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ECONOMIC AND SOCIAL SURVEY OF ASIA AND THE PACIFIC 2017

Governance and Fiscal Management

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Governance and Fiscal Management

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FOREWORD

The steady economic growth in the Asia-Pacific region has been an anchor of stability for the sluggish global economy in recent years. This dynamism has made it possible for many countries of the region to make major inroads against extreme poverty. Advances in Asia and the Pacific have also generated important lessons for countries in other regions striving to put in place smart policies and best practices for building lives of prosperity, safety and dignity for all.

At the same time, however, a troubling development has emerged: income disparities within and among the nations of Asia and the Pacific have widened, often with grave consequences for the most vulnerable. Economic progress has also, at times, contributed to untenable levels of environmental degradation.

Striking a balance between economic growth, social inclusiveness and environmental sustainability is the essence of the 2030 Agenda for Sustainable Development. The 2017 edition of the ESCAP *Economic and Social Survey of Asia and the Pacific* identifies governance – and in particular fiscal management – as a key factor in improving long-term economic prospects while grappling with social and environmental challenges. It finds that countries that perform better on governance measures tend to spend their fiscal resources more efficiently. Similarly, weak governance partially explains the low levels of tax revenues in several countries of the region, as so-called "tax morale" – the willingness to pay taxes – is affected by perceptions of how well those revenues are used. Highlighting the importance of transparency and accountability, the *Survey* calls for increasing access to fiscal data and information, and developing public administration capacities to monitor, evaluate and audit policies and actions. Indeed, inclusive institutions are both one of the Sustainable Development Goals and critical for progress across the 2030 Agenda.

Building trust between Governments and peoples and among countries must be a top priority as we strive to build a future of peace, sustainable development and human rights for all. In that spirit, I commend this *Survey* to a wide global audience.

António Guterres
Secretary-General of the United Nations

PREFACE

The developing economies of the Asian and Pacific region currently account for about a third of the world's output, and they are quickly reaching an economic status on par with that of the combined share of developed economies in North America and Europe. The convergence in output is likely to continue in coming years despite a narrowing growth differential between developing Asia-Pacific economies and the developed global economies. At the current pace, the region's share in the global economy is expected to exceed one half by 2050, when it regains the position it had held prior to the Industrial Revolution. Not surprisingly therefore what Asia and the Pacific does now influences the rest of the world more than in the past when the region was primarily affected by external developments.

With the increasing importance of the Asia-Pacific region, the role of traditional "success factors", such as education, robust investment and high savings rates and reliance on global markets through exports, are also likely to evolve. Future economic growth will need to rely more on productivity gains compared with factor accumulation. Sustained productivity gains in turn would require effective institutions and better governance in both the public and private spheres.

Importantly, policy focus will need to go beyond economic growth and into broader well-being. This is because decades of rapid economic growth in the region have come at the expense of rising inequalities and environmental degradation. The 2030 Agenda for Sustainable Development provides a useful framework for a "conceptual transition" to systematically address economic, social and environmental challenges. In this year's *Survey*, governance is identified as an important impetus to support the achievement of the 2030 Agenda through effective fiscal management.

We believe that the Asia-Pacific region has the potential to regain its historical position in the global economy and provide leadership in moving towards more holistic and transformative development based on sustainability.

As we enter the second year of the 2030 Agenda, economic growth in the Asia-Pacific economies is steady but modest amid prolonged weak external demand and rising trade protectionism. Recent political developments in advanced countries, however, risk undermining multilateralism. Countries can no longer rely on traditional export markets, but will need to strengthen domestic and regional demand to drive economic growth. The growing global significance of the region's economies and the multiple transboundary challenges it faces provide opportunities to boost domestic and external demand through further regional cooperation and integration.

Although Asia and the Pacific remains the engine of global economic growth, having lifted tens of millions of people out of extreme poverty, economic growth by itself is not enough. A number of challenges and risks have become apparent. The benefits of economic expansion have accrued relatively less to the poor, as is evident from rising income inequality. Additionally, expansion of decent jobs continues to remain a challenge, and the region currently is falling behind the rest of the world in terms of social protection financing and coverage. Moreover, economic growth has come at a steep environmental cost. On average, developing Asia-Pacific economies use twice as many resources per dollar of GDP as the rest of the world. Environmental degradation and carbon emissions, not captured in GDP, undermine the sustainability of economies.

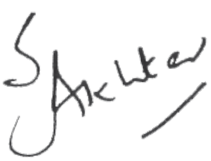
In the *Survey* for 2017, a proactive fiscal policy is advocated that could help address these challenges through productive investments in such areas as infrastructure, social protection and resource efficiency. In the short run, fiscal policy is central to addressing inequality through redistributive policies and the provision of social protection. Fiscal sustainability, which can be achieved through comprehensive tax reforms and effective debt mangement, will be critical to ensuring that fiscal policy continues to play a vital role in supporting sustainable development.

Structural reforms – measures that are aimed at raising productivity – could complement fiscal policy and help increase potential output. However, a careful assessment is needed in respect of their distributional and environmental impacts. As "creative destruction" of jobs takes place, workers will need to be equipped with the skills necessary to go forward and be protected from disruptive impacts. Moreover, rather than following a "one-size-fits-all" or a "big bang" approach, a sequential targeting of binding constraints is a more prudent approach given the diversity of economies in the region.

The role of the State, and thus the quality of governance, is especially important in this regard. Governments provide an enabling environment of policies, institutions and public services that helps factor and product markets to work efficiently. This in turn allows private sector-led growth to take place. How societies invest, innovate and ensure that no one is left behind largely depends on the quality of governance and on how much trust and confidence the people have in their institutions. As countries in Asia and the Pacific continue to undergo significant structural transformations, as reflected in the ongoing rebalancing in China and the reforms in India, the role of governance will only increase.

Governance is crucial for effective resource mobilization, public expenditure efficiency and structural reform. When institutions are weak, inequalities tend to increase, and the pace of poverty reduction declines. The quality of governance is also important to achieve beneficial environmental outcomes, as reflected for instance in the capacity to make and apply environmental rules and safeguards. Enhanced transparency and accountability of public sector policies and administration are the cornerstone of better governance.

In the *Survey* for 2017, the importance of effective governance is highlighted as it affects fiscal management. This is a particularlly important topic given the high demands on the fiscal policy needed to address the diverse challenges of sustainable development. The quality of governance has impacts on the composition and efficiency of public expenditure and tax morale. As is concluded in the *Survey* for 2017, effective governance can help reduce intraregional development gaps and enable poorer countries to benefit greatly from regional economic cooperation and integration.



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EXECUTIVE SUMMARY

Economic growth in Asia-Pacific economies, although steady, is modest compared with its recent historical trend amid prolonged weak external demand and its ramifications, such as subdued investment and rising trade protectionism. While robust economic growth is not a sufficient condition for achieving broader development goals, the lack of it could undermine efforts to reduce poverty and expand the availability of decent jobs. At the same time, decades of rapid economic growth, facilitated by globalization and technological advances, came at a cost – rising inequality and environmental degradation. Addressing such economic, social and environment challenges in a coherent and decisive manner will be critical for improving the region's future prospects.

The *Economic and Social Survey of Asia and the Pacific 2017* contains an examination of these policy challenges, especially from the perspective of better governance and effective fiscal management. In particular, in the *Survey* for 2017 it is found that the quality of governance affects development outcomes through its impact on the composition and efficiency of public expenditure. At the same time, weak governance partially explains the low levels of tax revenue in several countries in the region. In the *Survey* for 2017 it is argued that better governance and effective fiscal management in the Asia-Pacific region can not only improve long-term economic prospects but also facilitate the process of grappling with social and environmental concerns. Indeed, balanced progress on all three fronts is the essence of the 2030 Agenda for Sustainable Development.

Governance quality has been defined in various ways by different organizations and institutions. In the *Survey* for 2017 political dimensions, such as democratic accountability, are avoided, and governance is framed in terms of how power is exercised instead of how it is acquired. This approach respects the diversity of cultures, historical experiences and levels of development that countries in the Asia-Pacific region share. A more functional definition of governance enables the focus of the *Survey* for 2017 to be on transmission mechanisms – mobilization and allocation of fiscal resources – through which governance affects various aspects of sustainable development. For this purpose, governance is measured by analysing data on government effectiveness, regulatory quality, rule of law and control of corruption – four of the six dimensions of governance covered by the Worldwide Governance Indicators database. In the *Survey* for 2017 it is argued that enhancing transparency and accountability in public administration is fundamental to improving governance quality and achieving better fiscal management; several policies that can help on this front are discussed.

The first chapter of the *Survey* for 2017 provides a macroeconomic assessment of the region, with a discussion of risks to the economic outlook, and it highlights the importance of improving the quality of economic growth. A case is made for a proactive role for fiscal policy and supporting structural reforms not only to enhance economic potential but also to strengthen social protection and improve resource efficiency. The second chapter provides a more disaggregated analysis of economic issues and indicates that the potential benefits of better governance and effective fiscal management are large and wide-ranging, including: better health outcomes in the Pacific; economic diversification in North and Central Asia; decent jobs in South and South-West Asia; ecological innovations in East and North-East Asia; and narrowing development gaps in South-East Asia. The third chapter contains a study of the relationship between governance and various dimensions of sustainable development; the study delves in detail into analysing the role of governance in improving fiscal management and contains a discussion of a range of policy options to improve the quality of governance in support of better fiscal management.

Economic growth dynamics and risks to the region's economic outlook

Economic growth in the Asia-Pacific region has relied more on domestic demand in recent years than in the past, given the prolonged weakness in external demand and global trade. In particular, in line with the region's growing purchasing power, domestic private consumption has been the major growth driver, supported by low inflation, ease of borrowing at low interest rates and spending by the rich that have benefited from the increased value of their assets. These factors, however, are unlikely to support a sustained expansion of domestic demand; as inflation gradually increases, the capacity to repay borrowing weakens in the wake of slower growth in employment and incomes, and favourable liquidity conditions tighten. A sustained increase in consumption needs to be backed by consistent growth in real wages, which ultimately depends on productivity growth and labour market policies, both of which are areas that require greater policy attention.

Private investment has not been forthcoming in many countries despite low interest rates. This phenomenon is explained in part by global factors, such as weak aggregate demand and heightened uncertainty. For instance, global growth forecasts have been constantly revised downward in recent years, lowering the expected returns for business. A related factor is excess capacity and low capacity utilization in certain industrial sectors, as reflected in subdued industrial production. There are also signs of debt overhang and balance sheet pressures in the corporate and banking sectors in some of the major economies. While large public infrastructure outlays in major economies, such as China, have offset to some extent the slowdown in private investment, this is not the case in most countries.

Leading indicators, such as the Purchasing Managers' Index for assessing the health of the manufacturing sector and the latest export and import data, point to a mild economic recovery in 2017 and 2018. However, the recovery is unlikely to be a firm rebound given that the factors which held back private investment remain largely unresolved, even as rising trade protectionism effectively offsets potential recovery in external demand. Nevertheless, average economic growth in developing Asia-Pacific economies is projected to rise to 5 and 5.1 per cent in 2017 and 2018 respectively, from an estimated 4.9 per cent in 2016.

The most significant risk to the broadly positive economic outlook is rising trade protectionism. At the same time, recent shifts by the United States of America in its policies concerning trade, currency and immigration together with the so-called Brexit have increased global policy uncertainty and could have negative impacts on the region, including for China's goods exports and India's services exports. Any foregone trade and investment in turn could harm employment prospects and act as a drag on productivity growth in the years to come. An alternative economic growth scenario contained in the *Survey* for 2017 would suggest that economic growth for the major developing countries in the region in 2017 could be up to 1.2 percentage points slower than the baseline projections if an increase in trade protectionism and global economic uncertainty is steeper than anticipated.

This increase in uncertainty comes at a time of potential tightening of global financial conditions, which could effectively bring to an end the region's cycle of monetary easing. Capital outflow pressures, which increased in the wake of United States presidential election in November 2016 before subsiding recently, could re-emerge with the announcement by the United States of fiscal stimulus, and lead to further depreciation of regional currencies. On the upside, regional exports may benefit from relatively stronger external demand and currency-induced competitiveness, but any boost is likely to be limited due to the high number of trade protectionist measures.

Within the region, China's role as originator and transmitter of shocks has increased in recent years, given its role in global value chains. Real or perceived economic instability in China could lead to bouts of financial volatility in the region, as witnessed in early 2016. Given that several regional economies are competing with China in global value chains, the depreciation of the renminbi puts pressure on other regional currencies also to depreciate. On the upside, if China's economic performance is stronger than expected, as it was in 2016, there could be positive trade spillovers.

Economic policy and structural reform considerations

Boosts to credit and domestic demand from low policy rates have been smaller than expected, indicating limited efficacy of monetary policy under current conditions. In going forward, the recent uptick in inflation, though mostly due to non-domestic demand factors, such as oil prices and exchange rate depreciation, should also dissuade policymakers from further interest rate reductions. Likely currency depreciation could further limit monetary policy space, not least due to its inflationary impact. Indeed, monetary policy stances in the region have recently shifted from "accommodative" to "neutral" as upside risks to inflation increased slightly. Average inflation in the developing Asia-Pacific region is projected to rise from 3.6 per cent in 2016 to 3.8 per cent in 2017 and 2018. The region's economies are advised therefore to maintain the status quo in terms of policy interest rates. They should consider strengthening capital flow management and macroprudential measures to mitigate adverse effects of exchange rate depreciation and to ensure financial stability.

Fiscal policy, on the other hand, could play an active role in boosting domestic demand and supporting development priorities, such as reducing poverty, mitigating inequalities and supporting social protection measures. Indeed, fiscal policy stances in the region have been broadly countercyclical and expansionary in recent years. Nevertheless, ensuring fiscal sustainability is important and would require comprehensive tax reforms and effective debt management. Tax collection remains relatively low in the Asia-Pacific region, and the scope for boosting revenues through improved compliance and base-broadening is particularly large. Beyond financing, countries need to pursue broader public sector governance reforms to ensure that fiscal spending translates into better development outcomes. In assessing fiscal sustainability, countries should also consider the potential long-term positive spillovers of social and infrastructure investments in the economy. If the spillovers are sufficiently large, for instance due to the "crowding in" of private investment, the public debt-GDP ratio could be stable over the long term. This is an area where more research is needed given the mixed empirical evidence.

The important role of fiscal policy management in promoting social development is evident in Pacific island developing economies. Evidence suggests that the current relatively large amount of health spending in the Pacific subregion could be made more effective when more resources are devoted to preventive care and early treatment by specialized health services. Regarding revenue policy, taxes and tariffs have been introduced to discourage consumption of unhealthful products, although there appears to be room for higher tax rates. Such policies as user-pay health-care services and public-private partnerships are also a possible option, but they require careful implementation and effective governance to ensure people's access to services.

Structural reforms – measures that are aimed at raising productivity – could complement fiscal policy and help lift potential economic growth. Structural reforms are not new to the Asia-Pacific region and have been critical to the region's unprecedented structural transformation in recent decades. As seen from the perspective of the region's own experience, different reforms are needed at different stages of economic development. For instance, measured and gradual sectoral shifts from agriculture to manufacturing, particularly in East Asia, led to considerable productivity gains, supported by trade reforms, skills upgrading and infrastructure outlays. Similarly, China is now promoting high-technology industries through road maps, such as "Made in China 2025", while gradually increasing the share of services in the overall economy. Yet for other developing countries in the region, such as India, expanding the manufacturing base, including to relatively labour-intensive sectors, will be important for making broad-based productivity gains.

While structural reforms are generally viewed as productivity-enhancing, a careful assessment is needed concerning their distributional and environmental impacts. As "creative destruction" of jobs takes place, workers will need to be equipped with the necessary skills and protected from disruptive impacts. Moreover, rather than following a "one-size-fits-all" and "big bang" approach, a less ambitious alternative is to follow sequential targeting of binding constraints. A potential advantage of this approach is that early wins create political support for reforms over time, and the sense of ownership increases, which allows time for countries to "learn to reform". The region's own experience, including that of China, supports the sequential targeting approach. It also highlights the important role of the State in structural reforms. The Government provides an enabling environment in terms of policies, institutions and public services that helps factor and product markets to work efficiently. This situation in turn enables private sector-led growth to take place.

In many cases, the driving force for implementing domestic structural reforms is new opportunities brought about by external developments. For example, in the North and Central Asian subregion the Eurasian Economic Union (EAEU) aspires to become a single market with free trade among members, while the Belt and Road Initiative (BRI) of China is aimed at improving trade and infrastructure connectivity between China and European countries through the Eurasian landmass. To capitalize the potential gains from EAEU and BRI, subregional economies need to reduce domestic regulatory burdens to enable firms to benefit from lower cross-border trade costs. As productive capacity increases, more active participation in global supply chains can help widen the subregion's economic base.

Quality of economic growth

The benefits of economic expansion have accrued relatively less to the poor as is evident from the rising income inequality in the region. In the context of slower economic growth, sustained poverty reduction would need to rely more on enhancing income distribution and addressing non-income factors, such as social exclusion. Comprehensive measures are needed to tackle inequality, including fiscal measures, such as progressive taxation and social assistance, and labour market policies, such as minimum wages and training of low-skilled workers.

To tackle rising inequality and high levels of poverty in South and South-West Asia for instance, the availability of decent and high-productivity jobs will be a crucial factor, as most households depend entirely on labour income for their living. There is also a need to reduce the prevalence of informal jobs, which typically offer low pay and limited social protection. The economic formalization process would benefit from streamlining paperwork requirements and linking incentive schemes, such as financial support, with business registration and basic compliance with labour regulations. Governments could also provide informal workers with more support, including by delinking social security benefits from employees' contributions.

For the region as a whole, expansion of the availability of decent jobs continues to remain a challenge. In 2016, average employment growth in the Asia-Pacific region was modest but remained steady at 1.1 per cent, while the share of vulnerable employment remained persistently high at about 50 per cent. In 2015 (latest data), real wage growth was relatively robust in South Asia, possibility due to disinflation, and in China, where the share of labour in national income had been recovering. Wage growth in the Asia-Pacific region, however uneven, outperforms that of the rest of the world. Between 2006 and 2015, real wages in the region grew by 44 per cent, at a compound annual growth rate of 4.2 per cent. However, the region's dynamic performance is driven largely by China; wage growth elsewhere has been much more modest. Also, average wages across and within countries in the region still vary considerably.

Expanding social protection financing and coverage

As economies go through structural transformations, a robust system of social protection can help in dealing with issues of inequality, poverty and vulnerable employment, and contribute to strengthening domestic demand in a more equitable and durable manner. In the *Survey* for 2017 it is shown that countries with higher social protection spending tend to have a lower incidence of poverty. Key aspects of social protection include: universal access to affordable health care; free primary and secondary education; unemployment benefits for wage earners and income-support measures for those in need; contributory and social pensions; and full access to social benefits for persons with disabilities. Social protection could also improve the functioning of labour markets, by facilitating skills development and employment, which is especially important in economies that are undergoing rapid structural changes.

The development of social protection floors is a multi-step process that includes a national social dialogue, a financing strategy and delivery mechanisms. The Asia-Pacific region currently falls behind the rest of the world in terms of social protection financing and coverage, although there are some successful examples in the region. Average total public social protection spending, including health expenditures, as a percentage of GDP, increased from 3.5 per cent in 2000 to 5.3 per cent in 2010/11 (latest year) in the region, but it is still lower than the global average of 8.6 per cent. In terms of social protection coverage, countries such as China, Thailand and Viet Nam have made notable progress since the 2000s, but coverage levels remain weak in most countries in the region. For instance, effective coverage with unemployment benefits (contributory and non-contributory) is limited to 7 per cent of the population in the region compared with the global average of 12 per cent. Financing social protection schemes and improving their delivery rests critically on stable fiscal positions, and effective governance and institutions.

Internalizing costs of environmental degradation

Although not captured in the GDP measure, environmental degradation, carbon emissions and air pollution reduce social welfare and undermine the sustainability of economies. The region's rapid economic growth in the past few decades has been achieved in part on the back of environmental degradation, with concomitant adverse health impacts, and intensive and inefficient use of resources and natural wealth. Furthermore, the region is highly vulnerable to climate change, the adverse effects of which can substantially undermine the economic development gains in the region. Clean air, safe drinking water, sufficient food and secure shelter are also being adversely affected.

Despite having made gradual improvements, the region falls behind the rest of the world in terms of levels of energy and carbon intensity. On average, developing Asia-Pacific economies use twice the resources per dollar of GDP as the rest of the world. A clear example of policy effort to achieve more environment-friendly economic growth can be seen in East and North-East Asia. After years of heavy industrialization that led to deteriorating environmental conditions, the subregion is now focusing on green growth and developing energy-efficient and renewable technologies. Together, China and Japan account for nearly half the world's commercial investments in clean technology, while China accounts for most of the world's patent filings in climate change mitigation technologies.

Experience from East and North-East Asia points to three desirable aspects of public policies to promote clean energy, all of which highlight the role of effective governance. The first dimension is a well-designed governance structure that features a whole-of-government approach, effective monitoring and evaluation mechanisms and multi-stakeholder partnerships from development to diffusion of technology. The second aspect is a balanced policy framework in which Governments consider a mix of incentives, such as favourable pricing of renewable energy, and regulations, such as setting minimum energy efficiency standards. The third dimension is an enabling financing system, particularly non-traditional green financing instruments, such as carbon trading and green bonds.

Governance and development outcomes

The *Survey* for 2017 shows that better governance and effective institutions affect all three aspects of sustainable development. For instance, governance affects the capacity of an economy to gain access to a skilled labour force, improve investment prospects and sustain innovation. These factors in turn help enhance the level and pace of productivity, thus improving the long-term economic prospects of an economy. Similarly, in the *Survey* for 2017 it is argued that, when institutions are weak, inequalities tend to increase and the pace of poverty reduction declines. Weak institutions also partially explain inequality in access to social services, particularly for females as well as the poorest and most vulnerable segments of the society. The quality of governance also affects environmental outcomes, as reflected for instance in varying capacities to make and apply environmental rules and safeguards, and initiate ecological innovation and technological transfer.

Effective governance can also help close development gaps across countries by contributing to reforms that enable poorer countries to benefit more from regional economic integration initiatives. For instance, in South-East Asia, the average income per capita in the subregion's emerging economies is more than 10 times that of Cambodia, the Lao People's Democratic Republic, Myanmar and Viet Nam, the so-called CLMV countries. Development gaps in terms of education and health outcomes are also notable. Narrowing such gaps through structural reforms is critical for CLMV to fully realize potential gains from the ASEAN Economic Community. For this purpose, various governance issues could be strengthened in CLMV, such as improving law enforcement, ensuring property rights and increasing judicial independence. Similarly, promoting greater use of the criminal justice system in addressing corruption, enhancing cross-ministerial coordination to avoid duplication of work and introducing more transparent business regulatory frameworks can go a long way in improving development outcomes in CLMV.

Governance, tax revenues and public expenditure management

In the *Survey* for 2017 it is shown that weak governance partially explains the low level of tax revenues in several countries in the region, as the quality of governance affects the tax morale of taxpayers, the incentives to operate in the formal sector and the level of compliance of tax officials with relevant laws. Factors that contribute to or encourage fiscal corruption include: complicated tax laws; excessive discretionary power vested in tax administrators and the necessity for frequent interactions between taxpayers and tax officials; weak legal and judicial systems; lack of accountability and transparency in tax administration; and low salaries in the public sector.

Governance also has impacts on the way public revenues are raised, by affecting tax morale, as the willingness to pay taxes is affected by perceptions of how well tax revenues are used. Thus, while taxpayers generally are willing to pay taxes if they perceive that the level of public services offered is commensurate with their tax bills, they will shirk their tax responsibilities if they see a mismatch between tax liabilities and services. Low tax morale may also be linked to the perception that evasion of taxes is widespread, especially among those with higher incomes. For instance, in the *Survey* for 2017 it is estimated that low governance indicator scores explain up to 8 and 21 per cent of the level of tax revenues in Pakistan and Bhutan respectively from 2005 to 2014.

The quality of governance also affects the achievement of development goals through its impact on the composition and efficiency of public expenditure. For instance, corruption is shown to distort the structure of public spending by reducing the portion of social expenditure that goes to education, health and social protection. In contrast, it is shown in the *Survey* for 2017 that better governance increases the beneficial impact of public-health spending on child mortality rates, makes public spending on primary education more effective and leads to higher attainment in primary education. Moreover, it is also shown that less social expenditure also usually goes hand in hand with greater expenditure on such matters as law and order, fuel and energy subsidies and defence. In the *Survey* for 2017 it is estimated that, between 2005 and 2014, the impact of better governance and effective implementation of policies on public sector efficiency ranged from 0.34 per cent in the Russian Federation to 57 per cent in Georgia in the health sector and from 0.15 per cent in Timor-Leste to 32 per cent in Indonesia in the education sector.

Policies to improve governance for better fiscal management

In the *Survey* for 2017 it is argued that enhancing transparency and accountability in public administration is fundamental to improving governance quality and achieving better fiscal management. For this purpose, it is necessary to improve and strengthen the production of and access to meaningful fiscal information and to develop public administration capacities to monitor, evaluate and audit policies and actions. Inclusive institutions, where public service beneficiaries can exchange views with the Government, could also be instrumental for raising tax revenues and making expenditures more efficient. Also highlighted in the *Survey* are the roles of e-government, information and communications technology (ICT) and decentralization for improving governance in the context of fiscal management.

In terms of accountability, a regional assessment suggests that several Asia-Pacific countries require public officials at different levels to declare their financial assets in order to help increase the integrity of civil servants as well as public trust in them. This action has improved the efficiency of government expenditures and the overall quality of governance, although further improvements are needed in terms of public access and the coverage of pertinent information, and the monitoring and oversight of the implementation of such policies.

Ensuring access to meaningful fiscal information, such as the resources received by various government units responsible for the delivery of public services, can contribute to greater transparency. However, the availability of and public access to such information remains difficult in several countries in the region, even though these policies have yielded positive results in the case of Georgia, the Republic of Korea, Samoa and Singapore. Furthermore, when information is published, the quality and utility of the published government financial data sometimes seems to be low, particularly in North and Central Asia. In addition to producing and disseminating information, government officials will also need to better manage operational risks associated with the execution of the budget, whether related to tax revenues or expenditures, through internal controls and audits and external audits.

An assessment of public financial management in selected Asia-Pacific countries shows that there is considerable room to strengthen internal control and audit (external and internal) functions. For instance, there are issues related to the comprehensiveness, relevance and understanding of internal control rules and procedures. The degree of compliance with rules for processing and recording transactions is also weak. Similarly, with regard to internal audits, there are concerns related to the frequency and the distribution of reports and the extent to which management follows recommendations from an internal audit. Such issues as the scope of an external audit, adherence to international standards and timely submission of reports also require policy attention. Collecting and integrating views and concerns from citizens can also help check the effectiveness of fiscal policies and thus contribute to raising tax morale and revenues. In this vein, there is a need to establish effective feedback systems through which users are informed of the existence of such tools and are able to report wrongdoing by officials or assess the quality of public services.

The implementation of the above-mentioned policies can be optimized through information and communications technology and wider use of financial services by beneficiaries of public services and by taxpayers. Tax revenues can be substantially increased on the back of deployment of an e-system for making tax returns and filing taxes. Public expenditure efficiency can also increase due to e-systems because government programmes can be better coordinated, such as in Malaysia with the eKaish system, or funds can be tracked up to their receipt by the final beneficiary as is done in India with the payment of social benefits or wages through bank accounts. While e-government systems present opportunities for public financial management, and progress has been made during the last decade, Asia-Pacific countries could take greater advantage of the opportunities offered in this regard. Overall, countries with special needs (in particular, least developed countries and landlocked developing countries) do not predominantly use e-government platforms even though they could benefit greatly from their usage.

Efforts are needed to improve information flows across relevant government departments. For instance, the tax enforcement function depends on a central database and flow of information from different sources, particularly in the case of value-added tax (VAT) and income tax. However, a typical approach in the organization of tax administrations in developing countries has been to establish separate revenue departments overseeing different tax bases. This situation results in little sharing of information among them, along with difficulties in reconciling data and information on taxpayers. Some countries, such as Maldives and the Philippines, have addressed this problem through reorganizing the tax administration along functional lines.

Furthermore, through greater ownership of local revenues, fiscal decentralization can strengthen accountability and improve public expenditure efficiency. However, at the subnational level, gap-filling transfers and shared revenues are preferred to own-source revenues in several Asia-Pacific economies. Measures such as the control over rate structures at the local level could be more effective in generating accountability, even if all or some elements of tax administration are managed at different levels. Given their more limited capacities, subnational administrations could also consider adopting "piggy-back" taxation, wherein tax revenues would be collected by using the tax base, which has been identified by the central Government, and adding a surcharge to the tax rate. Accountability could also be improved by using a property tax system which accounts for the size and location of the property and the cost of the public services delivered.

Concluding remarks

How societies invest, innovate and ensure that no one is left behind largely depends on the quality of governance and on how much trust and confidence people have in government institutions. As countries in Asia and the Pacific continue to undergo large structural transformations, as reflected in the ongoing rebalancing in China and reforms in India, the role of governance will only increase. The issue of governance is examined in the *Survey* for 2017 in the specific context of fiscal management, given the growing demands on fiscal policy to support the economy and address diverse social and environmental challenges.

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

- ESCAP region: Afghanistan; American Samoa; Armenia; Australia; Azerbaijan; Bangladesh; Bhutan; Brunei Darussalam; Cambodia; China; Cook Islands; Democratic People's Republic of Korea; Fiji; French Polynesia; Georgia; Guam; Hong Kong, China; India; Indonesia; Iran (Islamic Republic of); Japan; Kazakhstan; Kiribati; Kyrgyzstan; Lao People's Democratic Republic; Macao, China; Malaysia; Maldives; Marshall Islands; Micronesia (Federated States of); Mongolia; Myanmar; Nauru; Nepal; New Caledonia; New Zealand; Niue; Northern Mariana Islands; Pakistan; Palau; Papua New Guinea; Philippines; Republic of Korea; Russian Federation; Samoa; Singapore; Solomon Islands; Sri Lanka; Tajikistan; Thailand; Timor-Leste; Tonga; Turkey; Turkmenistan; Tuvalu; Uzbekistan; Vanuatu; and Viet Nam
- Developing ESCAP region: ESCAP region excluding Australia, Japan and New Zealand
- Developed ESCAP region: Australia, Japan and New Zealand
- Least developed countries: Afghanistan, Bangladesh, Bhutan, Cambodia, Kiribati, Lao People's Democratic Republic, Myanmar, Nepal, Solomon Islands, Timor-Leste, Tuvalu and Vanuatu. Samoa was part of the least developed countries prior to its graduation in 2014
- Landlocked developing countries: Afghanistan, Armenia, Azerbaijan, Bhutan, Kazakhstan, Kyrgyzstan, Lao People's Democratic Republic, Mongolia, Nepal, Tajikistan, Turkmenistan and Uzbekistan
- Small island developing States: Cook Islands, Fiji, Kiribati, Maldives, Marshall Islands, Micronesia (Federated States of), Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu and Vanuatu
- East and North-East Asia: China; Democratic People's Republic of Korea; Hong Kong, China; Japan; Macao, China; Mongolia and Republic of Korea
- North and Central Asia: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan and Uzbekistan
- Pacific: American Samoa, Australia, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, New Caledonia, New Zealand, Niue, Northern Marina Islands, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu
- Pacific island developing economies: All those listed above under "Pacific" except for Australia and New Zealand
- South and South-West Asia: Afghanistan, Bangladesh, Bhutan, India, Iran (Islamic Republic of), Maldives, Nepal, Pakistan, Sri Lanka and Turkey
- South-East Asia: Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste and Viet Nam.

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Mention of firm names and commercial products does not imply the endorsement of the United Nations.

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

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

Reference to "tons" indicates metric tons.

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

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

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

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

Country or area in the ESCAP region	*ISO Alpha-3 code*	*Fiscal year*	*Currency and abbreviation*
Afghanistan	AFG	21 March to 20 March	afghani (Af)
American Samoa	ASM	..	United States dollar ($)
Armenia	ARM	1 January to 31 December	dram
Australia	AUS	1 July to 30 June	Australian dollar ($A)
Azerbaijan	AZE	1 January to 31 December	Azerbaijan manat (AZM)
Bangladesh	BGD	1 July to 30 June	taka (Tk)
Bhutan	BTN	1 July to 30 June	ngultrum (Nu)
Brunei Darussalam	BRN	1 January to 31 December	Brunei dollar (B$)
Cambodia	KHM	1 January to 31 December	riel (CR)
China	CHN	1 January to 31 December	yuan (Y)
Cook Islands	COK	1 April to 31 March	New Zealand dollar ($NZ)
Democratic People's Republic of Korea	PRK	..	won (W)
Fiji	FJI	1 January to 31 December	Fiji dollar (F$)
French Polynesia	PYF	..	French Pacific Community franc (FCFP)
Georgia	GEO	1 January to 31 December	lari (L)
Guam	GUM	1 October to 30 September	United States dollar ($)
Hong Kong, China	HKG	1 April to 31 March	Hong Kong dollar (HK$)
India	IND	1 April to 31 March	Indian rupee (Rs)
Indonesia	IDN	1 April to 31 March	Indonesian rupiah (Rp)
Iran (Islamic Republic of)	IRN	21 March to 20 March	Iranian rial (Rls)
Japan	JPN	1 April to 31 March	yen (¥)
Kazakhstan	KAZ	1 January to 31 December	tenge (T)
Kiribati	KIR	1 January to 31 December	Australian dollar ($A)
Kyrgyzstan	KGZ	1 January to 31 December	som (som)
Lao People's Democratic Republic	LAO	1 October to 30 September	kip (KN)
Macao, China	MAC	1 July to 30 June	pataca (P)
Malaysia	MYS	1 January to 31 December	ringgit (M$)
Maldives	MDV	1 January to 31 December	rufiyaa (Rf)
Marshall Islands	MHL	1 October to 30 September	United States dollar ($)
Micronesia (Federated States of)	FSM	1 October to 30 September	United States dollar ($)
Mongolia	MNG	1 January to 31 December	tugrik (Tug)

Country or area in the ESCAP region	*ISO Alpha-3 code*	*Fiscal year*	*Currency and abbreviation*
Myanmar	MMR	1 April to 31 March	kyat (K)
Nauru	NRU	1 July to 30 June	Australian dollar ($A)
Nepal	NPL	16 July to 15 July	Nepalese rupee (NRs)
New Caledonia	NCL	..	French Pacific Community franc (FCFP)
New Zealand	NZL	1 April to 31 March	New Zealand dollar ($NZ)
Niue	NIU	1 April to 31 March	New Zealand dollar ($NZ)
Northern Mariana Islands	MNP	1 October to 30 September	United States dollar ($)
Pakistan	PAK	1 July to 30 June	Pakistan rupee (PRs)
Palau	PLW	1 October to 30 September	United States dollar ($)
Papua New Guinea	PNG	1 January to 31 December	kina (K)
Philippines	PHL	1 January to 31 December	Philippine peso (P)
Republic of Korea	KOR	1 January to 31 December	won (W)
Russian Federation	RUS	1 January to 31 December	ruble (R)
Samoa	WSM	1 July to 30 June	tala (WS$)
Singapore	SGP	1 April to 31 March	Singapore dollar (S$)
Solomon Islands	SLB	1 January to 31 December	Solomon Islands dollar (SI$)
Sri Lanka	LKA	1 January to 31 December	Sri Lanka rupee (SL Rs)
Tajikistan	TJK	1 January to 31 December	somoni
Thailand	THA	1 October to 30 September	baht (B)
Timor-Leste	TLS	1 July to 30 June	United States dollar ($)
Tonga	TON	1 July to 30 June	pa'anga (T$)
Turkey	TUR	1 January to 31 December	Turkish lira (LT)
Turkmenistan	TKM	1 January to 31 December	Turkmen manat (M)
Tuvalu	TUV	1 January to 31 December	Australian dollar ($A)
Uzbekistan	UZB	1 January to 31 December	Uzbek som (som)
Vanuatu	VUT	1 January to 31 December	vatu (VT)
Viet Nam	VNM	1 January to 31 December	dong (D)

Sources: United Nations, *Monthly Bulletin of Statistics* website, http://unstats.un.org/unsd/mbs/app/DataSearchTable.aspx, 31 March 2016; and national sources.

ACRONYMS

ADB	Asian Development Bank
ANS	adjusted net saving
ASEAN	Association of Southeast Asian Nations
BERI	Business Environment Risk Index
BIS	Bank for International Settlements
BRI	Belt and Road Initiative
CAREC	Central Asia Regional Economic Cooperation
CFMP	Citizen Feedback Monitoring Programme
CLMV	Cambodia, the Lao People's Democratic Republic, Myanmar and Viet Nam
CMEPSP	Commission on the Measurement of Economic Performance and Social Progress
DEA	data envelopment analysis
DESA	United Nations Department of Economic and Social Affairs
EAEU	Eurasian Economic Union
ECB	European Central Bank
ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
ETS	emissions trading systems
FAI	fixed asset investment
FDI	foreign direct investment
FMIS	Financial Management Information Systems
GDP	gross domestic product
GHG	greenhouse gas
GNI	gross national income
ICT	information and communications technology
ILO	International Labour Organization
IMF	International Monetary Fund
I-TIP	Integrated Trade Intelligence Portal
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
Mtoe	million tons of oil equivalent
NADRA	National Database and Registration Authority
NTMs	non-tariff measures
PCW	Philippine Commission on Women
PDS	public distribution system
PPP	public-private partnership
PSE	public sector efficiency
R&D	research and development
RFID	radio frequency identification
SCP	sustainable consumption and production
TFP	total factor productivity
TPES	total primary energy supply
UID	unique identification system
UN Women	United Nations Entity for Gender Equality and the Empowerment of Women
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNIFEM	United Nations Development Fund for Women
VAT	value-added tax
WDI	World Development Indicators
WGI	Worldwide Governance Indicators

CHAPTER

01

ECONOMIC OUTLOOK AND QUALITY OF GROWTH

1. INTRODUCTION

The Asia-Pacific region's high and steady economic growth has served as an anchor of stability in recent years for the struggling global economy. In considering its high openness to trade, the region's relative resilience to weak external demand may come as a surprise. One explanation is the increased size of domestic and regional demand. The region's developing economies now account for a third of the world's output, only slightly less than the combined share of the developed economies in North America and Europe. If the region continues to outpace global economic growth at the current pace, it would account for more than half of global output by 2050. The region's income level would converge towards the global average and make the region home to the majority of the global middle class. The Asia-Pacific region's prominence is also likely to increase in such areas as global trade, finance, technology and education such that what the region does will affect the rest of the world compared with the past when the region was primarily affected by external developments.

For the Asia-Pacific region to realize its full potential, however, it cannot rely simply on past strategies and patterns of economic growth. For future growth, the region will need to rely more on broad-based productivity gains, which in turn will require effective institutions and governance in both the public and the private spheres. In the developing Asia-Pacific region, growth in overall labour productivity has declined by a third in the period following the financial and economic crisis that started in 2008 even as wide productivity gaps remain across and within sectors, particularly in agriculture and among small firms (ESCAP, 2016c). Public investments in such areas as health, education, training and infrastructure also need to be increased. Not surprisingly, the importance of a pro-active fiscal policy is emphasized in the section on policy considerations, along with a discussion on fiscal space. Additionally, a better policy and regulatory environment could make markets function well and stimulate productivity-enhancing innovation and private investment. Such efforts are particularly important given the increasingly uncertain global environment, especially for trade, as highlighted in the economic performance outlook section.

Another reason why the Asia-Pacific region cannot simply replicate its past economic growth patterns is the rising social and environmental pressures. Decades of rapid economic growth, facilitated by globalization and technology, came at a cost – rising inequalities and environmental degradation. The share of wages in national income declined in many countries even as wage inequalities widened. Owing to skills mismatches and lack of social protection, many were left behind in the creative destruction of jobs. While many have been lifted out of extreme poverty, the majority of the region's population are not yet "middle class" but could rather be classified as "transitional class" that is vulnerable to falling back into poverty (ESCAP, 2016c). This is why one of the selected topics in the quality of growth section is social protection. At the same time, the Asia-Pacific region is highly vulnerable to climate change, the adverse effects of which can substantially undermine the economic development gains in the region. Clean air, safe drinking water, sufficient food and secure shelter – key determinants of health – are also adversely affected. Internalizing the costs of environmental degradation will thus be important, as is argued in the quality of growth section.

It is in such a context of productivity-enhancing reforms and social and environmental measures that better and more effective governance becomes important. The governance theme is explored in depth in chapter 3, while subregional and country-specific developments and challenges are discussed in chapter 2. What is done in chapter 1 is to present a regional macroeconomic assessment in view of the 2030 Agenda for Sustainable Development.[1] The chapter consists of three sections. The first section on economic performance and outlook provides an assessment on consumption and investment patterns, external sector developments and major risks to the outlook for economic growth. In the second section on economic policy considerations, stock is taken of recent monetary, fiscal and structural policies, and issues that require attention are highlighted. In the third section on the quality of growth a number of issues are addressed concerning labour markets, income distribution, social protection and environmental sustainability.

2. ECONOMIC PERFORMANCE AND OUTLOOK

2.1. Asia-Pacific economies lead global growth but at less rapid pace

Following a strong post-crisis rebound in 2010, economic growth in the Asia-Pacific region has been moderate in recent years compared with its historical trend. The region's export-oriented economic growth strategy is under pressure amid prolonged weakness in external demand and global trade. China is both a transmitter and a source of the current economic slowdown, given its role as a hub in global value chains and its rebalancing towards consumption and services. The recent slowdown is also due to large terms of trade losses among net commodity exporters, such as the Russian Federation. Fortunately, both China and net commodity exporters had sufficient fiscal space to respond to such shocks. In particular, China's fiscal stance has been very expansionary, with large budgetary and non-budgetary support provided for the economy. India also regained its economic growth momentum on the back of reform initiatives and the beneficial impacts of low global oil prices. Taken together, the Asia-Pacific region's economic performance, although modest compared with its recent past, is commendable when viewed against the backdrop of a struggling global economy.

As noted in the Introduction, the region's developing economies now account for a third of global output, only slightly less than the combined share of developed economies in North America and Europe (see figure 1.1). This convergence is likely to continue in the coming years, despite a narrowing growth differential between developing Asia-Pacific economies and the developed global economies.

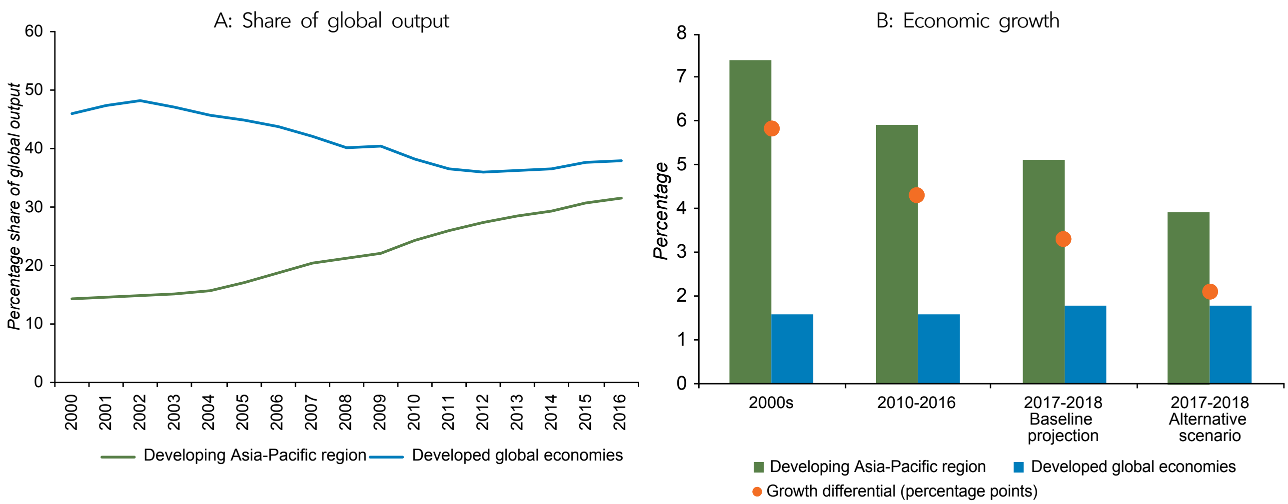
In 2016, economic conditions in the region began to stabilize, with better-than-expected performance exhibited by China and a recovery under way in net commodity-exporting countries. However, growth slowed considerably in Turkey due to the political situation and to a lesser extent in India due to the impacts of demonetization (see box 1.1).[2] Taken together, average economic growth in developing Asia-Pacific economies is estimated to have been 4.9 per cent in 2016, largely stable compared with that of the previous year, without a further deceleration.

2.2. Private investment has not been forthcoming

Across the region, economic growth in recent years has relied more on domestic demand (defined as GDP excluding net exports) given the prolonged weakness in external demand and global trade (see figure 1.2). In particular, in line with the region's growing purchasing power, domestic private consumption has been the major driver of growth. In China, the contribution of consumption to overall growth edged up, indicating progress in the rebalancing of the economy. In India, rural consumption was helped by a better monsoon season following two years of poor monsoon rain. In the Republic of Korea and Thailand, where high household debt has weighed on consumer spending, some boost was provided by fiscal stimulus measures. In the Russian Federation, there was a milder contraction in consumption compared with the previous year as inflation subsided.

The relatively strong performance in consumption may come as a surprise, given that exports and investment have been relatively sluggish in recent years, resulting in low capacity utilization, underemployment and weak nominal wage growth.[3] Potential explanations include real wage growth from low inflation, ease of borrowing as a result of low interest rates and spending by the rich who benefited from the increased value of their assets. These factors, however, would not support a durable expansion of domestic demand. First, inflation is likely to pick up in most countries in line with the partial recovery in global oil prices; in any case, wage growth would ultimately depend on productivity growth and labour market institutions – areas which require greater

Figure 1.1. Economic growth in Asia-Pacific region and the world



Source: ESCAP, based on table 1.1 and box 1.4 and data from IMF, World Economic Outlook Database. Available from www.imf.org/external/pubs/ft/weo/2016/02/weodata/index.aspx (accessed 1 February 2017).

Note: The term developed global economies refers to Canada, United States and Western Europe.

Box 1.1. Potential impact of demonetization in India

On 8 November 2016, India's Prime Minister announced that the Reserve Bank of India would withdraw India's two largest currency denominations, Rs 500 and Rs 1,000, from circulation. The two banknote denominations withdrawn represented more than 86 per cent of the cash in circulation. This policy initiative was aimed at (a) tackling the supply of high-denomination counterfeit notes, which were being used for financing terrorism, among other things, and (b) drawing out the storage of unaccounted wealth, the latter being known as "black money", undeclared to tax authorities.[a]

Preliminary GDP estimates showed that the economy expanded by 7 per cent from October to December 2016, slowing only marginally from 7.4 per cent in the preceding quarter. However, as also noted in the Government's *Economic Survey,* official figures could overstate economic growth as the large and cash-intensive informal sector is not adequately captured by the statistics, surveys and corporate financial statements on which the national accounts calculations are based. For instance, strong private consumption figures may be the result of Indians adopting Internet-based payment systems, leading therefore to an increase in activity in the formal sector. At the same time, the turnaround in investment, from contraction to growth, was less surprising, as base effects no longer acted as a drag on growth. It is conceivable, however, that the numbers for the official national accounts will be revised downward in the future.

The disruption had greater and longer-lasting impacts for lower-income individuals, households and businesses that had difficulty insulating themselves against the shock. Rural incomes and consumption were affected due to a decline in prices for agricultural products (although again, this was not reflected in the national accounts data which measure agriculture in terms of quantity). To mitigate the short-term negative impacts of the policy initiative, the Prime Minister announced in December 2016 measures to support the informal sector affected by demonetization, including furnishing higher credit limits for small enterprises, writing off interest on certain loans for farmers and instituting interest rate subvention on loans for low-income housing schemes.

In the medium-term, the currency initiative is expected to bring more economic activities into the formal sector and spur digitization of financial transactions, helping to broaden the tax base and secure the fiscal space needed for public social and infrastructure expenditures. In India, there were only 33.1 million effective taxpayers in 2014/15 for a population of more than 1.2 billion people.[b] The one-off currency measure in effect transferred lost black money to the Government through unclaimed or unexchanged notes. Preliminary estimates suggested a 97 per cent recovery of notes, which would imply a 3.16 per cent increase in fiscal revenues for the Government.

The measure did not, by itself, impede future black money flows in new denominations. While estimates of the size of the black economy vary at about 20-25 per cent of GDP, cash is estimated to make up only about 10 per cent of that value.[c] Thus, complementary measures would be required to target all forms of undeclared wealth and assets. Broader structural reforms which could also contribute to enhanced transparency include: the implementation of a goods and services tax; voluntary disclosure of income scheme; and tracking of high-value transactions through taxpayer identification numbers. Other measures, such as reforming the real estate registration process to ensure transparency, are being discussed.[d]

A more permanent increase in digital-enabled and non-cash-based transactions is likely, driven by awareness of cash-alternative solutions during the demonetization exercise and strong government advocacy and incentives. Digital payments are not a daily tool of most people in India, accounting for only 20 per cent of total transactions and 5 per cent of personal consumption expenditure.[e] Moving towards a cashless economy will require addressing household determinants of cash dependence beyond technology adoption, including low financial inclusion, high informality, persistent gender inequality in access to finance, low financial literacy, low ICT infrastructure and large gaps in energy access.

a *Gazette of India*, 8 November 2016, No. 2652 (http://finmin.nic.in/172521.pdf), and Reserve Bank of India, Press Release, 8 November 2016 (www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=38520).

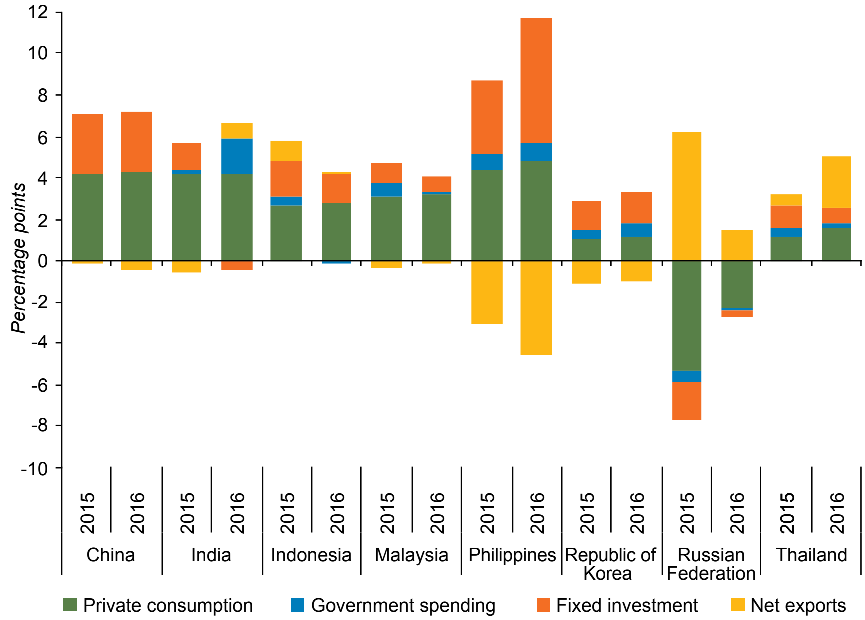
b See India, *Economic Survey*, 2015-16, chap. 7. Available from http://indiabudget.nic.in/es2015-16/echapvol1-07.pdf.

c The World Bank in 2010 estimated the size of the shadow economy for India at 20.7 per cent of GDP in 1999 and rising to 23.2 per cent in 2007. Bank of America-Merrill Lynch estimated the black economy at 25 per cent of GDP and the cash-based black economy component being approximately 10 per cent of that proportion.

d Statement by Executive Director for India on 25 January 2017 on the occasion of the IMF Article IV consultations.

e India, Ministry of Finance. Medium term recommendations to strengthen digital payments ecosystem. Report of the Committee on Digital Payments. Available from http://finmin.nic.in/reports/watal_report271216.pdf.

Figure 1.2. Demand-side contributions to economic growth in selected countries



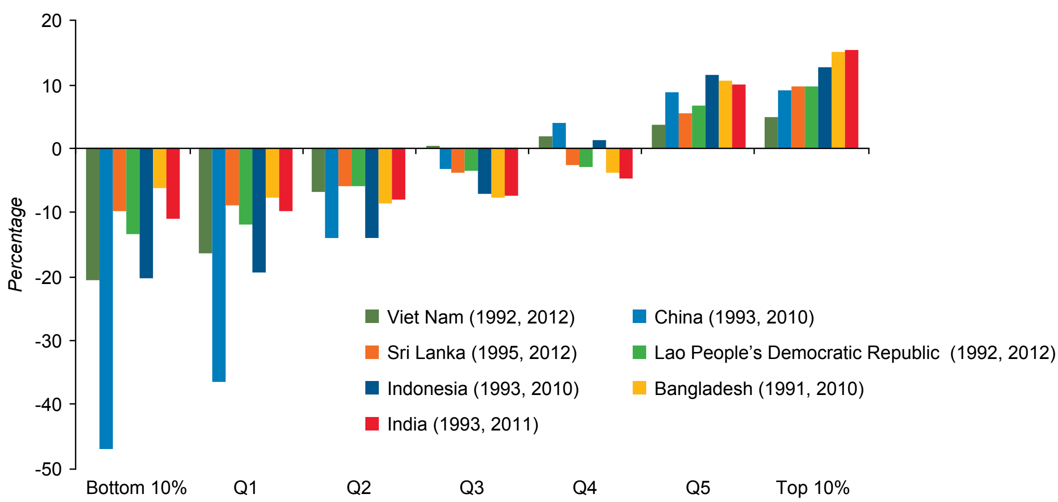
Source: ESCAP, based on data from CEIC.

Note: Total consumption and gross capital formation for China; fiscal year for India (April-March); 2016 data for India includes the first three quarters of fiscal year.

policy attention. Second, households could benefit from borrowing (for instance, to smooth consumption), but unlike income, borrowing has to be paid back, and this burden could become too heavy, especially if earnings are not strong. Third, strong growth in real estate and equity values were partly driven by favourable liquidity conditions, which are likely to tighten in the near future. Moreover, excess inequality in consumption, as reflected in strong sales of luxury goods even during recessions, is not desirable for a society. Thus, beyond the aggregate consumption figures, attention also needs to be paid to the drivers and the distribution of consumption. Available data suggest that increases in consumption since the 1990s were not evenly distributed, with increases in the top quintile and decreases in the bottom three quintiles (see figure 1.3).

Investment performance was relatively weaker in most countries, despite low interest rates. Its contribution to overall growth was relatively modest in Indonesia, Malaysia

Figure 1.3. Change in consumption share since the 1990s



Source: ESCAP, based on World Bank, World Development Indicators.

Note: "Q" means quintile, with Q5 indicating the top 20 per cent of households in terms of consumption.

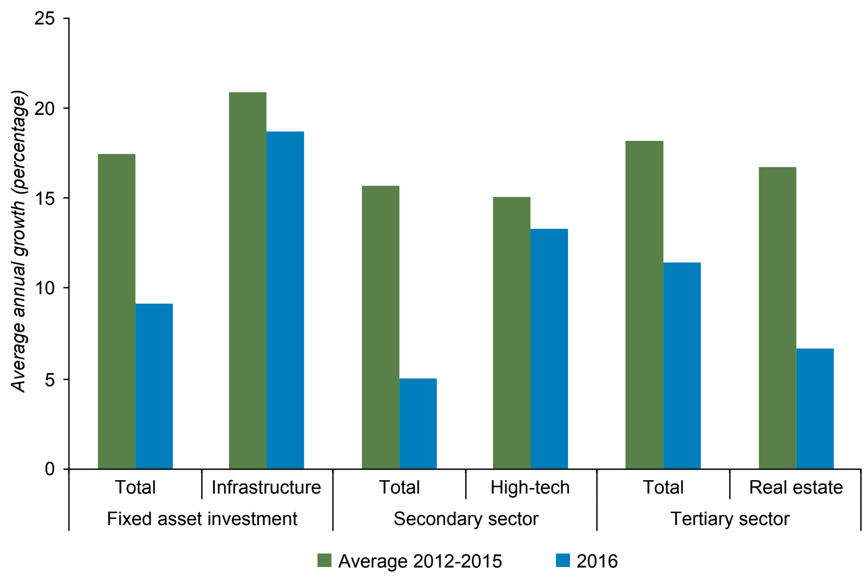
and Thailand and negative in India (see figure 1.2). This outcome was despite a significant reduction in policy interest rates in India and Indonesia and an increase in tax incentives in Thailand. In countries such as Thailand, weak private investment was partly offset by strong public investment, whereas in India and Indonesia weaker-than-expected public investment further weighed on private investment. Bucking the trend was the Philippines, where robust private investment complemented traditionally strong consumption as another engine of growth.

In China, investment growth was relatively stable in 2016 due in part to large public infrastructure outlays which stimulated the construction sector. Infrastructure investment grew by nearly 20 per cent, or about double the pace of overall fixed asset investment (see figure 1.4). This development coincided with some bottoming out in private investment, which had been steadily moderating in recent years. In particular, investment in the high-technology manufacturing sector grew at a relatively healthy pace. This was in line with the Government's policy to foster innovation-led growth and support higher value-added sectors.

While large public outlays were able to offset the slowdown in private investment in China, this was not the case in most countries. Even in China, growth in private investment in recent years was much lower compared with the pre-crisis period (see figure 1.5).[4] Weak private investment is explained in part by global factors, such as overall weak aggregate demand and heightened uncertainty (see figure 1.6). For instance, global growth forecasts have been constantly revised downward in recent years, lowering the expected returns for business. A related factor was excess capacity and low capacity utilization in certain industrial sectors, as reflected in subdued industrial production. There were also signs of debt overhang and balance sheet pressures in the corporate and banking sectors in some of the major economies, including China and India (ESCAP, 2016c).

Without robust private investment, however, a durable recovery will not be possible. Countries such as the Republic of Korea, which have sustained high economic growth for an extended period, managed to also sustain high investment growth for an extended period. Aside from increasing investment, enhancing the quality of growth and allocating resources to productive sectors will be important to enhance the return on investment and avoid "boom-bust" cycles. Although global factors may be difficult to address, countries could ease domestic constraints to private investment. In China, a priority is to address excess capacity in certain sectors, facilitate deleveraging and create a level playing field between State-owned enterprises and private firms. In India, a priority is to repair bank balance sheets, especially those of public sector banks. For all countries, in the medium term, increasing infrastructure investment and enhancing the business environment could stimulate private investment. However, least developed countries face various challenges in this regard (see box 1.2).

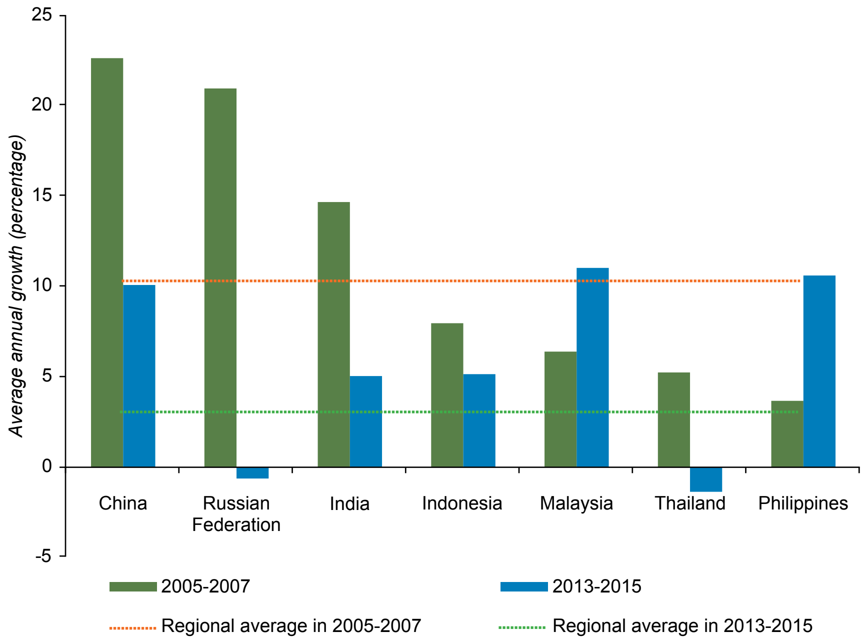
Figure 1.4. Investment in China, by sector



Source: ESCAP, based on data from CIEC and China National Bureau of Statistics.

Note: The data presented is the average annual growth rate in 2012-2015 and 2016. Fixed asset investment (FAI) includes capital spent on infrastructure, property, machinery and other physical assets. High-technology industry is defined as FAI in manufacturing of computers, communications and other electronic equipment.

Figure 1.5. Private investment



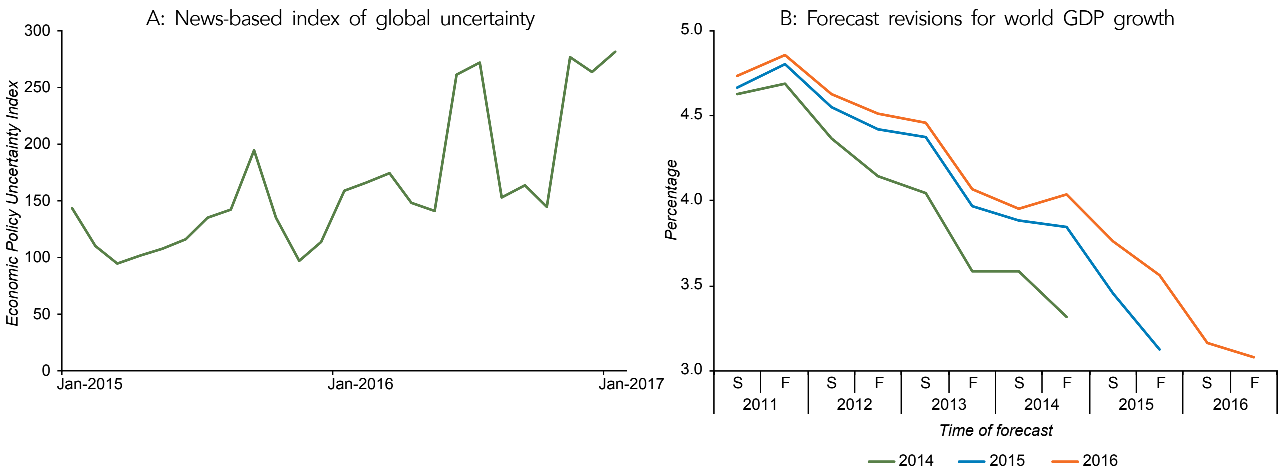
Source: ESCAP, based on IMF, Investment and Capital Stock Dataset. Available from www.imf.org/external/np/fad/publicinvestment/ (accessed 1 February 2017).

Note: The data presented are the average annual growth rate in 2005-2007 and 2013-2015, in constant 2011 international dollars. As shown in the dotted lines, the median value of private investment in 33 regional economies declined from 10.3 per cent in the period 2005-2007 to 3 per cent in the period 2013-2015.

2.3. Weak trade and volatile capital flows present a tough external environment

Exports have been weighed down in recent years by both cyclical and structural factors (ESCAP, 2016b). Nominal growth of exports was particularly weak in 2015 owing to lower global oil prices, which in turn affected domestic producer prices. A partial recovery was under way in 2016, but export growth was still weak by the end of the year and far below the recent historical trend in most countries (see figure 1.7). Imports, which had also contracted through the first half of 2016, began to return to positive growth in the second half of 2016 in several countries, including China, India, Indonesia, the Russian Federation and Thailand. In such countries as India and Thailand, a large net positive contribution was more a reflection of weak domestic demand, particularly investment, rather than strong exports.

Figure 1.6. Indicators of uncertainty



Source: ESCAP, based on data from Baker, Bloom and Davis (2016) and IMF, *World Economic Outlook*, various issues.

Note: A: The higher the figure, the greater is the uncertainty. B: Forecasts made in the Spring (S) and Fall (F) issues of the IMF *World Economic Outlook*.

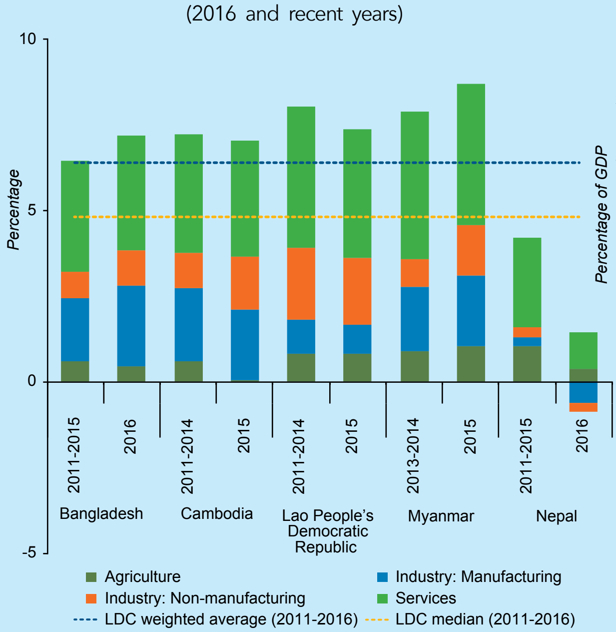
Box 1.2. Growth and investment in least developed countries

Average economic growth in the region's least developed countries was estimated to be 6 per cent in 2016. In particular, Bangladesh, Cambodia and Myanmar have benefited from increased inflows of foreign direct investment (FDI) in recent years, partly due to relocation of production from China. The inflows have supported relatively strong manufacturing growth in these economies (see figure A). However, only a few least developed countries have achieved the 7 per cent growth target envisioned in the Programme of Action for the Least Developed Countries for the Decade 2011-2020[a] (Istanbul Programme of Action). Median economic growth among the region's least developed countries has been below 5 per cent in recent years, or below the average for the developing countries in the Asia-Pacific region due in part to the impact of economic and non-economic shocks, such as natural disasters. Pacific least developed countries, such as Tuvalu and Vanuatu, had the lowest growth rates.

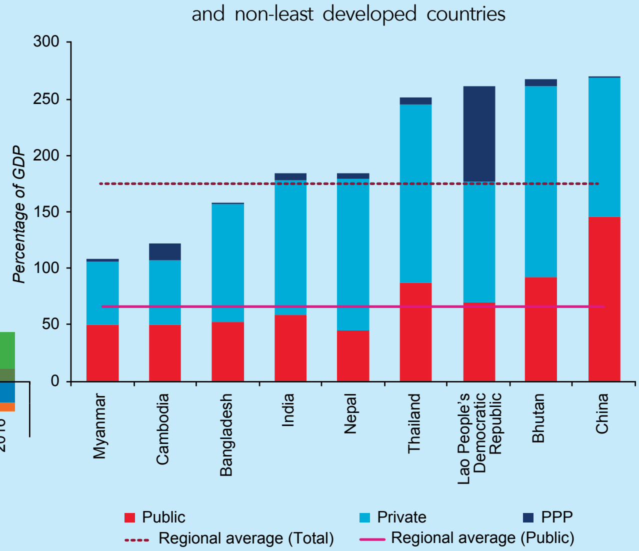
The slow growth in the region's least developed countries is partly due to severe deficits in physical infrastructure. This is also reflected in their relatively low capital stocks, with exceptions, such as Bhutan and the Lao People's Democratic Republic, due to their hydropower sectors (see figure B). In ESCAP (2017) it was suggested that providing transport infrastructure and energy is particularly important to the least developed countries. More sustainable, inclusive and reliable energy, especially solar and hydropower, would enable these countries to accelerate the process of expanding their productive capacities and increase their levels of productivity, while bridging transport infrastructure gaps would be important to improve access to domestic and international markets. Doing so would translate into higher wages and contribute to reducing poverty. This situation also points to the need to strengthen ICT infrastructure in Pacific least developed countries.

Nevertheless, least developed countries are facing major challenges in raising sufficient resources. Those with a small private sector and underdeveloped capital market will need to rely on limited domestic public finance and on official development assistance. New financing vehicles, including cooperation arrangements and public-private partnerships, could offer potential sources of infrastructure financing, but only after institutional capacities have been strengthened. Furthermore, those economies in the Pacific face high costs of developing infrastructure, particularly given their geographic isolation. They also face the additional challenge of having to maintain the steady erosion of infrastructure due to the impacts of climate change.

A: Supply-side contributions to real GDP growth (2016 and recent years)



B: Estimated capital stocks in selected least developed countries and non-least developed countries

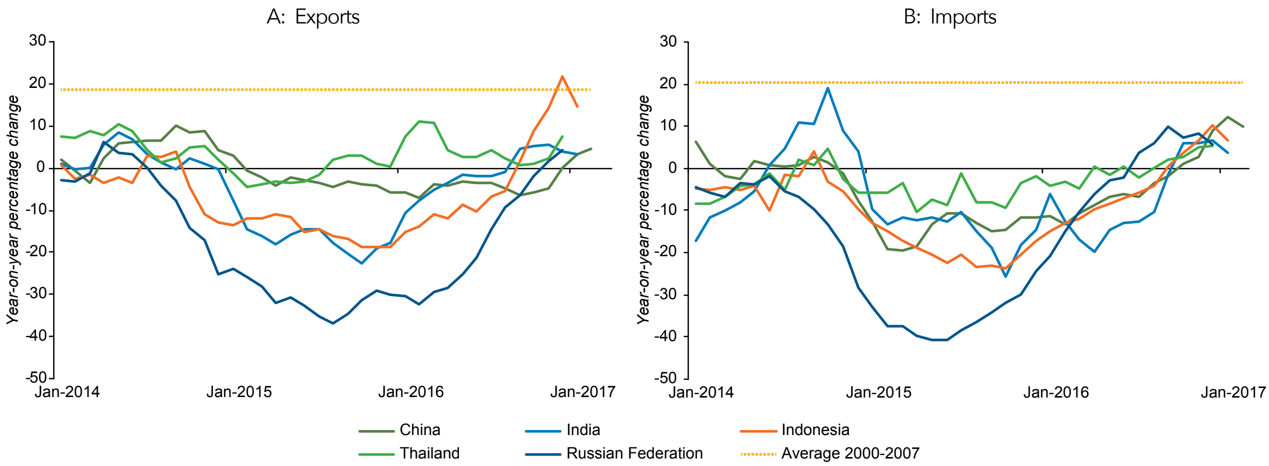


Source: ESCAP, based on data from CEIC and IMF, Investment and Capital Stock Dataset. Available from www.imf.org/external/np/fad/publicinvestment/ (accessed 1 February 2017).

Note: A: The weighted average and median real GDP growth rates are based on all 12 regional least developed countries, but supply-side contributions are presented for selected least developed countries, for which data are available. B: Estimated stocks in 2015 based on constant 2011 international dollars. PPP refers to public-private partnership. Regional average of 33 economies.

[a] General Assembly resolution 65/280.

Figure 1.7. Nominal growth in trade

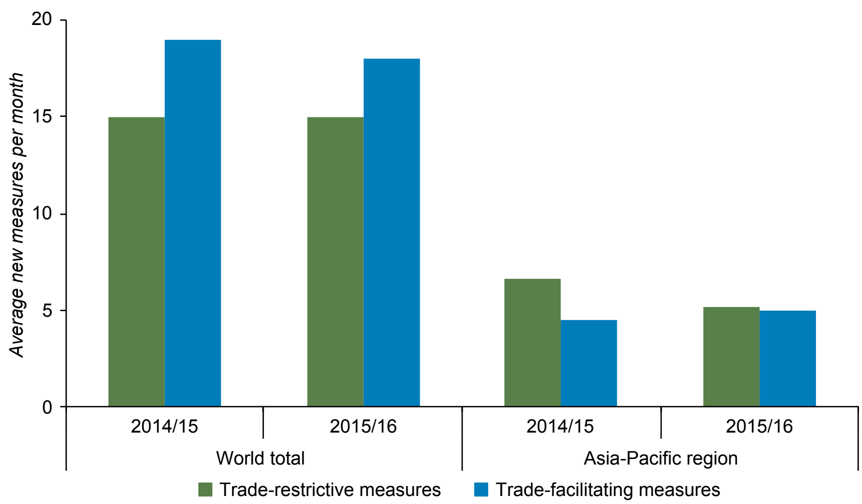


Source: ESCAP, based on data from CEIC and ESCAP Statistical Database. Available from www.unescap.org/stat/data (accessed 1 February 2017).

Note: The dotted line indicates average annual growth rate for the period 2000-2007 in China, India, Indonesia, the Russian Federation and Thailand.

Despite the recent mild recovery, exports are unlikely to be a major driver of economic growth for developing economies in the region, which is partly due to structural changes in global trade. Important factors include changes in demand structure, the deceleration in the expansion of global value chains and the impact of China's economic transformation (see box 1.3). The ratio of growth in trade volume and global GDP has noticeably declined in recent years, falling below 1 in 2016. The exchange rate elasticity of exports also seems to have declined. The intensification of global supply chains has slowed significantly since 2009, implying that trade volumes and global production could become increasingly disconnected from one another (ESCAP, 2015a; Hoekman, 2015). Given such changes, the degree to which a pickup in global output or depreciation of regional currencies would translate into higher export volumes is uncertain. Rising protectionist measures and sentiments are also adding to the current uncertainty. The stockpile of trade-restrictive measures has increased in recent years, both globally and in the region (see figure 1.8). The initiation of trade remedy measures relating to anti-dumping, countervailing duties and safeguards has also dramatically increased (ESCAP, 2016b), affecting progress of trade liberalization, including through preferential trade agreement efforts.

Figure 1.8. Trade-restrictive and facilitating measures



Source: ESCAP, based on data from World Trade Organization, Trade Monitoring Reports, several issues. Available from www.wto.org/english/tratop_e/tpr_e/trade_monitoring_e.htm ; and ESCAP, *Asia-Pacific Trade and Investment Report 2016: Recent Trends and Developments* (Sales No. E.16.II.F.23). Available from www.unescap.org/resources/asia-pacific-trade-and-investment-report-2016-recent-trends-and-developments.

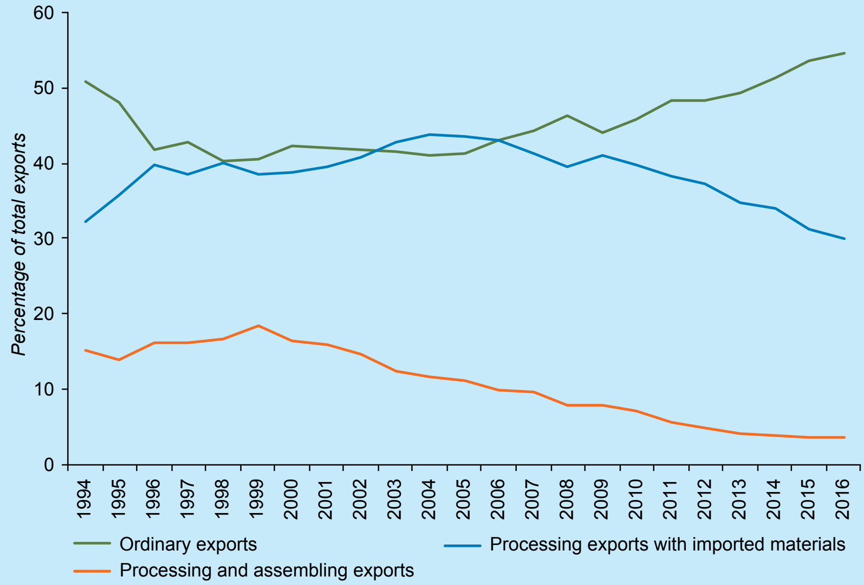
Note: The years 2014/15 and 2015/16 refer to the period from mid-October of one year to mid-October in the next year.

Box 1.3. Structural changes in China's trade

China has gradually shifted from exporting consumer goods to capital goods. In addition, the country has decreased its reliance on imported inputs for export production and reduced its dependency on processing exports. The share of capital goods in China's total exports rose from 30 per cent in 2000 to nearly 50 per cent in 2008, while its share in total imports was declining. Intermediate imports were also declining, from 40 per cent of total imports to only 20 per cent during those years. The growth rate of processing exports has been lagging behind ordinary exports since 2005. As a result, the share of processing exports with imported materials decreased from 44 per cent of total exports in 2005 to less than 30 per cent in 2016 while the share of ordinary exports increased from 41 to 55 per cent (see figure below).

These trends suggest two important structural changes in China: the movement away from processing exports into more complicated exported goods, and the movement away from using imported inputs to using domestic inputs. The potential impacts of these changes on other countries in the region are as follows. The upgrading may lead to higher competition between China and countries that export intermediates and capital goods in global value chains. The countries most affected may be those in the group of upper-middle-income countries, such as Malaysia and Thailand. On the other hand, lower-wage economies with appropriate infrastructure, such as Cambodia and Viet Nam, may have an opportunity to replace China in the low-value added segments of global value chains. However, uncertainties remain in the latter case, because the relocation of assembly plants from a high-wage coastal region to a low-wage inland region is also possible. Wage levels in the inland regions of China are still relatively low. The inland regions have already participated in domestic value chains. They have indirectly exported through firms in the coastal regions of China (Meng and others, 2012). Furthermore, they have advantages in terms of closer proximity to suppliers of parts and components (the upstream segments of global value chains) and to a large domestic market.

Composition of China's exports, by customs regime (1994 to 2016)

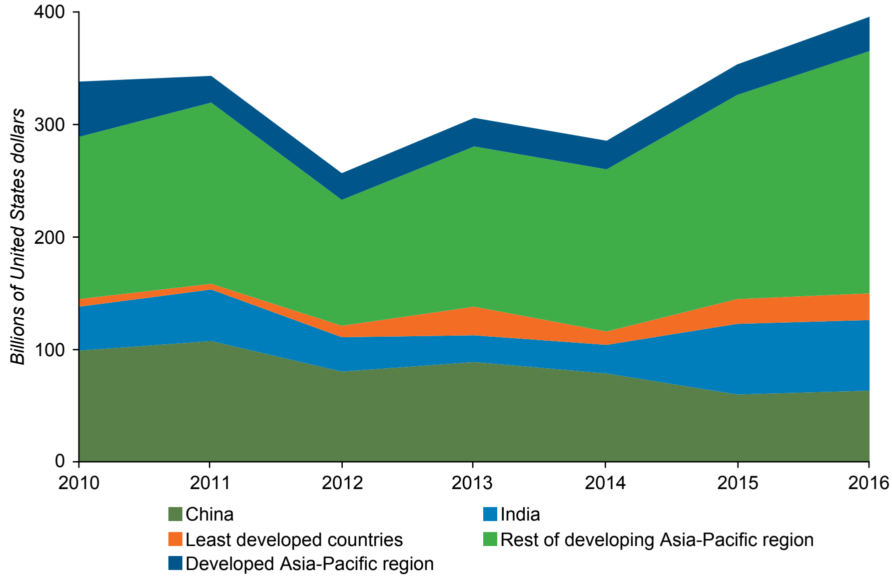


Source: ESCAP, based on data from CEIC.

On the FDI front, it is estimated that overall inflows to the region moderated in 2016 compared with that of the previous year, but remained high compared with the recent historical trend. The largest inflows were to China; Hong Kong, China; Singapore; and India, in that order (UNCTAD, 2017). In considering only greenfield FDI (excluding mergers and acquisitions), it is estimated that inflows to the region rose further in 2016 and that inflows to least developed countries remained relatively strong (see figure 1.9). The region's FDI outflows have also steadily increased in recent years, largely because of China, which is a major contributor to intraregional FDI, including through the Belt and Road Initiative.

However, non-FDI capital flows, such as portfolio flows and cross-border bank loans, have been quite volatile, in part due to realignment of exchange rates. With the strengthening of the United States dollar, most regional currencies have been depreciating bilaterally. The depreciation of some regional currencies was particularly

Figure 1.9. Greenfield foreign direct investment inflows



Source: ESCAP, based on data from Financial Times Ltd, fDi Intelligence. Available from www.fdiintelligence.com/

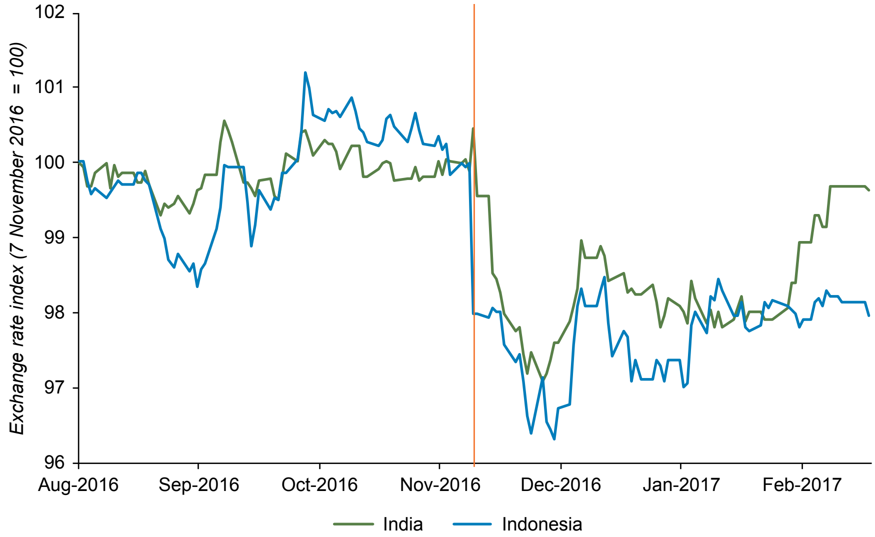
Note: The term developed Asia-Pacific region refers to Australia, Japan and New Zealand.

large in the wake of the United States presidential election in November 2016, although there has since been a partial recovery (see figure 1.10). Even before that election, the Chinese renminbi was under heavy depreciation pressure (see figure 1.11). China's foreign currency and bond markets went through substantial swings at the turn of the year. It is estimated that 40 per cent of the roughly $490 billion in outflows in 2016 took place during the fourth quarter (BIS, 2017). With the introduction of new capital control measures in December, outflows slowed in the first month of 2017. Overall, the size of the bilateral trade surplus *vis-à-vis* the United States has been a relevant factor in explaining the different degree of improvement in exchange rates since the recovery, with the gains being relatively smaller in Asian economies compared with other regions.

A key question is whether depreciation of currencies will have a net positive impact, as some currency-induced export competitiveness may be offset by increased pressure on corporate balance sheets with high dollar debt. These in turn could affect domestic private investment in different ways. While exchange rate depreciation could potentially boost exports, this effect may be mitigated by trade protectionist measures. The elasticity of trade to exchange rate movements seems to have decreased in any case due to structural factors, such as the expansion of global value chains. On the other hand, the financial effect of exchange rate movements seems to have increased since the 2000s (Lane and Shambaugh, 2010). When banks and corporations have foreign currency liabilities, exchange rate depreciation has valuation effects that can lead to a tightening of domestic financial conditions. For instance, a recent Bank for International Settlements (BIS) study estimated that, for a median developing economy, a 1 per cent appreciation of the debt-weighted exchange rate leads to an increase in quarterly GDP growth of 0.1 per cent in both the short and long run (Kearns and Patel, 2016). Both the trade and financial channels are more prominent in Asia compared with other regions. The financial channel is stronger for developing countries with more foreign currency debt, and it operates strongly through investment.

Large shifts are taking place on the external front, including in trade and capital flows and exchange rates. While some export recovery has been witnessed in recent months, countries in the region cannot rely simply on external demand to drive growth in coming years. Domestic and regional demand will need to play a greater role. At the same time, given the potential benefits of trade, countries in the region should continue to reduce trade costs and roll back the recent increase in trade barriers. Moreover, the gains from trade should be more broadly shared. Trade and technological changes could enable certain sectors to grow while shirking others, forcing the burden of adjustment predominantly onto households that are less mobile (IMF, 2017). Active labour market policies and social protection are thus needed. FDI flows into the region have been relatively robust, but greater effort is needed to ensure that they contribute to expanding the productive capacity of economies and creating decent jobs, including in least developed countries. Non-FDI capital flows have been quite volatile

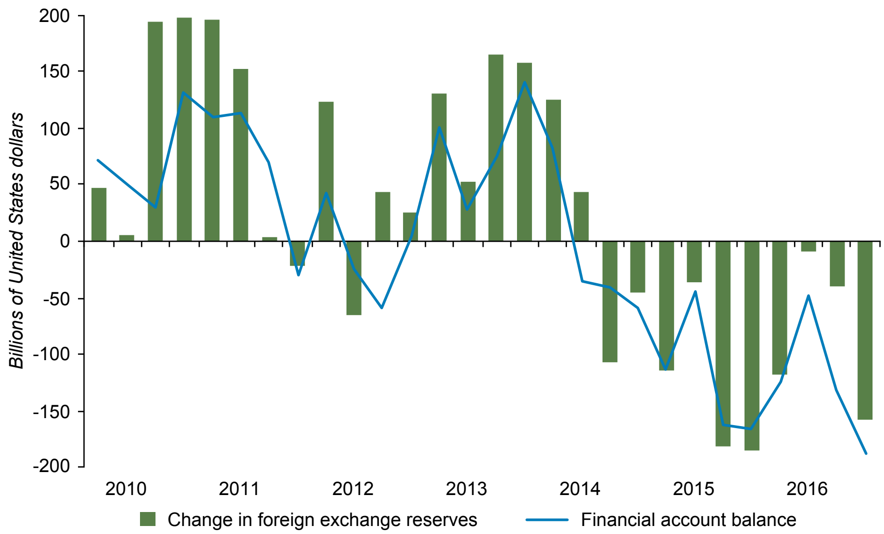
Figure 1.10. Depreciation of regional currencies in the wake of the United States presidential election



Source: ESCAP, based on data from CEIC.

Note: Bilateral exchange rate *vis-à-vis* the United States dollar.

Figure 1.11. China: Change in foreign exchange reserves and financial account balance



Source: ESCAP, based on data from Bank for International Settlements (2017). *BIS Quarterly Review*, March. Basel, Switzerland.

and their potential impacts, including on corporate balance sheets and domestic private investment, will need to be carefully assessed.

2.4. A modest recovery is under threat

Across the region, economic growth is expected to be slightly more broad-based in 2017 in terms of demand-side components. Leading indicators, such as manufacturing PMIs and the latest export and import data, point to a mild economic recovery, particularly on the investment side. However, such a recovery is unlikely to be a firm rebound given that the factors which held back domestic demand remain largely unresolved even as rising trade protectionism effectively offsets potential recovery in external demand.

Average economic growth in the developing Asia-Pacific region is projected to rise to 5 per cent in 2017 and 5.1 per cent in 2018 (see table 1.1), underpinned by stable

Table 1.1. Economic growth in the ESCAP region, 2016-2018

	Real GDP growth		
(Percentage)	2016[a]	2017[b]	2018[b]
East and North-East Asia	**3.8**	**3.7**	**3.6**
East and North-East Asia (excluding Japan)	**5.9**	**5.8**	**5.7**
China	6.7	6.5	6.4
Democratic People's Republic of Korea	..	..	..
Hong Kong, China	1.9	2.3	2.5
Japan	1.0	1.0	0.8
Macao, China	-2.1	2.8	5.0
Mongolia	1.2	2.0	3.5
Republic of Korea	2.8	2.5	2.7
North and Central Asia	**0.1**	**1.4**	**1.7**
North and Central Asia (excluding Russian Federation)	**1.5**	**2.9**	**3.4**
Armenia	0.9	2.5	3.0
Azerbaijan	-3.8	0.2	1.2
Georgia	2.7	3.5	3.0
Kazakhstan	1.0	2.0	2.5
Kyrgyzstan	-1.1	3.5	3.7
Russian Federation	-0.2	1.1	1.4
Tajikistan	6.6	5.0	5.2
Turkmenistan	6.2	6.5	6.8
Uzbekistan	7.3	7.4	7.4
Pacific	**2.6**	**2.7**	**2.9**
Pacific island developing economies	**2.6**	**3.1**	**2.6**
Cook Islands	4.2	4.0	1.1
Fiji	2.0	3.6	3.0
Kiribati	3.1	2.7	2.0
Marshall Islands	1.5	2.0	1.6
Micronesia (Federated States of)	2.0	2.5	2.5
Nauru	3.0	15.0	10.0
Palau	2.0	5.0	5.0
Papua New Guinea	2.5	3.0	2.5
Samoa	6.4	2.0	2.0
Solomon Islands	2.7	2.5	3.0
Tonga	3.1	2.6	2.7
Tuvalu	4.0	3.0	3.0
Vanuatu	3.5	3.8	2.5
Developed countries in the Pacific subregion	**2.6**	**2.7**	**2.9**
Australia	2.4	2.5	2.7
New Zealand	4.3	4.5	4.4
South and South-West Asia[c]	**5.4**	**5.6**	**5.9**
Afghanistan	2.0	3.0	4.3
Bangladesh	7.1	6.8	6.5
Bhutan	6.4	6.6	7.0
India	7.1	7.1	7.5
Iran (Islamic Republic of)	4.3	4.7	4.4
Maldives	3.9	4.5	4.6
Nepal	0.6	4.6	4.8
Pakistan	4.7	5.2	5.4
Sri Lanka	4.4	4.8	4.9
Turkey	2.4	2.8	3.2
South-East Asia	**4.5**	**4.7**	**4.8**
Brunei Darussalam	-2.0	0.8	1.0
Cambodia	7.2	7.2	7.1
Indonesia	5.0	5.2	5.3
Lao People's Democratic Republic	6.9	6.9	6.8
Malaysia	4.2	4.4	4.5
Myanmar	6.3	7.5	7.6
Philippines	6.8	6.9	7.0
Singapore	2.0	2.2	2.5
Thailand	3.2	3.3	3.4
Timor-Leste	5.0	5.5	6.0
Viet Nam	6.2	6.5	6.7
Memorandum items:			
Developing ESCAP economies[d]	**4.9**	**5.0**	**5.1**
Least developed countries	6.0	6.5	6.5
Landlocked developing countries	1.6	3.1	3.6
Small island developing States	2.9	3.4	3.0
Developed ESCAP economies[e]	**1.3**	**1.3**	**1.2**
Total ESCAP region	**3.7**	**3.8**	**3.8**

Source: ESCAP, based on national sources; United Nations, Department of Economic and Social Affairs (2017). *World Economic Situation and Prospects 2017*, Sales No. E.17.II.C.2. Available from www.un.org/en/development/desa/policy/wesp/wesp_current/wesp2017.pdf; IMF, International Financial Statistics databases. Available from http://elibrary-data.imf.org; ADB, *Asian Development Outlook 2016* and its updates (Manila, 2016); and CEIC Data Company Limited. Available from www.ceicdata.com.

Note: Aggregate growth rates were calculated using GDP at 2010 United States dollars as weights, a change from the previous calculation using GDP at 2005 prices. The update better reflects the current structure of the economies closer to the base period and provides a more accurate measure of growth. A notable change is evident in the increase in China's weight among the Asia-Pacific developing economies and is consistent with China's remarkable growth to become the world's second largest economy. The shift in the base year thus resulted in increased aggregate growth by approximately 0.1 percentage point compared with the previous base year.

a Estimate.

b Forecasts (as of 30 March 2017).

c The estimates and forecasts for countries relate to fiscal years defined as follows: 2016 refers to the fiscal year spanning the period from 1 April 2016 to 31 March 2017 for India; from 21 March 2016 to 20 March 2017 for Afghanistan and the Islamic Republic of Iran; from 1 July 2015 to 30 June 2016 for Bangladesh, Bhutan and Pakistan; and from 16 July 2015 to 15 July 2016 for Nepal.

d Developing ESCAP economies consist of all countries and areas listed in the table, excluding Australia, Japan and New Zealand.

e The group of developed ESCAP economies consists of Australia, Japan and New Zealand.

economic conditions in China, where higher value-added sectors are gradually replacing excess capacity sectors as the driver of output, employment and export growth. Projected moderation in China reflects mostly ongoing efforts to deleverage and restructure the economy, which could boost growth in the medium term. In India, a gradual recovery from an estimated 7.1 per cent growth rate in 2016 is projected, as remonetization will restore consumption, but a revival in investment will take longer given unresolved problems in the banking sector. A slightly improved growth outlook for the rest of the region is due to a recovery in net commodity-exporting economies and public investment in some of the net commodity-importing economies. Among developed Asia-Pacific economies, growth in Japan is projected to strengthen in line with improved labour market conditions (see chapter 2 for more details).

Despite the broadly positive economic outlook for 2017 and 2018, the likely impact of some risks for the near-term economic outlook should not be underestimated. With a significant increase in global policy uncertainty in recent months, the risks to the outlook are tilted to the downside.

The most significant risk is trade protectionism.[5] Recent shifts in United States policy over trade, currency, immigration and other areas could have large potential impacts on the region, including for China's goods exports and India's services exports. Possible further shifts in United States policy, together with Brexit and upcoming elections in various European countries, have also resulted in heightened global uncertainty, which in itself undermines investment in the region. Any foregone trade and investment in turn could hurt employment prospects and act as a drag on productivity growth in the years to come. Based on simulations, average economic growth in developing Asia-Pacific economies in 2017 could be up to 1.2 percentage points slower than the baseline projections if an increase in trade protectionism and global economic uncertainty is steeper than anticipated (see box 1.4).

All this comes at a time of potential tightening of global financial conditions, which could effectively bring to an end the region's cycle of monetary easing. Capital outflow pressures, which increased in the wake of the United States election before subsiding recently, are likely to re-emerge with the announcement by the United States of fiscal stimulus and lead to further depreciation of regional currencies against the United States dollar. This outcome is expected to be accompanied by bouts of financial volatility, arising from any deviations of actual policy from market expectations.[6] The United States raised its federal funds rate in March 2017 for the second time since the United States election in November 2016 and only the third time in a decade. The median expectation is that there will be two more rate increases in 2017. There is also a chance that sovereign yields in Europe could rise on the back of more expansionary fiscal stances and that the European Central Bank (ECB) may not extend its quantitative easing beyond 2017. Countries in the region with large current account deficits and high short-term external debt are particularly vulnerable.

On the upside, regional exports could benefit from stronger external demand and currency-induced competitiveness, but any boost is likely to be limited by trade protectionist measures. Currency depreciation could also further limit monetary policy space, not least due to its inflationary impact.

Within the region, China's role as originator and transmitter of shocks has increased in recent years. Real or perceived economic instability in China could lead to bouts of financial volatility in the region, as witnessed in early 2016. In view of the fact that several regional economies are competing with China in global value chains, depreciation of the renminbi puts pressure on other regional currencies to also depreciate. On the upside, if China's economic performance is stronger than expected, as in 2016, there could be positive trade spillovers.

In the medium term, strengthening domestic and regional demand will be critical in the face of a tough external environment. In this regard, China's rebalancing and opening augurs well for the region. The Belt and Road Initiative could provide renewed momentum for regional connectivity and intraregional trade, while China's capital account liberalization could dramatically increase the pool of long-term financing available for investment in the region. The future of regional demand also depends largely on whether South Asia realizes its full potential, for which regional economic cooperation and integration could critically complement domestic efforts.

Box 1.4. Alternative economic growth scenarios for developing Asia-Pacific economies in 2017

Although the baseline projections would seem to predict higher economic growth in developing Asia-Pacific economies in 2017, the region is set to face two key external downside risks. These risks are increased trade protectionism and heightened economic policy uncertainty in developed economies. While the baseline projections did take into account these developments to some extent, a sharper-than-expected increase in the degree of protectionism and uncertainty is possible. For example, several major developed and developing countries are considering non-tariff measures (NTMs) with unclear effective dates.[a] With regard to uncertainty, an example includes unexpected electoral outcomes that might lead to policy surprises, reversal of announced policies and unanticipated market reactions to known policy changes.

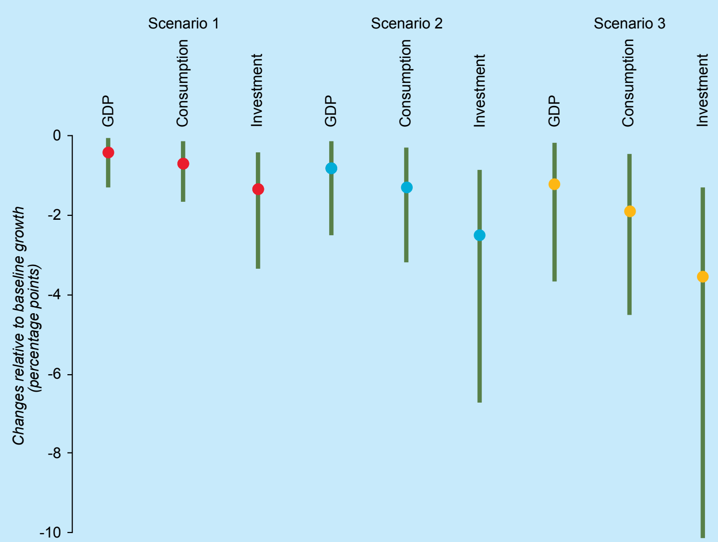
Sharper-than-expected increases in the degree of trade protectionism and economic uncertainty – if they materialize – would result in output growth that is below the baseline projections. In economies with a large export-oriented sector and high domestic content in export products, the adverse impact of trade protectionism on domestic employment conditions could be notable. In highly uncertain economic conditions, consumers also face increased job insecurity that deters their spending on durable goods and housing. Given less predictable demand, businesses are reluctant to expand production capacity, especially if excess capacity is already large. Finally, banks also tighten lending standards as perceived default risks rise.

To quantify the impact that the two risk factors could have on the projected economic growth in developing Asia-Pacific economies in 2017, three simulation scenarios were created using the Oxford Global Economic Model. These scenarios assume: a decline in merchandise exports following greater use of non-tariff trade barriers; a rise in the risk premium on a country's foreign debt amid a higher degree of risk aversion among global investors; and deteriorating domestic market confidence. The difference across the three scenarios is the assumed magnitude of changes in these variables.

In particular, while in the first scenario it is assumed that stronger-than-expected trade protectionism is confined to developed markets, in the second scenario it is assumed that developing Asia-Pacific economies themselves also introduce more trade-restrictive measures than had been expected. Such across-the-board rises in trade protectionism push up the risk premium and dent market confidence significantly. Finally, in the third scenario it is assumed that the levels of export declines are the same as those in the second scenario but feature an even higher risk premium and weaker market confidence.[b]

Under the first scenario, output growth in 14 developing Asia-Pacific economies in 2017 could be about 0.4 percentage points lower than the baseline case.[c] The magnitude of such a negative growth impact increases to 0.8 and 1.2 percentage points in the second and third scenarios respectively. In addition to the assumed export decline, projected economic growth is weighed down by more sluggish expansion in private consumption and gross fixed capital investment as a result of weaker market sentiment and higher financing costs (see figure below).

Alternative growth scenarios for developing Asia-Pacific economies in 2017



Source: ESCAP, based on the Oxford Global Economic Model.
Note: The vertical lines show the ranges of macroeconomic variables in 14 developing economies in the region in 2017. The dots on the lines represent the group-average values. The baseline projections are based on forecasts in the Oxford Model.

Box 1.4. *(continued)*

Slower economic growth in turn could adversely affect employment and wage prospects. At the global level, it is estimated that lower consumption and investment demand could increase unemployment by an addition 0.3 million persons in 2017 and almost 1 million in 2018 (ILO, 2017b). In developing countries, more relevant indicators could be the potential increases in underemployment and informal sector jobs during economic downturns. Employment generation is also likely to slow. Under the third scenario, it is estimated that employment growth in 14 developing Asia-Pacific economies in 2017 could be 0.3 percentage points lower than the baseline case, which is fairly significant given that average employment growth in the region in 2016 was 1.1 per cent.

[a] See the WTO Integrated Trade Intelligence Portal (I-TIP). Available from www.wto.org/english/res_e/statis_e/itip_e.htm.

[b] In the first scenario it is assumed that a country's exports to developed countries are 10 per cent lower than the baseline levels, the risk premium rises by 100 basis points and the confidence index declines by 5 points on a common 0-100 scale. In the second scenario it is assumed that exports to developed markets and developing Asia-Pacific economies are 15 and 10 per cent lower than their baseline levels respectively, while the risk premium rises by 150 basis points and the confidence index declines by 10 points. In the third scenario it is assumed that the latter two figures are 200 basis points and 15 points respectively.

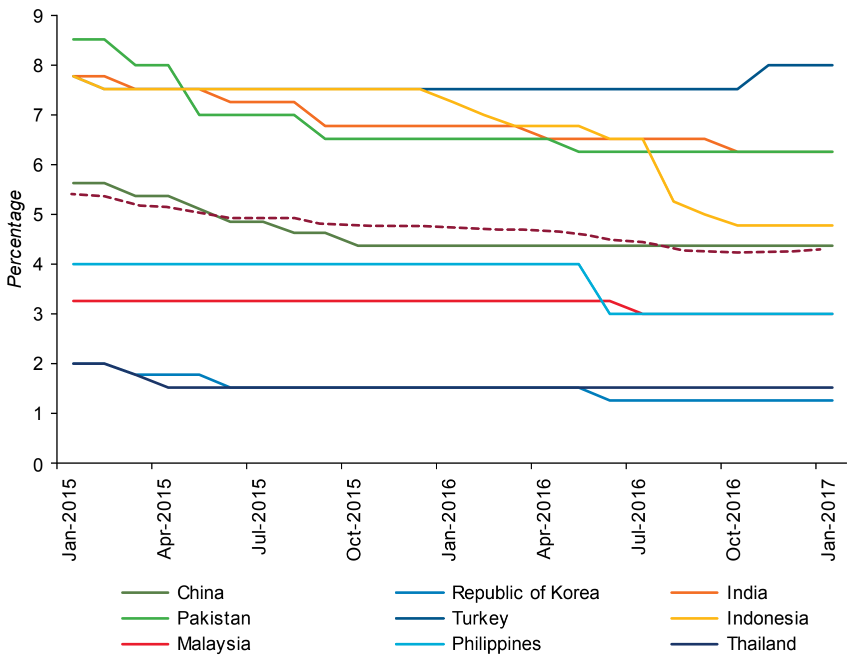
[c] The 14 economies are: China; Hong Kong, China; India; Indonesia; the Islamic Republic of Iran; Malaysia; Pakistan; the Philippines; the Republic of Korea; the Russian Federation; Singapore; Thailand; Turkey; and Viet Nam. Together, they account for nearly 96 per cent of total output in developing Asia-Pacific economies.

3. ECONOMIC POLICY CONSIDERATIONS

3.1. Monetary policy space and efficacy are declining

Monetary policy stances in the region have recently shifted from "accommodative" to "neutral" as upside risks to inflation increased. In the first three months of 2017, policy interest rates were on hold in India, Indonesia and the Philippines, while short-term interest rates increased in China, in contrast to the previous two years when policy rates were lowered consecutively or kept at record low levels in these economies plus others such as Pakistan, the Republic of Korea and Thailand (see figure 1.12). Average inflation in developing Asia-Pacific economies is projected to rise from 3.6 per cent in 2016 to 3.8 per cent

Figure 1.12. Policy interest rates



Source: ESCAP, based on data from CEIC and national central banks.

Note: Mean value of policy rates of these nine economies is shown by the dashed line. China is at the median throughout the period. The marked drop in Indonesia's policy rate in August 2016 was due to the adoption by Bank Indonesia of the seven-day reverse repurchase rate as its new benchmark.

in 2017 and 2018 (see table 1.2). The uptick is more evident if the average excludes North and Central Asia, where inflation has been subsiding after large currency depreciations prompted high inflation in the previous two years. In India, stronger inflationary pressure in recent months also reflected the remonetization of the economy, which spurred consumption demand. In China, although the overall monetary policy stance was neutral (with no changes in the benchmark deposit and lending rates), short-term money market rates were increased to curb capital outflows and ease downward pressure on the renminbi.

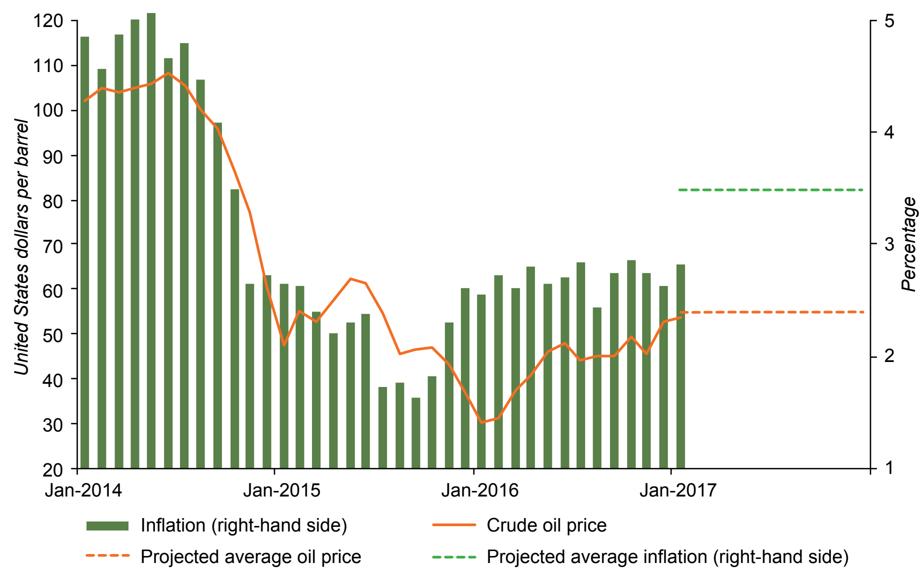
While global commodity prices have largely stabilized since 2016, they remain a source of upside or downside risk depending on whether a country is a net commodity exporter or importer. If global oil prices overshoot baseline projections of $55 per barrel, net importers of oil in the region would face higher inflation but net exporters would see faster economic recovery (see figure 1.13). Despite the OPEC production limitation agreement, large inventories and the availability of shale oil in the United States have so far limited further price rises.

In any case, the boost from low inflation and supportive monetary stances has been smaller than expected. For instance, countries which underwent disinflation or reduced their interest rate did not necessarily see output growth accelerate in the following year (see figure 1.14). Possible reasons include relatively weak growth in real wages and farm incomes on the consumption side and uncertainty and excess capacity on the investment side. In some countries, private sector debt overhang was also a major factor. In particular, private investment has not been forthcoming in many countries.

The recent uptick in inflation, though mostly due to non-domestic demand factors, such as oil prices and exchange rate depreciation, calls for caution. Likely currency depreciation could further limit monetary policy space, not least due to its inflationary impact. Nevertheless, raising policy rates would be difficult as well. For instance, leveraged households and firms could find that debt service costs will rise and refinancing become more difficult, thus increasing financial stability risks (see figure 1.15). Economies are therefore advised to maintain the status quo in terms of policy interest rates. At the same time, they should consider strengthening the management of capital flows and macroprudential measures to mitigate the adverse effects of exchange rate depreciation and to ensure financial stability (ESCAP, 2016c).

A potential source of financial instability in the near future may be worries about excessive indebtedness. In 2016, global total debt stood at record levels of $152 trillion or 225 per cent of global GDP (IMF, 2016). Furthermore, a specific vulnerability of debt accumulation is that, although issuance of local currency bonds has increased, considerable volumes of debt have been issued in hard currency, mostly the United States dollar. The interest rate hikes in the United States, together with the strong dollar, could spark a trend reversal. Within the region,

Figure 1.13. Crude oil price and average inflation in selected net commodity importers



Source: ESCAP, based on CEIC and IMF data.

Note: Projected average crude oil price of $55 per barrel in 2017. Unweighted average inflation in China, India, Pakistan, Philippines and Republic of Korea, with the projection for 2017 based on table 1.2.

Table 1.2. Inflation in the ESCAP region, 2016-2018

(Percentage)	Inflation[a] 2016[b]	2017[c]	2018[c]
East and North-East Asia	**1.0**	**1.6**	**1.8**
East and North-East Asia (excluding Japan)	**1.9**	**2.2**	**2.4**
China	2.0	2.3	2.5
Democratic People's Republic of Korea	..	..	..
Hong Kong, China	2.4	2.5	2.7
Japan	-0.1	0.8	0.9
Macao, China	2.4	2.0	2.0
Mongolia	1.1	4.5	5.3
Republic of Korea	1.0	1.9	2.0
North and Central Asia	**7.8**	**5.4**	**4.8**
North and Central Asia (excluding Russian Federation)	**11.6**	**7.2**	**6.6**
Armenia	-1.4	1.5	3.0
Azerbaijan	12.4	7.9	5.8
Georgia	2.2	3.2	3.2
Kazakhstan	14.7	6.8	6.2
Kyrgyzstan	0.4	1.3	3.0
Russian Federation	7.1	5.0	4.5
Tajikistan	6.0	5.0	4.5
Turkmenistan	4.2	5.7	5.9
Uzbekistan	11.5	12.5	12.0
Pacific	**1.3**	**1.9**	**2.3**
Pacific island developing economies	**5.3**	**5.5**	**5.0**
Cook Islands	-0.3	1.6	1.5
Fiji	3.9	2.5	2.5
Kiribati	1.5	1.8	2.1
Marshall Islands	-1.3	1.0	1.8
Micronesia (Federated States of)	-0.3	1.5	1.9
Nauru	6.6	1.7	1.7
Palau	1.5	2.5	2.5
Papua New Guinea	6.9	7.5	6.6
Samoa	1.3	2.3	2.3
Solomon Islands	3.3	4.5	3.8
Tonga	2.0	1.9	3.2
Tuvalu	3.5	3.0	2.8
Vanuatu	1.9	2.4	2.6
Developed countries in the Pacific subregion	**1.2**	**1.9**	**2.2**
Australia	1.3	1.9	2.3
New Zealand	0.6	1.5	1.7
South and South-West Asia[d]	**6.1**	**6.9**	**6.6**
Afghanistan	6.0	6.5	6.5
Bangladesh	5.9	5.8	5.5
Bhutan	4.0	4.5	5.0
India	5.0	5.3	5.5
Iran (Islamic Republic of)	8.5	9.2	9.2
Maldives	0.5	2.9	3.7
Nepal	9.7	8.5	8.0
Pakistan	2.9	5.0	5.5
Sri Lanka	4.0	5.0	5.3
Turkey	7.8	9.7	8.0
South-East Asia	**2.1**	**3.2**	**3.5**
Brunei Darussalam	-0.7	0.5	1.2
Cambodia	3.0	3.4	4.0
Indonesia	3.5	4.2	4.4
Lao People's Democratic Republic	1.6	2.1	2.6
Malaysia	2.1	3.2	3.4
Myanmar	7.2	8.5	8.5
Philippines	1.8	3.2	3.4
Singapore	-0.5	1.0	1.2
Thailand	0.2	1.5	2.0
Timor-Leste	-0.6	1.3	3.8
Viet Nam	2.7	4.0	4.5
Memorandum items:			
Developing ESCAP economies[e]	**3.6**	**3.8**	**3.8**
Least developed countries	6.1	6.4	6.3
Landlocked developing countries	11.1	7.2	6.6
Small island developing States	4.4	5.0	4.8
Developed ESCAP economies[f]	**0.1**	**1.0**	**1.1**
Total ESCAP region	**2.5**	**2.9**	**2.9**

Source: ESCAP, based on national sources; United Nations, Department of Economic and Social Affairs (2017). *World Economic Situation and Prospects 2017*, Sales No. E.17.II.C.2. Available from www.un.org/en/development/desa/policy/wesp/wesp_current/wesp2017.pdf; IMF, International Financial Statistics databases. Available from http://elibrary-data.imf.org; ADB, Asian Development Outlook 2016 and its updates (Manila, 2016); and CEIC Data Company Limited. Available from www.ceicdata.com.

Note: Aggregate growth rate calculated using 2010 United States dollars (GDP weights).

a Annual average of changes in consumer price index.

b Estimate.

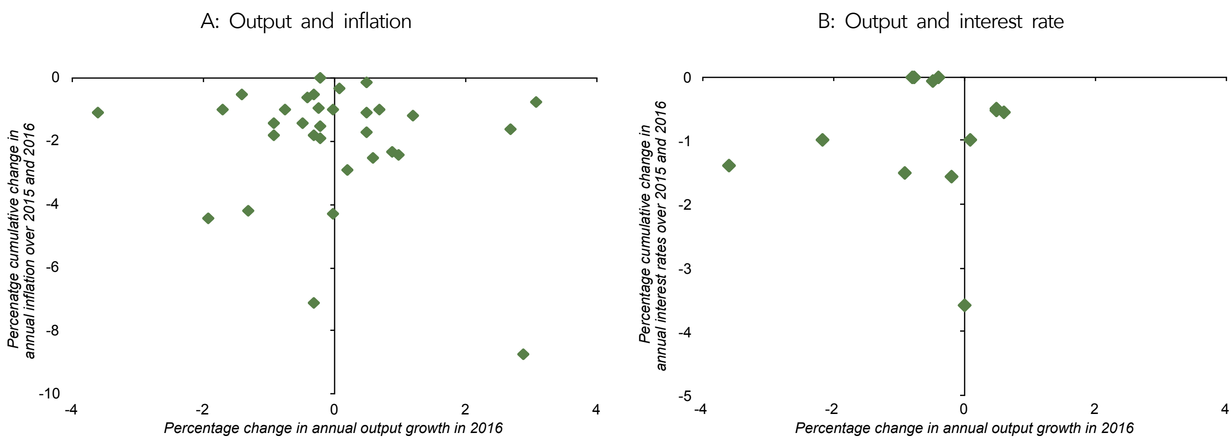
c Forecasts (as of 30 March 2017).

d The estimates and forecasts for countries relate to fiscal years defined as follows: 2016 refers to the fiscal year spanning the period from 1 April 2016 to 31 March 2017 for India; from 21 March 2016 to 20 March 2017 for Afghanistan and the Islamic Republic of Iran; from 1 July 2015 to 30 June 2016 for Bangladesh, Bhutan and Pakistan; and from 16 July 2015 to 15 July 2016 for Nepal.

e Developing ESCAP economies consist of all countries and areas listed in the table, excluding Australia, Japan and New Zealand.

f The group of developed ESCAP economies consists of Australia, Japan and New Zealand.

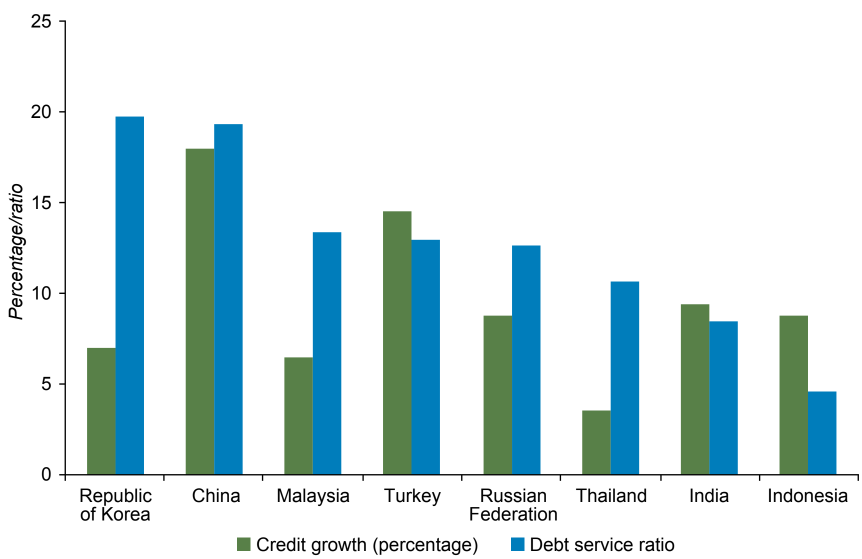
Figure 1.14. Output, inflation and interest rates



Source: ESCAP, based on data from CEIC and table 1.1.

Note: Percentage point differences between real GDP growth in 2015 and 2016. The figure does not show regional economies which underwent cumulative inflation over 2015 and 2016 or policy interest rate increases since January 2015.

Figure 1.15. Credit growth and debt service ratio



Source: ESCAP, based on data from the Bank for International Settlements and CEIC.

Note: Credit growth refers to domestic credit growth (percentage) as of December 2016. Debt service ratio is for the non-financial private sector.

some remedial measures and deleveraging have been introduced. Banking supervision has been strengthened in China and India, including through more rigorous assessment of bank asset quality. Countries are also addressing non-performing loans and other distressed assets, including through increased provisioning. However, such measures could produce negative short-term impacts on economic growth and investment.

3.2. Fiscal space should be used effectively

Fiscal policy could further play an active role in stabilizing the economy and supporting development priorities, but its effectiveness depends critically on good governance. Fiscal policy stances in the region have been broadly countercyclical and expansionary in recent years. China implemented large infrastructure projects and tax breaks;

India adjusted its medium-term fiscal consolidation path to accommodate higher current expenditures; and the Republic of Korea and Thailand engaged in various stimulus measures. However, net commodity exporters have taken a more cautious approach in view of the terms-of-trade losses that have affected public finances. Beyond stabilization considerations, there have also been efforts to enhance the composition and quality of public expenditures in support of development priorities (see box 1.5). However, there is substantial variation across the region, with combined education and health expenditures at about or below 5 per cent of GDP in some countries (see figure 1.16). Social protection spending and coverage also remain low, with large gaps in the informal sector, as will be discussed in greater detail in the next section.

Ensuring fiscal sustainability requires tax reforms and effective debt management, keeping in mind the potential positive spillovers of social and infrastructure investments on the economy. Tax collection remains relatively low in the

Box 1.5. Highlights of government budgets

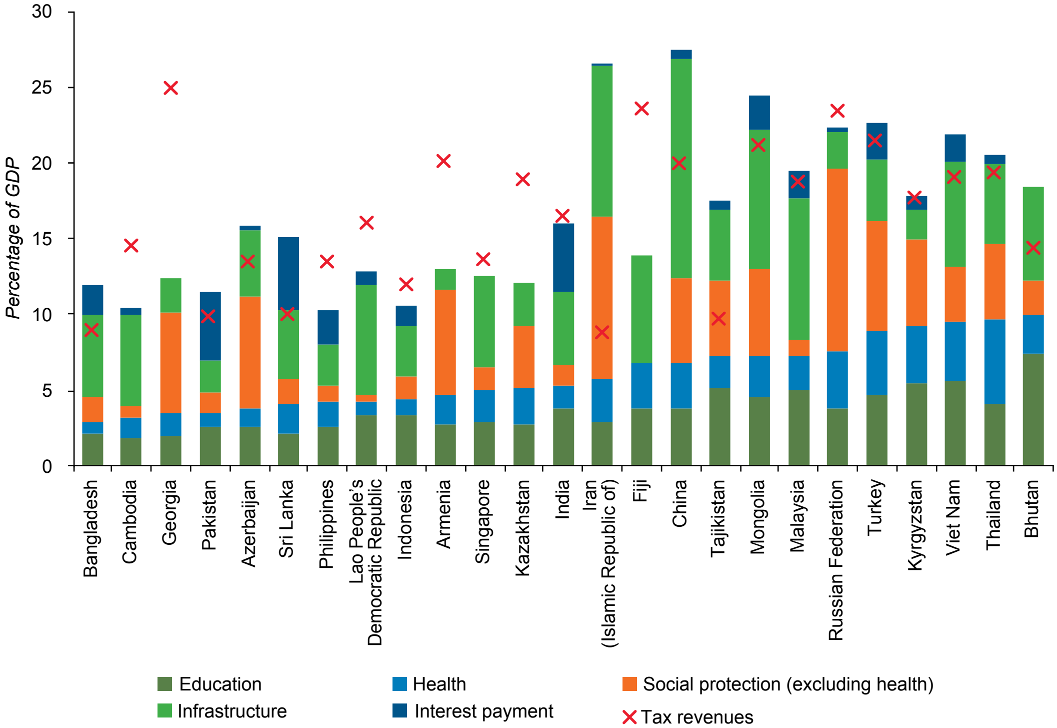
In Asia and the Pacific, fiscal stances during recent years have generally been countercyclical and expansionary, which bolstered the region's resilience to different shocks. China has pushed ahead with large infrastructure projects while providing tax breaks and other relief measures for firms and consumers, which resulted in a wider fiscal deficit of about 3 per cent of GDP in 2016. With a view to supporting the building of "a moderately prosperous society in all respects", the budget emphasized spending on education, science and technology, health care, poverty alleviation, social security and employment (China, 2016). Although the country's general government debt is relatively low, there are concerns about local government debt and contingent liabilities, which are being addressed with a revised fiscal law. The overall fiscal stance is expected to remain expansionary in the near term to stabilize the economy and to invest in social and infrastructure sectors. A special fund has also been set up to compensate for layoffs in sectors undergoing capacity reduction.

In India, the government budget contains several growth-supporting measures, especially for the rural sector, despite constraints posed by relatively high public debt and low tax revenues. As a remarkable step towards universal health coverage, a health insurance scheme was introduced to cover one third of the population when people have to make hospitalization expenditures, and a universal basic income scheme is under consideration (India, Ministry of Finance, 2017a). To accommodate such ambitious programmes, the Government is reprioritizing expenditures (by phasing out fuel subsides, for instance), enhancing expenditure efficiency (such as by reducing leakages through direct benefit transfers) and pursuing tax reforms – to boost revenues by curbing tax evasion (for example, through demonetization), reducing distortions (by imposing a nationwide goods and services tax, for example) and enhancing progressivity (such as by adding a surcharge on top incomes). For the 2017/18 budget, the Government is pursuing a milder consolidation target to support growth (India, Ministry of Finance, 2017b).

Net commodity exporters, such as Indonesia and the Russian Federation, have taken a more cautious approach in view of changes in the terms of trade in recent years. Those changes have adversely affected public finances through revenue shortfalls and smaller differential between the effective interest rate and the nominal GDP growth rate. Indonesia has successfully phased out its fuel subsidies and reallocated the savings to infrastructure and social spending. Amid persistent revenue shortfalls however, the budget was revised to meet the legal deficit ceiling of 3 per cent of GDP. In the ESCAP *Survey* for 2016 it was argued that some flexibility may be warranted given the relatively low levels of public debt and the need for large public investments – through a cyclically adjusted deficit rule for example, or exclusion of priority outlays from the perimeter of the rule (ESCAP, 2016c). While views may differ on this point, it is clear that weak tax revenue has become a key fiscal risk. Efforts to boost revenues, such as the recent tax amnesty programme, have had limited success. In the Russian Federation, the impact of lower oil prices on the national budget was mitigated as the Government drew on past windfall savings. Nevertheless, the budget for 2017 and the medium-term expenditure framework for the period 2017-2019 target consolidation through a mix of expenditure cuts and revenue mobilization efforts.

Net commodity importers, which have benefited from lower oil prices, have generally pursued an expansionary fiscal policy. Thailand implemented tax incentives aimed at stimulating private investment and quasi-fiscal measures, such as subsidized loans for farmers and small and medium-sized enterprises. One fifth of the 2017 budget is earmarked for capital expenditures to support a multi-year infrastructure development plan. The budget of the Philippines has increased rapidly in recent years on the back of strong economic growth and tax revenues. The 2017 budget contains large increases for police, education and infrastructure. In Bangladesh, the budget contains large increases for education and health, although much of it is driven by increased compensation for government employees. In the Survey for 2016 it was suggested that, in addition to such indicators as the cost of living, Governments could also compare the wage bill with the size of selected non-compensation expenditures administered by employees (ESCAP, 2016c).

Figure 1.16. General government spending and revenues



Source: ESCAP, based on national sources, International Monetary Fund, Fiscal Monitor database. Available from www.imf.org/external/pubs/ft/fm/2011/02/app/FiscalMonitoring.html (accessed 1 February 2017); World Economic Outlook database. Available from www.imf.org/external/pubs/ft/weo/2016/02/weodata/index.aspx (accessed 1 February 2017); and Investment and Capital Stock Dataset. Available from www.imf.org/external/np/fad/publicinvestment/data/data.xlsx (accessed 1 February 2017); United Nations Educational, Scientific and Cultural Organization, UNESCO Institute for Statistics (UIS) database. Available from http://uis.unesco.org/ (accessed 1 February 2017); International Labour Organization, Social Protection Platform. Available from www.social-protection.org/gimi/gess/ShowTheme.action?id=10 (accessed 1 February 2017); and World Bank, World Development Indicators database. Available from http://data.worldbank.org/ (accessed 1 February 2017).

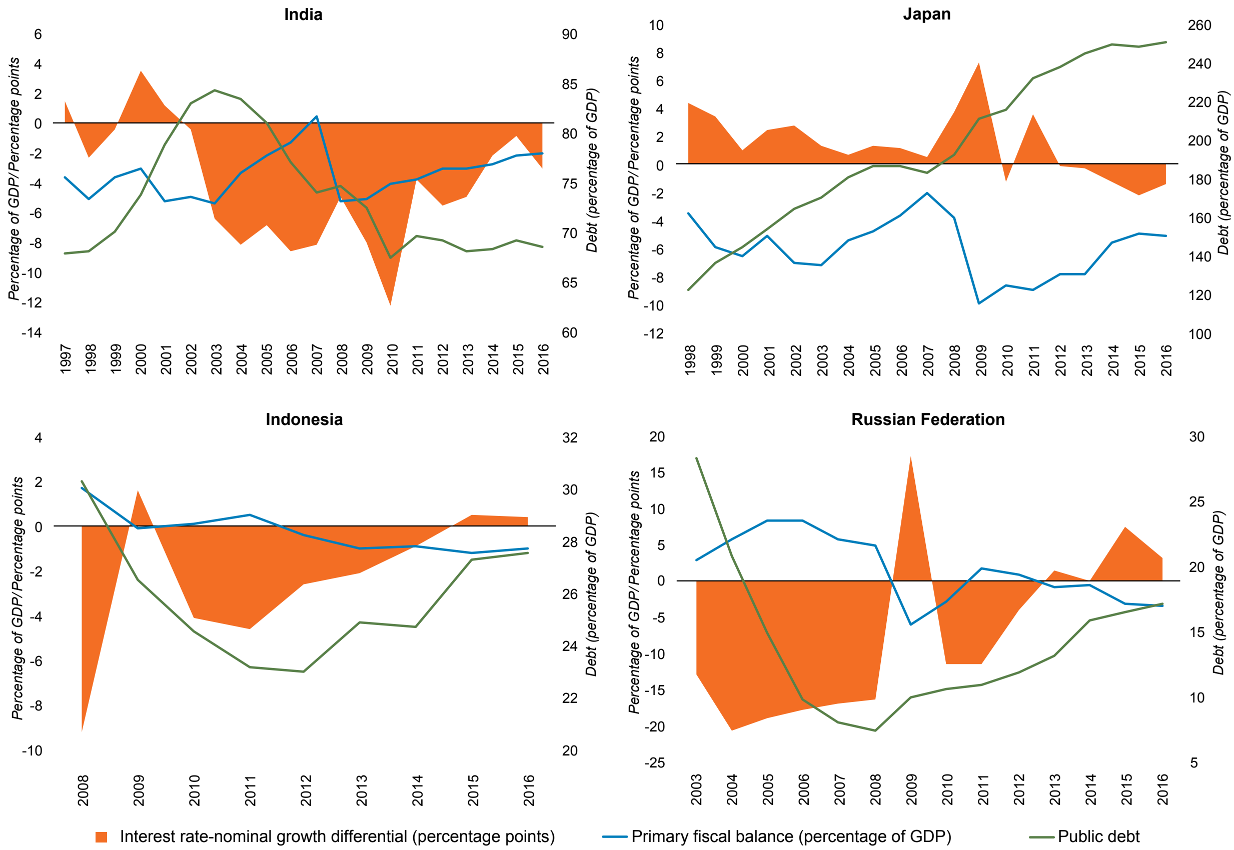
Note: The year 2015 or latest available year for social spending (on education, health and social protection) and tax revenues. Latest three-year average (2012-2015) for public investment and interest payments. Public investment covers social infrastructure (e.g. schools and hospital buildings) as well as economic infrastructure (e.g. roads and railways), thus overlapping somewhat with social spending. Countries are sorted by the sum of education and health spending only. Social protection, excluding health, is considered separately, given that in many countries it consists mostly of social insurance, such as pensions for public sector employees, and offers only limited coverage. While only tax revenues are indicated, some countries have significant non-tax revenues, including from the resources sector. Also in the case of public investment, State-owned enterprises play an important role such that funding is not entirely reliant on government revenues. Tax revenues include social security contributions, which are fairly small in most countries, except in transition economies. Interest payment is on total general government liabilities.

Asia-Pacific region and the scope for boosting revenues through improved compliance and base-broadening is particularly large (ESCAP, 2014a; 2016c). In countries where domestic demand is depressed, some tax relief could be offset by debt finance, taking advantage of the relatively low government bond yields in recent years – although the window of opportunity here may be narrowing. The trajectory of government debt depends, among other things, on two variables:[7] (a) the differential between the effective interest rate and the nominal GDP growth rate; and (b) the primary fiscal balance.[8]

While running primary deficits could be desirable from a stabilization or development viewpoint, it does make Governments dependent on economic growth and favourable interest rates to contain the debt ratio. This situation has been a concern in some countries, as economic growth slowed and disinflation occurred in recent years. In India, the debt to GDP ratio stopped declining in the wake of the global financial crisis of 2008 as the differential narrowed and the primary deficit widened; in Japan, it has continued to rise to very high levels (see figure 1.17). In contrast, Indonesia and the Russian Federation have fairly low debt levels, but the debt trajectory has made a clear turn following large terms of trade losses – which explains why the authorities are pursuing conservative budgets.

In assessing fiscal sustainability, countries could consider the potential positive spillovers of social and infrastructure investments on the economy. If the spillovers are sufficiently large, for instance due to the "crowding in" of private investment, the public debt to GDP ratio could be stable over the long term. It has been argued that the current

Figure 1.17. General government debt



Source: ESCAP, based on CEIC, IMF and Government of India *Economic Survey 2016-17*.

Note: Primary fical balance is the overall budget balance, excluding interest payments on consolidated government liabilities. The differential is expressed in reverse, that is, r-g rather than g-r, for easier comparison with primary deficit. Data for 2016 are estimates.

environment of weak external demand, weak private investment, low borrowing costs and benign inflationary pressures supports the case for greater public investment, including in infrastructure (ESCAP, 2016d). However, this is an area where more research is needed given the mixed empirical evidence (see box 1.6).

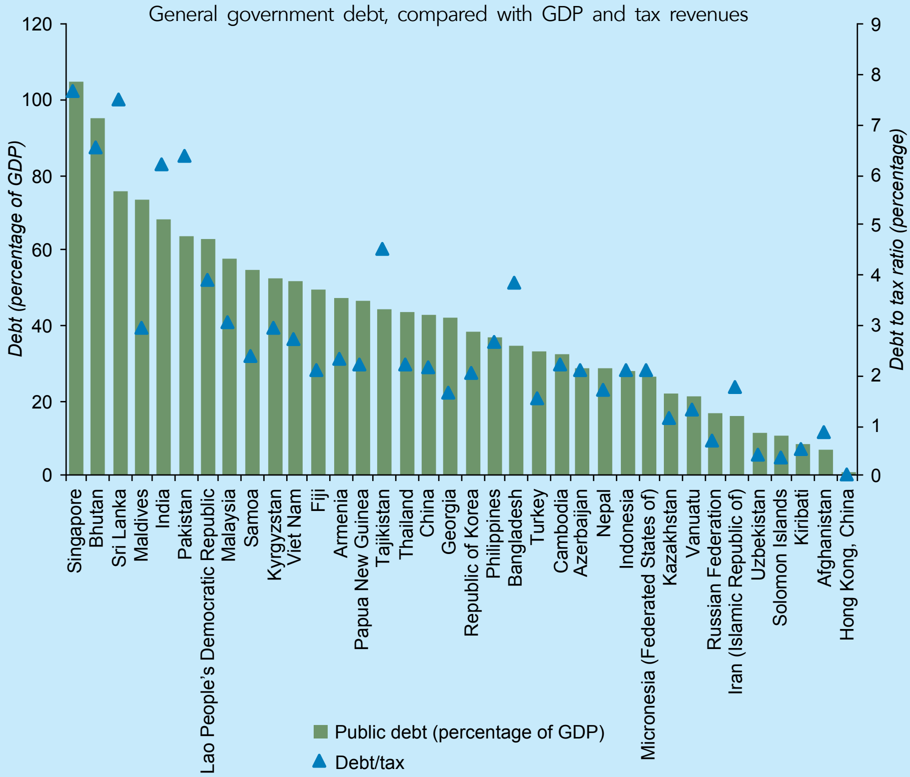
The literature points to higher multipliers for capital expenditures compared with current expenditures. A key question is whether public investment does in fact "crowd in" private investment and if so, to what extent. This would also depend on how the public outlays are financed – through additional revenue collection,

Box 1.6. Fiscal space and fiscal multipliers

Fiscal sustainability, particularly debt sustainability, depends on several factors. While conventional approaches to estimating the "sustainable" debt threshold, such as taking the mean or median debt to GDP ratio of a defined peer group, could be useful as a reference, such illustrative estimates should not be taken as de facto thresholds. In assessing fiscal sustainability or fiscal space, Governments are advised to refer to various alternative measures which could provide a different picture (DESA, 2017). For instance, the ability-to-pay model, which estimates the level of debt in which the primary balance adjustment would be insufficient to offset growing debt service (Ghosh and others, 2013) could provide a different picture from the tax-years model, which compares public debt levels to the number of tax years a Government needs to repay its debt (Aizenman and Jinjarak, 2010). For instance, according to the tax-year model, the Maldives may have more fiscal space than Pakistan despite having a higher debt to GDP ratio (see figure next page).

Another consideration in assessing fiscal sustainability is the concept of fiscal multipliers, which measure the short-term impact of discretionary fiscal policy on output. As illustrated above, the debt trajectory depends critically on

Box 1.6. *(continued)*



Source: ESCAP, based on IMF Fiscal Monitor Database. Available from www.imf.org/external/pubs/ft/fm/2016/02/fmindex.htm (accessed 1 February 2017).

the nominal GDP growth rate. Estimation of multipliers is important for macroeconomic projections and policy design. For instance, the underestimation of fiscal multipliers early in the global crisis contributed significantly to growth forecast errors (Blanchard and Leigh, 2013). However, there is little consensus in the literature on the size and persistence of multipliers. For instance, Ricardian equivalence and possible "crowding out" effects would suggest negligible or even negative multipliers.[a] In recent papers, however, it has generally been found that multipliers tend to be higher during recessions, especially if monetary policy is constrained by the zero lower bound (Christiano, Eichenbaum and Rebelo, 2011). In that context, it has been suggested that fiscal activism can partly pay for itself (Gaspar, Obstfeld and Sahay, 2016).

Empirical evidence is limited for developing economies, and it is unclear from a theoretical viewpoint whether multipliers should be expected to be higher or lower than in the developed economies (Batini and others, 2014). While lower capital stocks would imply higher returns, developing economies also tend to suffer from inefficiencies in public expenditure management and revenue administration. In developing economies, monetary policy is rarely near the zero lower bound, which is a controversial concept in itself, making the size of the fiscal multiplier smaller. Existing multiplier estimates for countries in the Asia-Pacific region are in fact closer to zero than 1. On average, the multiplier is above 1 only in China, about 0.5 in the Republic of Korea and the Philippines, about zero in Indonesia and Thailand, and negative in Singapore (Wang and Wen, 2013; Tang, Liu and Cheung, 2010).

Another possible explanation for low multipliers is the prominence of policy objectives other than output stability. Indeed, fiscal policy in developing economies could be more concerned about supporting development priorities than just stabilizing output – in which case, fiscal performance would be better assessed through such indicators as public expenditure efficiency instead of multipliers, as shown in chapter 3 for such areas as education and health. It could also be the case that some of the dynamic, long-term effects of fiscal policy on output are not captured in the short-term multiplier. For instance, if ambitious social and infrastructure spending results in large positive spillovers into the economy, the debt to GDP ratio could eventually fall below the baseline case (ESCAP, 2013).

[a] For Ricardian equivalence, it is assumed that individuals anticipate future tax increases and thus save and reduce consumption in the case of debt issuance and deficit financing. The crowding out effect refers to a situation when higher public expenditures, caused by increasing interest rates, lead to a reduction in private investment spending such that it dampens the initial increase in total investment spending.

borrowing or a mix of these. Another consideration is the pace of investment (front-loading or gradual), with some empirical studies supporting the latter based on the assumption that this would allow time for improving efficiency (Ghazanchyan and others, 2017). While more research is required to answer these questions, data suggest that it is not just public investment (flow), but the total public capital stock which matters for private investment (see figure 1.18). This thinking is in line with theoretical models of economic growth in which capital stock is a direct input factor of the production function, contributing to higher productivity growth.

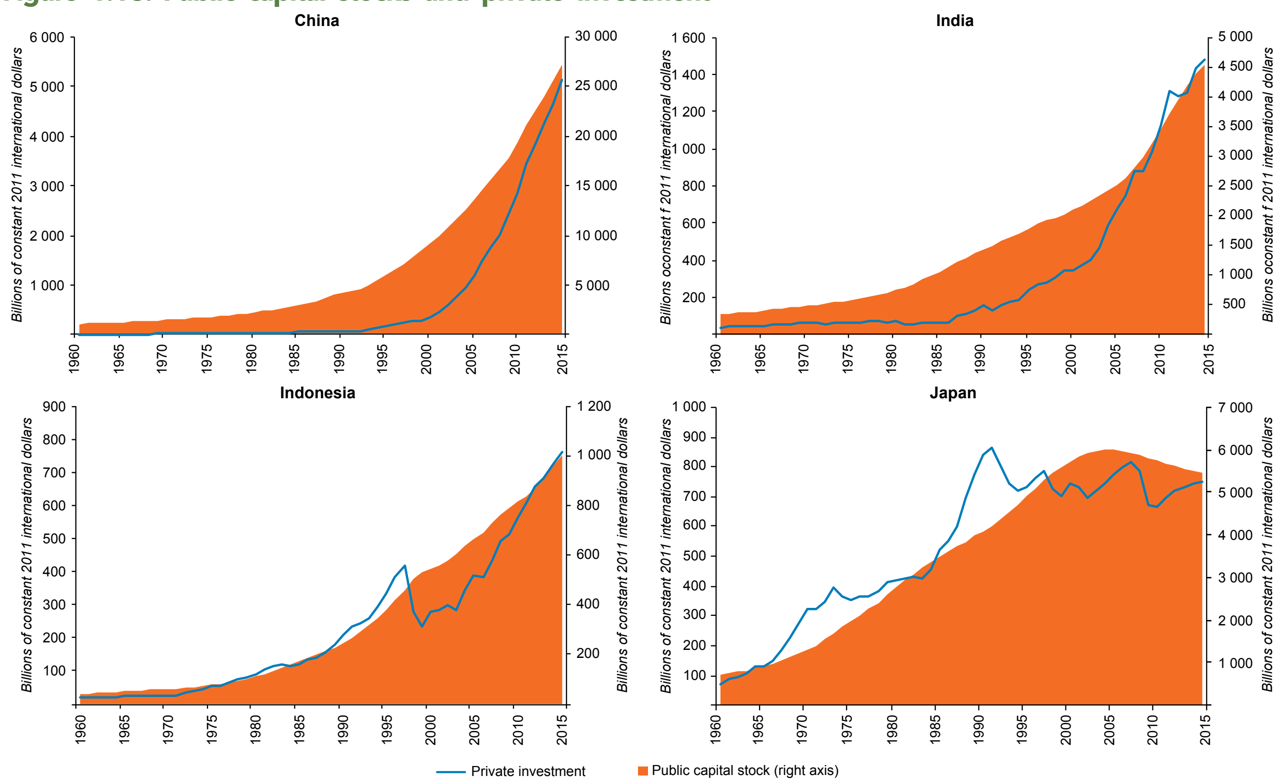
3.3. Structural reforms could lift productivity

To achieve economic health, countries often need to make changes in the basic structure of their economies. Structural reforms are measures that are aimed at raising productivity by improving the technical efficiency of markets and institutional structures, or by reducing impediments to the efficient allocation of resources (Rajan, 2004). These range from measures as diverse as reforms on banking supervision and laws on property rights to changes in tariff rates or rules on hiring and firing.[9]

Interest in structural reforms has increased in recent years amid the slowdown in productivity growth and the decline in potential growth. For developing Asia-Pacific economies, it was estimated in ESCAP (2016c) that growth in total factor productivity (TFP) declined by more than half between the period 2000-2007 and that of 2008-2014 while growth in labour productivity declined by a third over the same time frame. It was argued that, although cyclical elements may also be in play, structural constraints, such as in skills and infrastructure, seem to be holding back the productivity potential of the region. Weak governance has been identified as another potential constraint, as it could undermine productivity-enhancing innovation and investment (ESCAP, 2016d) (see also chapter 3).

Structural reforms are not new to the Asia-Pacific region.[10] In fact, reforms were critical to the region's unprecedented structural transformation in recent decades. Countries such as Malaysia and the Republic of Korea – and more recently, China – have constantly upgraded their economic structures through appropriate policy and regulatory changes and forward-looking investments. Reform often started with the rural and agricultural sectors.

Figure 1.18. Public capital stocks and private investment



Source: ESCAP, based on IMF capital stock and investment dataset.

Note: The shaded area shows public capital stock. The line represents private investment flows. Both are estimates from 1960 to 2015.

For instance, in China the decentralization of agricultural production and liberalization in the pricing and marketing of agricultural goods in the late 1970s and early 1980s resulted in large increases in agricultural growth and farm incomes (Von Braun, Gulati and Fan, 2005). At the same time, major productivity gains were achieved through sectoral shifts from agriculture to manufacturing and services. Particularly in East Asia, manufacturing played an important role, supported by trade reforms, skills-upgrading and infrastructure outlays.

As seen from the region's own experience, different reforms are needed at different stages of economic development. China is now promoting high-technology industries through road maps, such as "Made in China 2025", while gradually increasing the share of services in the overall economy. Yet for other developing countries in the region, expanding the manufacturing base, including to relatively labour-intensive sectors, will be important for broad-based productivity gains. India is planning to increase the share of the manufacturing sector in GDP to 25 per cent by 2020 through the creation of national manufacturing investment zones and measures to increase the ease of doing business. Similarly, Indonesia and the Philippines are seeking to diversify and upgrade their economies through infrastructure programmes and FDI liberalization measures. Many countries in the region could also enhance industry-service linkages, as the availability of cost-efficient services, such as distribution, business and logistics-related services, is crucial for improving overall productivity (ESCAP, 2016c).

The availability of a skilled labour force and the efficient allocation of capital will be important for such structural transformation. While levels of education have increased in most countries, the quality of education is a critical factor, as a shortage of skills would constrain the ability of economies to take advantage of technological change, thereby limiting productivity growth and economic diversification. At the same time, outdated or excessive labour market regulations could undermine the growth and dynamism of formal sector jobs. For instance, in India some 250 labour rules at the central and state levels and the process of enforcement, at least on paper, have been found to discourage investment (Sahoo, 2014). In Indonesia, a relatively high severance pay requirement is a key reason why firms tend to employ workers on a temporary basis (Allen, 2016). One reason why labour market regulations are relatively rigid in these countries is because of limited social assistance or social insurance programmes for unemployed workers. Thus, fiscal support for expansion of social protection could also facilitate necessary labour market reforms. In China, where the working elderly population is shrinking, restrictions on the urban-rural household registration system (*hukou*) are being eased in order to increase labour mobility and enhance coverage of the population with social protection schemes.[11]

For the efficient allocation of capital, parallel progress is needed in such areas as bankruptcy processes and banking sector reforms. China's legislature approved a modern bankruptcy law in 2007, but for years it has seldom been used. This situation has contributed to an accumulation of thousands of economically unviable enterprises that survive with the support of local governments and State-owned banks, and a rapid increase in non-financial corporate debt. In India, the recently approved insolvency and bankruptcy code is aimed at trimming 12 laws currently governing bankruptcy proceedings and shortening the resolution period to between 180 and 270 days.[12] In both China and India, excess capacity and leverage in certain sectors have impaired bank balance sheets. Beyond the implications for financial stability, banking sector reforms will be critical for the efficient allocation of resources and thus productivity growth. Banking supervision has been strengthened recently in China and India through more rigorous asset quality reviews, while such schemes as debt-equity swaps have been introduced to resolve corporate debt.

While structural reforms are generally viewed as productivity-enhancing, a careful assessment is needed on their distributional impacts. This is particularly important in the context of high or rising income inequality in many countries in the region. In general, reforms that tend to increase intersectoral productivity differentials can increase inequality, particularly in countries where the productivity gap across sectors is large and labour mobility is constrained (Fabrizio and others, 2017). Reforms that increase the relative price of tradable to non-tradable goods can also have significant distributional effects. This is because the poor tend to work in low productivity, non-tradable sectors. Reforms that reduce the costs of borrowing can increase inequality if financial access is limited. Most of all, labour market and social protection reforms would affect income distribution.[13] The direction and degree to which this would happen depends in part on how the specific reform is designed and implemented, but complementary measures may also be required, particularly to ensure that poor and low-skilled workers are not left behind. As "creative destruction" of jobs takes place, workers will need to be equipped with correct skills and be protected from disruptive impacts (ESCAP, 2016d). Specific compensatory measures may also be required, not least to make reforms politically acceptable. For instance, when the Netherlands undertook labour market reforms in the 1980s and 1990s, cuts in unemployment, illness and disability benefits were partly offset by cuts in workers' taxes and social security contributions.

The environmental impacts of structural reforms could also be considered, particularly given the increased environmental pressures in the region. For instance, to the extent that reforms discourage resource use or promote efficient resource use (by internalizing costs of eliminating subsidies, for instance) the environmental consequences can be positive. When the reforms promote resource use (by opening markets or reducing economic alternatives) the consequences can be negative (WWF, 2001).

Keeping in mind the broad objectives of productivity growth, equity and environmental sustainability, countries need to decide which reforms are most critical in the specific country context and whether several reforms could be bundled or sequenced. In the past, structural adjustment programmes in crisis-affected developing countries often took "one-size-fits-all" and "big bang" approach. An alternative approach is less ambitious, consisting of sequential targeting of binding constraints (Hausmann, Rodrik and Velasco, 2005). A potential advantage of this approach is that early wins could create political support for reforms over time, and that the sense of ownership will increase, which could also allow time for countries to "learn to reform". This situation is in contrast to the Washington Consensus[14] and its augmented version, which tends to be prescribed from the outside and suffer from redundancy or the lack of a well-defined list of priorities. The region's own experience, including that of China, seems to support the sequential targeting approach. Moreover, the region's own experience also highlights the important role of the State in structural reforms. The Government provides an enabling environment of policies, institutions and public services that helps factor and product markets to work efficiently, which in turn enables private sector-led growth to take place.

4. ENHANCING THE QUALITY OF GROWTH

In addition to ensuring sustained and robust economic growth, policymakers will need to address some key social and environmental challenges in order to improve the quality of this growth. Relatively stable economic conditions provide an opportunity to make progress on both the productivity and inclusiveness fronts, particularly in the context of implementing the 2030 Agenda for Sustainable Development. This section contains a discussion on how the challenges of poverty and inequality could be addressed through labour market and fiscal measures, including social protection. This argument is followed by a discussion on the environmental pressures in the region and policy options that could enhance resources efficiency.

4.1. Poverty and inequality call for labour market and fiscal measures

The benefits of economic expansion have accrued relatively less to the poor as is evident from rising income inequality. Available data indicate that some countries, including net commodity exporters, have witnessed a considerable decelerating trend in the rate of poverty reduction in the post-crisis period. Despite significant progress made by such countries as China in recent decades, the incidence of poverty remains in double digits in the majority of countries in the region, based on the threshold of $3.10 a day, 2011 purchasing power parities (PPP) (see table 1.3). Sustained poverty reduction in the context of slower economic growth would need to rely more on enhancing the income distribution and addressing non-income factors, such as social exclusion. Income inequality, however, has increased or remains high in many countries, with a significant concentration of wealth at the top. Wide income inequality also undermines social cohesion and impairs long-term economic growth by reinforcing inequality of opportunities.

While "inclusive growth" is increasingly highlighted in national development agendas, its implementation could be challenging given that many of the drivers of inequality, such as technological progress, globalization and market-oriented reforms, are also essential features of prevailing economic frameworks (ESCAP, 2016d). Comprehensive measures are thus needed to tackle inequality, including labour market policies, such as minimum wages and training of low-skilled workers, and fiscal measures, such as progressive taxation and social assistance. Moreover, the need for such measures is likely to increase with further technological progress and structural changes in economies. For instance, the tax burden may need to be shifted away from labour income towards the owners of productive capital and wealthy individuals through capital income tax and wealth-related taxes (ESCAP, 2016d).

Productive and decent work is central to eliminating poverty and reducing inequality. Relatively slow employment growth and a persistently high share of vulnerable employment have contributed to rising income inequality. A prolonged output growth slowdown eventually translates into weak employment data. Economies can also experience instances when output grows at a steady pace, but employment growth remains

Table 1.3. Labour market and income distribution indicators (latest available year)

	Vulnerable employment (percentage of total employment)	Minimum wage (percentage of average earning)	Poverty headcount ratio (percentage of population)	Income inequality (Gini index)
East and North-East Asia				
China	13.7	32.6	11.1	42.2
Democratic People's Republic of Korea	..	..	..	..
Hong Kong, China	6.0	51.0	..	..
Japan	8.6	44.8	..	32.1
Macau	3.4	..	..	..
Mongolia	22.9	23.8	2.7	32.0
Republic of Korea	26.8	..	..	..
North and Central Asia				
Armenia	41.9	41.7	14.6	31.5
Azerbaijan	55.5	24.7	2.5	31.8
Georgia	55.9	2.4	25.3	40.1
Kazakhstan	25.6	17.2	0.3	26.3
Kyrgyzstan	37.2	5.5	17.5	26.8
Russian Federation	5.9	18.1	0.5	41.6
Tajikistan	47.1	36.0	56.7	30.8
Turkmenistan	..	..	..	..
Uzbekistan	..	..	87.8	..
Pacific				
Australia	10.9	44.4	..	34.9
Cook Islands	9.9	..	..	..
Fiji	39.0	..	18.5	42.8
Kiribati	53.3	..	34.7	37.6
Marshall Islands	..	..	..	..
Micronesia (Federated States of)	..	..	39.4	42.5
Nauru	..	..	..	..
New Zealand	12.2	..	..	..
Palau	..	..	..	..
Papua New Guinea	..	..	64.7	43.9
Samoa	30.9	..	8.4	42.7
Solomon Islands	..	..	69.3	..
Tonga	..	..	8.2	38.1
Tuvalu	..	..	16.3	41.1
Vanuatu	70.0	..	..	37.2
South and South-West Asia				
Afghanistan	..	..	..	..
Bangladesh	57.8	..	56.8	32.1
Bhutan	72.9	..	13.3	38.8
India	..	40.0	58.0	35.2
Iran, Islamic Republic of	40.3	..	0.7	37.4
Maldives	18.8	38.1	23.3	38.4
Nepal	..	..	48.4	32.8
Pakistan	63.1	82.5	36.9	30.7
Sri Lanka	40.8	46.4	14.6	39.2
Turkey	28.4	..	2.6	40.2
South-East Asia				
Brunei	..	..	..	..
Cambodia	55.2	..	21.6	30.8
Indonesia	31.0	69.5	36.4	39.5
Lao People's Democratic Republic	83.9	..	46.9	37.9
Malaysia	22.1	47.2	2.7	46.3
Myanmar	..	..	..	..
Philippines	37.6	126.9	37.6	43.0
Singapore	8.3	..	..	..
Thailand	51.4	63.6	0.9	37.9
Timor-Leste	70.4	..	80.0	31.6
Viet Nam	57.8	..	12.0	37.6

Source: ESCAP, based on data from International Labour Organization, ILOSTAT database of labour statistics. Available from www.ilo.org/global/statistics-and-databases/lang--en/index.htm (accessed 1 February 2017); Global Wage Report 2016/17 data sets. Available from www.ilo.org/global/research/global-reports/global-wage-report/2016/lang--en/index.htm (accessed 1 February 2017); and World Bank, World Development Indicators database. Available from http://data.worldbank.org/ (accessed 1 February 2017).

Note: Minimum wage refers to statutory nominal gross monthly minimum wage effective 31 December. The poverty headcount ratio is based on the threshold of $3.10 a day, 2011 PPP.

weak, which is particularly true when the skill bias of modern technology, which drives output growth, reduces the pace of absorption of unskilled labour.

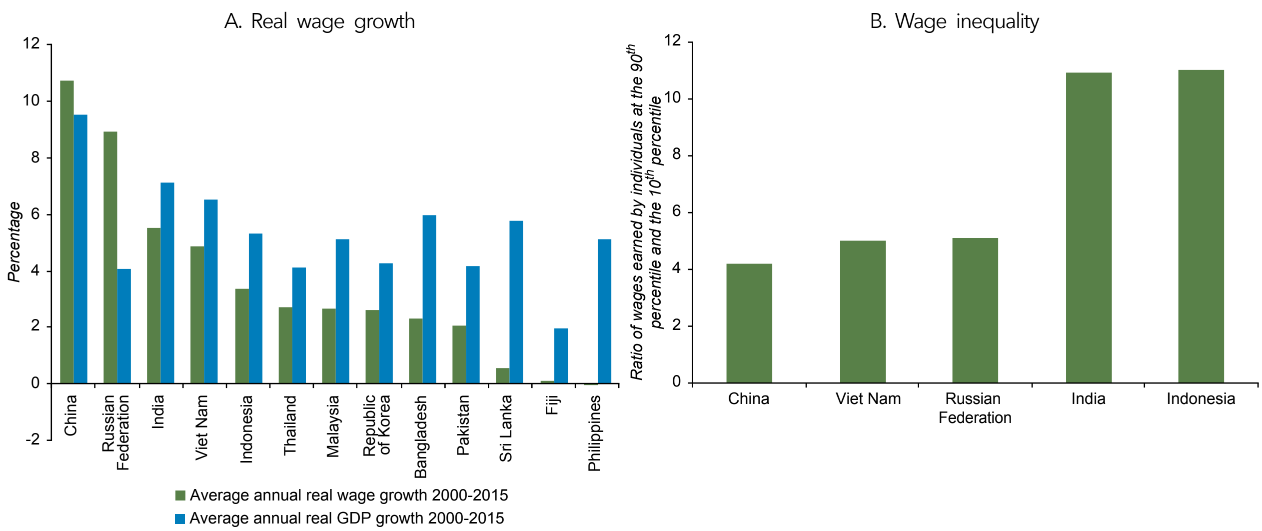
In 2016, average employment growth in the Asia-Pacific region was modest but remained steady at 1.1 per cent, while the share of vulnerable employment remained persistently high at about 50 per cent (ILO, 2017a). Only a few countries made progress on both fronts of quantity and quality (the Philippines, for example) as others succeeded only on quantity (Indonesia) or quality (Thailand and Viet Nam) or failed on both (Sri Lanka). In China, the labour market continues to adjust to structural rebalancing in the economy. Resilience of the labour market in China, even as growth moderated in recent years, can be explained by expansion of the services sector and possible labour hoarding in overcapacity sectors. In India, demonetization has created short-term uncertainty in labour markets but could help address informality in the longer term. Across the region, some improvement was made in lowering unemploy-ment, although youth still face disadvantages.

In 2015 (latest data), growth in real wages was relatively robust in South Asia (possibility due to disinflation) and China (where the share of labour in national income has been recovering). Wage growth in South-East Asia has also recovered in recent years in part due to minimum wage increases. Wage growth in the Asia-Pacific region, however uneven, outperforms that of the world as a whole. Between 2006 and 2015, real wages in the region grew by 44 per cent, at a compound annual growth rate of 4.2 per cent. However, the region's dynamic performance is driven largely by China; wage growth elsewhere has been much more modest (see figure 1.19). Moreover, wage inequality varies considerably across countries. The top 10 per cent of wage earners earned about 10 times more than the bottom 10 per cent in Indonesia and Singapore. This ratio was also relatively high in India, Malaysia, the Philippines, Sri Lanka and Thailand.

Gender inequality in the labour market is evident not only in the low participation of women in wage employment (representing inequality of opportunity) but also in wages (inequality of outcome). Gender wage gaps are wide in South Asia, especially in Nepal and Pakistan. Although no national statistical data are available for China, one estimate suggested that the gender earning differential in China was about 23 per cent in 2009 (Meng, 2012).

While addressing such wage inequality, countries in the region will need to improve the overall link between productivity and wages. Effective collective bargaining can be one of the tools for rebalancing the gains from economic growth through facilitating fair wage increases in line with productivity. The payoffs from building stronger institutions have been demonstrated in some developed economies (such as Germany) where collective bargaining has facilitated economic restructuring – helping enterprises to cope with unexpected events and to strengthen training and skill formation.

Figure 1.19. Wage dynamics



Source: ESCAP based on data from International Labour Organization, ILOSTAT database of labour statistics. Available from www.ilo.org/global/statistics-and-databases/lang--en/index.htm (accessed 1 February 2017); and Global Wage Report 2016/17 data sets. Available from www.ilo.org/global/research/global-reports/global-wage-report/2016/lang--en/index.htm (accessed 1 February 2017)

Minimum wage policies are another important tool for setting fair wages in the region, by protecting workers who lack collective bargaining power, often low-skilled workers. Governments need to strengthen minimum wage-setting institutions and base decisions on sound evidence and communication with trade unions and employers. For instance, Malaysia and Viet Nam have both recently set up tripartite bodies to review minimum wages. In India, the Government announced a much-needed review of the minimum wage act of 1948. Another important concern is that, even though minimum wage systems may be in place, the rates are not adjusted regularly. For instance, in Thailand sizable adjustments in 2012/13 followed a long period of stagnation (ESCAP, 2013).

Labour migration and remittances are also important for poverty eradication, by supporting and smoothing consumption, especially for low-income households in rural areas. Remittance inflows are about 3 per cent of GDP in India, 7 per cent in Pakistan and 10 per cent in the Philippines. This ratio is much higher in landlocked developing countries, such as Kyrgyzstan, Nepal and Tajikistan, and small island developing States, such as Samoa. Remittances are often countercyclical, rising during economic downturns and natural disasters as migrants increase their transfer of funds in order to provide for their families' emergency needs. However, this was not necessarily the case in recent years as major oil-producing host countries suffered large terms-of-trade losses. Latest available data suggest that, while a recovery is under way in North and Central Asia in line with the rebound of the economy in the Russian Federation, this trend is not apparent in South Asian economies, which rely on remittances from the Gulf Cooperation Council region (see figure 1.20).

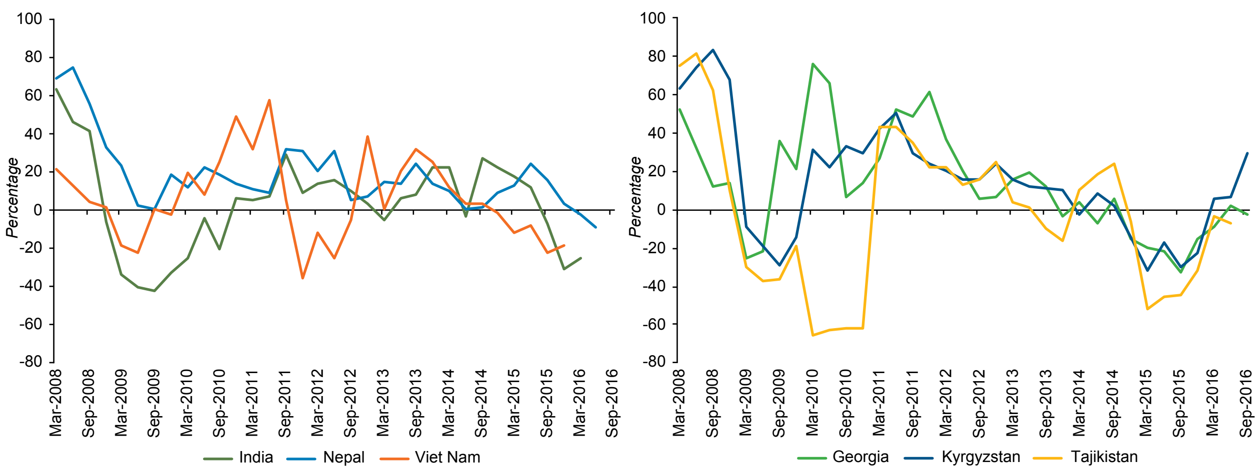
4.2. Social protection could reduce poverty and strengthen domestic demand

While many people have been lifted out of extreme poverty, the majority of the region's population are not yet "middle class" but could rather be classified as "transitional class" that are vulnerable to falling back into poverty (ESCAP, 2016c), which is why social protection is one of the selected topics in the quality of growth section. The importance of social protection in preventing people from falling into poverty and in reducing the duration of poverty, especially in times of rapid structural changes in the economy, has long been established (ILO, 2014). Countries with higher social protection spending tend to have a lower incidence of poverty (see figure 1.21).

More recently, the developmental role of social protection has been recognized. By improving equity, opportunity and resilience, social protection provides a solid foundation for sustainable development (World Bank, 2012b; Devereux and Sabates-Wheeler, 2004). Aside from fulfilling people's rights, enhanced social protection can help strengthen domestic demand by reducing precautionary savings, so that the poor could consume more and also invest in higher-return livelihood strategies. Social protection could also improve the functioning of labour markets by facilitating skills development and employment, which are especially important in economies that are undergoing rapid structural changes. The role of social protection in reducing inequality has also been highlighted (ESCAP, 2015b).

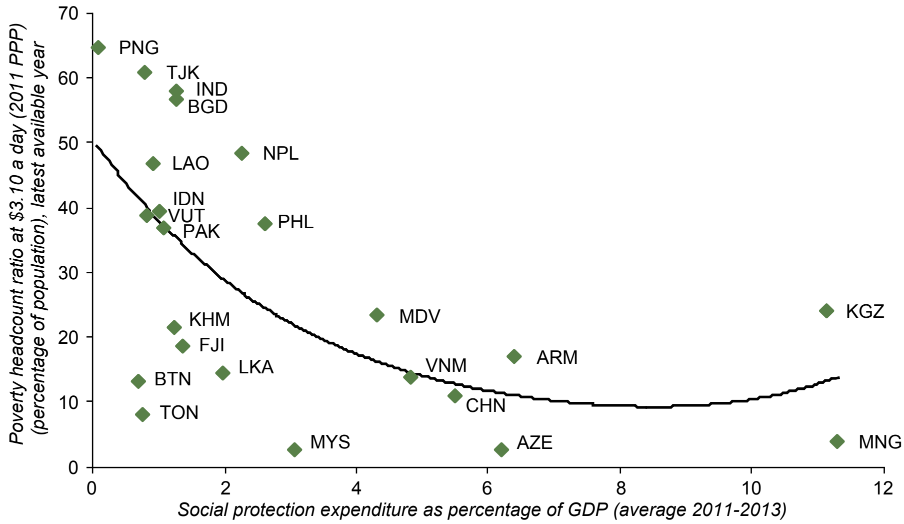
Key aspects of a social protection floor[15] include universal access to affordable health care; free primary and secondary education; unemployment benefits for wage

Figure 1.20. Remittances



Source: ESCAP, based on CIEC data.

Figure 1.21. Social protection spending and poverty incidence in developing Asia-Pacific economies



Source: ESCAP, based on Asian Development Bank, *The Social Protection Indicator: Assessing Results for Asia* (Manila, 2016), and World Bank, *World Development Indicators*. Available from http://data.worldbank.org/data-catalog/world-development-indicators.

Abbreviations: ARM = Armenia; AZE = Azerbaijan; BGD = Bangladesh; BTN = Bhutan; CHN = China; FJI = Fiji; IDN = India; IND = Indonesia; KGZ = Kyrgyzstan; KHM = Cambodia; LAO = Lao People's Democratic Republic; LKA = Sri Lanka; MDV = Maldives; MNG = Mongolia; MYS = Malaysia; NPL = Nepal; PAK = Pakistan; PHL = Philippines; PNG = Papua New Guinea; TJK = Tajikistan; TON = Tonga; VNM = Viet Nam; and VUT = Vanuatu.

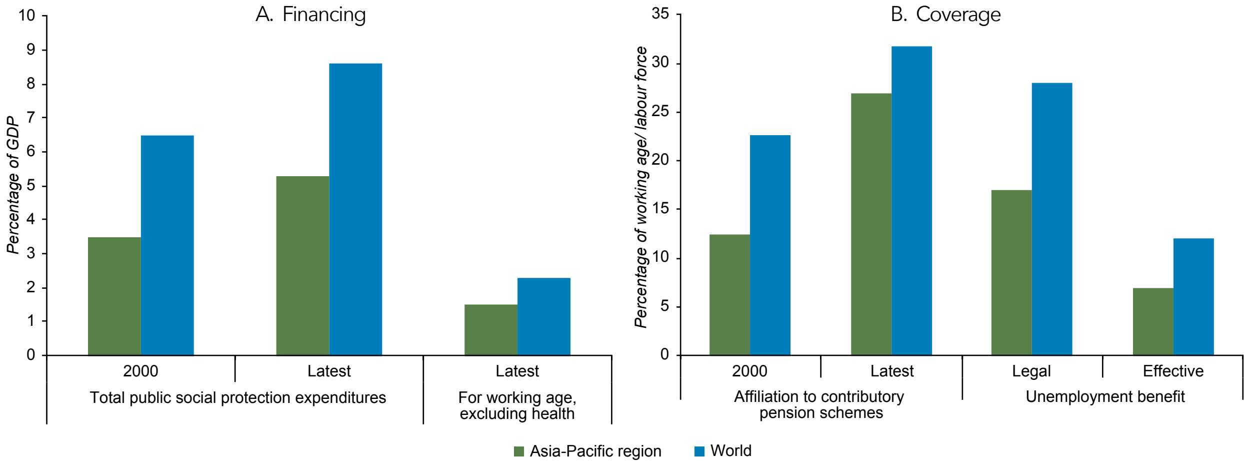
earners and income-support measures for those in need; contributory and social pensions; and full access to social benefits for persons with disabilities.

Social protection programmes for people of working age typically include social insurance, social assistance and labour market programmes. Social insurance is often financed through a contributory mechanism[16] that involves beneficiaries, employers and the State, and covers such areas as health insurance, old-age pensions and unemployment, maternity, sickness and disability benefits. Social assistance is a non-contributory scheme, which takes the form of cash transfers (often conditional) to poor households, persons with disabilities and other vulnerable groups. It can be either universal or targeted.[17] Active labour market programmes consist of skill development and training initiatives, special work schemes and wage and employment subsidies.

Based on the spending data that are available for the period 1996-2013 covering developing Asia-Pacific countries, 23 of 27 of them increased their investments for social protection as a share of total government expenditures. This reprioritization indicates that social protection is becoming more important for a large number of Governments in Asia and the Pacific (ESCAP, 2015b). Nevertheless, the Asia-Pacific region continues to fall behind the rest of the world in terms of social protection financing and coverage (see figure 1.22). Total public social protection spending, including health expenditures, as a percentage of GDP increased from 3.5 per cent in 2000 to 5.3 per cent in 2010/11 (latest year) in the region, but this was still lower than the global average of 8.6 per cent. Of the total, non-health social protection expenditures for people of working age in the region stood at 1.5 per cent compared with 2.3 per cent for the world (ILO, 2014). Social insurance continues to dominate social protection spending in the region. Almost three quarters of GDP per capita spent on social protection per capita is allocated to social insurance. Social assistance accounts for only 0.9 per cent of GDP per capita, while active labour market programmes account for only 0.1 per cent of GDP per capita (ADB, 2016).

In terms of social protection coverage, countries such as China, Thailand and Viet Nam have made notable progress since the 2000s, but coverage levels remain weak in most countries in the region. For a median country in the region, about a third of the total population was covered by at least one type of social protection scheme. For a median country, social insurance coverage was about 14 per cent and social assistance coverage was about 24 per cent.[18] Affiliation with contributory pension schemes was estimated to have increased from 12.5 per cent of the working-age population in early 2000 to 27 per cent in the 2010s, converging towards the global average of 31.8 per cent (ILO, 2015). Some 17 per cent of the labour force was legally covered by an unemployment benefit (contributory or non-contributory)

Figure 1.22. Social protection financing and coverage



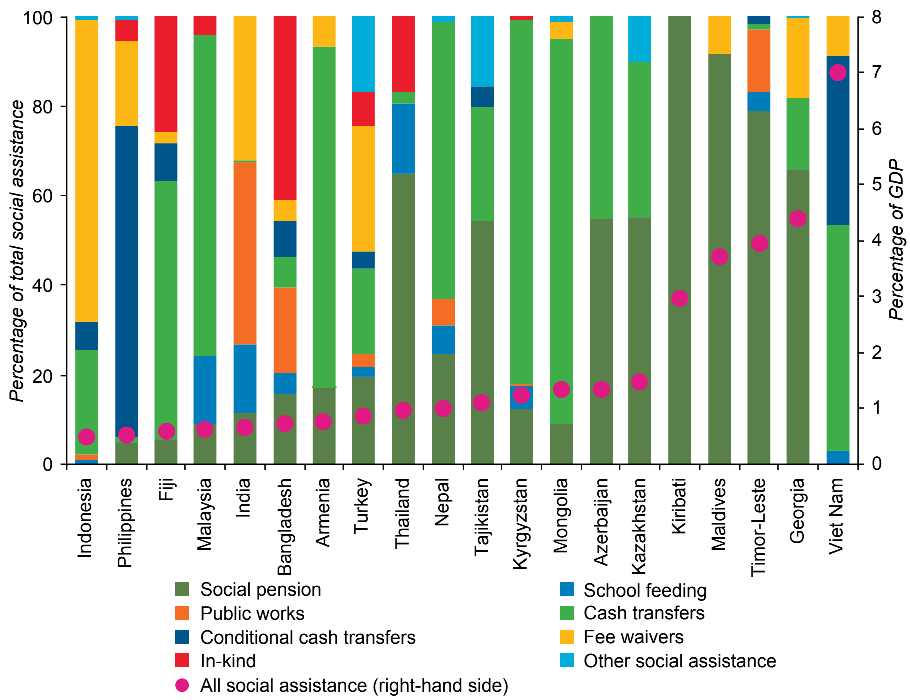
Source: ESCAP, based on International Labour Organization, Social Protection Platform. Available from www.social-protection.org/gimi/gess/ShowTheme.action?id=10 (accessed 1 February 2017).

Note: Figure in panel B shows contributory pension schemes coverage as percentage of working age; and unemployment benefits coverage as per cent of labour force.

in the region compared with the global average of 28 per cent. The effective coverage, however, was only 7 per cent in the region and 12 per cent in the world.[19]

As noted above, social assistance spending - which is particularly important for the poor and vulnerable - is relatively low in the region, accounting for less than 1 per cent of GDP in most countries. Apart from the need to scale up financing for this purpose, it is interesting that countries in the region prioritize different forms of social assistance depending on their policy priorities, history, and population and workforce composition (see figure 1.23). Social pensions are prominent in transition economies, which tend to have higher social assistance spending than other economies. Public works is quite prominent in South Asian economies with large populations, including Bangladesh and India. Conditional cash transfers are prominent in the Philippines and

Figure 1.23. Social assistance spending, by components



Source: ESCAP, based on World Bank, Atlas of Social Protection: Indicators of Resilience and Equity (ASPIRE) database (accessed on 1 February 2017).

Viet Nam. Fee waivers, such as for health-care services, are highly utilized in Indonesia,[20] India and Turkey, and school feeding programmes in Malaysia and India.

Also as noted above, active labour market programmes are not widely used in the region. Given that the Asian and Pacific region is expected to witness more "creative destruction" of jobs as economies undergo further structural changes and market reforms, social protection measures could be growth-enhancing if supported by labour market programmes, training and mobility schemes. Public employment services, including training and job-matching assistance, could strengthen employability, especially for young people in navigating the school-to-work transition. In addition, enhanced career counselling, motivational training and job readiness preparation are essential to empower youth to make informed decisions about prospective employment opportunities. Greater investment in employment offices and agencies in order to raise their profile and capacity could potentially align the job search methods used by young people with the hiring methods of employers.

Low public social protection spending in the Asia-Pacific region is partly the result of a long-prevailing development model that extends absolute priority to economic growth at the expense of redistributive policies (ILO, 2015). This is also reflected in overall low levels of government expenditures. However, the Asian financial crisis of 1997/98 and the global economic and financial crisis that began in 2008 exposed the limitations of this development model. There has indeed been a gradual shift in policy thinking, and a number of countries are now actively trying to enhance national social protection systems.

A number of countries have introduced inclusive health-care or insurance schemes which cover informal workers. Thailand, for instance, took a radical step in 2001 towards achieving full population coverage in health care by introducing a universal health care system, now popularly called the "UC scheme" (earlier known as the "30 baht scheme"). It offers all Thai citizens access to health services provided by designated district-based networks of providers, consisting of health centres, district hospitals and cooperating provincial hospitals.[21] Individuals are able to access a comprehensive range of health services, in principle without co-payments or user fees, including both inpatient and outpatient services and maternity care furnished by public and private providers within a framework which emphasizes preventive and rehabilitative aspects.

In the Lao People's Democratic Republic, informal sector workers can join the National Social Security Fund on a voluntary basis under the 2014 Social Security Law. Coverage includes access to a number of social security benefits, including health care and maternity benefits, based on a contribution rate of 9 per cent of their chosen reference wage. In Mongolia, universal maternity protection coverage is accessible through a combination of different mechanisms. While formal sector employees are covered by social insurance on a mandatory basis and receive a replacement rate of 100 per cent of their covered wage for four months, informal workers can join the scheme on a voluntary basis and receive maternity cash benefits for four months at a replacement rate of 70 per cent of their selected reference wage after 12 months of contributions.

In 2004, China initiated the Sunshine Project on Training for Rural Labourers Seeking Jobs in Urban Areas in the interest of enhancing the employability of rural workers, better managing migration and protecting basic social rights. The project entitles working-age members in rural households to receive vocational skills training. In 2007, the Sunshine Project successfully provided training for 11.25 million farmers; the training had a positive impact on both employment rates and earnings compared with those who did not attend the training programmes (ILO, 2011). More recently, social protection was extended to rural migrant labourers working in urban areas. In the initial phase, migrant workers were covered by a scheme separate from urban residents. Since the implementation of the Social Security Law in 2011, migrant workers are allowed to be registered by their employers under the same scheme for urban residents; coverage has reached about 26 per cent of about 270 million migrant workers.

In South Asia, where informal employment is particularly prevalent, public works have been quite prominent. In India, the Maharashtra Employment Guarantee Scheme supported the creation of roads and infrastructure, including irrigation structures, to overcome the main challenges posed by arid and dry land. This scheme led to the creation of seasonal occupation and improved access to land for the poor. In the expanded National Rural Employment Guarantee Programme, emphasis is laid on activities that enhance agricultural productivity and generate long-term dynamic income and employment gains.

In view of the fact that social protection coverage in Asia and the Pacific is still relatively low and that there are important gaps in both the depth and breadth of social assistance for the working-age population, a series of policies needs to be considered.

The development of social protection floors is a multi-step process that includes a national social dialogue, financing strategy and delivery mechanisms. As with public goods in general, social protection is a matter of political choice, which requires sufficient national dialogue. This is especially the case for developing national "floors" and universal schemes, which a growing number of countries are considering. Comprehensive social protection legislation needs to be developed. Coordination across government ministries and between national and subnational levels would be important to ensure coherent delivery of entitlements and avoid fragmentation, exclusion and overlaps.

Successful country experiences show that universal schemes can be affordable. As fiscal space might not be sufficient, Governments should explore innovative ways of financing social protection. Options to finance social protection schemes include: budget reallocation, such as phasing out general subsidies and containing wage bills; expenditure efficiency, for example reducing leakage through such schemes as direct benefit transfer; pension and health system reforms, such as increasing incentives for people to use community-based health services; and revenue enhancements, such as tax policy and administrative reforms and earmarking of financial resources.

Coverage could be expanded progressively, as has been done in China for the rural population and then for the uninsured part of the urban population. Expanding coverage to include the large informal sector remains a challenge, although some countries, such as China and Thailand, have been able to successfully establish universal health care and pension schemes through a combination of contributory and non-contributory approaches. There have also been innovative approaches to expand coverage, such as employment injury insurance in Bangladesh and Malaysia and the rural employment guarantee in India. Synergies should be sought, for instance by strengthening public health infrastructure through public employment programmes. Labour market programmes, although less widely used in the region, could enhance the economic growth impact of social protection.

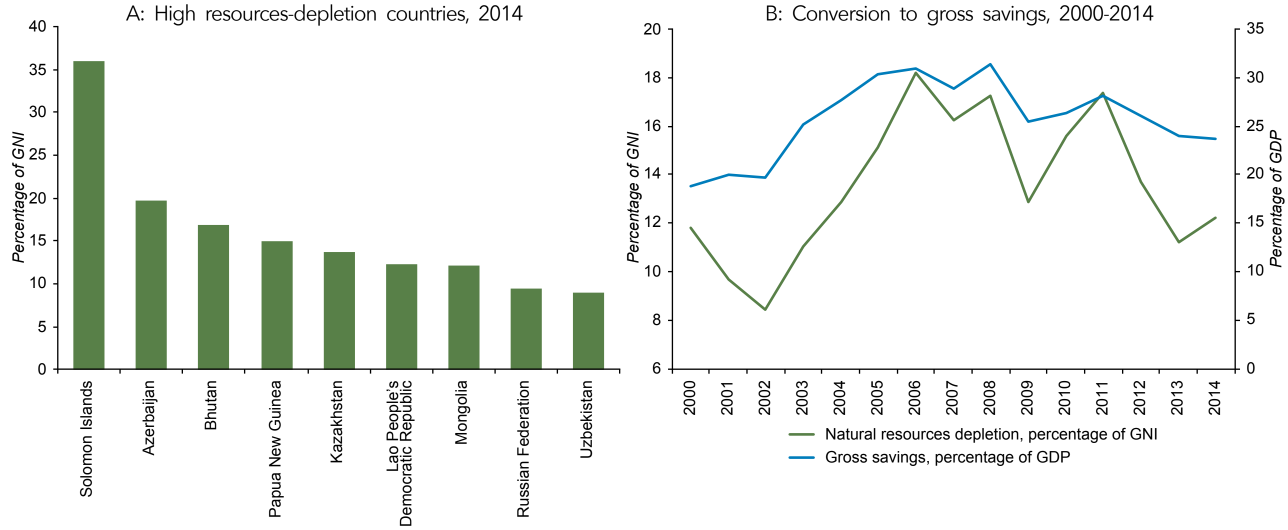
4.3. Environmental degradation is too costly to overlook

Over the past few decades, the Asia-Pacific region has experienced phenomenal real economic growth averaging 7 per cent over the period from 2000 to 2015, but this has been achieved in part at the cost of environmental degradation, concomitant health impacts and the intensive and unsustainable use of countries' natural resource wealth.[22] The region is highly vulnerable to climate change, the adverse effects of which can substantially undermine the economic development gains in the region and could force more than 100 million people in the region into extreme poverty by 2030.[23] Inefficient and unplanned urban expansion has resulted in the conversion and loss of forests, wetlands and other ecosystems and has increased the already high exposure to disasters, with poor and disadvantaged communities being the most severely affected.[24] Clean air, safe drinking water, sufficient food and secure shelter – key determinants of health – are adversely affected, with projected direct damage costs to health estimated to reach between $2 billion and $4 billion per year globally by 2030.[25] Globally, air pollution is considered to be the major factor in having caused more than half of the 7 million premature deaths recorded in 2012.[26] Contaminated drinking water affects about one third of the population in South and South-East Asia,[27] while small island States face problems of limited drinking water as a result of sea-level rise. About 80-90 per cent of urban wastewater from developing countries in the region[28] is discharged directly – without treatment – into surface water bodies.

These effects expose the limits of GDP as a measure of economic performance and social progress. If citizens are concerned about the quality of air, and air pollution is increasing, then statistical measures that do not account for air pollution will provide an inaccurate estimate of what is happening in terms of their well-being. Therefore, it is important to examine measures that can go beyond GDP to capture a country's natural capital and changes both in its natural wealth over time and in environmental degradation. Indeed, what is measured affects decision-making, so if measurements are flawed, decisions may also be distorted. This was the underlying premise of the Commission on the Measurement of Economic Performance and Social Progress (CMEPSP), which was created in 2008 with prominent economists as members who are concerned about the adequacy of current measures of economic performance, in particular the limits of GDP as a measure of societal well-being.[29] CMEPSP concluded, among other things, that sustainability assessments require a well-identified "dashboard" of indicators based on the concept of "stocks". The United Nations Statistical Commission has elaborated international statistical standards for national accounts data to incorporate the dimension, which is captured by its System of Environmental-Economic Accounting.[30]

Figure 1.24 shows natural resource depletion – the sum of net forest depletion, energy depletion and mineral depletion of a country for a given year – and reflects the decline in asset values associated with the extraction and harvest of natural resources, analogous to the depreciation of fixed assets.[31] Natural resource depletion is significant

Figure 1.24. Natural resources depletion



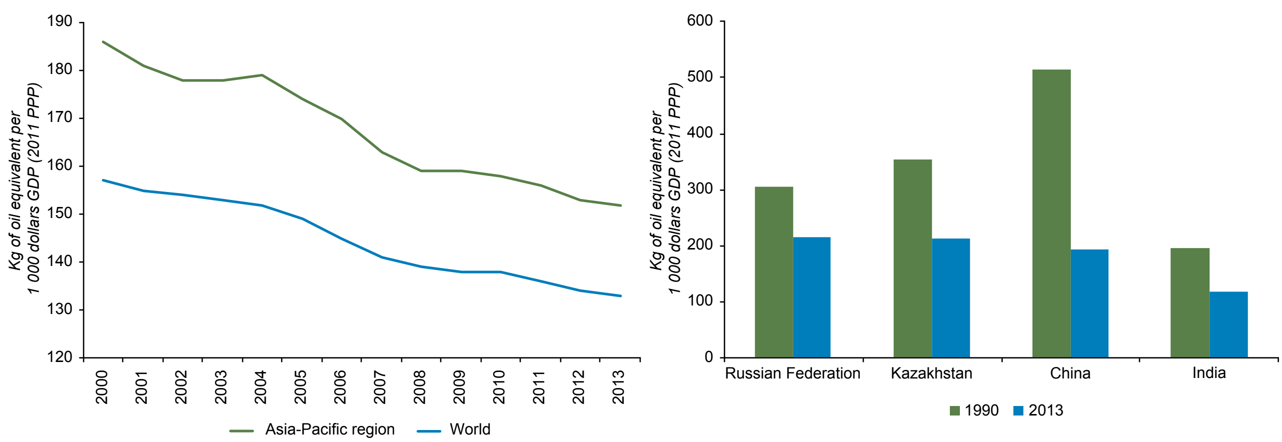
Source: ESCAP, based on data from World Bank, World Development Indicators.

Note: Panel B shows the median value of countries in panel A, excluding Bhutan, Papua New Guinea, Solomon Islands and Uzbekistan, for which full time series data are not available.

across countries in the region, reaching as high as 36 per cent of gross national income (GNI) in Solomon Islands, showing the extent to which economic growth has been achieved through significant disinvestment in a country's natural assets. While it is conceivable that some countries converted their assets into other types of savings, such as through sovereign wealth funds or the recycling of resource income by State-owned companies back into domestic investments, over time the rates of resource depletion observed are not sustainable and raise the issue of intergenerational equity. Moreover, although gross savings trends seem to be generally correlated with the depletion of resources (see figure 1.24), this may not be the case in some countries.

The region's growing weight in the global economy and its rapidly expanding manufacturing base have predictably resulted in increasing shares of global energy, material and water consumption, as well as greenhouse gas (GHG) emissions. Energy intensity – the ratio of total primary energy supply (TPES) to GDP – remains high, especially among the large oil producers and in China, although it is being steadily reduced over time (see figure 1.25). Total energy intensity for the region was 152 kg of oil equivalent per $1,000 GDP (2011 constant) in 2013, which is a decline of almost 20 per cent since 2000, but still above the global average. Fossil fuels – coal, oil and natural gas – continue to dominate total primary energy supply and its growth. Coal usage almost tripled,

Figure 1.25. Energy intensity



Source: ESCAP, based on the data from International Energy Agency. GDP figures are sourced from World Development Indicators.

from 1,067 million tons of oil equivalent (Mtoe) in 1990 to 2,939 Mtoe in 2014, while the share of coal as a primary fuel grew from 32 to 43 per cent, compared with a more modest rise in the global average, from 25 to 29 per cent.

The region already accounts for roughly half of global GHG emissions, and the high-growth path on which many of the region's economies find themselves means that this contribution will grow unless there are fundamental policy interventions. Emissions intensity in the region has been decreasing faster relative to that of the world, but in 2012 was still about 1.4 times higher than global emissions intensity (see figure 1.26). The region's GHG emissions per capita increased from 4.4 metric tons in 2000 to 6.3 metric tons of carbon dioxide equivalent in 2012, no longer far from the global per capita average of 7.5 metric tons of carbon dioxide equivalent.

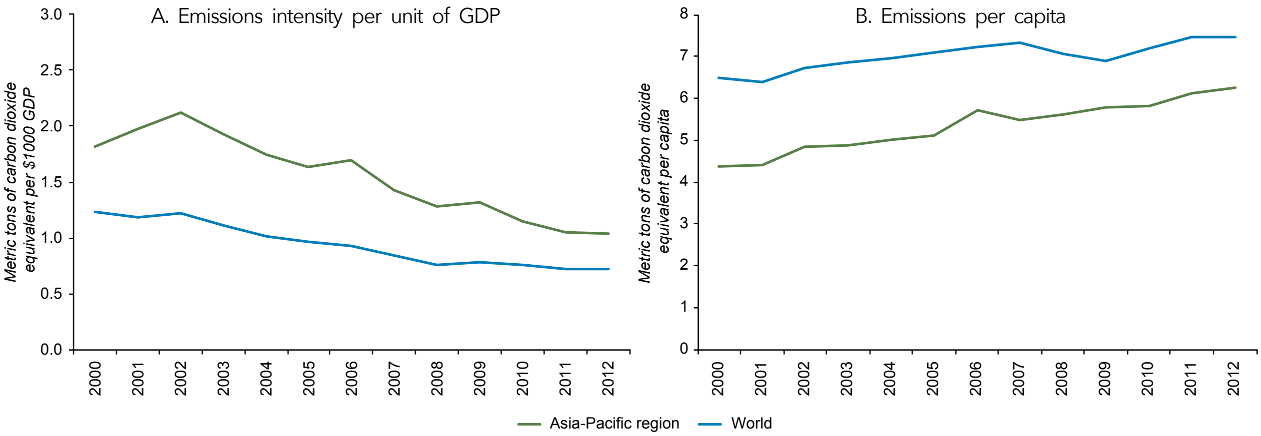
In terms of domestic material consumption, the Asia-Pacific region consumed about 53 per cent of the world's materials in 2010. The region needed 2.6 kg of materials to produce $1.00 of GDP, which means it still lags behind the rest of the world where on average only 1.3 kg was needed (see figure 1.27). The regional average, however, masks wide ranges, from 17 kg per dollar in Mongolia to 0.3 kg per dollar in Japan, with the poorest countries that are also the most dependent on natural resources often exhibiting very low resource efficiency. While material use reflects the production of goods and services, the material footprint is based on consumption patterns.[32,33] Even in industrialized countries, material footprints continue to rise at about 1 per cent per year, showing that there is no level of income yet at which material consumption levels off.[34] Nevertheless, the region still had roughly double the global average footprint in 2010. The region's water use accounts for more than half of global water use. The relative sectoral shares of water consumption were 80 per cent for agriculture and 10 per cent each for industry and municipal use.[35] Although water use is decreasing – due to improvements in the agricultural sector and irrigation – water intensity in the region's developing countries is still very high and, for the region as a whole, exceeds the global average by a factor of two.

Countries in the region are stepping up to the challenge of increasing energy- and resource-efficiency and tackling environmental degradation. Policy instruments can broadly be categorized as (a) regulatory; (b) market-based; and (c) voluntary or information-based. In practice, a mix of these policy instruments is employed to better achieve higher energy- and resource efficiency and improve environmental outcomes.

First, regulation is typically used to control hazardous point sources of pollution in air, water and land. Its advantage lies in exerting direct control over the environmental outcome it is seeking to address, which makes it ideal as an instrument to limit hazardous substances so that they do not exceed a specific amount set by scientific authorities for health considerations. Any pollution exceeding the ceiling levels would subject the polluter to fines. This type of instrument is information-intensive in that the regulator must regularly measure or spot-check the actual emission point sources at each installation. It is also inefficient relative to market instruments because – provided the emissions are below the established ceiling – it does not provide the polluter with any incentive to reduce emissions further, nor does it direct pollution abatement activities towards the lowest-cost polluter.

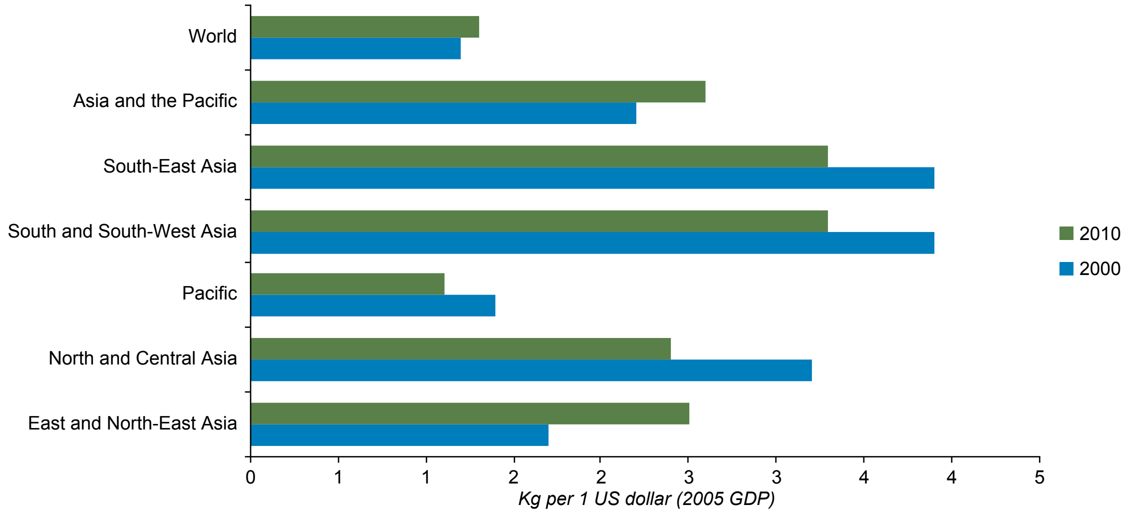
Examples from the region include Japan's Air Pollution Control Act, which stipulates allowable limits for

Figure 1.26. Carbon emissions, 2000-2012



Source: ESCAP statistical database. Available from http://data.unescap.org/escap_stat.

Figure 1.27. Domestic material consumption



Source: ESCAP statistical database. Available from http://data.unescap.org/escap_stat.

automobile exhaust gas.[36] The Republic of Korea's Green Procurement Policy, adopted in 2005, legally requires all public sectors to use sustainable products. As a result, between 2004 and 2010, the scale of green production has increased by a factor of four. Viet Nam's Law on Energy Efficiency and Conservation is aimed at achieving a 10 per cent reduction in energy intensity in energy-intensive industries and in codes for energy-efficient buildings.

Second, economic instruments rely on prices or markets to function and encompass taxes, subsidies and emissions trading systems (ETS). The advantage of market instruments concerns their superior allocative efficiency, the positive incentives that they provide and their revenue-generating ability. Emissions abatement falls first on those polluters that handle it in the most cost-efficient manner, which provides incentives to reduce pollution and emissions and to invest in environmentally friendly technologies. Market instruments are less information-intense in that they require only regulators to set the price (in the case of a tax) or the quantity (in the case of an ETS) of the relevant instrument, but this also gives them less control over the actual environmental outcome.

Examples from the region include the emissions trading systems for GHG emissions in China, Japan and the Republic of Korea, and the energy efficiency trading programme for major Indian industries known as the "Perform, Achieve and Trade" programme. Singapore plans to introduce a carbon tax from 2019, which will initially value a ton of carbon at between S$ 10 and S$ 20, which is approximately the level of carbon internal shadow pricing being adopted by a number of progressive private sector companies.[37] Experience suggests that these instruments need to be phased in slowly, with the tax rate increasing over time. Energy subsidies – especially on petroleum products and electricity – are prevalent in Asia, which accounted for about one third of global energy subsidies in 2013. In many countries in the region, fossil fuel subsidies account for a large share of GDP; for example, based on estimates for 2014, they accounted for about 20 per cent of GDP in the Islamic Republic of Iran, followed by the Russian Federation and India (both at about 10 per cent), Indonesia (7 per cent) and China (4 per cent). In the wake of the global oil price decline in 2014, a number of countries, including Indonesia, have aggressively phased out fuel subsidies.[38]

Third, voluntary and information-based measures include toxic release inventories or pollutant release and transfer registers, or "ecolabels", consumer awareness-raising campaigns and corporate sustainability reporting. One of the advantages of information instruments is the relatively low implementation cost compared with the complex administration needed to implement regulatory or market-based approaches. The limited costs involved in the use of such tools means they can be more easily employed by least developed economies. However, voluntary measures often have limited (sectoral) coverage and are sometime considered less effective than other measures.

Examples from the region include Thailand's carbon reduction label, which uses a lifecycle approach to give a measure of a product's contribution to GHG emissions, thus providing consumers with information that can help direct them towards less environmentally harmful purchases. Viet Nam has introduced mandatory labelling for certain market segments. The Singapore Packaging Agreement 2007 between the Government and the food and drink industry has led to the development of industry action plans and sets targets to reduce packaging waste from various packaging materials.

Priority policy actions for the region to achieve more sustainable growth include the following:

1. **Pursue further energy subsidy reform and promote carbon pricing, that is, get the price right:** Energy subsidies distort resource allocation decisions by encouraging wasteful fossil fuel consumption and reducing incentives for investment in renewable energy. In contrast, carbon pricing, either through carbon taxes or ETS, puts a price on the negative externality generated by carbon-generating production activities. Such pricing encourages a shift in consumption to goods or services with lower carbon content, either for consumption or as input into the production process. Further, it provides a market signal that helps spur innovation in low-carbon products and processes (see also the section on East and North-East Asia in chapter 2).

2. **Enhance energy and water efficiency opportunities across various sectors**: As buildings account for about a third of global total final energy consumption, and building stock is rapidly expanding in the region to accommodate population growth, economic growth and urbanization trends, there is huge potential for making energy efficiency improvements in the residential sector, especially in building design, heating and cooling, lighting and household appliances. In addition, the Asia-Pacific region is the world's manufacturing hub and therefore offers enormous potential for electricity savings from the institution of measures to improve industrial energy efficiency. Better water pricing policies that discriminate between high- and low-value users and that encourage lower use of water are needed to achieve water saving.

3. **Put decoupling of resource use and economic growth at the centre of development planning and improve capacities for sustainable consumption and production:** Innovative approaches to reducing, reusing and recycling wastes from cradle-to-grave and value-chain perspectives are vital to ensure sustainable consumption and production (SCP) patterns in line with Sustainable Development Goal 12. Institutional capacity-building at the national and local levels, financial support, especially for less developed countries, and technology and knowledge transfer and appropriate human resources development in support of SCP are essential. High-level political support is necessary for successful SCP policy implementation, including from their piloting and demonstration to the point of their implementation and enforcement, especially based on existing SCP initiatives in the region.[39]

5. CONCLUDING REMARKS

In 2016, economic conditions in the region began to stabilize, with a better-than-expected performance exhibited by China and with a recovery under way among net commodity exporters. In line with the region's growing purchasing power, domestic private consumption has been the major growth driver. Private investment has been less forthcoming amid weak global demand and heightened uncertainty. On the external front, trade and capital flows have been volatile. Structural changes and rising protectionist measures in trade suggest that exports are unlikely to be a major driver of growth despite the recent mild recovery. Given the depreciation of regional currencies, any boost to exports may be offset by increased pressure on corporate balance sheets with high dollar debt. Economic growth is expected to be slightly more broad-based in 2017 and generally stable at about 5 per cent. However, global policy uncertainty and trade protectionism are major downside risks. Bouts of financial volatility are also likely, with tighter global financial conditions. Within the region, China's role as originator and transmitter of shocks has increased. In the medium term, strengthening domestic and regional demand will be critical against a tough external environment.

Monetary policy space has narrowed in the past year, with policy stances recently shifting from "accommodative" to "neutral" amid upside risks to inflation. Monetary policy efficacy also seems to have declined, as reflected in a weaker-than-expected boost to domestic demand. Domestic financial stability concerns also need to be addressed. Thus, for the purpose of supporting economic growth, countries will inevitably need to rely more on fiscal measures. Given the region's large development spending needs, however, existing fiscal space should be used effectively. Some countries may also need to enhance revenue mobilization, on which fiscal sustainability and debt trajectory also ultimately depend. Countries should consider potential positive spillovers of social and infrastructure investments on the economy. Fiscal measures could be complemented by structural reforms to lift productivity, including labour market reforms and financial sector reforms that improve the allocation of resources. However, the distributional impacts of such reforms should be assessed and addressed, as well as their potential environmental impacts.

The benefits of economic expansion have accrued relatively less to the poor as is evident from rising income inequality in the region. Comprehensive measures are needed, including labour market policies, such as minimum wages, and fiscal measures, such as progressive taxation and social assistance. Despite the notable progress made in a number of countries, the region as a whole falls behind the rest of the world in terms of social protection financing and coverage. Financing options include budget reallocation, expenditure efficiency, pension and health system reforms, and revenue enhancements. Coverage could be expanded progressively through a mix of contributory and non-contributory schemes, keeping in mind the large informal sector. At the same time, environmental degradation and the intensive and unsustainable use of natural resources need to be addressed. To lower the region's energy and carbon intensity of growth, countries could deploy a mix of regulatory, market-based and voluntary or information-based measures. Priority policy actions include energy subsidy reform and carbon pricing; capturing energy and water efficiency opportunities across various sectors; and improving capacities for sustainable consumption and production.

ENDNOTES

1 General Assembly resolution 70/1.

2 See chapter 2 for further discussion of such country-level developments. Chapter 1 is focused more on regional economic performance and drivers of growth.

3 While data on underemployment are relatively scarce, it is likely that labour market conditions were relatively stable despite the export slowdown due to firms retaining their workers on the expectation of a rebound.

4 Using the pre-crisis period as a benchmark is for illustrative purposes only and has nothing to do with the "optimum" level or growth of private investment.

5 While trade restrictive measures have steadily increased in the wake of the global economic and financial crisis, protectionist sentiments may have increased while the resolve to resist protectionism may have weakened recently. For instance, the communique of the Group of Twenty Finance Ministers and Central Banks Governors Meeting on 17-18 March 2017 dropped the language from last year that vowed to "resist all forms of protectionism". Available from www.g20.utoronto.ca/2017/170318-finance-en.html.

6 For instance, it is possible that regional currencies could actually appreciate, at least temporarily (a) in the wake of a United States fiscal stimulus announcement if the size of the stimulus is smaller than the market expects, and (b) similarly, in the aftermath of a United States federal funds rate increase if the pace of increase is slower than expected.

7 The basic equation for debt sustainability may be recalled:

$$d_t - d_{t-1} = pd_t - \frac{g_t - r_t}{1 + g_t} * d_t$$

where d_t refers to the debt to GDP ratio in period t; pd_t the primary deficit; g_t the nominal GDP growth rate; and r_t the nominal effective rate of interest (borrowing cost) on government debt. This equation shows that if a Government is running a primary deficit, nominal growth must exceed the nominal interest rate to keep debt from increasing.

8 Primary fiscal balance is defined as general government net borrowing or net lending, excluding interest payments on consolidated government liabilities.

9 While structural reforms are generally associated with productivity growth, there is no precise agreed definition. The potential scope could be thus quite broad. For instance, the 2004 Leaders' Agenda to Implement Structural Reform of the Asia-Pacific Economic Cooperation consisted of five priority areas: competition policy; regulatory reform; strengthening economic and legal infrastructure; corporate governance; and public sector governance. A 2015 IMF policy paper on structural reforms identified the following 11 areas: agriculture; trade liberalization; legal system and property rights; capital market development; banking system; infrastructure; fiscal structural reforms; labour market; business regulations; industry regulations; and technology and innovation. According to a 2016 paper, the World Bank's current emphasis on structural reforms includes: promoting good governance and public sector reforms; increasing domestic resources mobilization; supporting inclusive growth, gender, social protection, environmentally sustainable growth; and enhancing competition for productivity and job growth.

10 While productivity gains can arise from the adoption of advanced countries' technologies or better use of resources within sectors of the economy, they often also reflect structural change – reallocation of resources from less productive sectors (such as agriculture) into higher-productivity ones (such as industry and services) or new activities.

11 About 30 provinces announced guidelines on *hukou* reforms in April 2016. However, while steps are being taken to remove the distinction between rural and urban household registration in smaller towns and cities, these reforms will not apply in the largest municipalities owing to concerns about how improved access to public services for former rural *hukou* holders will be financed.

12 In China, only 20,000 bankruptcy cases in total were accepted by courts between 2008 and 2015. IMF estimates that for each insolvency case accepted by China's courts, another 100-250 enterprises are estimated to have gone out of business, mostly through deregistration and business license cancellation. In India, despite the creation of new institutions and bankruptcy tribunals, as well as the use of digital records and electronic filing, the benefits of the new law will likely take years to flow through the Indian economy, as there is a backlog of 70,000 bankruptcy cases.

13 In the context of OECD countries, see, for instance, Causa, Hermansen and Ruiz (2016). Empirical studies on developing countries are relatively scant.

14 A set of economic policy prescriptions for developing countries, and Latin America in particular, that became popular during the 1980s.

15 In 2009, the United Nations System Chief Executives Board for Coordination launched the Social Protection Floor Initiative in response to the global financial and economic crisis. In 2012, the adoption by consensus of the Social Protection Floors Recommendation, No. 202, by 185 ILO Member States gave impetus to its implementation and reflected a global commitment to the cause of extending social protection to all.

16 Contributory schemes are those in which contributions made by protected persons directly determine entitlements to benefits. They can be wholly financed through contributions usually paid by both employers and workers, but often are partly financed from taxation or other sources.

[17] Examples of targeted social assistance programmes include the unconditional poverty-targeted cash transfer programme in China and the poverty-targeted conditional cash transfer programme in the Philippines, while an example of a universal social assistance programme is the Universal Health Care programme in Thailand.

[18] Based on World Bank, Atlas of Social Protection: Indicators of Resilience and Equity (ASPIRE) database.

[19] Based on ILO Social Protection Department, ILO LABORSTA database.

[20] For example, Indonesia prioritized the local-level implementation of Jamkesmas (Jaminan Kesehatan Masyarakat, or social health insurance), the national free health-care programme for the poor. Implemented from 2008 to 2013, the programme provided about 76 million low-income Indonesians with free basic health-care services and has enabled a dramatic expansion in access to health care among the poor.

[21] Thailand offers migrants the opportunity also to be a part of the scheme by purchasing insurance for the equivalent of $58 per year.

[22] For details, see UNEP, *Global Environment Outlook (GEO-6): Regional Assessment for Asia and the Pacific (Nairobi, 2016)*. Available from http://web.unep.org/geo/sites/unep.org.geo/files/documents/geo-6_ap_final_en_complete.pdf.

[23] For further information, see World Bank, *Shock Waves: Managing the Impacts of Climate Change on Poverty* (Washington, D.C., 2015). Newest estimates for the Asia-Pacific region show that climate change will cause significant impacts on growth. Without action on climate, GDP in the region could decrease by as much as 3.3 per cent by 2050 and 10 per cent by 2100, relative to the base case. See Asian Development Bank, *Asian Development Outlook 2016 Update: Meeting the Low-Carbon Growth Challenge* (Manila, 2016).

[24] Estimates are from ESCAP, UN-Habitat and Rockefeller Foundation, "Pro-poor urban climate resilience in Asia and the Pacific: quick guide for policy makers". Available from www.unescap.org/resources/quick-guide-policy-makers-pro-poor-urban-climate-resilience-asia-and-pacific-0.

[25] WHO has estimated that, between 2030 and 2050, climate change is expected to cause approximately 250,000 additional deaths per year due to malnutrition, malaria, diarrhoea and heat stress. Available from www.who.int/mediacentre/factsheets/fs266/en/.

[26] The results are from J. Lelieveld and others, "The contribution of outdoor air pollution sources to premature mortality on a global scale", Nature 525, pp. 367-371. Available from www.nature.com/nature/journal/v525/n7569/pdf/nature15371.pdf.

[27] For additional details, see R. Bain and others, "Global assessment of exposure to faecal contamination through drinking water based on a systematic review", *Tropical Medicine and International Health*, vol. 19, No. 8, pp. 917-927. Available from www.ncbi.nlm.nih.gov/pmc/articles/PMC4255778/.

[28] See ESCAP and UN-Habitat, *The State of Asian and Pacific Cities Report 2015: Urban Transformations – shifting from quantity to quality*. Available from www.unescap.org/sites/default/files/The%20State%20of%20Asian%20and%20Pacific%20Cities%202015.pdf.

[29] For further information, see https://en.wikipedia.org/wiki/Commission_on_the_Measurement_of_Economic_Performance_and_Social_Progress.

[30] For details, see http://unstats.un.org/unsd/envaccounting/seea.asp.

[31] Adjusted net savings, including natural resources depletion, is an indicator calculated by the World Bank. The adjustments for capital depletion are not comprehensive in that they do not include some important sources of environmental degradation, such as underground water depletion, unsustainable fisheries and soil degradation. This results from the lack of internationally comparable data rather than from intended omissions. Net forest depletion is a unit resource rent times the excess of roundwood harvest over natural growth. Energy depletion is the ratio of the value of the stock of energy resources to the remaining reserve lifetime (capped at 25 years). It covers coal, crude oil and natural gas. Mineral depletion is the ratio of the value of the stock of mineral resources to the remaining reserve lifetime (capped at 25 years). It covers tin, gold, lead, zinc, iron, copper, nickel, silver, bauxite and phosphate.

[32] Material footprint is the attribution of global material extraction to domestic final demand (consumption and capital investment) of a country. It is calculated as the raw material equivalent of imports plus domestic extraction minus the raw material equivalents of exports. See indicators for a resource efficient and green Asia and the Pacific 2015. Available from www.unep.org/asiapacificindicators.

[33] For additional details, see http://unstats.un.org/sdgs/files/metadata-compilation/Metadata-Goal-12.pdf.

[34] Indicators for a resource efficient and green Asia and the Pacific are available from www.unep.org/asiapacificindicators.

[35] For further information, see ESCAP and others (2016).

[36] See Japan, Ministry of Environment (www.env.go.jp).

[37] For example, in 2016 Mahindra and Mahindra became the first Indian company to implement an internal carbon fee of about $10 per ton in order to help achieve its goal of reducing greenhouse gas emissions by 25 per cent over the next three years.

[38] Experience shows that six elements are common to successful reform efforts, namely improving delivery of social support through subsidy targeting and cash transfers; institutional reforms to facilitate market-level pricing of energy; appropriate phasing-in and sequencing of price increases, differentiating across energy products; facilitating improvements in energy efficiency; comprehensive energy sector reform with clear objectives together with a good understanding of its impacts and broad stakeholder consultation; and a transparent communications strategy.

[39] Specific SCP initiatives in the region include the Asia Pacific Roundtable on Sustainable Consumption and Production and the European Commission funded the SWITCH-Asia Programme. At the country level, these include the National Action Plan for Sustainable Consumption and Production in the Philippines and Viet Nam, and national round tables in China, India and Viet Nam. The 10-year framewok of programmes on sustainable consumption and production patterns (10YFP) has also propelled thematic programmes centred on sustainable buildings and sustainable tourism, sustainable lifestyles etc., for which there are regional components in the Asia-Pacific region. The concept of SCP is increasingly embedded in national strategies for sustainable development. For example, China has operationalized "circular economy" principles and pollution control into national pollution frameworks, while its "eco-civilization" strengthens this approach by integrating environmental protection into societal and environmental goals. Thailand set SCP as one of four national strategies of its Tenth National Economic and Social Development Plan.

CHAPTER

02

PERSPECTIVES FROM SUBREGIONS

1. INTRODUCTION

The Asia-Pacific region is vast and diverse. The region is home to some of the world's largest economies, such as China, India, Indonesia, Japan and the Russian Federation. Changes in economic conditions and direction of economic policies in these countries have notable implications for other regional peers and beyond. At the same time, the region is home to several small countries, the population size of which is less than 1 million, that are dependent on and influenced by other larger economies in the region.

The economic structure and development challenges that various subregions in Asia and the Pacific are facing differ markedly. In landlocked North and Central Asia and remote Pacific islands, international trade costs are high but for different reasons, and the subregions require different policy solutions. In terms of economic integration, regional production networks in East and North-East Asia and South-East Asia are considered highly interconnected. In contrast, the South and South-West Asian subregion remains one of the least integrated blocs of economies in the world. Similarly, on demographics the East and North-East Asian subregion is facing rapid population ageing, whereas the share of the young in the total population continues to increase notably in South and South-West Asia.

Given such diversity, in this chapter macroeconomic developments and prospects and medium-term development issues are looked at from the subregional and country perspectives. The chapter complements chapter 1 by offering a more disaggregated macroeconomic assessment. This subregional perspective is important because region-wide economic figures are sometimes shaped by developments in large economies. For example, although overall economic growth for developing Asia-Pacific countries edged up in 2016 relative to 2015, economic growth indeed slowed in more than half of the economies where data are available to assess such growth.

This chapter presents five selected subregional development issues which could be seen as case studies on how effective fiscal policy management and good economic governance can contribute to better development outcomes. These topics build upon the thrust of chapter 1, which presented arguments for a more active role to be played by fiscal policy in addressing social and environmental concerns and a reorientation of policy focus towards more inclusive economic growth. The selected topics also support the arguments that will be made in chapter 3, that effective governance helps enhance the quality of fiscal policy management and that good governance is necessary for delivering domestic structural reforms that have a beneficial impact.

The selected topics for South and South-West Asia and Pacific island developing economies are focused on inclusive and social development. In South and South-West Asia, poverty remains widespread despite rapid output growth as the subregional economies are currently stagnating in informal, low-productivity activities. Policy efforts to reduce economic informality and create more productive jobs will require changes in governance practice and fiscal policy design, such as reducing paperwork requirements and linking financial support with business registration. In Pacific island developing economies, various fiscal policy tools have been introduced to tackle the prevalence of non-communicable diseases. Key policy issues, such as the targeting of health spending on preventive care and considering the potential benefits of public-private partnerships and a user-pay arrangement, require careful fiscal planning as well as enabling institutional settings beyond the health sector. For both subregions, the fiscal space is limited so partnerships with international development partners are crucial.

Turning to environmental concerns, the selected topic for East and North-East Asia highlights how other Asia-Pacific countries can learn from the subregion in promoting clean energy innovation. As in the case of policies to address social issues, the role of fiscal policy and governance is notable here. For example, some of the key policy lessons are the balanced use of fiscal incentives and enforcement of environmental laws, as well as the implementation of institutional arrangements that promote effective monitoring and evaluation of public spending, and the need for multi-stakeholder partnerships.

Finally, the selected issues for North and Central Asia and South-East Asia would suggest that initiatives on regional economic integration could help drive countries to introduce structural reforms to address weak economic fundamentals. Effective economic governance is key to the successful implementation of such reforms. In North and Central Asia, the Eurasian Economic Union and the Belt and Road Initiative will result in fewer trade restrictions and greater transport connectivity. To benefit from such new windows of opportunity, some important steps are necessary, such as reducing bureaucratic burdens and adopting common standards. In South-East Asia, less developed economies of the subregion would benefit more from the ASEAN Economic Community if structural constraints, such as inadequate labour skills and public infrastructure, are addressed. Delivering a successful reform package requires a well-functioning public sector, but this requirement is currently undermined by governance issues, such as widespread corruption and weak coordination among public agencies.

2. SOUTH AND SOUTH-WEST ASIA

2.1. Macroeconomic performance and outlook

Economic growth in South and South-West Asia softened slightly to 5.4 per cent in 2016 from 5.8 per cent in 2015. Despite the slower growth, South and South-West Asia was still the fastest-growing subregion in the Asia-Pacific region. In India, which accounts for at least half of subregional output, economic growth slowed amid weak manufacturing activity and fixed investment. In contrast, economic growth accelerated in Bangladesh and rebounded notably in the Islamic Republic of Iran and Maldives. Pakistan recorded stable growth at a relatively rapid pace.

Consumer inflation in South and South-West Asia reached a multi-decade low rate of 6.1 per cent in 2016 in the face of low global energy and commodity prices. Lower inflation was also underpinned by much softer price pressure in the Islamic Republic of Iran after the lifting of international sanctions that enabled the country to gain access to goods and services. The modest inflation environment has allowed monetary easing that supported economic growth in several economies. However, monetary conditions are different in Sri Lanka where a credit boom has led to tightening of monetary policy.

Despite generally low interest rates in the subregion, private investment conditions were mixed. In India, such factors as excess production capacity, corporate deleveraging and a high ratio of non-performing loans deterred business investment, although public infrastructure projects are likely to take up some slack. In Nepal, public investment jumped in 2016 as post-earthquake reconstruction efforts continued, but private investment was held back by supply disruptions following a border dispute and blockade. In contrast, private investment was stronger in Pakistan as the China-Pakistan Economic Corridor helped attract more foreign investment, while Bhutan continued to register robust investment in hydropower projects. More broadly, public infrastructure investments should be geared towards crowding-in private investment to facilitate an industry-oriented structural transformation that promotes the creation of productive jobs (see the next subsection for a more detailed discussion).

Output growth is expected to rebound to 5.6 per cent in 2017 and 5.9 per cent in 2018, with stronger growth performance being projected in most subregional economies. As in past years, private consumption, as well as public investment in some countries, will be the main driver of growth. In India, despite some disruptive impacts due to currency demonetization, economic growth is likely to trend upward in coming years. A key downside risk is higher-than-expected inflation, which could lead to the unwinding of monetary policy support and dampen consumer spending. In addition to global energy price developments, such price spikes could be due to domestic factors, such as adverse weather conditions that would push up food prices.

The subregion's medium-term economic development has been constrained by significant supply-side impediments, such as inadequate infrastructure and energy. Closing such gaps requires large fiscal spending in this subregion where fiscal space is typically limited. To increase fiscal resources, efforts have been expended on restructuring loss-making State-owned enterprises, expanding the tax base and improving tax administration. Other reforms that are aimed at addressing bottlenecks, such as land acquisition and labour reforms, could help lift the subregion's potential output growth.

Afghanistan

Economic growth in Afghanistan was stable at the low level of 2 per cent in 2016, on par with that in 2014 and 2015. Output growth has trended downward notably in recent years, from the 6.5-10.9 per cent growth rates recorded for the period 2011-2013 when large numbers of international forces stationed in the country (mostly withdrawn by end-2014) helped support the economy. Economic growth is generally impeded by rising violence and weak governance and institutional systems, factors which have undermined the business sector. Despite the enormous potential of the country's mineral sector, only a fraction of the potential gains have been realized, and mining output is on a downward trend, with large leakages due to illegal activities. Meanwhile, recent policy efforts have been focused on boosting domestic fiscal resources in order to reduce the country's reliance on foreign aid. In this regard, the Government introduced tax reforms, increased royalties and rationalized the size of public services. These steps helped improve fiscal conditions, although sustained improvement in fiscal positions depends on tax revenue from a more vibrant business sector.

The near-term economic outlook is positive but fragile with growth projected at 3 per cent in 2017 and 4.3 per cent in 2018. A new medium-term development framework for the period 2017-2021 outlines a road map aimed at increasing the country's self-reliance through enhancement of institutional quality and macroeconomic fundamentals. For example, under the framework, programmes on employment generation have been proposed to complement the low job intensity of Afghanistan's sectors that have high potential, such as mining and energy. Job creation is key to the country's medium-term development as its young population, aged between 15 and 24 years, accounts for one third of the total population.

Bangladesh

The economy of Bangladesh has enjoyed an annual growth rate of at least 6 per cent since 2011. In 2016, growth reached a decade-high rate of 7.1 per cent. Net exports of goods and services drove the overall economic expansion as a result of steady export growth, mainly of ready-made garments, and a much larger decline in import bills due to low oil prices. Overall, domestic demand was solid. Government consumption expanded notably partly owing to the record increase in public sector pay. Capital investment also increased, although this was mainly driven by public investment. Meanwhile, household spending grew more slowly in 2016 in line with lower workers' remittances caused by weak economic activity in host countries, particularly those in the Middle East. Given the important role of remittances, policies related to the establishment of drawing arrangements between overseas exchange houses and the banks operating in Bangladesh were relaxed in order to facilitate the transfer of remittances.

Near-term economic growth is projected to remain high at 6.5-6.8 per cent in 2017 and 2018. Consumer spending is likely to drive the economy, underpinned by the expected rise in farm income, a rebound in workers' remittances and multi-year low inflation rates. Steady growth of FDI and merchandise exports would enable the country to maintain its current account surplus. Despite the positive outlook, there are signs of heightened financial sector risks, such as rising non-performing loans and steep deterioration in returns on equity and assets. These developments have prompted an increase in regulatory supervision. To sustain medium-term economic development, tax collection needs to be further strengthened in order to overcome infrastructure and energy shortages. Despite ongoing efforts to streamline tax administration and encourage compliance, the tax-to-GDP ratio remains below 10 per cent. In this regard, recent policies to enhance the investment climate, such as creation of one-stop services, should help to energize the business sector and enhance future tax collection.

Bhutan

Bhutan's economic growth rate remained high at 6.4 per cent in 2016. That pace is somewhat lower than the high base of 7.7 per cent in 2015 partly due to subdued demand for energy-intensive exports, such as steel, in India. As in past years, economic expansion in 2016 was driven by the construction of large-scale hydropower projects, which have kept the share of gross fixed investment at more than half of GDP. Nonetheless, as these construction projects rely on imported materials, Bhutan exhibits a large current account deficit and a high debt-to-GDP ratio. Although macroeconomic stability risk is not considered excessive in view of future hydropower income, prudent project planning and implementation is important. Meanwhile, inflation decreased to 4 per cent in 2016 from 4.5 per cent in 2015 and an annual average of 8.7 per cent during the period 2012-2014. Such a downtrend trend is in line with inflation in India, which is the main supplier of goods to Bhutan.

Growth is projected to rise to 6.6 per cent in 2017 and 7 per cent in 2018 when more hydropower projects become operational. Risks to the outlook include delays in implementation of these projects and higher-than-expected costs that could push up the cost of debt servicing. To maintain rapid economic development in the medium term, the Government has sought to diversify the country's source of economic growth beyond the hydropower sector. For example, to address a cumbersome and fragmented approval process, the Government has established new agencies responsible for enhancing the business environment. In the longer term, Bhutan's economic and social development will crucially depend on effective spending of hydropower revenues.

India

The rate of India's economic growth moderated to 7.1 per cent in 2016 from 7.6 per cent in 2015. The manufacturing sector was more sluggish in 2016 relative to 2015 owing to weaker domestic demand, rising input costs and subdued bank credit. Fixed investment continued to contract as stressed corporate balance sheets suppressed firms' appetite for additional spending. Overall, the still rapid output growth in 2016 benefited from a modest recovery in agriculture due to an improved monsoon season and robust growth in public administration following public sector salary increases. Meanwhile, the unexpected withdrawal of the two largest denomination currency notes in November 2016 and their subsequent replacement with new currency, a process known as demonetization, weighed down economic conditions in late 2016 and early 2017. For example, the resulting liquidity crunch led to delays in the payment of wages and purchase of inputs in the industrial sector.

Economic growth is projected to be stable at 7.1 per cent in 2017 before edging up to 7.5 per cent in 2018, underpinned by higher private and public consumption and increased infrastructure spending. Despite the overall fiscal tightening, capital expenditure under the budget for fiscal year 2017/18 is about 25 per cent higher than that in the preceding budget. Meanwhile, inflation is projected to reach 5.3-5.5 per cent in 2017 and 2018, which is somewhat above the official target of 4.5-5 per cent. A key downside risk is heightened financial sector risks related to the concentration of bad loans in public sector banks. The gross non-performing assets ratio in public sector banks reached almost 12 per cent in 2016, which points to the need for bank recapitalization.

While the impact of demonetization on the economy is expected to be transient, a slower-than-expected recovery would particularly diminish the outlook for cash-intensive sectors and supply chains for agricultural products. In this regard, the recent budget calls for various measures that seek to mitigate the large temporary adverse shocks on income and wealth, such as expanding a low-cost housing scheme and providing more relief to the agricultural sector and credit support for small enterprises. Notwithstanding its short-term disruptions, one of the medium-term benefits of the demonetization that took place was to help expand banking sector liquidity. The country's medium-term economic development will also benefit from recent reforms that are aimed at easing domestic supply bottlenecks, such as the implementation of the goods and services tax, amendment of a bankruptcy law and opening up of the pharmaceuticals, defence and civil aviation sectors.

Islamic Republic of Iran

The economy of the Islamic Republic of Iran resumed positive growth in 2016 at 4.3 per cent compared with zero growth in 2015. The lifting of international sanctions in early 2016 helped to restore oil production and exports to pre-sanction levels and attract higher foreign investment. Growth in non-oil sectors was led by increased activity in such sectors as agriculture, trade and transport. Meanwhile, inflation moderated to 8.5 per cent in 2016 from 13.7 per cent in 2015 and an annual average of 28 per cent in the preceding three years. Renewed access to imported goods and services, tight monetary policy and low global food prices are among the contributing factors.

Growth is projected to edge up further to 4.4-4.7 per cent in 2017 and 2018. Oil production and export volumes should continue to increase at the same time that global energy prices rebound. Relaxed restrictions on foreign investment are expected to support investment in the non-oil sectors, particularly the automotive, petrochemical and infrastructure sectors. The positive outlook is, nonetheless, uncertain. The projected growth pickup assumes no oil production cuts (beyond that agreed by the Organization of the Petroleum Exporting Countries (OPEC) in early 2017) and no renewal of international sanctions. The outlook is also conditional on continued implementation of structural reforms, such as overhaul of State-owned enterprises, bank restructuring and recapitalization, deepening of trade and investment links, and improved fiscal management of oil revenues.

Maldives

The economy of Maldives rebounded from a low base of 2.8 per cent growth in 2015 to 3.9 per cent in 2016. Tourism, which is the country's main source of income, increased with the arrival of more visitors from Europe, which offset the earlier decline in the number of Chinese tourists. Compared with previous years, domestic demand contributed more significantly to economic growth in 2016, particularly the construction and wholesale and retail trade sectors, which have registered notable growth in loans. The economic rebound in 2016 was also supported by public investment in large-scale infrastructure projects. The monetary policy stance was more stable, with the policy rate kept unchanged since 2012, although inflation reached a decade-low rate of 0.5 per cent in 2016.

Growth is projected to pick up to 4.5 per cent in 2017 and 4.6 per cent in 2018. Steady tourist arrival growth is expected to be the main driver of economic growth. However, macroeconomic imbalances cloud the growth outlook. In particular, large budget deficits and the rising public debt level have raised concerns over fiscal sustainability. While the Government foresees a much smaller fiscal deficit in 2017, partly benefiting from abolishment of electricity subsidies, it has recently agreed to pay $270 million, or more than 20 per cent of total resources for 2016, in compensation on an arbitration case relating to cancellation of an airport expansion project. On external accounts, the foreign exchange reserves fell by about 40 per cent in 2016 as a result of an investment in a corporate bond to raise funds for such compensation and a rise in import bills for infrastructure investments and buoyant construction activity.

Nepal

Nepal's economic growth decreased to a decade-low level of 0.6 per cent in 2016 from an already low base of 2.7 per cent in 2015. Economic activity has not rebounded from the devastating earthquake that took place in April 2015 and a prolonged border blockade with India in the later part of the year. As a result, industrial output fell notably in 2016 as the earthquake depressed household income and the demand for goods, while the border blockade disrupted the supply of fuel and raw materials from India. While higher public investment was planned, inadequate implementation capacity and procedural bottlenecks continued to impede spending. Meanwhile, inflation sped up to 9.7 per cent in 2016. In the early part of the year higher price rises were recorded due to the limited supply of products from India, which constitute a large share of the goods consumed in Nepal. Inflation has consistently been close to double-digit levels in past years due to supply-side bottlenecks.

The growth outlook is set to improve to 4.6 per cent in 2017 and 4.8 per cent in 2018. Overall exports should improve owing to an expected economic rebound in India, which accounts for about 60 per cent of total shipments. Exports of garments and apparel would also benefit from duty-free access granted recently by the United States. Consumer spending is expected to grow steadily amid stable agricultural income, while fixed investment growth is underpinned by gradual reconstruction efforts. The medium-term outlook is supported by policy reform efforts to enhance the business environment, such as streamlining tax administration and offering new investment incentives. Ongoing construction of hydropower projects will also help the economy to reap the dividends of its abundant resources and spur manufacturing growth.

Pakistan

Pakistan's economic growth in 2016 increased to 4.7 per cent from 4 per cent in 2015. The expansion was, however, uneven. Agricultural output declined slightly, as production of cotton and rice shrank due to abnormal rainfall and subdued prices. In contrast, there was a strong uptick in construction and manufacturing activities, while the services sector expanded robustly. From the demand side, despite subdued farm income, consumer spending largely propelled the economy on the back of a decades-low inflation rate and a modest increase in inflows of remittances. Exports continued to decline in 2016 owing to lower global prices of and demand for textiles, which account for almost 60 per cent of Pakistan's exports. Increased capital inflows from China to finance projects under the China-Pakistan Economic Corridor (CPEC) have helped generate foreign exchange receipts, although imports of transport and construction-related items also increased.

The growth outlook is projected to trend up to 5.2-5.4 per cent in both 2017 and 2018. Private consumption and public investment would drive the economy, supported by higher consumer credits, improved security conditions and ongoing infrastructure projects under CPEC. On the supply side, the large-scale manufacturing sector should benefit from greater energy security and a notable cut in gas prices for industrial use. Similarly, the agricultural sector is likely to improve, with expanded production of cotton, sugarcane and maize. Meanwhile, a rebound in global oil prices and an upward adjustment in domestic petrol prices would push up inflation in 2017/18 to 5-5.5 per cent, which is still within the official target of 6 per cent. In the medium term, energy shortages would continue to result in the country's below-potential growth. Despite recent improvements, energy sector reforms would need to further reduce subsidies, tackle the accumulation of arrears and improve technical efficiency.

Sri Lanka

Economic growth in Sri Lanka moderated to 4.4 per cent in 2016, from 4.8 per cent in 2015 and an average of 7.4 per cent during the period 2010-2014. Agricultural output contracted as production of key commodities, such as rubber, rice and tea, was impaired by severe weather conditions. For production of food and beverages and textiles and garments, slight declines were recorded. The construction and services sectors were more buoyant, especially in financial services and domestic trade. On the external front, export earnings shrank in 2016, although the current account deficits narrowed thanks to stronger tourism revenues and remittance inflows. Meanwhile, subdued agricultural output and higher wage levels pushed up inflation to 4 per cent in 2016, well within the official target of 4-6 per cent. To contain credit growth, the policy rates were raised twice in 2016 for a total of 100 basis points.

Economic growth is expected to rebound modestly to 4.8-4.9 per cent in 2017 and 2018. Agricultural activity should recover from adverse weather conditions. A major headwind to stronger growth prospects, however, is fiscal tightening that would constrain consumer spending and public investment, especially in an environment of higher domestic interest rates. The country's medium-term economic development is contingent upon the success of reforms designed to reduce stubbornly large fiscal and trade deficits. Public debt currently stands at close to 80 per cent of GDP, with a large share being foreign-currency denominated. In this regard, the Government has strengthened its fiscal consolidation programme by increasing the value-added tax rate from 11 to 15 per cent and imposing various taxes, such as a capital gains tax and carbon tax for motor vehicles. There are also efforts to tax e-commerce transactions, reform State-owned enterprises and improve tax administration.

Turkey

Turkey's economic growth rate dipped to 2.4 per cent in 2016 from a high base of 6.1 per cent in 2015. Increased political uncertainty in the aftermath of a failed coup attempt in July 2016 and recent geopolitical developments weakened market confidence, resulting in a decline in private investment and tourism revenues. Moreover, capital outflows were sizable, which led to an interest rate rise in November 2016. Unemployment rose to a multi-year high rate of about 12 per cent in late 2016, partly due to job cuts in the tourism sector. Joblessness is much higher among female workers, which is a cause for concern given the already low female labour force participation rate. The economic slowdown in 2016 came despite measures to boost consumer demand, such as a 30 per cent increase in minimum wage levels from January 2016.

Output growth is projected to edge up to 2.8 per cent in 2017 and 3.2 per cent in 2018. Improving job market conditions are expected to support private consumption, while exports would benefit from the removal of trade restrictions with the Russian Federation. However, private investment is likely to remain sluggish, as currency depreciation weakened the balance sheets of corporates with foreign exposure. Overall, the outlook is constrained by concerns over domestic security and the political situation, which would continue to restrain consumer spending and tourist arrivals. Meanwhile, inflation is expected to remain high, at more than 7 per cent in both 2017 and 2018, relative to the official medium-term target of 5 per cent, given the pass-through effect from higher minimum wages and currency depreciation.

While an immediate policy priority is to restore domestic business sentiment, another policy challenge is to make further progress on labour market reforms in order to reduce informal labour, narrow gender gaps in workforce participation and better integrate refugees into formal employment. In this regard, the Government introduced automatic pension enrolment of wage earners younger than 45 years of age in private pension plans in order to supplement the public pension programme and increase retirement savings.

2.2. A selected policy challenge: structural transformation for inclusive development

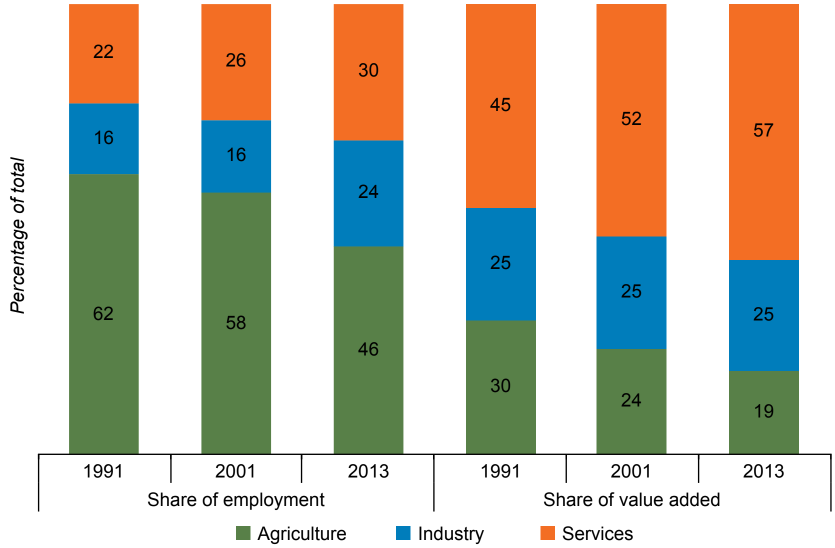
Employment constitutes a crucial link between economic growth and poverty reduction for South and South-West Asia as most households in this subregion remain entirely dependent on income generated through work; access to other sources of income, such as from productive assets and public transfers, is usually limited. Thus, the availability of decent and high-productivity jobs on a sustained basis is key to tackling poverty in this subregion. In this regard, structural transformation that promotes economic growth and creates productive jobs in sectors where people living in poverty are likely to be employed should be a policy priority for South and South-West Asia (Islam, 2003; Khan, 2007; Aggarwal and Kumar, 2012). Moreover, as the subregion is experiencing a youth bulge, in which the share of those in the working-age population is projected to rise at least until 2030, the need to create a sufficient number of decent jobs becomes urgent.

Unconventional structural transformation in South and South-West Asia

Conceptually, structural transformation should boost opportunities for productive jobs. In its broadest sense, structural transformation refers to long-term reallocation of the factors of production, such as labour and machinery, to more productive economic activities (Silva and Teixeira, 2008; Harguchi and Rezonja, 2013; McMillan, Rodrik and Verduzco-Gallo, 2013). As resources are used more efficiently, such as by mobilizing excess labour in low-productivity agriculture for employment in other sectors, structural transformation would help to promote a country's economic growth and productivity. The traditional concept of structural transformation implies that opportunities for productive jobs should rise as an economy's income level increases and its structure transforms from reliance on the agricultural and subsistence sectors to higher value-added manufacturing and services sectors (Lewis, 1954).

The dynamics of structural transformation in South and South-West Asia, however, have differed from this conventional narrative. In particular, structural change in the subregion has failed to create a sufficiently large number of productive jobs. This is mainly because most of the economies continue to stagnate between agriculture and low value-added manufacturing. Figure 2.1 depicts the shares of employment and value added over time in the agricultural, industrial and services sectors, and highlights the lack of high value-added industrialization in the subregion. In particular, while the share of industry in total employment increased over the past two decades, from about 16 per cent in 1991 to 24 per cent in 2013, its share in total output has been stagnant at about 25 per cent during the same period. This implies lower productivity in industrial activities in the past decade. Meanwhile, although figure 2.1 suggests higher productivity in service activities, mainly driven by modern and productive jobs, such as those in India's financial and information technology sectors, the vast majority of jobs in services are concentrated in low-productivity areas, such as in retail services.

Figure 2.1. Sector shares of employment and value added, South and South-West Asia, 1991-2013



Source: Based on the ESCAP Statistical Database.

Available data on occupational groups point to the dominance of low-productivity jobs in South and South-West Asia. The share of jobs which are generally regarded as more productive and have higher skills requirements, such as professional, managerial and technical work, remains below 20 per cent in most economies in the subregion. In contrast, skilled jobs in the agricultural sector and elementary occupations account for the highest shares of workers in most economies. In Maldives, almost half of all employed persons are performing rudimentary occupations, such as street vending, providing cleaning services and performing simple tasks related to farming, manufacturing and mining. Such shares are also high in India at about 30 per cent and close to 20 per cent each in Bangladesh, Pakistan and Sri Lanka.

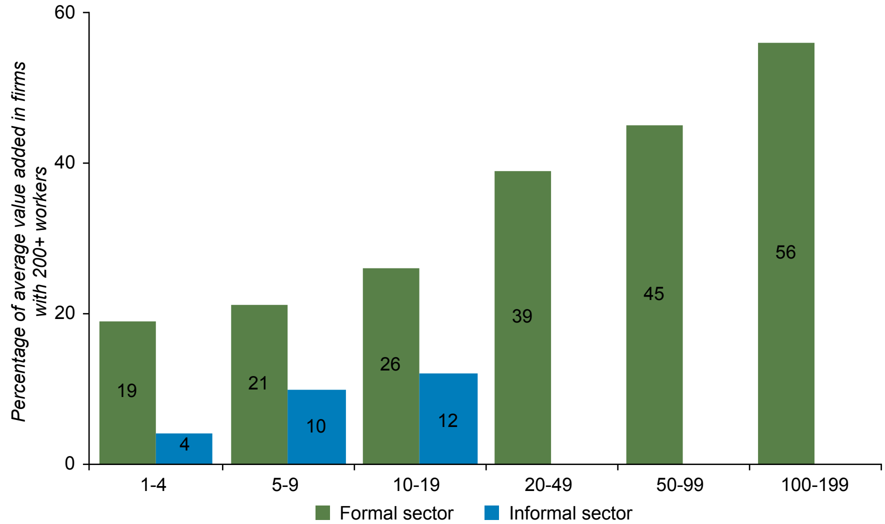
In India, structural transformation bypassed high-productivity industrialization and shifted to low value-added services sectors. India's share of manufacturing in GDP, at 17 per cent in 2014, was notably lower than that of other major Asia-Pacific economies, such as China, the Republic of Korea and Thailand, where such shares were close to one third. The lacklustre growth in the share of manufacturing output has been attributed to several factors, including rising capital intensity, the concentration of manufacturing in the informal sector, an absence of middle-sized firms and the reclassification of some tasks that were previously performed by manufacturing but have now been transformed into services (Mazumdar and Sarkar, 2009; Nayar and others, 2012; Thomas, 2013; Bhat, 2014). Within the manufacturing sector, the resource and labour-intensive low-technology sectors, such as food processing, tobacco, wood products and textiles, remain the largest employers.

Informal jobs are common

Even where jobs exist, the quality of jobs, including such aspects as wages, working conditions, social protection and equal access to employment opportunities, is important. In South and South-West Asia, the quality of employment appears to be low, as a large share of workers is being employed in the informal sector. For example, informal employment accounts for about 70 per cent of all jobs in Sri Lanka, almost 90 per cent in Bangladesh, India and Pakistan, and up to 95 per cent in Nepal. When excluding jobs in agriculture, one estimate suggested that the informal economy in Bangladesh, India and Nepal still absorbs at least half the working population (ILO, 2015). These informal jobs are typically characterized by low pay, poor working conditions and little or no protection or rights.

The pervasiveness of informal sector jobs has perpetuated low productivity, poverty and inequality (Chen, Vanek and Heintz, 2006; Inter-American Development Bank, World Bank and ECLAC, 2013). Figure 2.2 shows that in terms of manufacturing in India labour productivity among informal workers is much lower than that of formal workers. For example, while the average value added by producers in the formal sector employing 10-19 workers is about 26 per cent of that of workers in firms that employ more than 200 workers, the share of value added by those in the informal sector decreases to only 12 per cent. In India, informalization of the organized manufacturing sector has been rising through greater use of subcontracting and increasingly employing contract and temporary workers. Typically, casual and temporary workers receive significantly lower wages than regular workers and have limited recourse

Figure 2.2. Mean value added per worker in manufacturing in India as a share of value added per worker in formal firms with 200+ employees



Source: Nayar and others (2012).

to adequate social security and other benefits. Evidence suggests that the bulk of new jobs created in the formal sector of Indian manufacturing are low-quality insecure jobs. The increasing informalization of manufacturing is a matter of concern because, if structural change through sustainable industrialization does not create decent jobs for people to attract workers away from low-productivity occupations, such change would fail to have a significant impact on reducing poverty (Aggarwal and Kumar, 2012).

Policy strategies for guiding structural transformation in South and South-West Asia

Policy strategies to ensure that structural change creates a sufficiently large number of productive jobs could feature at least four related components: introducing multifaceted industrial development policies; investing in human resources development; breaking the informal-formal segregation barriers; and expanding social protection beyond formal sector employment.

On the first component, the goal of an industrial policy should be to offer an enabling business environment that is conducive to creating new high-productivity sectors and increasing the value added for existing economic activities. The latter includes enhancing productivity in the agricultural sector, which still employs nearly half the workers in South and South-West Asia. In order to promote dynamic, high-value-added economic activities, the focus should be on enhancing innovation capacity and entrepreneurship. In this regard, enhanced access to credit facilities and venture capital to support business start-ups is important (ESCAP, 2016a).

There is already a renewed effort to energize manufacturing activities in the subregion, such as the recent "Make in India" policy package that envisions India as a global manufacturing hub. The core part of the initiative is sector-specific industrial policies. The focus is on manufacturing sectors, such as automotives, textiles and pharmaceuticals, as well as the energy and infrastructure sectors, such as oil and gas, power, ports and telecommunications. There is also a range of complementary policies and incentives to avoid the pitfalls of a "picking-winners" approach. Examples include a new microfinance public financial institution that targets innovative small and microenterprises, and "Stand-up India", which seeks to promote entrepreneurship among women and disadvantaged indigenous groups.

The second component of policy strategies to ensure that structural transformation leads to high-productivity jobs is investment in human resources development to increase the availability of a skilled labour force. On this supply-side policy, studies show that countries which have higher average years of schooling tend to have a higher share of employment in the manufacturing and services sectors and a higher share of wage employment (World Bank, 2012c; Byiers and others, 2015b). These studies also highlight the importance of education for successful structural transformation in Asia-Pacific countries, such as China, Indonesia and Viet Nam.

Several Governments of countries in the subregion have placed greater emphasis on skills formation and human resources development in the past decade. For example, while Sri Lanka passed the Free Education Act in 1945 and Bangladesh adopted the Primary Education Compulsory

Act in 1990, India and Pakistan passed right-to-education legislation only in 2009 and 2012 respectively. Moreover, India established the Ministry of Skill Development and Entrepreneurship in 2014 and launched the Skill India programme in 2015, which seeks to harness the energy of the country's youth.

One policy priority is to strengthen technical and vocational education and training (TVET) schemes. Studies suggest the employment benefits of TVET schemes could be more significant in the informal sector and among some population groups, such as women. In the context of South and South-West Asia, a recent estimate shows that the rate of return of TVET schemes is as high as 42 per cent in Sri Lanka (Byiers and others, 2015a). Despite the high rate of return, enrolment in TVET programmes in the subregion is very low, at about 2 per cent of total school enrolments in 2007. Such low enrolment is largely due to a perception that TVET carries lower social status compared with formal education. Nevertheless, some policy effort has been made to promote TVET. For example, Bangladesh has sought to modernize its TVET system through implementation of the National Education Policy 2010 and the National Skills Development Policy 2011. In Sri Lanka, TVET plans were designed in consultation with representatives from the private sector to ensure that the skills being developed are those that are relevant for work, particularly in the apparel industry.

The third component of the policy package to create high-productivity jobs is labour market innovations that seek to break the informal-formal segregation barriers. Among other measures, formalization of the informal economy should be encouraged by reducing the regulatory cost of formalization, such as by imposing fewer paperwork requirements, and linking incentive schemes, such as eased access to finance, with business registration and basic compliance with labour and environmental regulations. Moreover, as most informal firms are small, the broad policy is to help these firms to grow and graduate into formal economy enterprises. This step requires addressing constraints, such as limited access to credit and inadequate management skills. As for workers, a policy effort that seeks to formalize employment relationships, expand social security benefits to in-service training and enable transferability of qualifications and skills between the formal and informal sectors would help facilitate integration in the formal economy (ILO, 2007).

The fourth component is to expand the provision of social protection beyond formal sector employment. Social protection plays a critical role in promoting inclusive development. For example, income support in case a worker becomes temporarily unemployed or injured in a work-related accident would help workers avoid falling into poverty. Similarly, pensions provide basic income security in old age, while maternity benefits promote female labour force participation and access to good-quality maternal health care. Despite the importance of such measures, only about 10 per cent of workers in the subregion have social security coverage, although this share is higher, at about 25 per cent, in Sri Lanka (ESCAP, 2016a).

As the subregion has large informal sectors, the provision of social security that is based on employment contributions excludes the vast majority working in the informal economy and the working poor. To address this problem, countries such as Bangladesh and Nepal are taking steps to expand their social protection systems through safety net programmes. Meanwhile, public works programmes intended to support income smoothing during adverse economic shocks and provide safety nets, such as job guarantees in India, have been successful in promoting the productivity of agriculture and diversification whereby male workers have moved out of the casual private sector into alternative occupations (Zimmermann, 2013). Such social protection initiatives could be used as stepping stones towards a more universal and comprehensive social protection system untied to employment status. Such schemes also improve employment dynamics and provide decent work.

3. PACIFIC

3.1. Macroeconomic performance and outlook

As a group, economic growth in Pacific island developing economies dipped to 2.6 per cent in 2016 from 7.1 per cent in 2015 and 6.2 per cent in 2014. The sharp slowdown was driven by more sluggish economic expansion in Papua New Guinea, which accounts for 60 per cent of the output of the developing economies in the subregion, owing to subdued prices and reduced exports of minerals. The slower overall economic growth in 2016, however, masks the fact that growth performance indeed improved in about half of the subregional economies, including Cook Islands, Marshall Islands, Nauru, Samoa, Tuvalu and Vanuatu. Moreover, 2016 marked the first time in decades that all subregional economies recorded positive economic growth. Such across-the-board economic expansion has been rare because most subregional economies are highly vulnerable to external shocks, such as natural disasters and declining commodity prices.

The near-term growth outlook is expected to improve modestly, with growth projected to be 3.1 per cent in 2017. The improved prospects benefit from such factors as an expected uptick in global commodity prices, steady economic growth in key trading partners, particularly Australia and New Zealand, stable tourism receipts, continued infrastructure upgrades and post-cyclone reconstruction efforts in some economies. A key downside factor is the persistent risk of natural disasters, which have in the past significantly damaged productive sectors, infrastructure and tourism facilities.

While Pacific island developing economies are vulnerable to a wide range of negative shocks, the room for policy responses is often limited. For example, while public debt levels are generally within established thresholds for fiscal stability, several subregional economies are approaching such thresholds and are considered to exhibit a high risk of debt distress. Moreover, fiscal outcomes are subject to several sources of volatility, stemming from a narrow revenue base, such as fishing license fees, and large fluctuations in economic activity that make revenue less predictable. Spending rigidity caused by a large share of recurrent expenditure for civil service salaries and operations is also an issue.

Pacific island developing economies

Fiji

Output growth in Fiji trended down to 2 per cent in 2016 from 3.6-3.8 per cent in 2014 and 2015. Tropical Cyclone Winston in February 2016 and a tropical depression in December of the same year impeded activity in the agricultural, timber production and manufacturing sectors. Despite the setbacks from the natural disasters and higher inflation due to supply disruptions, private consumption appeared buoyant as a result higher revenues from increased tourist arrivals and elevated workers' remittances. Investment conditions and reconstruction works benefited from eased fiscal and monetary policy stances.

Growth is forecast to rebound to 3.6 per cent in 2017 before softening to 3 per cent in 2018. Tourism-linked sectors and post-cyclone reconstruction work are expected to drive the economy. Aided by government financial assistance and subsiding inflation, private consumption should increase as households restock consumer goods and rebuild houses. In contrast, the preferential access of sugar from Fiji to markets in the European Union is scheduled to end in 2017. Similarly on the downside, despite higher capital spending budgeted for reconstruction activity, shortages of essential building materials and skilled labour may continue to delay some major construction work. Sustaining the country's medium-term growth will depend on effective implementation of structural reforms that are aimed at enhancing the business climate, strengthening the civil service and State-owned enterprises and removing impediments to land use.

Papua New Guinea

The economy of Papua New Guinea recorded much more modest economic growth in 2016 at 2.5 per cent compared with a high base of 9.9 per cent in 2015 when the first full-year production of liquefied natural gas began. In addition to the high base, the completion of construction of major mining projects and lower agricultural production, owing to El Niño-related drought in 2015, also contributed to slower economic growth in 2016.

Economic growth is forecast at 2.5-3 per cent during the period 2017-2018. Mining production and construction activity, including preparations for hosting the APEC Economic Cooperation Leaders' Meeting in 2018, will support the rebound. The key downside risks include lower-than-expected prices for key commodity export items, such as copper and gold, and lower external demand for minerals. This situation could weaken public revenue and necessitate expenditure restraint. In the medium term, fiscal consolidation is needed to decrease risks due to lower-than-expected mineral sector revenues. Given the limited fiscal space, spending on basic public services, such as health, education and infrastructure, should be well targeted. An effort to increase the effectiveness of public spending could be focused on monitoring and evaluation of project implementation together with better assessment of capacity to deliver results.

Samoa

Economic growth in Samoa surged to 6.4 per cent in 2016 from 1.6 per cent in 2015 mainly because of higher tourism earnings and infrastructure upgrades, including a new airport terminal. Increased visitor arrivals boosted activity in the transport, accommodation and restaurant sectors. Investment in deep-sea fishing operations also helped raise the output of fisheries. Meanwhile, inflation dipped to only 0.1 per cent in 2016 due to lower fuel prices and improved domestic food supply.

Near-term growth is projected to normalize from a high base in 2016 to 2 per cent in both 2017 and 2018. Moderate expansion in agriculture and tourism is expected to support the economy, while a new submarine cable investment would boost output in the communications sector. On the downside, the country's largest manufacturing employer is expected to close its operations in 2017. Given the country's narrow economic base, public policies could focus on promoting such sectors as agriculture and high-value-added industries.

Solomon Islands

Economic growth in Solomon Islands was largely steady at 2.7 per cent in 2016 relative to 2.9 per cent in 2015. Construction activity and new investment in communications and fisheries-processing capacity supported the economic expansion. In contrast, the prolonged drought conditions in 2015 and in the early part of 2016 weighed on agriculture and fisheries, while the export of logs was hampered by weak demand from China. Together with the weaker exchange rate, lower domestic food supply pushed up food prices, with overall inflation rising to 3.3 per cent in 2016 compared with a small decrease in 2015.

Economic growth is projected to be 2.5-3 per cent during the period 2017-2018. Resource-based sectors would continue to be the main growth driver. The country's medium-term economic development would benefit economic diversification as well as productivity enhancement in such sectors as logging, mining and tuna processing. Among other areas, policy efforts could focus on providing support for small enterprises, linking subsistence farmers with market opportunities and streamlining business regulations and trade facilitation processes.

Vanuatu

Vanuatu's output growth rebounded to 3.5 per cent in 2016 after a 1 per cent contraction in 2015 as a result of Cyclone Pam, which damaged housing, infrastructure, agriculture and tourism facilities. Reconstruction and infrastructure upgrades and a pickup in tourism and agricultural activities supported the recovery in 2016. Inflation moderated to 1.9 per cent in 2016 as supply shortages subsided relative to the situation in 2015.

Growth is projected to trend upward slightly to 3.8 per cent in 2017. Increased tourism revenue, higher agricultural production and additional infrastructure projects are some of the expected drivers of growth. In contrast, capacity constraints and external funding gaps remain and could lead to delays in implementing major infrastructure projects. In this regard, comprehensive tax reform is already under way, including the introduction of income and corporate taxes. Other policy issues include land reform, productivity enhancement in fisheries and agriculture and the need for public investment to crowd in business investment.

Smaller Pacific island developing economies

The economy of the **Cook Islands** grew by 4.2 per cent in 2016, up from 3 per cent in 2015, as a result of higher visitor arrivals and ongoing water, electricity and road infrastructure upgrades. The overall price level fell by 0.3 per cent in 2016 due to lower global commodity prices and the strong New Zealand dollar, the currency used in the Cook Islands. The growth outlook for 2017 is projected to be stable at 4 per cent. Additional flight services from Australia and New Zealand in 2017 are expected to support growth in tourism, although accommodation and infrastructure capacities during peak periods need to be expanded. A key downside risk is possible delays in capital project implementation.

In **Kiribati**, economic growth moderated slightly to 3.1 per cent in 2016 from 3.5 per cent in 2015. Ongoing road, airport, water and sanitation infrastructure upgrades continued to drive the economy. In looking forward, output growth in 2017 and 2018 is likely to trend down further to 2-2.7 per cent, as major public infrastructure works are completed. Private sector development, such as the recent investment in fish processing capacity, is vital for job creation. A policy effort to reform State-owned enterprises and enhance the business climate, through more streamlined business licensing processes and land registration, remains critical.

In the **Marshall Islands**, the economy expanded by 1.5 per cent in 2016, up from 0.5 per cent in 2015. The adverse effects of the drought in 2015 waned, while higher fishery revenue supported public expenditure and donor-funded infrastructure spending resumed. In going forward, the economy is expected to grow by 1.6-2 per cent over the period 2017-2018. The near-term inflation outlook remains manageable.

The economy of **Micronesia** slowed to 2 per cent growth in 2016 from the 3.7 per cent level in 2015, mainly due to the impact of natural disasters. The outlook for 2017 and 2018 is set to improve to 2.5 per cent in both years. Donor-funded infrastructure spending, higher public spending as a result of windfall fishing revenue and tourism activity is expected to support economic expansion.

In **Nauru**, output growth rebounded to 3 per cent in 2016 after a 10 per cent contraction in 2015, which was largely due to depressed phosphate production and exports. Limited domestic supply and rising consumption kept inflation at a high level of 6.6 per cent in 2016. On the outlook for the future, growth is expected to increase significantly to 15 per cent in 2017, with resumption of phosphate exports and the ongoing demand created by operations of the Nauru Regional Processing Centre, an Australian immigration facility for processing asylum seekers; the Centre is the second largest employer after the Government.

In **Palau**, economic growth dipped to 2 per cent in 2016 from 9.4 per cent in 2015. Tourist arrivals declined due to restrictions placed on the number of chartered flight services to Palau as part of the Government's focus on higher-value and more sustainable tourism. An economic rebound is expected in 2017 and 2018, with projected growth of 5 per cent in both years. Ongoing infrastructure projects and upgrades to tourism facilities are expected to support economic growth. Inflation is likely to be moderate at about 2.5 per cent in the near term.

The economy of **Tonga** grew by 3.1 per cent in 2016, down slightly from 3.4 per cent in 2015. Ongoing infrastructure work, tourism revenue and consumer spending supported the economic expansion. Growth is projected at 2.6-2.7 per cent for 2017 and 2018, mainly due to tourism receipts and construction activity in preparation for hosting the 2019 Pacific Games. Inflation is expected to remain moderate in the near term.

Output growth in **Tuvalu** increased to 4 per cent in 2016 from 2.6 per cent in 2015, supported mainly by infrastructure and construction activity. Growth is projected to be 3 per cent in 2017 and 2018, underpinned by ongoing infrastructure projects and higher government spending as a result of windfall fishery revenue. Inflation is forecast to trend down to 2.8-3 per cent in 2017 and 2018.

Australia and New Zealand

Australia

The Australian economy grew at a steady pace of 2.4 per cent in 2016. The recent uptick in global commodity prices supported exports of coal and iron ore, while the weaker exchange rate boosted services receipts in such sectors as tourism, education and business services. Growth of private consumption and non-mining investments moderated in the latter part of 2016 on the back of slower wage and employment growth and temporary factors, such as adverse weather conditions, that held back construction activity. The transition from the mining investment boom to the production phase was reflected in a decrease in mining investments, while investments in dwellings were more buoyant. Meanwhile, inflation remained below target at 1.3 per cent in 2016. A high underemployment rate held back wage growth, while macroprudential measures resulted in moderation of housing prices. Given the weaker domestic demand and modest price pressure, the policy rate was cut twice in mid-2016 for a total of 50 basis points.

Growth is expected to pick up slightly to 2.5-2.7 per cent in 2017 and 2018. Export receipts should continue to benefit from higher production of iron ore and liquefied natural gas and the weaker exchange rate. A likely recovery in wage growth and low interest rates would revive household consumption. However, counteracting these positive factors are the relatively high unemployment rate, at almost 6 per cent in 2016, and high household debt. Non-mining activities would be led by the dwelling sector, as several large-scale projects are still in the pipeline. Meanwhile, inflation is expected to rise to 1.9 per cent in 2017 and 2.3 per cent in 2018, owing to increases in energy prices, labour costs and a tobacco excise tax. Key downside risks include weak commodity demand in China and heightened global economic uncertainty.

New Zealand

The economy of New Zealand grew robustly at 4.3 per cent in 2016, up from 3.1 per cent in 2015. The solid expansion was underpinned by improved exports following an uptick in diary prices, higher tourism revenue and high net migration that led to strong housing demand and construction activity. Inflation remained low at 0.6 per cent in 2016. In addition to low commodity prices, moderation in housing prices following the introduction of macroprudential measures helped contain inflation. The stronger exchange rate towards the end of 2016 also contributed to soft price pressures.

The outlook is positive, with projected growth edging up to 4.4-4.5 per cent in 2017 and 2018. The net migration and tourism sector would continue to support the economy. In addition to net migration, construction activity would be buoyed by reconstruction efforts following the Kaikoura earthquake in November 2016. Private consumption would benefit from low inflation and financing costs, although its strength is constrained by rising prices for housing and high household debt. Additional macroprudential measures may be required if housing prices continue to rise rapidly and lead to capacity constraints in the construction sector where skilled workers are already in shortage. Meanwhile, net migration, which has contributed to increased labour supply and employment growth, could moderate in coming years as global economic activity picks up and labour markets in Australia improve.

3.2. A selected policy challenge: fiscal policy for better health outcomes

Pacific island developing economies continue to address their unfinished agenda for achieving decent health outcomes. Several subregional economies have not fully achieved the Millennium Development Goals on health issues, such as those relating to maternal health, HIV/AIDS, malaria and tuberculosis. Meeting the Sustainable

Development Goals on health issues, which is arguably a more complex endeavour, would be even more challenging for these economies. In addition to hampering social development, poor health outcomes also undermine economic development through, among other channels, output loss due to illness and death, and forgone income for family members taking care of patients. In the context of Pacific island developing economies, healthy workers are especially needed to enhance the currently low level of labour productivity.

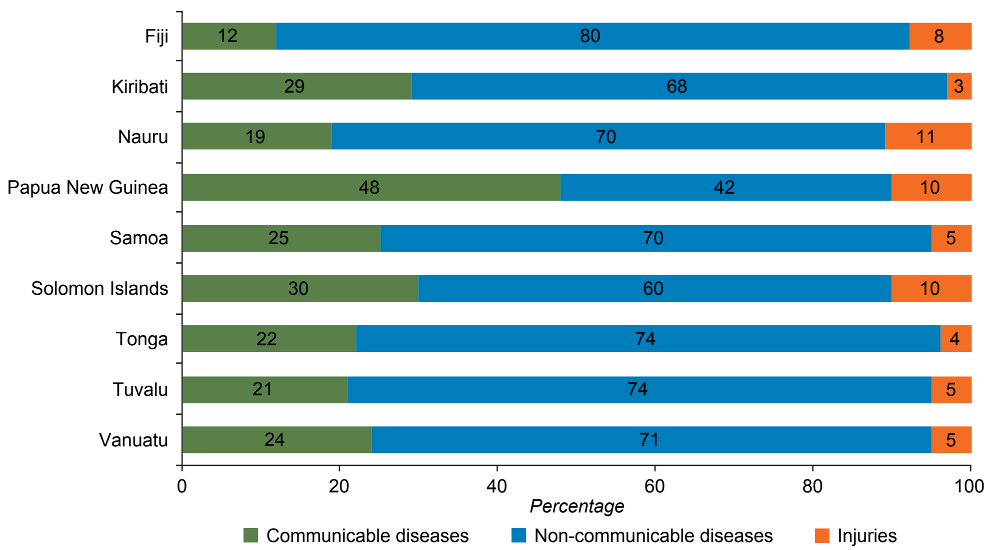
The focus here is on the use of fiscal policy tools to improve health outcomes in Pacific island developing economies, particularly to address the prevalence of non-communicable diseases (NCDs) in most subregional economies. Through both revenue and expenditure tools, fiscal policy has great potential to deal with NCDs as those tools incentivize changes in behavioural factors that drive such diseases. The focus on fiscal policy is especially important in the context of the Pacific, given the limited fiscal space in most of these economies. Moreover, national budgets of Pacific island developing economies are often volatile because the revenue base is narrow, dependent on foreign aid and subject to external shocks, such as natural disasters. Better design and implementation of fiscal policy can help improve health outcomes while ensuring fiscal sustainability.

Behavioural risks are driving prevalent non-communicable diseases in the Pacific

Pacific island developing economies are facing considerable pressure in coping with non-communicable diseases, such as cardiovascular diseases, diabetes, cancer and chronic respiratory diseases. For example, Cook Islands, Marshall Islands, Nauru and Palau are among the world's top 10 diabetes-prevalent countries (International Diabetes Federation, 2015). In most subregional economies, the proportion of deaths due to such diseases is higher than that in other economies. For example, non-communicable diseases account for up to 80 per cent of deaths in Fiji and 74 per cent in Tonga and Tuvalu compared with the global average of 68 per cent (see figure 2.3).

Behavioural risk factors, such as unhealthy diet, tobacco use and physical inactivity, are responsible for most of deaths related to non-communicable diseases in the subregion. Examples of dietary risk include high consumption of sweetened beverages, trans-fat and sodium (salt), all of which contribute to obesity and raise people's susceptibility to cardiovascular diseases and diabetes. Approximately half of the Pacific island developing economies are listed as having the most obese populations in the world (WHO, 2011; 2014). More than a quarter of the adult population in most Pacific island developing economies are clinically obese, with obesity rates as high as 54-58 per cent in Tonga and Samoa compared with the global average of 13 per cent (Hou, Anderson and Burton-Mckenzie, 2016). Tobacco use is also prevalent, with about two thirds of adult males in Kiribati and between 40 and 55 per cent of their counterparts in Palau, Papua New Guinea, Samoa and Tonga being regular users of tobacco (WHO, 2014). Of particular concern is the high consumption of tobacco by youth, especially females, at 47 per cent and 62 per cent of girls in Cook Islands and Palau respectively (UNDP, 2014).

Figure 2.3. Proportional mortality, by cause, for selected Pacific island developing economies



Source: WHO, Noncommunicable diseases country profiles. 2011 and 2014.

Enhancing the effectiveness of already sizeable public spending on health

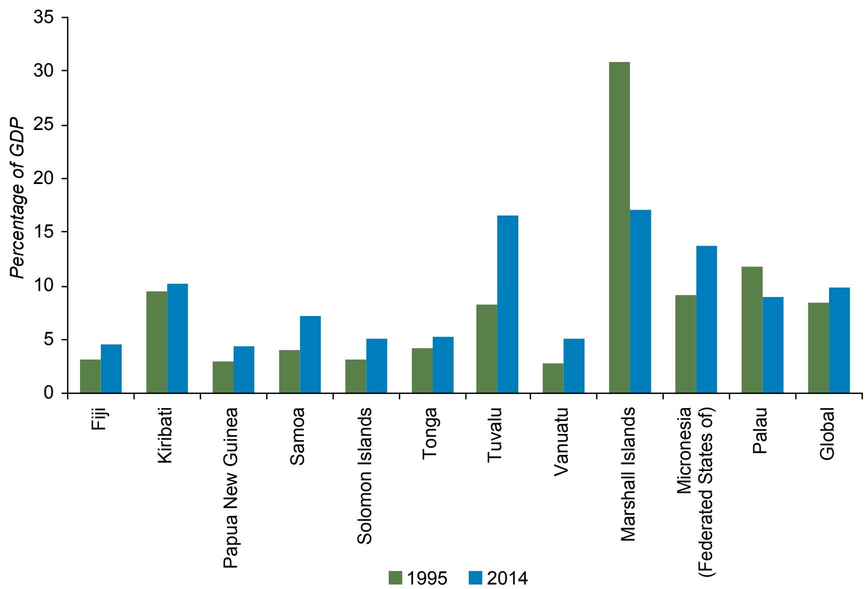
Public spending on health in most Pacific island developing economies is not considered small, which raises questions about the effectiveness of such spending. In 2014, public expenditure on health ranged between approximately 4.5 per cent of GDP in Fiji and Papua New Guinea to about 17 per cent of GDP in Marshall Islands and Tuvalu (see figure 2.4). On average, Pacific island developing economies spent close to 9 per cent of their GDP on health in 2014, which was not low compared with the global average. For most subregional economies, public health spending in 2014 was also higher than that in 1995. Meanwhile, when compared with total government expenditure, public health spending remained sizeable at 13.3 per cent on average in 2014, double that of the world's lower-middle-income countries. Although the fixed cost of providing any social services in Pacific island developing economies is naturally high in view of their sparse populations, lagging health outcomes in several countries cast doubts on the effectiveness of health spending in the subregion.

Evidence from Pacific island developing economies shows that reorienting public health spending towards preventive care, specialized health services and early treatment could help improve spending effectiveness. On preventive care, this refers to both primary prevention programmes, which seek to prevent adverse health conditions from occurring in the first place, and secondary prevention programmes that reduce the incidence of reoccurring conditions or further health deterioration. In Vanuatu, every person who managed behavioural risks through primary prevention and successfully avoided becoming a type 2 diabetes patient saved the Government about $347 per year. This amount is more than twice the annual per capita public expenditure on health. Moreover, effective secondary prevention where every type 2 diabetes patient did not progress to using an insulin regime saved the Government an additional $484 per year (Anderson, 2013).

Additional investment in specialized health services can also improve spending effectiveness. In Samoa, a diabetic foot clinic was introduced in order to reduce amputations for patients with diabetic foot ulcers. Previously, patients usually presented late to hospitals, and the admission to treat the sepsis often led to amputation of a lower limb. Through the new clinic, treatment costs are nearly eight times lower when compared with admitting a client with diabetic foot sepsis into hospital, while the outcomes are also better in terms of avoided amputations (McGrath, 2016). When specialized medical care is not available locally or if it is available but not sufficiently, overseas referrals are required, and the cost can be extremely high. For example, Samoa's cost for overseas referrals amounted to 15 per cent of its total public health expenditure in 2010 but benefited less than 0.1 per cent of the total population (World Bank, 2014).

Finally, early treatment also offers great value for money and is cost effective because urgent late-stage patient care is typically costlier and more difficult to access than early interventions. In Tonga, expenditure on non-communicable diseases more than trebles as care progresses from the

Figure 2.4. Public health expenditure as a share of GDP, 1995 and 2014



Source: World Bank, World Development Indicators database. Available from http://data.worldbank.org/.

level of health centres to the outpatient clinic at the main hospital, and increases ninefold as treatment advances from outpatient to inpatient care (Hou, Anderson and Burton-Mckenzie, 2016).

Beyond the health sector, public spending and fiscal policy management also matter for improving health outcomes. For example, price subsidies for healthful food items, such as fresh fruits and vegetables, can lead to an increase in their consumption and subsequent weight reduction in specific segments of the population (Fountaine and others, 2016; WHO, 2016). However, given the limited fiscal space, Pacific island developing economies will need to design well-targeted programmes and assess the costs and benefits of such a policy. More broadly, strengthening public financial management in the subregion, which is often characterized by slow disbursement of funds, under- and overspending of budgeted expenditure and weak procurement and reporting practices, helps enhance health service delivery (Haque and others, 2012).

Exploring non-tax revenue policies to cope with non-communicable diseases

A common revenue policy to improve health outcomes is the levy of taxes and customs tariffs on products that are deemed harmful to health. These policy tools are generally effective as they especially discourage unhealthy consumption among youth and low-income earners who are price-sensitive (World Bank, 2014). A recent global study showed that fiscal measures that lead to a 20 per cent increase in the retail price of sugary drinks would result in proportional reductions in the consumption of such products (WHO, 2016). The generated revenue could also be used to boost health spending. For example, when the Philippines introduced a law that increased tobacco taxes by more than eight times in 2013, it earned an additional $980 million in tobacco tax revenue after the first year. The additional revenue was spent on providing health insurance premiums for nearly 15 million disadvantaged families (Osewe, 2016).

Less commonly used non-tax policy options can also help improve health outcomes but they require careful planning and implementation. For example, a user-pay arrangement, where patients contribute financially to cover a certain portion of health-care costs, would help cushion public health expenditure. However, given the need to ensure affordability of health care and access for all, a tiered payment approach based on income could be considered. Similarly, a public-private partnership (PPP) arrangement to build specialized health-care facilities could help ease fiscal burden. Another example of PPP is the provision of private health insurance schemes, including microinsurance products that increase the affordability and scope of coverage to benefit the most disadvantaged groups of the population (Leatherman, Christensen and Holtz, 2010). The success of such schemes requires enabling policy settings beyond the health sector, such as regulatory frameworks relating to PPPs and mature domestic capital markets. These conditions are, however, not fully in place in most Pacific island developing economies.

Addressing non-communicable diseases requires stronger and broader policy efforts

Addressing NCDs has already been regarded as one of the policy priorities in Pacific island developing economies. For example, an NCD road map was adopted by the Joint Forum Economic and Pacific Health Ministers Meeting in 2014. Among other policy actions, the road map emphasizes the use of tax measures to discourage unhealthy consumption, the importance of targeted prevention measures and the need to strengthen the evidence base for greater programme effectiveness (World Bank, 2014). In this regard, tobacco taxes have been raised in recent years in several Pacific island developing economies, such as Fiji, the Federated States of Micronesia, Palau, Papua New Guinea, Samoa and Tonga. Moreover, Fiji, Samoa and Tonga increased taxes on sugary beverages, while Tonga raised taxes on turkey tails and instant noodles.

Despite achieving some progress, more policy efforts to address NCDs could be made. On the revenue side, there appears to be room for further increases in tobacco taxes, as noted in the road map: excise duties should be as high as 70 per cent of cigarettes' retail price over the medium term. At the same time, any hikes in taxes or tariffs on unhealthful products should be accompanied by legislative measures aimed at mitigating illegal trade and ensure policy effectiveness. On the expenditure side, available data suggest that spending on preventive measures remains inadequate, and a higher proportion of budgetary allocations need to be set aside for this purpose. During the period 2006-2007, less than 2 per cent of health funds in Samoa, Tonga and Vanuatu were used for preventive health-care promotion and activities (Anderson, 2013).

More broadly, tackling NCDs requires a multipronged policy approach. As highlighted above, NCDs are driven mainly by behavioural risk factors, such as unhealthy diet, tobacco use and physical inactivity. However, these risks are influenced by a broader set of factors, such as patterns of international trade, agricultural production and urbanization. A multifaceted policy approach is needed to promote healthier lifestyles for the population. For example, the use of regulatory measures may be desirable, such as declaring smoke-free zones and imposing bans on advertising of unhealthy products during children's television airtime. On international trade policy, opening market access to healthful imported goods that are not locally available would make domestic prices of these products more affordable. At the same time, safeguards against unhealthful imported food and beverages need to be considered.

Finally, another policy area with great potential for producing gains is the more widespread use of information and communications technologies, which are important instruments of effective governance, to overcome the long distance between physicians and patients in this sparsely populated subregion. Examples include teleconferencing with patients in rural areas, seeking specialized opinions on patient cases and test results and instant messaging with a health practitioner for medical advice (Lewis and others, 2012).

Given the diverse characteristics of Pacific island developing economies and their varied national health-care situation, country-tailored fiscal policy measures are required together with an array of complementary policy choices.

4. EAST AND NORTH-EAST ASIA

4.1. Macroeconomic performance and outlook

Economies in East and North-East Asia continued to expand at the largely stable rate of 3.8 per cent in 2016. The pace previously, at 3.7-4 per cent in 2014 and 2015, was slower than the three years of 4.6 per cent growth recorded during the period 2011-2013. As growth in China has steadily come down since 2014 due to structural reforms favouring household consumption and services, the subregion's stable growth in 2016 was underpinned mainly by a slight economic rebound in Japan and the Republic of Korea. In the context of subdued global trade, economic expansion in these large economies was driven by domestic demand, such as large-scale infrastructure projects in China, increased social spending in Japan and residential construction in the Republic of Korea. Meanwhile, steady economic growth in the subregion masks years of economic contraction in Macao, China due to declining gaming revenues. In 2016, Mongolia also registered the first output decline in seven years owing to lower commodity prices and a decrease in foreign direct investment.

The subregion's consumer inflation rate reached a seven-year low of 1 per cent in 2016 as Japan resumed mild deflation after three years of price increases. The impact of Japan's new monetary policy framework, which features negative short-term interest rates and zero long-term interest rates, remains to be seen. Excluding Japan, inflation edged up to a still low level of 1.9 per cent for the subregion despite steeper price rises in China and the Republic of Korea that were driven by higher food prices. In Mongolia, which has historically recorded higher inflation than its subregional peers, inflation slowed relative to a high base in 2015.

Economic growth prospects in the subregion are likely to remain steady in 2017 and 2018 at 3.6-3.7 per cent. The Chinese economy is projected to continue its new normal growth trend. An uptick in growth performance in Hong Kong, China; and Japan, as well as a stable outlook for the Republic of Korea, should support the subregion's economic expansion. A key downside risk is uncertainty over the strength of global trade, which is clouded by interconnected factors, such as restrained import demand by China, increased economic certainty in developed economies and rising trade protectionism. Weaker-than-expected shipments could act as a significant drag on this export-oriented subregion. Another headwind is the pace of structural adjustment in China. Although the country's economic growth is set to trend downward at a steady pace given its gradual and prudent rebalancing, a sharper-than-expected slowdown could have a significant impact on smaller subregional neighbours that rely on China's commodity import demand, such as the Democratic People's Republic of Korea and Mongolia.

Burgeoning debts are undermining the subregion's economic prospects. China had an estimated 270 per cent debt-to-GDP ratio in 2016, mostly driven by the real estate sector and private firms. The country's rapid credit growth is increasingly a cause for concern amid capital outflows and domestic currency depreciation. In the Republic of Korea, the household debt-to-disposable income ratio exceeded 150 per cent, with many low-income households exhibiting limited capacity for repayment. In Japan, the size of government bonds continued to expand, although largely domestically, and the country's debt-to-GDP ratio is projected to exceed 250 per cent by 2020. Finally, in Mongolia large external debts have become less manageable, with a double-digit fiscal deficit-to-GDP ratio, and declining commodity revenues and foreign exchange reserves. Overall, the rising debt burden needs to be managed, although the balance between maintaining financial stability and reviving economic growth should be kept in view.

China

China's economic growth has been on a downward trend in the past several years, as the country has implemented supply-side reforms aimed at shifting the economy's growth driver gradually from its excessive focus on manufactured exports and fixed investments towards household consumption and services activities. In 2016, growth moderated to 6.7 per cent from 6.9 per cent in 2015, although this rate was somewhat better than expected. As external demand remained subdued, economic expansion was underpinned mainly by consumer spending and public infrastructure investment. In addition to higher per capita disposable incomes, relatively low inflation and urban unemployment rates at 2 per cent and 4 per cent, respectively, supported private consumption in 2016.

Output growth is projected to soften further to 6.5 per cent in 2017 and 6.4 per cent in 2018. As supply-side reforms continue, industrial sectors are expected to grow at a more sustainable pace. On the demand side, consumer spending is likely to propel economic growth as exports are expected to improve only gradually in the wake of rising trade protectionism. Meanwhile, inflation is projected to edge up to 2.3-2.5 per cent during the period 2017-2018, with upward pressure from global commodity prices and the weaker domestic currency.

The outlook is subject to headwinds and downside risks. Monetary policy tightening in the United States could result in financial volatility and capital outflows, especially in the event that China's growth performance becomes weaker than expected. Capital account restrictions could help curb some volatility, although China's financial linkages with international markets have risen through (a) the inclusion since October 2016 of the renminbi in the IMF special drawing rights basket and (b) a growing number of currency swap arrangements. Domestically, high domestic indebtedness could act as a drag on economic growth. The liabilities of State-owned enterprises are estimated at about 115 per cent of GDP, which could undermine the country's fiscal sustainability, especially in the wake of a rising fiscal deficit. A notable increase in corporate debt is also a major concern.

On the policy front, structural reforms in 2016 were focused on reducing industrial capacity, housing inventory, corporate leverage and production costs. Some progress has been made in these areas. For example, the targets on steel production and coal capacity were achieved ahead of schedule, while lower tax rates and energy and logistics costs helped pull down production costs. For medium-term development, further reforms are needed to tackle rising social inequality, address rapid urbanization and enhance energy efficiency.

Hong Kong, China

The economy of Hong Kong, China expanded at a more modest pace, 1.9 per cent, in 2016 compared with 2.4-2.5 per cent in the preceding two years. As an export-oriented economy, the slowdown in growth was driven by subdued global merchandise trade, including more sluggish import demand from China. Domestic demand was somewhat stronger due to sustained government spending. Despite a relatively low unemployment rate at 3.4 per cent in 2016, private consumption was sluggish as a result of declining tourist arrivals and weak spending by local residents. Capital market volatility also weighed down domestic business confidence.

The outlook is set to improve, but only marginally, with growth being projected at 2.3 per cent in 2017 and 2.5 per cent in 2018. There are signs that goods exports to other Asia-Pacific economies picked up towards the end of 2016, although any improvement could be fragile. Fixed investment conditions are expected to improve in 2017 as major infrastructure projects are under way, such as airport runway expansion and the final-phase construction of a bridge that connects this densely populated urban centre with Macao, China. As in past years, consumer inflation is expected to remain relatively low at 2.5-2.7 per cent in 2017 and 2018. Recent cuts in power tariffs and an increase in stamp duties to cool down overheating housing prices also contribute to the outlook for modest inflation. Meanwhile, as one of the world's major financial centres, the economy of Hong Kong, China is exposed to a financial volatility risk due to monetary policy tightening in China and the United States. On the upside, financial services benefit from China's recent move to ease approval of initial public offerings and the increasing internationalization of the Chinese renminbi currency.

Macao, China

The economy of Macao, China faced its third year of economic contraction in 2016, although the magnitude of the output fall, at 2.1 per cent, was remarkably smaller than the 20.3 per cent decrease recorded in 2015. Gaming sector revenues, which fuelled rapid economic growth during the period 2010-2013, have declined in recent years amid China's economic slowdown and anti-corruption initiative, both of which have deterred high-end visitors. Similar to service exports, merchandise exports continued to decrease, resulting in a wider trade deficit. On domestic demand, consumer spending remained cautious despite low inflation and unemployment rates, at 2.4 per cent and 1.9 per cent, respectively, in 2016. Retail sales decreased, especially for high-value and luxury items, such as motor vehicles and cosmetics. Overall, the smaller output contraction in 2016 benefited from increased government consumption and a more modest decline in gaming and tourism revenues.

Near-term growth is projected to resume an expansionary mode, at 2.8 per cent in 2017 and 5 per cent in 2018. Such recovery is connected to new developments in a major hotel-casino complex and infrastructure projects, such as construction of a light railway network and a cross-islands bridge. The gaming industry is expected to record an upturn, shifting towards a mass market, although the outlook remains uncertain. Meanwhile, consumer spending could be held back by higher financing costs, as the local currency is tied to the United States dollar.

Democratic People's Republic of Korea

The Democratic People's Republic of Korea does not publish official economic statistics. In 2016, the expansion of large-scale construction and improvements in food production as a result of agricultural reforms supported the economy. On the other hand, the economy was struck by several incidents. The closure of an important industrial zone in early 2016 has hampered bilateral trade with the Republic of Korea, which will likely have a negative impact on employment. Moreover, the severe flooding in mid-2016 caused extensive damage to infrastructure and agricultural outputs, while it also displaced many residents and aggravated conditions of undernourishment. Finally, the imposition of international sanctions in late 2016 has further depressed economic activity.

The economic outlook is expected to be weak. China recently announced that it would halt its coal imports from the Democratic People's Republic of Korea for the rest of 2017. As coal exports to China are that economy's major source of foreign exchange earnings and while trade in other minerals remains subdued, overall exports are expected to be severely affected. The planned increases in infrastructure spending are also likely to face a cutback due to lower government revenue. The overall economic environment is also clouded by international sanctions and shortages of power supply.

Japan

Japan's economic growth stayed at a low level of 1 per cent in 2016, down slightly from 1.2 per cent in 2015. Household consumption and fixed investment drove the expansion. The average unemployment rate was low at 3 per cent in 2016 owing in part to the shrinking working-age population, while real wage levels increased moderately. Exports were more sluggish due to the economic slowdown in China, which accounts for a quarter of Japan's shipments, generally weak demand for capital goods in emerging economies and appreciation of the domestic currency. The devastating earthquake in April 2016 also caused temporary supply-chain disruptions that dampened production and exports. Meanwhile, despite an intensive policy effort to raise inflation to a target rate of 2 per cent, Japan faced a mild price decrease of 0.1 per cent in 2016. The monetary authorities recently introduced a negative short-term interest rate and zero long-term interest rate policy, as well as an inflation overshooting commitment in order to achieve its price stability target.

The near-term growth outlook is stable, with projected growth at 0.8-1 per cent during the period 2017-2018. Consumer spending growth is likely to remain steady, supported by fiscal stimulus measures, such as higher social security spending, a postponement of a consumption tax hike to 2019 and investments in preparation for the 2020 Olympics. Increased corporate profits and tight labour supply would also promote private consumption. A key downside risk is deterioration in market sentiments. On the domestic front, a high level of public debt, at about 230 per cent of GDP at end-2016, in addition to a significant increase in social security spending further raises concerns over the country's fiscal condition. On the external front, increased economic uncertainty in developed markets and the divergence in monetary policy directions in Japan and the United States could lead to financial volatility.

Meanwhile, Japan's overall price level is set to rise by 0.8 per cent in 2017 and 0.9 per cent in 2018. The expected return to inflation is attributable to higher global commodity prices, depreciation of the yen and continued monetary easing, although these factors are counteracted by falling rents due to a surge in apartment construction.

Mongolia

Economic growth in Mongolia slowed to 1.2 per cent in 2016 from a growth rate of 2.3 per cent in 2015 and average growth of 12.3 per cent during the period of the mining boom in 2011-2014. The plunge in global commodity prices and weaker demand in China mainly accounted for lower economic growth in 2016. Domestic demand was also subdued, as private consumption and fixed investments decreased. The unemployment rate increased to almost 9 per cent at end-2016. Meanwhile, the mining sector, which had propelled the economy in the past, experienced a drastic fall in foreign direct investment due to waning confidence and investor disputes. The decline in mining revenues pushed up government debt to nearly 90 per cent of GDP, raising concerns over debt repayments. In this regard, the Government introduced austerity measures in August 2016 and availed itself of external financing assistance. An immediate policy priority is to demonstrate a credible fiscal consolidation plan and effective macroeconomic management.

Growth is projected to pick up to 2 per cent in 2017 and 3.5 per cent in 2018. An expected increase in global prices of coal and copper, higher coal export volumes to China and the expansion of a major copper and gold mine are some of the contributing factors. In addition, railway construction under China's Belt and Road Initiative and the signing of a transit transport agreement with China and the Russian Federation are expected to facilitate cross-border trade in this landlocked country. Beyond exports, the 25 per cent minimum wage hike that became effective in January 2017 could help ease the impact of fiscal tightening and support consumer spending. To promote medium-term economic development, the Government launched an economic recovery programme for the period 2016-2020, which includes the policy aim of diversifying the country's income sources to non-mining sectors, such as tourism and agriculture.

Republic of Korea

The economy of the Republic of Korea maintained a stable growth rate of 2.8 per cent in 2016. Relatively solid performance in key industries, such as construction of residential buildings and investment in intellectual property, drove the economy. In contrast, the shipping and shipbuilding industry is undergoing restructuring, while weak automotive production was held back even more by labour strikes. From the demand side, private consumption benefited from low inflation and interest rates, relatively low unemployment and tax reductions, although the enforcement of the country's anti-graft law dampened spending on high-value gifts. As an export-oriented economy, overall economic growth in past years has been clouded by prolonged weakness in global trade.

Forecasts are for growth to remain moderate at 2.5-2.7 per cent in 2017 and 2018. The export outlook is fragile due to increased trade protectionism and trade-related disputes with China. While consumer spending would continue to benefit from favourable job market conditions and low inflation, its strength is being restrained by high and rising household debt, the diminishing positive effect of fiscal measures and a decline in manufacturing employment. To contain household debt, measures are in place for stricter screening of loan applications and borrowers' creditworthiness in financial institutions. As with other subregional peers, a downside risk includes possible financial volatility as a result of increasing economic uncertainty in developed markets. Prospects of a buffer for the Republic of Korea are limited by the maturing currency swap agreements with China and suspended talks with Japan.

To maintain the competitive edge of its leading industries, the Government has introduced industrial restructuring, support schemes for the participation of small and medium-sized enterprises in global supply chain and various deregulation measures. On the social front, the issue of income inequality due to labour market dualism and rising youth unemployment merits attention. Moreover, such programmes as reverse mortgages and diversified income streams for elderly citizens could support future private consumption while addressing the issue of population ageing.

4.2. A selected policy challenge: role of governance in clean energy innovation policies

The major economies in East and North-East Asia are at the forefront of technological advancements and play an increasingly significant role in developing energy-efficient and renewable technologies. China accounts for the highest percentage of the world's patent filings in climate change mitigation technologies, such as biofuels, solar thermal and solar photovoltaics (Helm, Tannock, and Iliev, 2014). Similarly, Japan and the Republic of Korea have a high concentration of patents in fuel cells, cleaner coal, nuclear energy and electric and hybrid technologies (National Science Board, 2016). In terms of commercial investment in clean energy, the global share of China and Japan stood at 31 per cent and 13 per cent in 2014 respectively. In leading global investment in renewable energy, with investments valued at $102.9 billion in 2015 (Frankfurt School-UNEP Centre and BNEF, 2016), China has also stepped up its overseas investment in wind and solar energy thanks to policy and financial support promoting outbound investment in renewable energy. In going forward, China, Japan and the Republic of Korea have committed themselves to double spending on research and development for clean energy over the period 2016-2020, with the aim of making clean energy more affordable.

Innovation in support of green growth has resulted in some early gains. For example, China's energy efficiency improved by 5.6 per cent in 2015, up from an average of 3.1 per cent per year over the past decade (IEA, 2016a). Excluding China, the global energy efficiency gain was smaller at 1.4 per cent in the same year. Recent data also point to some decoupling of economic growth from energy-related GHG emissions in the subregion. In Japan, amid zero economic growth in 2014, total primary energy supply (TPES)[1] and carbon dioxide emissions decreased by 3-4 per cent. In China, when the economy expanded robustly at 7.3 per cent in 2014, TPES and carbon dioxide emissions increased modestly at less than 2 per cent. Nonetheless, despite the progress, East and North-East Asia consumes almost one third of global energy, while producing about one fifth of the world's energy output. China still accounts for almost half of the world's total consumption of coal, although this proportion is set to decline as the economy continues to restructure towards less energy-intensive industries.

Selected policy experiences for other Asia-Pacific countries

The experiences of major economies in the subregion point to at least three desirable aspects of public policies and strategies in promoting clean energy innovation. These aspects include a well-designed governance structure, balanced policy mix of incentives and regulations and an enabling financial system. The list is clearly not comprehensive as other policy aspects, such as the need to develop a large pool of educated workers and to have an open trade policy to facilitate technology transfer, are equally crucial.

The first dimension is a governance structure that features green development as an integral part of national development plans, a whole-of-government approach to implement such plans and multi-stakeholder partnerships. At the strategic level, green development[2] appears prominently in the subregion's national plans. Ecological innovation policies in China, Japan and the Republic of Korea go beyond promoting niche green sectors and relate to achieving concrete targets, such as reduction of carbon dioxide emissions.

As part of well-designed governance structures, China, Japan and the Republic of Korea all adopted a whole-of-government approach to promote green development. In these countries, innovation policies are coordinated directly under their respective prime ministers' offices (ESCAP, 2016e). In the Republic of Korea, various ministries worked together to prepare comprehensive green growth plans at sectoral, local and national levels (Global Green Growth Institute, 2015). Such plans are linked with other relevant areas of public policies, such as market entry, human resources development and international cooperation and collaboration with the private sector. In Japan, the Council for Science, Technology and Innovation takes the lead in the formulation of the overall government budget for science and technology. To ensure that public spending on energy technology is effective, ex-ante, interim and ex-post evaluations of energy research and development are carried out in the Republic of Korea.

Another important component of governance structure is multi-stakeholder partnerships, particularly with the business sector and international entities, those run from development to diffusion of technological innovation. In Japan, the cross-ministerial Strategic Innovation Promotion Programme functions beyond the government framework, and each project director is responsible for coordinating with industry and academic entities on end-to-end focused research and development. Similarly, Japan's open innovation hub brings together industries, academia and government to engage in research, technical evaluations and standardization efforts. In China, a large proportion of funding on science and technology was given to large State-owned institutions, a situation which has led to the establishment of innovation start-ups and university demonstration bases.

The second desirable aspect of governance structure is a policy framework in which Governments consider the use of both economic incentives and regulatory policies. Examples of incentives include taxation on pollution and favourable pricing of renewable energy products. In Japan, the tax on emissions of sulphur oxides introduced in the 1970s led firms to undertake or adopt significant technologies to reduce pollution (Matsuno and others, 2009). In 2012, Japan introduced a feed-in-tariff system in which power utilities are required to purchase electricity from renewable energy sources for a certain amount of time at a fixed price. Such schemes served as an important driver in the early deployment of solar power, which now reaches more than 1.5 million households.

On regulatory policies, a common policy example is setting minimum energy efficiency standards. For example, Japan's Top Runner Programme set as the standard the efficiency of the most efficient product in a given category. China adopted a similar mandatory energy savings programme, with efficiency benchmarks, shortened schedules to achieve the standards and other policy incentives (IEA, 2016a). Another type of regulatory policy is the increasing share of renewable energy use. In the Republic of Korea, a renewable portfolio standards programme requires power companies to steadily increase their renewable energy mix in total power generation.

Evidence suggests that a balanced mix of economic incentives, regulatory policies and technological innovation is desirable. In China, research and development on green technology is a powerful driver of efficiency improvements when interacted with increases in energy prices (Du and others, 2016). When the renewable energy law was put into effect in 2005, China created a feed-in tariff system, with a mandatory connection and purchase policy and funding mechanisms. Similarly, an experience from the Republic of Korea suggests that financial support to develop low carbon energy technologies may not effectively deliver the targeted reduction in emissions if complementary pricing reforms are not in place (Sonnenschein and Mundaca, 2016).

The third desirable aspect of governance structure is an enabling financing system. Access to finance by firms carrying out innovation is often limited because they are capital-intensive and involve a long payback period, if not unpredictable financial returns to research and development. Meanwhile, bank lending usually requires tangible collateral and has much shorter maturity. In the case of the energy sector, research and development spending is also hampered by various potential market failures, such as indivisibility and spillovers reducing private incentives for investments, and slow diffusion of technology.

Given the constraints on conventional financing products, countries have launched an increasing number of non-traditional, green instruments, such as green bonds, credits, development funds and carbon finance. China introduced green bonds, that is, it ensures that funds are applied exclusively to finance new and existing green infrastructure projects in order to help significantly scale up the use and development of renewable energy projects. China's guidelines on establishing a green financial system, released in 2016, include a series of policy measures to support and incentivize green investment, create a national green development fund and provide a mandatory environmental information disclosure system.

Fiscal support has helped to promote ecological innovation in the subregion. For example, subsidies have been granted to local governments in the Republic of Korea to support renewable energy and energy-saving schemes since the 1990s. More recently, nearly 80 per cent of the country's fiscal stimulus in response to the 2008 global economic and financial crisis was spent on green measures and investments (Barbier, 2015), although emphasis on ensuring positive impacts on the environment required greater attention. To catalyse investments in green technologies among small and medium-sized enterprises, which often lack a track record and financial soundness, the Republic of Korea has adopted a technology appraisal system as the basis for providing guarantees and insurance for such enterprises (Moon, Song and Lee, 2016). At a broader level, cross-country evidence shows that long-term policy stability and credibility are critical to ensure financing for innovative green ventures (Criscuolo and Menon, 2014).

Working together to achieve green development

Given these policy experiences, a related issue is how the major economies in East and North-East Asia could collaborate with other subregional peers and beyond to secure green development in the Asia-Pacific region. Within the subregion, several factors present opportunities for greater cooperation: (a) the existing energy supply and demand, with China being the world's largest energy consumer; (b) scarce domestic resources in Japan and the Republic of Korea; (c) the potential for renewable energy production in Mongolia; (d) technological advancements; and (e) geographical contiguity.

There has been a wide range of regional partnerships through knowledge-sharing, capacity-building and financing facilities. On technical cooperation, a recent example is the "Enevolution" initiative launched by Japan to provide developing countries with a one-stop mechanism, including technical support, for preparing energy policies. Another example is the Green Technology Center-Korea, which links the Republic of Korea's public-private cooperative green technology research projects with the demand for green technology from developing countries. Finally, a new centre is planned jointly by China's National Energy Administration and the International Energy Agency to enhance collaboration in such areas as energy data, renewable energy policy analysis and clean energy technologies. China is also increasingly engaged in global energy governance to strengthen energy cooperation as well as take the lead in discussions involving energy interconnection and collaboration in sustainable energy (IEA, 2016b).

On financing, the Republic of Korea's International Joint Energy R&D Program since 2011 has provided financial aid for energy innovation through international joint research and development activities. Japan, through its Joint Crediting Mechanism, has financed projects in Mongolia and several other developing Asia-Pacific countries to facilitate the diffusion of low carbon technologies and implement mitigation actions.

Domestic reforms remain key to successful ecological innovation

The role of domestic structural reforms in pushing forward green development cannot be overemphasized. Successful ecological innovation requires policy shifts on several fronts, such as reorganization of government agencies, amendments of energy and environmental laws and policy frameworks for unconventional financial products. The overall aim is to create an enabling condition that supports the business sector to carry out more innovation in respect of clean and efficient technologies. In China and the Republic of Korea, the share of gross domestic expenditure on research and development in GDP roughly doubled between 2000 and 2014: to 2.8 per cent in China and 4.3 per cent in the Republic of Korea. As in Japan, large research and development spending in both countries is driven by private enterprises. China's research and development spending on renewable energy technologies rose to 4 per cent in 2015, reaching as high as $2.8 billion and matching Europe's spending (Frankfurt School-UNEP Centre and BNEF, 2016).

Some progress is being made in lagging economies. In Mongolia where energy intensity remains high, the Parliament approved the Green Development Policy in 2014 and the Mongolia Sustainable Development Vision 2030 in 2016. Among other goals, the plans are aimed at increasing the use of innovative technologies in the production sector and reducing GHG emissions by 14 per cent from the current levels. However, the journey towards ecological innovation is a long one. In the case of the Republic of Korea, the initial policy focus was on promoting learning about technology (1960s and 1970s), then developing domestic research and development capability (1980s), before developing a more advanced innovation system in the 1990s (Chung, 2011). Overall, the ecological innovation track and related policies need to be adaptive to specific country circumstances. With limited resources, developing countries may focus on innovation that make existing technologies less expensive or adapt existing technologies for new uses.

5. NORTH AND CENTRAL ASIA

5.1. Macroeconomic performance and outlook

North and Central Asian economies expanded by 0.1 per cent in 2016, following the steep decline of 2.7 per cent in 2015. As the Russian Federation accounted for about 80 per cent of the total output of the subregion, the trend for North and Central Asia largely reflected an improvement in the output trend in the country. Excluding the Russian Federation, other subregional economies posted economic expansion of 1.5 per cent in 2016, down from 2.8 per cent in 2015.

In general, growth performance in net energy-exporting economies remained relatively weak. The Russian Federation faced the second year of recession in 2016. A slight rebound in global oil prices led to a stronger domestic currency and lower inflation, but the country's growth performance was hampered by international sanctions and domestic structural impediments. Meanwhile, Azerbaijan faced a notable economic contraction while Kazakhstan registered a decade-low economic growth rate in 2016. In both economies, sharp currency depreciation in the second half of 2015 pushed up their inflation rates to double-digit levels in 2016. Together with high inflation, the increased debt burden and fiscal consolidation undermined consumer spending. Meanwhile, unlike in other energy exporters, economic growth remained high in Turkmenistan, as long-term contracts to supply gas to China provided some cushion from low global energy prices.

Beyond net energy-exporting economies, growth performance was mixed in 2016. In Tajikistan, strong investment to enhance the country's power-generation capacity supported economic growth despite lower workers' remittances and subdued prices for main export items, such as cotton and aluminium. Growth performance was also favourable in Uzbekistan, supported by a large fiscal stimulus package introduced in 2015. In contrast, output growth fell sharply in Kyrgyzstan due to lower gold output and reduced trade with China.

The near-term growth outlook is cautiously optimistic. North and Central Asia is projected to grow by 1.4 per cent in 2017 and 1.7 per cent in 2018. Excluding the Russian Federation, the forecast growth rates for these two years are 2.9 and 3.4 per cent respectively. The positive outlook is uncertain and contingent upon such factors as a further pickup in global energy prices and steady economic growth in China, which is the subregion's growing trading partner and investor. Investment projects under China's Belt and Road Initiative would also provide some boost to foreign direct investment. If coupled with a stable geopolitical situation in the subregion, favourable developments in such external conditions would support exchange rate stability and enable easing of monetary policy. Nonetheless, while the stronger exchange rates would help lessen financial risks arising from debts denominated in United States dollars, increased debt burden in recent years will continue to weigh down consumer and investor confidence.

The subregion's medium-term growth prospects depend crucially on its ability to diversify the growth drivers. Economic diversification is especially important due to an expected prolonged period of below-trend energy and commodity prices. For example, the sharp depreciation of subregional currencies would have supported manufactured exports, which are currently lacking. More vibrant economic activities beyond the resource-based sectors would also help promote inclusive economic growth in North and Central Asia.

Armenia

Armenia's economic growth rate slid to 0.9 per cent in 2016 from 3 per cent in 2015. Lower output in the agricultural, construction and mining sectors contributed to the slowdown. Consumer spending was subdued, as remittance inflows, mainly from workers in the Russian Federation, fell sharply. On the upside, supportive fiscal policy and higher merchandise exports to the Russian Federation, which surged after Armenia's accession to the Eurasian Economic Union in 2015, underpinned an economic expansion in 2016. Meanwhile, the overall price level decreased by 1.4 per cent in 2016 amid weak household spending, low import prices of food and energy and a price cut for retail gas. To combat deflation, the policy rate was cut eight times in 2016 for a total of 250 basis points.

The near-term outlook is projected to edge up to 2.5 per cent growth in 2017 and 3 per cent in 2018. The expected economic rebound in the Russian Federation should help revive workers' remittances, which account for about 13 per cent of Armenia's GDP. Consumer spending, particularly by low-income households, also benefits from expansion of a family benefit programme. In addition, the construction of a rail link from the Islamic Republic of Iran to the Russian Federation via Armenia and Georgia would help promote economic activity. On the other hand, fiscal support would be less strong in coming years, as the government debt-to-GDP ratio has exceeded the statutory limit of 50 per cent, which calls for fiscal tightening. Meanwhile, following deflation in 2016, overall prices are projected to rise by 1.5 per cent in 2017 and 3 per cent in 2018.

Azerbaijan

The economy of Azerbaijan shrank by 3.8 per cent in 2016, after subdued growth of 1.1 per cent in 2015. Low oil prices dampened the economy where resource rents from the oil and gas sector account for up to 40 per cent of GDP and three quarters of government revenue. Public investment contracted as a result of ongoing fiscal consolidation. Private consumption also declined following steep price rises, higher financing costs and lower levels of credit. Inflation surged to 12.4 per cent in 2016, from 4 per cent in 2015 following currency devaluation in 2015 and an increase in utility tariffs. To curb inflation, the policy rate was raised by a total of 12 percentage points over the year 2016. The currency depreciation not only pushed up inflation but also led to a greater degree of dollarization of deposits by households and weakened banks' balance sheets as non-performing loans increased. To ensure financial stability, various macroprudential measures were also introduced, such as deposit guarantees, tighter conditions for foreign loans and higher requirements on foreign-currency reserves.

Near-term economic growth is projected to turn positive, although rather sluggishly at 0.2 per cent, in 2017 and 1.2 per cent in 2018. Inflation is set to decline but the projected rates of 7.9 per cent in 2017 and 5.8 per cent in 2018 remain higher than the past trend. The economic rebound would be supported by a pickup in global oil prices. However, fiscal tightening, in which spending under the budget for 2017 is about 13 per cent lower than under the 2016 budget, would weigh down non-oil economic activity. In general, low levels of market development and limited macroeconomic policy flexibility continue to undermine the economy's resilience to shocks.

Georgia

Economic growth in Georgia slid slightly to 2.7 per cent in 2016 from 2.9 per cent in 2015. Growth rates in both years were low relative to the annual average of 4.8 per cent during the period 2012-2014. Economic growth has been constrained by subdued exports and workers' remittances as a result of weak economic activity in key external partners, such as the Russian Federation. In contrast, private investment was more robust, benefiting from lower borrowing costs and a notable increase in FDI in the manufacturing and financial sectors. Public spending also increased, particularly on social benefits to support the universal health-care system.

The growth outlook is set to improve to 3-3.5 per cent during the period 2017-2018. For both years, inflation should remain relatively low at 3.2 per cent. The main contributing factors are fiscal support measures, an increase in pensions and the implementation of infrastructure projects for an oil pipeline, a deep-sea port and hydropower plants. While the key headwind is uncertainty over the economic recovery in Europe and other subregional peers, the upside is the improved business environment that should attract additional foreign investment. Meanwhile, there are risks to macroeconomic stability that need to be addressed, such as the rising public debt and interest payments, a high degree of dollarization and low foreign exchange reserves.

Kazakhstan

Output growth in Kazakhstan dipped further in 2016 to only 1 per cent from an already low base of 1.2 per cent in 2015. Exports shrank amid subdued commodity prices and more sluggish import demand in China and the Russian Federation. Household consumption increased only slightly due to strong price pressures. The inflation rate jumped to a multi-year high of 14.7 per cent in 2016 following significant depreciation of the local currency in late 2015. As a result, the monetary policy stance remained tight. Overall economic growth in 2016 was underpinned by public investment, as reflected in expanding construction activity. Private investment was more subdued. Corporate profitability deteriorated amid the weaker exchange rate that pushed up the debt burden.

Economic growth is projected to rebound to 2 per cent in 2017 and 2.5 per cent in 2018. A major oilfield reached its commercial production stage in late 2016 so oil output is expected to rise in coming years. An expected increase in global commodity prices would also support exports and government revenue, which would improve the Government's ability to sustain its ongoing fiscal support. To finance the fiscal shortfall, transfers from sovereign wealth funds have been raised. For medium-term economic development, the country aspires to become a hub for Eurasian trade. Higher investment in transport infrastructure and logistics is being planned.

Kyrgyzstan

The economy of Kyrgyzstan shrank by 1.1 per cent in 2016 from growth rates of 3.5-3.6 per cent in the preceding two years. The slowdown was driven mainly by lower gold production. In contrast, the construction and trade sectors expanded, which was reflected in a steady increase in fixed investment and retail sales. Unlike some other subregional peers, workers' remittances continued to rise, thus supporting consumer spending. Household consumption also benefited from low inflation, which dropped to only 0.4 per cent in 2016 from 6.6 per cent in 2015, as a result of lower food prices and appreciation of the domestic currency. Such low inflation enabled monetary policy easing, for which the policy rate was cut by 6 percentage points in 2016.

Economic growth is projected to edge up to 3.5 per cent in 2017 and 3.7 per cent in 2018. The outlook assumes a moderate increase in workers' remittances due to an economic rebound in major host economies, such as Kazakhstan and the Russian Federation. Despite the low base, inflation is expected to rise only modestly to 1.3 per cent in 2017 and 3 per cent in 2018. Soft price pressure and an increase in remittance inflows should help to sustain consumer spending. Meanwhile, gold output is also expected to rebound, although global gold prices are currently projected to trend downward in coming years.

Russian Federation

The economy of the Russian Federation recorded a smaller economic contraction of 0.2 per cent in 2016 after a decline of 3.7 per cent in 2015 and a subdued 0.6 per cent growth rate in 2014. A slight rebound in global oil prices helped lessen macroeconomic instability in the country. In particular, the domestic currency appreciated by almost 20 per cent in 2016 following a cumulative depreciation of about 80 per cent in 2014 and 2015 on the back of export slumps, international sanctions and the adoption of a floating exchange rate in late 2014. The stronger exchange rate helped lower inflation to 7.1 per cent in 2016 from a decade-high rate of 15.5 per cent in 2015. Despite reduced macroeconomic volatility, still low global energy prices and international sanctions accounted mainly for the recession in 2016. Domestically, stalled progress on structural reforms and declining fixed investments also weighed down the economy. Outputs in the domestic trade and construction sectors continued to contract.

Weak economic performance and lower disposable incomes have undermined social development in recent years. For example, the national poverty rate increased by 3 percentage points to 14.2 per cent in 2015. In this regard, the Government has launched economic support measures, such as recapitalizing banks, offering guarantees for State-owned enterprises and providing pensioners with unemployment benefits and lump-sum payments. Overall fiscal support is constrained by fiscal consolidation that is focused on spending cuts, although the budget allocated to social spending has been increased. To finance the increased budget deficit, the Government issued $3 billion in Eurobonds, withdrew resources from a reserve fund and partly privatized State-owned enterprises in the commodity sector.

The growth outlook is set to improve, with growth projected to be 1.1 per cent in 2017 and 1.4 per cent in 2018, mainly due to relatively higher oil prices. The more optimistic outlook is, however, subject to uncertainty amid volatile geopolitical tensions. The prospect is also premised on the assumption of greater exchange rate stability, which would allow more policy rate cuts and help ease inflation further. In the medium term, implementation of structural reforms, such as those on promoting market competition, addressing a declining labour force and upgrading production technologies, would help to enhance the country's growth potential.

Tajikistan

Economic growth in Tajikistan increased to 6.6 per cent in 2016 from 6 per cent in 2015. An increase in public spending and fixed investment mainly drove the more rapid economic growth, which was in line with higher output levels in the construction and industrial sectors. A $500 million investment plan by Chinese investors was announced, and the construction of a $200 million metals-processing plant already began in mid-2016. Meanwhile, household consumption was less upbeat, as inflows of remittances from migrant workers in the Russian Federation dropped by almost 60 per cent. Consumer spending was also held back by higher inflation, at 6 per cent in 2016 relative to 5.5 per cent in 2015, on the back of steep currency depreciation in 2016. To curb inflation, the central bank raised the policy rate by 300 basis points in 2016. The banking sector is fragile, with the non-performing loan ratio being more than 30 per cent, especially due to liabilities generated by State-owned enterprises.

Output growth is set to moderate to 5-5.2 per cent in 2017 and 2018. Fiscal policy could be less supportive than in past years, as public debt is approaching the statutory limit of 40 per cent of GDP. On the upside, global prices of key commodity export items, particularly cotton and aluminium, are projected to rise steadily in the near term. Similarly, workers' remittances should rebound somewhat as a result of the modest economic recovery in the Russian Federation. A key uncertainty is whether citizens of the Eurasian Economic Union would be given preferential treatment, which could erode Tajikistan's remittance inflows as the country's membership in the Union is still being considered. As workers' remittances account for up to 40 per cent of GDP, any changes in remittance inflows could have a significant impact on household incomes and poverty reduction.

Turkmenistan

Economic growth in Turkmenistan softened slightly to 6.2 per cent in 2016 from 6.5 per cent in 2015 and the average annual rate of 10.5 per cent during the period 2012-2014. Despite the slowdown in recent years, Turkmenistan's growth performance remained more favourable than that of most other subregional peers. Long-term contracts to supply gas to China have provided some shelter from subdued global energy prices, although these contracts are linked to global oil prices. The slight economic slowdown in 2016 was underpinned by weaker industrial conditions as a result of sluggish external demand, while ongoing fiscal consolidation led to reduced public investment and held back construction activity. In addition to cuts in investment spending, the fiscal consolidation plan is also aimed at increasing non-hydrocarbon revenue, privatizing State-owned enterprises and increasing the effectiveness of subsidy and social programmes.

After years of slower economic growth, Turkmenistan is expected to record higher growth at 6.5 per cent in 2017 and 6.8 per cent in 2018. The positive outlook is conditional upon higher prices for gas and steady import demand from China, which is the country's major trading partner. In the event that gas prices are more subdued than expected, fiscal consolidation would have to advance more swiftly and depress domestic demand further. The public provision of gas, water and electricity that has been a central feature of inclusive social policy is under pressure, and consideration is being given to a needs-based system of social assistance.

Uzbekistan

The economy of Uzbekistan continued to enjoy high economic growth at 7.3 per cent in 2016, although this was the first time in a decade that growth fell below 8 per cent. The robust economic expansion was led by higher public investment as part of fiscal stimulus programmes to promote industrial modernization, infrastructure development and agricultural productivity. Private investment also expanded well, benefiting from tax relief for businesses. Meanwhile, the economic slowdown in 2016 was mainly due to weaker exports of goods and services. In particular, shipments contracted in 2016 on the back of slower import growth in China, which is Uzbekistan's largest trading partner. Workers' remittances also decreased as a result of the economic recession in the Russian Federation. As in past years, inflationary pressure was strong in 2016. The inflation rate stood at 11.5 per cent, up from 10 per cent in 2015, and was driven by upward adjustments in administered prices, robust government spending and the currency depreciation.

Growth is projected to remain high at 7.4 per cent in both 2017 and 2018. An expected economic rebound in the Russian Federation should result in higher workers' remittances, while an uptick in global oil prices would support higher hydrocarbon revenues. The Government announced in December 2016 a plan to create new economic zones, which are aimed at attracting more foreign investment and promoting product diversification, especially in the processing of mineral resources and agricultural products. Meanwhile, a key headwind to the growth outlook is weak commodity import demand in China. On the upside, the fiscal space appears sizeable, with public debt at only 15 per cent of GDP at end-2016, and that space could be used to support economic growth.

5.2. A selected policy challenge: deepening integration for economic diversification

Ongoing economic stagnation in North and Central Asia since the collapse of global oil prices in mid-2014 reinforces the need to diversify the subregion's economic growth engine beyond the resource-based sectors. Economic growth performance in the subregional economies is often volatile, largely influenced by global prices for a few commodities. For example, oil and gas account for more than 90 per cent of the total export value in Azerbaijan and Turkmenistan and more than half in Kazakhstan and the Russian Federation. Similarly, more than half of Kyrgyzstan's shipments are of gold, while copper ore and aluminium account for one third of the exports from Armenia and Tajikistan respectively. A more diversified economic base in resource-based economies also would help reduce economic volatility in countries that rely on workers' remittances, such as Kyrgyzstan and Tajikistan where workers' remittances (mainly from workers in the Russian Federation) are equivalent to about a quarter of their GDP. As global commodity prices are projected to remain below trend for an extended period of time, an effort to broaden the economic base of North and Central Asian economies in order to increase their economic resilience to external adverse shocks remains an urgent task.

Lack of economic diversification also undermines progress on achieving inclusive development. Recent economic recessions have led to slower employment growth, weaker ability of the Government to provide the poor with fiscal support and higher inflation as a result of weak exchange rates. As a result, poverty has increased in such countries as the Russian Federation, with a potentially negative impact on social development in its smaller subregional neighbours. Moreover, income inequality could rise further, as temporary and low-skilled workers earning lower pay tend to lose their jobs first.

New multilateral initiatives provide new opportunities for economic diversification

Two emerging multilateral initiatives on trade and connectivity provide a new window of opportunity for economic diversification of North and Central Asia: the Eurasian Economic Union (EAEU) led by the Russian Federation and China's Belt and Road Initiative.

The Union aspires to become a single market with negligible costs for internal trade among members. Established in January 2015, the pact evolved from the customs union agreed in 2009 between Belarus, Kazakhstan and the Russian Federation. Armenia and Kyrgyzstan also joined EAEU in 2015, while Tajikistan is also considering becoming a member.

Parts of the EAEU agreement include abolishing customs controls between member countries, introducing customs procedures in electronic form and harmonizing trade rules. Such trade facilitation measures are expected to help reduce transportation time and trade costs among member countries. Under the customs union, border-crossing time for trucks leaving Kazakhstan for the Russian Federation decreased from almost eight hours in 2011 to less than three hours in 2012 (ADB, 2012).

The trade bloc is also expanding its economic ties to global markets. In October 2016, EAEU ratified its first free trade agreement with Viet Nam, which eliminated trade barriers for the majority of traded goods and enhanced cooperation in such areas as e-commerce, intellectual property protection and public procurement. Moreover, EAEU has already initiated negotiations on possible trade agreements with China, the Islamic Republic of Iran, the Republic of Korea, Singapore and Turkey, among other countries.

In addition to creating a common market in goods, EAEU is evolving into a common market in services, energy and labour. For example, the pact allows service providers registered in a member country to operate in other member countries and permits access to natural monopoly services, such as electricity transmission and energy transport. In the medium term, a common market for electricity is envisaged by 2019 and for petroleum by 2025. The EAEU treaty also provides free movement of labour by eliminating quotas and mandatory work permits and by reducing the number of documents required for migrant workers.

The second emerging multilateral initiative is the Belt and Road Initiative (BRI), which, among other objectives, is aimed at improving infrastructure connectivity between China and Europe through the Eurasian landmass. First announced by China in late 2013, the primary goal of the Initiative is to promote freer flow of economic factors, such as capital, goods, services, energy and people, across Asia and the Pacific and beyond. One core element of BRI is the Silk Road Economic Belt, which comprises land transport routes between China and the rest of Asia and Europe. Of six economic corridors that have been proposed, three pass through North and Central Asia, namely the China-Central Asia-West Asia Corridor, the China-Mongolia-Russia Corridor and the New Eurasian Land Bridge Corridor. These aspects highlight the importance of North and Central Asia in overall BRI strategies.

The efforts to realize a more connected Asia-Pacific region are not new. For example, the project to create a highway network in Asia[3] has been ongoing since 1992. Similarly, several large-scale infrastructure projects that are being planned are also based on facilities that predate BRI, but the Initiative goes beyond improving the network of transport infrastructure. It also seeks to enhance trade, finance, ICT and energy links and strengthen coordination of development policies and strategies across participating countries (China, 2015). What is also striking about BRI is its sheer scale. Most studies suggest that the Initiative could cover more than 60 economies with a collective GDP equivalent to about one third of global output and 40 per cent of global trade, involving a total population of more than 4 billion people.

New multilateral initiatives provide impetus for governance reforms

EAEU and BRI are expected to promote economic diversification through at least two channels. The first channel is through enhanced infrastructure connectivity and reduced trade barriers, which can facilitate access to production factors and upgrade participating country's production capacity. In particular, access to inputs that were not available locally, such as raw materials and technology, can help these economies to increase the variety of goods that they can produce. Even when production factors are already available locally, greater access means that an economy is able to produce goods at more competitive cost, allowing it to participate effectively in global supply chains.

The second channel is through incentivizing Governments to improve their economic governance and push forward policy reforms that can make their economies remain competitive after the opening up of markets. For example, BRI could encourage a race to the top in providing the soft infrastructure essential to make new hard infrastructure productive, such as an enabling business investment in terms of reduced regulatory burden, policy stability and transparent legal framework. Thus, integration would not only help optimize the benefits of economic diversification but also serve as an impetus to governance reforms, producing broader benefits for the economy as a whole.

The Eurasian Economic Union and Belt and Road Initiative also pose some risks

While offering many opportunities, EAEU and BRI also present economic and governance challenges to effectively manage regional integration. For example, while EAEU creates a more integrated trade bloc among members, the initiative may hamper trade with non-members because its imposition of a common external tariff and customs code and common external commercial policies, such as anti-dumping duties, discriminates against non-members. This situation could undermine overall efforts on economic integration in the subregion. For example, the previous customs union increased the average border-crossing time for trucks entering Kazakhstan from outside the union from less than 9 hours to more than 21 hours (ADB, 2012).

Similarly, BRI also presents economic, social and environmental challenges. At a broad level, relatively easy access to large foreign loans for infrastructure projects, even if most of them tend to be on a concessional basis, could undermine macroeconomic stability in small economies with underdeveloped financial markets and less effective debt management ability. On the environment front, unless properly managed, the relocation of heavy and natural resource-based industries out of China could adversely affect air quality and cause resource degradation in recipient countries. There is thus a need for an upfront assessment of environmental safeguards. On the social front, sections of the population could be marginalized, such as workers in industries that will no longer be competitive after the opening up of markets. Dealing simultaneously on all fronts could test the capacity of most Governments.

Ensuring the balance among governance, economic diversification and inclusive development

If integration is to remain beneficial for economic diversification while paying sufficient attention to sustainable development issues, then economic governance will have to be improved. However, the quality of economic governance in North and Central Asia is often perceived as being less than desirable. As resource-rich economies, the urgency of having effective economic governance in the subregion has been weak because the Governments rely on resource revenues rather than on creating a vibrant market economy that generates tax revenues. In other words, attention was often diverted from productive activities to rent-seeking activities. Indeed, economic concentration in North and Central Asia is partly due to this aspect of governance. As a result, the extent to which EAEU and BRI will be able to help enhance the quality of national economic policy design and implementation and the time frame for doing so are highly uncertain.

Greater regional integration can contribute to improving the quality of economic governance. Membership in multilateral trade initiatives helps countries accept international norms and standards in such areas as intellectual property, consumer protection and transportation. In this regard, the rise in membership of North and Central Asian countries in the World Trade Organization since 2012 is an encouraging sign, as WTO promotes the principles of transparency, evidence-based assessment of trade barriers and due process of dispute resolution.

EAEU and BRI can help promote more inclusive development. For example, EAEU agreements on labour and migration reduce the number of documents required by migrant workers, increase the time frame for registration and the permissible period of uninterrupted stay, grant social rights to the migrant's family, especially in education, and provide migrants with guarantees about information availability. These measures are important steps in regularizing labour migration. For BRI, faster and more affordable transport networks to new markets would tend to especially benefit agricultural exporters and smaller enterprises that are currently restricted to local markets but are hoping to link into global value chains. Large commodity- and resource-based companies have already established some export channels.

6. SOUTH-EAST ASIA

6.1. Macroeconomic performance and outlook

Economic growth in South-East Asia edged up to 4.5 per cent in 2016, from a 4.4 per cent expansion in both 2014 and 2015, but remains subpar relative to the average annual growth rate of 5.3 per cent during the period 2011-2013. The slight pickup in 2016 was underpinned by stronger growth in Indonesia, the Philippines and Thailand, which together account for more than 60 per cent of the subregion's output. Domestic demand, particularly consumer spending and public investment, drove the expansion in these economies. Meanwhile, both Malaysia and Singapore recorded a multi-year low economic growth rate in 2016 owing to subdued global trade, while Brunei Darussalam and Timor-Leste faced the fourth year of output decline as oil production contracted.

As in past years, economic expansion in less developed economies in the subregion, namely Cambodia, the Lao People's Democratic Republic, Myanmar and Viet Nam, remained generally robust at 6.2-7.2 per cent in 2016. Such rapid growth was driven by robust exports of manufactures or an increase in FDI inflows into the energy sector. The rapid economic growth in these economies helps narrow the income gap within the subregion, although the broader development gap remains wide (see the next subsection for more details).

Except for Myanmar, consumer inflation was generally modest and within the official targets in 2016. The low inflation environment was made possible because of subdued global energy prices and various domestic policy changes, such as cuts in administered fuel prices and a larger food import quota in Indonesia. Soft price pressures have enabled an easy monetary policy stance in most economies in the subregion. It appears, however, that lower financing costs have not boosted private investment in most countries, given their large excess manufacturing capacity, fragile import orders and cautious investor sentiment.

Fiscal policy has been supportive of economic growth. Various fiscal measures were aimed at supporting consumer spending, such as an increase in the tax-free threshold in Indonesia, lower income tax rates in Malaysia and soft loans for farmers and cash transfers to low-income households in Thailand. Infrastructure investment, especially in transport and energy infrastructure, also played an important role in supporting the economic rebound in Indonesia and Thailand. Overall, despite being accommodative, the strength of fiscal support in countries, such as Brunei Darussalam, Indonesia and Malaysia, was constrained by subdued commodity revenues and the need for fiscal consolidation.

The near-term economic growth outlook is expected to improve further, to 4.7 per cent in 2017 and 4.8 per cent in 2018, with higher growth rates being projected for most economies. In general, the positive prospects are supported by an expected pickup in commodity prices and supportive macroeconomic policies. A key downside risk is possible delays in public investment projects. Outside the subregion, factors such as rising trade protectionism and weaker import demand in China could undermine the expected recovery of trade flows. Despite the overall positive outlook, the subregional economies continue to face various economic imbalances and structural constraints. Examples include the need to manage wide fiscal and current account deficits in the Lao People's Democratic Republic and Myanmar and high household debt in Malaysia and Thailand. Similarly, Brunei Darussalam, Cambodia and Timor-Leste would benefit from a broader economic base.

Brunei Darussalam

Brunei Darussalam, which relies heavily on oil and gas exports, recorded an economic contraction for the fourth year in 2016. The output level fell by 2 per cent after a cumulative output decline of 5 per cent over the period 2013-2015. Subdued growth performance was indeed recorded before the plunge in global oil prices in mid-2014 due to maintenance work on the country's hydrocarbon facilities. Fixed investment contracted in 2016 owing to weak activity in the oil and gas sector. Private consumption was stronger as a result of lower unemployment and fiscal support. In view of the lower commodity revenues, budgeted expenditure for the fiscal year ending in March 2017 was about 12 per cent smaller than that for the preceding year. Meanwhile, the overall price level continued to decrease, at 0.7 per cent in 2016, after small declines in 2014 and 2015. Years of deflation were driven by low global commodity prices and various price subsidies.

Output growth is projected to resume positive growth at 0.8 per cent in 2017 and 1 per cent in 2018 due to higher global energy prices. In line with an expected rebound in economic growth, modest inflation is expected in 2017 and 2018. A major policy effort will be to develop a non-energy sector in the economy. Such economic diversification will improve the economy's resilience to commodity price shocks and help broaden the sources of government revenue. In this regard, the Government has focused on promoting foreign investment in such sectors as business services, *halal* (permissible or allowed) foods and tourism.

Cambodia

Economic growth in Cambodia remained solid at 7.2 per cent in 2016. The economy has enjoyed at least 7 per cent annual growth since 2011. Exports of ready-made garments, accounting for about 80 per cent of total exports, continued to expand well as a result of privileges enabling countries such as Cambodia to gain market access in developed countries. As the sector is estimated to employ more than 600,000 workers, stronger garment exports also fuelled consumer spending. Private consumption was also supported by modest inflation, at 3 per cent in 2016, and rising tourist arrivals.

As for the outlook, growth is set to remain rapid at 7.1-7.2 per cent during the period 2017-2018. Exports are set to grow further, partly aided by higher prices for key agricultural items, such as rice and rubber. Consumer spending tends to benefit from such factors as an increase in the minimum wage for workers in the garment industry, a downward trend in the household debt level and a stable price outlook. A steady increase in FDI inflows would buoy overall investment conditions, although slower credit growth could hold back domestic investments. To manage rapid credit growth and promote financial stability, the central bank raised the minimum capital requirements for banks. Meanwhile, one of the Government's policy priorities is to enhance rural incomes as part of an effort to reduce poverty, which remained high at almost 18 per cent of the total population in 2012. For example, to support rice farmers who were affected by drought during the past two years, the Government waived value-added tax on agricultural products and offered low-interest loans to millers who buy rice at predetermined prices.

Indonesia

Indonesia's economic growth picked up slightly to 5 per cent in 2016, from a six-year low rate of 4.8 per cent in 2015. Consumer spending drove the rebound in 2016 amid steady job growth, softer price pressure and fiscal measures, such as an increase in the tax-free threshold and an employment scheme aimed at helping drought-affected farmers. Goods exports fell by nearly 10 per cent as a result of low global commodity prices and weak commodity demand in China. Meanwhile, consumer inflation dipped to 3.5 per cent in 2016, from 6.4 per cent in 2015, largely due to a significant cut in administered fuel prices and approval for a higher quantity of imported food items. Given modest price pressures, the policy rate was cut six times in 2016 for a total of 150 basis points. Room for fiscal support is more limited, as revenue collection has been hampered by low energy prices.

Output growth is projected to rise further to 5.2 per cent in 2017 and 5.3 per cent in 2018. Private consumption would continue to drive the economy amid modest, within-target inflation. An expected increase in energy prices should support the recovery of exports. A downside risk includes exchange rate volatility as a result of the country's twin deficits and its close link to commodity exports. The growth outlook could be more upbeat if infrastructure investments, such as those in oil refineries, toll roads and railways, gain stronger momentum than had been expected. In addition to infrastructure investment, the Government is seeking to revive economic growth by attracting more foreign investment. Various measures have been introduced to simplify approvals of large-scale infrastructure projects and business licenses and raise the cap on foreign ownership in such sectors as tourism, logistics and e-commerce.

Lao People's Democratic Republic

Economic growth in the Lao People's Democratic Republic remained high at 6.9 per cent in 2016, mainly propelled by construction in the hydropower sector. The country currently has 40 operational power plants, with an installed capacity of more than 6,300 megawatts. Another 35 projects with combined capacity of 4,500 megawatts are under construction. The country's ability to sustain currently wide fiscal and current account deficits depends crucially on the future revenue stream from hydropower projects. In particular, rising mining profits would help support government revenue, while power exports and lower imports of capital goods used for construction of hydropower projects would narrow the trade deficit.

The growth outlook is set to remain buoyant at 6.8-6.9 per cent in 2017 and 2018. As in past years, power exports and construction of hydropower projects would drive the economy. Higher global prices of main commodity export items, such as copper and coffee, will also support exports. Meanwhile, private consumption should remain strong, underpinned by low inflation, solid tourist arrivals and higher workers' remittances as a result of a steady economic rebound in Thailand. In addition to hydropower projects, the medium-term outlook likely benefits from the Government's effort to promote foreign investment through several special economic zones. Ongoing construction of a high-speed railway between Vientiane and the Chinese border will enhance cross-border connectivity in this landlocked country.

Malaysia

Malaysia's output growth moderated to a multi-year low rate of 4.2 per cent in 2016 compared with 5 per cent in 2015 and 6 per cent in 2014. Total exports contracted as a result of low commodity prices and sluggish global demand for the main export items, such as consumer electronics. Subdued external demand constrained the need for additional business investment, although progress was made on various public investment projects, which are aimed at turning Malaysia into a high-income country by 2020. The economic expansion in 2016 was largely underpinned by private consumption, which benefited from fiscal measures, such as smaller employee contributions to the retirement fund and lower income tax rates. However, household spending also faced headwinds from a drought, weaker employment and high household debt levels. To support domestic demand, the policy rate was cut by 25 basis points in mid-2016, the first reduction in seven years.

Output growth is set to rebound marginally to 4.4 per cent in 2017 and 4.5 per cent in 2018. While exports could recover somewhat, the overall economic rebound will be driven by consumer spending. Fiscal measures will also support household consumption. For example, the budget for 2017 outlined an increase in cash transfers to low-income groups, although the overall strength of fiscal support is restrained by ongoing fiscal consolidation. Meanwhile, inflation is projected to trend upward in 2017 and 2018 partly due to policy changes, such as the phasing out of the cooking oil price subsidy and upward adjustments in retail fuel prices, but the projected rate of inflation remains within the official target of 2-3 per cent.

Myanmar

Myanmar's output growth slowed to a still high rate of 6.3 per cent in 2016 compared with 7.3 per cent in 2015. Foreign investment, mainly in the oil and gas sector, propelled the economy. Inflation remained elevated at 7.2 per cent in 2016, underpinned by such factors as the weak exchange rate, continued albeit decreasing monetization of fiscal deficits and high transport costs. To reduce such monetization, the first auction of kyat-denominated treasury bonds was held in September 2016; it raised $160 million.

Growth is set to rebound to 7.5-7.6 per cent during the period 2017-2018. Foreign investment in energy and infrastructure projects will continue to drive economic expansion. The removal of the remaining sanctions on Myanmar by the United States in October 2016 will support mining exports. More broadly, the business sector would benefit from various measures aimed at reducing regulatory burdens. Meanwhile, inflation is projected to remain high at 8.5 per cent in both 2017 and 2018. On medium-term economic development, the Government unveiled its 12-point economic policy in July 2016, which emphasizes development priorities, such as transparent and sustainable natural resource extraction, a competitive private sector, including reform of State-owned enterprises, effective public financial management and agricultural development. As part of economic liberalization, the Government also introduced measures to promote financial sector development, such as granting additional licenses for foreign banks and allowing private banks to supply State-owned enterprises with foreign exchange.

Philippines

Economic growth in the Philippines sped up to 6.8 per cent in 2016 from about 6 per cent in the preceding two years. Robust private consumption drove economic expansion thanks to higher workers' remittances, stronger domestic employment and modest inflation. Fixed investment also surged in 2016 as a result of a pre-election spending cycle and a notable increase in public works projects. Unlike domestic demand, external demand was much weaker. Total exports, in which electronics components account for a large proportion of the total, declined in 2016. In an effort to further increase spending on social services, the Government recently raised the ceiling on the fiscal budget from 2 per cent of GDP to 3 per cent in the period to 2022. Years of rapid economic growth have helped reduce the poverty rate, although it remained relatively high at almost 22 per cent in 2015.

The growth outlook is optimistic, with projected growth of 6.9-7 per cent in 2017 and 2018. Higher oil prices would help boost economic activities in the Middle East, which hosts many Filipino overseas workers. In addition to higher workers' remittances, fiscal support would support household consumption. Budgeted government spending in 2017 is more than 10 per cent higher than that in 2016, with the increase being focused on education and infrastructure development. Capital investment is expected to expand favourably, given that industrial capacity utilization is at a multi-year high level. Meanwhile, the inflation rates in 2017 and 2018 are projected to remain below the past trend.

Singapore

Singapore's economic growth was largely stable at the low rate of 2 per cent in 2016. Amid weak global trade, merchandise exports, which account for about 120 per cent of GDP, shrank in 2016. Fixed investment also contracted owing to a sluggish export-oriented production sector and subdued investment in housing. Meanwhile, despite the overall price decrease and supportive macroeconomic policy, private consumption growth moderated as unemployment edged up. The monetary policy aim has switched from gradual appreciation of the nominal effective exchange rate to zero appreciation, while public spending in the fiscal year ending March 2017 is set at almost 10 per cent higher than the previous year.

The growth outlook is expected to pick up to 2.2 per cent in 2017 and 2.5 per cent in 2018, mainly conditional on a revival in global trade. Projected economic growth remains below the past trend. Domestic demand is expected to strengthen somewhat, underpinned by stable employment conditions and supportive policy measures, such as higher corporate income tax rebates for small and medium-sized enterprises. A key downside risk is heightened trade protectionism, which would especially undermine economic growth in this trade-oriented economy. Meanwhile, part of Singapore's medium-term policy effort is to enhance productivity. The Government introduced an industrial transformation programme, which promotes automation and research and development through tax allowances, financial support and loan guarantees. It also co-funds wage increases for firms that have implemented productivity enhancement.

Thailand

After years of an uneven output growth record, the Thai economy gained stronger momentum in 2016. Output growth reached 3.2 per cent, after a 2.8 per cent growth rate in 2015 and 0.9 per cent in 2014. Despite relatively high household indebtedness and widespread drought that held back farm incomes, consumer spending growth rebounded in 2016 as a result of robust tourism revenue and various fiscal measures, such as higher thresholds for personal income taxes and soft loans and tax breaks for farmers. Public infrastructure projects, mainly for transport and water management, supported the overall fixed investment conditions. While benefiting from spillovers from public investment projects and low-interest loans, large excess industrial capacity has deterred new business investments. Meanwhile, export growth was virtually flat in 2016 as a result of slack external demand.

Growth performance is forecast to remain stable at 3.3-3.4 per cent in 2017 and 2018. Private consumption will continue to be supported by modest inflation and healthy tourist arrivals. Nonetheless, counteracting these positive factors are likely sluggish prices of key agricultural products, such as rice and rubber. On capital investment, a $25 billion national infrastructure plan for 2017 is focused on transport infrastructure projects, particularly railways. To maintain a modest fiscal shortfall, the Government enacted inheritance taxes and introduced or increased excise taxes on such items as alcohol, cigarettes and diesel. Overall, the strength of domestic demand is conditional on smooth domestic political transition that is scheduled for early 2018 and adequate progress on the implementation of infrastructure projects. Both factors would help boost market sentiments.

Timor-Leste

The output level in Timor-Leste is estimated to have contracted in 2016 for the fourth year, as a result of lower oil production due to ageing fields and subdued global energy prices. Oil production accounts for up to 80 per cent of the country's output. For the non-oil sector, output growth increased slightly to 5 per cent in 2016 from 4.3 per cent in 2015, supported by higher government spending. The private sector economy remained relatively small. With regard to the outlook for the future, non-oil output growth is set to trend up to 5.5 per cent in 2017 and 6 per cent in 2018. An expected rebound in oil prices should help boost capital investment, with some positive spillover effects on the non-oil sector. Modest inflation, in part due to the pegging of the country's currency to the United States dollar, would support consumer spending. On the downside, an almost 20 per cent spending cut under the 2017 budget would restrain the strength of domestic demand.

Economic diversification is key to Timor-Leste's medium-term economic development. The financing of public capital spending has relied heavily on withdrawals from the Timor-Leste Petroleum Fund, use of which is intended for developing non-energy sectors. As oil resources are depleting, there is a need to develop other growth drivers. In this regard, some policy effort has been made, such as ongoing development of industrial clusters, infrastructure development and special economic zones.

Viet Nam

Economic growth in Viet Nam softened slightly from a high base of 6.7 per cent in 2015 to 6.2 per cent in 2016. The slowdown was more notable in the first half of the year, as adverse weather conditions depressed agricultural output and household consumption. Fixed investment conditions were generally solid, supported by FDI in the manufacturing sector. Unlike other subregional economies which have experienced export slumps, Viet Nam's exports expanded more favourably, mainly due to various market access privileges and relatively diversified export baskets. Service receipts also rose in 2016, as tourist arrivals increased notably.

The near-term outlook is positive, with projected economic growth of 6.5-6.7 per cent over the period 2017-2018. Exports are expected to remain buoyant in the face of stronger import demand from the United States, which accounts for almost a quarter of Viet Nam's shipments. Continued relocation of businesses in search of low-cost manufacturing activities, particularly in China, would support private investment. Private consumption would benefit from higher minimum wages and strong tourist arrivals, although more modest fiscal support and higher inflation are major drags on solid consumption. Inflation is projected to increase to 4 per cent in 2017, the same level as the official limit. To restrain the rising public debt level, partial privatization of State-owned enterprises is one of the main policy priorities. The Government announced in January 2017 a list of 137 such enterprises in sectors such as banking, mining, telecommunications and oil that it is seeking to partially privatize by 2020.

6.2. A selected policy challenge: narrowing development gaps through better governance

One of the key challenges for the South-East Asian subregion is narrowing the development gap within ASEAN between the later-entrant countries – Cambodia, the Lao People's Democratic Republic, Myanmar and Viet Nam (CLMV) – and those which had become members of ASEAN earlier. In income terms, the gap in the ratio of GDP per capita between the early-entrants of ASEAN and CLMV remains wide, although it has been gradually narrowing. The ratio stood at 10.6 in 2015 and 4.1 if the highest-income economy in the subregion, Singapore, is excluded. If concerted and coordinated measures are not taken to accelerate the narrowing of the income gap between the ASEAN-4 (Indonesia, Malaysia, Philippines and Thailand) and CLMV, it may take another 40 years to eliminate the gap completely.

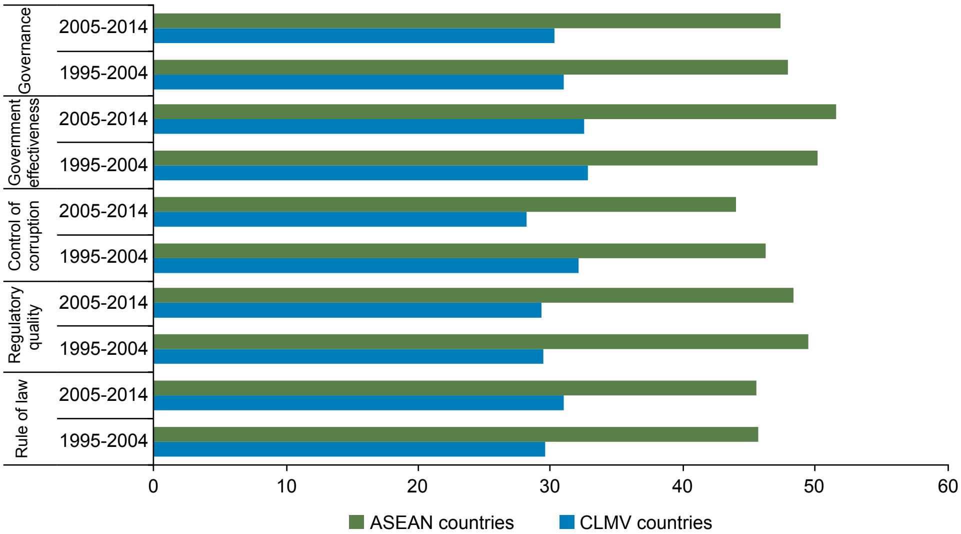
Apart from income gaps, development gaps also exist in major socioeconomic areas. For instance, in the wake of technology-driven economic growth and the desire to integrate further into ASEAN, there is a need for CLMV countries to pay attention to their widening skills gap. Access to basic education has increased, but higher education and the quality of education remain a challenge. Similarly, while indicators of health in CLMV countries have improved significantly since 2000, the large gaps with other ASEAN countries remain. Active policy interventions will be required to ensure that higher income growth translates into lower poverty, less income inequality and better social outcomes.

Specifically, narrowing the income and development gap will require measures that increase the availability and quality of physical capital, as well as improve workers' skills and the availability of decent and productive jobs. In addition, there is a need to improve the economic fundamentals, wage and social protection systems and the effectiveness of fiscal policy. The need to narrow gaps in economic development of CLMV is particularly pressing given that deepening of subregional integration structures to fully realize the ASEAN Economic Community has already begun. Failure to close development gaps would run the risk that the economies of CLMV may be overwhelmed by more developed neighbours and may not take full advantage of the opportunities emanating from integration.

Underlying all of these policy measures, however, is the need to improve governance and institutional quality in CLMV as this is a prerequisite to undertake effective policies in the socioeconomic sphere to close the development gaps. There is a strong positive correlation between governance and institutional quality and economic growth and income levels, as is highlighted in the analysis in chapter 3 of the present publication.

Analysis of World Bank Worldwide Governance Indicators that relate to the rule of law, regulatory quality, control of corruption and government effectiveness shows that CLMV performed more poorly in all of these governance dimensions than their ASEAN peers (see figure 2.5). Moreover, for most of the indicators there has also been little improvement over the two periods 1995-2004 and 2005-2014. Indeed, control of corruption has deteriorated, whereas for other indicators performance has largely been unchanged apart from the rule of law, which has improved. In looking at the cross-country comparison of the latest period, CLMV continue to rank particularly low in control of corruption and regulatory quality, while there has been somewhat better performance in terms of the rule of law and government effectiveness.

Figure 2.5. Governance indices in the CLMV group and ASEAN group, 1995-2004 and 2005-2014



Source: ESCAP, based on Worldwide Governance Indicators (WGI) from Kaufmann, Kraay and Mastruzzi (2010).

Note: Worldwide Governance Indicators have been rebased to 100. High values of the indices represent a good perception of the institutional quality. The index "governance" is the average of the four Indicators.

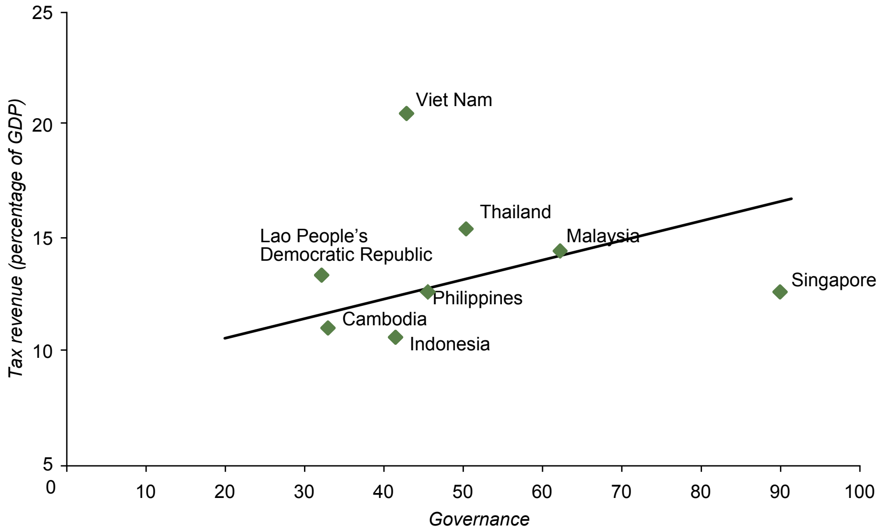
When considering the governance performance of individual countries in CLMV, there is considerable divergence. In general, Viet Nam is a better performer in the composite governance indicator and in most individual indicators, while Myanmar has the greatest deficit in both the composite and individual indicators. Whereas Cambodia shows substantially better performance in regulatory quality, Cambodia and the Lao People's Democratic Republic are in general in the intermediate position within CLMV for the composite and the individual indicators.

The importance of governance for socioeconomic development in CLMV can be seen by considering some of the relationships between their development indicators and governance performance. One key concern for CLMV is financing their development needs. Apart from external development assistance, this involves increasing domestic resource mobilization from both the public and private sectors. In the public sphere, governance affects the ability of these countries to raise tax revenue, owing to issues such as corruption in tax collection and low tax morale due to perceived governance deficits. The relationship between lower governance performance and low tax revenues can be seen in the examples of Cambodia and the Lao People's Democratic Republic (see figure 2.6). Governance deficits can also affect the availability of private sector credit, which is important to support development objectives. The relationship between lower governance performance and domestic credit to the private sector can be observed in the cases of Cambodia, the Lao People's Democratic Republic and Myanmar.

Another important relationship for CLMV is between governance performance and social development, especially in the critical spheres of health and education. The efficiency of the provision of health and education services is affected by governance performance, particularly through the channels of corruption and ineffective administration. For example, the relationship between lower governance performance and health sector efficiency can be seen in the cases of Cambodia and the Lao People's Democratic Republic (see figure 2.7).

Among CLMV, the greatest governance challenge is currently being faced by Myanmar. This is not surprising as the country has been in a transition process since 2010 involving economic and political opening. Good governance is especially important for attracting investors during the economic opening of the country as it attempts to diversify from an economy based on natural resources. One of the key governance challenges is to increase bureaucratic efficiency. One way may be to increase salaries. While these have been increased rapidly in recent years, they still remain low, especially in comparison with newly available private sector jobs, including in foreign enterprises. The competition is highest in ministries with easily transferable skills, such as the Ministry of Planning and Finance and the central bank (Hendrix and Noland, 2015). Public sector reforms were

Figure 2.6. Tax revenues and governance in ASEAN countries, 2010-2014



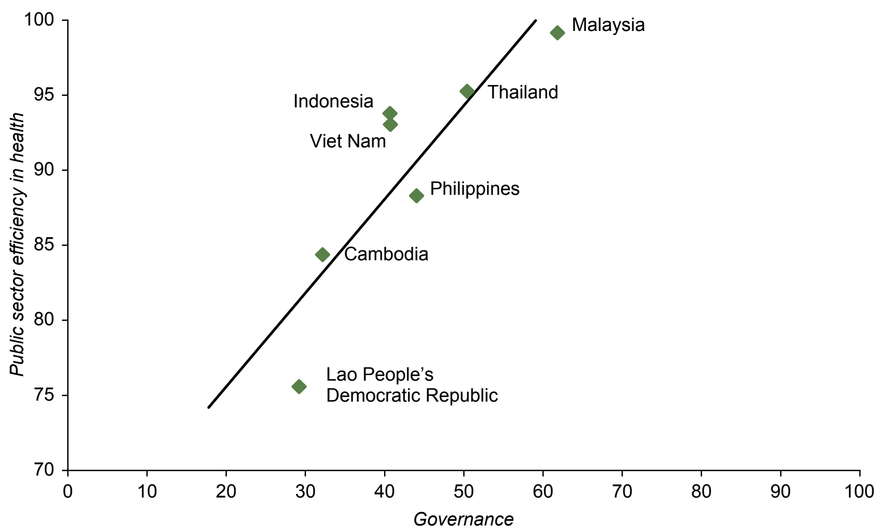
Source: ESCAP, based on Worldwide Governance Indicators from Kaufmann, Kraay and Mastruzzi (2010).

Note: Tax revenue data is the average for 2009-2013 for Viet Nam.

initiated in 2013, with the formation of interministerial committees to simplify coordination mechanisms, such as the National Energy Management Committee. However, these committees would be greatly aided in their work by having independent secretariats, as currently any policy proposals are returned to individual ministries for action. Another major challenge will also involve implementing effective decentralization of the bureaucracy. Although the 2008 constitution established state and regional governments, each with the power to levy taxes (Hook and others, 2015), bureaucrats are appointed by the national Government. This creates conflicting powers of delegation for bureaucrats, especially with lines of delegation being further blurred by fewer line ministries at the regional level than at the national level, which results in multiple responsibilities.

The Lao People's Democratic Republic, while benefiting from good growth in recent years, remains the country with the lowest level of income per capita in the subregion. Corruption, which remains a significant barrier to accelerated development, has increased as a result of growth in the natural resources sector and an influx of foreign investment in recent years. However, the

Figure 2.7. Public sector efficiency in health and governance, 2005-2014



Source: ESCAP, based on Worldwide Governance Indicators from Kaufmann, Kraay and Mastruzzi (2010).

Note: Efficiency scores range between 0 and 100. An efficiency score which is equal to 100 would mean that the country is delivering the development outcomes by efficiently using the available resources.

government has been active in attempting to counter the problem through legislative action: in 2009 it ratified the United Nations Convention against Corruption[4] and in 2012 established an anti-corruption law. The State Inspection and Anti-Corruption Authority, which started working on investigation of corruption cases in 2014, would, however, benefit from further capacity development and specific investigative training. Currently, there is also underutilization of the criminal justice system in addressing corruption, with the authorities traditionally dealing with corruption through internal inspections but with few cases being brought to court. Some of the other challenges concern bribery and embezzlement in the private sector, which still have not been criminalized; liability of legal persons, which has not yet been introduced; and inconsistencies between the penal code and the anti-corruption law (UNODC, 2016). The country would also benefit from enhanced capacity for citizens and businesses to denounce corruption cases through advocacy, education and the improvement of the interface between citizens and the State Inspection and Anti-Corruption Authority.

Cambodia, another fast-growing country in the subregion, faces a particular challenge compared with its neighbours in terms of performance under the rule of law. Some of the key elements are judicial independence and enforcement of the law. The Government has undertaken various legal and judicial reforms, such as the "Rectangular Strategy", which is centred on good governance and has key programmes on legal and judicial reform and fighting corruption, among others. The Government in 2010 created an anti-corruption unit in the Cambodia National Police. However, challenges remain in implementing legislation effectively. There are concerns that inefficiency, lack of training and lack of independence have had adverse impacts on the judiciary. Economic development is also affected by this situation with regard to property rights, with a key area being land acquisition (Dwyer and Sokphea, 2016). The country suffers from a lack of capacity across all sectors of the judicial system, including enforcement and the judicial, where salaries and available resources remain low. The country could also improve merit-based promotion and institute a tiered-pay system in enforcement, the police and the judiciary; eliminate the patronage system; enforce training standards; and make sure that recruits meet minimum requirements (Morrish, 2016). While the creation of the anti-corruption unit in the Cambodia National Police is a positive step, more can be done to increase the accountability of the justice system to the general public.

While Viet Nam performs better in terms of the above-mentioned governance indicators, it should undertake more regulatory reforms to pave the way for the economy to move to upper-middle-income status. The Government has undertaken ambitious reforms recently: in 2016, Regulation 35 proposed regulatory reforms that would increase the private sector's share of Viet Nam's GDP from 43 per cent to 49 per cent; the Government also issued 50 decrees clarifying guidelines for enterprises and removing about 3,500 regulations, the most ambitious cutting of red tape in the country (Hoang, 2016). However, further work is required to reduce administrative burdens, overcome human resources constraints and simplify an overcomplicated, restricted and unclear licensing and regulatory environment (Vo and Nguyen, 2016). Particular actions which should be taken include improving the administrative environment through the simplification of laws and administrative procedures, reducing the scope for abuse by clarifying regulations and improving the pay of State employees and avoiding approving retroactive laws. Among specific regulations, those regarding tax should be revised in order to spur the growth of private enterprise and attract more foreign investment.

While many of the measures to alleviate these governance challenges will have to come through national policies in CLMV, policy coordination at the subregional level can also play an important role through the assistance of ASEAN. Actions that ASEAN could take include monitoring the relative governance performance of CLMV using readily available data, establishing strategic capacity-building and knowledge-sharing activities that target existing gaps and complementing national programmes. Another action includes establishing a more focused approach in capacity development programmes that target gaps in CLMV public services that are not being addressed through national programmes. CLMV could work closely with ASEAN counterparts to identify these gaps.

7. CONCLUDING REMARKS

For each Asia-Pacific subregion, there has been an examination in this chapter of recent macroeconomic developments and near-term prospects, and a discussion of selected issues that could be seen as case studies on how effective fiscal policy management and good economic governance can improve development outcomes.

On macroeconomic assessments, the chapter highlighted that growth prospects for the period 2017-2018 are cautiously positive across the subregions. In East and North-East Asia, Pacific island developing economies and South-East Asia, the outlook seems to be steady or improving slightly but the projected output growth in all three subregions is below their past trends. In North and Central Asia, stronger economic recovery is expected but the prospects remain uncertain. Finally, the outlook for South and South-West Asia is more optimistic than for other subregions, although strong policy efforts are needed to tackle supply-side constraints to sustain rapid growth in the medium term. Overall, risks are tilted to the downside. Sluggish global trade would dampen the outlook for export-led East and North-East Asia and South-East Asia, while a weaker-than-expected uptick in global commodity prices would undermine economic recovery in North and Central Asia and the Pacific. At the same time, a steep rise in energy prices could bring back high inflation and widen trade deficits in South and South-West Asia.

On selected medium-term topics, the discussion highlighted the important role of effective fiscal management and economic governance in addressing social and environmental concerns and implementing structural reforms. For example, the balance between enforcing relevant laws and offering fiscal incentives is key to reducing economic informality in South and South-West Asia and promoting clean energy technology in East and North-East Asia. Experience also highlights the importance of careful design and implementation of fiscal measures, such as by reorienting public health spending towards preventive care in Pacific island developing economies, conducting independent evaluation of public research and development spending in East and North-East Asia and de-linking the provision of social assistance from employee contributions in South and South-West Asia. In these three subregions, partnerships also matter, whether these are with international development partners in the cases of South and South-West Asia and the Pacific islands, given their limited fiscal space, or with the business sector in the case of East and North-East Asia.

In the chapter, it has also been highlighted that, to cope with structural shifts in the external environment, Governments themselves would benefit from institutional rearrangements and greater capacity. In North and Central Asia, a policy effort to diversify the drivers of economic growth would be aided by new initiatives on regional economic integration, but actual economic gains would depend on the extent to which closer cooperation drives the Governments to cut red tape and improve the conduct of national economic policies. Similarly, in the less developed economies of South-East Asia, civil service reforms that lead to reduced corruption and improved cross-ministry coordination would enhance bureaucratic quality, which is a key component for any successful domestic structural reform.

ENDNOTES

1 TPES is calculated as the sum of production, net trade and stock changes of fuels, such as coal and gas. Fuels are subsequently transformed into other energy forms, such as electricity.

2 Green development implies policies that either reduce resource use per unit of value added incrementally (relative decoupling) or keep resource use and environmental impacts stable or declining while the overall economy is growing (absolute decoupling). Absolute decoupling is essential for achieving sustainable development.

3 See the Intergovernmental Agreement on the Asian Highway Network (United Nations, Treaty Series, vol. 2323, No. 41607).

4 General Assembly resolution 58/4, annex.

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CHAPTER

03 GOVERNANCE AND FISCAL MANAGEMENT

1. INTRODUCTION

Development trajectories of countries within the Asia-Pacific region have varied significantly over time. While some countries have made tremendous advancements in terms of economic and social indicators, others have not been quite as successful. Historical and cultural differences may explain part of the different development experiences of countries in the region. Yet, there is no doubt that the quality of *governance* and the effectiveness of *public institutions* are critical factors that contribute to the process of development.

Indeed, while it is today universally accepted that better and effective governance, similar to "gender equality and the empowerment of women and girls" (Sustainable Development Goal 5), has intrinsic value in itself and is therefore a goal worth striving for, it is also a fundamental element that contributes to the effective functioning of Governments and thus the process of development. A former United Nations Secretary-General in 1998 declared: "Good governance is perhaps the single most important factor in eradicating poverty and promoting development".[1] Similarly, the UNDP Administrator in 2012 stated that "without good governance, countries will find it hard to achieve any sustained development results".[2]

The concept of *governance* was not explicitly included as a separate goal among the Millennium Development Goals. However, it was nevertheless recognized as a critical requirement for attaining those Goals. In the Millennial Declaration it was argued, for instance, that success in creating an environment that is conducive to development and the elimination of poverty requires "good governance within each country … [and] … good governance at the international level and transparency in the financial, monetary and trading systems".[3]

The 2030 Agenda for Sustainable Development is more concrete in the consideration given to governance within its development framework. For one, the High-level Panel on the Post-2015 Development Agenda, as a follow-up to the Millennium Development Goals, pointed to the importance of governance – alongside peace – as a core element of well-being (United Nations, 2013b). To this extent, the 2030 Agenda has incorporated aspects of governance and effective institutions by explicitly calling upon countries to "… build effective, accountable and inclusive institutions at all levels" (Sustainable Development Goal 16).

However, while it has been argued that good governance is important to development, the term itself is in fact amorphous and does not necessarily lend itself to a simple and easy definition. To this end and to clarify the framework within which this concept operates both in this chapter and in the entire *Survey* for 2017, the concept first needs to be defined.

1.1. Definition of governance

Governance has been defined in various ways by different organizations and institutions. For instance, the World Bank has broadly defined governance at the national level as "the traditions and institutions by which authority in a country is exercised" (World Bank, 1992), where traditions and institutions are analysed on the basis of "(1) the process by which governments are selected, monitored, and replaced; (2) the capacity of the government to effectively formulate and implement sound policies; and (3) the respect of citizens and the state for the institutions that govern economic and social interactions" (Kaufmann, Kraay and Zoido-Lobatón, 1999). UNDP defines governance at the national level as relating to "the exercise of economic, political and administrative authority to manage a country's affairs at all levels", where governance comprises in this context "mechanisms, processes and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences" (Economic and Social Council, 2006).[4]

Notwithstanding the importance and relevance of these two definitions, both of them include political dimensions, relating implicitly to democratic accountability. While this is an important aspect of governance, the definition of governance used in this chapter abstracts from *political* dimensions. The key rationale for doing so is especially relevant within the context of the extensive breadth of diversity in the cultures, historic experiences and levels of development that countries in the Asia-Pacific region share. In addition, in view of the greater concern with development issues rather than political ones, in this chapter *governance* is framed in terms of how power is being *exercised* instead of how it is *acquired*. In the words of Fukuyama (2013), *governance* is rather about "a government's ability to make and enforce rules, and to deliver services, regardless of whether that government is democratic or not".

Indeed, the relevance of this apolitical definition stands out in the Asia-Pacific region, considering that several of the region's economies have recorded economic success at times when their political systems would not have been considered democratic. At the same time, other countries in the region historically have enjoyed more vibrant democracies for decades, including for instance India, yet have not always been governed or administered in the best way and have not been able to develop successfully.[5] These examples therefore serve to highlight that, regardless of whether one agrees or disagrees how power is *acquired*, authoritarian regimes can be well governed, just as the existence of democracy is neither necessary nor indeed sufficient – from a development point of view – to guarantee good governance and thus sustainable development. The focus is not on political arrangements but rather on the delivery of public services in any given arrangement.

1.2. Why is governance relevant?

Clearly articulating a definition of governance is important in order to disentangle conceptual issues: in this case, differentiating between how power is *exercised* and how power is *acquired*. Accepting that governance is important for development also requires a common understanding of the *transmission mechanism* through which governance affects developmental outcomes.

Governance is intrinsically linked to how the State is managed in terms of ensuring a good quality of life for all citizens and how authority and power are separated in order to achieve this goal (Fourie, 2006). Thus, one transmission mechanism is through the creation of a well-functioning legal framework. For instance, the positive relationship between measures of governance, such as *contracting and legal environments* or *property rights* and economic growth as well as higher national income levels, is robust. This may be because well-functioning institutions are generally required for the effective delivery of public services and because good governance is critical to enable institutions to function well (Hulme, Savoia and Sen, 2014).

Another transmission mechanism pertains to the mobilization and allocation of resources that can be used to foster development. This transmission mechanism is in fact a critical element for the achievement of the 2030 Agenda for Sustainable Development. Indeed, good governance in public sector financial management cannot be divorced from good governance of the State. Thus, while good *governance* and effective *institutions* contribute to better management of public finances, weak governance and poor institutional quality can adversely affect, for instance, the level of tax revenues. Corruption and ineffective bureaucracy not only can reduce government revenues but also can contribute to an increase in the size of the informal sector, eroding revenues further (Tanzi and Davoodi, 1997; Mahdavi, 2008; Gupta, 2007; Friedman and others, 2000).

Similarly, low institutional quality reduces public expenditure efficiency. For instance, while the negative impact of public health spending on child mortality is lower in countries with "good" institutions, public spending is also less effective in countries rated as very corrupt or having an ineffective bureaucracy. Higher corruption affects the composition of public spending and can result in a lower quality of public infrastructure (Tanzi and Davoodi, 1997; Rajkumar and Swaroop, 2008; Hessami, 2014). In this regard, weak governance and poor institutional quality represent significant risks to the achievement of the 2030 Agenda.

Specifically, in this chapter the role of governance to support sustainable development is analysed through its impact on public resource mobilization and expenditure efficiency, with reference to critical components of the Addis Ababa Action Agenda of the Third International Conference on Financing for Development.[6] For this purpose, the chapter is organized as follows: section 2 presents conceptual issues related to the measurement of governance, analysing trends in governance changes in the region and presenting mechanisms through which governance can affect economic, social and environmental development outcomes; in section 3, the impact of governance on tax revenues and public expenditure efficiency is dealt with; and section 4 presents policies that can be implemented to improve governance for better public resource mobilization and fiscal management.

2. GOVERNANCE: MEASUREMENT, TRENDS AND IMPACT ON DEVELOPMENT IN ASIA AND THE PACIFIC

This section contains an overview of conceptual issues regarding existing measures of governance, including databases which use both "subjective" and "objective" measures. It presents the indicators that are used to measure governance in this chapter and a discussion of key assumptions which support the usage of the Worldwide Governance Indicators database. In this section, trends and patterns in governance changes in the Asia-Pacific region over the past two decades are also analysed, which furnish a regional perspective of the changes in governance and the potential driving factors of governance changes that have been observed in the region. Finally, mechanisms through which governance can affect development are considered.

It is worth noting, however, that the relationship between governance and development is a two-way relationship, as discussed by Sundaram and Chowdhury (2012), Fukuyama (2008) and Aron (2000). In fact, while the literature emphasizes the importance of governance for development, better governance can also be the result of economic growth through the emergence of a middle class which seeks better institutions to safeguard their assets. Furthermore, a better educated population, while a result of the implementation of adequate policies, would also desire accountable and transparent institutions.

2.1. Conceptual issues in measuring governance

As the definition of governance is not universally agreed, its measurement is also a subject of discussion, as indicated by the availability of both *objective* and *subjective* measures of governance (Williams and Siddique, 2008). Objective indicators measure mainly the evolution and/or state of a political institution (democracy, dictatorship), the type of institutional regime, the occurrence of political instability and violence and the existence of executive constraints ("checks and balances"). Some popular databases containing these indicators are Gurr's POLITY database[7] (Gurr, 1974) and those of Beck and others (2001) and Henisz (2000). While there may be agreement on variables that are used as objective measures, the databases do not provide information on the quality of institutions. Instead, these indicators provide a narrow perspective of governance, and the scope of measurement is generally limited to executive and legislative offices. For this reason, this chapter does not use this category of indicators.

Subjective measures of governance are based on expert opinions and perception surveys. They attempt to go beyond the scope of objective indicators by integrating the computation elements related to the quality of bureaucracy and/or institutions and the rule of law (judicial branches of government). These indicators are generally compiled on the basis of experts' opinions, surveys, or composite indices which reflect experts' opinions on different subjects that are linked. In economic research, the following indices are most commonly used: institutional measures of the International Country Risk Guide; the Corruption Perception Index of Transparency International; and the Worldwide Governance Indicators developed by Kaufmann, Kraay and Zoido-Lobatón (1999). Other indices include, for instance, the Country Policy and Institutional Assessment of the World Bank, the Business Environment Risk Index (BERI) and the Freedom House index.

Since several available databases do not provide wide coverage of ESCAP member States, in this chapter the Worldwide Governance Indicators (WGI) database is used; however, it should be mentioned that their use is not without criticism (see box 3.1). Nevertheless, WGIs are used as governance indicators not only because they are the most widely used in the literature but also for pragmatic reasons, as *alternative and new* governance indicators have yet to be developed to address these drawbacks. In doing so, it is acknowledged that there is difficulty in testing the validity of WGIs, particularly as there is no universal definition of governance, as the quality of institutions is related to economic, political and cultural factors which have not been properly integrated into a single analytical framework (Fukuyama, 2013; La Porta and others, 1999), but rather have been considered separately in existing research.

2.2. Explaining trends in governance: a socioeconomic perspective

Given that the focus here is on exploring the relationship between governance, as defined in the previous section, development outcomes and fiscal management, only four of the six indicators of the WGI database are used. These indicators assess: (a) government effectiveness; (b) regulatory quality; (c) rule of law; and (d) control of corruption. According to Kaufmann, Kraay and Mastruzzi (2010):[8]

(a) **Government effectiveness** summarizes the perception of the quality of public and civil services, the degree of independence from political pressures, the quality of policy formulation and implementation and the credibility of a Government's commitment;

(b) **Regulatory quality** summarizes the perception of the capacity of the Government to formulate and implement policies and regulations that foster the development of the private sector;

(c) **Rule of law** summarizes the perception of the extent to which agents have confidence in and abide by the rules of society and in particular the quality of contract enforcement, property rights, the police and the courts, as well as the likelihood of crime and violence;

(d) **Control of corruption** summarizes the perception of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the State by elites and private interests.

Examining the data reveals that there are notable differences in governance among country groupings. At the global level, governance is considered highest in developed countries as a whole and is weakest in least developed countries. The quality of governance in the region's small island developing States is perceived

Box 3.1. Some limitations of the Worldwide Governance Indicators database

Several different databases have been used to derive the actual indicators of the Worldwide Governance Indicators (WGI) database. This is a drawback when using perception surveys, as responses are collected from different samples (foreign investors, domestic firms, or citizens) and sampling methods are heterogeneous. In addition, as the list of data sources has changed several times since the launch of this database in 1996, country comparison over time is difficult.

However, to overcome this issue, a "latent variable" approach is used to derive scores of governance using the different databases which analyse the same type of issue. Such a "latent variable method" generates a consistent data set by combining the information contained in different data sources into a single variable using data-driven precision-weighting mechanisms. Indeed, from a statistical point of view, it is better to use more information (that is, databases) than less.

WGI has also been criticized because there is a difference between perceptions of a phenomenon and its actual measurement (Sundaram and Chowdhury, 2012). Moreover, perceptions may be inaccurate and biased by different factors, such as the role or position of the interviewee in society, the ideological orientation of the interviewee and the level of development of the country or its recent macroeconomic performance. However, one can assume that errors are systematic and stable over time and that interviewees behave consistently over time, such that adjustments are made for past errors. Furthermore, in an environment characterized by the limited availability of information, perception plays an important role in decision-making. Indeed, the same could also be true for projections.

Finally, another criticism of WGI is that as there is no universal definition of "governance", as it cannot be measured directly and that using proxy variables is therefore valid. However, it is common practice to use proxy variables when measuring phenomena that cannot be directly observed or measured, and WGI falls into this category of indicators.

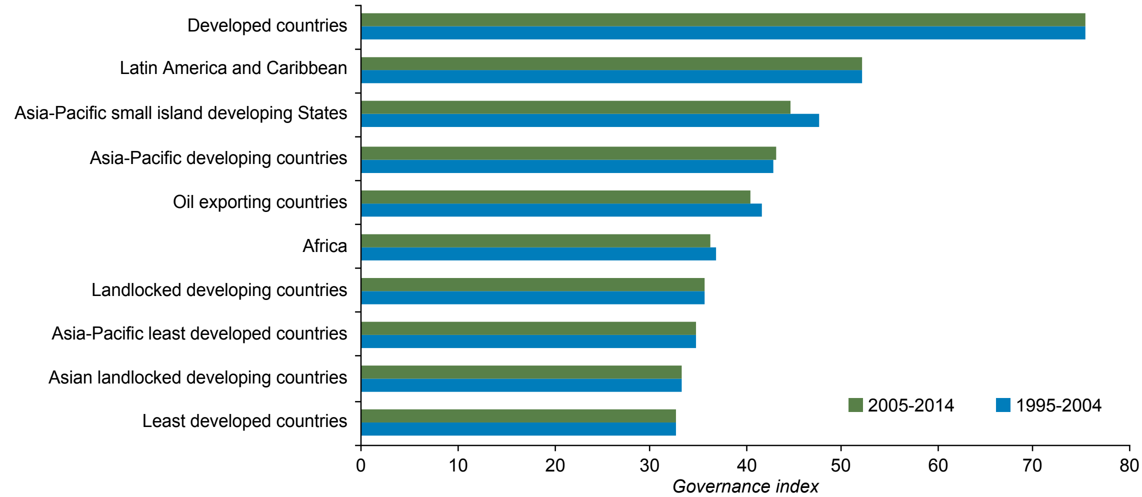
to be greater than in the region's developing countries. Moreover, while at the global level governance in landlocked developing countries is generally better than in least developed countries, the opposite is true in the case of the Asia-Pacific region. This may be due to the fact that 9 of the region's 12 landlocked developing countries are still undergoing transition from a centrally planned economy to one based on a dominantly market-based system, which has had a significant impact on the effectiveness of State institutions in these economies. In addition, in comparison with Africa, at least half the Asia-Pacific least developed countries are expected to graduate from the least developed country category by 2020, indicating that Governments have made efforts to improve health, education and income levels. In doing so, the likelihood that these countries will experience an expansion in the middle class has increased. This in turn has contributed to demands for better institutions and higher perceptions of better governance.

In terms of changes over the last two decades, perceived institutional quality has improved only marginally in the Asia-Pacific region. This situation is primarily due to marginal improvements of institutional quality in East and North-East Asia and in landlocked developing countries, particularly in North and Central Asia (see figure 3.1 and appendix 1 in the annex). In several Asia-Pacific small islands developing States, deterioration in governance can be observed in all components of governance, while in Asia-Pacific least developed countries, deterioration in governance can be observed across all components, excluding control of corruption.

Differences in levels of institutional quality and changes over time can be explained by a host of economic, social and political factors. Some theories suggest that cultural factors are also relevant (La Porta and others, 1999; Treisman, 2000).[9] Regarding economic factors, it has been suggested that economic development, associated with higher income and education levels, goes hand in hand with greater demand for effective governance and better institutions. As incomes increase or people accumulate more assets, they expect better protection of their property and expect their Government to be more efficient in the delivery of public services or goods (La Porta and others, 1999; Treisman, 2000).

On the supply side, empirical analyses show that higher relative civil service wages contribute to reduced corruption in low-income countries (Van Rijckeghem and Weder, 2001). Furthermore, an educated population is more likely to notice government abuses and to identify government inefficiencies (Svensson, 2005). Similarly, higher levels of education among civil servants could,

Figure 3.1. Governance in different regions of the world: perception based index



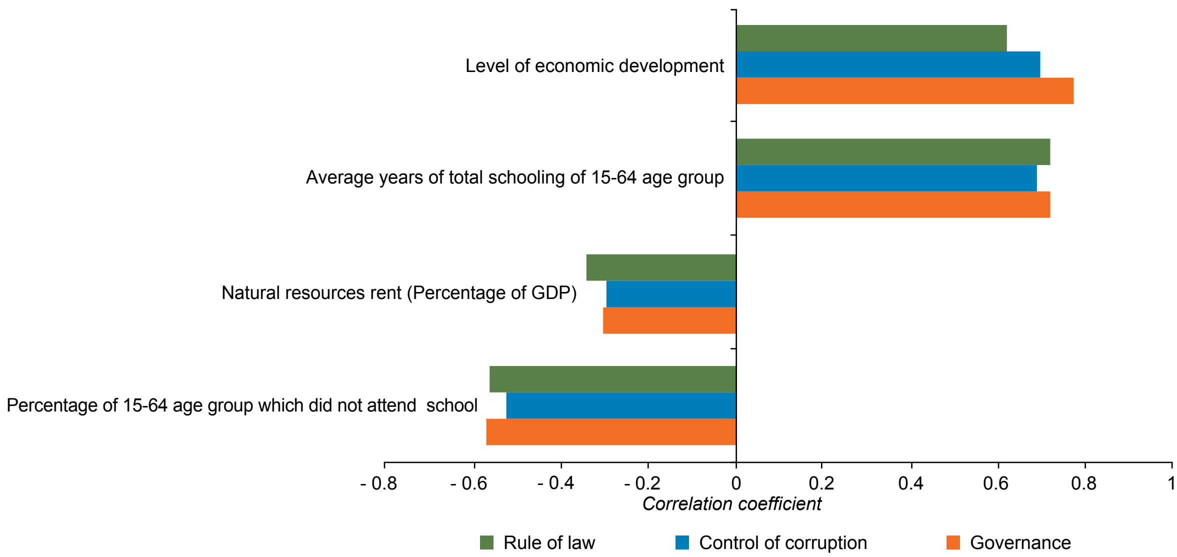
Source: ESCAP, based on Worldwide Governance Indicators (WGI) from Kaufmann, Kraay and Mastruzzi (2010). WGIs have been rebased to 100. High values of the indices represent a good perception of institutional quality. The index *governance* is the average of the four WGIs which are analysed in this chapter. Regional indices are based on simple averages.

for instance, contribute to a reduction in corruption (Van Rijckeghem and Weder, 2001). In figure 3.2, it is confirmed that in Asia-Pacific countries, better governance is associated with higher levels of development, at least in terms of income and education.

At the same time, however, as economies develop and become more complex, public officials have more opportunities to make private gains from their decisions due to rent-seeking behaviour (Bardhan, 1997). Moreover, a smaller market size of new products may require granting monopoly rights or franchises, which in turn provides opportunities for decisions that could result in private gain. Similarly, privatization and large infrastructure projects are also channels through which corrupt behaviour and the occurrence of kickbacks can be observed.

Similarly, the existence of natural resource rents can erode

Figure 3.2. Correlation between governance and potential socioeconomic drivers in Asia and the Pacific



Source: ESCAP, based on data from the World Bank, World Development Indicators (WDI), and the Worldwide Governance Indicators (WGI) from Kaufmann, Kraay and Mastruzzi (2010).

Note: The index *governance* is the average of the four WGIs which are analysed in this chapter.

the overall institutional quality of a country by contributing to higher levels of corruption (Anthonsen and others, 2012; Kolstad and Soreide, 2009). The adverse relationship of natural resource rents with corruption is related to the facts that the market structure of natural resources is often oligopolistic and the high degree of "regulatory discretion" provides grounds for the implementation of policies which favour private interests at the cost of public welfare. Researchers have also highlighted that the origin of public revenues (tax versus non-tax revenues) shapes government institutions and the "professionalization" of the administration. This is because a high level of tax revenues, relative to non-tax revenues, calls for greater accountability of Government in the management of fiscal policy. In the Asia-Pacific region, the availability of natural resources, measured as natural resource rent as a percentage of GDP, is negatively correlated with governance indicators (figure 3.2).[10]

In terms of social factors, there is clear evidence that inequality affects governance and vice-versa (Chong and Gradstein, 2007; You and Khagram, 2005). Theoretical models and empirical analyses show that the quality of institutions can affect inequality, but that the reverse is also possible: "[…] income inequality and poor institutional quality may reinforce each other […]" (Chong and Gradstein, 2007, p. 455). For example, well-connected and rich people who benefit from poor governance and weak institutions are typically not willing to support institutional change and improve governance in order to safeguard their own interests. At the same time, poor people are left with little choice but to change their social norms to survive within actual institutional settings and governance frameworks. This type of situation results in entrenchment of existing arrangements, making it all the more difficult to bring about positive change (You and Khagram, 2005). However, empirical evidence on the importance of this channel is lacking in the Asia-Pacific region. From the perspective of drawing out policy lessons, it may be useful to focus more on the direction from governance to inequality rather than the other way around.

Differences in the origin of legal systems can also affect rule of law and government effectiveness as they shape the degree of protection of private property owners and determine enforcement mechanisms of the law (Treisman, 2000; La Porta and others, 1999). Two main categories of law in this regard are *common law* and the *civil law* system. Common law systems, which have British origins, are more likely to protect private property owners as they were originally developed by parliament and property owners to protect against expropriation or other adverse regulations emanating from a sovereign. Moreover, judges that work in common law systems are more likely to adhere to procedures even if their actions can have negative outcomes on the hierarchy (Treisman, 2000, p. 403). Civil law systems have been developed mostly for State-building and for the provision of "just" solutions to disputes from the State's perspective. The effectiveness of civil law systems can be improved through the existence of a professional bureaucracy (La Porta and others, 1999, pp. 231-232).

To summarize, governance has marginally changed in the Asia-Pacific region over the last two decades, and these changes have been driven due to different factors, among which the following can be cited: economic factors related to the economic development of a country, its natural resource endowment and the implementation of specific sets of policies; social factors, such as the degree of polarization in a society; and political factors, which refer to State-building and the origins of legal systems. While these changes have been marginal, in this chapter it is posited that their impacts on development outcomes and public resource management were significant. In the sections below, an attempt is made to explain how governance affects development outcomes, before assessing in the subsequent section the impact of governance on public resource management.

2.3. The impact of governance on development outcomes

Better governance and effective institutions have direct and indirect effects on the achievement of inclusive economic expansion and the transformation of an economy – Sustainable Development Goals 8 and 9, both being necessary but not sufficient conditions for the achievement of the 2030 Agenda for Sustainable Development. At a broader level, governance affects the capacities of an economy to develop and have access to a skilled labour force, to improve investment prospects and to innovate and thus increase levels of productivity. All three aspects contribute to prospects of sustained economic expansion and thus effective pursuit of the 2030 Agenda.

Weak institutions and poor governance adversely affect the level of investment by creating operational inefficiencies and encouraging risk-averse behaviour. For instance, corruption is perceived as an additional cost and an unpredictable tax by investors, both domestic and foreign, which does not automatically lead to desired results (Wei, 2000). Furthermore, large differences between corruption levels in host and home countries can be an impediment to attracting investment (Brada, Drabek and Perez, 2012; Bénassy-Quéré, Coupet and Mayer, 2007; Habib and Zurawicki, 2002) by defining the entry mode of foreign investors and thus reducing their participation. It is further argued that higher levels of corruption enable investors to develop skills to negotiate with corrupt officials, thus resulting in a higher probability of investment in a country with high corruption. Investors from countries with higher levels of corruption therefore tend to consider countries with a high level of corruption as adversely affecting the quality of investments in the process. As a result, positive spillover effects from foreign investment inflows are less likely to occur, and it becomes more difficult for countries to transform their economies, to industrialize and to foster innovation by using FDI inflows as an instrument (Sustainable Development Goal 9).

In addition to corruption, the rule of law, property rights protection and regulatory quality also affect investors' decisions through, for instance, cases of expropriation without compensation and unfair practices in the application of laws, among others. These elements are particularly important for access to credit, which is a major issue for small and medium-sized enterprises in the Asia-Pacific region (ESCAP, 2016e). Investment is reduced because of such credit-market imperfections. Credit-market imperfections, such as asymmetry of credit information and limitations of legal systems, negatively affect the capacity to collect defaulted loans or protect debtors' assets (Barro, 2000). Furthermore, corruption biases the application of rules towards "well-connected" people and thus increases the risk premium faced by "less-connected" people, especially poor people. As a result, potential investments cannot be realized and the productivity of firms is reduced. Figure 3.3 shows the importance of better governance for the access of firms to loans in Asia and the Pacific.

The quality of governance and of institutions also influences the innovative capacities of a country by creating an enabling environment that equips different stakeholders from academia, research institutes, industry and government to collaborate and coordinate their actions. Effective institutions, transparent and enforceable rules and associated administrative infrastructure are required to facilitate the interactions of these stakeholders. Rule of law, which governs the management of property rights, protection of intellectual property, settlement of disputes, clarification of existing regulations and usage of public funds should be concise, transparent and enforceable. In this context, protection of property rights and the existence of an efficient bureaucracy have been found to be important determinants of a higher number of patents in most technologically advanced economies. In the Asia-Pacific region, Malaysia and Singapore are examples of countries that have appropriate regulatory frameworks and a high number of patents per capita. Figure 3.4 shows that a strong rule of law is positively correlated with the number of patents granted and with innovation capacity.[11]

The impact on poverty of governance and the quality of institutions is partly a result of misallocation of public resources and market inefficiencies. Thus, with poor governance and weak institutions, a Government's decision to invest or to hire is more likely to be based on favouritism than public welfare considerations (Breton, 2004). The same tends to be the case when allocating public resources. In addition, as investment prospects are constrained due to these inefficiencies, sustained expansion of the economy to accommodate a rising population remains below potential. Consequently, there is less investment or misdirected investment in the economy and fewer jobs for poor people.

Furthermore, ineffective governance and weak institutions can exacerbate income inequality by making it more difficult for poor and less-well-connected people to easily borrow and invest. Weak enforcement of rules and high asset ownership inequality also contribute to higher risk premiums and lower value of collateral (Gupta, Davoodi and Alonso-Terme, 2002).

Some researchers have also argued that there is an inverted-U shape relationship between governance and inequality: the political Kuznets curve (Chong and Calderon, 2000). Initially, an improvement in institutional quality in developing economies results in higher inequality due to the size of the informal sector. Thus, as institutional quality improves, new entrants into labour markets tend to benefit, which in turn translates into a reduction of the relative income of people working in the informal sector (Andres and Ramlogan-Dobson, 2011).

Empirical analyses also confirm the role of governance in the efficiency and effectiveness of public spending on health and education. For instance, Rajkumar and Swaroop (2008) found that higher public health spending is reflected in lower mortality rates while higher public educational expenditure is linked with increases in primary attendance rates in countries with good governance, whereas public spending on health and education has virtually no impact in countries with weak governance. In addition, Sen (2014) found that efficient and well-functioning governmental systems in the region positively influence social development outcomes relative to poorly governed ones by increasing the mobilization of domestic resources, such as taxes and increasing the effectiveness of social spending. For instance, in China 40 per cent of respondents to a survey question claimed that corruption was the main source of poor-quality public services.[12]

Weak institutional quality affects women more than men. One reason is that women in their role as primary caretakers of family members need to access public services more often than men, which exposes them more often to issues related to corruption and weak rule of law (UNIFEM and UNDP, 2010). Figure 3.5 shows that good governance is negatively correlated to gender inequality.

Corruption can affect access to public services through *grand corruption* and *petty cash corruption* by, respectively, affecting the allocation and usage of public resources and by denying access to medical services, such as those related to birth delivery or maternity drugs. Misuse or embezzlement of public resources can also reduce access to safe water and sanitation, both representing health issues and long-term means to increase women's productive capacities and household income as women and girls have water-gathering responsibilities in rural areas in many countries, and this can prevent them from studying or being involved in other productive activities in the long run.[13]

The existence of regulations can reduce the environmental footprint of economic activities if the regulations are enforced and the Government regularly monitors environmental degradation (Dasgupta and others, 2002). For instance, in the case of deforestation, weak enforcement of regulations can be fostered by a high level of corruption; such a situation will also affect land use planning if the adopted plans are not sustainable and not adequate for the welfare of communities. Corruption can also occur when local officials deal with illegal encroachment on forest areas (Diarra and Marchand, 2011; Kaika and Zervas, 2013). Thus, corruption can even push the turning point of the environmental Kuznets curve to

Figure 3.3. Domestic credit extended to the private sector and institutional quality in the Asia-Pacific region, 2014

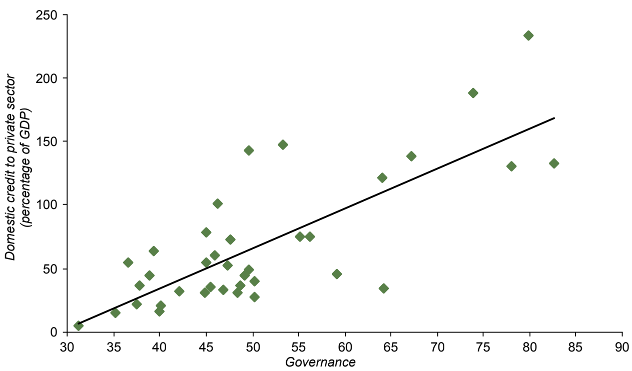


Figure 3.4. Patents granted (by country of origin) and the rule of law, 2014

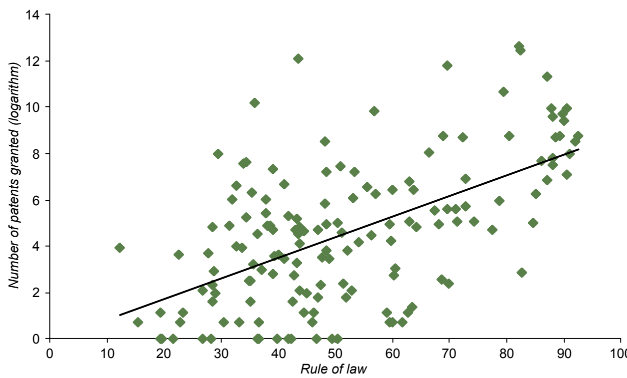


Figure 3.5. Governance and gender inequality index, 2005-2014

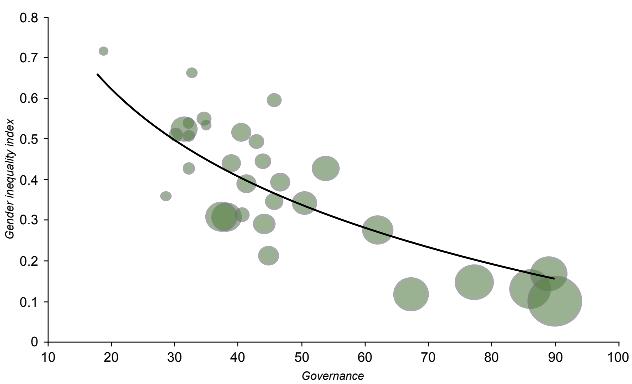
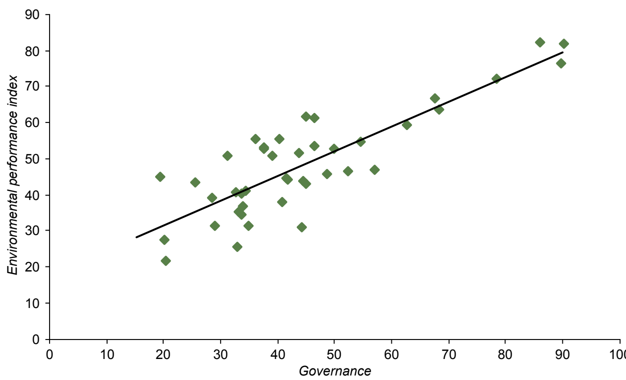


Figure 3.6. Governance quality and environmental performance, 2005-2014



Source: ESCAP, based on data from the World Development Indicators (WDI) database; the Worldwide Governance Indicators (WGI) are from Kaufmann, Kraay and Mastruzzi (2010), the International Monetary Fund Research Department; and A. Hsu and others, *The 2016 Environmental Performance Index* (New Haven, Connecticut, Yale University, 2016). Available from www.epi.yale.edu (accessed on 17 November 2016).

Note: The size of bubbles represents PPP-adjusted per capita GDP at constant 2011 international United States dollars. The environmental performance index, which is compiled by Yale University, ranges between 0 and 100; high levels of this index correspond to lower environmental degradation. High values of the gender inequality index mean that inequality is high between men and women. WGIs have been rebased to 100. High values of the indices represent a good perception of institutional quality. The index *governance* is the average of the four WGIs that are analysed in this chapter.

higher levels of income, requiring more years to reduce environmental degradation.[14]

Since governance is weak in developing countries, environmental regulations are more likely to be less stringent and not strictly enforced (figure 3.6). This situation contributes to the development of pollution-intensive industries in developing countries (*displacement hypothesis*) through international trade or through multinational enterprises which are heavy polluters if hosting countries have low standards (*pollution haven hypothesis*) (Dinda, 2004; Kaika and Zervas, 2013; Mukherjee and Chakraborty, 2015). Moreover, there are also indirect channels through which governance can affect environment outcomes, such as technological progress (Dinda, 2004; Kaika and Zervas, 2013). In fact, innovation and technological transfer positively contribute to the reduction of environmental degradation, according to the Porter hypothesis (Porter and van der Linde, 1995), while empirical findings show that poor governance can adversely affect innovation. Researchers argue that changes in environmental degradation have also been driven by the development, adoption and diffusion of cleaner technologies (Dasgupta and others, 2002; Dinda, 2004; Kaika and Zervas, 2013). Whether such technologies affect products or processes, Porter and van der Linde (1995) suggested that environmental regulations and the requirement to comply with them have resulted in several innovations in the case of the United States. However, weak governance can impede the adoption and development of new technologies by not allowing the training of qualified staff or by discouraging necessary investment.

In this section, mechanisms have been discussed through which governance affects sustainable development, and these can be summarized in two key points: (a) misallocation of resources (public and private investments and innovation); and (b) weak enforcement of regulations (environmental blueprint). Because the efficiency of public expenditures has transversal importance, the section below is focused on this channel by shedding some light on how the efficiency of public expenditures is affected and by providing insights on how the mobilization of public resources is also affected by weak governance quality.

3. GOVERNANCE AND FISCAL MANAGEMENT

The quality of governance is a critical factor for a country's development process and overall public welfare. Yet, in many developing countries people suffer from the impact of dysfunctional governance systems. This impact can take many forms. For instance, weak governance can result in higher levels of crime and political instability as well as adverse economic, social and environmental outcomes. Governance failures can also undermine fundamental human rights, particularly as weak governance often translates into the inability of Governments to provide their populations with even minimal levels of vital public services.

The aim of this section is to focus on the extent to which governance acts as an enabler to achieve better development outcomes through improved fiscal management, where *fiscal management* refers to the ability to effectively manage expenditures and raise adequate levels of tax revenues. The underlying hypothesis is that fiscal management is an important transmission mechanism through which governance affects development outcomes. Thus, effectively and efficiently allocating public expenditure across public services, such as education and health services, clean water and sanitation and infrastructure, affects the availability and quality of services. Similarly, taxation is an important policy tool which can help improve governance through the provision of valuable information and greater accountability.

While drawing a link between fiscal management and development outcomes, it is also analysed in this section why some countries may be doing better than others in terms of effective management of public expenditure and efficiently raising domestic resources.

3.1. Governance and effective public expenditure management

The impact of governance on public expenditures in terms of improving development outcomes can take the form of influencing the amount of public expenditure allocated for development purposes, its composition and/or how efficient it is in achieving desired outcomes.

As already stated in a previous issue of the *Survey*: "By improving governance, resources can be saved and utilized to improve access to and the quality of education and health services. More effective implementation of checks and balances and greater decentralization in the provision of education and health services can help to check the wastage and leakage of resources" (ESCAP, 2013).

While weak governance can take many forms, the one that has been studied extensively in the literature is *corruption*. It has been argued that corruption affects the total amount of public expenditures, that is, it leads to more public expenditures (Tanzi, 1998). However, it has also been shown that corruption does not have a significant impact on the level of public spending (Mauro, 1995). In any case, greater public expenditure does not necessarily imply that it is devoted to improve development outcomes. The overall effect of corruption on the size of total public expenditure thus appears to be ambiguous, at least from a theoretical point of view. Empirically, figure 3.7 confirms the weak relationship between governance and the level of total public expenditures.

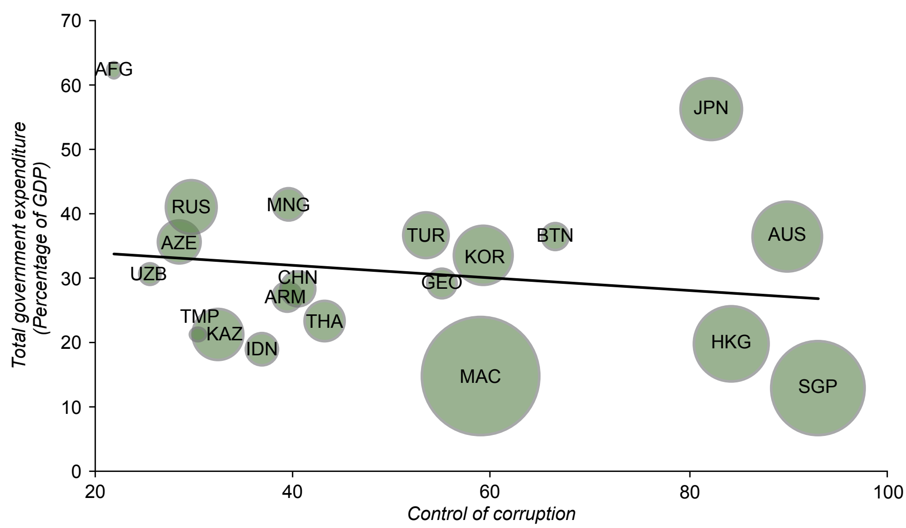
On the other hand, there is ample evidence that governance has impacts on the composition of public expenditure. For instance, corruption has been shown to distort the structure of public spending by reducing the portion of social expenditure that is allocated to education, health and social protection (Tanzi, 1998). Figure 3.8 confirms the existence of such a pattern in Asia-Pacific countries, as countries with less corruption tend to have a greater share of health expenditure but less defence expenditures.

Less social expenditure also usually goes hand in hand with greater expenditure on such items as law and order, fuel and energy subsidies, and defence (Delavallade, 2006; Gupta, de Mello and Sharan, 2000) and on infrastructure and procurement (Tanzi, 1998). Moreover, it is also worth noting that, while public expenditure on infrastructure increases, particularly with regard to larger projects (Bardhan, 1997), with higher levels of corruption (that is, weaker governance), the productivity of this expenditure declines as operational and maintenance expenditures are low and the quality of infrastructure is generally poor (Tanzi and Davoodi, 1997).

Governance not only affects the size and composition of tax expenditures, but also the *efficiency* of expenditure. As such, better governance may have positive impacts on the link between measures of government expenditure and desirable development outcomes. For instance, better governance has been found to increase the beneficial impact of public health spending on child mortality rates, and it makes public spending on primary education more effective in increasing primary education attainment (Rajkumar and Swaroop, 2008). In contrast, Kaufmann, Kraay and Zoido-Lobatón (1999) and Kaufmann, Kraay and Mastruzzi (2004) showed that poor governance indicators have a strong negative impact on infant mortality. Indeed, when countries are poorly governed, public spending has hardly any impact on health and education outcomes (Rajkumar and Swaroop, 2008).

Measures of public sector performance and public sector efficiency can be used to evaluate how effective public expenditure is in terms of delivering public services. *Public sector performance* measures how well a country is doing in terms of socioeconomic indicators, such as education and health-related indicators, relative to other countries. This enables cross-country examination of differences in efficiency irrespective of, for instance, levels of income in a country. In contrast, *public sector efficiency* relates government expenditure to socioeconomic indicators

Figure 3.7. Control of corruption and total government expenditure in Asia-Pacific countries, 2012

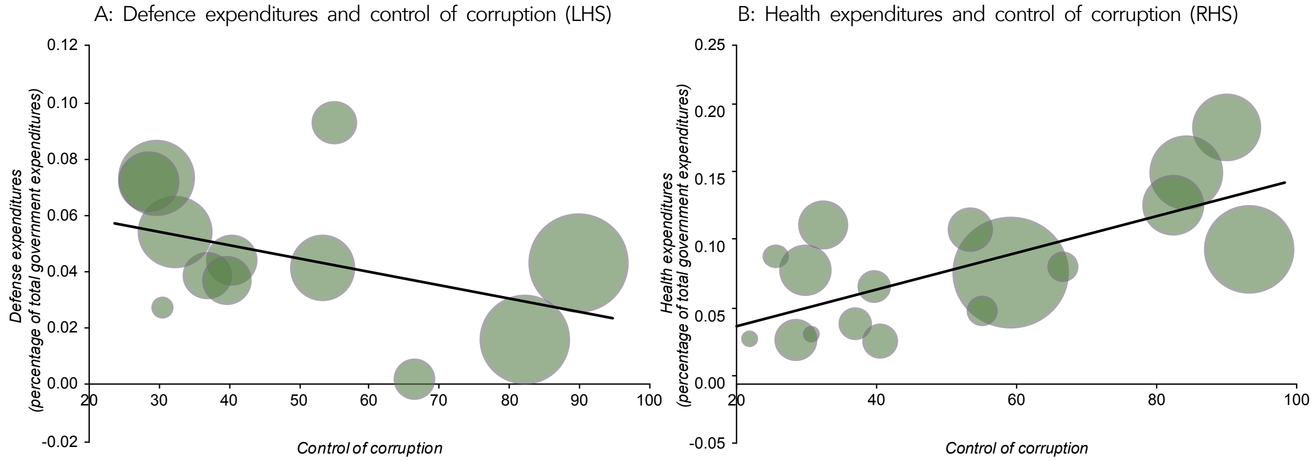


Source: ESCAP, based on data from the World Development Indicators and the Worldwide Governance Indicators databases.

Note: The size of the bubbles represents PPP-adjusted per capita GDP at constant 2011 international United States dollars.

Abbreviations: AFG = Afghanistan; ARM = Armenia; AUS = Australia; AZE = Azerbaijan; BTN = Bhutan; CHN= China; GEO = Georgia; HKG = Hong Kong, China; IDN = Indonesia; KAZ = Kazakhstan; JPN = Japan; KOR = Republic of Korea; MAC = Macao, China; MNG = Mongolia; RUS = Russian Federation; SGP = Singapore; THA = Thailand; TMP = Timor-Leste; TUR = Turkey; and UZB = Uzbekistan.

Figure 3.8. Defence expenditures, health expenditures (in percentage of total government expenditures) and control of corruption in Asia-Pacific countries



Source: ESCAP, based on data from the World Development Indicators and Worldwide Governance Indicators databases, and the IMF Government Statistics database.

Note: The size of bubbles represents PPP-adjusted per capita GDP at constant 2011 international United States dollars. The abbreviations LHS and RHS mean left-hand side and right-hand side respectively.

that are assumed to be targeted by public spending. This measure enables highlighting which countries are doing well by relating development outcomes to costs.

Table 3.1 highlights scores in public sector *performance* in education and health as well as public sector *efficiency* in education and health in the Asia-Pacific region.[15] It is possible that education and health outcomes receive spillover effects from each other. For example, with longer life expectancy, people may value education more as it is more likely to pay off in the longer term. Similarly, better-educated populations may be more aware of personal and public health issues and invest more in personal health. Conceptually, countries' performance in education and health can also be influenced by their performance in terms of the other Sustainable Development Goals. However, due to unavailability of expenditures data on many other such Goals, only education and health efficiency are discussed here.

Four indicators are provided to assess public sector performance in education: (a) children out of school (percentage of primary school-age population); (b) gross enrolment ratio in primary schools; (c) gross enrolment ratio in secondary schools; and (d) gross sex ratio in secondary school enrolment. For the performance in health, five indicators are considered: (a) prevalence of undernourishment (percentage of total population); (b) mortality rate of children under age 5 (per 1,000 live births); (c) maternal mortality ratio (per 100,000 live births); (d) births attended by skilled health staff (percentage of total births); and (e) life expectancy at birth.

Performance scores and efficiency scores range from 0 to 100, the latter figure being the "best" score. For performance scores, a value of 100 would mean that the country has achieved the highest levels of development outcomes. An efficiency score which is equal to 100 would mean that the country would be delivering the development outcomes by efficiently using the resources available.

As can be observed from table 3.1, in countries with available data, public sector efficiency and public sector performance have generally improved over time. This means that in the sectors analysed – education and health – public expenditures have contributed to higher levels of outcomes, and that, in comparison with other countries, many Asian countries have been using their resources more efficiently.

An interesting result from table 3.1 is related to the high level of public sector performance both in education and health in many countries, excluding the case of least developed countries in the health sector and Pakistan for both sectors. However, to achieve the objectives of the 2030 Agenda, policymakers should be aware that public performance analysis needs to be broadened through integration of qualitative indicators. For instance, additional education indicators could measure other aspects of well-being, such as access to education facilities that are child, disability and gender sensitive, or they could measure the capacity of the educated labour force to innovate or to meet the demands of the private sector (minimum proficiency levels in reading and mathematics, and information technology skills).

Table 3.1. Public sector performance and public sector efficiency in education and health

Country	Public sector performance in education		Public sector performance in health		Public sector efficiency in education (DEA)		Public sector efficiency in health (DEA)	
	2005-2009	2010-2014	2005-2009	2010-2014	2005-2009	2010-2014	2005-2009	2010-2014
East and North-East Asia								
China	..	..	87.9	90.8	..	..	95.6	97.3
Japan	90.2	90.4	99.7	100.0	98.6	96.4	100.0	100.0
Mongolia	83.5	87.1	75.8	81.2	89.8	92.4	87.2	91.6
Republic of Korea	89.3	88.3	96.0	97.1	96.1	93.3	100.0	100.0
North and Central Asia								
Armenia	78.4	..	90.6	91.8	89.5	..	97.5	99.9
Azerbaijan	81.1	84.9	84.2	88.9	92.7	94.2	100.0	100.0
Georgia	84.8	91.5	90.9	90.9	95.6	100.0	98.3	100.0
Kazakhstan	89.4	91.1	87.9	90.4	100.0	98.7	95.4	97.9
Kyrgyzstan	83.4	85.6	85.3	88.0	89.8	90.8	93.0	94.2
Russian Federation	82.3	87.2	91.0	92.7	90.9	93.2	96.5	97.4
Tajikistan	78.6	81.2	67.4	71.3	88.6	88.5	86.1	86.3
Pacific								
Fiji	84.8	83.9	89.0	89.7	90.8	90.3	95.7	96.6
Samoa	81.5	81.5	84.1	85.7	88.2	..	91.7	91.7
Vanuatu	..	..	79.5	85.7	..	..	89.2	92.8
Australia	96.0	96.5	98.9	99.4	100.0	99.7	100.0	100.0
New Zealand	92.5	91.4	98.3	98.8	97.2	95.5	99.1	99.2
South and South-West Asia								
Afghanistan	..	..	34.2	45.6	..	..	63.1	67.7
Bangladesh	71.9	73.2	53.1	59.8	86.5	87.2	77.9	85.3
Bhutan	68.0	78.6	..	..	77.2	85.3	..	..
India	75.1	79.9	59.7	64.7	86.6	88.1	81.5	83.2
Iran (Islamic Republic of)	84.3	87.2	89.8	91.2	90.6	94.2	96.5	97.9
Maldives	..	..	86.9	91.9	..	..	92.2	95.0
Nepal	..	87.1	51.3	66.9	..	92.5	71.4	81.9
Pakistan	51.2	53.1	51.4	57.6	67.3	67.7	80.3	83.1
Sri Lanka	..	86.6	83.1	85.0	..	100.0	93.4	95.9
Turkey	80.7	83.9	88.6	92.0	92.0	..	94.5	96.5
South-East Asia								
Cambodia	72.2	..	58.4	73.9	100.0	..	79.6	89.1
Indonesia	81.5	84.5	72.3	79.8	92.2	92.6	91.6	95.8
Lao People's Democratic Republic	64.8	74.3	42.4	55.4	78.8	83.7	69.4	81.5
Malaysia	..	..	92.2	92.6	..	..	98.5	99.7
Philippines	78.1	84.9	70.4	75.0	90.5	92.6	87.0	89.6
Thailand	79.0	..	89.1	91.2	87.8	..	94.8	95.5
Timor-Leste	72.5	86.4	..	50.7	80.8	91.5	..	77.6
Viet Nam	..	..	82.6	86.9	..	..	92.1	94.0

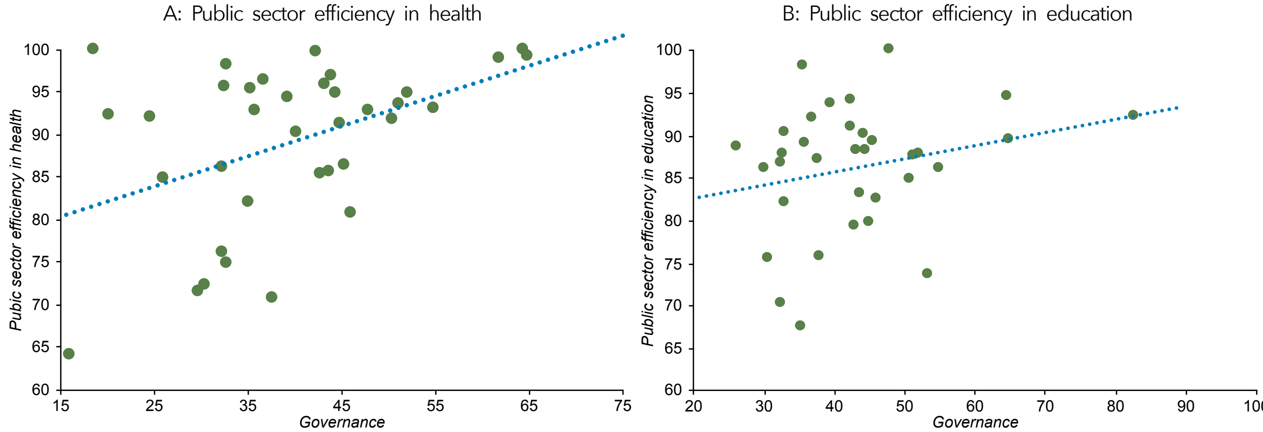
Source: ESCAP analyses based on various data sources (for details, see appendix 2 in annex).

Note: DEA = data envelopment analysis (for details on the method, see William W. Cooper, Lawrence M. Seiford and Joe Zhu, eds., *Handbook on Data Envelopment Analysis*, International Series in Operations Research & Management Science (New York, Springer, 2011). Two dots (..) indicate that data are not available or are not separately reported.

Additional health indicators could measure achievements in reproductive health for adolescents, or in the reduction of the occurrence (or treatment) of communicable and non-communicable diseases.

Among the potential determinants of public expenditure efficiency, governance seems to play an important role. Thus, figure 3.9 shows that there is a positive and significant correlation between governance and public expenditure efficiency. Furthermore, according to ESCAP analyses, between 2005 and 2014, the impact of better governance and effective implementation of policies on the enhancement of public sector efficiency ranges from 0.34 per cent in the Russian Federation to 57 per cent in Georgia in the health sector, and from 0.15 per cent in Timor-Leste to 32 per cent in Indonesia in the education sector (for more details, see figure 3.10 and appendix 3 in the annex).

Figure 3.9. Correlation between public sector efficiency in health and education and governance, 1995-2014



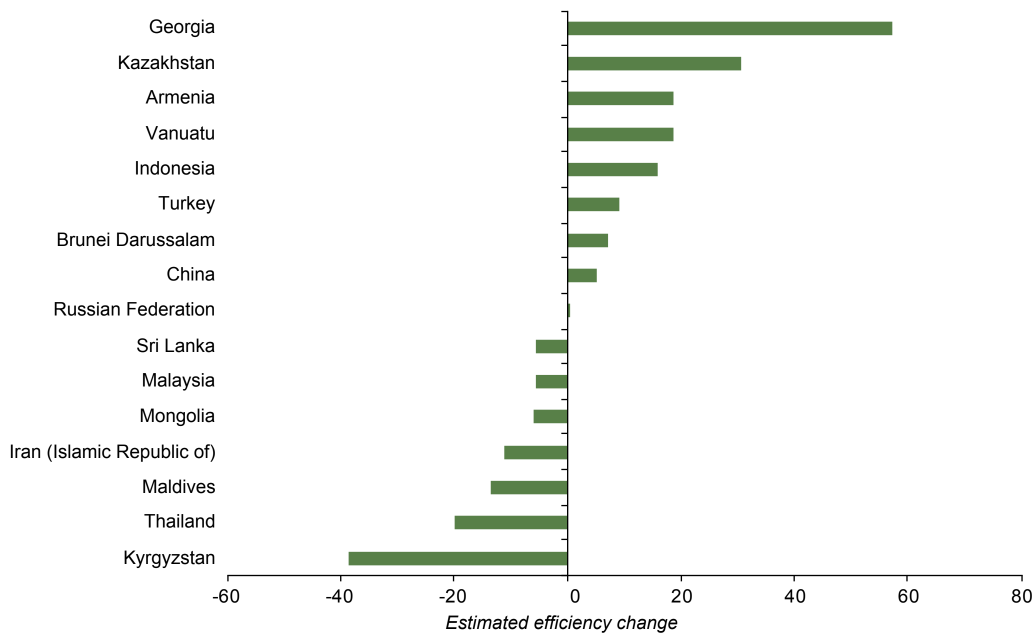
Source: ESCAP based on data from various data sources (for details, see appendix 2 in annex).

To increase the efficiency of public expenditures, one step could be to ensure that expenditures reach beneficiaries more effectively, for instance by reducing contact between the beneficiaries and public officials and transferring payments directly to the recipients. This approach has been quite successful in reducing leakages in several economies (see box 3.8). Another way could be through reforms of the policy-design process, as is the case for gender-responsive budgeting (see box 3.2). However, such an approach would require more effort in the production of data disaggregated by sex. More details on potential policies are provided in section 4.

3.2. Governance and tax revenues

The impact on tax revenues is another important channel through which governance affects fiscal management. In the Survey for 2014, it was demonstrated that in many economies in the region tax revenues are quite low, barely reaching double-digit rates, in terms of GDP. This situation is a cause for concern as, without sufficient resources, Governments are unable to provide the required expenditure for their economies to develop. Indeed, while estimates of tax-to-GDP ratios of about 25 per cent of GDP are generally assumed to be required

Figure 3.10. Average impact of governance change on efficiency change in health between 2005 and 2014 in selected Asia-Pacific economies (in percentage of total change in efficiency)



Source: ESCAP analyses based on various data sources and econometric analyses (for details, see appendix 3 in annex).

Box 3.2. Gender-responsive budgeting to make public expenditure more efficient

What is gender-responsive budgeting?

Building on the principles of good governance related to transparency, efficiency and accountability, gender-responsive budgeting serves as a strategy to promote the goal of gender equality and gender mainstreaming by paying attention to the raising of revenue and the spending of government finances. Specifically, this process entails: (a) an analysis of the gender-differentiated impacts of the budget; and (b) a process of adjusting budgetary decision-making and priorities in accordance with the differential needs of women and men.

Gender-responsive budgeting is essentially both a political and technical undertaking with the potential to be a powerful tool for social transformation and eliminating inequality.[a] It is a tool for introducing policies on gender equality and eliminating discrimination in society.

Examples from Asia and the Pacific

While the Asia-Pacific region has made progress in recent decades in terms of developing laws and policies on women's rights, limited financing remains a key obstacle to implementation. Many countries continue to allocate less than 1 per cent of their national budget to their national women's machinery, face financing gaps as high as 90 per cent for implementing national action plans on gender equality and receive minimal amounts of foreign development assistance which targets gender equality as a main objective.[b]

Notwithstanding these obstacles, innovative strategies have also emerged from around the region, and these provide the basis for useful lessons to be learned from national experiences. For example, in **Indonesia**, the process was initiated through a Presidential Instruction in 2000 on gender mainstreaming, accompanied by the inclusion of gender indicators in the national development plan and the planning and budgeting policy (2009-present). This applies to national as well as subnational levels of government. Gender-responsive programmes were developed based on comprehensive gender analyse reviewed by the National Planning Board and the subsequent production of a gender budget statement comprising a gender situation analysis, objectives, action plan, activities and associated analyses budgetary allocations, outputs, performance indicators and anticipated impacts (Costa, Sharp and Elson, 2010). So far, of 38 ministries, 28 have adopted gender-responsive planning and budgeting, with 33 provinces and 20 per cent of all districts/municipalities also following this approach (Supiandi, 2016). The key success factors of Indonesia's application of gender-responsive budgeting include: (a) its institutionalization at both national and local levels, with engagement of women and senior male public servants and office holders; (b) the multisectoral coordination and planning that is enabled by the Inter-Ministerial Steering Committee; (c) strategic partnerships with a range of actors; and (d) budget statements that include qualitative and quantitative information (ESCAP, 2014b).

Another good practice is evident in the **Philippines**, where the current gender and development budget policy has evolved from a series of legislative mandates, including the Magna Carta of Women (1999), which requires all government agencies to allocate at least 5 per cent of their budgets to address gender issues, with the intention for that 5 per cent to influence the remaining 95 per cent. In addition, agencies are required to produce a "gender and development" plan and budget, as well as a report on an annual basis. Technical support and capacity-building assistance are provided to agencies in this regard by the Philippine Commission for Women (PCW) through training, workshops, advisory services and written guidelines. Aside from PCW, oversight agencies for the implementation of the aforementioned budget policy include the Philippine Commission on Women; Department of Budget and Management; Department of the Interior and Local Government; National Economic and Development Authority; and Commission on Audit. Moreover, one unique feature of gender-responsive budgeting in the Philippines is the implementation of gender audits as part of the mainstream audit processes, accompanied by strict measures for non-compliance. The Government of the Philippines also has taken steps to promote gender-responsive budgeting at the subnational level, including through the provision of technical assistance in conducting gender analysis of the socioeconomic situations of local government unit areas and integrating sex-disaggregated data into local planning and budgeting (ESCAP, 2014b; UN Women, 2016).

Overarching challenges faced by countries in the region in advancing gender-responsive budgeting initiatives include issues related to the effectiveness of institutional mechanisms, limited leadership and capacity of actors, as well as contextual factors, including budget transparency and the political climate. The utility of gender-responsive budgeting in these countries could be further enhanced through more extensive disaggregation of data by sex, increased investment in the capacity of decision-makers as well as the engagement of a broader range of stakeholders, including civil society (ESCAP, 2014b; UN Women, 2016).

[a] For details, see Oxfam, Action Aid, Care and Women's Organisations Network of Myanmar. A case for gender responsive budgeting in Myanmar. Available from http://policy-practice.oxfam.org.uk/publications/English-#.

[b] For additional information, see UN Women (2016). Gender responsive budgeting in the Asia-Pacific region: a status report. Available from www2.unwomen.org/-/media/field%20office%20eseasia/docs/publications/2016/12/grb_report-for-web-s.pdf?vs=1520.

to enable a country to develop, few countries in the region have ratios that exceed 20 per cent (see figure 3.11). Indeed, in this regard, it was demonstrated in the Survey for that year that, given their economic structures, there is significant potential to increase tax revenues in many economies in the region.

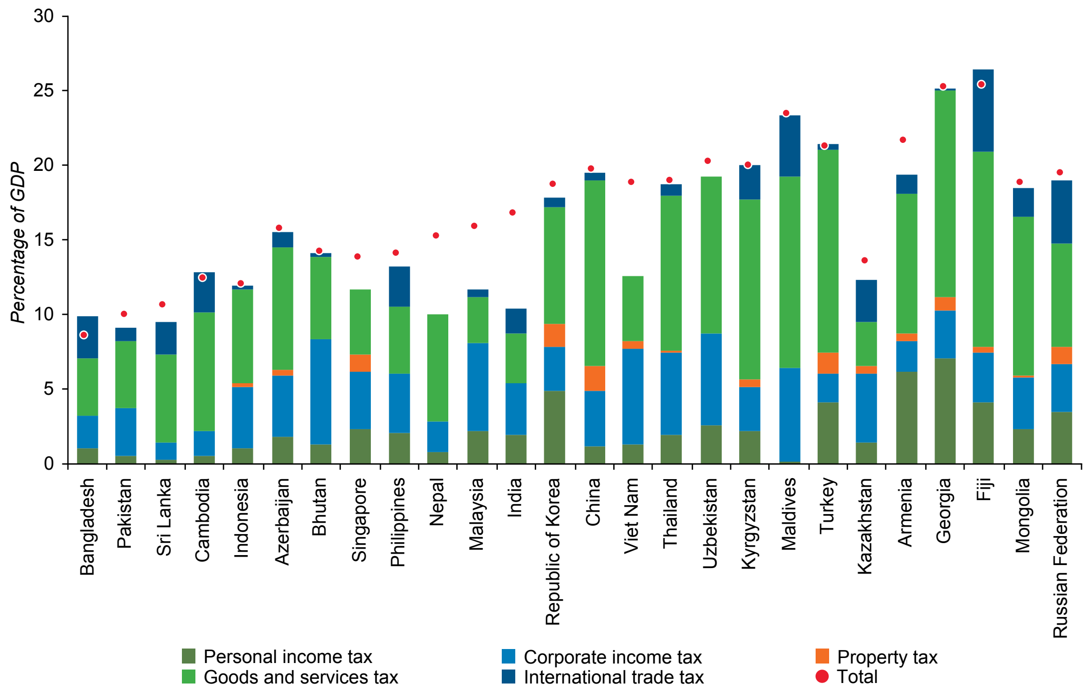
Clearly, tax performance, that is, the ability to raise tax revenues, differs among countries for several reasons. Important determinants of tax revenue include a number of variables, such as the per capita GDP, the sectoral composition of output, the degree of trade and financial openness, the degree of informality in the economy, the ratio of foreign aid to GDP and the ratio of overall debt to GDP, to name but a few.

An additional important factor why tax revenues are low in many economies in the region may be due to weak governance (see figure 3.12). One transmission mechanism in the analysis of the effect of governance on revenues that has been intensively analysed in the literature is *corruption*. For instance, Tanzi and Davoodi (1997) and Friedman and others (2000) provided evidence that countries with high levels of corruption tend to have lower collection of tax revenues in relation to GDP. As pointed out by Tanzi (1998), factors that contribute to or encourage fiscal corruption include complicated tax laws, excessive discretionary power vested in tax administrators as well as the necessity for frequent interactions between taxpayers and tax officials, weak legal and judicial systems, lack of accountability and transparency in the tax administration and low salaries in the public sector. As a result of these factors, corrupt officials may collect bribes in exchange for alleviating the tax burdens of taxpayers offering bribes. The officials may also be tempted to complicate procedures for taxpayers who refuse to participate in the bribery scheme, thus forcing them out of business or into the informal sector.

Indeed, higher corruption is associated with lower revenues of all types, except for non-tax revenues (Tanzi and Davoodi, 2000). Corruption also has a larger negative impact on direct taxes compared with indirect taxes. In particular, individual income tax collection declines with corruption, which suggests that individuals may be able to evade taxation by negotiating their tax liability with corrupt officials. This is worrying as low levels of taxation may translate into either suboptimum levels of public expenditure or into higher fiscal deficits, with negative impacts on the levels of debt.

There are of course a number of reasons why individuals may seek to evade taxation, and how corruption has impacts on tax collection. For instance, tax systems that are complex and fragmented tend to encourage corruption as tax auditors may have more leeway to use

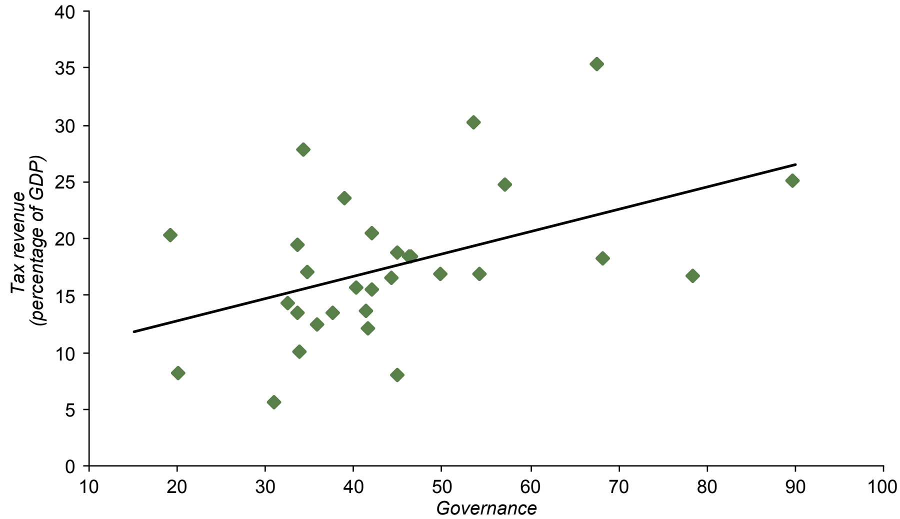
Figure 3.11. Composition of tax ratios in Asia and the Pacific, 2013-2015



Source: ESCAP, based on IMF Government Finance Statistics and World Bank World Development Indicators databases and CEIC Data.

Note: For change in direct-indirect tax ratio, earliest and latest years vary significantly by country. Discrepancies can be explained by the usage of different data sources.

Figure 3.12. Tax revenues and governance in Asia and the Pacific, 2010-2014



Source: ESCAP, based on data from the World Development Indicators and the Worldwide Governance Indicators databases.

"flexible powers" to determine the applicability of laws and determine tax dues. Also, while low wages of tax administrators is a factor that also fosters corruption, high tax rates may encourage tax evasion (Ajaz and Ahmad, 2010). Indeed, increasing the tax rates may lead to overall lower revenues for a Government if tax administrators are corrupt (Sanyal, Gana and Goswami, 2000).

In highlighting the link between corruption and tax evasion, causality is a concern. Thus, while tax evasion provides fertile grounds for corruption, it can also be argued that corruption drives tax evasion, that is, the existence of corrupt tax officials creates a breeding ground for tax evasion. In looking more closely at the causality between corruption and evasion, Alm, Martinez-Vazquez and McClellan (2016) demonstrated that causality indeed runs from corruption to evasion. Thus, the corruption of tax officials is a statistically and economically significant determinant of tax evasion. In this regard, reducing corruption would improve revenue performance, particularly of low-income and middle-income countries (Gupta, 2007). This could be done by reducing the opportunities for corruption in tax administration, changing the incentive structure for tax officials and ensuring that tax administrations are honest.

Corruption is only one element that may explain why tax revenues are low. In such situations, it is only a part of the broader issue of governance and public management. Governance also has impacts on the manner in which public revenues are raised in other ways. For instance, *tax morale*, which drives tax payments, is affected by perceptions of governance. Thus, while taxpayers will generally be willing to pay taxes if they perceive that the level of public services that is offered is commensurate with their tax bills (Bird, 2004), they will shirk their tax responsibilities if they see a mismatch between tax liabilities and services.

Low tax morale may also be linked to the perception that evasion of taxes is widespread. One reason may be the existence of a large informal sector. Thus, if taxpayers perceive that a large number of workers evade taxes by working in the informal sector, which is usually by definition untaxed, the incentives to move their own activities to the informal sector and thereby evade taxes may be higher (Torgler, 2003; 2005). For instance, in the United States and Europe tax morale has been found to explain more than 20 per cent of the total variance in the size of the shadow economy (Alm and Torgler, 2006). In linking the argument of tax morale to institutional quality, improving social institutions, through such channels as enhancing tax morale, voice and accountability, the rule of law, government effectiveness and its regulatory quality, and reducing corruption, all have been shown to lessen the potential incentive to "go underground" (Torgler and Schneider, 2009). In such cases, tax morale and societal institutions in general matter quite significantly in determining the size of the shadow economy; institutional quality thus seems to be a key component in understanding the informal sector.

In Asia and the Pacific, ESCAP calculations show that governance affects domestic resource mobilization efforts. Among developing economies, the level of tax revenues in Bhutan, India, Nepal, Pakistan and Thailand have been adversely affected by the deterioration of governance during the period 2005-2014 (table 3.2, column 1). The contribution of poorer governance to lower tax revenues during this period in these seven economies ranges from 8 per cent in Pakistan to about 21 per cent in Bhutan,

Table 3.2. Estimated contribution of governance to changes in tax revenues between 2005 and 2014 in selected Asian economies (in percentage of total change)

Country/area	Governance	Control of corruption	Rule of law	Government effectiveness	Change in tax revenue (2005-2014)[a]
Afghanistan	11.6	2.9	6.7	-	1.8
Armenia	6.4	2.2	0.5	7.8	7.3
Azerbaijan	1.9	-0.3	0.8	3.5	-2.8
Bangladesh	12.9	15.8	15.2	-12.8	1.0
Bhutan	-20.8	31.1	17.9	-46.2	5.0
Cambodia	-3.8	-7.0	2.7	-1.0	6.7
China	3.0	12.8	3.5	2.4	1.1
Georgia	12.5	6.7	5.7	9.9	11.4
India	-17.1	-9.6	-14.1	-7.2	0.2
Macao, China	0.6	-0.9	-1.2	2.1	-
Malaysia	-5.9	-13.3	22.8	5.9	13.6
Mongolia	-2.3	-1.7	-2.4	-2.2	1.4
Nepal	-12.1	-6.2	-7.5	-12.4	6.7
Pakistan	-8.0	-5.1	-0.8	-21.6	0.4
Philippines	3.5	-1.2	0.3	16.8	1.17
Republic of Korea	31.9	7.2	10.6	38.9	-3.2
Russian Federation	0.2	-4.2	4.0	3.8	0.1
Singapore	7.6	-12.8	16.5	16.6	2.3
Sri Lanka	-1.5	-6.1	-7.0	41.4	-3.7
Thailand	-14.6	-5.7	-16.6	-8.2	-

Source: ESCAP, based on different econometric analyses and data from World Development Indicators and the CEIC database.

[a] Central tax revenues as percentage of the gross domestic product at current prices. Dash "-" means not significantly different from zero.

meaning that low governance explains up to 8 per cent of Pakistan's low tax revenues and 21 per cent of those in Bhutan. Negative developments in governance offset the increase in tax revenues in India, Nepal and Thailand. The quality of policy formulation and implementation (summarized as "government effectiveness" in table 3.2) seems to be one of the most important components of governance affecting domestic resource mobilization as, for many countries, this component contributes the most (positively or negatively) to tax revenue changes.

Inequality in the distribution of wealth and income has also been argued to be strongly connected with public views on how the fiscal system performs in terms of addressing social objectives, such as fairness, social justice and redistribution (Bird, 2004). For instance, if tax systems are deemed regressive and thus a cause of income inequality, the result may be a lower level of trust in institutions and eventually lower tax morale.

Another important aspect relating to public resources and governance pertains to State-owned enterprises. Since the 1980s, privatization of State-owned enterprises has contributed to raising significant resources in many economies, while in South Asia the experience with privatization has been more limited, particularly in India, despite the notable inefficiency of such enterprises (see Gupta, 2007). This was not the case in East Asia, where privatization proceeds between 1998 and 2008, for instance, reached $230 billion, or about 30 per cent of total global proceeds. Indeed, China has consistently been among the top privatizers over the last five years. It was the second largest privatizer in 2009 and the first in 2013 and 2014, with aggregate privatization deals totalling in value more than $40 billion in both 2013 and 2014 (Estrin and Pelletier, 2015).

However, as is highlighted in box 3.3, the importance of generating resources through privatization needs to be carefully considered against the need to ensure that certain services continue to be provided by the public hand. As such, their perceived inefficiency, which is often quoted as one of the reasons for privatization, is instead a problem of governance.

The above analyses suggest that governance changes can significantly affect tax revenue levels and the efficiency of public expenditures. Government effectiveness and corruption have been found to play critical roles in the fiscal management of Asia-Pacific countries. For tax revenues, the quality of governance affects the tax morale of taxpayers, incentives to operate in the formal sector and the level of tax officials' compliance with relevant laws. As mentioned previously, factors that contribute to or encourage fiscal corruption include complicated tax laws, excessive discretionary power vested in tax administrators as well as the necessity for frequent interactions between taxpayers and tax officials, weak legal and judicial systems, lack of accountability and transparency in the tax administration and low salaries in the public sector. While tax morale can be negatively affected by a low level of public expenditure efficiency,

Box 3.3. Reforming corporate governance in State-owned enterprises for sustainable development

Despite the large amount of resources that have been generated and that can potentially still be obtained, privatization of State-owned enterprises is not without criticism. Indeed, the role of privatization in generating resources needs to be carefully balanced against the rationale for disinvestment.

Economic arguments for privatization usually are centred upon certain principals – agent theories, property rights and the economics of public choice. For instance, in terms of property rights, privatization has often been driven by the perceived need to improve the efficiency of the enterprise. One reason for this is that managers of State-owned enterprises, who are often public officials, do not usually have a claim to any profits and thereby no incentive to increase efficiency, innovation and higher profitability. Indeed, State-owned enterprises are usually not penalized for excess costs or for misjudging public needs, but can perform rather poorly year after year and still receive funding. By transferring decision rights – and also the risk of bankruptcy – to the private sector, managers have a greater incentive to generate value as they receive in return a claim to a portion of the profits generated. Public choice theory highlights the fact that public managers may be subject to political pressures or overly influenced by political election cycles. Privatizing thus removes these pressures by driving a wedge between managers and politicians (Boycko, Shleifer and Vishny, 1996).

Besides the impact of privatization, there is a range of considerations relating to the process of privatization. These concern how the Government implements the privatization process – for instance, whether the policy is effectively communicated to the public, whether the programme is correctly sequenced with the creation of regulatory capacity and whether effective corporate governance is created for privatized entities. Indeed, neither public nor private managers will act always in the best interests of their shareholders. Privatization will thus be effective only if private managers have incentives to act in the public interest, which includes, but is not limited to, efficiency. At the same time, while State-owned enterprises have traditionally operated as quasi-monopolies, privatization has often gone hand in hand with deregulation to improve the competitiveness of the market, for instance in the case of telecoms and electricity.

However, generating financial resources through privatization can lead to industry and regulatory structures that have a large social cost. Indeed, investors are often willing to pay more for a company that is granted a de facto or de jure monopoly for particular products or services than they would for a company without such an exclusive hold on products or services in a market. Such monopolies, however, have the effect of raising consumer prices. Indeed, Governments preoccupied with maximizing the value of privatization have often been tempted to include privatization monopoly rights or regulatory guarantees that suppress competition. Doing so, however, is a short-sighted policy with high social welfare costs. Indeed, it is surprising that private participation in infrastructure for water continues to be promoted despite poor results in developing countries (Tan, 2012). Moreover, for similar reasons (that is, increasing prices) the sale of ports and electricity infrastructure and the opening of vocational education to private companies have also caused the public to lose faith in privatization and deregulation.[a] It has not helped either that Governments usually end up selling the profitable State-owned enterprises and keeping the most poorly performing ones (see Estrin and Pelletier, 2015).

[a] For more information, see www.smh.com.au/business/privatisation-has-damaged-the-economy-says-accc-chief-20160726-gqe2c2.html.

the quality of governance can also affect the latter by shaping the structure of budget and reducing public welfare. For instance, corruption has been shown to distort the structure of public spending by reducing the portion of social expenditure that is allocated to education, health and social protection. Better governance has been found to increase the impact on child mortality rates of public health spending, and it makes public spending on primary education more effective in increasing the attainment of primary education. In the next section, policy options are discussed that can be used to improve the quality of governance for effective fiscal management, knowing that significant public reforms should be replicable throughout the public administration at different managerial levels.

4. POLICIES TO IMPROVE GOVERNANCE FOR BETTER FISCAL MANAGEMENT

The discussion in the preceding sections clearly showed that governance has an important role in improving both development outcomes and the management of fiscal resources. Among factors which shape the capacity of Governments to exercise power to deliver public services, government effectiveness and control of corruption have been found to significantly improve mobilization of domestic revenues and to efficiently spend public resources.

According to the Committee of Experts on Public Administration of the United Nations Economic and Social Council, improvement in the quality of governance relies particularly on enhancement of transparency and the strengthening of accountability. The United Nations Convention against Corruption,[16] which was adopted on 31 October 2003, also recognizes transparency as a tool to prevent corruption. In fact, both factors reduce the incentive for government officials and public service beneficiaries to be involved in unlawful activities. The Committee of Experts on Public Administration defined accountability as "holding elected or appointed officials charged with a public mandate responsible and answerable for their actions, activities and decisions". It went on to state: "Without *transparency*, that is, unfettered access to timely and reliable information on decisions and performance, it would be difficult to call public sector entities to account".[17]

Figure 3.13 presents a conceptual framework of the policy analysis discussed below. It shows that transparency and accountability (*output*) can be improved and strengthened by ensuring production and access to key data and information, developing governmental mechanisms that are related to monitoring, evaluating and auditing policies and actions, and creating inclusive institutions where public service beneficiaries can exchange with the Government (*key activities*). E-government, decentralization and fiscal reforms can contribute to the implementation of these activities as a means of implementation. While such public sector reforms can be perceived as general, through an improvement of tax morale, they can have a significant positive impact on mobilization of domestic revenues, efficiency and structures of government expenditures.

The discussion below is focused on policies that have been or could be implemented to improve transparency and to strengthen accountability in public administration in charge of tax revenue or the execution of development-related expenditures. While the focus is mainly on formal institutional mechanisms, the existence of informal institutional settings is also acknowledged as they have a significant impact on the design and setting of formal institutions (United Nations, 2015). The section presents case studies and policy options for key activities and means of implementation in the above-mentioned areas of public administration.

4.1. Improving the production of and access to data and information

To address issues related to transparency and accountability, the pertinent data sets and information should reflect the compliance of government officials with rules and ethical values, inform beneficiaries and potential relevant stakeholders and contribute to the design of effective evidence-based policies.

The existence of information on income and assets of government officials and the possibility for citizens to have access to that information can help address issues related to transparency and accountability. This would enable the detection and prevention of corrupt

Figure 3.13. Analytical framework of improving governance for better fiscal management

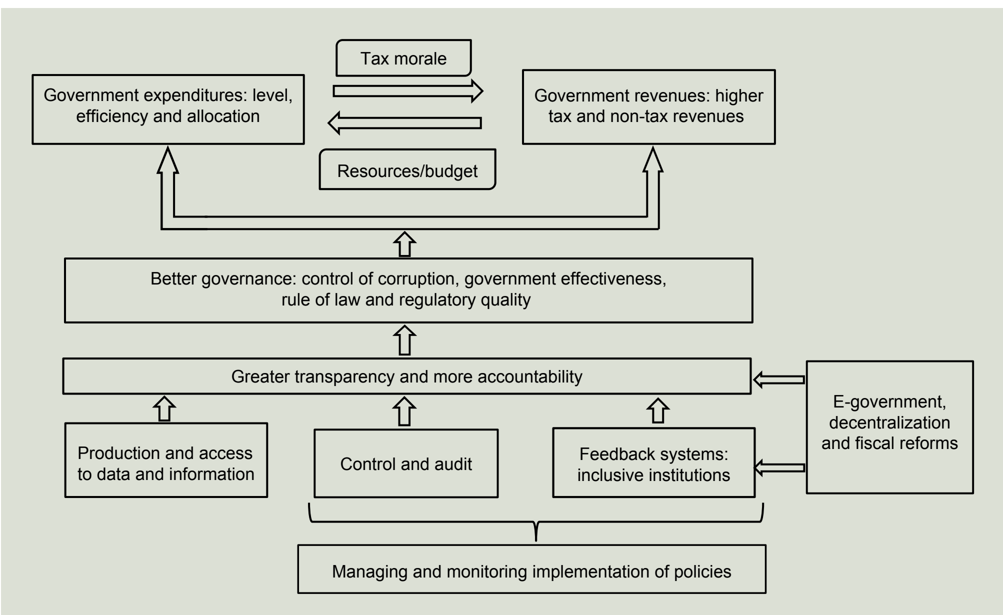
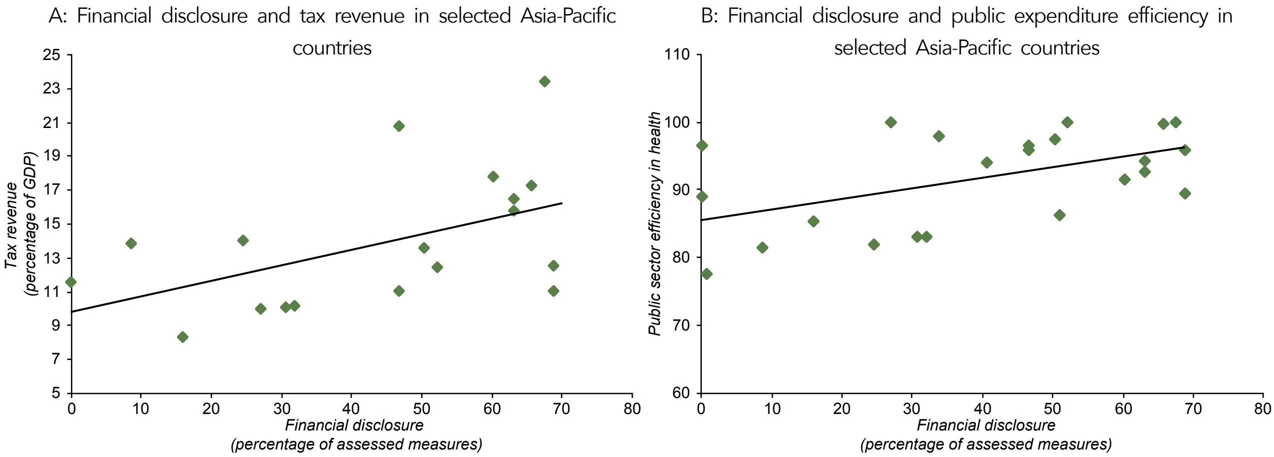


Figure 3.14. Financial disclosure, tax revenue and government expenditure efficiency, 2010-2014



Source: ESCAP, based on data on financial disclosure from the Public Accountability Mechanisms Initiative of the World Bank Governance and Public Sector Group (available from http://data.worldbank.org/data-catalog/public-accountability-mechanisms); and data from the World Development Indicators database.

behaviours and conflicts of interest and help increase the integrity of civil servants as well as public trust in them (World Bank, 2012a). As shown in figure 3.14, countries with legal instruments for financial disclosure as well as income and asset disclosure are better equipped to fight against corruption, to have a better institutional framework and to have higher tax revenues as well as higher public expenditure efficiency. For this purpose, the United Nations Convention against Corruption stresses the role of an income and asset disclosure system.

Such a system needs an institutional framework with a specific entity being responsible for the compilation, verification and release of related information. However, several Asia-Pacific countries do not have the institutional capabilities or the legal instruments to ensure the compliance of government officials at different levels. On the basis of the framework which is used to assess the capacity of a country to address issues related to conflict of interest and income and asset disclosure (see appendix 5 and appendix 6 in annex), table 3.3 shows that the percentage of policies set by countries range from zero to 80 per cent for conflict of interest and from zero to about 70 per cent for financial disclosure, including income and asset disclosure. In comparison with the global average of 43 per cent of measures for conflict of interest, in more than half of the selected Asia-Pacific countries the number of policies is lower than the global average. For financial disclosure, it is about half the global average.

A regional analysis of the depth of policies which support financial disclosure shows that several Asia-Pacific countries require public officials at different levels to declare their financial assets. However, three areas require further improvement: public access to financial declaration of public officials; coverage of disclosed items; and monitoring and oversight of implementation of such policies. In comparison with non-ESCAP States, the region lags behind in all three areas (see figure 3.15, panel A). The examples of Georgia and Kyrgyzstan are discussed in box 3.4, which highlights the importance of these factors.

Several ESCAP countries have introduced policies to address potential conflicts of interests in public administrations, such as codes of conduct or laws regulating restrictions on conflict of interest at different levels of the administration. However, functions related to the monitoring and oversight and sanctions (figure 3.15, panel B) need to be strengthened, especially when compared with the ones operating in such countries as the United Kingdom of Great Britain and Northern Ireland and the United States of America.

Government resources are typically used for consumption of investment expenditure, including wages, transfers to subnational entities, State-owned enterprises or households and other current expenses to support the delivery of public services. However, the execution of the budget associated with each of these categories of expenditures presents risks associated with their usage by public officials in terms of inefficient and ineffective allocation. Controlling and reducing these risks, through an increase in transparency during the procurement process, can improve the management of public funds and their impact on beneficiaries of public services.

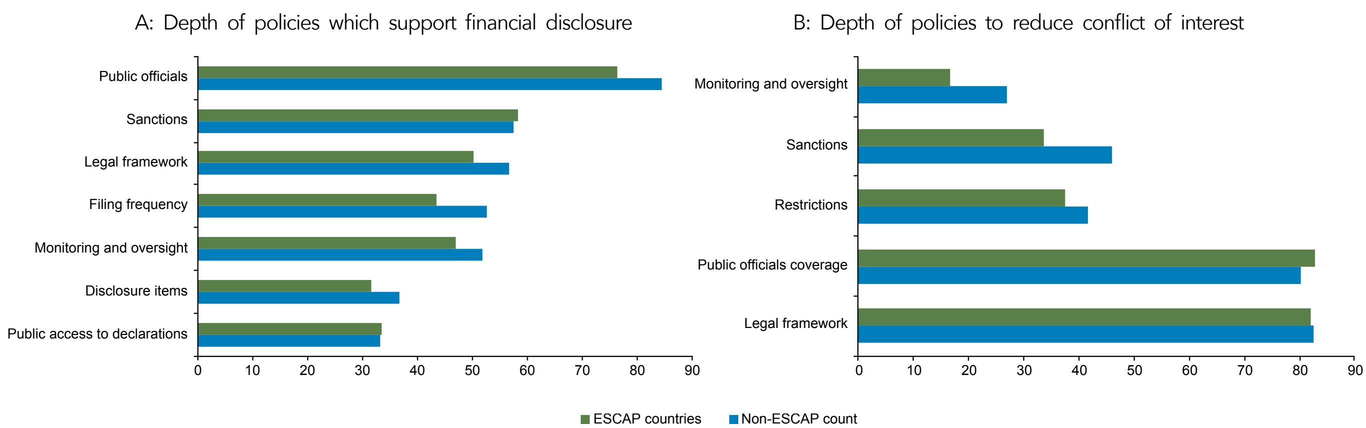
Information on the availability of resources received by various government units responsible for the delivery of public services and public access to key fiscal information remain thorny issues in several countries in the region

Table 3.3. Depth of policies and measures used to manage conflicts of interest and financial disclosure in selected Asia-Pacific countries

Countries	Conflict of interest	Financial disclosure
Armenia	38.9	65.6
Azerbaijan	50.5	52.1
Bangladesh	36.8	16.0
Fiji	0.0	0.0
Georgia	61.1	67.5
Indonesia	47.4	68.7
India	46.3	30.7
Japan	26.3	27.0
Kazakhstan	49.5	33.7
Kyrgyzstan	36.8	63.2
Cambodia	30.5	0.0
Lao People's Democratic Republic	33.7	8.6
Sri Lanka	8.4	46.6
Mongolia	25.3	60.1
Nepal	34.7	24.5
Pakistan	51.6	31.9
Philippines	80.0	68.7
Palau	32.6	69.9
Papua New Guinea	41.1	51.5
Russian Federation	36.8	50.3
Solomon Islands	58.9	46.6
Tajikistan	48.4	50.9
Timor-Leste	20.0	0.6
Tonga	10.5	4.3
Turkey	26.3	46.6
Uzbekistan	33.7	0.0
Viet Nam	64.2	40.5
Vanuatu	41.1	63.2
Global average	**43.0**	**42.3**

Source: ESCAP, based on data on financial disclosure (2012) and conflict of interest (2012) from the Public Accountability Mechanisms Initiative of the World Bank (http://data.worldbank.org/data-catalog/public-accountability-mechanisms).

Figure 3.15. Depth of policies related to financial disclosure and conflicts of interest



Source: ESCAP, based on data on financial disclosure (2012) and conflict of interest (2012) from the Public Accountability Mechanisms Initiative of the World Bank (http://data.worldbank.org/data-catalog/public-accountability-mechanisms). Details on the content of each item are available in appendix 6 in the annex.

Box 3.4. Income and asset declaration, governance and public fiscal management in Georgia and Kyrgyzstan

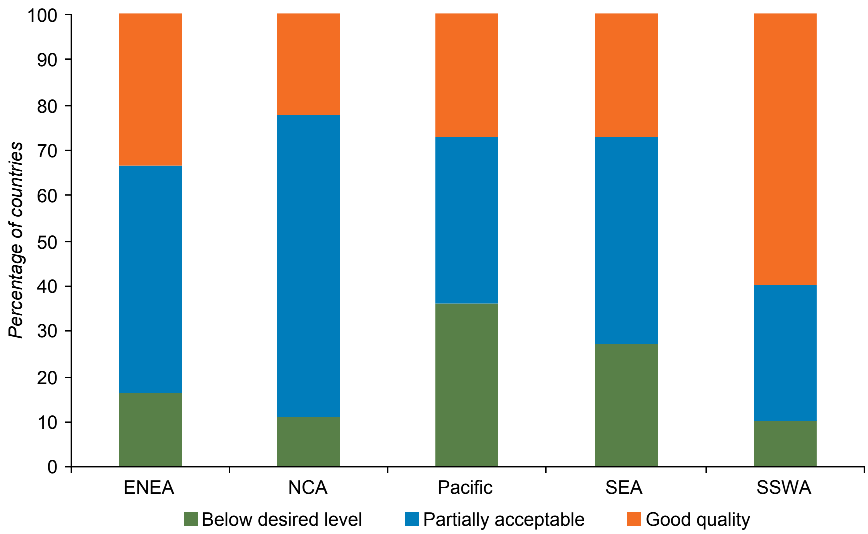
To improve governance, the Government of Georgia in 2010 launched an online asset declaration system. With the Civil Service Bureau as the implementing agency, government officials are required to file, on an annual basis, their asset declarations, and interested stakeholders are able to search those declarations on the website by using such search variables as name, surname and organization (United Nations, 2014). Within 48 hours of the submission of the declaration, the latter is made available to the public free of cost. Results from this reform can be discerned from improvement in indicators that assess corruption in the country (see appendix 1). Figure 3.10 shows that this change in governance has contributed to almost 60 per cent of the change recorded in public expenditure efficiency in Georgia during the period 2005-2014, and the data in table 3.2 would suggest that this contribution reached almost 13 per cent for the change in tax revenues.[a]

In Kyrgyzstan, a framework exists that enables the compilation of income and asset declarations; however, sanctions do not exist for public officials who do not comply with the income and asset declaration requirements. Furthermore, the income and asset declarations system is paper-based, and the agency responsible for managing this system, the Civil Service Agency, is not allowed to deal with content verification. Finally, only selected elements of the income and asset declarations are publicly available, thus limiting the scope for citizens to detect false reporting (World Bank, 2012a). While several reforms are being prepared by the Government with the support of development partners, figure 3.10 shows that public expenditure efficiency could have been higher during the period 2005-2014.

[a] For details, see http://csb.gov.ge/en/asset-declarations.

(figure 3.15), even though these policies have yielded positive results in the case of Georgia, the Republic of Korea, Samoa and Singapore. Figure 3.16 presents key variables of an assessment of public expenditure frameworks in selected Asia-Pacific countries. This figure presents scores by specific components of the fiscal framework and by subregion. Scores range between one (low rate) and four (high rate). Furthermore, according to the Financial Management Information Systems (FMIS) and Open Budget Data Global Dataset, when information is published, the quality of the published government financial data is evaluated as "partially acceptable" in most countries, particularly in North and Central Asia (figure 3.16).

Figure 3.16. Status of the quality of published government financial data in developing countries in Asia and the Pacific



Source: ESCAP, based on data from the FMIS and Open Budget Data Global Dataset (version 2.3, 2 January 2017).

Abbreviations: ENEA = East and North-East Asia; NCA = North and Central Asia; SEA = South-East Asia; and SSWA = South and South-West Asia.

Furthermore, it is common for countries to purchase expensive financial information management systems even though they do not always assess exhaustively the implications of the usage of those systems on their processes and procedures across government entities, as well as the architecture of connecting with line agencies and subnational governments. This issue is important because line agencies or local governments can purchase their own systems without aligning with the ministry of finance or treasury, and these systems do not often have standardized charts of accounts. As a result, it is difficult to generate data on general government operations – either the economic classification that would also cover the build-up of liabilities or the functional or programme classifications that make it possible to report on the key Sustainable Development Goal deliverables.

The Governments of Georgia and Singapore have transparent e-procurement systems which allow the public to gain access to all the related information. Examples include the following: the Georgian Electronic Government Procurement system, which was launched in 2010; and in Singapore, GeBIZ, an integrated one-stop electronic business centre, and the Contractors Registration System, both of which were launched in 2000 and 1985 respectively. In their systems, blacklisted firms, which performed poorly or were involved in misconduct during the implementation of previous projects, can no longer bid, and procedures to register and to submit complaints or bids are standardized and done electronically. In Georgia, in addition to the impact of this tool on environmental blueprints (about 20 million paper copies were used in 2010), the Government has been able to save $110 million within just one year of the system's the implementation, representing approximately 14 per cent of the total value announced in tenders. In Singapore, the standardization of the bidding and registration procedures for all government agencies has enabled those agencies to save resources allocated for this type of transaction as it is now a centralized procedure, and private firms are more efficient in terms of time and money because it is easier to fulfil the procurement requirements which used to be decided by each agency separately prior to 1985 (United Nations, 2014; 2013a).

In the Republic of Korea and Samoa, data resources have been made available to beneficiaries and interested stakeholders, and an improvement in the efficiency of government expenditures has been recorded in the domains of construction in the Republic of Korea and in education in Samoa. In the capital of the Republic of Korea, the online payment system *e-Immediately* has been deployed by the Seoul Metropolitan Government to reduce cases of workers or subcontractors not being paid for their work, and the corruption associated with such cases. This system, with the support of financial institutions, enables workers and subcontractors to track the disbursement of funds in real time. In addition to this system, all interested stakeholders of a project can monitor its implementation through dedicated platforms (United Nations, 2013a). In Samoa, the implementation of the Samoa (Primary) School Fee Grant Scheme from 2010 to 2015 provided positive education outcomes because, among other things, there was a school committee which was involved in the approval of the budgets to develop the school, and the records on transfers and funds for each school were made available to the public through a public notice.[18]

On tax matters, public institutions could be made more trustworthy, and tax morale could be increased by making information on taxpayers, especially public officials, publicly available. For instance, after having published a tax directory of its members of parliament and senate, in 2014 Pakistan published a complete directory of all its registered taxpayers. In doing so, it became only the fourth country in the world to have made such information on taxpayers publicly available, following the example of Finland, Norway and Sweden.[19] Importantly, the records revealed that, of a population of more than 180 million people, Pakistan had only 750,000 registered payers of income tax. Moreover, almost half (46 per cent) of the 1,167 members of 6 houses of parliament (national assembly, senate and four provincial assemblies) paid no tax at all, demonstrating the weak tax morale even among legislators.[20] However, making all such data available in the public domain will not yield results if follow-up measures are not taken and implementation is not adequate.

4.2. Managing and monitoring the implementation of policies

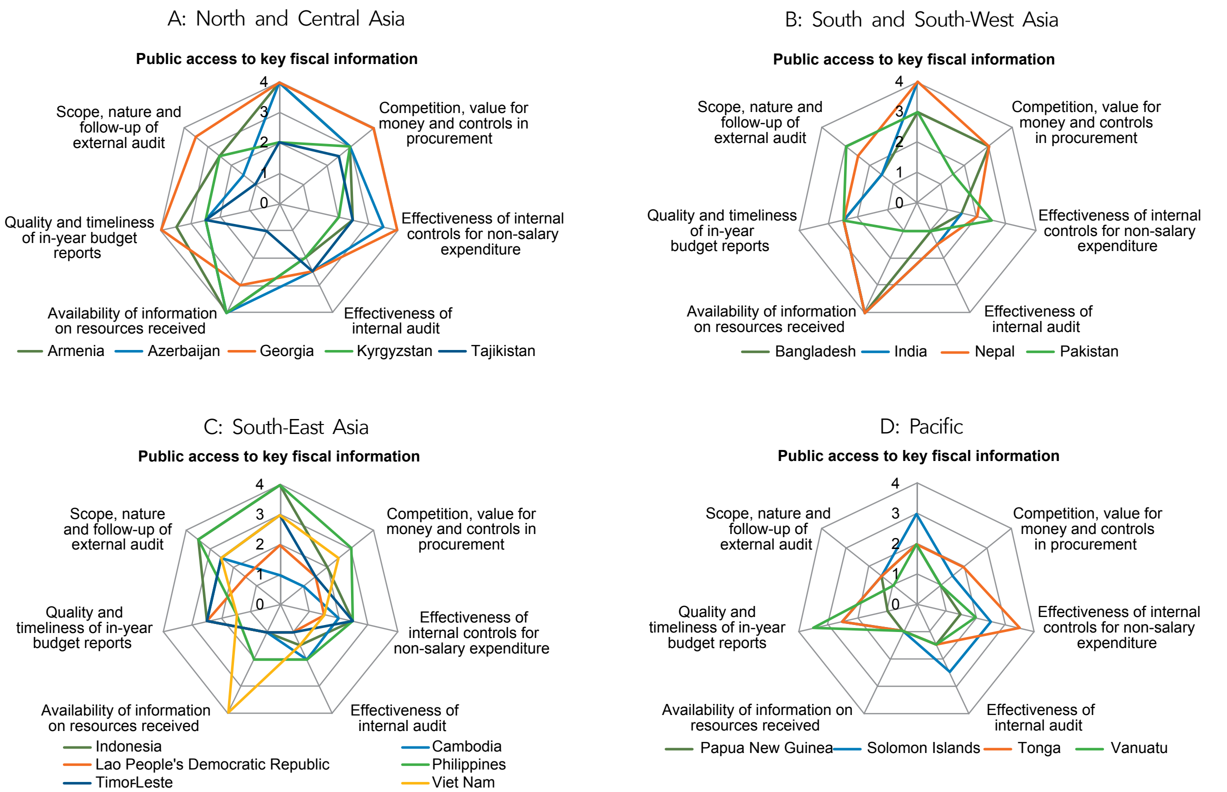
In addition to producing and disseminating data, government officials have to manage operational risks associated with the execution of the national budgets whether they are related to tax revenues or expenditures. These functions can be performed by staff through internal controls before the execution of a budget and through audits after its execution. Similarly, supreme audit institutions (through external audits), or citizens (through feedback systems) can also be used to improve the monitoring of policies. Decentralization is another means through which Governments can be more responsive and accountable in the area of public financial management.

Both internal controls and audits contribute to better governance as they enable transactions (or operations) to be checked against existing laws and regulations. Specifically, internal control requires an entity to provide, on the basis of documents that are provided, a reasonable level of assurance that a transaction (operation) is effective and efficient, accurately reported in the financial system and complies with the laws and regulations of the country. Internal audits are aimed at evaluating and improving the effectiveness of the risk management framework and of control procedures (implemented during internal control). However, for both mechanisms of verification to contribute to increased accountability, senior governmental officials, such as heads of department and minister-level officials, need to be aware of the risks and rules associated with the execution of an operation, whether the latter refers to an expenditure or tax exemption/refund.

An external audit, which is performed by a supreme audit institution, can be seen as an independent mechanism for verification of public administrations and accountants. It is aimed at verifying the accuracy of an institution's financial statement, checking to determine whether government revenue and expenditure have been authorized and approved and assessing the performance (value for money) of the administration. Depending on the model of the supreme audit institutions (Westminster, Napoleon, or board) (World Bank, 2001), recommendations from the supreme audit institution may or may not be followed by the head of administrative entities, or the parliament may not follow up the implementation of the institution's recommendations, and the supreme audit institution itself may not have the power to prosecute or the competency to identify financial and performance-related issues.

An assessment of public financial management in selected Asia-Pacific countries shows that there is considerable room to strengthen the internal control and audit (external and internal) functions of public financial management in many countries (figure 3.17). Excluding Azerbaijan, Georgia and Tonga, several countries are not performing well with regard to the effectiveness of the internal control aspect of public financial management. Data from the Public Expenditure and Financial Accountability database show that in several countries there are issues related to the comprehensiveness, relevance and understanding of internal control rules and procedures. Similarly, the degree of compliance with rules for processing and

Figure 3.17. Summary of the assessment of specific areas of the public expenditure framework in selected Asia-Pacific countries



Source: ESCAP, based on data from the Public Expenditure and Financial Accountability database (2011 and 2016 editions).

Note: On interpreting the figures, being further out on the radian is better than being closer to the middle.

recording transactions is also weak. Concerning internal audits, Asia-Pacific countries face concerns related to the frequency and the distribution of reports and the extent to which management follows recommendations from internal audits. Finally, concerning external audits, it is the scope of an external audit, the adherence to international standards and the timeliness of the submission of reports which are major concerns.

Value-added tax (VAT) is one tool that can be used to strengthen the audit function of tax administrations and reduce the probability of tax evasion through access to better data on transactions performed by firms. As calculation of VAT is based upon profits and additional inputs, firms that collect and claim VAT need to provide documents that support their claims for expenses. The implementation of VAT permits the collection of more information on firms and reduces the probability of rent-seeking behaviour, underreporting and tax evasion. Furthermore, it is possible to estimate the cost of capital goods or investment because several countries have a zero-VAT policy for capital goods. However, in some countries, special treatments exist, and they can foster rent-seeking behaviours and create "breaks" in the flow of information. However, using VAT to support data collection needs careful consideration, as discussed in box 3.5.

While the literature on VAT often highlights its negative impact on low-income households and equity-efficiency tradeoffs, VAT can in fact facilitate effective collection of income taxes, which are the principal instrument for redistribution and equity. By doing so, VAT provides important additional public resources for conditional cash transfers or programmes. Furthermore, while the overall distributional effects will depend on combinations of taxes and social policies, careful design of VAT itself will minimize the need for compensatory measures. For instance, excluding non-processed basic staples (wheat, rice, maize) in different countries would go a long way towards "protecting the poor". Empirical work in Timor-Leste suggests that, if the authorities were to implement a VAT which exempts non-processed staples (rice, maize and cassava), a single rate VAT would still be quite progressive (Ahmad and Breton, 2015).

In addition to audit and control functions within the public administration, integrating views and concerns from citizens could also be important as it would allow checking on the effectiveness of a policy. One way to do this is to introduce feedback from citizens on the quality of public services that they have received. Digitally enabling citizen feedback about public services delivered to them can empower citizens by increasing their inclusion in the policy implementation process and improve delivery by rapidly identifying problem hotspots in order to improve the efficiency of public services. Pakistan, for instance, introduced its Citizen Feedback Monitoring Programme in 2009 to identify systematic quality gaps and monitor the performance of officials, and Bhutan has also begun implementing digital monitoring and feedback systems for its public services (see box 3.6).

Feedback systems can also be used to increase the mobilization of tax revenues. For instance, in China, a feedback system is used to ensure optimum collection of value-added tax. For each purchase, an electronic receipt and invoice must be issued by the seller to record the transaction, known as *fapiao* (invoice). However, reference codes on the invoice are unique and issued only by the tax administration and must be purchased by the business entity a month or a year in advance. For these receipts to be accepted for tax refunds, they must be authentic. Thus, customers are encouraged to check their authenticity by instant text messaging because the Government organizes a lottery which is based on numbers associated with these invoices (Tomar and others, 2016). The provision of incentives from the Government is also used in the Republic of Korea where citizens can earn up to $30,000 for reporting ongoing issues with regard to public administration (Wittemyer and others, 2014, p. 58). In addition to feedback systems, decentralization has been found also to improve the responsiveness of public administration.

Indeed, one argument is that a more decentralized system of Government tends to be more responsive and can better meet taxpayers' needs and preferences (Oates, 1972). For one, local governments have greater accountability to the population. At the same time, subnational authorities may have better information about the needs of the community and may be able to provide public goods at lower cost, thereby increasing the allocative and productive efficiency of the provision of public goods (Oates, 1999). Thus, in addition to assuring ownership of locally executed projects, allocative efficiency is high in a decentralized governance approach rather than the higher levels of governance (Sangita, 2007).

In this context, the budget initiative in India is seen as a first step in this process, aimed at increasing state government autonomy and untied resources and improving lower-tier programme planning and implementation. At the same time, greater responsibility for the provisioning of social sectors through a reduction and consolidation of some federal social programmes and an increase in untied spending has also been devolved to the state level, with a focus on key underperforming states. This is particularly important as decentralization of fiscal authority will not lead to expected outcomes if it is not accompanied by a decentralization of administrative authority. Moreover, the spending capacity of the Indian states and the prioritization of various social sectors become key factors in ensuring that implementation is effective.

In the same way that *decentralization* has impacts on expenditures, it can also affect revenues. For instance, more decentralized governance structures may, by making Government more efficient and more responsive at all levels, result in an increased willingness to contribute – that is, be taxed – and in an increased demand for public spending and higher voluntary levels of tax effort. Thus, a higher proportion of tax revenues raised and/or controlled locally as well as a lower transfer dependency from the central Government have been shown to be associated with lower infant mortality rates (in Italy), other things being equal (Cavalieri and Ferrante, 2016).

Box 3.5. Policies to support usage of value-added tax as a tool to collect information

This box presents information on policy issues to be considered when value-added tax (VAT) is used as a tool to collect information. Issues related to the tax base, the organization of the tax administration and limitations to the usage of such an instrument are discussed.

To ensure full usage of VAT for data compilation, tax administrations need to broaden the tax base by integrating small taxpayers that may use simple cash-based accounting packages. For instance, in Mexico, the increase in income tax revenue from 5.1 per cent of GDP in 2012 to 6.8 per cent of GDP in 2015 can be partially explained by the 2013 reform of the VAT regime. The Mexican reform was aimed at broadening the tax base through the inclusion of small taxpayers (firms) in the regular tax system and obliging them to use a simple cash-flow electronic accounting package and to issue electronic invoices. Furthermore, all VAT taxpayers were brought under the central tax administration while special exemptions and the VAT rate were unified. With full VAT in operation and electronic invoices used by small taxpayers, large firms had no room to engage in "hidden transactions" as these were effectively blocked.

The organization of tax administrations along functional lines can significantly contribute to better usage of data flow from the full implementation of VAT. A functional organization of tax administrations can ensure that no single administrator can influence a tax payment and that there are checks and balances based on the generation and reconciliation of data from different sources for risk assessment and audit. For instance, the enforcement function depends on a central database and flow of information from different sources, particularly in the case of VAT and income taxes. Analysis of this flow of information triggers flags for anomalies that need to be audited, with effective sanctions as may be stipulated in legislation. The registration function ensures that there is a common tax identifier number for all taxes and all levels of government – and facilitates the flow of information and linkages between different types of taxes, particularly VAT, income tax and payroll tax.

If the VAT and income tax bases are split, there is the risk that neither tax will perform effectively in raising revenues, while minimizing distortions and burdens on the taxpayers, and that it would not be possible to assess the degree of the application of tax laws by tax officials and taxpayers. In addition, the enforcement function is particularly important as it reflects the compilation of information from various taxes into a common database (such as for VAT, corporate income tax and excise taxes) that can be juxtaposed against real-sector variables and third-party information, such as for asset holdings and consumption patterns, which provide a basis to signal a risk-based audit.

However, a typical approach in the organization of tax administrations in several emerging countries, including Mexico and some South Asian countries, has been to establish separate tax administrations with different tax bases for VAT and income taxes. As with VAT, there are possibilities of arbitrage and "cheating", and the integrated flow of information becomes more difficult to achieve. Thus, the overall quality of the administration, especially for such wide-area taxes as VAT and income tax, is only as good as the links between the different tax administrations are weak.

Depending on the level of decentralization of an administration, VAT reforms can also result in a decrease in local tax revenues, thus requiring "ad hoc" transfers from the central Government, which is administering VAT, to support subnational administrations. For instance, this was the case in China where provinces lost revenue as a consequence of the 1993/94 fiscal reform. The replacement of the business tax with the value-added tax for several industries in May 2016 will result in losses at the provincial level and therefore require transfers from the central Government.[a] However, increasing transfers to subnational governments can reduce accountability because other jurisdictions bear the cost of liabilities and because this creates an incentive to spend without consideration of efficiency, knowing that the tax burden on local residents from such a policy is expected to be low.

[a] For more details, see www.china-briefing.com/news/2016/12/30/overview-chinas-vat-reform.html (accessed on 17 February 2017).

Box 3.6. Feedback systems for public service delivery: the case of Bhutan and Pakistan

Pakistan's Citizen Feedback Monitoring Programme (CFMP) is one such feedback initiative that began in 2009 across several districts in the provincial government of Punjab and was later expanded to cover the entire province. CFMP seeks electronic feedback from citizens who, while utilizing various public services, such as obtaining a driver's license or registering property, are requested to provide a telephone number. After-service feedback is sought via a text message or voice calls from CFMP call centres. The feedback covers service quality and timeliness and also solicits the reporting of possible corruption. The collected feedback is then analysed to identify problem areas and provide evidence for officials to take corrective measures (Callen and Hasanain, 2011).

Between 2012 and 2015, about 6.3 million citizens across 36 districts of Punjab Province in Pakistan had been solicited for feedback on 17 public services.[a] Regular, continuous data collection through CFMP has helped identify systematic quality gaps and monitor the performance of officials. Fast and effective responses have been taken, even in remote communities. To date, more than 6,000 administrative actions against concerned officials have been taken based on information provided through CFMP.

Although it is an effective governance tool, CFMP is not a panacea for all governance and accountability challenges in service delivery. It has only limited capacity to correct implementation problems between the provincial government and the district coordination officers. Civil service regulations also provide for a more limited scope of punitive action against wrongdoers, with the majority of actions being formal warnings and official apologies by the officials concerned, rather than suspension or dismissal (World Bank, 2016). However, a World Bank-commissioned evaluation found almost 90 per cent of respondents reporting that the CFMP had an effect on overall service delivery and helped build trust between citizens and the State.

The programme's success in Punjab convinced Pakistan's federal Government to replicate, in phases, CFMP nationally in 2014 for monitoring federal services, such as passport and national identity card registration. The increased scale of the CFMP model implementation has also reduced overheads, such as lower marginal costs per SMS message. These cost reductions are encouraging other provinces to consider CFMP as a viable model for their own services.[b] CFMP has been shown to be a very cost-effective programme and a good practice model of frugal digital citizenship for improving governance and public service delivery. As a replicable good practice, Pakistan's CFMP model has also recently been adopted by other countries, including Albania and Romania.

Bhutan has begun implementing, through its Government-to-Citizen project, digital monitoring and feedback systems for its public services. The Government launched a web portal, *Zhung Ley Meseer Zhabtog*, to provide a common entry point for information, applications and other forms related to public services provided by different government departments and authorities. The Government of Bhutan also launched an online portal, *eKaaSel*, to encourage citizens to report complaints and submit feedback relating to public service delivery issues. On submitting their grievances, citizens could track the status of their applications and would be notified through e-mail or text messages on successful resolution of their application.[c] For transparent and formal user feedback mechanisms such as these to have a significant positive impact, citizens need to have incentives to provide feedback with clearly demonstrated responsiveness and fast follow-up actions by service providers to register and resolve these complaints.

[a] For further information, see http://cfmp.punjab.gov.pk/.
[b] For details, see http://successfulsocieties.princeton.edu/sites/successfulsocieties/files/OM_CivilService_Pakistan_SRA_0.pdf.
[c] For more information, see www.citizenservices.gov.bt/vocusermanual.

However, the impact of decentralization on the provision of public goods can depend on the quality and nature of local institutions as greater decision-making power is given to local communities. For instance, in the case of Indonesia, fiscal decentralization led to a significant increase in community spending on social infrastructure (health and education) where communities had both a tradition of democracy and adhered to traditional laws. In contrast, when communities did not have a tradition of democracy or adhered strictly to traditional laws, fiscal decentralization led to a decline in investments as a share of total public spending (Pal and Wahhaj, 2016).

At the same time, redistributing income becomes difficult under full decentralization where local governments have more power and autonomy with respect to both public expenditures and revenues (Dollar, 2007). In the case of China, fiscal decentralization on the spending side that has taken place since the economic reforms of 1978 may have contributed to rising income inequality (Song, 2013). Decentralization also led to a greater allocation of expenditure for the purpose of capital construction, with relatively smaller proportions going to education and administration (Jia, Guo and Zhang, 2014).

Box 3.7. Policy options to finance subnational governments

This box contains a description of fiscal tools that can be used to finance subnational governments. It is focused on the usage of "piggy-back" systems and on means to maximize returns from property taxes.

With subnational administrations being sometime less equipped to handle a full range of tax matters, the implementation of a so-called piggy-back taxation system could be useful in developing countries. Piggy-back taxation is a system through which tax revenues are collected by adding a surcharge to the tax rate that the central Government is applying to its tax base. The surcharge (or piggy-back) is typically not recommended in the case of value-added taxes, but it works with an integrated base for personal income taxes or for environmental taxes for cities.

The control over rate structures is much more effective in generating accountability, even if all or some elements of tax administration are managed at a different level of administration. A local surcharge generating the same amount of revenue as the shared-revenue from the central administration becomes an own-source of revenue if the subnational jurisdiction has the right to raise or lower the marginal rate that it has been assigned.

In addition to the piggy-back taxation system for subnational administration, accountability could also be improved by amending the formulas which are used to allocate resources from central to local governments. In particular, equalization transfers are not gap filling if standardized factors which integrate needs and revenue bases are used as these are not under the control of the recipient jurisdiction. However, if actual subnational spending and revenues are used, the "equalization" system becomes another form of "gap filling" as the local jurisdiction can begin to manipulate it either by ramping up spending or reducing taxes that weigh on their populations.

For cities, the surcharge approach is an option for the implementation of a carbon tax that could form the basis for initiating structural changes in production and consumption patterns. Thus, more congested and polluted metropolitan areas may require a higher than standard carbon tax rate, without running the risk that the tax might fall to zero as result of a race to the bottom.

Beside the piggy-back approach, property taxes have long been regarded as an important source of financing for local administrations. High property taxes are also synonymous with good public service delivery. However, for the system to work well, there must be a clear delineation of property titles, as well as frequent adjustment in relation to changing property values and the cost of service delivery. Unfortunately, these preconditions do not exist in many parts of the world, to the extent that the property tax is moribund in many parts of Africa, Latin America and Asia. For instance, according to Rao (2013), the information base on property taxes in India is severely deficient and unreliable. This is partly because the cadastre is woefully out of date, and the valuation system has not kept pace with market price changes.

In this regard, one alternative is to move to a presumptive basis for taxing properties based on location and size to try to approximate true values. In Bangalore, India, the application of presumptive estimates led to a virtual doubling of property tax revenues between 2007/08 and 2008/09. However, typical problems with arbitrary adjustments to presumptive measures have appeared recently.

A final alternative is to sidestep valuation systems altogether and link property taxes to size, location and cost of the public services delivered. This is the Marshallian "benefit tax" proposal that overcomes political resistance and links the taxes paid to services provided (see Ahmad, Brosio and Pöschl, 2015).

It is important to note that the valuation requirements are no longer binding in a system that links property use to the cost of local services. However, there needs to be an accurate map of properties. Satellite imagery can prove to be a very useful tool and is now readily available in most parts of the world. This cannot be easily evaded and can sidestep the corruption that takes place in measuring and recording property areas as well as structures, which also has useful applications with respect to monitoring forestry and natural resources as well as illegal logging and mining.

Better governance at the subnational level requires information on financial transactions to be available on time and to be produced on the basis of international standards. Without full information on such transactions, there is considerable scope for unproductive spending as well as corruption. Measures to monitor spending and outcomes at different levels of government are needed both for the implementation of fiscal rules as well as providing the basis to evaluate the costs of spending and outcomes. Without this information, it is unlikely that leakages and inefficiencies in spending can be addressed.

[a] It could be useful for gender-budgeting.

As shown in box 3.7, fiscal decentralization can also strengthen accountability, particularly through greater ownership of local revenues, by providing incentives for better governance. However, at the subnational level, gap-filling transfers and shared revenues are preferred to own-source revenues as there is no political cost to generating additional funds and the cost is borne by the central Government. Gap-filling transfers and shared-revenue thus can undermine efforts to improve accountability in the public administration and, indirectly, the efficiency of public expenditure. In fact, in the case of deficits or local debt, subnational administrations can always request the support of the higher-level jurisdiction at either the national or supranational levels to meet additional spending needs.

4.3. E-government and financial inclusion for better coordination and effectiveness

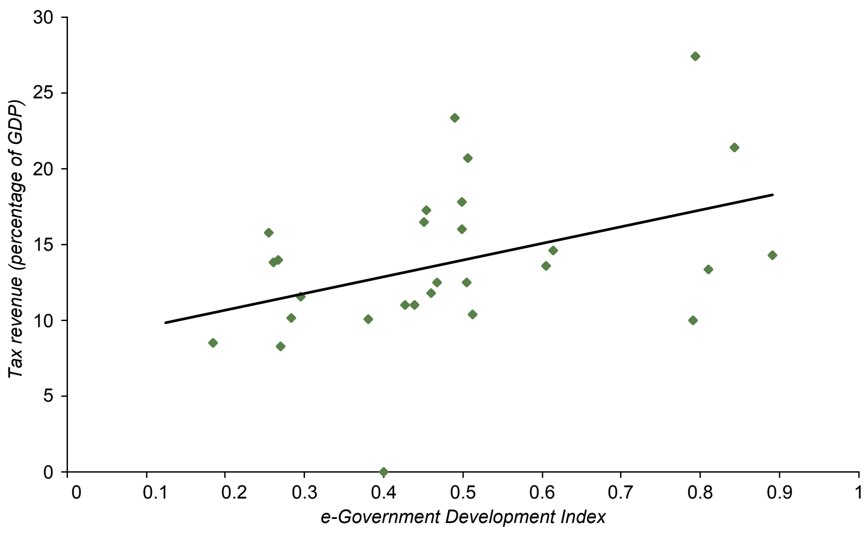
The implementation of the above-mentioned policies can be optimized through information and communications technology (ICT) and through wider use of financial products by beneficiaries of public services and by taxpayers. For instance, most of the case studies discussed above are based on the usage of e-systems by public administration, that is, e-government.

E-government refers to the capacity and willingness of the public sector to use ICT for public service delivery. It can contribute to a better coordination of public entities during the implementation of programmes and can afford access to a range of data sets for policy design, implementation, monitoring, auditing and evaluation.

Tax revenues can be substantially increased on the back of a deployment of an e-system for tax returns and tax filling. According to figure 3.18, the usage of e-tools by the Government is positively correlated with the level of tax revenues in Asia-Pacific countries. For instance, in the Eurasian Economic Union (EAEU), a project to introduce radio frequency identification (RFID) technologies has been launched to track fur products. Every fur product that is purchased, stored, transported and sold in the EAEU territory is required to be labelled with an RFID tag for verification and monitoring. The implementation of this system has enabled the recording of a sixteen fold increase in the sale of fur products in comparison with the year 2015.[21]

Public expenditure efficiency can also increase due to the use of e-systems because of better coordination of government programmes, such as in Malaysia, or because funds can be tracked up to the final beneficiary, such as in India. In Malaysia, the Government deployed a system to assist people living below the poverty line through a database of verified heads of households, which is accessible by all government agencies involved in poverty eradication programmes. The probability of duplicated aid or programmes has been reduced, and the poverty eradication strategies have become more effective and efficient (United Nations, 2013a, p. 119). In India, the implementation of the largest employment

Figure 3.18. Tax revenue and level of implementation of e-government in Asia-Pacific countries, 2005-2014



Source: ESCAP, based on data from the World Development Indicators database and the United Nations E-Government Survey database. Available from https://publicadministration.un.org/egovkb/en-us/Data-Center (accessed on 30 January 2017).

Note: Technical note on the index available from https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2016-Survey/Annexes.pdf (accessed on 30 January 2017).

programme through smart cards has yielded savings equivalent to eight times the cost of the implementation of the programme (see box 3.8).

While e-government systems present opportunities for public financial management and progress has been made during the last decade, Asia-Pacific countries are performing fairly well in this domain (table 3.4).

Table 3.4 presents the regional averages for 2016 of the United Nations e-government development index and its three components. The index ranges between zero and

Box 3.8. Digital technology for improving government service delivery and better fiscal management: innovations from South and South-West Asia

In India, a government programme called *Jan Dhan Yojana-Aadhaar*-Mobile (JAM) was recently established to directly transfer subsidies and other benefits to citizens through electronic payments, increasing delivery and removing leakages and market distortions. Two additional programmes enable people to receive digital funds: one for digital identification and the other for providing access to bank accounts. India's unique identification system (UID), *Aadhaar*, provides a unique identification number linked to each individual's basic demographic and biometric information; more than 975 million people have been enrolled in the system. UID is also a powerful tool for including into society previously excluded and disadvantaged groups. More than 250 million bank accounts have been created to date under the *Pradhan Mantri Jan Dhan Yojana*, with 132 million such accounts linked to the *Aadhaar* cards.[a]

India's experience of switching direct transfers into *Aadhaar*-linked bank accounts for transfers paid under the Pahal Scheme of liquefied petroleum gas subsidies saved about $1 billion per year when applied countrywide (Barnwal, 2015).[b] JAM payments to *Aadhaar*-linked bank accounts for workers under India's Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) – the world's largest employment programme – resulted in the plugging of large leakages and significantly reduced the time involved in paying beneficiaries. In one Indian state, Andhra Pradesh, electronic MGNREGS wage payments through smart cards cut down leakages and generated fiscal savings eight times greater than the cost of implementing the programme (India, Ministry of Finance, 2015).[c]

Pakistan has also been successful in using its advanced digital identification system, the National Database and Registration Authority (NADRA), to register and authenticate payments to beneficiaries under various safety net programmes. Under Pakistan's Benazir Income Support Programme, 4.5 million beneficiaries receive their payments through debit cards linked to an efficient management information system and biometric identity database (World Bank, 2016). Applying digital systems for issuing national identity cards in Pakistan increased registration by 80 per cent, from 54 million in 2008 to 98 million in 2014, including 43 million women. In 2014, NADRA estimated that further expansion to bring into the tax net more than 1.2 million potential taxpayers that had not been filing taxes could increase revenue by $1 billion in just three months (Malik, 2014).[d]

Digital transfer systems are effective when they include sensible policies to address privacy and data integrity concerns and complementary policies that prohibit passive exclusion of individuals and groups when documents for registration are difficult to provide. To address increasing privacy concerns, legal safeguards are being implemented to check data theft or misuse.[e] The exclusion of eligible beneficiaries can be substantial, particularly in rural areas with limited access to the banking system. In India, a major challenge for rolling out direct financial transfers has been linking the *Aadhaar* card to the *Jan Dhan* bank accounts and getting beneficiaries to use the bank accounts, especially where correspondent bank networks or mobile banking penetration is low.[f] These barriers are the primary rationale for continuing direct physical food transfers through India's enormous unwieldy public distribution system (PDS) and not obliging people vulnerable to hunger to convert to electronic payments to which they may not yet have access. In this context, while digital and financial transfer systems and the scope of such transfers are being strengthened, models such as Biometrically Authenticated Physical Uptake, where beneficiaries can authenticate their identity by scanning their fingerprints while buying subsidized foods at PDS shops, could significantly reduce leakages and lower exclusion errors (India, Ministry of Finance, 2015).[g]

[a] For more details, see www.pmjdy.gov.in/account.
[b] Additional details are available from www.columbia.edu/~pb2442/subsidyLeakageUID.pdf.
[c] More information on this success story is available from http://indiabudget.nic.in/es2014-15/echapter-vol1.pdf.
[d] For further information, see www.cgdev.org/sites/default/files/CGD-Essay-Malik_NADRA-Story_0.pdf.
[e] For additional details, see www.bbc.com/news/world-asia-18101385 and www.thehindubusinessline.com/opinion/columns/all-you-wanted-to-know-about-aadhaar-bill/article8381808.ece.
[f] Details are available from http://economictimes.indiatimes.com/news/economy/policy/pms-inclusion-dream-unrealised-growth-in-number-of-jan-dhan-yojana-bank-accounts-outpaced-delivery-of-govt-benefits-and-subsidies/articleshow/51068715.cms and www.livemint.com/Politics/PRmaclHkzL6fGJEUlVLo3H/India-has-started-linking-Jan-Dhan-scheme-Aadhaar-and-mobil.html.
[g] Further information is available from http://indiabudget.nic.in/es2014-15/echapter-vol1.pdf.

Table 3.4. Status of the implementation of e-government, by subregion, 2016

	United Nations e-government index	Online service index	Human capital index	Telecommunication infrastructure index
Asian landlocked developing countries	0.434	0.471	0.578	0.253
Asian least developed countries	0.326	0.444	0.414	0.120
South-East Asia	0.477	0.458	0.648	0.324
South and South-West Asia	0.436	0.655	0.493	0.159
Pacific	0.433	0.232	0.630	0.437
North and Central Asia	0.660	0.676	0.791	0.514
East and North-East Asia	0.630	0.770	0.705	0.414
Developing Asia-Pacific region	0.515	0.663	0.603	0.280
Developed countries	0.805	0.836	0.863	0.717
Global average	**0.553**	**0.678**	**0.639**	**0.341**

Source: ESCAP, based on data from the United Nations e-government survey database. Available from https://publicadministration.un.org/egovkb/en-us/Data-Center (accessed 30 January 2017).

Note: For weighted average, total population is the weight.

one (best performer). The e-government index "assesses national websites and how e-government policies and strategies are applied in general and in specific sectors for delivery of essential services".[22] Overall, countries with special needs (least developed countries and landlocked developing countries), which face governance issues, do not particularly use e-government platforms even though they could benefit considerably from their usage. In addition, Pacific countries rarely use online services for the delivery of public services.

Critically, Asia-Pacific least developed countries, particularly landlocked developing countries and developing countries in the Pacific have very low telecommunications infrastructure index scores. The low scores of this sub-index highlights the growing digital divide in connectivity which needs to be addressed.[23] Regional cooperation initiatives, such as the "Asia-Pacific Information Superhighway" initiative which is aimed at enhancing the availability and affordability of broadband Internet across Asia and the Pacific, could contribute to the strengthening of the underlying Internet infrastructure in the region.[24]

However, increasing the usage of online tools for public service delivery involves other challenges related to the cost of the type of tools, their maintenance, the need to ensure the security of data (personal and firm level) and the need to amend some administrative procedures to ensure that the e-platform matches with procedures. Furthermore, the successful implementation of this plan requires political commitment as well as adequate training of staff and citizens. Finally, it is worth noting that e-government is not a panacea for the improvement of governance, but is just a tool to support governance.

5. CONCLUDING REMARKS

Developing countries will need significant resources to achieve the 17 interrelated Sustainable Development Goals and 169 associated targets that were adopted by the General Assembly in September 2015. In this chapter *governance* was identified as an important tool to leverage such resources by emphasizing the link between governance and development through fiscal management.

In the chapter, it was argued that governance indicators, such as government effectiveness and corruption, play critical roles in fiscal management in Asia-Pacific countries. For tax revenues, the quality of governance affects the tax morale of taxpayers, incentives to operate in the formal sector and the level of compliance of tax officials with laws. Additional factors that contribute to or encourage fiscal corruption include complicated tax laws, excessive discretionary power vested in tax administrators and legal requirements that may necessitate frequent interactions between taxpayers and tax officials. Weak legal and judicial systems, lack of accountability and transparency in the tax administration, as well as low salaries in the public sector, are also important factors that contribute to poor governance in the region.

One way to improve transparency and strengthen accountability in public administrations in charge of tax revenue or the execution of development-related expenditures is to enhance the production of and access to fiscal data and information. Using e-government tools and reforming tax and expenditure policies can also contribute to improving transparency and accounability. There is also considerable room to strengthen internal control and audit (external and internal) functions of public financial management in the region. In several countries, there are issues related to the comprehensiveness, relevance and understanding of internal control rules and procedures. While the degree of compliance with rules for processing and recording transactions is often weak, there are also concerns related to the frequency and distribution of reports and the extent to which management follows recommendations from internal audits.

Efforts are also needed to improve information flows across relevant government departments. For example, tax administrations in developing countries have often established separate revenue departments overseeing different tax bases rather than organizing tax administration along functional lines. This situation results in little information-sharing among them along with difficulties in reconciling data and information on taxpayers, a situation that contributes to revenue losses.

Finally, it was found that fiscal decentralization can strengthen accountability and improve public expenditure efficiency by increasing ownership of local revenues. In view of limited capacities, subnational administrations could consider adopting a "piggy-back" taxation approach by using the tax base that has been identified by the central Government and adding a surcharge to the relevant tax rate.

Good governance, that is, having a government that is able to make and enforce rules and to deliver services efficiently and effectively, is critical to achieving the 2030 Agenda for Sustainable Development. It is particularly relevant in the context of fiscal management, given the growing demands on fiscal policy to support the economy and address diverse social and environmental challenges.

ENDNOTES

1 For the statement of Mr. Kofi Annan, see press release SG/2048 GA/9443 dated 21 September 1998.

2 From remarks made by Helen Clark on the occasion of the Singapore Lecture Series, Singapore. 13 March 2012. Available from www.undp.org/content/undp/en/home/presscenter/speeches/2012/03/13/the-importance-of-governance-for-sustainable-development.html.

3 General Assembly resolution 55/2, para. 13.

4 See also www.unpan.org/Directories/UNPAGlossary/tabid/928/Default.aspx.

5 The Economist Intelligence Unit has created a democracy index, which is based on five categories: electoral process and pluralism; civil liberties; the functioning of Government; political participation; and political culture. In this index, India, Japan, the Republic of Korea and Singapore rank 35th, 23rd, 22nd and 74th, respectively, out of 167 countries ranked. See www.eiumedia.com/index.php/latest-press-releases/item/2127-democracy-in-an-age-of-anxiety.

6 General Assembly resolution 69/313.

7 See www.systemicpeace.org/inscrdata.html.

8 Two WGI indicators are not used here: (a) voice and accountability; and (b) political stability and absence of violence. The perceptions related to voice and accountability capture elements of democracy and electoral processes, while those related to political stability and absence of violence capture the likelihood of political instability and/or politically motivated violence. It can be argued that both of these indicators are more relevant to how power is acquired rather than how it is exercised. They are not relevant to the definition of governance used in this chapter.

9 This section does not present extensive political and cultural factors. Readers may refer to La Porta and others (1999); Treisman (2000); and Fukuyama (2013) for further details.

10 Rent management can also become an institutional issue in countries which implement industrial policies in the absence of competition (Van Rijckeghem and Weder, 2001). Goujon and Mabali (2016) provided some empirical evidence on the relationship between natural resources and governance.

11 See Murphy, Shleifer and Vishny (1993) for the impact of institutional quality on innovators.

12 For more information, see www.adb.org/news/infographics/fighting-corruption-asia-good-governance-encourages-development (accessed 18 November 2016).

13 Corruption in the form of sexual extortion is also used as a "currency", but it is not easily measurable because it is less likely to be reported (UNIFEM and UNDP, 2010).

14 The environmental Kuznets curve hypothesis stipulates that, at an early stage of economic development, economic growth results in environmental degradation and pollution. However, beyond a certain level of income per capita, further economic expansion often results in environmental improvements because there is a demand for a cleaner environment. It is acknowledged though that the environmental Kuznets curve is a not a comprehensive model for the analysis of environmental issues, as highlighted by Stern (2004).

15 For details on the computation of scores, see annex.

16 General Assembly resolution 58/4, annex.

17 See www.unodc.org/documents/brussels/UN_Convention_Against_Corruption.pdf, paras. 48 and 49 (accessed 23 January 2017) and http://unpan1.un.org/intradoc/groups/public/documents/un/unpan022332.pdf (accessed 20 January 2017).

18 For additional details, see http://wbgfiles.worldbank.org/documents/hdn/ed/saber/supporting_doc/EAP/Samoa/SAA/MESC_2011_Samoa_School_Fees_Grant_Scheme_Program_Design_Document.pdf (accessed 25 January 2017).

19 See https://watchdog-watcher.com/2013/01/06/disclosing-tax-data/.

20 For further information, see www.dagliano.unimi.it/20140608/pakistantaxation/.

21 The Eurasian Economic Union is a customs union and a single economic space, the members of which are Armenia, Belarus, Kazakhstan, Kyrgyzstan and the Russian Federation.

22 For further information, see https://publicadministration.un.org/egovkb/en-us/About/Methodology.

23 See www.unescap.org/resources/state-ict-asia-and-pacific-2016-uncovering-widening-broadband-divide.

24 For details, see www.unescap.org/our-work/ict-disaster-risk-reduction/asia-pacific-information-superhighway.

ANNEX

Appendix 1. Governance indices in Asia-Pacific countries – perception based indices

Countries/areas/subregions	Rule of law		Regulatory quality		Control of corruption		Government effectiveness		Governance	
	1995-2004	2005-2014	1995-2004	2005-2014	1995-2004	2005-2014	1995-2004	2005-2014	1995-2004	2005-2014
East and North-East Asia	**56.5**	**57.2**	**53.6**	**56.7**	**53.8**	**54.6**	**54.2**	**59.3**	**54.5**	**57.0**
China	41.6	41.7	44.3	45.9	42.8	39.7	47.8	51.9	44.1	44.8
Democratic People's Republic of Korea	30.7	25.3	5.7	2.7	17.0	20.5	11.6	11.9	16.2	15.1
Hong Kong, China	71.4	81.3	88.1	88.5	82.3	86.4	77.4	85.5	79.8	85.4
Japan	75.4	77.0	65.0	72.7	71.1	79.1	72.4	80.1	71.0	77.2
Macao, China	60.1	62.7	64.9	74.7	61.0	59.6	63.4	73.5	62.4	67.6
Mongolia	50.0	43.2	46.0	44.5	45.8	37.8	43.4	39.6	46.3	41.3
Republic of Korea	66.0	69.1	61.3	67.9	56.9	59.2	63.5	72.9	61.9	67.3
North and Central Asia	**29.1**	**32.2**	**33.1**	**37.7**	**31.3**	**31.6**	**33.1**	**38.0**	**31.6**	**34.9**
Armenia	41.7	42.0	48.2	55.1	37.8	38.5	42.4	47.4	42.5	45.8
Azerbaijan	29.7	34.5	32.7	41.9	27.6	29.3	31.7	36.7	30.4	35.6
Georgia	25.6	45.6	36.8	58.5	31.0	50.2	37.0	55.0	32.6	52.3
Kazakhstan	28.0	35.8	41.1	43.4	29.2	31.8	33.2	41.6	32.9	38.1
Kyrgyzstan	34.5	25.7	45.8	41.7	36.4	26.8	40.9	34.9	39.4	32.3
Russian Federation	31.3	33.4	43.6	43.0	32.0	30.6	38.9	42.4	36.4	37.4
Tajikistan	21.5	26.8	23.9	29.0	26.2	28.3	23.8	30.3	23.9	28.6
Turkmenistan	22.9	21.1	12.9	8.5	31.5	21.9	22.4	21.6	22.4	18.3
Uzbekistan	26.2	24.6	12.8	18.6	29.5	27.4	27.4	32.1	24.0	25.7
Pacific	**59.8**	**59.1**	**47.4**	**45.8**	**52.6**	**54.4**	**48.2**	**47.0**	**52.1**	**51.6**
Pacific island developing economies	**55.5**	**54.6**	**41.4**	**39.2**	**46.0**	**47.9**	**42.0**	**40.7**	**46.3**	**45.6**
American Samoa	67.0	73.4	59.3	56.9	65.6	59.8	46.1	58.3	59.5	62.1
Fiji	49.1	38.2	45.0	38.6	52.2	40.9	44.8	37.9	47.7	38.9
Guam	70.1	73.4	63.6	61.4	57.4	67.4	55.3	52.1	61.6	63.6
Kiribati	59.5	56.5	31.3	26.0	44.1	51.4	39.6	35.7	43.6	42.4
Marshall Islands	47.4	49.4	35.2	31.3	37.2	43.5	35.8	22.6	38.9	36.7
Micronesia (Federated States of)	56.7	54.4	36.7	37.4	44.8	48.0	38.3	37.9	44.2	44.4
Papua New Guinea	32.6	31.2	38.3	37.9	34.4	26.7	40.6	35.2	36.5	32.8
Samoa	67.6	65.6	48.7	45.8	49.5	53.7	55.9	53.3	55.4	54.6
Solomon Islands	43.2	35.8	19.8	27.5	34.7	42.5	25.4	31.0	30.8	34.2
Tonga	55.6	53.5	28.5	37.4	42.1	38.0	40.7	42.5	41.7	42.9
Tuvalu	70.5	66.5	53.7	29.7	48.9	45.9	42.8	38.7	54.9	45.2
Vanuatu	46.5	57.1	36.9	40.2	41.4	57.3	38.4	43.0	40.8	49.4
Developed countries in Pacific	**85.8**	**86.4**	**83.0**	**85.5**	**92.2**	**93.3**	**85.3**	**84.9**	**86.6**	**87.5**
Australia	84.9	85.2	79.2	84.9	87.6	89.8	84.6	84.2	84.1	86.0
New Zealand	86.7	87.6	86.8	86.2	96.7	96.8	86.0	85.5	89.0	89.0
South and South-West Asia	**42.5**	**39.7**	**39.4**	**36.8**	**40.3**	**39.4**	**43.0**	**42.0**	**41.3**	**39.5**
Afghanistan	15.2	13.6	11.0	20.2	15.8	20.0	12.5	21.6	13.6	18.9
Bangladesh	30.9	33.6	30.5	31.8	31.8	28.7	37.4	34.5	32.6	32.2
Bhutan	53.4	55.2	41.5	31.4	61.7	66.4	60.4	57.3	54.3	52.6
India	53.7	50.2	42.5	42.9	42.3	40.7	48.0	48.8	46.6	45.7
Iran (Islamic Republic of)	36.8	31.5	19.6	19.4	39.1	36.1	40.2	38.9	33.9	31.5
Maldives	55.2	44.8	63.7	46.0	50.5	39.3	59.9	46.3	57.3	44.1
Nepal	42.6	34.2	39.9	36.3	42.3	36.4	38.6	33.1	40.9	35.0
Pakistan	34.7	32.7	37.4	38.0	30.6	31.4	40.3	36.7	35.8	34.7
Sri Lanka	53.6	49.5	52.9	45.7	46.3	44.4	44.0	47.1	49.2	46.7
Turkey	48.9	51.5	55.2	56.7	42.3	50.9	48.9	56.0	48.8	53.8
South-East Asia	**44.8**	**43.9**	**47.3**	**46.3**	**45.7**	**42.9**	**48.6**	**49.3**	**46.6**	**45.6**
Brunei Darussalam	61.2	61.7	72.5	70.6	58.0	62.1	66.1	67.5	64.5	65.5
Cambodia	27.3	28.7	45.3	40.8	30.3	27.1	31.7	32.3	33.6	32.2
Indonesia	36.1	37.5	44.0	43.7	32.1	36.2	41.1	44.9	38.3	40.6
Lao People's Democratic Republic	30.0	32.0	24.4	29.1	35.1	27.0	33.9	32.7	30.8	30.2
Malaysia	59.7	60.3	61.5	61.1	58.8	54.3	68.5	72.3	62.1	62.0
Myanmar	19.7	21.7	10.6	9.5	23.0	20.9	24.3	19.4	19.4	17.9
Philippines	45.1	40.4	52.4	47.8	43.3	36.9	48.1	50.7	47.2	43.9
Singapore	78.0	84.2	91.5	87.7	95.3	93.7	91.2	94.2	89.0	89.9
Thailand	58.2	47.5	55.0	54.9	47.2	43.6	54.9	55.8	53.8	50.5
Timor-Leste	35.6	27.2	25.3	26.5	39.5	32.1	33.5	27.2	33.5	28.3
Viet Nam	41.5	41.5	37.7	37.9	39.7	37.5	41.4	45.6	40.1	40.6

Source: ESCAP, based on Worldwide Governance Indicators (WGIs) from Kaufmann, Kraay and Mastruzzi (2010). WGIs have been rebased to 100. High values of the indices represent a good perception of institutional quality. The index *governance* is the average of the four WGIs which were analysed in the *Survey*.

Appendix 2: Measuring public sector performance and public sector efficiency

1. Definition of public sector performance and efficiency indicators

Public sector performance (*PSP*) is defined in line with Hauner and Kyobe (2010). $PSP_{i,j}$ is the performance indicator of country i in area j, which can be defined as:

$$PSP_{i,j} = \Sigma_{k=1}^{n_j} \omega_k PSP_{i,j,k} \,(1)$$

where n_j denotes the number of government activities in area j. $PSP_{i,j,k}$ is thus a scalar function of socioeconomic indicators that increases in the relevant indicators, and ω_k is the weight of $PSP_{i,j,k}$ determined by the societal welfare function. As in Hauner and Kyobe (2010) and Afonso, Schuknecht and Tanzi (2005), ω_j is unobservable and is assumed identical within a country for performance.

Public sector performance is thus assessed on the basis of a composite index. Variables, which are used to compute this index, are rescaled on the basis of a min-max procedure and range between zero and one. One represents the score associated with the best performing country. The composite index is the simple average of these rescaled variables, each variable being provided an equal weight.

2. Computing PSP indicators

The chapter is focused on the government performance in education and health. $PSPE_{i,t}$ and $PSPH_{i,t}$ respectively represent the performance of country i in education and health in period t.

For performance in education, the following indicators are used: children out of school (percentage of primary school-age population), gross enrolment ratio in primary schools, gross enrolment ratio in secondary schools and sex ratio in gross secondary school enrolment.

For the performance in health, the following indicators are used: prevalence of undernourishment (percentage of population), mortality rate of children under age 5 (per 1,000 live births), maternal mortality ratio (per 100,000 live births), births attended by skilled health staff (percentage of total births) and life expectancy at birth.

For a negative outcome (undesired), the score S of variable X is obtained on the basis of the following formula:

$$S = \frac{Max - X}{Max - Min}$$

The above formula was used for children out of school, prevalence of undernourishment, mortality rate of children under age 5 and the maternal mortality ratio.

For a positive outcome, the score S of variable X is obtained on the basis of the following formula:

$$S = \frac{X - Min}{Max - Min}$$

For gender parity in secondary school, the following formula is used:

If $X<1$ then $S = \frac{X - Min}{Max - Min}$

If $X>1$ then $S = \frac{1 - (X - 1) - Min}{Max - Min}$

Data were collected for 200 countries. Due to data availability, the five-year average of each indicator is used in the calculation of *PSP*.

3. Computing PSE indicators

The public sector efficiency index is an efficiency measure which is derived from data envelopment analyses (DEA), which is an optimization method which allows assessing efficiency through the maximization of the output and the minimization of inputs. Efficiency scores are computed by period on the basis of the all the available data; the range is between 0 and 1 (or 100 per cent). The results (detailed in the report) are based on a two-stage output-oriented DEA model with decreasing returns (Li and Lee, 2010).

Efficiency scores are based on the comparison between actual input (public expenditures) and theoretical inputs which should be used to obtain the same level of output (public services represented by *PSP*). Thus, a score of 100 per cent implies that the country is *fully* using its input to obtain the actual level of output, and the country is on the *frontier*. A score of 90 per cent would imply that the country could decrease the level of inputs by 10 per cent to produce the same level of output.

4. Data sources

All the indicators have been compiled from the World Bank's World Development Indicators database.

5. Results: PSP and PSE in selected Asia-Pacific countries

Country	Public sector performance in education		Public sector performance in health		Public sector efficiency in education		Public sector efficiency in health	
	2005-2009	2010-2014	2005-2009	2010-2014	2005-2009	2010-2014	2005-2009	2010-2014
East and North-East Asia								
China	..	..	87.9	90.8	..	..	95.6	97.3
Japan	90.2	90.4	99.7	100.0	98.6	96.4	100.0	100.0
Mongolia	83.5	87.1	75.8	81.2	89.8	92.4	87.2	91.6
Republic of Korea	89.3	88.3	96.0	97.1	96.1	93.3	100.0	100.0
North and Central Asia								
Armenia	78.4	..	90.6	91.8	89.5	..	97.5	99.9
Azerbaijan	81.1	84.9	84.2	88.9	92.7	94.2	100.0	100.0
Georgia	84.8	91.5	90.9	90.9	95.6	100.0	98.3	100.0
Kazakhstan	89.4	91.1	87.9	90.4	100.0	98.7	95.4	97.9
Kyrgyzstan	83.4	85.6	85.3	88.0	89.8	90.8	93.0	94.2
Russian Federation	82.3	87.2	91.0	92.7	90.9	93.2	96.5	97.4
Tajikistan	78.6	81.2	67.4	71.3	88.6	88.5	86.1	86.3
Pacific								
Fiji	84.8	83.9	89.0	89.7	90.8	90.3	95.7	96.6
Samoa	81.5	81.5	84.1	85.7	88.2	..	91.7	91.7
Vanuatu	..	..	79.5	85.7	..	..	89.2	92.8
Australia	96.0	96.5	98.9	99.4	100.0	99.7	100.0	100.0
New Zealand	92.5	91.4	98.3	98.8	97.2	95.5	99.1	99.2
South and South-West Asia								
Afghanistan	..	..	34.2	45.6	..	..	63.1	67.7
Bangladesh	71.9	73.2	53.1	59.8	86.5	87.2	77.9	85.3
Bhutan	68.0	78.6	..	..	77.2	85.3	..	..
India	75.1	79.9	59.7	64.7	86.6	88.1	81.5	83.2
Iran (Islamic Republic of)	84.3	87.2	89.8	91.2	90.6	94.2	96.5	97.9
Maldives	..	..	86.9	91.9	..	..	92.2	95.0
Nepal	..	87.1	51.3	66.9	..	92.5	71.4	81.9
Pakistan	51.2	53.1	51.4	57.6	67.3	67.7	80.3	83.1
Sri Lanka	..	86.6	83.1	85.0	..	100.0	93.4	95.9
Turkey	80.7	83.9	88.6	92.0	92.0	..	94.5	96.5
South-East Asia								
Cambodia	72.2	..	58.4	73.9	100.0	..	79.6	89.1
Indonesia	81.5	84.5	72.3	79.8	92.2	92.6	91.6	95.8
Lao People's Democratic Republic	64.8	74.3	42.4	55.4	78.8	83.7	69.4	81.5
Malaysia	..	..	92.2	92.6	..	..	98.5	99.7
Philippines	78.1	84.9	70.4	75.0	90.5	92.6	87.0	89.6
Thailand	79.0	..	89.1	91.2	87.8	..	94.8	95.5
Timor-Leste	72.5	86.4	..	50.7	80.8	91.5	..	77.6
Viet Nam	..	..	82.6	86.9	..	..	92.1	94.0

Note: Two dots (..) indicate that data are not available or are not separately reported.

Appendix 3: Estimating the contribution of governance to the change of public sector efficiency

To analyse the impact of governance on public sector efficiency, a Tobit model is estimated to explain efficiency scores. The Tobit model is used because efficiency scores are censored and they range between zero and one. It is a random-effects Tobit model. Because the inclusion of GDP per capita creates an endogeneity issue, the model includes three dummy variables to reflect the level of development or specific issues faced by countries in their development process. These dummy variables are associated with the following: least developed countries, landlocked developing countries and Africa. Coefficients reported in columns (2) and (4) are used to estimate the contribution of governance change in the change of public sector efficiency.

$$\hat{C}_{i,t} = \frac{\Delta\, Gov_{it} \times \beta}{|\ \Delta\, Efficiency_{it}\ |}$$

Where C is the estimated contribution, $\hat{\beta}$ is the coefficient associated to the variable governance, $\Delta\, Gov_{it}$ is the change in governance and $\Delta\, Efficiency_{it}$ is the change efficiency; i and t are, respectively, country and period indices.

1. Empirical results

Variables	(1) PSEE	(2) PSEE	(3) PSEH	(4) PSEH	(5) PSE	(6) PSE
Governance	0.049***	0.017**	0.061***	0.039***	0.017	0.046***
	(0.009)	(0.007)	(0.013)	(0.009)	(0.012)	(0.015)
Openness	0.000***	0.000**	0.001***	0.000**	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Population growth	-0.016***	-0.007*	-0.014***	-0.008**	-0.022***	-0.044***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.008)	(0.009)
Least developed countries		-0.152***		-0.129***	-0.087***	
		(0.018)		(0.017)	(0.020)	
Landlocked developing countries		0.005		-0.043***	-0.021	
		(0.017)		(0.016)	(0.018)	
Africa		-0.110***		-0.116***	-0.110***	
		(0.016)		(0.015)	(0.018)	
Share of natural resources in exports	-0.047*		0.014			-0.010
	(0.028)		(0.024)			(0.033)
Constant	0.835***	0.889***	0.838***	0.934***	0.997***	0.964***
	(0.020)	(0.014)	(0.022)	(0.014)	(0.022)	(0.031)
Observations	452	453	414	414	265	265
Number of countries	155	156	117	117	100	100

Note: Standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1.

2. Contribution of governance change to change in public sector efficiency (PSE) (in percentage of total change)

Countries	PSE in health	PSE in education
Afghanistan	3.29	..
Armenia	18.62	5.52
Australia	..	-3.10
Azerbaijan	..	1.85
Bangladesh	1.86	8.34
Bhutan	..	-0.66
Brunei Darussalam	7.04	..
Cambodia	-0.02	-0.40
China	5.09	..
Georgia	57.22	29.81
India	-2.41	-8.20
Indonesia	15.97	32.58
Iran (Islamic Republic of)	-11.19	-3.74
Japan	..	13.76
Kazakhstan	30.38	10.00
Kiribati	-1.32	..
Kyrgyzstan	-38.74	-16.72
Lao People's Democratic Republic	2.19	4.35
Malaysia	-5.80	..
Maldives	-13.43	..
Mongolia	-6.05	-1.48
Nepal	-4.70	..
Pakistan	-0.93	-26.73
Philippines	-2.14	0.24
Republic of Korea	..	8.11
Russian Federation	0.35	0.80
Sri Lanka	-5.59	..
Thailand	-20.09	..
Timor-Leste	..	0.15
Turkey	8.91	3.39
Turkmenistan	-1.97	..
Uzbekistan	2.07	..
Vanuatu	18.56	..
Viet Nam	3.08	..

Note: Two dots (..) indicate that data are not available or are not separately reported.

Appendix 4. Estimating the contribution of governance to the change of tax revenues

Variables	(1)	(2)	(3)	(4)
Log of GDP per capita	0.654***	1.262***	1.422***	0.980***
	(0.217)	(0.315)	(0.280)	(0.213)
Agriculture in percentage of GDP	-0.044**	-0.070***	-0.059***	-0.022
	(0.019)	(0.023)	(0.022)	(0.019)
Imports in percentage of GDP	0.042***	0.049***	0.049***	0.040***
	(0.003)	(0.006)	(0.007)	(0.004)
Governance index	1.605***			
	(0.261)			
Population growth	-0.695***	-0.510***	-0.525***	-0.686***
	(0.096)	(0.145)	(0.146)	(0.109)
Natural resource rent in percentage of GDP	-0.023	-0.078***	-0.077***	-0.040**
	(0.017)	(0.021)	(0.022)	(0.017)
period==1	-0.615	9.182*	9.260*	-0.539
	(0.411)	(5.496)	(5.389)	(0.448)
period==2	-1.125***	5.239	5.298	-0.848**
	(0.328)	(3.685)	(3.607)	(0.360)
period==3	-0.908*	11.430	11.412	-0.641
	(0.476)	(7.362)	(7.227)	(0.532)
Africa	3.473***	4.324***	4.614***	3.420***
	(0.334)	(0.496)	(0.511)	(0.413)
Developing Asian and Pacific countries	-2.148***	-1.600***	-1.454***	-2.222***
	(0.286)	(0.379)	(0.417)	(0.332)
Latin America and Carribean	0.037	0.867*	1.129**	-0.055
	(0.291)	(0.506)	(0.507)	(0.316)
Control of corruption		0.892***		
		(0.281)		
Rule of law			0.883***	
			(0.280)	
Government effectiveness				1.252***
				(0.246)
Constant	10.669***	-2.674	-4.310	7.636***
	(2.060)	(5.562)	(5.338)	(1.989)
Observations	451	451	451	451
Number of countries	131	131	131	131

Note: Standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1.

Appendix 5. List of policies considered for the assessment of the management of conflict of interests in a country

Each question is considered at different levels of the hierarchy: Head of State, ministers/cabinet members, members of parliament and civil servants

Legal framework
Laws regulating restrictions on conflict of interest
Constitutional requirement to avoid specified conflict(s) of interest
Code of conduct/ethics
Public officials coverage
Head(s) of State are obligated to avoid specified conflict(s) of interest
Ministers/Cabinet members are obligated to avoid specified conflict(s) of interest
Members of Parliament (MPs) are obligated to avoid specified conflict(s) of interest
Civil servants are obligated to avoid specified conflict(s) of interest
Spouses and children are obligated to avoid specified conflict(s) of interest
Restrictions
General restriction for conflict of interest
Income and assets
Accepting gifts
Private firm ownership and/or stock holdings
Ownership of State-owned enterprises
Business activities
Holding government contracts
Board member, advisor, or company officer of private firm
NGO or labour union membership
Outside employment
Post-employment
Public office mandate
Simultaneously holding policymaking position and policy-executing position
Simultaneously holding two distinct policymaking positions
Participating in official decision-making processes that affect private interests
Assisting family or friends in obtaining employment in public sector
Sanctions
Fines are stipulated for violations of conflict of interest regulations restricting behaviour
Administrative sanctions are stipulated for violations of conflict of interest regulations restricting behaviour
Penal sanctions are stipulated for violations of conflict of interest regulations restricting behaviour
Monitoring and oversight
Enforcement body specified
Individual or agency specified for providing guidance
Process for resolving conflict of interest

Appendix 6. List of policies considered for the assessment of the management of financial disclosure in a country

Each question is considered at different levels of the hierarchy: Head of State, ministers/cabinet members, members of parliament and civil servants

Legal framework	
Laws regulating requirement to disclose	
Constitutional requirement to disclose	
Code of conduct/ethics	
Public officials coverage	
Head of State	Civil servants
Ministers/Cabinet members	Spouses and children
Members of Parliament (MPs)	
Disclosure items	
Income and assets	
Real estate	Income from outside employment/assets
Movable assets	Gifts
Cash	Private firm ownership and/or stock holdings
Loans and debts	Ownership of State-owned enterprises
Business activities	
Holding government contracts	Outside employment
Board member, advisor, or company officer of private firm	Post-employment
NGO or labour union membership	
Public office mandate	
Simultaneously holding policymaking position and policy-executing position	Official decision-making in policy decisions that affect private interests
Simultaneously holding two distinct policymaking positions	Concurrent employment of family members in public sector
Filing frequency	
Filing required upon taking office	
Filing required upon leaving office	
Filing required annually	
Filing required within three years of leaving office	
Ad hoc filing required upon change in assets or conflicts of interest	
Verifiable declaration (not oral)	
Sanctions	
Sanctions stipulated for late filing (fines, administrative and/or criminal)	
Sanctions stipulated for non-filing (fines, administrative and/or criminal)	
Sanctions stipulated for false disclosure (fines, administrative and/or criminal)	
Monitoring and oversight	
Enforcement body explicitly identified	
Depository body explicitly identified	
Some agency assigned responsibility for verifying submission	
Some agency assigned responsibility for verifying accuracy	
Process specified for resolving conflict of interest	
Public access to declarations	
Public availability	
Timely posting	
Clearly identified location	
Fees for access	
Length of records maintenance is specified	

REFERENCES

Afonso, Antonio, Ludger Schuknecht, and Vito Tanzi (2005). Public sector efficiency: an international comparison. *Public Choice*, vol. 123, No. 3, pp. 321-347.

Aggarwal, Aradhna, and Nagesh Kumar (2012). Structural change, industrialization and poverty reduction: the case of India. Development Papers, No. 1206. New Delhi: ESCAP Subregional Office for South and South-West Asia.

Ahmad, E., and M. Breton (2015). A VAT for Timor Leste – some policy and design considerations. ADB and Timor-Leste Fiscal Reforms Commission. Available from www.laohamutuk.org/econ/tax/VATAhmadRpt15Dec2015.pdf.

Ahmad, Ehtisham, Giorgio Brosio, and Caroline Pöschl (2015). Local property taxes and benefits in developing countries – overcoming political resistance? In *Handbook of Multilevel Finance*, Ehtisham Ahmad and Giorgio Brosio, eds. Cheltenham, United Kingdom: Edward Elgar.

Aizenman, Joshua, and Yothin Jinjarak (2010). De facto fiscal space and fiscal stimulus: definition and assessment. Working Paper, No. 16539. Cambridge, MA: National Bureau of Economic Research.

Ajaz, Tahseen, and Eatzaz Ahmad (2010). The effect of corruption and governance on tax revenues. *The Pakistan Development Review*, vol. 49, No. 4, pp. 405-417. Available from www.jstor.org/stable/41428665.

Allen, Emma (2016). Analysis of trends and challenges in the Indonesian labor market. Papers on Indonesia, No. 16. Manila: Asian Development Bank.

Alm, James, Jorge Martinez-Vazquez, and Chandler McClellan (2016). Corruption and firm tax evasion. *Journal of Economic Behavior and Organization, Taxation, Social Norms and Compliance*, vol. 124 (April), pp. 146-163.

Alm, James, and Benno Torgler (2006). Culture differences and tax morale in the United States and in Europe. *Journal of Economic Psychology*, vol. 27, No. 2, pp. 224-246.

Anderson, Ian (2013). The economic costs of non-communicable diseases in the Pacific Islands: a rapid stock take of the situation in Samoa, Tonga, and Vanuatu. Working Paper, No. 86522. Washington, D.C.: World Bank.

Andres, Antonio R., and Carlyn Ramlogan-Dobson (2011). Is corruption really bad for inequality? Evidence from Latin America. *The Journal of Development Studies*, vol. 47, No. 7, pp. 959-976.

Anthonsen, M., and others (2012). Effects of rent dependency on quality of government. *Economics Governance*, vol. 13, pp. 145-168.

Aron, J. (2000). Growth and institutions: a review of evidence. *World Bank Research Observer*, vol. 15, No. 1, pp. 99-135.

Asian Development Bank (ADB) (2012). *Central Asia Regional Economic Cooperation Corridor Performance Measurement and Monitoring Annual Report 2012*. Manila. Available from www.carecprogram.org/uploads/docs/CAREC-CPMM-Reports/1-CAREC-CPMM-Annual-Report-2012.pdf.

______ (2013). Fighting corruption in Asia: good governance encourages development, 7 November. Available from www.adb.org/news/infographics/fighting-corruption-asia-good-governance-encourages-development. Accessed 18 November 2016.

______ (2016). *Social Protection Indicator: Assessing Results for Asia*. Manila.

Baker, Scott, Nicholas Bloom, and Steven Davis (2016). Measuring economic policy uncertainty. Update of NBER Working Paper, No. 21633. Cambridge, MA, United States: National Bureau of Economic Research. Available from www.policyuncertainty.com/.

Bank for International Settlements (BIS) (2017). *BIS Quarterly Review*, March. Basel, Switzerland.

Barbier, Edward B. (2015). Policies to promote green innovation in East Asia and North America. *STI Policy Review*, vol. 6, No. 1, pp. 54-69.

Bardhan, P. (1997). Corruption and development: a review of issues. *Journal of Economic Literature*, vol. 35, No. 3, pp. 1320-1346.

Barnwal, Prabhat (2015). Curbing leakage in public programs with biometric identification systems: evidence from India's fuel subsidies. Columbia University School of International and Public Affairs. Available from www.columbia.edu/~pb2442/subsidyLeakageUID.pdf.

Barro, R. (2000). Inequality and growth in a panel of countries. *The Journal of Economic Growth*, vol. 5, No. 1, pp. 87-120.

Batini, Nicoletta, and others (2014). Fiscal multipliers: size, determinants, and use in macroeconomic projections. Technical Notes and Manuals, No. 2014/04. Washington, D.C.: International Monetary Fund.

Beck, Thorsten, and others (2001). New tools in comparative political economy: the database of political institutions. *World Bank Economic Review*, vol. 15, No. 1, pp. 165-176.

Bénassy-Quéré, A., M. Coupet, and T. Mayer (2007). Institutional determinants of foreign direct investment. *World Economy*, vol. 30, No. 5, pp. 764-782.

Bhat, T.P. (2014). India: structural changes in the manufacturing sector and growth prospect. Working Paper, No. 173. New Delhi: Institute for Studies in Industrial Development.

Bird, Richard M. (2004). Managing tax reform. *Bulletin for International Fiscal Documentation*, vol. 58, No. 2, pp. 42-55. Available from www1.worldbank.org/publicsector/learningprogram/PracticalIssues/papers/Managing%20the%20reform/Managing%20Tax%20Reform.pdf.

Blanchard, Oliver, and Daniel Leigh (2013). Growth forecast errors and fiscal multipliers. *American Economic Review*, vol. 103, No. 3, pp. 117-120.

Boycko, Maxim, Andrei Shleifer, and Robert W. Vishny (1996). A theory of privatisation. *Economic Journal*, vol. 106, No. 435, pp. 309-319. Available from www.jstor.org/stable/2235248.

Brada, J.C., Z. Drabek, and M.F. Perez (2012). The effect of home-country and host-country corruption on foreign direct investment. *Review of Development Economics*, vol. 16, No. 4, pp. 640-663.

Breton, T.R. (2004). Can institutions or education explain world poverty? An augmented Solow model provides some insights. *Journal of Socio-Economics*, vol. 33, No. 1, pp. 45-69.

Byiers, Bruce, and others (2015a). Manufacturing progress? Employment creation in Sri Lanka. Case Study Report, March. London: Overseas Development Institute.

______ (2015b). Working for economic transformation. Dimension Paper, No. 03. London: Overseas Development Institute. Available from www.developmentprogress.org/sites/developmentprogress.org/files/case-study-report/working_for_economic_transformation_web_v2_10_mar.pdf.

Callen, M., and A. Hasanain (2011). The Punjab model of proactive governance: empowering citizens through information communication technology. Available from http://epod.cid.harvard.edu/files/epod/files/punjab_model_evaluation.pdf.

Causa, Oretta, Mikkel Hermansen, and Nicolas Ruiz (2016). The distributional impact of structural reforms. Economics Department Working Papers, No. 1342. Paris: Organisation for Economic Co-operation and Development.

Cavalieri, Marina, and Livio Ferrante (2016). Does fiscal decentralization improve health outcomes? Evidence from infant mortality in Italy. *Social Science and Medicine*, vol. 164 (September), pp. 74-88.

Chen, Martha, Joann Vanek, and James Heintz (2006). Informality, gender and poverty: a global picture. *Economic and Political Weekly*, vol. 41, No. 21, pp. 2131-2139.

China (2015). Vision and actions on jointly building Silk Road Economic Belt and 21st-Century Maritime Silk Road. A document issued by the National Development and Reform Commission, Ministry of Foreign Affairs, and Ministry of Commerce, March. Available from http://en.ndrc.gov.cn/newsrelease/201503/t20150330_669367.html.

______ (2016). Report on the execution of the central and local budgets. Available from www.npc.gov.cn/englishnpc/Speeches/2016-03/23/content_1985907.htm.

Chong, A., and C. Calderon (2000). Institutional quality and income distribution. *Economic Development and Cultural Change*, vol. 48, No. 4, pp. 761-786.

Chong, A., and M. Gradstein (2007). Inequality and institutions. *Review of Economics and Statistics*, vol. 89, No. 3, pp. 454-465.

Christiano, Lawrence, Martin Eichenbaum, and Sergio Rebelo (2011). When is the government spending multiplier large? *Journal of Political Economy*, vol. 119, No. 1, pp. 79-121.

Chung, Sungchul (2011). Innovation, competitiveness and growth: Korean experience. In *Annual World Bank Conference on Development Economics – Global 2010: Lessons from East Asia and the Global Financial Crisis*, Justin Yifu Lin and Boris Pleskovic, eds. Washington, D.C.: World Bank.

Costa, Monica, Rhonda Sharp, and Diane Elson (2010). Gender responsive budgeting in the Asia-Pacific region: Indonesia. Available from http://w3.unisa.edu.au/hawkeinstitute/research/gender-budgets/documents/indonesia.pdf.

Criscuolo, Chiara, and Carlo Menon (2014). Environmental policies and risk finance in the green sector: cross-country evidence. Science, Technology and Industry Working Papers, No. 2014/01. Paris: Organisation for Economic Co-operation and Development.

Dasgupta, S., and others (2002). Confronting the environmental Kuznets curve. *Journal of Economic Perspectives*, vol. 16, No. 1, pp. 147-168.

Delavallade, Clara (2016). Corruption and distribution of public spending in developing countries. *Journal of Economics and Finance*, vol. 30, No. 2, pp. 222-239. Accessed 26 August 2016.

Devereux, Stephen, and Rachel Sabates-Wheeler (2004). Transformative social protection. Working Paper, No. 232. Brighton, United Kingdom: Institute of Development Studies.

Diarra, Gaoussou, and Sébastien Marchand (2011). Environmental compliance, corruption and governance: theory and evidence on forest stock developing countries. CERDI Etudes et Documents Working Paper, No. E 2011.01. Clermont-Ferrand, France: Centre d'études et de recherches sur le developpement international.

Dinda, S. (2004). Environmental Kuznets curve hypothesis: a survey. *Ecological Economics*, vol. 49, pp. 431-455.

Dollar, David (2007). Poverty, inequality, and social disparities during China's economic reform. Policy Research Working Paper, No. 4253. Washington, D.C.: World Bank.

Du, Huibin, and others (2016). Understanding drivers of energy efficiency changes in China. *Applied Energy*, vol. 184 (December), pp. 1196-1206.

Dwyer, Michael B., and Young Sokphea (2016). Uneven developments towards inclusive land governance in contemporary Cambodia. Working Paper, No. 476. Brighton, United Kingdom: Institute of Development Studies. Available from www.ids.ac.uk/publication/uneven-developments-toward-inclusive-land-governance-in-contemporary-cambodia.

Estrin, Saul, and Adeline Pelletier (2015). Privatisation in developing countries: What are the lessons of experience? Available from http://r4d.dfid.gov.uk/pdf/outputs/EPS/Topic_Guide_Privatisation_Nov.pdf.

Fabrizio, Stefania, and others (2017). Macro-structural policies and income inequality in low-income developing countries. Staff Discussion Note, No. 17/10. Washington, D.C.: International Monetary Fund.

Fountaine, Tim, and others (2016). *Tackling Indonesia's Diabetes Challenge: Eight Approaches from around the World*. Jakarta: McKinsey & Company.

Fourie, David Johannes (2006). The application of good governance in public financial management. Available from http://repository.up.ac.za/dspace/handle/2263/3903.

Frankfurt School-UNEP Collaborating Centre, and Bloomberg New Energy Finance (BNEF) (2016). *Global Trends in Renewable Energy Investment 2016*. Frankfurt: Frankfurt School of Finance and Management. Available from http://fs-unep-centre.org/sites/default/files/publications/globaltrendsinrenewableenergyinvestment2016lowres_0.pdf.

Friedman, E., and others (2000). Dodging the grabbing hand: the determinants of unofficial activity in 69 countries. *Journal of Public Economics*, vol. 76, pp. 459-493.

Fukuyama, F. (2008). What do we know about the relationship between the political and economic dimensions of development. In *Governance, Growth, and Development Decision-making: Reflections by Douglass North, Daron Acemoglu, Francis Fukuyama, Dani Rodrik*, W. Bank, ed. Washington, D.C.: World Bank.

______ (2013). What is governance? *Governance*, vol. 26, No. 3, pp. 347-368.

Gaspar, Victor, Maurice Obstfeld, and Ratna Sahay (2016). Macroeconomic management when policy space is constrained. Staff Discussion Note, No. 16/09. Washington, D.C.: International Monetary Fund.

Ghazanchyan, Manuk, and others (2017). Collect more, spend better: public investment in Asian frontier markets. Working Paper, No. 17/10. Washington, D.C.: International Monetary Fund.

Ghosh, Atish, and others (2013). Fiscal fatigue, fiscal space and debt sustainability in advanced economies. *Economic Journal*, vol. 123, No. 566, pp. F4-F30.

Global Green Growth Institute (2015). *Korea's Green Growth Experience: Process, Outcomes and Lessons Learned*. Seoul. Available from http://gggi.org/wp-content/uploads/2016/01/Koreas-Green-Growth-Experience.pdf.

Goujon, M., and A. Mabali (2016). The different impacts of different types of natural resources on political institutions in developing countries. *Journal of Economic Development*, vol. 41, No. 3, pp. 1-20.

Gupta, A. (2007). Determinants of tax revenue efforts in developing countries. Working Paper, No. WP/07/184. Washington, D.C.: International Monetary Fund.

Gupta, S., H. Davoodi, and R. Alonso-Terme (2002). Does corruption affect income inequality and poverty? *Economics of Governance*, vol. 3, pp. 23-45.

Gupta, Sanjeev, Luiz R. de Mello, and Raju Sharan (2000). Corruption and military spending. Available from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=879367.

Gurr, Ted Robert (1974). Persistence and change in political systems, 1800-1971. *American Political Science Review*, vol. 68, No. 4, pp. 1482-1504.

Habib, M., and L. Zurawicki (2002). Corruption and foreign direct investment. *Journal of International Business Studies*, vol. 33, No. 2, pp. 291-307.

Haque, Tobias, and others (2012). Planning public financial management reforms in Pacific Island countries. Guidance Note, No. 78582. Washington, D.C.: World Bank.

Haraguchi, Nobuya, and Gorazd Rezonja (2013). Emerging patterns of structural change in manufacturing. In *Pathway to Industrialization in the Twenty-First Century: New Challenges and Emerging Paradigms*, Adam Szirmai, Wim Naudé and Ludovico Alcorta, eds. Oxford: Oxford University Press.

Hauner, David, and Annette Kyobe (2010). Determinants of government efficiency. *World Development*, vol. 38, No. 11, pp. 1527-1542.

Hausmann, Ricardo, Dani Rodrik, and Andres Velasco (2005). Growth diagnostics. Available from http://j.mp/1flDbCA.

Helm, Sarah, Quentin Tannock, and Ilian Iliev (2014). The acceleration of climate change and mitigation technologies: intellectual property trends in the renewable energy landscape. Global Challenges Brief. Geneva: World Intellectual Property Organization. Available from www.wipo.int/edocs/pubdocs/en/wipo_pub_gc_1.pdf.

Hendrix, Cullen, and Marcus Noland (2015). Myanmar: cross-cutting governance challenges. Economics Working Paper, No. 428. Manila: Asian Development Bank.

Henisz, W.J. (2000). The institutional environment for economic growth. *Economics and Politics*, vol. 12, No. 1, pp. 1-31.

Hessami, Z. (2014). Political corruption, public procurement, and budget composition: theory and evidence from OECD countries. *European Journal of Political Economy*, vol. 34, pp. 372-389.

Hoang, Chau (2016). Vietnam's new Prime Minister quietly turns the wheels of economic reform, 23 August. Available from www.cogitasia.com/vietnams-new-prime-minister-quietly-turns-the-wheels-of-economic-reform/.

Hoekman, Bernard (2015). *The Global Trade Slowdown: A New Normal?* London: Centre for Economic Policy Research. E-book. Available from http://voxeu.org/content/global-trade-slowdown-new-normal.

Hook, David, and others (2015). Conceptualizing public sector reform in Myanmar, Myanmar Development Resource Institute's Centre for Economic and Social Development (MDRI-CESD) and the Asia Foundation. June. Available from http://asiafoundation.org/resources/pdfs/PSRFullreportENG.pdf.

Hou, Xiaohui, Ian Anderson, and Ethan-John Burton-Mckenzie (2016). Health and non-communicable diseases. Pacific Possible Series, June. Washington, D.C.: World Bank.

Hulme, David, Antonio Savoia, and Kunal Sen (2014). *Governance as a Global Development Goal? Setting, Measuring and Monitoring the Post-2015 Development Agenda*. Effective States and Inclusive Development Working Paper, No. 32. Manchester: University of Manchester. Available from www.effective-states.org/wp-content/uploads/working_papers/final-pdfs/esid_wp_32_hulme_savoia_sen.pdf.

India, Ministry of Finance (2015). *Economic Survey 2014-15*. Available from http://indiabudget.nic.in/es2014-15/echapter-vol1.pdf.

______ (2017a). *Economic Survey 2016-17*. Available from http://indiabudget.nic.in/e_survey.asp.

______ (2017b). *Union Budget 2017-18*. Available from http://indiabudget.nic.in/budget.asp.

International Diabetes Federation (2015). *IDF Diabetes Atlas*, 7th ed. Brussels.

International Energy Agency (IEA) (2016a). *China's Engagement in Global Energy Governance*. Partner Country Series. Paris: OECD/IEA.

______ (2016b). *Energy Efficiency Market Report 2016*. Paris: OECD/IEA.

International Labour Organization (ILO) (2007). *The Informal Economy: Enabling Transition to Formalization*. Geneva. Available from www.ilo.org/wcmsp5/groups/public/@ed_emp/@emp_policy/documents/meetingdocument/wcms_125489.pdf.

______ (2011). *Employment Policies Report – China: promoting decent employment for rural migrant workers*. Geneva.

______ (2014). *World Social Protection Report 2014/15: Building Economic Recovery, Inclusive Development and Social Justice*. Geneva.

______ (2015). *Social Protection in Asia and the Pacific and the Arab States*. Bangkok.

______ (2016). *Key Indicators of the Labour Market*, 9th ed. Geneva.

______ (2017a). *Asia-Pacific Labour Market Update*, January. Bangkok.

______ (2017b). *World Employment and Social Outlook: Trend 2017*. Geneva.

International Monetary Fund (IMF) (2016). *Global Financial Stability Report: Fostering Stability in a Low-Growth, Low-Rate Era*. Washington, D.C.

______ (2017). Global prospects and policy challenges. Paper prepared for the G-20 Finance Ministers and Central Bank Governors' Meetings. Baden-Baden, Germany, 17-18 March.

Inter-American Development Bank, World Bank, and Economic Commission for Latin America and the Caribbean (2013). Addressing inequality, informality and low productivity: policy options in times of uncertainty. Discussion Paper, No. IDB-DP-325. Washington, D.C.: IDB.

Islam, Rizwanul (2003). *Labour Market Policies, Economic Growth and Poverty Reduction: Lessons and Non-Lessons from the Comparative Experience of East, South-East and South Asia*. Issues in Employment and Poverty Discussion Paper, No. 8, Geneva: ILO.

Jia, Junxue, Qingwang Guo, and Jing Zhang (2014). Fiscal decentralization and local expenditure policy in China. *China Economic Review*, vol. 28 (March), pp. 107-122.

Kaika, Dimitra, and Efthimios Zervas (2013). The environmental Kuznets curve (EKC) theory – part A: concept, causes and the CO2 emissions case. *Energy Policy*, vol. 62, pp. 1392-1402.

Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi (2004). Governance matters III: governance indicators for 1996, 1998, 2000, and 2002. *The World Bank Economic Review*, vol. 18, No. 2, pp. 253-287. Available from http://wber.oxfordjournals.org/content/18/2/253.short.

______ (2010). The worldwide governance indicators: methodology and analytical issues. Policy Research Working Paper, No. 5430. Washington, D.C.: World Bank.

Kaufmann, Daniel, Aart Kraay, and Pablo Zoido-Lobatón (1999). Governance matters. Research Working Paper, No. 2196. Washington, D.C.: World Bank.

Kearns, Jonathan, and Nikhil Patel (2016). Does the financial channel of exchange rates offset the trade channel? *BIS Quarterly Review*, December.

Khan, Azizur Rahman (2007). *Asian Experience on Growth, Employment and Poverty: An Overview with Special Reference to the Findings of Some Recent Case Studies*. Geneva: International Labour Office; Colombo: United Nations Development Programme Regional Centre in Colombo.

Kolstad, I., and T. Soreide (2009). Corruption in natural resource management: implications for policy makers. *Resources Policy*, vol. 34, pp. 214-226.

Lane, Philip, and Jay Shambaugh (2010). Financial exchange rates and international currency exposures. *American Economic Review*, vol. 100, No. 1, pp. 518-540.

La Porta, R., and others (1999). The quality of government. *Journal of Law, Economics and Organization*, vol. 15, No. 1, pp. 222-279.

Leatherman, Sheila, Lisa Jones Christensen, and Jeanna Holtz (2010). Innovations and barriers in health microinsurance. Microinsurance Paper, No. 6. Geneva: International Labour Organization.

Lewis, Trevor, and others (2012). E-health in low- and middle-income countries: findings from the Center for Health Market Innovations. *Bulletin of the World Health Organization*, vol. 90, pp. 332-340.

Lewis, W.A. (1954). Economic development with unlimited supplies of labour. *The Manchester School*, vol. 22, No. 2, pp. 139-191.

Li, Y.-B., and C. Lee (2010). Data envelopment analysis. *The Stata Journal*, vol. 10, No. 2, pp. 267-280.

Mahdavi, S. (2008). The level and composition of tax revenue in developing countries: evidence from unbalanced panel data. *International Review of Economics and Finance*, vol. 17, pp. 607-617.

Malik, Tariq (2014). Technology in the service of development: the NADRA story. Essay, 11/5/14. Washington, D.C.: Center for Global Development. Available from www.cgdev.org/sites/default/files/CGD-Essay-Malik_NADRA-Story_0.pdf.

Matsuno, Yu, and others (2010). The impacts of the SOx charge and related policy instruments on technological innovation in Japan. Paper contributed to the project on Taxation, Innovation and the Environment. Organisation for Economic Co-operation and Development, Paris. Available from www.researchgate.net/publication/275531178_The_impacts_of_the_SOx_charge_and_related_policy_instruments_on_technological_innovation_in_Japan.

Mauro, Paolo (1995). Corruption and growth. *Quarterly Journal of Economics*, vol. 110, No. 3, pp. 681-712.

Mazumdar, Dipak, and Sandip Sarkar (2009). The employment problem in India and the phenomenon of the 'Missing Middle'. *Indian Journal of Labour Economics*, vol. 52, No. 1, pp. 43-55.

McGrath, Katrina (2016). Cutting costs while improving care: Samoa's Diabetic Foot Clinic, 13 October. Available from http://devpolicy.org/cutting-costs-improving-care-samoas-diabetic-foot-clinic-20161013/.

McMillan, Margaret, Dani Rodrik, and Inigo Verduzco-Gallo (2013). Globalization, structural change, and productivity growth, with an update on Africa. *World Development*, vol. 63, pp. 11-32.

Meng, Bo, and others (2012). China's regional economies and value chains: an interregional input-output analysis. Discussion Papers, No. 359. Chiba, Japan: Institute of Developing Economies.

Meng, Xin (2012). Labor market outcomes and reforms in China. *Journal of Economic Perspectives*, vol. 26, No. 4, pp. 75-102.

Moon, Jin-Young, Jihei Song, and Seojin Lee (2016). Catalyzing investment for renewable energy in developing countries. KIEP Research Paper World Economy Update, Nos. 16-17 (28 June).

Morrish, Steve (2016). Building rule of law for the next generation in Cambodia, 12 November. Available from www.linkedin.com/pulse/building-rule-law-next-generation-cambodia-steve-morrish.

Mukherjee, S., and D. Chakraborty (2015). *Environmental Challenges and Governance*. New York: Routledge.

Murphy, K.M., A. Shleifer, and R.W. Vishny (1993). Why is rent-seeking so costly to growth? *American Economic Review*, vol. 83, No. 2, pp. 409-414.

National Science Board (2016). *Science and Engineering Indicators 2016*. Arlington, VA, United States: National Science Foundation.

Nayar, Reema, and others (2012). More and better jobs in South Asia. South Asia Development Matters Series. Washington, D.C.: World Bank. Available from http://siteresources.worldbank.org/SOUTHASIAEXT/Resources/223546-1296680097256/7707437-1316565221185/Jobsoverview.pdf.

Oates, Wallace E. (1972). *Fiscal Federalism*. New York: Harcourt Brace Jovanovich.

______ (1999). An essay on fiscal federalism. *Journal of Economic Literature*, vol. 37, No. 3, pp. 1120-1149. Available from www.jstor.org/stable/2564874.

Osewe, Patrick (2016). NCDs: money matters; taxation options. Presentation at the Pacific NCD Summit: Translating Global and Regional Commitments into Local Action. Tonga, 20-22 June.

Pal, Sarmistha, and Zaki Wahhaj (2016). Fiscal decentralisation, local institutions and public good provision: evidence from Indonesia. *Journal of Comparative Economics*, pp. 1-27.

Porter, Michael E., and Claas van der Linde (1995). Toward a new conception of the environment-competitiviness relationship. *Journal of Economic Perspectives*, vol. 9, No. 4, pp. 97-118.

Rajan, Raghuram (2004). Why are structural reforms so difficult? *Finance and Development*, June.

Rajkumar, A.S., and V. Swaroop (2008). Public spending and outcomes: Does governance matter? *Journal of Development Economics*, vol. 86, pp. 96-111.

Rao, M.G. (2013). Property tax system in India: problems and prospects of reform. Working Paper, No. 2013-114. New Delhi: National Institute of Public Finance and Policy.

Sahoo, Pravakar (2014). Making India an attractive investment destination: analyzing FDI policy and challenges. December. Seattle, WA, United States: National Bureau of Asian Research: Trade, Economic, and Energy Affairs. Available from www.nbr.org/downloads/pdfs/ETA/IIP_Sahoo_paper_121014.pdf.

Sangita, Satyanarayana (2007). Decentralisation for good governance and service delivery in India: theory and practice. *The Indian Journal of Political Science*, vol. 68, No. 3, pp. 447-464. Available from www.jstor.org/stable/41856346.

Sanyal, Amal, Ira N. Gang, and Omkar Goswami (2000). Corruption, tax evasion and the Laffer Curve. *Public Choice*, vol. 105, No. 1-2, pp. 61-78. Accessed 6 September 2016.

Sen, Kunal (2014). Governance and development outcomes in Asia. ADB Economics Working Paper Series, No. 384. Manila: Asian Development Bank.

Silva, Ester Gomes, and Aurora A.C. Teixeira (2008). Surveying structural change: seminal contributions and a bibliometric account. *Structural Change and Economic Dynamics*, vol. 19, No. 4, pp. 273-300.

Song, Yang (2013). Rising Chinese regional income inequality: the role of fiscal decentralization. *China Economic Review*, vol. 27 (December), pp. 294-309.

Sonnenschein, Jonas, and Luis Mundaca (2016). Decarbonization under green growth strategies? The case of South Korea. *Journal of Cleaner Production*, vol. 123, No. 1, pp. 180-193.

Stern, David I. (2004). The rise and fall of the environmental Kuznets curve. *World Development*, vol. 32, No. 8, pp. 1419-1439.

Sundaram, J.K., and A. Chowdhury (2012). *Is Good Governance Good for Development?* New York: Bloomsbury Academic.

Supiandi, Yusuf (2016). Gender responsive planning and budgeting: the Indonesian experience. Presentation at the National Seminar on Gender-Responsive Budgeting. Beijing, 17-18 November.

Svensson, J. (2005). Eight questions about corruption. *Journal of Economic Perspectives*, vol. 19, No. 3, pp. 19-42.

Tan, Jeff (2012). The pitfalls of water privatization: failure and reform in Malaysia. *World Development*, vol. 40, No. 12, pp. 2552-2563.

Tang, Hsiao Chink, Philip Liu, and Eddie Cheung (2010). Changing impact of fiscal policy on selected ASEAN countries. Working Paper Series on Economic Integration, No. 70. Manila: Asian Development Bank.

Tanzi, Vito (1998). Corruption around the world: causes, consequences, scope, and cures. *IMF Economic Review*, vol. 45, No. 4, pp. 559-594. Available from http://link.springer.com/article/10.2307/3867585.

Tanzi, Vito, and Hamid Davoodi (1997). Corruption, public investment and growth. Working Paper, No. WP/97/139. Washington, D.C.: International Monetary Fund.

______ (2000). Corruption, growth, and public finances. IMF Working Paper, No. 00/182, pp. 1-27. Available from http://papers.ssrn.com/abstract=880260.

Thomas, Jayan Jose (2013). Explaining the 'jobless' growth in Indian manufacturing. *Journal of the Asia Pacific Economy*, vol. 18, No. 4, pp. 673-692.

Tomar, L., and others (2016). Big data in public sector: selected applications and lessons learned. Discussion Paper, No. IDB-DP-483. Washington, D.C.: Inter-American Development Bank. Available from https://publications.iadb.org/bitstream/handle/11319/7884/Big-Data-in-the-Public-Sector-Selected-Applications-and-Lessons-Learned.pdf. Accessed 30 January 2017.

Torgler, Benno (2003). Tax morale in Latin America. *Public Choice*, vol. 122, No. 1-2, pp. 133-157. Available from http://link.springer.com/article/10.1007/s11127-005-5790-4.

______ (2005). Tax morale and direct democracy. *European Journal of Political Economy*, vol. 21, No. 2, pp. 525-531.

Torgler, Benno, and Friedrich Schneider (2009). The impact of tax morale and institutional quality on the shadow economy. *Journal of Economic Psychology*, vol. 30, No. 2, pp. 228-245.

Treisman, D. (2000). The causes of corruption: a cross-national study. *Journal of Public Economics*, vol. 76, pp. 399-457.

United Nations (2013a). *Compedium of Innovative E-Government Practices*. Sales No. E.12.II.H.4.

______ (2013b). *A New Global Partnership: Eradicate Poverty and Transform Economies through Sustainable Development – the Report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda*. New York. Available from https://sustainabledevelopment.un.org/content/documents/8932013-05%20-%20HLP%20Report%20-%20A%20New%20Global%20Partnership.pdf.

______ (2014). *Good Practices and Innovations in Public Governance. United Nations Public Service Awards Winners, 2012-2013*. Sales No. E.13.II.H.1.

______ (2015). *Responsive and Accountable Public Governance: 2015 World Public Sector Report*. New York. ST/ESA/PAD/SER.E/187.

United Nations Conference on Trade and Development (UNCTAD) (2017). Global Investment Trend Monitor, No. 25. Geneva.

United Nations Development Fund for Women, and United Nations Development Programme (2010). *Corruption, Accountability and Gender: Understanding the Connections*. Primers in Gender and Democratic Governance Series, No. 5. New York.

United Nations Development Programme (2014). *The State of Human Development in the Pacific: A Report on Vulnerability and Exclusion at a Time of Rapid Change*. Suva: United Nations Development Programme Pacific Centre. Available from www.unescap.org/sites/default/files/The%20State%20of%20Human%20Development%20in%20the%20Pacific(LORes)..pdf.

United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) (2016). *Gender Responsive Budgeting in the Asia-Pacific Region: A Status Report*. Bangkok: UN Women Regional Office for Asia and the Pacific.

United Nations Office on Drugs and Crime (UNODC) (2016). Supporting Lao PDR to pursue sustainable growth through corruption eradication, 8 April. Available from www.unodc.org/southeastasiaandpacific/en/what-we-do/anti-corruption/topics/04-lao-corruption.html.

United Nations, Department of Economic and Social Affairs (2017). *World Economic Situation and Prospects 2017*. Sales No. E.17.II.C.2.

United Nations, Economic and Social Commission for Asia and the Pacific (2013). *Economic and Social Survey for Asia and the Pacific 2013: Forward-looking Macroeconomic Policies for Inclusive and Sustainable Development*. Sales No. E.13.II.F.2.

______ (2014a). *Economic and Social Survey for Asia and the Pacific 2014: Regional Connectivity for Shared Prosperity*. Sales No. E.14.II.F.4.

______ (2014b). *Empowering Women Economically: Illustrative Case Studies from Asia*. Bangkok. ST/ESCAP/2678.

______ (2015a). *Asia-Pacific Trade and Investment Report 2015: Supporting Participation in Value Chains*. Sales No. E.15.II.F.15.

______ (2015b). *Time for Equality: The Role of Social Protection in Reducing Inequalities in Asia and the Pacific*. Bangkok. ST/ESCAP/2735.

______ (2016a). *Achieving the Sustainable Development Goals in South Asia: Key Policy Priorities and Implementation Challenges*. New Delhi: ESCAP Subregional Office for South and South West Asia. Available from www.unescap.org/sites/default/files/SDGs%20South%20Asia%20report%202016%20rev%2014%20April%202016.pdf.

______ (2016b). *Asia-Pacific Trade and Investment Report*. Sales No. E.16.II.F.23.

______ (2016c). *Economic and Social Survey for Asia and the Pacific 2016: Nurturing Productivity for Inclusive Growth and Sustainable Development*. Sales No. E.16.II.F.10.

______ (2016d). *Economic and Social Survey for Asia and the Pacific 2016: Year-end Update*. Bangkok. ST/ESCAP/2762.

______ (2016e). *Harnessing Science, Technology and Innovation for Inclusive and Sustainable Development in Asia and the Pacific*. Sales No. E.16.II.F.12 .

______ (2017). *Asia-Pacific Countries with Special Needs Development Report: Investment in Infrastructure for an Inclusive and Sustainable Future*. Sales No. E.17.II.F.9.

United Nations, Economic and Social Commission for Asia and the Pacific, and others (2016). T*ransformations for Sustainable Development: Promoting Environmental Sustainability in Asia and the Pacific*. Sales No. E.16.II.F.5.

United Nations, Economic and Social Council (2006). Definition of basic concepts and terminologies in governance and public administration. 5 January. E/C.16/2006/4. Available from http://unpan1.un.org/intradoc/groups/public/documents/un/unpan022332.pdf. Accessed 31 March 2017.

Van Rijckeghem, C., and B. Weder (2001). Bureaucratic corruption and the rate of temptation: Do wages in the civil service affect corruption, and by how much? *Journal of Development Economics*, vol. 65, pp. 307-331.

Vo, Tri Thanh, and Cuong Van Nguyen (2016). Towards responsive regulatory management systems: country report for Viet Nam. ERIA Discussion Paper, No. 2016-22. Jakarta: Economic Research Institute for ASEAN and East Asia. Available from www.eria.org/ERIA-DP-2016-22.pdf.

Von Braun, Joachim, Ashok Gulati, and Shenggen Fan (2005). Agricultural and economic development strategies and the transformation of China and India. Annual Report Essay. Washington, D.C.: International Food Policy and Research Institute.

Wang, Xin, and Yi Wen (2013). Is government spending a free lunch? Evidence from China. Working Paper, No. 2013-013A. St. Louis, MO, United States: Federal Reserve Bank of St. Louis.

Wei, S.-J. (2000). How taxing is corruption on international investors? *Review of Economics and Statistics*, vol. 82, No. 1, pp. 1-11.

Williams, A., and A. Siddique (2008). The use (and abuse) of governance indicators in economics: a review. *Economics of Governance*, vol. 9, pp. 131-175.

Wittemyer, R., and others (2014). New routes to governance: a review of cases in participation, transparency, and accountability. In *Closing the Feedback Loop*, B.-S. Gigler, and S. Bailur, eds. Washington, D.C.: World Bank.

World Bank (1992). *Governance and Development*. Washington, D.C.

______ (2001). Features and functions of supreme audit institutions. PREM Notes Public Sector, No. 59. Washington, D.C. Available from www1.worldbank.org/prem/PREMNotes/premnote59.pdf. Accessed 22 February 2017.

______ (2012a). Public office, public interests: accountability through income asset disclosure. Stolen Asset Recovery (StAR) Series. Washington, D.C.

______ (2012b). Resilience, equity and opportunity: the World Bank's social protection and labor strategy 2012-2022. Consultations Report. Washington, D.C.

______ (2012c). *World Development Report 2013: Jobs*. Washington, D.C.

______ (2014). Non-communicable disease (NCD) roadmap report. Working Paper, No. 89305. Washington, D.C.Available from http://documents.worldbank.org/curated/en/534551468332387599/pdf/893050WP0P13040PUBLIC00NCD0Roadmap.pdf.

______ (2016). *World Development Report 2016: Digital Dividends*. Washington, D.C.

World Health Organization (2011). Noncommunicable diseases country profiles. Available from www.who.int/nmh/countries/2011/en/.

______ (2014). *Global Status Report on Noncommunicable Diseases 2014*. Available from http://apps.who.int/iris/bitstream/10665/148114/1/9789241564854_eng.pdf?ua=1.

______ (2016). *Fiscal Policies for Diet and Prevention of Noncommunicable Diseases: Technical Meeting Report, 5-6 May 2015, Geneva, Switzerland*. Geneva.

World Wildlife Fund (2001). Environmental impact assessment of macroeconomic reforms, 9 April. Available from wwf.panda.org/wwf_news/?3783/Environmental-Impact-Assessment-for-Macroeconomic-Reform-Programs.

You, J.-S., and S. Khagram (2005). A comparative study of inequality and corruption. *American Sociological Review*, vol. 70, No. 1, pp. 136-157.

Zimmermann, Laura (2013). Why guarantee employment? Evidence from a large Indian public-works program. Available from www-personal.umich.edu/~lvzimmer/Zimmermann_NREGS_current_draft.pdf.

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Although the recent economic expansion of countries in Asia and the Pacific has been steady, it is modest compared with the recent historical trend owing to prolonged weak external demand, rising trade protectionism and heightened global uncertainty. At the same time, decades of rapid economic growth, facilitated by globalization and technology, came at the expense of rising inequalities and environmental degradation. Addressing such economic, social and environment challenges in a coherent and decisive manner will be critical for the region's future.

In view of such challenges and the terms of the 2030 Agenda for Sustainable Development, the *Economic and Social Survey of Asia and the Pacific 2017* highlights the importance of better governance and effective fiscal management. In particular, it is found in the *Survey* for 2017 that the quality of governance affects development outcomes through its impact on the composition and efficiency of public expenditure. At the same time, weak governance partially explains the low levels of tax revenues in several countries in the region. Governance has impacts on the way public revenues are raised, especially its effects on tax morale, as the willingness to pay taxes is affected by perceptions of how well tax revenues are used.

It is argued in the *Survey* for 2017 that transparency and accountability in public administration can be improved and strengthened by ensuring the production of and access to key data and information, and by developing public administration capacities to monitor, evaluate and audit policies and actions. Inclusive institutions, where public service beneficiaries can exchange views with the Government, could also be instrumental for raising tax revenues and making expenditures more efficient. The *Survey* also highlights the role of e-government, information and communications technology and decentralization in improving governance in the context of fiscal management.

In the *Survey*, it is further emphasized that the potential benefits of better governance are large and wide ranging, including better health outcomes in the Pacific, economic diversification in North and Central Asia, decent jobs in South and South-West Asia, ecological innovations in East and North-East Asia and the narrowing of development gaps in South-East Asia.

> *"The 2017 edition of the ESCAP Economic and Social Survey of Asia and the Pacific identifies governance -- and in particular fiscal management -- as a key factor in improving long-term economic prospects while grappling with social and environment challenges.... Building trust between governments and peoples and among countries must be a top priority as we strive to build a future of peace, sustainable development and human rights for all. In that spirit, I commend this Survey to a wide global audience."*

António Guterres
Secretary-General of the United Nations

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