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Successful Tax Reforms in the Recent International Experience: Lessons in Political Economy and the Nuts and Bolts of Increasing Country Tax Revenue Effort

Jorge Martinez-Vazquez*

November 2021

Abstract

The main objective of this paper is to extract practical lessons on increasing tax revenue effort that are relevant to developing countries. Specifically, it focuses on insights from two dimensions: the political economy requirements to generate public support for reform and the technical factors (“nuts and bolts”) of substantially increasing tax revenue effort. General topics covered include the political economy preconditions that facilitate tax reform, how and by whom tax reform should be implemented, the timing of reform efforts, determinants of current tax effort, tax policy choice options, tax administration options, and the enhancement of tax morale and compliance norms. The paper also profiles successful examples of recent tax reforms from 29 countries worldwide. It concludes with lessons from both the literature and these countries’ experiences, empowering reform-minded politicians and administrators to shape their own jurisdictions’ strategies for increasing tax revenue effort.

Keywords: tax reform, tax policy, tax administration, international taxation

JEL Classification: H20; H21; H22; H83

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“When it comes to tax reform, 'ownership' matters. So does leadership. So does a coherent strategy, and of course adequate resources both to develop good ideas and specially to implement them effectively.”

— *Richard Bird (2008)*

1. Introduction

Adequate levels of tax revenues are key for sustainable development, but for many countries, their tax systems remain the weakest link in the promotion of growth and state building (Besley & Persson, 2009; Bird & Martinez-Vazquez, 2014; Gaspar et al., 2016b). The need for country tax revenue mobilization and tax capacity building has been highlighted in recent international forums including the G-20 leaders in 2010, the Addis Tax Initiative (ATI) for revenue mobilization, and the UN’s recognition for the needs for additional tax revenues by member countries to fund the Sustainable Development Goals (SDGs) by 2030 (Akitoby et al., 2018). In this latter regard, 15 percent of GDP has been often cited as a target (Prichard et al., 2019).¹

The main focus of this paper is to review the institutional conditions and policies that can facilitate, or become an obstacle to, successfully and sustainably increasing tax revenues as a share of GDP, especially in developing countries. As later discussed in this paper, revenue mobilization is just one of the objectives tax reform efforts can pursue; indeed, many countries, especially developed countries, have embarked over the recent decades on substantial, but

¹ For example, Gaspar et al. (2016a) find that once a country reaches a tax-to-GDP threshold of around 12.75 percent, economic growth rises sharply and consistently, on average 7.5 percent, over the next decade. Nevertheless, some recent research has questioned the ability of many developing countries to tax themselves in order to increase their annual spending by 30 percent, as estimated by the UN, in order to achieve the Sustainable Development Goals (SDGs; see, for example, Baum et al., 2017). In particular, tax revenues in relation to GDP remain low in the Asia-Pacific region (17.6 percent in 2018) by comparison to the OECD average (24.9 percent in 2018).

revenue neutral, tax reforms pursuing other objectives, such as gains in efficiency and facilitating economic growth, or attaining a more equitable distribution of tax burdens.

Tax reform, especially when its objective is to increase tax revenues, is among the most difficult and politically charged policies any government can implement. Citizens and businesses alike are rarely inclined to paying higher taxes. Thus, it is not surprising to see over the years that governments in many countries experience serious political difficulties and even fall and lose power when tax reforms are poorly planned and implemented.

Internationally, there are some examples of countries that, despite repeated well-planned attempts to increase their tax revenues in relation to GDP, would seem to have been stuck in a relatively "constant" tax-to-GDP ratio, showing the inherent difficulties of tax reform, especially reforms focused on substantially raising tax revenues.² Low levels of tax revenue generation remain a problem in many countries around the world, thus the important question is as Bird (2004) puts it, why so little change? Although there may be reasons of capacity, the more likely reason is the lack of political consensus to break away from an "equilibrium position" regarding the level of taxing and structure of the tax system. The reasons for that type of suboptimal equilibrium are complex, but likely include a lack of capacity and legitimacy of political institutions needed to undertake comprehensive tax reform (Lledo et al., 2003). Corruption can

² One such example was Mexico, where despite major tax changes that have taken place over decades, those changes appear to have had no impact on the country's tax-GDP ratio. This latter was 10.2 percent in 1980 and 10.1 percent in 2004, although it eventually reached 16.5 percent by 2019. See Martinez-Vazquez, 2001, for a discussion of how progress in the earlier decades in Mexico was undermined by unrelated ad hoc measures and administrative deterioration. Similar experiences have been reported for other countries, such as Colombia (McLure & Zodrow, 1997) and Pakistan (Martinez-Vazquez, 2007). The reviews for India and Indonesia's experiences, in a later section of this paper, offer similar accounts of historical difficulties in raising overall tax effort.

also affect the overall level of taxation, as citizens view corruption as a substitute for taxation, especially in developing countries (Frey & Eichenberger, 1999).³

Tax reforms are complex processes with many dimensions, many of which can potentially pose significant obstacles to successful tax reform (Bird, 2004; Brys, 2011). Beside raising adequate or targeted revenues, reforms must balance efficiency issues (critical to promoting economic growth) with distributional issues, that is, with some desirable standards of horizontal equity and vertical progressivity and redistribution; those different objectives are often not compatible. Other institutional dimensions can likewise become obstacles to successful tax reform, such as intergovernmental fiscal relations regarding revenue assignments and tax sharing arrangements between different levels of government. The lack of a social contract and weak political institutions can also become substantial obstacles.⁴

Changes in political institutions can also become formidable obstacles to fundamental tax reform. Decreases in the political integration of national parties (with central party figures being less able to control local candidate nominations or impose a national policy platform) incentivizes local party leaders to set their priorities according to their local constituencies' interests as opposed to those of the party's national constituency (Bonvecchi, 2010).⁵

³ For example, Tanzi and Davoodi (2000), Bahl (2006), Martínez-Vázquez (2007), and Goodspeed et al. (2013) report empirical evidence of a substitution effect between taxation and corruption.

⁴ For example, Gómez-Sabaini and O'Farrell (2009) argue that in much of Latin America, broken social contracts, epitomized by the power of interest groups, delegitimized political institutions, and citizens having little trust in government institutions, represented a major obstacle to the adoption of fundamental tax reforms in the region over decades.

⁵ One such example is offered in Olivera et al. (2010) regarding Colombia, where tax reforms post-1991 became "piecemeal" or "quick-fix" reforms as opposed to fundamental structural reforms because of the political party fragmentation, with most members of congress being elected via single-candidate lists, and their incentives shifted in support of the narrow tax interests of groups and firms that helped with campaign financing.

Economic structure (agriculture versus manufacturing versus services, the extent of economic openness—imports and exports—or the presence of natural resources) can facilitate or make it more difficult to implement reform. Inequality in income distribution can motivate tax reforms but also make achieving them harder because of the opposition and lobbying of the wealthier groups. Even when there is more equitable distribution, most tax reforms in some sense generate “winners” and “losers”; losers are typically more effective in voicing opposition than winners are in offering support, in part because the losers may be concentrated in a smaller group while the winners are widely dispersed in society or in groups less likely to voice their opinions (see, for example, Ilzetzki, 2018). Thus, the art of successful tax reform is to craft provisions or “compensation” packages that can help overcome the resistance of groups that see themselves as losers.⁶ Taxpayers at large need to be informed and motivated by clear plans to improve governance (less corruption, more accountability, etc.) and tangible improvements in government services; otherwise, reforms can be seen as arbitrary and abusive and thus be vehemently opposed.

There may be also administrative type obstacles to tax reform. Skill levels and training of public officials in tax matters may present an obstacle, but perhaps an easier one to address, even though at times this dimension is truly forgotten and becomes a binding constraint.

International factors, such as the new global economy and worldwide capital mobility, have also conditioned tax reform. Trade liberalization and compliance with WTO rules and

⁶ For example, all taxpayers can be winners and losers in some way, but the wins need to be perceived as exceeding the losses. When the loser group is well-identified, an explicit compensation package may also be introduced in the reforms.

multilateral trade agreements have meant significant reductions in tariffs and country reliance on international trade taxes. There has also been a movement away from relying on capital income taxation. This has taken multiple forms. One such form is reductions in corporate income tax rates, because of the high mobility of capital and tax competition to attract foreign capital. Another example has been the introduction of “dual” income taxation systems, such as those adopted in some Northern European countries, favoring capital over labor income (Bahl & Bird, 2008).⁷

The rapid pace of technological change across the globe has likely added constraints to tax reform. The new world of digitalization poses both opportunities and challenges to effectively raising tax revenues, but there is emerging evidence that the digitalization is likely to impose a threat to tax collections everywhere (Hanrahan, 2020). On the other hand, the current crisis worldwide associated with the COVID-19 pandemic may work as an inducement to fundamental tax reform in countries where, for multiple reasons, tax reform efforts have not taken hold.⁸

International challenges, such as those stemming from “base erosion and profit shifting” (BEPS) and the generalized perception that multinationals are not paying their “fair share” of taxes have spurred multiple initiatives for domestic tax reforms. While there are still multiple reform options countries can adopt, progress is expected to be slow (Mooij et al., 2021).

⁷ However, a recent meta-analysis study by Adam et al. (2011) has failed to confirm such negative effect of globalization on the taxation of capital.

⁸ For example, Gupta and Tovar Jalles (2020) find that past pandemics have led many developing countries to implement tax reforms, but, interestingly, that has not been the case for tax revenue administration reforms.

Successful tax reform involves two main and clearly separate types of activities: the process (“how to do it”) and the substance (“what to do”) (Bird, 2008). Even though the emphasis of research in the past has been on substantive, overarching tax policy and tax administration reform and modernization issues, there has been growing awareness and attention given to the political process and enabling institutions and conditions that may facilitate successful reform. Politics can be central to successful tax reform.⁹ Though those different components and elements are relevant and often involved in examples of successful tax reforms, not all of them need to be present. For example, the introduction of deep tax administration reform and modernization may be sufficient to generate sustained increases in revenues without any substantial changes in tax policy. Some of the country experiences later reviewed in this paper provide good examples of that.

Overall, although successful tax reform is hard, it can be done. The experiences in raising tax revenues as a share of GDP summarized in Table 1 and the case studies of tax reforms described in the fourth section of this paper, as well as in other works,¹⁰ are witnesses to that possibility.

Table 1. Some Successful Tax Reforms in Recent Years around the World

Country	Reform Year	Result	Result Period
Afghanistan	2003, 2004, 2017	2.5% to 8.0%	2003-2012
Bangladesh	2010-11	7.5% to 9.7%	2006-2013
Bosnia and Herzegovina	2007-09	0.6% to 3.3% ^a	2006-2012
Brazil	1988	22% to 30%	1990-2004
Burkina Faso	2010	9.6% to 15.6%	2002-2019
Cambodia	2016	10% to 19%	2009-2019
China	1994	12.6% to 16.1%	2001-2016

⁹ For example, in a recent study of tax reform in the European Union countries during the period 2000-2007, Castanheira et al. (2012) find that political issues, such as incentives and constraints, are much more important drivers of tax reform than economic issues.

¹⁰ See, among others IMF (2011) and Brys (2011).

Colombia	1992-93,95	8.2% to 15%	1990-2004
Denmark	2010	46.3% ^b	2019
The Gambia	2013	13% to 17.5%	2010-2015
Georgia	Phase I (2004-2007); Phase II (2007-2009); Phase III (2010-2011)	7.62% to 23.18%	2002-2012
Guyana	2017	0.81% to 1.02%	2016-2019
Hungary	1988,91	25.55% to 19.83%	1991-2010
	2010	21.07% to 22.93%	2011-2012
India	2005, 2015	15.8% to 16.6%	2001-2020
Indonesia	1983	8% to 8.9%	1983-1989
Liberia	2003	10% to 20%	2003-2015
Lithuania	2009	28.8% to 29.8%	2005-2009
Malaysia	2015	14.8% to 12.4%	2007-2019
Maldives	2010	9.38% to 25.2%	2010-2015
Mauritania	2009	11.1% to 17.2%	2009-2014
Mozambique	2010	14.74% to 27.06%	2010-2019
Nepal	1997-2005	9% to 22%	2006-2019
Paraguay	2004	8.8% to 12.8%	2003-2010
Rwanda	2010-2015	12.9% to 16.65%	2010-2016
Senegal	2012	18% to 20.9%	2009-2017
Slovakia	2013,2014	28.1% to 34.7%	2012-2019
South Korea	1950's to 1980's	6% to 20%	1950s-1990s
Spain	1985	18.4% to 34%	1975-1990
Thailand	1992	15.5% to 17.2%	1999-2019
Uganda	2010/11-2014/15	10.5% to 14%	2012-2017
Ukraine	2004	20% to 25%	2004-2011
Vietnam	Phase III (2006-2010)	20% to 22.3% ^c	2009-2010

^a Corporate Income tax and Personal income tax

^b Ratio has remained stable for the last 19 years.

^c Ratio has declined to 18.2% by 2014

Source: Developed by author from multiple sources

The main objective of this paper is to extract practical lessons relevant to developing countries from two dimensions: the political economy perspective and the technical factors (“nuts and bolts”) of substantially increasing tax revenue effort.

First, this work analyzes the political economy of tax reforms to explore the elements and structure of the approach taken that can help make them politically successful. What practical lessons from past experiences of developing and developed countries can be extracted on implementing successful tax reforms, especially in those countries where tax effort (measured as the total tax revenues to GDP ratio) was increased significantly as the result of the reform?

Second, even though some tax reforms can pursue objectives such as decreasing or eliminating tax distortions in the economy or improving the progressivity of tax burdens across income groups, keeping overall revenue neutrality, most often, when countries engage in tax reform, they do so to increase overall revenue collections. Thus, this policy note will also analyze the technical factors (“nuts and bolts”) that facilitate significant increases in tax revenues as a share of GDP (or overall tax effort). Here again the work attempts to answer: what are the practical lessons from past experiences of developing and developed countries that can be extracted from successful revenue enhancing tax reforms, especially in those countries where tax effort increased significantly?

Third, this work reviews and describe the actual tax reform experiences of a significant number of developing and developed countries. Again, the main objective will be to extract useful lessons both in the political economy and the tax policy and tax administrations packages that have been used successfully. The most important lessons are discussed in the last section, which concludes this policy note.

To close this introductory section, we anticipate a summary of the main conclusions reached in the paper. The international experience shows well defined lessons on the conditions and approaches needed to attain sustained increases in tax revenues as a share of GDP. These are briefly summarized here around the main themes of political economy factors, tax policy design, complementary tax administration measures, and the enhancement of tax morale and tax compliance norms.

First, there are lessons on the political economy of tax reform. First and foremost, tax reforms require major political consensus or a nationwide political pact. These are generally

more easily reached during periods of significant political transition and/or following major economic crises. In addition, fundamental tax reform is more likely to happen if driven by strong buy-in from all stakeholders, supported by sustained commitment from political leaders, and accompanied by measures that head off resistance from groups that perceived themselves as losers. Successful reforms are generally backed by a strategic plan laying out clear objectives and the means of achieving them, including the development of databases and the analysis of the potential effects of the different options on revenues, resource allocation, and tax burden distributions.

Second, there are lessons on the choices of tax policy structure. The ongoing gold standard in tax policy reforms has been the broadening of tax bases, by significantly curbing exemptions and other special treatments and by selective decreases in tax rates. Fundamental tax reform, especially with a revenue adequacy objective, may involve introducing new tax instruments, especially a VAT, but may also include selectively increasing tax rates in already existing taxes. Tax policy reform at the national level will typically also imply changes in revenue assignments for subnational governments.

Third, successful reforms are generally accompanied by the upgrading and modernization of tax administration and enforcement services. There is wide experience showing that the joint pursuit of tax policy reforms and revenue administration improvements leads to larger and better-sustained gains; indeed, substantial tax administration reform can *itself* deliver sustained tax revenue increases.

Last, sustained tax revenue increases are considerably more likely when tax reforms are accompanied by increases in taxpayer morale and compliance norms. These can be achieved

when tax reforms are imbedded in wider fiscal reforms including expansion of social services and other public goods, improvements in governance and reductions in corruption levels, and increasing trust in government institutions.

These lessons provide an empowering guide for reform-minded politicians and administrators in building their own strategies for tax policy and administrative reform to achieve sustained increases their countries' tax revenues.

2. The Political Economy of Tax Reform: Key Lessons and Country Experiences in Facilitating and Performing Successful Tax Reforms

There is no magic bullet to tax reform; it is complex, it is messy, and it is always different from one country to another. But this is not to say that important lessons cannot be learned from how other countries have dealt with these problems. Perhaps the most important lesson learned in the past decades is that political institutions and the political process are highly influential in shaping successful approaches to tax reform. These processes involve careful planning and analysis of the options, ample dialog and socialization involving all stake holders in society, and very present “sharp” political leadership support during the entire process. Many taxation experts have emphasized that the fundamental challenge for successful tax reforms rests on improving these political processes, rather than the technical aspects and contents of the reforms themselves (Lora, 2007; Bird, 2008; Focanti et al., 2016). To better understand the role these political economy issues play, it is useful to separate them into three large categories: (i) the preconditions or how to facilitate tax reform; (ii) who is and how to carry these processes; and (iii) the timing or when to do tax reform.

2.1 Preconditions that facilitate tax reform

2.1.1 Strong leadership and political commitment at the highest level

A precondition for successful tax reform that most observers have agreed on is that of strong leadership and political will at the highest possible level of government. This can take the form of a political champion who can recognize the opportunity, build the necessary political coalitions, counter special interests, and/or create the conditions sufficient for implementation (Bird, 2004; Owens, 2005; Brys, 2011; Gaspar et al., 2016 b; Akitoby et al., 2018).

2.1.2 Presence of enabling institutions

The experience of the last decades with successful tax reform clearly indicates that crucial aspects are the quality of the institutions that are charged with the planning, analysis, and implementation of the tax reform process (Bird, 2004; Brys, 2011) and the presence of “constitutive institutions” such as free elections, rule of law, and/or a meritocratic civil service (Gaspar et al., 2016b).

2.1.3 Attainment of a new fiscal-social contract

Cornia et al. (2011) and Bird and Zolt (2015) highlight the key role played by a new “fiscal contract” for lifting overall tax effort across Latin American countries in the last decade putting more emphasis on the “fiscal exchange” (the quality and quantity of public goods and services to be provided by government and the types of taxes to be used to finance them), redistributive justice, and the increasing economic and political role played by the growing middle class in those countries. The contract-building process demonstrates the relevance of the “Wicksellian link,” with citizens willingly accepting to pay more in taxes in exchange for expanded social and economic public services.¹¹

¹¹ Numerous empirical studies have shown that a high correlation exists between rising tax to GDP ratios and the quality and quantity of public services supplied in a context of democratic accountability (Lenton et al., 2017). Note also that the concept of the “fiscal contract” can be separate from specific redistribution objectives. For example,

2.1.4 External support for the development of medium-term revenue strategies (MTRSs) and other international initiatives as commitment devices

While the highest-level political commitment by the country's authorities is critical to successful tax reform—which cannot be simply generated by external support—external support *can* effectively encourage and reinforce that commitment where it already exists. The external support can be expressed as technical assistance by IOs in tax policy development and the strengthening of taxation agencies, increased support for regional tax organizations, and the development of medium-term revenue strategies (MTRSs) which emphasize a holistic approach to tax reform.¹² In this regard, it is also important to highlight the large potential role of tax statistics and evidence-based policy making being internationally supported by the ISORA-Revenue Statistics hosted by IOs¹³ and the Asia Pacific Tax Hub.¹⁴

2.2 How to do tax reform and by whom

It is completely accepted that, when it comes to tax reform, one size does not fit all; tax reform needs to be tailored to the individual country's history and needs. Nevertheless, much has

Timmons (2005) argues that countries with tax systems in which the rich are taxed more heavily also tend to have spending patterns that cater to the rich.

¹² The MTRS is a comprehensive approach for undertaking effective tax systems reform for boosting tax revenues over the medium term through a country-led approach. Presently, 22 countries are engaged with Partners in discussing, formulating, or implementing an MTRS. For example, among Asian countries, the following are at the “formulation stage” of the MTR: Indonesia, Lao PDR, Pakistan, and Thailand. Among those in the “pre-formulation stage” are Bangladesh, Malaysia, Uzbekistan, and Vietnam. See <https://www.tax-platform.org/medium-term-revenue-strategy>, and Keen (2016), among others.

¹³ The International Survey on Revenue Administration (ISORA) is a partnership of IOs including the Inter-American Center of Tax Administration (CIAT), the Intra-European Organisation of Tax Administrations (IOTA), the International Monetary Fund (IMF) and the Organisation for Economic Co-operation and Development (OECD), and with the support of other IOs, including the Asian Development Bank (ADB). The project was first deployed in 2016 with the participation of 135 tax administrations from around the world providing data on revenue statistics and tax administration. The survey data are accessible for participating countries on a secured online database to facilitate cross-country analysis and comparisons on performance and operations.

¹⁴ The Asia Pacific Tax Hub at ADB assists member countries in developing domestic resource mobilization programs and pursuing international tax cooperation objectives, such a MTRS, or the digitalization of tax administrations. In particular, the Tax Hub promotes the achievement of the Sustainable Development Goals (SDGs) and a variety of the ITC initiatives, including the Global Forum on Transparency and Exchange of Information for Tax Purposes and the Inclusive Framework on BEPS.

been learned from multi-country experiences in the successful process of tax reform and who should implement or be in charge of that reform process.

2.2.1 Clear strategic vision and specific objectives

This will entail stating a clear rationale for the tax reform to obtain a consensus on broad long-term goals for the country, which can include financing expanded social and economic services, reducing debt levels, or promoting economic growth by attracting FDI and improving labor supply incentives. It will also entail benchmarking the concrete objectives of the reform, such as raising tax revenues to some level, attaining a fairer distribution of tax burdens, simplifying taxes to promote rather than inhibit growth, and so on.

2.2.2 Careful planning and analysis of the impact of the different options must precede actual tax reform

The policy formulation should focus on what matters and what can be done, paying close attention to details and the feasibility of implementation (Gillis, 1989; Thirsk, 1997). The analysis of the impact of the tax reform should include the simulation of changes in the income distribution from each measure and the entire reform package, and the potential impact on economic activity. Sound analysis and strong packaging of the reform will permit making changes for political (or other) reasons without compromising the core of the reform. It will also permit refuting incorrect but otherwise appealing attacks on the substance of the reform. Doing all this will require building up institutional and analytical capacity in taxation, with economists, lawyers, IT experts, etc., both inside and outside of government (McIntyre & Oldman, 1975; IDB, 2006; Bahl, 2006; Preston & Sibieta, 2008; Bird, 2009).

2.2.3 Strategy for educating about and “selling” the reform

Providing education about tax reform is an all-inclusive process which can be important to its eventual success. Hidden agendas and opaque processes with few stakeholders’

involvement can be tempting to some policymakers, but they risk eventually raising hard opposition and derailing otherwise good and desirable tax reforms. Building consensus requires clear communication regarding long-term objectives and strategy through all channels including public media and the “bundling” of the reforms into more comprehensive reform packages (Owens, 2005; Bird, 2009). The entire reform package needs to be “sold” not only to members of the parliament or other body that must approve it, but also to the public at large and to the tax administration officials who will implement it. Selling the tax reform will also require a careful communication strategy and an open dialogue with all the direct stakeholders, including business, unions, and special interest groups (Brys, 2011). In addition, it may require some special measures, for example, the earmarking of some revenues to specific spending programs and perhaps adding sunset provisions.¹⁵

2.2.4 Consideration of compensating the losers

The most formidable obstacle to comprehensive tax reform is likely to be the “voice and vote” of those groups that perceive themselves as “losers”; that is, they will have to pay more taxes and perceive that otherwise there is nothing (or not enough) in the reform package that will compensate them for those higher taxes. Part of the art of designing a successful tax reform is to address these concerns. First, it is important to identify winners and losers for every changed policy and find ways to mobilize the support of the winners. Second, there should be a strategy to neutralize the losers’ opposition by devising compensation measures in other areas of the reform (or even with temporary provisions). Ideally, the reform will use a package approach,

¹⁵ See, for example, Flores-Macías (2018) for discussion of the case of Mexico.

with most taxpayers being both winners and losers and the perspective that eventually most or all will gain.

2.2.5 Assignment of who is charged with preparing the tax reform

There is no complete agreement among experts on the issue of who is to be charged with preparing the reform.¹⁶ One of the most common and successful practices has been the appointment of special commissions with broad representation across society, involving the tax policy office (Ministry of Finance etc.), the tax administration agency, and representatives of business, labor unions, and other relevant citizen groups and stakeholders. The commission is typically supported by a technical team of domestic and, if needed, international experts with the requisite skills and credentials, to formulate options and to collect data and run analyses and simulations involving the main problems with the current system, as well as simulate the revenue impact and the efficiency effects and distributional impacts of different potential measures and scenarios. The biggest risk associated with this approach is the loss of ownership by the government, which must see the entire project as its own as opposed to that of an outside technical commission.

The alternative to a tax reform commission is that the lead for the reform be taken by a particular agency in the government. It is typically not a good idea to have the tax administration agency oversee the process, since wider policy issues need to be considered. The job can be performed by the Ministry of Finance, or the President's office, but in these cases, it is always desirable to have the door open to other contending ideas from within other government agencies

¹⁶ See, for example, Bahl (2006) and Bird (2009).

and other stakeholders in society at large to have, as Bird (2009) puts it, “a competition of reform ideas in play.”

2.3 The “when” or timing of tax reform

Timing matters for successful tax reforms in a variety of ways. First, it is important to recognize that there is always some sort of historical path dependence in tax reform. As Feldstein (1976) put it several decades ago, the starting point necessarily conditions the way forward with tax reform.¹⁷ What may be desirable in the next round of tax reform may be quite different from what it would have been if those taxes were to be introduced for the first time.

Second, the preparation stage should not be hurried. Government should take enough time to plan, prepare, and socialize the tax reform package to gain support from politicians, administrators, and most important, main stakeholders and the public.

Third, once the tax reform is approved, the choice is to implement it all together right away in a big-bang or else to sequence the changes in a preordered way. Phasing in the implementation over a period and delaying the application of some measures allows the economic system to adjust and adapt to the new rules and can soften the costs or losses, as well as the opposition by those adversely affected by the reform. However, if there is some danger of political reversal of the reforms, limiting the time between approval and implementation may be best. There is also the good argument to be made for building reform momentum by implementing reforms that have immediate effects.¹⁸

¹⁷ A good example of that time path-dependence is the comparison in Di John (2006) of the tax reform processes in Brazil and South Africa during the last several decades.

¹⁸ See Feldstein (1976), Owens (2005) and Akitoby et al. (2019) for further discussion of these issues.

Fourth, should tax reform be opportunistic and be implemented in a time of crisis or is it better to wait for times of fiscal bonanza and stability? There is wide belief that fundamental tax reform is easier to carry out in times of crisis, when the political system and the public may be open to policy measures that may imply sacrifices and special vested interests may be weaker to oppose reform (Olofsgard, 2003; Bahl, 2006; Akitoby et al., 2018). The successful reform experiences of many countries reviewed below in times of severe crises are also witness to this wisdom. However, some recent empirical research also shows that many governments also tend to undertake tax reforms in good economic times when budget surpluses can be used to partly compensate the losers from tax reform (Brys, 2011; Castanheira et al., 2012). On balance, therefore, it will be good to take advantage of a crisis to embark on tax reform, but the process can also be successfully carried out in times of fiscal stability.¹⁹

Fifth, another important aspect of timing is the stability of tax institutions over time. Tax structures should be stable, and tax changes, which create all kinds of costs in administration and compliance, should be kept to a minimum between periods of fundamental tax reform. Business and investor uncertainty created by frequent changes to the tax laws can have significant deleterious effects on economic activity, investments, and ultimately on economic growth.

Last, the better attainment of some specific objectives may also call for specific timing of the tax reform process. For example, Gupta and Tovar Jalles (2020), studying tax reforms in 45

¹⁹ Nevertheless, regular political cycles also tend to matter. For example, Fuest et al. (2021), after examining multiple tax reforms in 23 countries over the period 1960–2014, find that politicians consistently postpone any tax rate increases to after elections and that electoral cycles are most conspicuous for changes in the rates of the VAT and PIT.

emerging and low-income countries from 2000 to 2015, find that in order to have a greater impact on income inequality, it is more effective to implement tax reforms when the economy is growing relatively slowly. As another example, Fairfield (2013) argues that increasing the tax burdens of economic elites with political and economic power would be better to do in an incremental approach to reform, opening different fronts at the same time to seek acceptance and effectiveness.

3. The Nuts and Bolts of Increasing Country Tax Revenue Effort: Institutional and Other External Factors, Tax Policy Measures, Tax Administration Measures, and Taxpayers' Tax Morale

Even after all political economy issues are addressed, effectively raising tax revenues requires; (i) implementing structural and institutional changes that can facilitate a country's tax effort; (ii) making the right choices in tax policy design regarding tax bases, tax rates, special tax treatments, and so on; (iii) developing and enabling a modern tax administration for the efficient enforcement and collection of taxes, minimizing taxpayers' compliance costs; and (iv) encouraging and strengthening taxpayers' "tax morale," their intrinsic willingness to voluntarily pay taxes. These are not alternative initiatives but rather are complementary and should be implemented in combination. In particular, countries that have combined pursuing both tax administration and tax policy reforms have experienced much larger and more persistent gains in revenues (Owens, 2005; Akitoby et al., 2019). This section develops all those dimensions in more depth.

3.1 Determinants of country tax effort

There has been considerable interest and research in the economics literature on the determinants of countries' tax efforts. One main take-away of this knowledge base is that the economic and institutional conditions of a country limit the amount of taxes that it can

realistically raise. However, even though there are some determinants of tax effort which the government cannot directly affect (at least in the short run) such as the structure of the economy and therefore available tax bases, there are other determinants, like governance institutions, corruption, etc., that are actionable policy levers which can be used to facilitate overall increases in tax effort in any country.

Strictly speaking, *tax effort* measures how far a country's actual revenue is from its tax revenue capacity or potential; the further away actual revenues are from potential revenues, the lower the tax effort.²⁰ The typical determinants of the level of taxation across countries used in the literature on tax effort include the sectoral composition of the economy (in particular the relative size of the agricultural sector which offers lower tax bases and is more difficult to tax), the degree of openness of an economy (which offers easier tax handles), per capita GDP, the ratio of public debt to GDP, the inflation rate, income inequality as measured by the GINI index, and the level of education of a country. More recently, studies in this topic have utilized institutional

²⁰ Two basic methodologies have been used in the empirical literature to estimate tax effort: the “stochastic frontier analysis” and the “cross-section or panel regression estimation.” In both cases, the analysis of a country's tax effort is relative to the comparative performance of all countries including in the sample used in the statistical analysis. For example, from that perspective, South and East Asia economies show an overall tax effort, measured by the share of tax revenues in GDP, that is low vis-à-vis those of other economies around the world with the same level of per-capita income (Bernardi et al., 2005). The difference between the two methods is that, in the case of frontier analysis, performance in tax revenue collections is relative to that of the best performers (and therefore there are only negative deviations or underperformers). However, in the panel regression method, performance is relative to the average performer and therefore there are both positive deviations—with overperformers—and negative deviations—with underperformers). See, for example, Bird et al. (2006; 2008), Fenochietto and Pessino (2013), Langford and Ohlenburg (2015), and Ayodele (2019). In both cases, the underlying theoretical framework is that there is a sort of “production function” that relates the maximum level of tax revenues which can be obtained by a country given its tax structure and inputs, such as economic structure, openness, etc. More recent contributions have shifted emphasis from comparative performance among countries to the required tax effort to meet government spending targets, such as balanced budgets or the Sustainable Development Goals (SDGs) (see Cyan et al., 2014).

factors as additional determinants accounting for “voice and accountability,” such as the quality of governance and the presence of corruption.²¹

The causes of low tax effort are multiple. From a policy viewpoint, knowing the level of tax effort should be the first step to planning fundamental tax reform. There may be little point in restructuring taxes or changing tax rates if the current tax system is yielding revenues below its potential. What would be needed in this case is more effective tax administration and enforcement. It is therefore important to understand the level and causes of tax effort in the country as a first step for engaging in tax reform.

While openness, GDP per capita, education level, and good governance are consistently found to be positive factors in attaining high tax effort, the relative size of the agricultural sector, inflation, inequality in the distribution of income, and corruption are found to be negative factors.²² The important message is that both developing and high-income countries have the potential to improve their tax performance through improving their governance institutions. Public institutions might be interpreted as the extent to which taxpayers feel they have a meaningful “voice” in influencing public policy.²³ At the same time, tax effort may also be related to the availability of the “exit option” of the so-called “shadow economy.” In addition, an important reason why many countries do not exert an expected level of effort is that it may not

²¹ Of course, there is some degree of endogeneity in some of these variables; for example, good governance and other state institutions not only affect the share of tax revenues to GDP, but the latter also affect state institutions.

²² Tax effort has also been shown to have even deeper determinants such as the geography and history of the country (Van Oordt, 2019).

²³ Voice and accountability are measured by an index containing various aspects of the political process, civil liberties and political rights (approximating how citizens are able to elect their governments), and independence of the media (Bird et al., 2006).

be in the interest of those who dominate the political process to increase taxes. Thus, changing tax effort may require changing political institutions. What emerges from all these works is that a more legitimate and responsive state is likely an essential precondition for a desirable level of tax effort, especially in developing countries (Bird et al., 2006).

The structure of taxes, to a large extent reflecting public political choices, naturally also affects the relative revenue performance of a country; large exemptions and relatively low tax rates for important tax instruments are a main cause of lower tax effort, especially for many developing countries. These findings show that there is wide scope for increasing tax effort through tax policy and tax administration reform measures, two main themes that are further developed below in this section.

Other more idiosyncratic country factors have also been found to affect tax effort. Countries with large natural resources typically raise much less revenue from traditional tax sources (Fenochietto & Pessino, 2013). Foreign aid and debt forgiveness can also affect tax effort. Surprisingly, the international financial community may sometimes be at fault. In particular, the expectation of debt forgiveness may discourage countries, especially developing countries, from attaining sustainable fiscal independence through fundamental tax reform and maintained tax effort. In the past, at the same time the international financial community has advised developing countries to improve their tax capacity, it also condoned their loan repayment obligations and induced expectations of renewed bail outs (Brown & Martinez-Vazquez, 2015; Boukbech et al., 2018).

3.2 Tax policy choices and goals

The choice of tax policy changes is central to tax reform. This section reviews the different types of tax policy measures that are recommended by tax policy theory and that have been successfully taken in other countries to significantly enhance tax revenue collections. These range from the introduction of new tax instruments to the broadening of existing tax bases, selective increases in tax rates, the reduction or elimination of tax expenditures and incentives, the alteration of exemption thresholds, and the presumptive taxation of small businesses, among others.

Tax reform experiences, of course, are multiple and varied. The main paradigm for tax policy reform over the last several decades has been to broaden tax bases and lower tax rates.²⁴ This is because broadened tax bases can raise the same amount of revenues with lower tax rates, and thus make the tax system less distorting of economic activities. Lower rates also help to grow those tax bases over time and discourage taxpayers from operating in the informal sector. As part of the same paradigm, there is wide acceptance that the best tax policy to attract and compete for foreign direct investment is a level playing field with the lowest possible taxes instead of using exemptions and other preferential treatment.

Tax policy reform analysis and design has been significantly enhanced in recent decades by the introduction and wide availability of analytical tools which allow us to anticipate the revenue impact and the distribution of tax burdens and efficiency losses due to behavioral

²⁴ Note that decreasing tax rates does not always result in reduced tax revenues. Beyond the behavioral effects of stimulating the enlargement of the tax bases, the latter may also expand as the result of increased economic activity. In this respect one of the most salient tax policy puzzles of the last two decades is that while the corporate income tax rates have significantly declined over the last decades in OECD countries, revenues from the corporate income relative to GDP have remained stable. The explanation appears to lie in the fact that rate reductions have been accompanied by large increases in corporate profits. See, for example, Fuest et al. (2020).

responses of economic agents to tax changes. Such tools include microsimulation models using direct taxpayer data, computable general equilibrium (CGE) models also utilizing microeconomic data, or the computation of the elasticity of taxable income (ETI) (see Feltenstein et al., 2014, for a discussion and comparison of many of those tools). This elasticity allows us to quantify how taxable income changes in response to net-of-tax rate changes (where the net-of-tax rate is 1 minus the marginal tax rate); thus, it summarizes a range of behavioral responses including labor supply changes, savings and investment, legal tax avoidance, and illegal tax evasion. Its importance lies in the fact that it can be taken as a sufficient statistic for dead-weight loss calculations arising from tax policy changes (Feldstein, 1999; Chetty, 2009).

This section first discusses the need for clearly outlining the objectives of tax policy reform; next, it reviews the most often recommended types of tax policy reforms, and the extent to which those recommendations have been followed by tax policy reforms in practice. Then the work stops to look in more detail at the issue of using tax incentives to attract FDI and more broadly the management of tax expenditures. It also addresses the issue of dealing with the informal economy and, more specifically, using presumptive taxation. Last, the section reviews a short list of other selected contemporary issues in tax policy reform, including the avoidance of bad tax policy choices.

3.2.1 Clear outlining of the objectives of tax policy reform

Tax policy reform first and foremost requires clear policy objectives. Throughout the decades, those basic objectives of tax reform have varied little, other than adapting to the shifting international economic and institutional environment imposed by globalization.

The first typical goal of a tax policy reform is to ensure the generation of adequate revenues for government to provide the desired levels of public goods and services and investment in needed infrastructure. This is the most fundamental objective of any tax system; however, even though many tax reforms are driven by the need to generate additional tax revenues, not all tax reforms have had or need to include this objective.

The second common goal is achieving a fairer distribution of tax burdens, in terms of horizontal equity, so that taxpayers in similar circumstances pay similar amounts, and in terms of vertical equity, with those taxpayers with greater ability paying more than proportionally. Here it is important to note, however, that it is generally quite fruitless to analyze the progressivity or regressivity of isolated taxes. Fairness and progressivity should be judged in terms of the entire tax system or, even better, in terms of the overall fiscal (tax and expenditure) incidence of the government budget. Even mildly to moderately regressive taxes may be effective financing means for strongly progressive spending programs. At the end, what matters for overall fiscal equity is making sure that the poorest income groups are protected through progressive public spending programs and are exposed to significantly lighter taxation.²⁵

Third, a frequent object of reform is minimizing distortions in the economy in order to reduce the excess burden losses of taxation to a minimum and to preserve market incentives to work, save, and invest. Ultimately, raising tax revenues imposes costs to society, beyond the

²⁵ For further discussion of these issues, see, for example, Martinez-Vazquez (2008), Lustig (2019), and Gupta and Jalles (2020). The empirical evidence on whether there has been a decline in the progressivity of tax systems around the world in recent decades has been somewhat mixed. Gerber et al. (2018) find that there has been a decrease, but Gupta and Tovar Jalles (2020) find that distributional impact of major tax reforms in 45 emerging and low-income countries from 2000 to 2015 have been progressive, except for sub-Saharan Africa. However, there is evidence of gains in the overall progressivity or fiscal incidence of budgets (Lustig, 2019). This may reflect the fact that generally it is easier and more effective to redistribute income through the expenditure side of the budget.

proper revenue raised, with this latter being considered a transfer among individuals. Those costs include the so-called excess burden losses or the lost economic activity in response to the taxes, and also administration costs and compliance costs. Given that each tax instrument represents some of those costs to a certain extent, the best or optimal mix of tax instruments would be the one that minimizes all costs, or put in a different way, that mix of instruments for which the cost to society of raising a unit of revenue is the same for all instruments used (Slemrod, 1990; Shaw et al., 2008).

Pursuant to this third goal, the traditional belief has been that there is a tradeoff between the equity and efficiency objectives of tax systems. Ultimately, there has been much debate about the impact of tax composition on economic growth, with some evidence favoring the view that reliance on consumption and indirect taxes is more friendly to economic growth than heavier reliance on income and direct taxes, but with differential impacts depending on the level of development.²⁶ Trade liberalization by reducing highly distortionary trade tariffs, aggressively pursued by many countries, has been an exception to the heavier reliance on indirect taxation.²⁷

²⁶ For example, McNabb (2016), using panel data for 100 developing and developed countries, finds that the shift from trade toward domestic consumption taxes had a positive effect on economic growth but only for lower-middle-income countries. In addition, a shift toward personal income taxes and social contributions were found to lead to lower growth rates. This conclusion is also reached in other studies (for example, Martinez-Vazquez et al., 2011; Alinaghi & Reed, 2018; Nguyen et al., 2021). However, the impact of progressivity of tax systems on economic growth may be much smaller than conventionally believed (Gerber et al., 2018). Last, there is also some evidence that the design of the switch to indirect taxes may matter for economic growth; specifically, a greater reliance on the VAT, based on expanding the tax base by reducing exemptions, is more effective than relying on tax rate increases (Acosta-Ormaechea & Morozumi, 2021).

²⁷ For some time, it was widely believed that trade liberalization put pressure on overall revenues, especially in low-income countries. However, more recent research shows that the dynamic effects of trade liberalization on tax revenues tend to be negative in the shorter term tending to disappear in the medium term, especially in countries that implemented a VAT prior to trade liberalization (Arezki et al., 2021).

The fourth and final typical goal of reform is simplifying the tax system to reduce administration costs, facilitate enforcement, and reduce taxpayer compliance costs to a minimum.²⁸ Complexity can also facilitate greater corruption in the implementation of tax systems.²⁹ On the other hand, some complexity may be required for using the tax system, beyond effectively raising revenues, for redistribution and providing limited economic incentives. In reality, most countries have struggled to simplify their tax systems in large part due to political economy considerations.³⁰

Beyond those classical objectives, several newer objectives have emerged in the international practice adapting to the new global realities and constraints. These include, first, utilizing “green taxes” to combat climate change through decarbonization and adaptation and, second, providing a competitive tax environment in a more globalized and digitalized world where base erosion, profit shifting, and other challenges in international taxation have demanded closer cooperation on tax matters among all countries.

3.2.2 Stylized broad contents of modern tax policy reforms

Within the broad paradigm provided by the reform objectives above, the typical modern tax policy reform will involve some or all of the following tax policy actions:³¹

²⁸ A prime example of the international drive for the simplification of tax systems have been the proposals for the flattening and simplification of the personal income tax. Those came to a head with the proposals for a “Flat Tax,” with a single rate and a high enough exempt threshold to induce progressivity. But its ability to simplify tax implementation has been questioned (Benardi, 2019), and in practice its implementation has been limited to several former communist countries in Eastern Europe. See, for example, Gorodnichenko et al. (2009) for the effects of its implementation in Russia.

²⁹ See, for example, Awasthi and Bayraktar (2014) who find empirical evidence for the impact of tax complexity on corruption in tax administration.

³⁰ See for example, Hettich and Winer (1999) who interpret tax complexity as a natural outcome of democratic political processes leading to an equilibrium representing multiple interests and pressure groups in society.

³¹ See IMF (2011), and others, for example, Bahl and Bird (2008) and Moore and Prichard (2017).

- Eliminating most exemptions, which generally serve very little purpose, can represent increases in tax revenues of several points of GDP.
- Implementing a broad VAT:³²
 - For countries that have not yet introduced any VAT, creating a broad-based VAT, with a sufficiently high threshold in turnover for mandatory registration of firms.
 - For countries where a VAT is in place, broadening the tax base can also yield several points of GDP in additional revenues.
- Introducing a broad-based corporate income tax with internationally competitive rates.
- Enlarging the base of the personal income tax to ensure fair and balanced treatment of all forms of income, including capital income and, in order to gain more legitimacy, making greater efforts in taxing elites and higher income and wealthy individuals.
- Relying more heavily on excise taxes, especially those bearing social externalities.³³
- Implementing coherent simplified tax regimes for small businesses.
- Developing capacity to monitor and evaluate tax expenditures in the entire tax system.
- Increasing the use of real estate property taxes.

3.2.3 Tax policy reform measures in practice

If the policy actions above are the typical package recommended by tax policy experts, what type of tax policy measures have been *actually* used in recent tax policy reforms around the world? For OECD countries, Mankiw et al. (2009) confirm that, to a large extent, actual tax reform practice has followed many of the conventional recommendations offered by theories of optimal tax policy in academia, including the broadening of tax bases, lowering of top marginal

³² The introduction of a VAT and the broadening of existing VATs have had among the most significant impacts in tax revenues across the world, becoming one of the key factors in successful tax reforms. See, for example, Martinez-Vazquez and Bird (2011).

³³ For example, Cnossen (2020) recently has argued that currently excise tax revenues are much below their efficient levels, offering the potential of tripling their yield, especially in the case developing countries. Excise duties help improve the efficient allocation of resources, are not generally regressive, and can be more easily administered than VAT or income taxes.

income tax rates, the flattening of marginal income tax schedules, and utilizing more uniform commodity taxes assessed on final sales.³⁴

For low-income and emerging economies, Akitoby et al. (2018) find that, among other things, the type of tax policy measures implemented in 55 recent country episodes of large tax revenue increases (increase in the tax-to-GDP ratio of 0.5 percent per year or more over three years) most frequently involved the increased use of indirect taxes and the reduction in exemption levels.³⁵ Within those dimensions, the specific instruments most utilized were tax rate changes (in indirect taxes, especially excise taxes),³⁶ and broadening tax bases by reducing exemptions in the VAT and corporate income tax.³⁷ By type of tax instruments, VAT (and other general goods and services taxation) and excise taxation (fuels, tobacco, alcoholic and non-alcoholic drinks, and cars) were the most common measures for revenue mobilization. Less frequently used taxes were on sector-specific activities yielding economic rents, for example tourism, telecom, and oil; however, these instruments *were* effectively used by some countries. In contrast, changes to property taxes were the least frequently used.

³⁴ Of course, not all prescriptions from optimal tax theory have been followed, such as in the case of the treatment of capital income. Despite the lower taxation of capital income in dual-income tax systems, most countries continue to be far from the zero-level recommended by theory, probably because of equity considerations

³⁵ The heavier reliance of developing countries on indirect taxes over direct taxes, and the opposite pattern for developed countries, has been well documented in the taxation literature. The choice has to do with the availability of tax handles (indirect taxes being generally easier to administer and enforce than direct taxes) but also with the relative weight given to the objective of economic growth and development over income redistribution, since indirect taxation has been generally more supportive of the former than of the latter. See, for example, Martinez-Vazquez et al. (2011).

³⁶ In contrast, rate changes to the PIT and CIT were mostly negative.

³⁷ However, threshold changes were the least common.

3.2.4 Tax incentives and FDI, and other tax expenditures

Tax incentives are widely used in tax systems around the world, but besides significantly decreasing revenue yields,³⁸ there is little evidence that they work, with the exception perhaps of those providing for faster recovery of investment costs.³⁹ A general recommendation in this area is for the design of tax systems that minimize discriminatory incentives and instead focus on generally simple and neutral tax structures. Tax incentives have been used more frequently in recent decades, especially by developing countries, to attract foreign direct investment (FDI), leading to intense competition among countries in particular regions of the world. However, there is evidence that host country governance measures, lower corruption, and infrastructure quality are more important than taxes in attracting in both developing countries and developed countries to invest and that host country taxation may only matter for developed countries (Goodspeed et al., 2008; 2011). Here again, a superior strategy may be to set low and stable taxes and concentrate policy actions on improving governance, infrastructure, and labor force education (Madiès & Dethier, 2010).

Tax incentives are a particular form of tax expenditures, which are generally provisions in the tax laws providing tax relief or financial support to individuals and firms. They are used as an alternative to direct transfers and financial subsidies which, unlike tax expenditures, would appear as budget expenditures, as opposed to lower budget revenues. After mounting evidence that they can cause significantly lower tax revenue yields, the general policy advice is that tax

³⁸ For example, Alm (2019) recently explains the low revenues generated by the tax system in Indonesia largely as the result of the extensive use of fiscal incentives and other deliberate policy choices, such as very high thresholds in the CIT and the VAT.

³⁹ See, for example, the discussions on Zee et al. (2002) and Bergner et al. (2017).

expenditures must be managed carefully. Many governments now routinely publish a tax expenditure budget or report together with their regular budgets (see, for example, Heady & Mansour, 2019).

3.2.5 Using presumptive taxation to deal with the informal economy

There continues to be an intense debate among tax policy experts on the benefits and costs of increasing efforts to bring those operating in the informal or shadow economy into the government tax net. The arguments against doing so emphasize the high costs of collection and the limited revenue potential together with the negative impact on the economic activity of small entrepreneurs. On the other hand, the arguments for increasing those efforts emphasize the positive impact on tax morale and compliance, as well as the indirect impact on governance and economic development. Overall, policy development in this area calls for paying closer attention to the costs and benefits in the specific environment of each country (see Joshi et al., 2014, for a full discussion of these issues). Beyond the indirect effects on tax morale and development, some recent research has also emphasized the impact of informality on the incidence and distribution of tax burdens. Since households' share of spending in the informal sector declines with income, this tends to make consumption taxes such as VAT and excises more progressive. The implication is also that reduced VAT rates on necessities may have a limited impact on inequality (Bachas et al., 2020).⁴⁰

Presumptive taxes have been traditionally seen as a way to reduce the chances that small businesses will decide to operate in the informal economy. These taxes are justified because, for

⁴⁰ This important argument regarding the progressivity of VAT burdens reinforces the traditional argument about the progressivity of indirect taxation when “property” is measured in relation to household expenditures, thus removing the influence of savings (see, for example, Thomas, 2020).

many small taxpayers, it is very costly for the tax administration to assess net incomes and assets. Typically, presumptive taxes replace several formal taxes, such as income taxes and VAT, and the tax due is levied on the bases of a variety of indicators such as sales or gross turnover, number of employees, area size of the business, electricity consumption, and so on.⁴¹ The empirical evidence on the final effect of presumptive taxation on revenue collections, controlling the informal economy, and increasing tax compliance is to date mixed and not conclusive (see Bucci, 2020).

3.2.6 Selected contemporary topics in tax policy reform

There are many other important issues to consider at the time of undertaking tax policy reform. For the sake of space, this sub-section reviews four issues that often have been in the mix of tax reform measures around the world in recent times. The first issue is whether to introduce minimum corporate taxes. This has become a popular tax policy measure used to protect revenues from excessive tax incentives and other forms of tax base erosion, such as tax avoidance. Minimum corporate taxes are generally recognized as an effective tool, especially when reforming the corporate income tax poses administrative or political difficulties. In a recent empirical study on the practice in a large number of countries, Aslam and Coelho (2021) find that a minimum tax designed as a modified corporate income tax typically leads to somewhat larger increases in effective tax rates than when minimum taxes are based on assets or turnover.

Another contemporary topic is whether to use wealth taxes. Wealth taxes repeatedly have been thought of as the right instruments to address income and wealth inequality, an issue important to many countries today, but even though it has been tried it has not actually taken

⁴¹ See, for example, Tanzi and Casanegra de Jantscher (1987) and Thuronyi (2004).

hold. Scheuer and Slemrod (2020) recently report that while up to a dozen OECD countries had wealth taxes in recent years, very few have retained them. With the exception of Switzerland, wealth taxes have been characterized as raising little revenue, although they have been more effective as disclosure devices for personal income taxation. Even though they are feared to induce significant behavioral responses, the evidence on that outcome is weak. Probably their major weaknesses include a difficult administration and their unpopularity among taxpayers and politicians alike.

A third contemporary topic is the importance of carbon taxation and the looming future of stranded assets. Carbon taxes, in all their forms including excises, are very much needed to combat greenhouse gases and effectively combat climate change, yielding the double dividend (reduced pollution and increased tax revenues) of other green taxes.⁴² However, carbon taxation is likely to induce losses in market value and ultimately generate stranded assets in countries with fossil fuel industries, a significant financial risk for investors and for the country finances relying on these revenue sources.⁴³

The final issue to mention is that good tax policy reform also involves not introducing bad tax instruments in a rush to quickly raise tax revenues. There are several possible examples of that practice, but the most conspicuous one is perhaps the case of the ‘surrogate’ tax on financial transactions introduced by several Latin American countries over the last two decades. This is a tax that generated multiple market distortions ultimately leading to financial

⁴² See Van Dende (2019) for a survey of practices with carbon taxes and also emissions trading systems and excise taxes in 40 OECD and G20 countries. While excise taxes raise the most revenue, they are also the least earmarked for green projects or other programs.

⁴³ See Van der Ploeg and Rezai (2020) for a discussion of these issues.

disintermediation.⁴⁴ In addition, these taxes on bank transactions have been shown to provide unreliable sources of revenues over the medium term.⁴⁵

3.3 Tax administration reform and modernization

Tax systems are only as good as their implementation. The key role that efficient and effective tax administration can play has been long recognized by tax reformers and practitioners. As Bird (2003) put it, tax administration is “way too important” to policy outcomes, since how a tax system is administered ends up affecting its yield, incidence, and efficiency. In short, “tax administration is tax policy” (Casanegra de Jantscher, 1990).

Recent decades have witnessed many innovations in the organization and operations of tax collection agencies, such as the consolidation of inland revenues with customs offices, the shift from tax-based to function-based organizations, the introduction of semi-autonomous revenue authorities, and the creation of large taxpayer units. These innovations and improved information technologies have facilitated more effective enforcement and taxpayer compliance through developments such as tax withholding at source, effective use of third-party information, digital return filing and processing, and the use of officially pre-populated taxpayer returns.⁴⁶

⁴⁴ See Cornia et al. (2011). Examples include the case with Brazil’s Contribución Provisoria sobre el Movimiento o Transmisión de Valores y Créditos de Naturaleza Financiera (CPMF) introduced in 1996 with revenues earmarked for financing the public health system, Venezuela Impuesto al Débito Bancario (IDB) introduced in 2002, and Mexico’s Impuesto a los Depósitos en Efectivo introduced in 2008. Colombia, Ecuador, and Peru also introduced similar taxes in earlier years.

⁴⁵ See Baca-Campodónico et al. (2006) and Matheson (2011).

⁴⁶ In particular, tax withholding and third-party reporting have been major historical developments to increase tax enforcement and revenue collections across countries. See, for example, Bagchi and Dusek (2021) for an account of their impact in state tax collections in the U.S. over the 1948-1987 period. The introduction of pre-populated tax returns, where the tax administration fills out the tax return for the taxpayers with the available information and asks the taxpayers to verify their accuracy is a relatively recent innovation in tax administration, but one with great potential to significantly reduce taxpayer compliance costs and increase compliance and revenues (Martinez-Vazquez & Sanz, 2020; Benzarti, 2020). Technology innovations can also make a difference; for example, Ali et al. (2021) find significant increases in VAT collections and reported sales in Ethiopia after the universal adoption of electronic sales register machines.

This section reviews, in some depth, many of those reforms with the goal of assessing how tax administration reform can highly complement tax policy reform to significantly increase tax revenues. Good tax policy design always keeps in perspective the capacity of the tax administration to implement the laws, thus incentivizing keeping the tax structure as simple as possible. In turn, good tax administration is the guarantee that the new tax system will be implemented. In a recent survey of 55 episodes of large tax revenue increases in low-income countries, Akitoby et al. (2018) find that ambitious tax administration reforms (covering risk-based audits, registration, filing, payment, and reporting) were highly complementary with tax policy reforms.⁴⁷ Furthermore, they find that those tax administration reforms were key to the sustainability of the revenue raising efforts in those countries.

The fundamental objective of any tax administration agency is to raise revenues efficiently with the lowest practical administration and taxpayer compliance costs.⁴⁸ As in the case of tax policy reform, effective tax administration reform also requires political will and commitment together with a clear strategy and sufficient resources for implementation.

3.3.1 Three modern paradigms for tax administration reform

The modern theory of tax enforcement substantially argues that, in order to be effective and maximize all the potential venues for greater compliance, modern tax administration systems must implement an array of policies that fall within three “paradigms.”⁴⁹

⁴⁷ They find that tax administration reform measures complemented tax policy reforms in 90 percent of all the cases reviewed, and that in some cases (Sierra Leone and Republic of Congo), the reform was only at the tax administration level. In the case of some reform episodes, such as Antigua, Barbuda, and The Gambia, the initial success in increased revenues from tax policy reform were rapidly eroded because of the lack of sustained efforts to reform the tax administration systems.

⁴⁸ The impact of lowering taxpayer compliance costs can go beyond saving taxpayers’ time and resources. Dabla-Norris et al. (2017) held that countries can benefit in term of growth and productivity gains when firms face lower tax compliance costs.

⁴⁹ See Prichard et al. (2019) and also Kirchler et al. (2008), Shaw et al. (2008), and Alm and Torgler (2011), among others.

- First, the traditional “enforcement/catch-and-punish” paradigm in which policies exclusively seek to stop tax evasion through taxpayer audits and the application of severe penalties.
- Second, the “service” paradigm that seeks to facilitate voluntary tax compliance by reducing taxpayer compliance costs and providing full and transparent information and services to taxpayers.
- And third, the “trust” paradigm that exploits and enhances the role of tax morale (or intrinsic willingness to voluntarily comply with taxes), as well as that of social norms and ethics in compliance behavior.

The full policy dimensions of the first two paradigms, traditional enforcement tools and service, are further developed in this section. Those for the trust paradigm are developed in the next section.

3.3.2 Tax administration reform’s potential scope under the enforcement and service paradigms
This scope⁵⁰ is a multidimensional agenda including the following:

- Implementing organizational redesign on the basis of functions instead of type of taxes, consolidating collection of customs, payroll taxes, and pension contributions in a single agency, more closely monitoring large taxpayers by creating a large taxpayer unit (LTU), and possibly introducing semi-autonomous revenue agencies (SARAs). Large taxpayers represent a minority of taxpayers but a vast majority of tax revenues, and they tend to have more complex tax returns; the LTUs allow the assignment of higher-skilled auditors. Regarding SARAs, they allow more budget autonomy for the revenue agency, the hiring and firing of staff outside the regular civil service, more detachment from political pressures, and the ability to better enforce taxes on political and economic elites (their effectiveness is further reviewed below).⁵¹
- Modernizing taxpayer registration by introducing a unique Taxpayer Identification Number (TIN) and establishing and maintaining taxpayer current accounts.⁵²

⁵⁰ See, for example, Gill (2003); McCarten (2006); and Moore and Prichard (2017).

⁵¹ The adoption of SARAs should not be confused with the “privatization” of any or all of the tax administration functions. Fundamentally, SARAs are still integral part of the government administration but they are allowed to operate with much more flexibility than other parts of the government bureaucracy.

⁵² Some countries, like Jamaica, make the TIN mandatory for government contracts or for obtaining permits or even driver licenses and passports, thus forcing potential taxpayers to register.

- Improving return processing and payment systems, strengthening tax withholding systems, introducing automation, and including the use of banks for paying taxes.
- Fully adopting information and communications technology (ICT) to manage all core processes and for example creating centralized Data Processing Centers (DPCs), which can realize economies of scale and serve multiple offices for a variety of functions, such as taxpayer registration and detection of stop filers, tax return processing and payments, and correspondence with taxpayers.⁵³
- Strengthening enforcement by developing risk-based audit selection programs, adding access and more intensive use to third-party information within and outside the public sector, and using computerized information to detect non-filers, stop filers, and partial-payment taxpayers. This also includes strengthening audit capacity itself by training staff in new methodologies to conduct audits used in other countries to deal with cross-border transactions, transfer pricing, and other sophisticated business practices.
- Improving collection enforcement, especially the collection of tax arrears, sometimes with the creation of special units for this purpose.
- Streamlining tax appeals and taxpayer dispute resolution mechanisms, avoiding appeals to the courts against decisions of tax authorities becoming an instrument to avoid or delay tax payments. A good practice is to set up a transparent and neutral administrative appeals body; even though court appeals cannot not be avoided, they are likely to be less frequent if taxes due have to be prepaid.
- Implementing anticorruption programs, including minimizing the direct contact of tax administrators and taxpayers and strengthening internal control systems.⁵⁴
- Training and strengthening management by setting strategic goals, formulating operational policies, monitoring and evaluating performance, enforcing internal control systems, and interacting with external stakeholders.

⁵³ However, IT improvements are generally not by themselves a “silver bullet” for improving tax compliance. An interesting example of that is provided by Casey and Castro (2015) who survey the adoption of electronic fiscal devices (EFDs) in many developing countries to improve compliance with VAT and sales taxes, an innovation that is typically costly to both the administration and taxpayers. These authors concluded that despite their widespread use and considerable cost, EFDs have been only effective as part of much more comprehensive compliance strategies.

⁵⁴ Fighting corruption effectively typically also requires eliminating excessive regulations which firms may pay bribes to avoid, both in tax administration and elsewhere in government (Godin & Hindriks, 2015).

- Improving taxpayer services, including creating understandable forms with clear instructions, assistance, and information; introducing taxpayer education programs; improving phone advice service and website instructions; simplifying taxes and tax forms and payment; and assisting in filing returns and paying taxes, potentially including the use of pre-populated tax returns.
- Reaching out to key stakeholders by utilizing information campaigns in public media and school curricula on how tax revenues are used to increase public services.

3.3.3 Tax administration reform in practice

Several relatively recent papers report on the actual content of tax administration reform around the world, as well as those that are still pending in some regions. In their review of 55 successful reforms, Akitoby et al. (2018) find first, that improvements to the audit and information verification systems were included in 89 percent of the episodes, aiming to improve the audit process and combat tax evasion and corruption. The good revenue performance of the reform episodes in Georgia and Guinea were directly associated with improved tax and customs audits. Second, many countries (77 percent of the episodes) also introduced measures for modernizing governance, management, and human resources, focusing on skill upgrading and performance monitoring. As part of the governance reforms, some countries also introduced SARAs. Third, more than half of the reform episodes involved upgrading computerized systems and information technology (IT). The marked revenue increases in countries like Burkina Faso, Tonga, Guinea-Bissau, and Uruguay were directly associated with those innovations. Fourth, a smaller number of countries introduced other innovations including improved voluntary compliance systems and large taxpayer units (LTUs).

In the case of tax administration reform in Latin American countries, Figari and Gandullia (2007) report that many of them have focused on the adoption of functional internal organizations instead of the traditional ones based on type of tax, human resources development,

introduction of modern information technology, and the utilization of private banks to simplify tax collections. Most of those tax administration reforms were implemented with the support of IOs.

Last, Araki and Claus (2014) carried out a survey of 22 national tax administrations in Asia and the Pacific with a focus on achievements and the need for reforms. They find, first, that the majority of countries (16 out of 22) had a large taxpayer unit and internet banking or direct debit via bank accounts; second, that some tax administrations were understaffed in human resources relative to the size of their populations (Cambodia, India, Indonesia, Myanmar, and the Philippines); third, that the tax debt collection in the region lagged behind that in OECD countries; fourth, ICT offering electronic taxpayer services were relatively low in some countries (Indonesia, the Kyrgyz Republic, and Malaysia); and fifth, that most tax administrations in the region had limited nontax functions, including the collection of customs and social security contributions.

3.3.4 Tax administration and the informal economy

In many developing countries, large shares of the economy remain cash based, which facilitates tax evasion. The conventional belief in many of these countries is that the informal sector represents a major challenge to their tax systems. This is a difficult issue that has led policy makers and tax administrators to introduce numerous innovations to better control cash transactions. However, the question remains on how much effort government should exercise in trying to tax the informal sector. This is true because it is unclear whether or not the many small firms and street traders, the perceived the informal sector, should be taxed anyway, especially when considering the administrative and compliance costs vis-à-vis the tax revenues foregone.

The real issue is the evasion by certain taxpayers, such as professionals, who are not truly in the informal sector (see, for example, Kanbur, 2009).

The most common approach to address this issue has been, as we saw in the discussion of tax policy issues above, the introduction of presumptive taxes to assess the tax liabilities of small firms and vendors. This approach has been helpful in some countries in bringing small businesses into the tax net, but with the handicap of a generally low revenue benefit to administrative cost ratio.⁵⁵

3.3.5 Tax amnesties accompanying tax reforms

Many countries have implemented broad amnesties at the time of major tax reforms with several broad objectives including to add no-filing taxpayers to the tax rolls, increase collections, and mark the introduction of a new regime with increased enforcement. However, the available international experience with tax amnesties shows that most of those objectives are not fulfilled and that this type of measure can backfire. One major issue is that complying taxpayers are likely to consider amnesties fundamentally unfair, allowing evaders to address their status with impunity. Thus, an important adverse consequence is that honest taxpayers in the longer term may also turn to evasion. On the whole, tax amnesties fail to deliver in their more important objective of generating additional revenues, generally resulting in small gains. Overall, they should be avoided (Alm & Beck, 1990; Hasseldine, 1998; Uchitelle, 1999; Bird, 2003; Alm et al., 2009).

⁵⁵ See Engelschalk (2004) and Awasthi and Engelschalk (2018) for a discussion of these issues and the need for a more comprehensive approach to combating informality, including access to taxpayer data and third-party information systems.

3.3.6 Semi-autonomous revenue agencies' (SARAs) effectiveness

As already mentioned above, the introduction of semi-autonomous revenue agencies (SARAs) has been one of the most important innovations in tax administration in developing countries over the last several decades. SARAs can lead to enhanced collections efficiency, improved taxpayer relations, and increased tax revenue collections. For example, Cornia et al. (2011) report that, in recent times, half of the countries in Latin America adopted a SARA in their functional organization reform, aiming at increased employee specialization, merit criteria for personnel selection, greater worker accountability, and staff independence from political pressures. One main problem with the implementation of SARAs is that the initial set of reforms, such as independence from the regular bureaucracy and separate pay scales, tends to be eroded over time.⁵⁶

The important question for other countries considering tax administration reform is whether SARAs *actually* work. The empirical evidence on whether their promises have been realized is somewhat mixed, but mostly leaning to positive, signaling that their effectiveness depends on implementation and sustainability of the original reform design. On the positive side, Von Haldenwang et al. (2014) find that indeed the SARA reforms in Peru led to significantly sustained revenue increases in that country. The most controversy is on the effectiveness in sub-Saharan African countries, where this type of reform has been tried for the last three decades by most countries in the region. Ebeke et al. (2016), find that SARAs have had, on average, a large and positive effect on non-resource taxes in those countries. However, Dom (2019) finds that

⁵⁶ See, for example, Junquera-Varela et al. (2019) for a recent assessment of the strengths and weaknesses of SARAs.

there is no consistent evidence that SARAs have increased revenues in sub-Saharan African countries, and Gbato et al. (2021) reach the conclusion that improving traditional tax organizations may be more effective in sub-Saharan African countries than adopting SARAs.

3.3.7 Tax collector incentives and tax administration (semi-)privatization

The difficulties in collecting taxes frequently experienced by governments have led them to experiment with innovative solutions, in particular incentivizing tax collectors and contracting tax collection with private actors. The case of incentivizing tax collectors, with some sort of a bounty premium or performance-pay schemes for catching evaders and increasing collections can work in mobilizing revenues but are generally fraught with exposure to rent-seeking and corrupt acts (Khan et al., 2014).

In the case of privatization, what may or may not be privatized in tax administration is a complex issue and has not been contemplated in much detail in practice. What differentiates the privatization of tax administration from other privatization processes in the public sector is that only the State has the right to collect taxes, especially those aspects that involve the principle of public authority, which therefore should not be privatized, such as the (administrative) interpretation of the law in an audit or the execution of an eviction. However, other aspects of information and agency components, such as facilitating collection, withholding taxes, or collecting and analyzing data, could be privatized. One of the most important practical challenges faced by subnational authorities is assessing the revenue potential of taxes to be privatized (Fjeldstad & Heggstad, 2012). Frequently, revenue assessments are conducted on an ad hoc basis, often based on historical collections. Any substantial underestimation of the revenue potential may imply that the private agent takes a substantial share of the revenue collected, situations that invite rent-taking and corruption.

On balance, the history of private tax collection in different continents and countries is not a positive one. For example, in Europe, the most recent experience in Sicily has been described as a private monopoly displacing a public monopoly, with high barriers to entry and low efficiency (Kiser & Baker, 1994). In Africa, Fjeldstad and Heggstad (2012) report that a good number of subnational governments in Ethiopia, Tanzania, and Uganda have privatized many of their taxes, with unclear results on collection in some cases and significant losses of revenue in others. Thorndike (2004) collects the negative historical experience of the United States and Chowdhury (2006) does the same for Bangladesh.

However, instead of full, or near-full, privatization of tax collection, there are certain types of partial privatization, such as using private banks as collection agents and companies or other taxpayers as withholding agents and cross-information providers, which have been used by many tax administrations around the world with very positive results.

3.4 Tax morale and voluntary compliance norms

So far, along the enforcement paradigm, there is evidence that the probability of audits and the presence of fines matter to compliance.⁵⁷ Logically, along the service paradigm, lowering compliance costs and generally facilitating information and payments likely also matters for taxpayer compliance. However, the question remains whether taxpayers' attitudes and beliefs also matter in stimulating voluntary compliance, along the trust paradigm.⁵⁸

⁵⁷ Beyond their direct effect, audits tend to have a “demonstration effect” on the compliance of other individuals since taxpayers typically tend to overweight or exaggerate the probability of audit. On the other hand, the evidence is that fines tend to have a lower deterrent effect.

⁵⁸ Many researchers have emphasized the role of social norms in voluntary compliance. See, for example, Kiser and Levi (2015) and Gaspar et al. (2016).

For that purpose, this section reviews the literature on the determinants of “tax morale” (typically defined as the intrinsic willingness of taxpayers to voluntarily pay taxes), which, as seen above, has become the third fundamental pillar of a modern strategy to improve tax enforcement and increase tax revenues on a sustainable basis (Torgler, 2007; Luttmer & Singhal, 2014; Horodnic, 2018). The basic fact is that the work of the tax administration could be enormously facilitated if taxpayers’ intrinsic voluntary willingness to pay taxes were improved.⁵⁹ Better knowledge of what motivates individuals to be more compliant with their tax obligations can help tax administrations and governments in general take actions to improve voluntary compliance, and it can be done.⁶⁰ Thus, the fundamental question to address is how to do it. Therefore, the end of this section reviews the existing evidence so far on the effectiveness of messaging.

As this section shows, there are many determinants of tax morale, and while some of those determinants, such as the age or sex of taxpayers, are given and fixed to government authorities, there are others, like trust in government institutions or the quality of public services provided by government agencies, that are policy actionable, although not always in the direct purview of tax administration authorities. Additionally, even if some determinants like age, gender, or profession are not directly policy-actionable, they can still provide useful information on the groups that tax administration efforts may be more effectively directed to in terms of

⁵⁹ There is empirical evidence that better tax morale does indeed increase tax compliance (Cummings et al., 2005, 2009; Luttmer & Singhal, 2014).

⁶⁰ For applications in Asian countries see, for example, Torgler (2004b) and Cyan et al. (2016).

education, outreach programs, and “nudging” through specialized messages or mass media campaigns.

The overall context is that taxpayer decisions are affected by their social norms and beliefs and the overall social and institutional environment in which they live, rather than just by some rational calculus of the costs and benefits of compliance versus non-compliance (Alm, 2018). Thus, tax morale is affected by the behavior of other members of the community; if tax compliance is considered as a social norm, evaders gain disapproval and tax morale increases. If instead there is low trust in other citizens and there is the perception that a large share of the population evades taxes, or there is widespread corruption, tax morale decreases. In that sense, it is positive for tax morale to provide information about other citizens’ good compliance behavior.

Regarding determinants of those norms and beliefs, the past literature has found that the demographic characteristics and distribution of taxpayers matters significantly for compliance. Numerous country case studies and cross-sectional studies have consistently found that, for example, younger, unmarried, unemployed, and self-employed people as well as those in upper social classes tend to have lower voluntary compliance. Married, female, older taxpayers and those with higher education and life satisfaction tend to have higher tax morale. Beyond personal characteristics, other positive determinants of tax morale include accountable and transparent government,⁶¹ the quality and quantity of public services, the presence of democratic institutions, a higher level of GDP, and a higher level of immigration.⁶²

⁶¹ For example, one way to increase tax morale may be to hold more referendums (Hug & Spörri, 2011).

⁶² See, for example, Gaspar et al. (2016) and Alm (2018).

Among the most significant factors determining tax morale appears to be trust in government in a wide sense, including the executive branch, parliament, the courts, and the tax administration itself (Horodnic, 2018). In this respect, Koumpias et al. (2021) find that trust in “output government organizations” such as the police and the civil service has a significantly stronger influence on tax morale than does trust in “input organizations,” such as the national government and the parliament.⁶³

Given the role played by tax morale, there has been an increasing scope for tax administration to engage in a variety of policies aimed at increasing tax morale and ultimately tax compliance and total revenues collected. These policies cover a wide gamut of actions such as clarifying the link between taxes paid and the provision of popular government services, emphasizing fairness and equity for all individuals, targeting information to certain groups of taxpayers, or even publicizing tax evaders. An increasing number of tax administrations around the world have embarked upon formal programs to motivate taxpayers’ compliance using “behavioral nudges” (OECD 2021), and more is being learned about their effectiveness.⁶⁴

⁶³ Also relevant, horizontal trust (trust in other individuals in society) positively affects vertical trust (trust in government) and vice versa (Chan et al. 2018).

⁶⁴ For example, Hallsworth et al. (2013), using administrative data from more than 200,000 taxpayers in the UK, find messages on fairness and norms significantly improved tax compliance. However, the content and the media used also appear to matter in the effectiveness of messaging. Koumpias and Martinez-Vazquez (2019) find that income tax filing in Pakistan increased in response to exposure to newspaper ads that provided information on tax eligibility; television advertisements that relied on moral suasion and portrayed self-employed taxpayers, improved tax filing among the self-employed but not among the broader survey population. Furthermore, taxpayers may respond strategically to the messages, increasing compliance in the referred to dimensions in the message, but decreasing it in other unnamed dimensions. See, for example, Fiorio and Santoro (2017) for the case of Italy. It must also be noted that messaging can also backfire. For example, messaging that tax returns will be closely investigated and not doing it can lead to less compliance (Slemrod et al., 2001; Koumpias, 2017). For a more critical view of the effectiveness of messaging see Antinyan and Asatryan (2019).

4. Relevant International Examples of Successful Tax Reforms

The last several decades have been witness to numerous tax reforms around the world. Major tax reforms have been undertaken in countries with very diverse backgrounds from China and Russia to Colombia and Spain to Indonesia and Jamaica. Many other countries have undertaken partial reform, in many cases also highly effective. These reforms have typically required vast amounts of time and resources. Therefore, it is worthwhile to extract lessons from those efforts for other countries considering fundamental tax reforms in the present and near future. As a matter of fact, most countries need to learn from each other how to adapt their tax systems to the important challenges of the present, including globalization, technological development and information systems, climate change, and regional economic integration (Alm et al., 2005).

This section describes the main features and outcomes of tax reforms in several countries, while the main general lessons from these reforms are summarized in the following section. For more on Afghanistan, Bangladesh, Bosnia and Herzegovina, Paraguay, Rwanda, and Vietnam, see OECD (2015); for more on Burkina Faso, the Gambia, Mauritania, Rwanda, Senegal, and Uganda, see Akitoby et al. (2019); on Cambodia, Georgia, Guayana, and Ukraine, see Akitoby (2018); and on China and Colombia, see Gaspar et al. (2016b).

4.1 Afghanistan

Starting in 2003-2004, the Government of the Islamic Republic of Afghanistan (GIROA) launched measures to build its new domestic tax system. These included introducing a number of simplified taxes, including a turnover tax (BRT) and withholding from wages. The Afghanistan Revenue Department (ARD) established an official presence in Kabul as well as in provincial offices around the country.

The ARD launched a fast-track filing system for the large taxpayers in August 2017 in order to expedite the filing process and improve clarity regarding tax filing. The Ministry of Finance (MOF) implemented a temporary amnesty on penalties for late payment, late filings, and tax concealment. Under the amnesty initiative, all backlogged tax penalties were exempted to 95 percent, so taxpayers with outstanding tax liabilities could clear them by paying just 5 percent of the accumulated penalties. A VAT rate of 10 percent was implemented from December 2020. As a result of these reforms, tax revenue has increased drastically from 2.5 percent of GDP in 2003 to 8.0 percent in 2012.

4.2 Bangladesh

The Government of Bangladesh launched the Strengthening Governance Management Project (SGMP) in 2011 with a goal of promoting online tax filing and digitalization of tax returns as well as establishing taxpayers' information and service centers. Furthermore, it introduced the Taxpayer's Identification Number (TIN), Business Identification Number (BIN), Universal Taxpayer's Identification Number (UTIN), and e-payment facilities in some areas; taxpayer compliance costs were also reduced by the introduction of an online tax calculator. The government also implemented public awareness-raising through the publication of taxpayer's instructions/leaflets, arrangement of some motivational actions, celebration of national tax-day, and the issuance of a tax card as a recognition of tax payments. Following these reforms, the tax ratio increased from 7.5 percent in 2006 to 9.7 percent in 2013. Particularly, income taxes (corporate and personal) doubled from 1.2 percent of GDP in 2006 to 2.3 percent in 2011.

4.3 Bosnia and Herzegovina

After the civil war ended in 1995, Bosnia and Herzegovina sought to modernize its tax administration by developing new manuals, devising new systems, and building skills in all areas

of taxation, especially in audits, taxpayer services, and collections. Other reforms included: i) streamlining and automating major business processes; ii) a new taxpayer registry and taxpayer identification number, iii) the creation of central processing centers; and iv) improved system-wide data sharing, thanks to a new high-speed, low-cost microwave-based data network. In December 2003, Parliament adopted the Law on the Indirect Taxation System. This law established the Indirect Taxation Authority (ITA). ITA is a semi-autonomous revenue authority that oversees customs and all indirect taxes including VAT, customs duties, and excises. In 2006, various sales taxes were replaced with a single broad-based Value-Added Tax with a flat rate of 17 percent. New corporate income tax laws were passed that lowered the rates from 30 percent to 10 percent, but also reduced many tax holidays and removed exemptions. The CIT and PIT combined collections rose from only 0.6 percent of GDP in 2006 to 3.3 percent of GDP in 2012. The number of taxpayers (companies and persons) rose threefold.

4.4 Burkina Faso

Burkina Faso suffered from low tax collection with a tax system mired with many exemptions. The tax-to-GDP ratio in 2007 stood at 12.5 percent, among the lowest in West African Countries. In 2010, a comprehensive tax reform was introduced with a goal to streamline tax incentives and simplify tax legislation. The main measures taken included the following:

- Created a single tax code to consolidate the tax legislation.
- Introduced a corporate income tax (CIT) of 25 percent, lowest in the West African Economic and Monetary Union (WAEMU).
- Broadened the VAT base by revising the list of exemptions.
- Applied VAT on imports of operating mining companies and companies that signed contracts with the government.
- Increased the excise tax on alcoholic beverages from 25 to 30 percent.

- Limited the deductibility of investment spending from profit taxes.
- Introduced a special tax on transactions related to mining stocks.
- Diversified and increased the audit types.
- Implemented communication activities to foster a sense of civic responsibility regarding paying taxes.
- Computerized tax information systems to systematically generate a list of large taxpayer office filers and non-filers.

As a result of these reforms, the tax to GDP ratio increased from 9.6 percent in 2002 to 15.6 percent in 2019.

4.4 Cambodia

In the tax reform of 2016, Cambodia implemented the ‘Self-Assessment Regime’ for business taxpayers. Prior to the reform, the taxpayers were subjected to the ‘estimated tax regime.’ It was applied to those businesses with annual turnover lower than those businesses in the self-assessment regime type. The taxpayers subject to the tax on profit under the estimated regime system were required to pay the tax monthly to a tax official who came around physically. It was a challenge for the government to collect taxes under that regime. The main focus of the tax reform was to implement a ‘self-declaration regime.’ Under the self-declaration tax regime, taxpayers are classified into three categories: small taxpayers, medium taxpayers, and large taxpayers.

Table 2. Criteria for Sole Proprietorship or Partnership (Turnover in Approximate USD)

Small	Annual turnover from USD 62,500 to USD 250,000 for agricultural, service, and commercial sectors
	Annual turnover from USD 62,500 to USD 400,000 for the industrial sector
	Total turnover for any three consecutive months in calendar year from USD 15,000
	Total expected turnover for next three consecutive months from USD 15,000, or
	Participating in bidding, price consultation, or surveys for the supply of goods or services.
Medium	Annual turnover from USD 250,000 to USD 1 million for the agricultural sector
	Annual turnover from USD 250,000 to USD 1.5 million for service and commercial sectors

	Annual turnover from USD 400,000 to USD 2 million for the industrial sector
	Registered as a legal person or representative office
	National or sub-national state institutions, associations or non-government organisations (NGOs), or projects under these institutions, or
	Foreign diplomatic and consular missions, international organisations, and technical cooperation agencies of other governments.
Large	Annual turnover from USD 1 million for the agricultural sector
	Annual turnover from USD 1.5 million for service and commercial sectors
	Annual turnover from USD 2 million for the industrial sector
	Subsidiary status in a multi-national company or as a branch of a foreign company, or
	Qualified Investment Projects (QIPs).

Other reform measures included:

- Availability of online registration and online payment options.
- Professionalization of counter services within the General Department of Taxation (GDT) headquarters.
- New smartphone apps to help users manage salary and vehicle taxes.
- E-reports to evaluate the performance of GDT staff.
- A single invoicing system to ensure transparency and to remove opportunities for bargaining and bribing.

A survey conducted by Transparency International in 2018 shows that all respondents have noticed significant changes in the tax system. They acknowledged that the recent reform has reduced the incidence of many corrupt practices. Following the reforms, the country’s tax-to-GDP ratio increased from 10 percent in 2009 to approximately 19 percent in 2019.

4.5 China

The 1994 Tax Sharing System (TSS) reform in China illustrates well the important role intergovernmental fiscal relations can play in comprehensive tax reform and the political economy issues involved in gaining acceptance of those reforms from jurisdiction that potentially be large losers as the consequence of those reforms. This latter was achieved by introducing a special transfer, so called the “tax rebate,” which held harmless all provincial

governments with respect to the tax revenues they were receiving before the reform in 1993.⁶⁵ Prior to the TSS Reform of 1994, China had followed a former Soviet-system tax structure and tax administration organization. There was heavy reliance on state enterprises' taxes and remittances and all taxes were administered and collected at the provincial level, with further remittance of upward sharing of the collections (18 percent) with the central government in Beijing. This system led to rapidly declining tax revenues as a share of GDP, in large part because the provincial governments used their powers to protect their domestic enterprises (basically permitting them to avoid and evade taxes). Enforcement with private enterprises and joint ventures was also weak. By 1994, the tax-to-GDP ratio had fallen to just above 9 percent. The impending accession of China to the World Trade Organization added fuel to the need for a fundamental tax reform.

The 1994 Tax Sharing System Reform included changes in tax policy structure, the sharing of tax revenues with provincial governments (thus implying a major change in the system of intergovernmental fiscal relations), and the organization of the tax administration. In terms of policy, the aim was to simplify and standardize all taxes. Income tax rates were significantly decreased and a new VAT was introduced with a general rate of 17 percent and a reduce rate of 13 percent for basic commodities. The changes in the revenue sharing system with subnational governments were major. The 1994 reform divided all new taxes into central, subnational, and shared categories. The central taxes included consumption (excise) taxes, customs duties, and import-related VAT and consumption taxes. Shared taxes included domestic

⁶⁵ See Bahl and Martinez-Vazquez (2006) and Zhihua and Martinez-Vazquez (2002).

VAT, enterprise income taxes, and personal income taxes. All other taxes were assigned at the subnational level, including the business turnover tax on services, social security contributions, and stamp duties on real estate transactions.⁶⁶

The changes in the organization of the tax administration were also quite major. The central government created anew its own revenue administration agency, the State Administration of Taxation (SAT), which was charged with the collection and enforcement of all central and shared taxes. The provincial and local tax administration were charged with the collection and enforcement of subnational taxes. There were also significant efforts to computerize and upgrade all tax processes. As a result of these reforms, the tax-to-GDP ratio increase to 12.6 percent in 2001 and stood at 16.1 percent in 2016 (STAPRC, 2019).

4.6 Colombia

The process of successive tax reforms in Colombia during the 1990s and early 2000s ably illustrates the role of politics and successful “social pacts” as the engines of fundamental tax reform, as does the case of Spain reviewed further below. Colombia’s tax reforms in the early 1990s were introduced largely in response to the new economic, social, and political demands that arose from the 1991 Constitution, which included devolving taxes to subnational governments, widening the coverage of social services, and strengthening security institutions, among other initiatives.

⁶⁶ To deflect political opposition from the provincial governments, the central government introduced a transitional period for the new legal measures and, more significantly and as mentioned above, held all provincial budgets harmless—that is, their revenues would not be lower than those before the reform in 1993. Other compensation measures were added, including sharing some of the growth of future revenues in VAT.

The first round of tax reform reduced the corporate tax rate, introduced a considerably lower rate for income from repatriated capital, and exempted stock market dividends from tax. In 1992-93, the VAT base was broadened, the rate was increased to 14 percent, and an income tax surcharge was introduced to fund new national security measures. Tax administration reform measures were simultaneously introduced, involving computerized risk analysis for the selection of audit cases, increased penalties for evaders, and an improved program for the collection of tax arrears.

A subsequent reform in 1995, aiming to further broaden the base of the VAT, failed because of lack of political support. However, in the late 1990s, following the Asian and Russian crises, Colombia saw again enough political consensus for broadening the VAT base and for introducing a temporary financial transactions tax. Posterior reforms in the early 2000s introduced further broadening of the VAT and made the financial transactions tax permanent; in tax administration, electronic filing was introduced to facilitate voluntary compliance. The increase in tax collections that followed was also facilitated by a marked increase in citizen tax morale (willingness to voluntarily pay taxes) due to improved governance and quality of public services and a decrease in the perception of corruption in public affairs. As the result of those successive reforms, the tax-to-GDP ratio in Colombia increased from 8.2 percent in 1990 to above 15 percent in 2004.

4.7 Denmark

The 2010 tax reform in Denmark aimed to reduce the relatively high top marginal personal income tax rates (see Brys, 2011, and OECD, 2006). The reform involved tax cuts and financing of around 30 billion DKK, corresponding to around 1.5 percent of GDP. The reform

also intended to increase labor supply in the medium to long term and soften the effects of the global economic crises in the short run. The changes to the personal income taxation included:

- Reduction of the bottom tax rate from 5.26 percent to 3.76 percent.
- Abolition of the middle tax rate of 6 percent.
- Increase of the top tax rate threshold from 347,200 to 393,400 DKK.
- Issuance of a green check of 1,300 DKK for each adult and 300 DKK each for children under 18 years (maximum two children).
- Reduction of the tax ceiling from 59 percent to 51.5 percent.
- Reduction of marginal tax rates for all income levels above the personal allowance of 41,000 DKK.
- Reduction of the top marginal tax rate for labor income is from 63.0 to 56.1 percent.
- Reduction of the bottom tax rate is from 42.3 percent to 40.9 percent.

Changes were also made to capital income taxation, including a gradual reduction in tax value of net interest payments from 33.5 percent to 25.5 percent above 50,000 DKK from 2012-2019, allowance in tax on positive net capital income of 40,000 DKK, and reduction in share income tax from 45/43/28 to 42/27 percent. There were also changes in energy taxes to increase collections by nearly 4 billion DKK through various measures, including changes in VAT exemptions, such as the removal of the exemptions on travel agencies and on property management and the supply of buildings and building land.

The tax-to-GDP ratio of Denmark has been relatively stable since the 1980s, until 2003 hovering around 48-50 percent. In 2002, the EU-average was 40.6 percent while the OECD average was 36.3 percent. Denmark's tax reform in 2010 did not change the tax-to-GDP ratio. As of 2019, the ratio is at 46.3 percent and has remained steady for the last 19 years.

4.8 The Gambia

The Gambia's political system is considered relatively stable among African countries. In 2020, it ranks eight out of 54 African countries in the 'Political Stability and Absence of Violence/Terrorism' index of the Worldwide Governance Indicator. However, in previous years, the country lacked the political commitment for some necessary reforms (Akitoby et al., 2019). After the global financial crisis of 2008, Gambia suffered from fiscal imbalance resulting from declining revenues and increases in spending. Its total public debt increased rapidly to 70 percent of GDP by 2011 and the country remained at high risk of debt distress. Additionally, Gambia's business tax system was complex and investor unfriendly. Gambia introduced tax reforms in 2013 with a main focus on indirect taxation. Some of these measures included:

- A Value Added Tax (VAT) introduced with a broad base standard rate of 15 percent, a rate of 18 percent for telecommunication services.
- The tax base for excise tax on cigarettes changed from weight to number of packs. This tax change increased the equivalent tax rate on cigarettes by about 25 percent. Additionally, a weight-based excise on non-cigarette tobacco products was introduced. This discourages consumers from switching to a cheaper product when taxes increased.
- Fuel subsidies eliminated (the revenue losses from such fuel subsidies had reached 0.8 percent of GDP in 2011). From 2013, monthly fuel price adjustments were implemented, and fuel subsidies were eliminated by July 2014, which allowed gradual increases in fuel taxes.
- The Gambian Revenue Authority (GRA) strengthened its audit capacity. It also implemented a detailed compliance improvement plan for large taxpayers. As a result,

about 86 percent of large taxpayers filed their income tax returns in 2012, up from 79 percent in 2011.

Following the reforms, the Gambia's tax-to-GDP ratio increased from 13 percent in 2010 to 17.5 percent in 2015.

4.9 Georgia

Prior to the tax reform of 2004, the Georgian tax system was mired with a highly complex tax code, making it hard for taxpayers to determine when and how to pay taxes and detracting from overall tax collections. Following the 2003 Rose Revolution, Georgia implemented a revised tax code in 2004 that simplified the tax system, reduced general rates, and eliminated some low revenue-generating local taxes, including environmental and gambling taxes. The new government, formed by the United National Movement (UNM) under the leadership of Mikheil Saakashvili, also took a zero tolerance stance against corruption and sought to reduce inefficiency in tax collection. The reforms in public services helped to eliminate petty corruption in issuing property registration documents, permits, licenses, and other documents. The Saakashvili government created a favorable tax and regulatory environment for business (Tsereteli, 2020). Tax reform in Georgia was implemented in three successive phases.

- i. Phase I (2004-2007)
 - Reduced formal tax burdens, eliminated 15 types of taxes, and lowered tax rates.
 - Removed all unnecessary and ineffective intervention from the Government into private businesses.
 - Brought tax and customs agencies under the Ministry of Finance.
 - Reduced Value Added Tax rate from 20 percent to 18 percent.
- ii. Phase II (2007-2009)
 - Created the State Revenue Service (SRS), bringing customs and tax administration into a single organization.

- Set the corporate income tax at a flat rate of 15 percent (from a previous maximum rate of 20 percent).
- Replaced progressive personal income tax rates with a flat rate of 20 percent.
- Reduced tax rates for dividends and interest payments from 10 percent to 7.5 percent.
- Introduced an electronic tax filing system to improve tax compliance.
- Upgraded infrastructure—major renovation of customs checkpoints and tax service centers.

iii. Phase III (2010-2011)

- New tax code refined based on best international practices.
- Sharp reduction in tax compliance costs through IT enhancements.

As a result of the combined effects of the changes in the tax laws and administration, Georgia's tax revenues increased more than four-fold. According to World Bank data, tax revenue as a percent of GDP in 2002 was at 7.62 percent, which had increased to 23.18 percent in 2012. The average compliance rate (measured as the ratio of actual tax revenue to potential tax revenue) improved from 35 percent to 78 percent. Increase in tax revenue has led to significant increase in public spending—health spending increased by 80 percent and education spending increased by 46 percent. The reform has also resulted in a drastic reduction in the number of bribery cases involving tax officials.

4.10 Guyana

Guyana successfully introduced a VAT in January 2007. The new VAT was broad-based, with a single rate of 16 percent and a limited number of exemptions (for financial, medical, and educational services). The 2017 VAT reform further broadened the tax base while reducing the rate, yielding a gain in the VAT revenue-to-GDP ratio (increasing from 0.81 percent in 2016 to 1.02 percent in 2019.) In addition, Guyana took advantage of the decline in the international

price of oil to raise fuel excise taxes in 2015. This step buoyed revenue during the country's economic downturn.

In terms of tax administration reforms, Guyana implemented a unique system of computer-generated taxpayer identification number, commonly known as a TIN, to each taxpayer, whether an individual, business, government department, or special body. Guyana also improved the tax compliance through the introduction of income tax withholding.

4.11 Hungary

Prior to the tax reform in 1988, Hungary's domestic revenue depended heavily on taxes paid by state-owned enterprises. The tax system was filled with complicated rules, allowances, exemptions, subsidies, etc. In 1988, Hungary enacted laws on a VAT, personal income tax, and corporate profits tax. Most goods and services were taxed at the standard rate of 25 percent, some services (including the transportation of goods, repairs, and tourism) were taxed at 15 percent, and basic consumer goods were not taxed. On the side of the personal income tax, there were eleven income tax brackets and the highest tax rate was 60 percent (representing higher marginal tax rates, steeper progression, and narrower income brackets than its Western counterparts). Due to these factors, the Hungarian personal income tax reform in 1988 was not as successful as anticipated.

The rate for corporate profits was initially set in 1988 at 50 percent but it was lowered to 40 percent in 1990. One handicap in this area was that Hungary did not have a unified system of accounting (Hungary's first Act on Accounting was not introduced until 1991). Without a uniform system of accounting, there was no uniform way to measure corporate profits. Moreover, corporate profits were double taxed—first at the corporate rate and then at the

personal income tax rate after being distributed to shareholders and owners as income. These policies discouraged the privatization process in Hungary, as it made privately-owned businesses less attractive during that phase of the transition to a market economy.

In 2010, Hungary implemented a flat personal income tax of 16 percent which was lowered to 15 percent in 2016. The corporate income tax rate, which had been lowered to 20 percent in 1995, was again lowered to 9 percent in 2016, making it the lowest corporate tax rate in the European Union (see Karnosh, 2019, for more). The general VAT rate was set at 27 percent, but with reduced rates of 18 percent for dairy products, corn, starch, and commercial accommodation services and 5 percent for meat, fish, eggs, medicine, books, heating services, live music, restaurants, and internet. These measures were intended to mitigate the regressivity of tax burdens. Tax policy has also been criticized for frequent changes and often without consultation with businesses. On the side of tax administration, the criticism has been of irregular tax payments and bribes and an aggressive audit stance with foreign businesses. Following the tax reform in 1988 and 1991, the tax-to-GDP ratio in Hungary declined from 25.55 percent in 1991 to 19.83 percent in 2010. Following the flat tax reform of 2010, the ratio increased from 21.07 percent in 2011 to 22.93 percent in 2012, and it has stayed around 22 percent since then.

4.12 India⁶⁷

The Indian constitution allows the federal government to levy the major broad-based and mobile taxes, which include taxes on nonagricultural incomes and wealth, corporate income taxes, customs duties, and manufacturers' VAT on goods. States can levy taxes on agricultural incomes and wealth, sales taxes, excises on alcoholic products, taxes on motor vehicles and on

⁶⁷ See Rao and Rao (2006) and (Tharoor, 2017).

transport of passengers and goods, stamp duties and registration fees on transfers of property, and taxes and duties on electricity.

An early attempt of tax reform in India occurred in 1956 when expenditure tax was implemented to curb consumption and raise the savings level. However, it did not generate the expected revenues and was subsequently withdrawn in 1957-58. Until mid-1970s, changes in the income tax structure at the central level were mostly ad hoc. A major simplification and rationalization initiative came in 1985-86, when the number of tax brackets was reduced from eight to four, the highest marginal tax rate was lowered to 50 percent, and wealth tax rates were lowered to 2.5 percent.

Systematic and comprehensive attempts at tax reform at the central level started only after market-based economic reforms were initiated in 1991. The Tax Reforms Committee (TRC) produced a framework and road map for tax reform on both direct and indirect taxes that were subsequently enacted. These reforms include: (i) reducing rates of all major taxes—customs, individual and corporate income taxes, and excises;⁶⁸ (ii) broadening the tax base by eliminating or minimizing exemptions and concessions; (iii) simplifying procedures, introducing information systems, computerizing tax returns, and strengthening enforcement machinery. The state tax reform of April 2005 was mostly focused on the adoption of VAT. The tax was levied at two

⁶⁸ The corporate income tax was reduced to 30 percent. In the case of the personal income tax, three tax brackets, 20, 30, and 40 percent were introduced starting in 1992-93; these rates have remained stable since 1997-98 at 10, 20, and 30 percent. But it is remarkable that even today only 1 percent of India's population pays income tax.

rates, a general rate of 12.5 percent and a reduced rate of 4 percent for items of common consumption, inputs, and capital goods;⁶⁹ basic necessities were exempted.⁷⁰

Many of the remaining issues between the Union (national) government and the states with the VAT reform of 2005 were addressed by the most recent major tax reform in India: the Goods and Services Tax (GST) introduced in 2017. The GST is a consumption-based tax intended to replace most of indirect taxes at both federal and state levels. Taxes such as excise, duty, additional customs duty, services tax levied at the central level and state-level, and the value added tax are replaced by the GST. The GST has two major components—Central GST and State GST. However, critics of the GST reform have argued that the reform was introduced in haste without adequate preparation by the tax administration. Furthermore, the rate is not a single rate as advertised by the slogan “one nation, one tax.” Instead, there are four different taxes—5 percent, 12 percent, 18 percent, and 28 percent. Additionally, there is a 0 percent rate for items like food grains, cereal, and fresh milk, and a luxury tax of 43 percent. The new tax reform also requires businesses to file tax returns multiple times a year—twice each month and once annually, a total of 25 tax returns; it also has been reported that smaller businesses have been scrambling to acquire computer access and literacy.

As a result of the successive tax reforms the tax-to-GDP ratio in India has increased over time but remains below the average in emerging economies. It was at 6.3 percent in 1950-51; it

⁶⁹ A tax credit facility covered inputs and purchases as well as capital goods for both manufacturers and dealers, with credit for taxes paid on capital goods usable over three years of sales.

⁷⁰ Because these reforms affected state tax revenues, the central government agreed to compensate the states for any loss of revenue at rates of 100 percent in the first year, 75 percent in the second year, and 50 percent in the third year. The loss will be calculated by estimating the difference between the projected sales tax revenue using 2004–05 as the base and the actual revenue collected

increased to 16.1 percent in 1987-88. By 1991-92, it had declined to 15.8 percent. In 2001-02, the tax-to-GDP was at 14 percent and more recently at 16.6 percent.

4.13 Indonesia

Before the 1983 tax reform, the Indonesian tax system suffered from uneven enforcement and compliance. The tax laws were complex and ambiguous. The tax base was narrow and there was huge variation in tax rates for private businesses. Furthermore, the non-oil tax revenue only made-up 6 percent of the country's GDP while oil revenue contributed 12.9 percent of the GDP.

The 1983 tax reforms had four broad objectives: i) increase non-oil tax yield, ii) streamline tax laws and improve administrative efficiency, iii) reduce tax-induced distortions in the allocation of resources and achieve economic neutrality, and iv) ensure that the poor were not made worse off because of the reforms.

Income tax rate, for both individuals and corporations, was set at 15 percent for up to Rp 10 million per year, 25 percent on the next Rp 40 million, and 35 percent on income above Rp 50 million per year. Under the previous system, there were seventeen different rates for individuals, ranging from 5 to 50 percent, and rates of 20, 30, and 45 percent applied to corporations. The 1983 law broadened the tax base for individual income considerably. Long-term capital gains and pensions were also subject to income tax. In addition, the new income tax made extensive use of withholding as a means of collecting revenue. It also abolished income tax-based incentives, including investment allowances, tax holidays, and accelerated depreciation. Fringe benefits and charitable contributions were no longer deductible from taxable income. VAT was first implemented in April 1985. It was set at 10 percent on domestically produced goods, imports, and contractors' services but at zero for exports and there was an additional tax of 20

percent on certain luxury goods. VAT was extended to wholesalers, domestic air transportation, and telecommunication services in 1989.

However, the structure of the tax system in Indonesia virtually has not changed in the past decades, resulting in the country's still low tax-to-GDP ratio. A recent review of the tax system (Alm, 2019) argues that the main reason for this under-performance is the large amount of tax evasion, especially of the income tax and VAT, and a large "shadow economy" as shown by the relatively low number of tax filing individuals: in 2017, out of an estimated 165 million potential taxpayers, there were 35 million registered taxpayers and only 10 million who actually filed tax returns. The non-oil revenue-to-GDP ratio increased from 7 percent in 1983 to 8.9 percent in 1989. The VAT revenue-to-GDP ratio increased from 1.01 percent in 1984 to 3.35 percent in 1989. Fast forwarding since then, Indonesia's tax-to-GDP ratio remained at 11.9 percent in 2018.

4.14 Liberia

Liberia initiated tax reform after the civil war ended in 2003. It introduced taxes on turnover or import values, including the goods and services tax, excises, and custom tariffs, underpinned by simple tax legislation. Posterior reforms broaden the scope of its goods and services tax while raising excise taxes on alcoholic beverages and cigarettes.

Liberia also computerized the tax administration, making tax filing easier and less costly for taxpayers (in terms of printing and processing paper returns) by implementing e-filing. It has also reduced time spent by taxpayers going to tax offices and standing in lines to comply with their tax obligations. Electronic filing decongested tax offices and reduced opportunities for corruption between tax officers and taxpayers. These reforms led to an increase in tax

compliance and growth in tax revenue; its tax-to-GDP ratio increased from less than 10 percent in 2003 to approximately 20 percent in 2015. As a result of the reforms, the tax-to-GDP ratio increased from 20 percent in 2004 to above 25 percent in 2011.

4.15 Lithuania⁷¹

Tax reform enacted in 2009 made following changes to the tax structure:

- Set income taxes for individuals at a flat tax rate of 15 percent (but at 20 percent for income from distributed profits).
- Imposed VAT at a standard rate of 19 percent, reduced to 9 percent for medicines and heating power.
- Increased excise duty rates on alcohol, manufactured tobacco products, and motor fuel.

The results from these reforms were far from spectacular. There was a perception that personal income taxation became more complicated for the taxpayers and collected revenues from excise duty were less than expected. Overall, the tax to GDP ratio only increased slightly from 28.8 percent in 2005 to 29.8 percent in 2009.

4.16 Malaysia

Malaysia still maintains different tax collection organizations. The *Lembaga Hasil Dalam Negeri* or Inland Revenue Board (IRB) administers direct taxes and the Royal Malaysian Customs (RMC) is responsible for indirect taxes, including the import tariffs. The Income Tax Act of 1967 (ITA) is the main governing legislation for direct taxes including corporate and individual income tax. The country adopted the self-assessment system (SAS) in multiple stages for different types of taxpayers from 2001 to 2004. Previously, Malaysia had an Official Assessment System (or the ‘Formal System’), which was similar to a modern pre-populated

⁷¹ See Skackauskiene and Tuncikiene (2012).

system: taxpayers received their annual returns, which they had to verify and update. The shift to SAS was also complemented with improvements in IT to process returns and score taxpayers for audit selection. Both individual income and especially corporate income tax revenue increased substantially in the 2002-2006 period of reform.

The Goods and Services Tax (GST) was adopted in 2015, with a general rate of 6 percent and requiring registration for annual sales above RM500,000. This new tax brought RM27 billion in 2015 and RM44 billion by 2017. The structure of tax revenues is peculiar, with close to half coming from the corporate income tax (natural resource related) and a bit over one-fourth from the GST. One ongoing issue is the large size of the shadow economy, recently estimated to represent 21 percent of GDP. After the initial increase in revenues associated with the reforms in the early 2000s, the tax to GDP ratio in Malaysia decreased from 14.8 percent in 2007 to 12.4 percent in 2019.

4.17 Maldives

Prior to the reforms, Maldives tax structure was overly reliant on tourism sector making the country vulnerable to external shocks. As the country was still reeling from the 2004 tsunami, it was hard hit by the global financial crisis of 2008. The decrease in revenue and increase in government expenditure led to an increase in government deficit. By 2009, the government deficit had reached 20.5 percent of Maldives' GDP. The government was determined to improve the state of public finances by reducing expenditure and increasing revenue.

However, the introduction and implementation of the tax reform was not as smooth. Post-2008, the political mix was not conducive towards making compromises and pushed out the implementation of the new tax regime until 2011. Amid increasing tension with the opposition,

President Nasheed decided to address the deteriorating fiscal situation in 2011. Following the presidential election in late 2013, an incoming ruling coalition led by the Progressive Party secured its victory in the parliamentary elections (Akitoby et al., 2019). Within a period of 9 months (from January to October 2011), Maldives introduced:

- A tourism goods and service tax (T-GST), which was later replaced by a general goods and services tax (GST).
- A business profit tax (BPT) at a flat rate of 15 percent on taxable profits.

Prior to the reforms, there was no central revenue-collecting authority. In 2010, Maldives Internal Revenue Authority (MIRA) was established. In addition to collecting taxes, MIRA was also given authority to conduct audits and investigations, with the power to freeze the bank accounts of noncompliant taxpayers. The introduction of BPT and general GST in the second half of 2011 were intended to broaden the tax base to reduce the government's revenue dependence on the tourism sector. These reforms were followed by extensive public awareness programs (see Asian Development Bank, 2017).

Tax reforms in Maldives since 2010 have resulted in an increase in tax revenue at the annual rate of 43 percent from 2010 to 2015. The tax-GDP ratio more than doubled from 9.38 percent in 2010 to 25.2 percent in 2015. Both business registrations and GST registrations also increased significantly from 2011 to 2015.

4.18 Mauritania (2010-2014)

Mauritania launched a comprehensive reform process following the presidential election in 2009. The reform included the following measures:

- Eliminated the global income tax and adopted a dual tax system—proportional tax on capital income and progressive tax on wages.

- Removed the corporate income tax on the main gold company, contributing to the increase in CIT by 1.3 percent of GDP.
- Increased the excise tax on tobacco from 10 percent to 30 percent.
- Extended the VAT to the mining sector. (Mining companies were reimbursed if they proved their purchases were acquired from domestic suppliers.) This incentivized local suppliers to jump into the formal economy, with the tax identification numbers increasing from 1,789 in 2011 to 5,860 in 2013.

As a result of these changes, the tax-to-GDP ratio increased from 11.1 percent in 2009 to 17.2 percent in 2014.

4.19 Mozambique

Since 2010, the country opted to simplify the tax system and broaden the tax base (for more, see World Bank, 2017). Tax system broadening took three routes: i) tax awareness and customs literacy campaigns, ii) new tax offices to connect the tax administration to the taxpayers, and iii) simplification of taxation procedures through legislative reform measures. Additional recent reforms also include the use of unique taxpayer identifying code (NUIT) and a general Value Added Tax (VAT) rate of 17 percent. The tax-to-GDP ratio has climbed steeply from 14.74 percent in 2010 to 27.06 percent in 2019.

4.20 Nepal

After the transition to democracy in the 1990s, Nepal introduced tax policy reforms with a main focus on indirect taxes. In 1997, a Value-Added Tax (VAT) with a general rate of 10 percent was introduced to replace the previous sales tax. By 2000, VAT contributed to 2.7 percent of GDP and continued to grow as more businesses entered the formal sector. In 2005, the general VAT rate was raised to 13 percent and tax collections saw a steady increase after the civil conflict ended in 2006.

The Income Tax Act of 2002 introduced a Permanent Account Number (PAN) for taxpayers. In addition, new Excise Act and Customs Act were introduced in 2002 and 2007 respectively. In 2010, a new 35 percent tax band was added to the personal income tax (PIT) targeting high-income individuals earning above Rs. 2.5 million, which also had a significant impact on revenue collections.

The Internal Revenue Department (IRD) was established in 2001 by combining separate services for the various taxes and several reforms followed to strengthen tax administration. These included the improvement of recordkeeping by mandating electronic tax deduction at source (ETDS) for all large taxpayers. There has been also a continuous push for the computerization of other tax administration activities. By 2014/15, 98 percent of tax filings and nearly 100 percent of all tax registrations were conducted online. Importantly, these reforms have led to an improved public perception of the IRD as a more transparent organization. Following the reforms, from 2006 to 2019, Nepal achieved a cumulative increase in tax revenues of 12.8 percentage points of GDP (from 9 percent of GDP in 2006 to nearly 22 percent of GDP in 2019).

4.21 Paraguay

While the tax reform introduced in 1991 simplified the tax system, it was not successful in raising revenues to cover the rising demands for public goods and services in the country (Richards, 2001). It also couldn't resolve the inefficiency in the tax administration. The incoming government of President Duarte Frutos in 2003 sought to address the long-term weaknesses of Paraguay's public sector (Ferrario, 2008). Additionally, the 2004 reform aimed to modernize the public administration and create favorable business environment for foreign investors.

Paraguay introduced a sweeping tax law in 2004 that reduced corporate income tax rates from 30 percent of profit to only 10 percent and removed a five-year tax holiday on first-time investment. Furthermore, the Fiscal Adjustment Law broadened the VAT tax base by introducing a tax on services, rentals, and transportation, reducing exemptions on basic goods and oil products, and eliminating several other VAT exemptions. The single VAT rate was set at 10 percent. It also introduced a new small business tax of 10 percent and a 1 percent property tax. The reform also sought to modernize the tax administration by streamlining several of its procedures, strengthening control over goods and better enforcing collections. Part of those changes was the establishment of a Large Taxpayers Unit and the training of its staff. The customs code also saw modernizations designed to improve and streamline customs administration.

In 2012, Paraguay enacted a personal-income tax bill establishing a personal income tax with a top rate of 10 percent for taxpayers earning 10 times the minimum wage and 8 percent on low-income earners. Moreover, the reform in 2012 also sought to raise revenue from the agricultural sector, which in 2011 accounted for 20 percent of GDP, but only contributed to 0.5 percent of total revenue collections. The reform extended the VAT to primary production and introduced a 10 percent profit tax on commercial farmers, as well as new agricultural taxes. As a result of these changes, tax revenues have increased steadily from 8.8 percent of GDP in 2003 to

12.8 percent by 2010. The VAT Gross Compliance Ratio⁷² rose from 68 to 92, among the best in the world, while corporate income tax productivity⁷³ rose from 0.06 in 2004 to 0.19 in 2012.

4.22 Rwanda (2010-2015)

Following the end of the conflict in 1994, Rwanda embarked on an economic reconstruction that passed several reforms. Two main objectives of tax reforms were to improve tax collection and reduce the country's dependence on foreign donors (Ndikumana, 2001). The Rwanda Revenue Authority (RRA) was established in 1997. It is responsible for tax and customs administration, audit, and investigation. In 2001, a VAT was introduced with a 15 percent rate. The VAT replaced the sales tax, which had many exemptions and produced little revenue. In 2005, a new income tax law was enacted with three tax rates: 0 percent, 20 percent, and 30 percent, and many exemptions were eliminated. The law also introduced a 4 percent annual turnover tax on "intermediate" business owners. Furthermore, the government overhauled tax collection procedures, increased staff capacity, improved information management, and launched a massive and sustained public education campaign in an effort to build a new social contract. A new law was enacted in 2005 to improve the tax appeals process, set-up audit procedures, and introduce penalties for tax evasion. The RRA has operated as a semi-autonomous revenue agency (SARA) since its introduction in 1997. The staff are better compensated than civil servants. The RRA implemented the Standardized Integrated Government Tax Administration System (SIGTAS), a commercial off-the-shelf tax administration program.

⁷² *VAT Gross compliance ratio* = $\left(\frac{\text{VAT revenue}}{\text{Total private consumption in the economy}} \times \frac{1}{\text{VAT rate}} \right)$

⁷³ *Corporate income tax productivity* = $\left(\frac{\text{Total corporate income tax revenue}}{\text{GDP}} \times \frac{1}{\text{CIT rate}} \right)$

By 2010, Rwanda faced the uncertainties of declining foreign aid plus trade was also expected to decline after 2010 when the East African Community (EAC) Common Market became effective, and Rwanda implemented the EAC Common External Tariff Framework. With those looming uncertainties in the horizon, the Rwandan government decided to increase domestic revenue mobilization and prioritize spending in support of development. As a result, Rwanda introduced a comprehensive tax reform for the period 2010 to 2015, which included the following measures:

- The introduction of electronic registration, filing, and payment systems.
- The Rwanda Revenue Authority enforced VAT compliance by introducing Electronic Transaction Devices (ETD) and withholding VAT at source by government departments; it also introduced a program for the increased collection of tax arrears.
- Tax and customs operations were automated and the customs Single Window for trade facilitation was implemented.
- Tax rates on imported construction materials were increased from 5 to 10 percent in 2012.
- Excise duty on airtime of mobile phones increased from 5 to 10 percent.
- A simplified tax regime for micro enterprises with turnover below RFr 12 million was introduced.
- Tariffs for water and electricity were increased by 19 and 35 percent respectively.
- Some tax exemptions were removed.

Following the reform, the tax-to-GDP ratio increased by 3.75 percent between 2010 and 2015 (12.9 percent to 16.65 percent).

4.23 Senegal (2010-2017)

Senegal introduced a sequenced tax reform from 2009 to 2017 following a sharp increase in its fiscal deficit that had reached 5.1 percent in 2009, in part because of the sharp increase in international food and energy prices and high budgetary costs of untargeted subsidies. Senegal adopted an inclusive approach to their tax reform by consulting with stakeholders, including employers and labor unions. Such approach generated a greater acceptance of the reforms. The main measures in the reform included:

- Rationalized all domestic tax related laws into the Tax Code in 2012.
- Eliminated the propositional PIT and the tax shield (*bouclier fiscal*).
- Eliminated the “*quotient familial*” an income-splitting scheme based on the number of dependents, which was highly regressive.
- Replaced the “*Patente*,” a tax levied on the basis of the productive assets of the company, with the “*Contribution economique local (CEL)*,” which is based on the rental value of premises and value added of companies.
- Established The Center for Medium Size Enterprises (CMZE) in 2017 with the goal to cover businesses with turnover of FCFA 200 million to 1 billion. Complementary measures to improve compliance were also introduced shortly.

As a result of these reforms, tax-to-GDP ratio increased from 18 percent in 2009 to 20.9 percent in 2017. This improvement occurred steadily over seven consecutive years.

4.24 Slovakia

Slovakia was the first OECD country to have a flat personal income tax (see Brys, 2011, for more). It introduced a “comprehensive” flat tax reform in 2004 with the goal of improving labor market conditions and attracting foreign direct investment. Prior to the reform, there were five income tax brackets varying from 10 percent to 38 percent. The 2004 reform introduced a flat tax of 19 percent on both corporate and income tax. The government also reduced social assistance benefits, introduced additional reforms that aimed to “make work pay,” and shifted the

tax burden from direct to indirect taxation. A single VAT rate of 19 percent replaced the two former VAT rates of 14 percent and 20 percent. The reform turned out to be broadly revenue neutral. The revenue lost from personal income tax and corporate income tax was almost entirely offset by the increase in revenue from VAT and excise tax. The 2004 tax reform made the tax system simpler and transparent. It improved incentives to invest and set up a business. It also reduced distortions in capital allocation and, because of considerable base broadening, prevented further efficiency losses. However, the social security contributions (SSC) remained high and put significant tax burden on labor.

In 2013 and 2014, there were additional tax reforms that aimed to address some weaknesses from the previous reform. The corporate tax rate was increased from 19 percent to 23 percent in 2013, and then lowered to 22 percent in 2014. In 2014, a minimum corporate income tax was introduced. The minimum tax is either EUR 480, EUR 960, or EUR 2,880, depending on the company's turnover and whether it is registered for VAT. On the personal income side, a second tax bracket and tax rate of 25 percent was introduced in 2013. This rate is applicable to the taxable income exceeding 176.8 times the valid subsistence minimum. Slovakia's tax-to-GDP ratio steadily declined from 1995 to 2012. It fell from 39.6 percent in 1995 to 28.1 percent in 2012. Since the 2013 and 2014 reform, the ratio increased to 34.7 in 2019.

4.25 South Korea

South Korea has had successive tax reforms starting with the Three-Year Economic Reconstruction plan (1959), following the Korean war. This reform sought to reduce most tax rates and simplify tax administration. The 1960 tax reform also reduced rates for direct taxes

while increasing rates for indirect taxes. Additionally, the government increased the number of tax exemptions and deductions to promote exports and capital accumulation.

The military government that came into power in 1961 forgave all existing penalty claims for past tax delinquencies, and simultaneously it pledged to deal with future cases more harshly. At this time, the Tax Account Law was enacted to help taxpayers in filing tax returns voluntarily. A tax reduction was provided to voluntary tax filing for both individuals and corporates. The tax reform of 1961 also placed heavy reliance on indirect taxes to raise tax revenues. Tax rates on alcoholic beverages, entertainment activities, and luxury consumer goods increased. The Office of National Tax Administration (ONTA) was established in 1966 with a clear mandate to increase tax collections.

In 1967, a progressive tax rate system was adopted to increase the tax burden of high-income groups; complementarily, the 1971 tax reform's objective was to lower the tax burden on low-income earners. Tax rates on wages and salaries and businesses were lowered and the basic exemption level increased. A progressive income tax rate system was introduced in 1975 and VAT was implemented in 1977. At the same time, the VAT was introduced to replace several indirect taxes and thus simplify the indirect tax system. The Basic Law of National Taxes was enacted to clarify the legal basis of taxation, to promote fairness in tax administration, and to protect the rights and interests of taxpayers.

The tax reforms in the 1980s focused on structural adjustments and featured minor revisions over several years. They included streamlining the tax incentive system, reducing tariffs, abolishing tax privileges for foreign investors, strengthening tax incentives for research and development, establishing small and medium businesses, and installing antipollution

measures. As a result of all those reforms, the share of total tax revenue as a percentage of GNP increased from 6-7 percent in the mid-1950s to 20-21 percent in the 1990s. The country's tax-to-gross domestic product (GDP) ratio came to 20.1 percent in 2019, and which puts South Korea about five percentage points lower than the average OECD country.

4.26 Spain⁷⁴

Following the death of dictator General Franco in 1975, and the following economic crisis, Spain embarked on a transition to democracy and modernization of its economy and state institutions, as embodied in the new Constitution of 1978. A principal goal was to be able to join the European Economic Community. A main component of that transition was a major tax reform process that started with Law 50/1977 of Urgent Tax Reform Measures and that eventually included a new personal income tax with broad base and progressive rates, a progressive personal net wealth tax, a broad-based corporate income tax, and VAT like that used in other European countries, which was introduced in 1985. The upgrading of the tax administration involved substantial investments in regional offices, human resources, and information systems and the addition of a unique taxpayer identification number, a significant increase in self-assessment, withholding at source, use of third-party information systems, and stiffer penalties for tax cheaters.

These tax reforms were made possible by all political parties early in the process committing to a social-political agreement (the “Moncloa Pacts”). The goal was to significantly raise tax revenues through progressive tax policy reform and the substantial upgrading of tax enforcement. The purpose was to finance substantial increases in public spending, especially in

⁷⁴ See Martinez-Vazquez and Sanz-Sanz (2007) and Martinez-Vazquez and Torgler (2009).

social and welfare programs, health and education, and public infrastructure in order to put Spain at the same level in public policies as its neighboring European countries, especially those already in the European Economic Community that would later become the European Union. The control of past tax evasion practices and the substantial increase in public spending programs and the quality of public services also led to large increases in tax morale with accompanying higher levels of voluntary tax compliance. As a result of those reforms the tax-to-GDP ratio improved from 18.4 percent in 1975 to around 34 percent in 1990. Since then, it has hovered around 33-34 percent.

4.27 Thailand

Thailand enacted its first major tax law in 1992, introducing a VAT to replace a business tax. In 1999, Thailand enacted personal income tax reform and further tweaked the VAT. The reforms that followed until 2008 in both income taxes had the objective of increasing the progressivity of tax burdens via rate reductions and exemption levels, which narrowed the tax bases (see Sujjapongse, 2005). The tax-to-GDP ratio in Thailand was 15.5 percent in 1999, 17.6 percent in 2007, and 17.2 percent in 2019.

4.28 Uganda

With the 2013-17 tax reform, the Ugandan government aimed to strengthen domestic revenue mobilization to build fiscal space for investments and reduce their reliance on donor funds. The tax reform was enacted as part of the National Development Plan (NDP) (2010/11-2014/15). The main measures of the reform included:

- Reformed the VAT with many fewer exemptions, including those for hotels, and an increased VAT threshold.
- Increased the personal income tax top bracket by 10 percentage point (from 30 to 40 percent).

- Increased the excise tax on locally produced spirits from 45 to 60 percent.
- Increased the excise tax on cigarettes by 60 percent.
- Imposed an excise duty on imported fresh juices.
- Increased the excise duty on a variety of products such as fuel, sugar, mobile money transfers, and international calls.
- Introduced the Tax Procedures Code, providing a single regulation for all procedural aspects related to taxes, aiming to streamline and clarify tax procedures.
- Implemented the Regional Electronic Cargo Tracking System (RECTS), a web-based system to monitor transit cargo in the EAC and improve revenue collection. This was done by the Ugandan Revenue Authority (URA)
- Established a list of potential High Net Worth Individual (HNWI) taxpayers and conducted outreach to educate them on their rights and obligations to pay taxes. Following the establishment of the unit, both the number of taxpayers and the tax collection from this segment increased substantially.
- Implemented e-tax services to facilitate taxpayers' registration, filing and payments.

From 2012 to 2017, Uganda increased its tax-to-GDP from 10.5 percent of GDP to 14 percent of GDP.

4.29 Ukraine

Ukraine implemented tax reform after the Orange Revolution in 2004. It removed VAT exemptions and revised the regime for agriculture by reducing the rates and eliminating refunds. To improve tax compliance, Ukraine implemented a targeted audit program. The tax code of Ukraine, finally implemented in 2011, outlines the nature of planned tax audits that are conducted according to the risk assigned to taxpayers. The low-risk taxpayers may be inspected no more than once per three years, medium-risk taxpayers may be inspected no more than once per two years, and high-risk taxpayers may be inspected no more than once per year (Sydorenko & Pogrebna, 2019).

4.30 Vietnam

The first and second phases of tax reform were implemented in the periods 1990-1995 and 1997-2005, respectively. These reforms introduced new taxes and sought to facilitate Vietnam's integration into the regional and global economy. A new VAT and an enterprise income tax were introduced during the second phase of the reform. In addition, other taxes that were relevant with the operation of a market-oriented economy were gradually established and applied to all economic sectors—export and import duties, special consumption tax, agricultural land use tax, personal income tax on high income earners, property tax, and natural resources tax. Tax revenue in 1996-2000 increased by 2.3 times compared with the revenue collected in 1991-1995. Additionally, in the period 2001-2005, it increased two times in comparison to the tax revenue collected in 1996-2000.

The third phase of the tax reform (2006-2010) reduced the corporate income tax from 28 to 25 percent; that rate was further reduced to 22 percent in 2013 and to 20 percent in 2017. A new Ordinance on personal income tax on high earners was passed in 2009. It sought to equalize treatment between Vietnamese citizens and resident foreigners. It included a progressive tax system with seven tax brackets and removed several exemptions. The property tax on non-agricultural land use was reformed to make the base the value of the land rather than its area, increased taxes on land used for urban residences, and decreased taxes on rural areas' resident land.

Furthermore, tax policy reforms were also accompanied by modernization of the tax administration in terms of its organization, personnel, and use of technology. It also promulgated regulations on tax audit based on risk management. By 2014, 97 percent of businesses used e-filing. The number of active registered taxpayers increased from about four million in 2006 to

about 15 million by 2014. Tax revenue (as a percent of GDP) peaked in 2010 at 22.3 percent from 20 percent in 2009. However, it had declined to 18.2 percent by 2014.

In closing this review of individual country tax reform experiences, Table 2 offers a summary of the key most important factors behind those individual country reforms. In Table 2 we reproduce part of the information showed above in Table 1 indicating the increase in revenues as a share of GDP and the time period over which that was achieved, and adding a column summarizing the most fetors behind each reform: getting the political economy right, new tax policy measures, modernizing tax administration, and enhancing tax morale and tax compliance norms. We see there that country experiences do vary significantly and that playing one or several those factors right can lead to successful tax reform.

Table 2. Key Factors in Successful Tax Reforms in Recent Years around the World

Country	Result	Period	Key Factors in the Reform
Afghanistan	2.5% to 8.0%	2003-2012	Administration
Bangladesh	7.5% to 9.7%	2006-2013	Increased tax morale
Bosnia and Herzegovina	0.6% to 3.3% ^a	2006-2012	Policy design
Brazil	22% to 30%	1990-2004	Policy design
Burkina Faso	9.6% to 15.6%	2002-2019	Administration; Policy design
Cambodia	10% to 19%	2009-2019	Increased tax morale
China	12.6% to 16.1%	2001-2016	Policy design
Colombia	8.2% to 15%	1990-2004	Right political economy
Denmark	46.3% ^b	2019	Policy design
The Gambia	13% to 17.5%	2010-2015	Right political economy
Georgia	7.62% to 23.18%	2002-2012	Right political economy
Guyana	0.81% to 1.02%	2016-2019	Policy design
Hungary	25.55% to 19.83%	1991-2010	Policy design
	21.07% to 22.93%	2011-2012	
India	15.8% to 16.6%	2001-2020	Policy design
Indonesia	8% to 8.9%	1983-1989	Policy design
Liberia	10% to 20%	2003-2015	Right political economy
Lithuania	28.8% to 29.8%	2005-2009	Policy design
Malaysia	14.8% to 12.4%	2007-2019	Policy design
Maldives	9.38% to 25.2%	2010-2015	Right political economy
Mauritania	11.1% to 17.2%	2009-2014	Right political economy

Mozambique	14.74% to 27.06%	2010-2019	Policy design
Nepal	9% to 22%	2006-2019	Policy design
Paraguay	8.8% to 12.8%	2003-2010	Right political economy
Rwanda	12.9% to 16.65%	2010-2016	Right political economy
Senegal	18% to 20.9%	2009-2017	Policy design
Slovakia	28.1% to 34.7%	2012-2019	Policy design
South Korea	6% to 20%	1950s-1990s	Right political economy
Spain	18.4% to 34%	1975-1990	Right political economy
Thailand	15.5% to 17.2%	1999-2019	Policy design
Uganda	10.5% to 14%	2012-2017	Policy design
Ukraine	20% to 25%	2004-2011	Right political economy
Vietnam	20% to 22.3% ^c	2009-2010	Administration; policy design

^a Corporate Income tax and Personal income tax

^b Ratio has remained stable for the last 19 years.

^c Ratio has declined to 18.2% by 2014

Source: Developed by author from multiple sources

5. Conclusion: Policy Lessons and Fundamental Takeaways

The amount of tax revenue a country must raise is a difficult question to answer. This question, furthermore, is likely to never have a clear, immediate answer, especially given the role that political choice and discretion should play in all governance issues, including how much a country wants to tax itself. The traditional approach to measuring tax effort employs a metric of tax capacity derived from the tax levels attained in other countries, similar or not, after controlling for tax handles and institutional and other determinants on those tax levels prevailing in international practice. Sustained levels of public spending (and deficits) and medium-term policy objectives (such as those of the Millennium Development Goals) may be more relevant to answering the question of the correct level of tax revenues to be raised than comparisons with practices in other countries (see, for example, Cyan et al., 2014).

Be that as it may, once the desired level of tax revenue is determined, the question becomes, what makes a successful tax reform? First, practitioners must be aware that one size does not fit all; in particular, a country's history and starting point significantly influence the process of tax reform. Nevertheless, there are useful lessons from past reform experiences that

can help other countries to be more successful in their tax reform effort. The answer, of course, lies in the attainment of the objectives being pursued. One of these objectives is often the increase in the tax revenues available to the budget authorities. However, as has been already discussed in this paper, that does not have to be the only objective. In fact, successful tax reforms can be revenue neutral but attain significant gains in economic efficiency by reducing tax distortions or attaining a more equitable distribution of tax burdens, as in the cases of Denmark and Vietnam reviewed in the previous section.

The international experience generally shows that sustained and meaningful increases in tax effort, measured by increases in tax-to-GDP ratio of more than several percentage points, are difficult and take time, but they are not rare. This section attempts to extract lessons from the many reform experiences reviewed in this paper, especially focusing on those ingredients that underpin significant improvements in tax effort. The lessons are grouped by the major component factors of successful tax reforms: political economy factors, tax policy design, complementary tax administration measures, and the relevance of tax morale and compliance norms.

5.1 Lessons on the political economy of tax reform

- Tax reforms require major political consensus or a nationwide political pact, which may be difficult to put together. Periods of significant political transition tend to facilitate political forces coming together into a national pact, such as in the cases of Spain in the early years of retuning to democracy after Franco's dictatorship in the late 1970s and Colombia after the enactment of its new Constitution in the early 1990s. Similar experiences took place in Georgia, Nigeria, and Ukraine.
- Major tax reform efforts also tend to occur following major economic crises, which in part may facilitate reaching nationwide political pacts, like in Liberia, Maldives, and Rwanda.

- Fundamental tax reform is more likely to happen if driven by strong buy-in from all stakeholders and sustained effort and commitment by political leaders, as, for example, in Mauritania, South Korea, and Spain.⁷⁵
- These processes are likely facilitated by an explicit institutional commitment to comprehensive tax reform as in the case of countries that have adopted a Medium Term Revenue Strategy (MTRS).
- Successful tax reforms are more likely to happen when supported by measures that head off resistance from opposing vested interests. Good examples of that include the 1994 Tax Sharing System Reform in China and the experiences of Senegal and Vietnam.
- International co-operation and technical assistance can be instrumental to facilitating tax reform, but building domestic capacity and ownership are critical to sustaining reform efforts, as the cases of Colombia and Paraguay show.
- Successful tax reforms generally require a strategic plan with clear objectives for the tax system and the means of achieving those objectives in the simplest and most efficient and equitable manner. In addition, investing resources in the development of data bases and the methodologies required to analyze the potential effects on revenues, resource allocation and tax burden distributions of alternate tax policies are also required. Georgia and Kazakhstan are good examples of the benefits of careful preparation of the reform package and road map.

5.2 Lessons on the choices of tax policy structure

- The gold standard in tax policy reforms has been the broadening of tax bases, by significantly curbing exemptions and other special treatments and by selective decreases in tax rates, as for example in Denmark, Guyana, and Slovakia.
- In other cases, however, fundamental tax reform, especially with a revenue adequacy objective may involve introducing new tax instruments or increasing tax rates in existing ones like in The Gambia, Maldives, and Mauritania.
- Tax policy reform at the national level will typically imply the reform of the system of intergovernmental fiscal relations regarding sharing and revenue assignment arrangements as in the cases of China, Georgia, Guyana, Indonesia, Spain, and Ukraine.

⁷⁵ The lack of political leadership may also be a serious impediment. For example, Mokhtari and Ashtari (2011) highlight it as the main reason for the lack of progress with tax reform in the case of Central Asian republics, with the exception of Kazakhstan, where tax reform has received more political support.

5.3 Lessons on the need of complementary measures in tax administration upgrading

- Sustained tax reform effort is clearly correlated with tax policy reform efforts complemented by stronger compliance measures and substantial upgrading of the tax administration apparatus. There is considerable experience showing that the joint pursuit of tax policy reforms and revenue administration improvements leads to larger and better-sustained gains. Therefore, an important lesson is not to focus just on modernizing tax policies and relegating tax administration and taxpayer compliance issues to a remote second place. Examples of successful tax administration reform include Burkina Faso, Cambodia, Georgia, Mozambique, and Rwanda.

5.4 Lessons on the key role of tax morale and compliance norms

- Sustained tax revenue increases are considerably more likely when tax reforms are accompanied by increases in taxpayer morale and compliance norms. These increases tend to be present when tax reforms are imbedded in wider fiscal reforms including expansion of social services and other public goods and services that taxpayers want and marked improvements in governance (drastic reductions in corruption, etc.) and other institutions across the public sector such as the judicial system and the police. Country examples include Bangladesh, Burkina Faso, Colombia, and Spain.

These lessons come from both the literature and these experiences of the many countries profiled in this paper, which hopes to provide an empowering guide for reform-minded politicians and administrators to shape their own jurisdictions' strategies for tax policy and administrative reform to increase their countries' tax revenue efforts successfully and sustainably.

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