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.

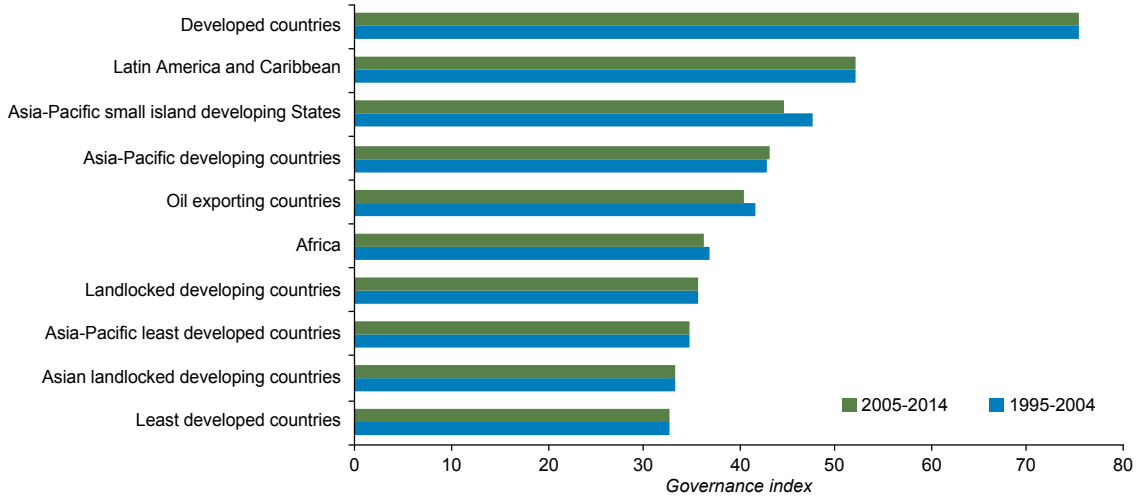
to be greater than in the region's developing countries. Moreover, while at the global level governance in landlocked developing countries is generally better than in least developed countries, the opposite is true in the case of the Asia-Pacific region. This may be due to the fact that 9 of the region's 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



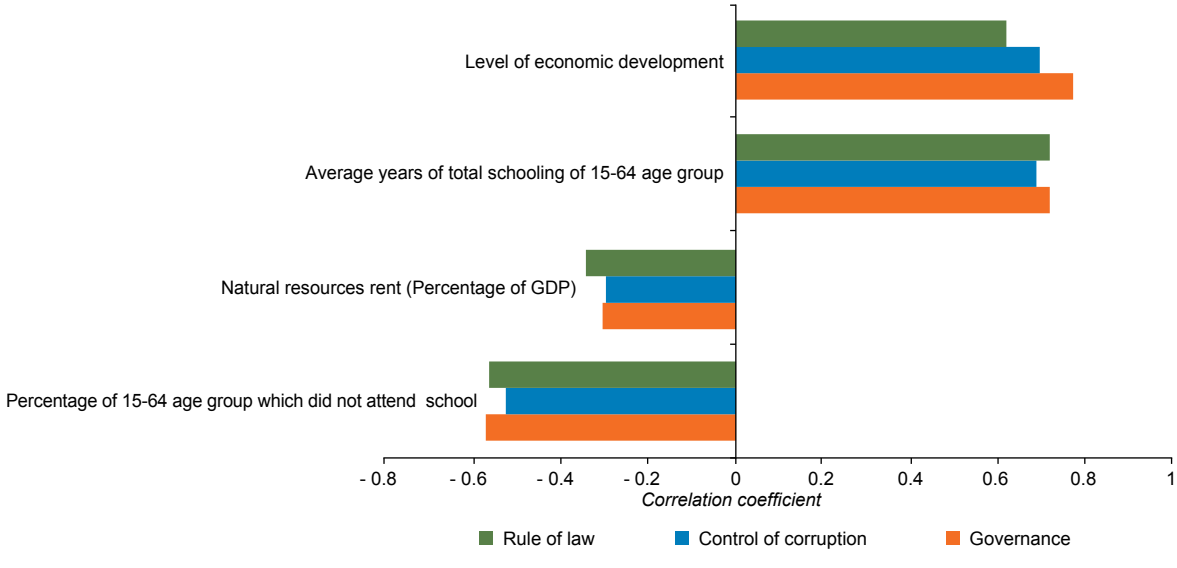
Source: ESCAP, based on Worldwide Governance Indicators (WGI) from Kaufmann, Kraay and Mastruzzi (2010). WGIs have been rebased to 100. High values of the indices represent a good perception of institutional quality. The index *governance* is the average of the four WGIs which are analysed in this chapter.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

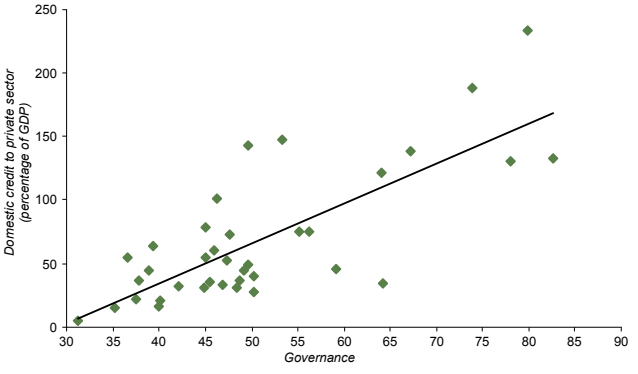


Figure 3.4. Patents granted (by country of origin) and the rule of law, 2014

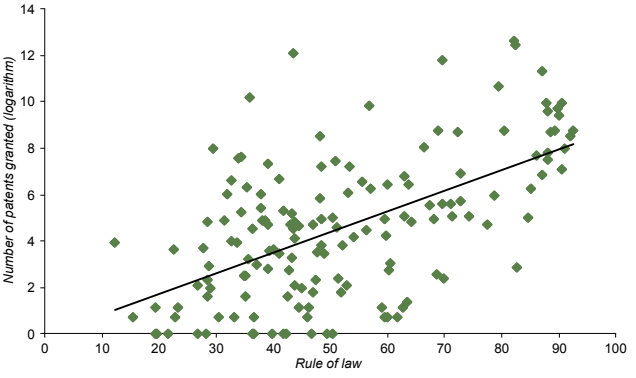


Figure 3.5. Governance and gender inequality index, 2005-2014

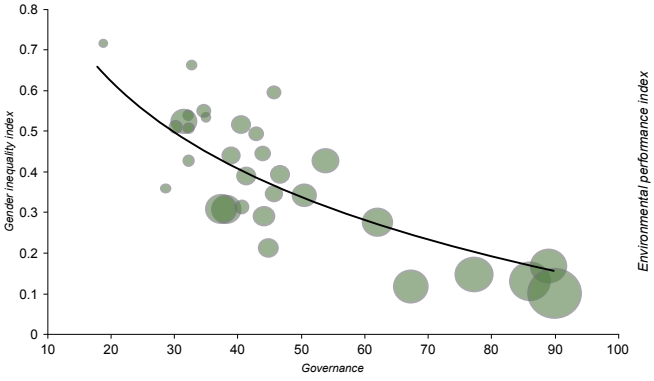
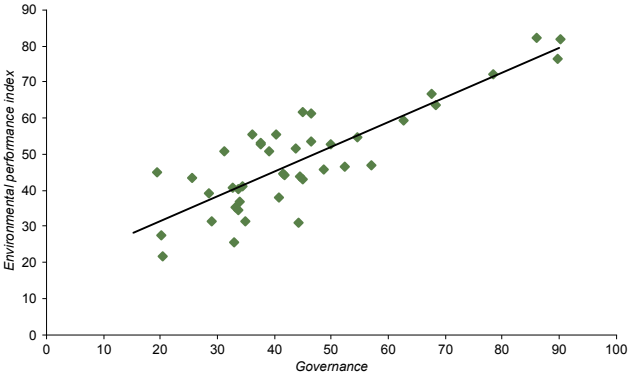


Figure 3.6. Governance quality and environmental performance, 2005-2014



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.

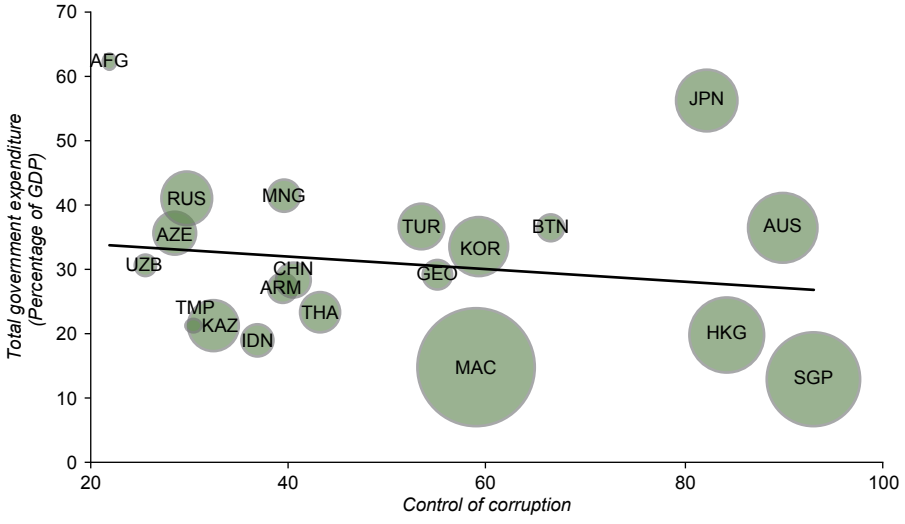
On the other hand, there is ample evidence that governance has impacts on the composition of public expenditure. For instance, corruption has been shown to distort the structure of public spending by reducing the portion of social expenditure that is allocated to education, health and social protection (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

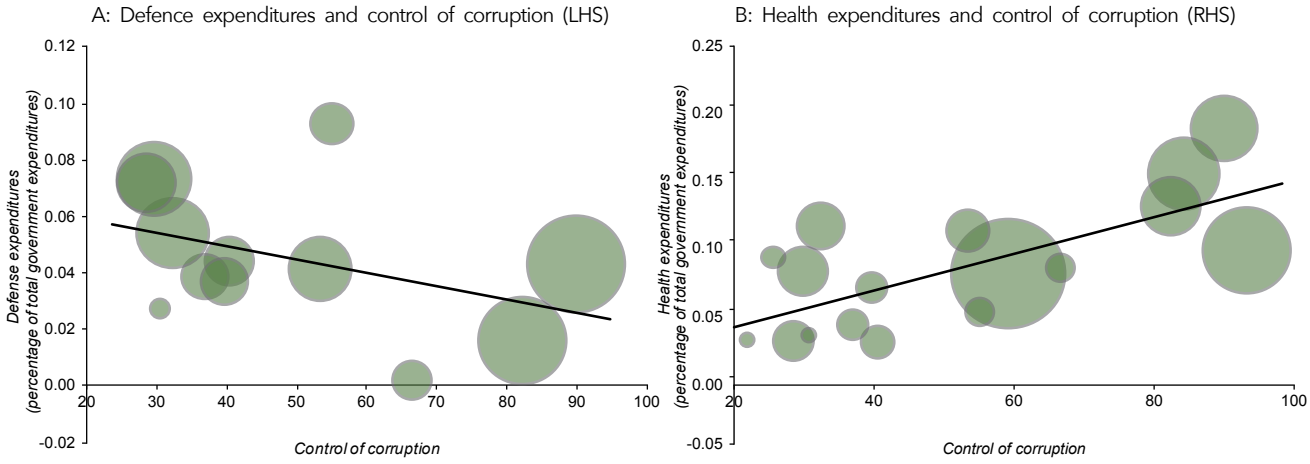


Source: ESCAP, based on data from the World Development Indicators and the Worldwide Governance Indicators databases.

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

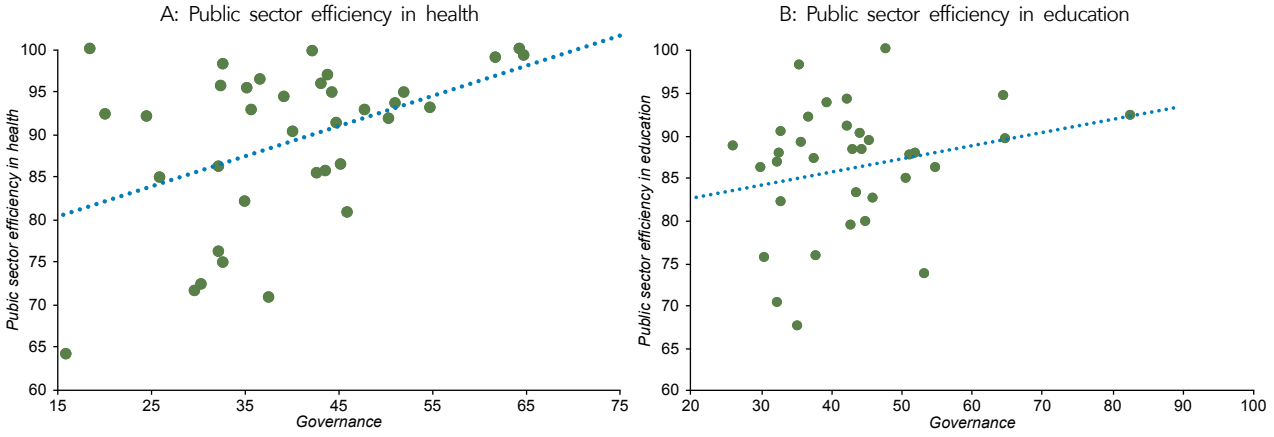
Source: ESCAP analyses based on various data sources (for details, see appendix 2 in annex).

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



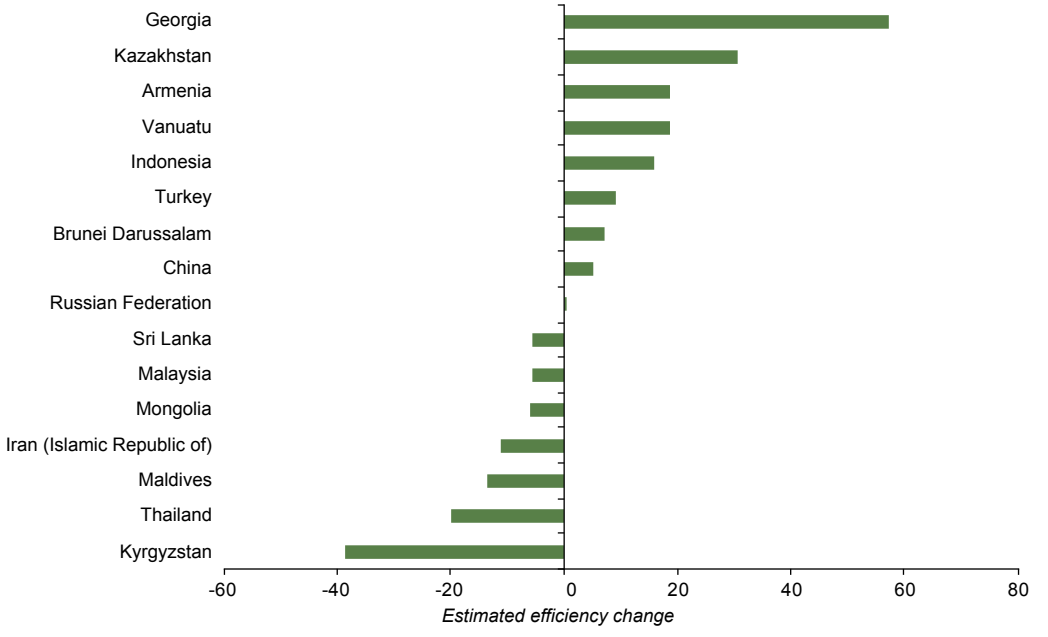
Source: ESCAP based on data from various data sources (for details, see appendix 2 in annex).

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.

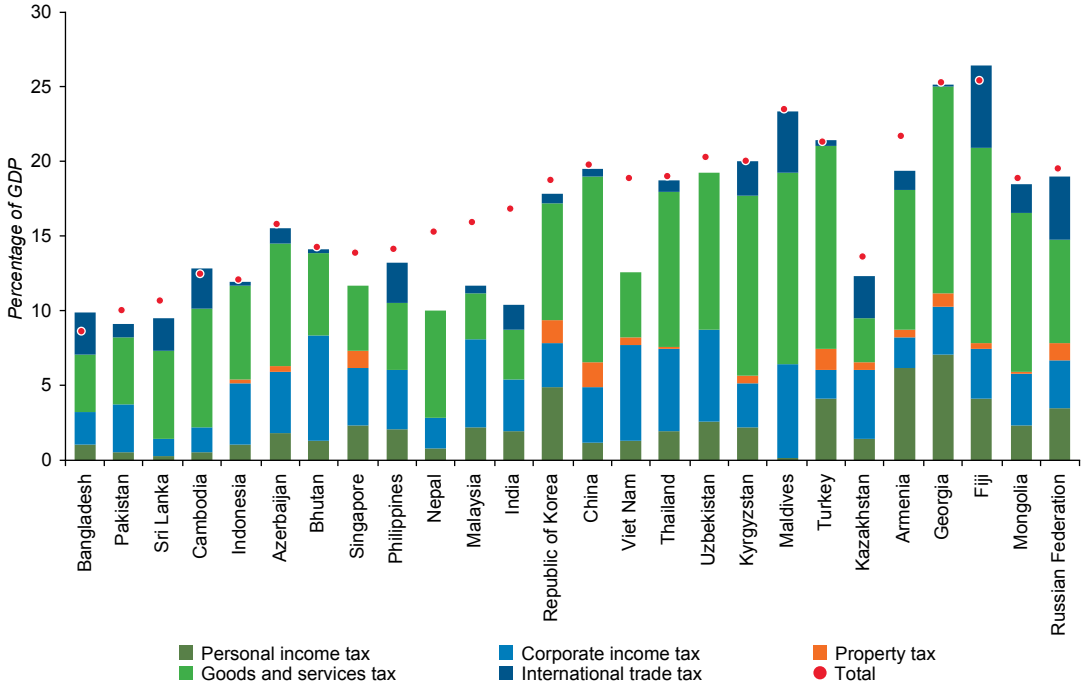
Clearly, tax performance, that is, the ability to raise tax revenues, differs among countries for several reasons. Important determinants of tax revenue include a number of variables, such as the per capita GDP, the sectoral composition of output, the degree of trade and financial openness, the degree 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

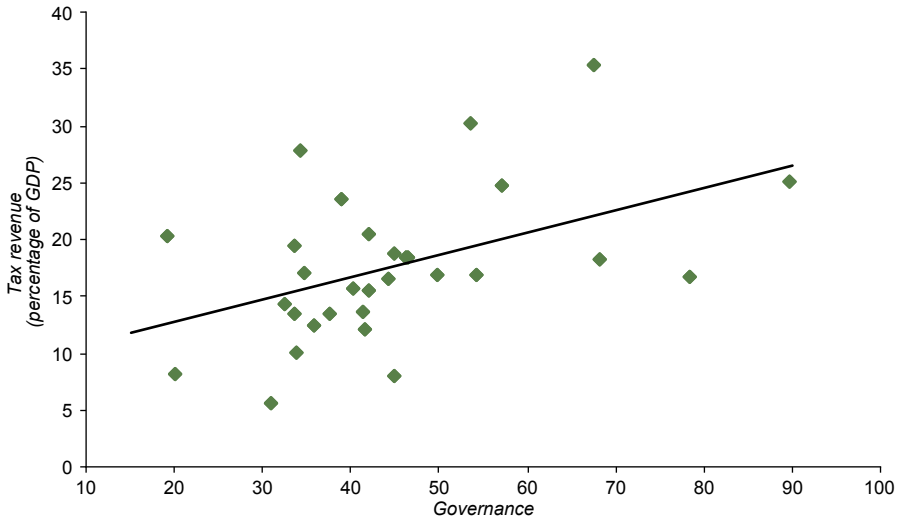
Figure 3.11. Composition of tax ratios in Asia and the Pacific, 2013-2015



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

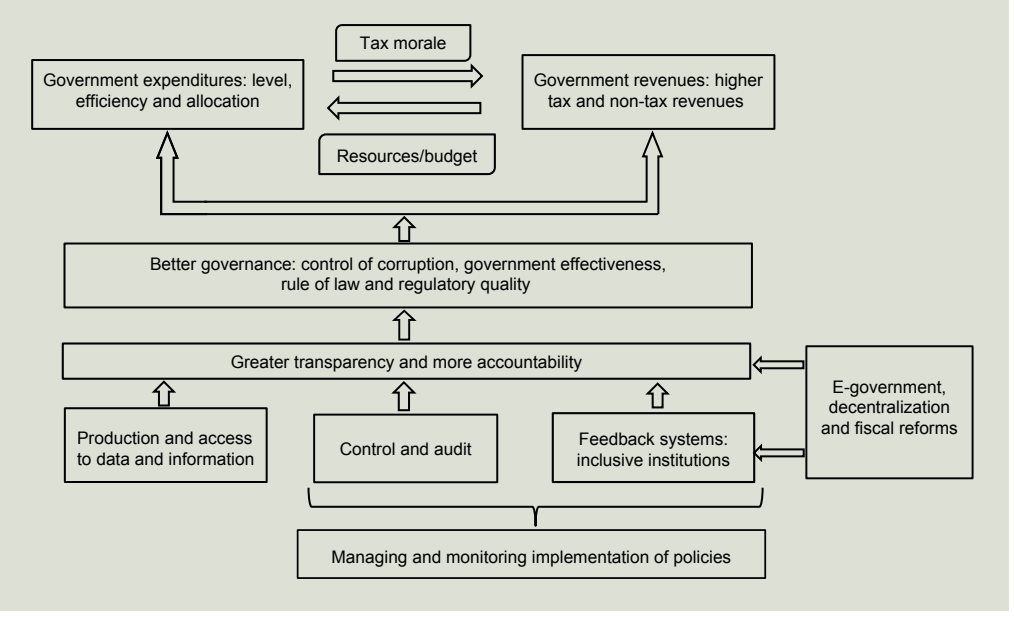
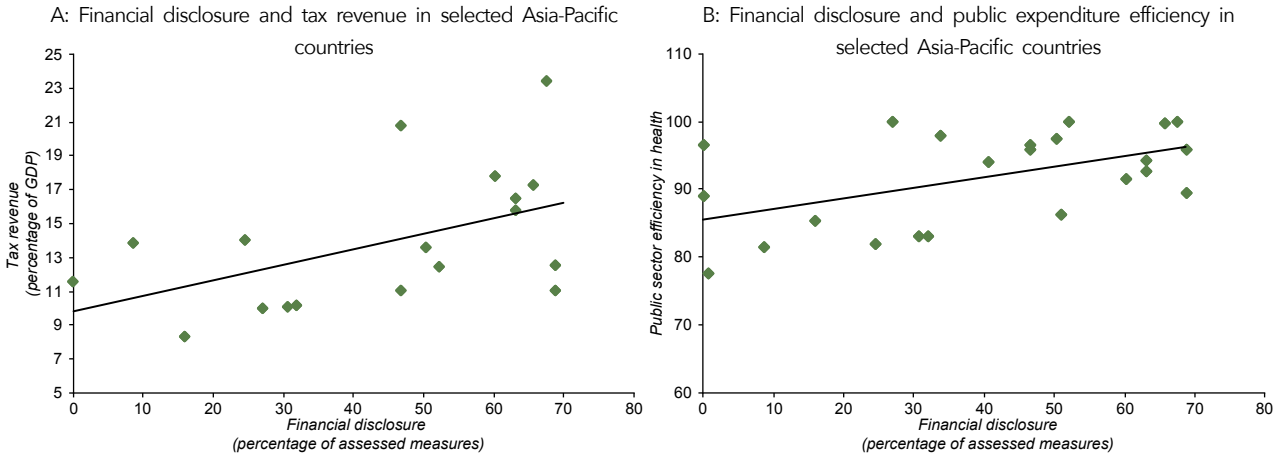


Figure 3.14. Financial disclosure, tax revenue and government expenditure efficiency, 2010-2014



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.

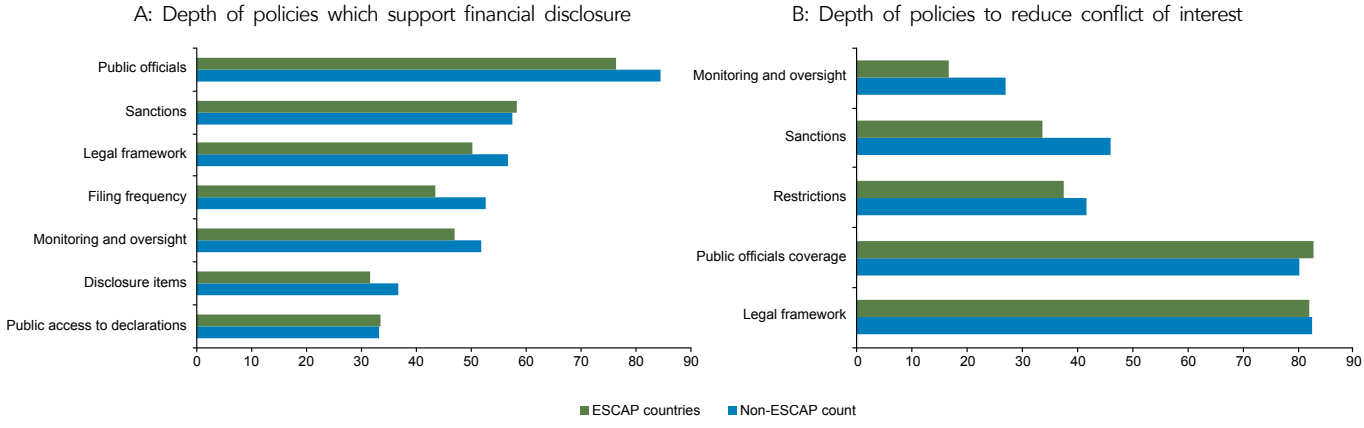
Information on the availability of resources received by various government units responsible for the delivery of public services and public access to key fiscal information remain thorny issues in several countries in the region

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

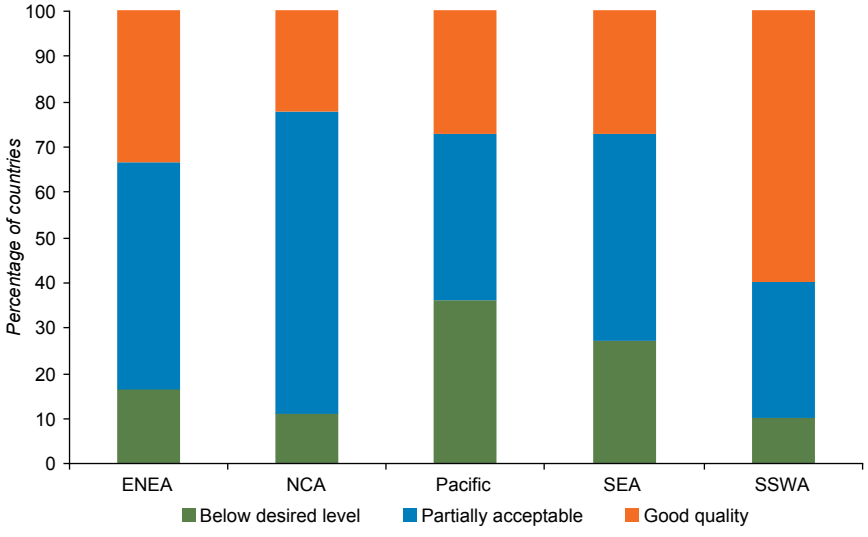
To improve governance, the Government of Georgia in 2010 launched an online asset declaration system. With the Civil Service Bureau as the implementing agency, government officials are required to file, on an annual basis, their asset declarations, and interested stakeholders are able to search those 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.

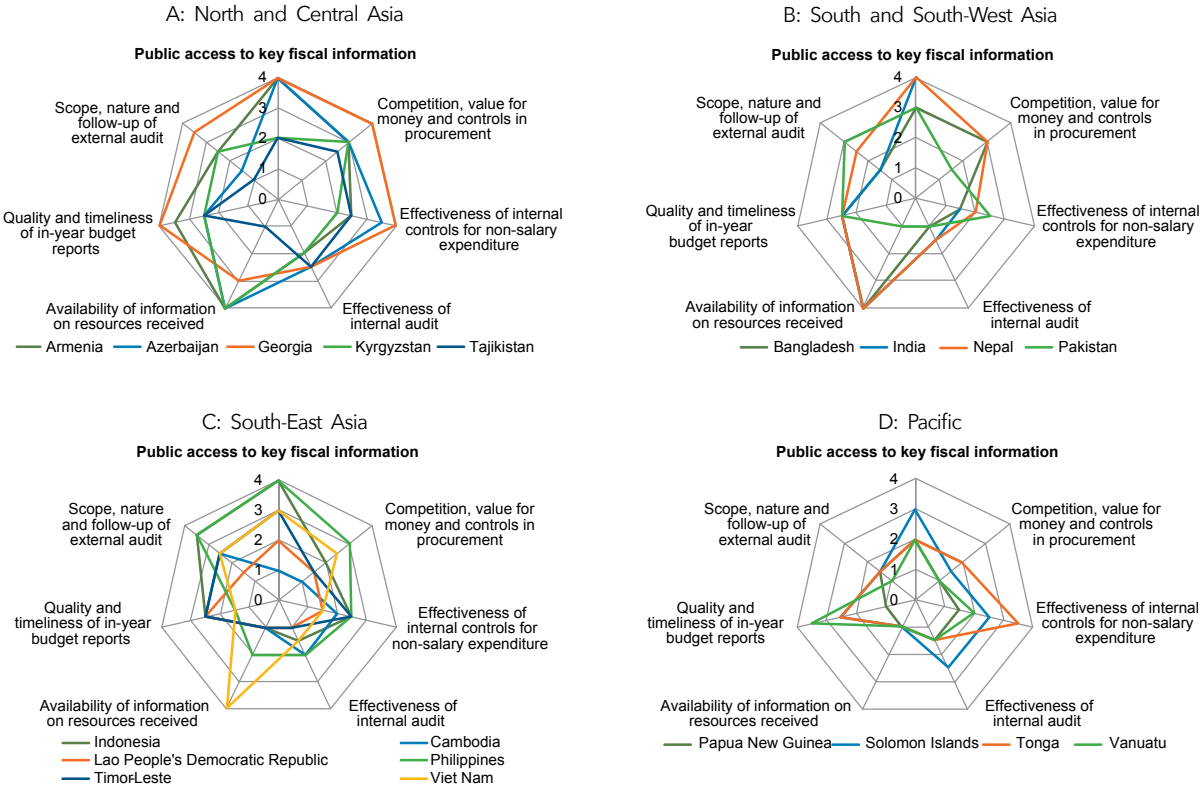
Both internal controls and audits contribute to better governance as they enable transactions (or operations)

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

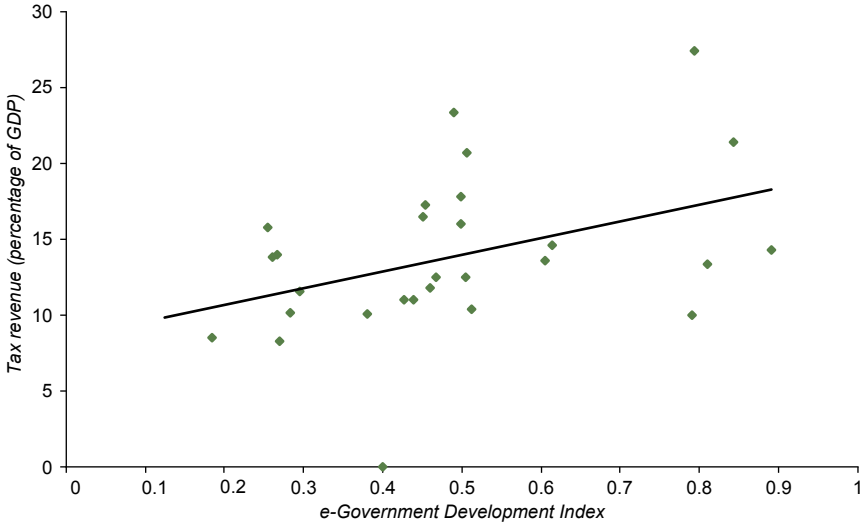
The implementation of the above-mentioned policies can be optimized through information and communications technology (ICT) and through wider use of financial products by beneficiaries of public services and by taxpayers. For instance, most of the case studies discussed above are based on the usage of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

$$PSP_{i,j} = \Sigma_{k=1}^{n_j} \omega_k PSP_{i,j,k} \quad (1)$$

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:

$$\text{If} \quad X<1 \quad \text{then} \quad S = \frac{X - Min}{Max - Min}$$

$$\text{If} \quad X>1 \quad \text{then} \quad S = \frac{1 - (X - 1) - Min}{Max - Min}$$

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.

$$\hat{C}_{i,t} = \frac{\Delta\, Gov_{it} \times \beta}{\mid \Delta\, Efficiency_{it} \mid}$$

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	