Addressing Pakistan's Chronic Fiscal Deficit

Ijaz Nabi and Anjum Nasim

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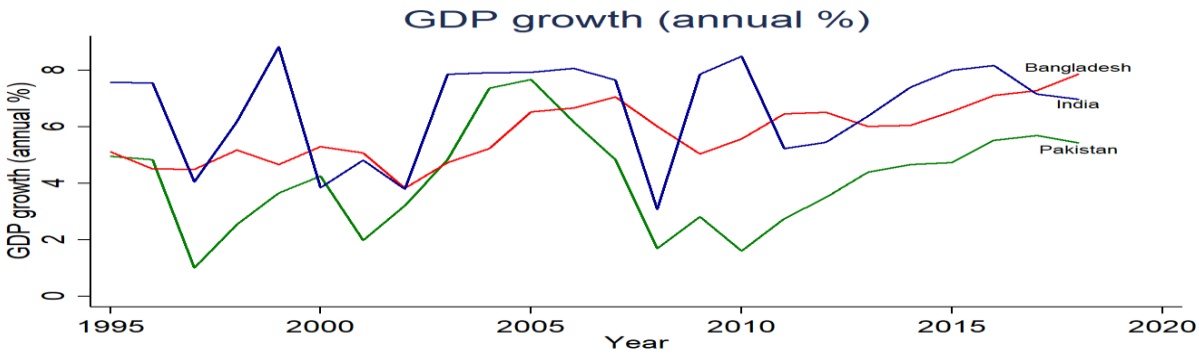
Section 1: Macroeconomic stability

Section 1 is a quick overall review of macro-economic outcomes since 1995. To provide context, it compares Pakistan's macro outcomes with India and Bangladesh, and identifies the main structural weaknesses that have landed Pakistan under IMF tutelage for 9 of the 19 years under review. It then assesses what worked and what didn't under the programs, and whether the main structural weaknesses were addressed: loss of competitiveness, stagnant investment and low tax collection that underpin current account vulnerability. How to restore competitiveness and increase investment is for another paper. The subsequent sections address: (1) better expenditure management (Section 2) that would also increase the willingness to pay taxes to meet future expenditure needs in a sustained way, and (2) reform of some of the federal and provincial taxes (Section 3) to increase revenues and bring fiscal deficit down from the 8-9 percent at present to more sustainable levels.

The macroeconomic roller coaster

Since the start of the new millennia, Pakistan's economy has been on a roller coaster with frequent dips that have caused anxiety about sustaining living standards and have clouded the investment climate. A comparison of recent GDP growth outcomes in Bangladesh, India and Pakistan (Figure 1) shows that Pakistan's GDP growth rate has been lower and more prone to steep falls. Alarmingly, Pakistan's international competitiveness, measured in exports as share of GDP has nose-dived since the 1990's falling from about 18 percent of GDP, by far the highest of the three countries, to under 10 percent in 2018, well below Bangladesh and surging India (Figure 2). Meanwhile, personal remittances in Pakistan that were less than 1.5% of GDP in 2000 have been around 7% since 2014 and largely account for the continued fall in poverty (Figures 3-5).

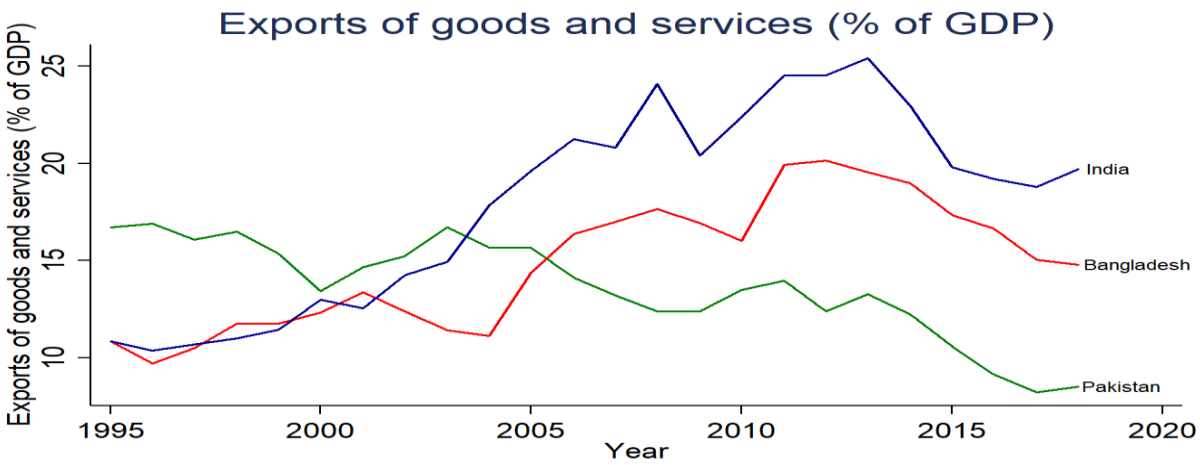
Figure 1



Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2010 U.S. dollars. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

Data Source: World Bank National Accounts Data

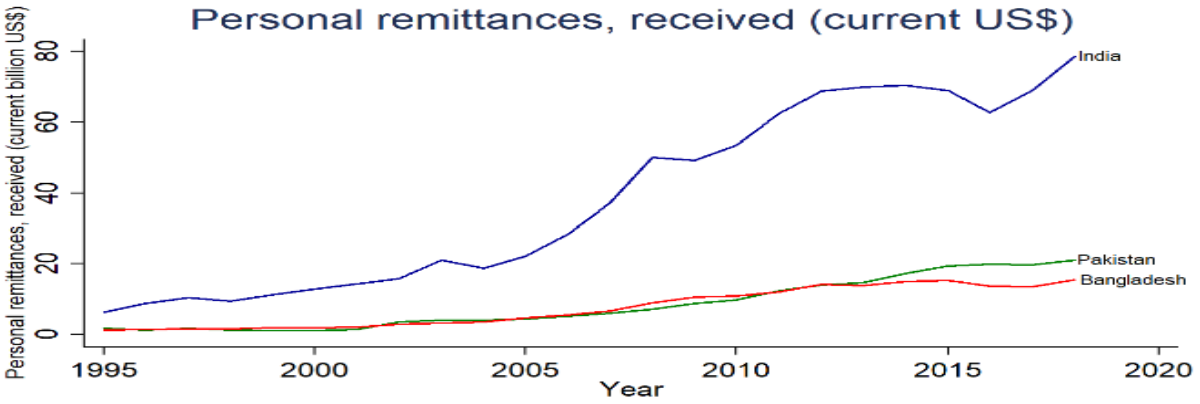
Figure 2



Exports of goods and services represent the value of all goods and other market services provided to the rest of the world. They include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services.

Data Source: World Development Indicators

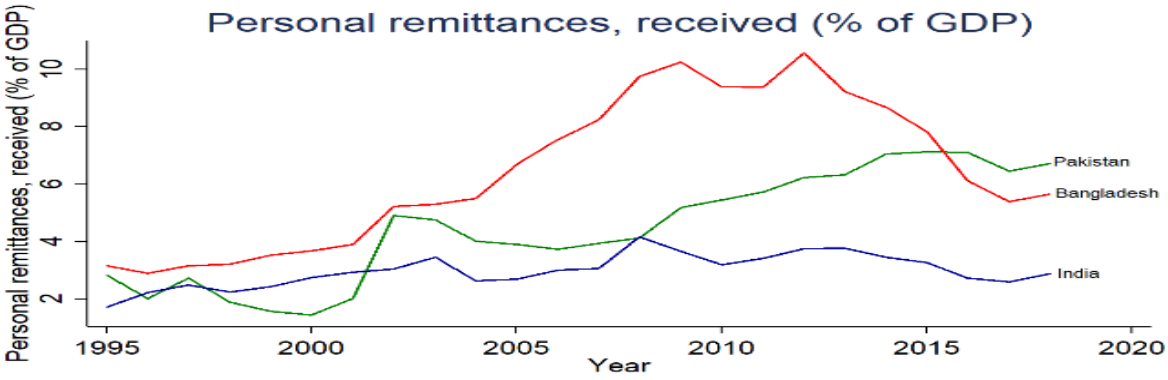
Figure 3



Personal remittances comprise personal transfers and compensation of employees. Personal transfers consist of all current transfers in cash or in kind made or received by resident households to or from nonresident households. Personal transfers thus include all current transfers between resident and nonresident individuals. Compensation of employees refers to the income of border, seasonal, and other short-term workers who are employed in an economy where they are not resident and of residents employed by nonresident entities.

Data Source: World Development Indicators

Figure 4



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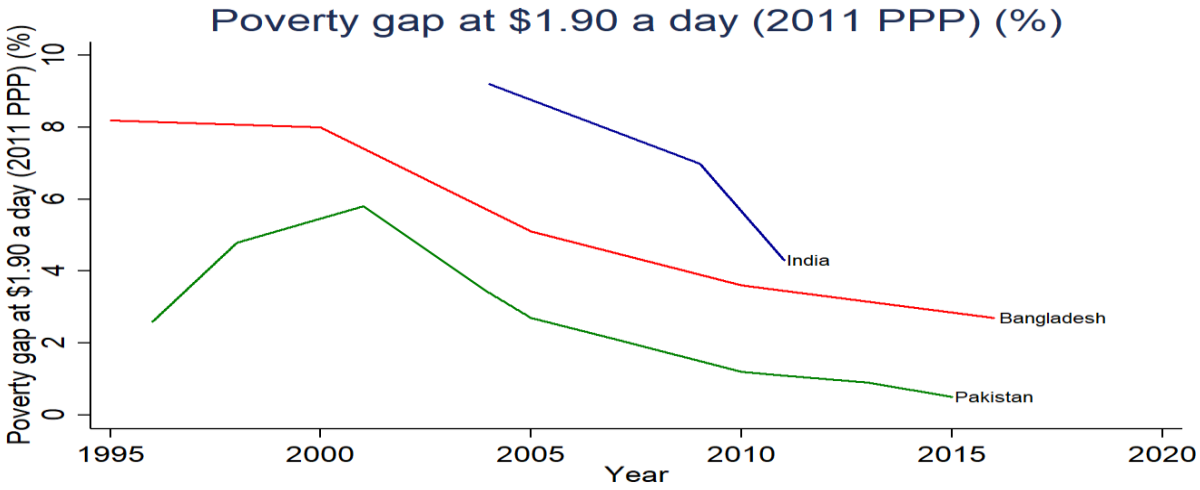
Data Source: World Development Indicators

Figure 5



Poverty gap at $1.90 a day (2011 PPP) is the mean shortfall in income or consumption from the poverty line $1.90 a day (counting the nonpoor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence.

Data Source: World Development Indicators

Identifying the structural weaknesses

Balance of payments crises and IMF adjustment programs is a recurrent feature of Pakistan's economy, which we discuss in more detail in the next sub-section. To understand the structural nature of the recurrent balance of payments problem, we first recap the current account balance, which can be expressed in a number of different ways:

The current account balance of a country is a tally of all its international transactions in goods and services, factor services and unilateral transfers. In other words it is the sum of: (1) balance on trade & services (X – M), (2) balance on primary income (BPI) or net income from abroad[1], and (3) balance on secondary income (BSI) or net current transfers.[2] The balance on primary incomes is also known as net income from abroad; the balance on secondary income is also known as net unilateral transfers. Formally:

$$CAB = X - M + BPI + BSI \qquad (1)$$

CAB in (1) can be written as the difference between gross national disposable income (GNDY = GDP + BPI + BSI) and gross national expenditure on goods and services (C + I + G)[3]:

$$CAB = GNDY - GNE \qquad (2)$$

We can also write CAB as the difference between saving (S) and investment (I):

$$CAB = S - I \qquad (3)$$

We can distinguish between private saving and investment (S_p and I_p) and government saving and investment (S_g and I_g) and rewrite (3) as:

$$CAB = (S_p - I_p) + (S_g - I_g) \qquad (4)$$

[1] "When labor, financial resources, and natural resources owned by residents are put at the use of nonresidents, primary income is earned. When labor, financial resources, and natural resources are owned by nonresidents and are put at the use of residents, primary income is payable." International Monetary Fund, Balance of Payments and International Payments Position Manual, Sixth Edition (BPM6), 2009, P. 183.

[2] Secondary income balance is the balance of current transfers between residents and non-residents. (Capital transfers do not affect disposable income and, hence, are recorded in the capital account.) Every transaction is either an exchange or a transfer. When something of economic value (e.g., goods, services, or a financial asset) is provided without a corresponding return of an item of economic value, the corresponding entry is made as a transfer. International Monetary Fund, Balance of Payments and International Payments Position Manual, Sixth Edition (BPM6), 2009, P. 207.

[3] C = household consumption; I = gross capital formation (investment in non-financial assets); G = government consumption.

Noting that $S_g = T - G$ where T is government current revenue (R_g) net of government transfer payments (T_r) and G is government consumption expenditure, we can write (4) as:

$$CAB = (S_p - I_p) + (T - G - I_g) \quad (5)$$

$$CAB = (S_p - I_p) + Fiscal\ balance \quad (6)$$

We also note that any surplus or deficit in the current account is offset by a deficit or surplus in international asset transactions. These asset transactions are recorded in the capital account[4] and in the financial account.[5] The balance of these accounts are termed respectively as capital account balance (KAB) and net financial account balance (NFA). NFA is also called net lending/ borrowing (NLB). Representing net lending as (+) and net borrowing as (–), the following relationship holds:[6]

NLB = CAB + KAB = NFA (7)

We finally note that since NFA includes changes in foreign exchange reserves, we can also write CAB as:

CAB = NKF + RT (8)

Where

NKF = net capital and financial account transactions excluding reserve assets

RT = net reserve asset transactions

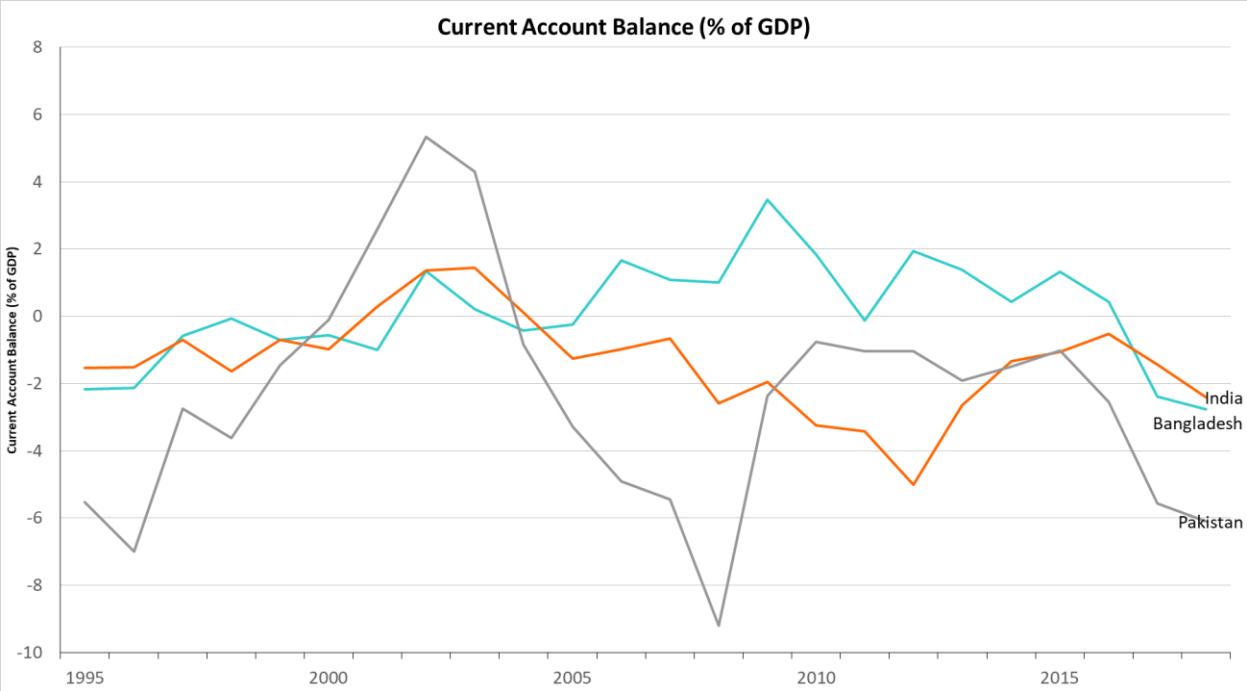
Figure 6 compares Pakistan's current account balance with India and Bangladesh. Pakistan's CAB shows much greater volatility than both India and Bangladesh and like India it has very few years of surplus. In the case of Pakistan, the surplus years were in the first half of 2000s, and was a result of rescheduling of its debt and consequent reduction in interest payment after it joined the Coalition Forces in its war in Afghanistan in early 2000.

[4] "The capital account in the international accounts shows (a) capital transfers receivable and payable between residents and nonresidents and (b) the acquisition and disposal of nonproduced, nonfinancial assets between residents and nonresidents." International Monetary Fund, Balance of Payments and International Payments Position Manual, Sixth Edition (BPM6), 2009, P. 216.

[5] "The financial account records transactions that involve financial assets and liabilities and that take place between residents and nonresidents." International Monetary Fund, Balance of Payments and International Payments Position Manual, Sixth Edition (BPM6), 2009, P.133.

[6] International Monetary Fund, Balance of Payments and International Payments Position Manual, Sixth Edition (BPM6), 2009, Chapter 14.

Figure 6



Taking the definition of CAB as in (1), if the economy becomes more competitive so that the share of exports in GDP increases, then it would tend to improve the current account balance. This is happening in Bangladesh and India (Graph 7) but not in Pakistan. An over-valued exchange rate, particularly in the period of the last PML-N government (2013-18) has been a contributory factor in the declining share of exports and increasing share of imports but other factors have been at play as well. Lack of investments in new technologies to make exports more competitive is a factor, but many factors may explain this. The poor law and order situation for many years in Karachi, the main industrial hub in the country, because of home-grown factors, and later in the rest of the country as a fallout of the Afghan war, has scared away investors, both domestic and foreign.

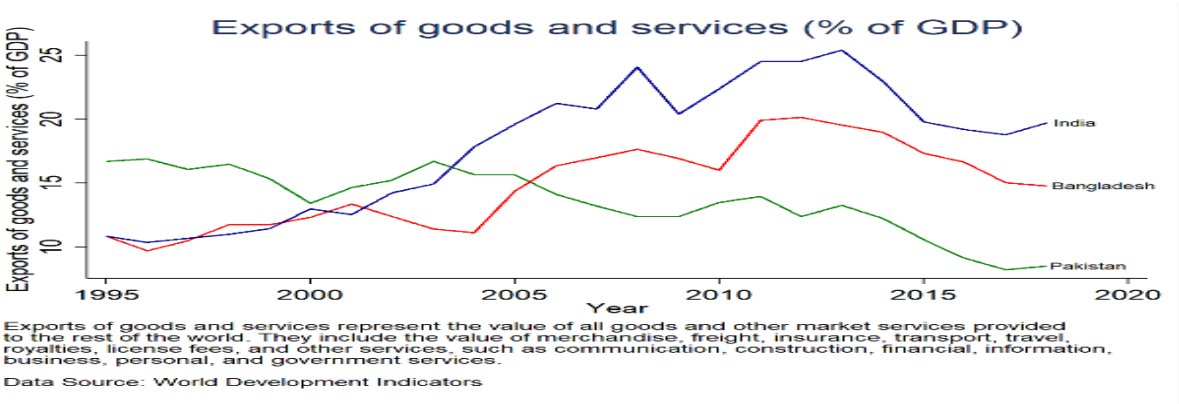
Pakistan also suffered from electricity supply shortages for better part of the last three decades that hampered production and investment. The shortages began in the mid-1980s and continued through most of the 1990s till the power generation by independent power producers (IPPs) became available in the late 1990s. The shortages resurfaced in the second half of 2000s, which became particularly acute during 2008-2013.

Recent investments in power generation under CPEC has eased the power shortages but there are concerns about the power tariffs that have been negotiated with IPPS under CPEC, which makes exports less competitive. Similar concerns were expressed when tariffs were first negotiated with IPPS in the mid-1990s and then again under the Musharraf regime. Whether or not these tariffs are internationally comparable, there is no doubt that the thermal-based power generation under IPPS, which has been a growing source of power since the mid-1990s, is far more expensive than the hydro-power generation that was Pakistan's mainstay till then.

Another structural bottleneck in the way of investments is the mismatch between the education, training and skills of the workforce and the demand of the industry. In Section 2 we will see how the Punjab government has tried to address this issue.

The consumption orientation, particularly of the government, that attracts credit away from the private to the public sector has also been a factor that may explain lack of investment in general and export oriented industries in particular. This aspect of government finances that crowds out private investment and growth is the main theme of this paper.

Figure 7



Focusing on (S – I) – Equation 3 – a country, that starts with a zero CAB, can run a current account deficit by increasing consumption and lowering saving (as a share of GDP) or greater investment (as a share of GDP). Both involve net borrowing (see (7)),[7] which would require repayment with interest in the future. The greater consumption in the present, in effect, implies sacrificing future consumption for better living in the present. If a similar choice is made for a long enough period, the debt obligations will reach a point where raising more debt becomes very expensive if not impossible. This then forces the country to adopt austerity measures, which can be very painful at times.

If the country chooses the path of greater investment then provided the investments are sound, the country can enjoy greater consumption in the future as well as run a surplus in the current account to meet its debt servicing obligations. A higher future income from such investment also allows consumption smoothing i.e., greater consumption in the present as well as in the future.

This way of looking at CAB suggests that a deficit in the current account is not necessarily bad. It can be temporary and it allows a country to achieve higher living standards by borrowing for investment and growth.

Since the late 1990's, Pakistan has become a far more consumption driven economy compared to India and Bangladesh (Figure 8). As a result, Pakistan's savings as a share of GDP are substantially

[7] We are ignoring capital transfers.

lower than India and Bangladesh's (Figure 9). This shows up in investment to GDP ratio that is less than half that of India and Bangladesh (Figure 10).

Figure 8

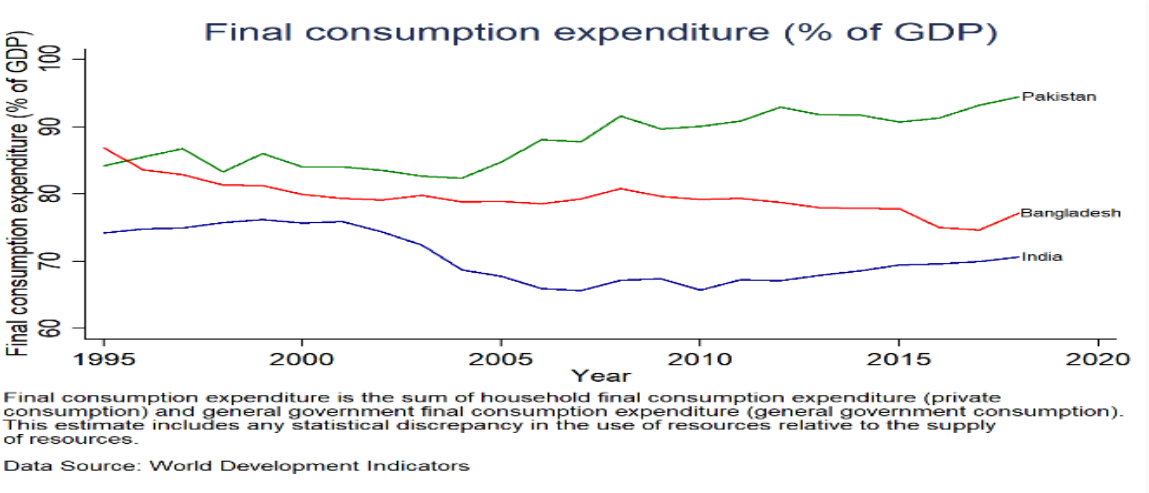


Figure 9

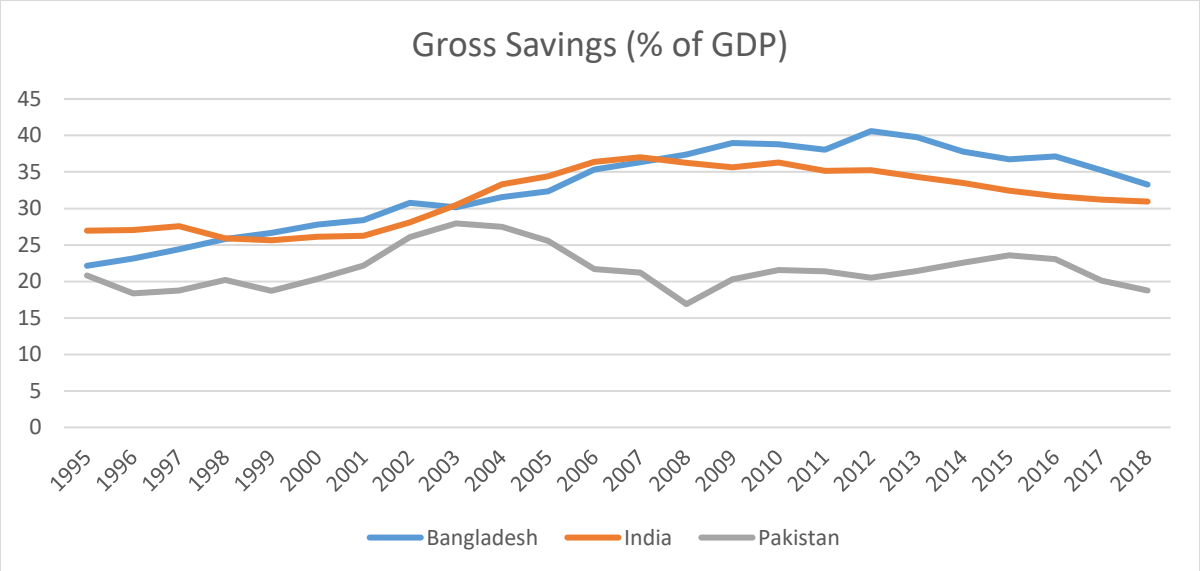
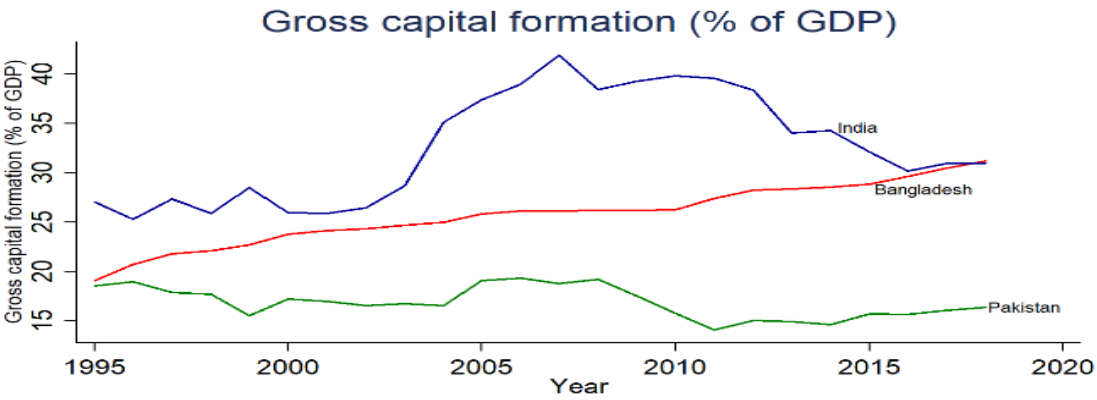


Figure 10

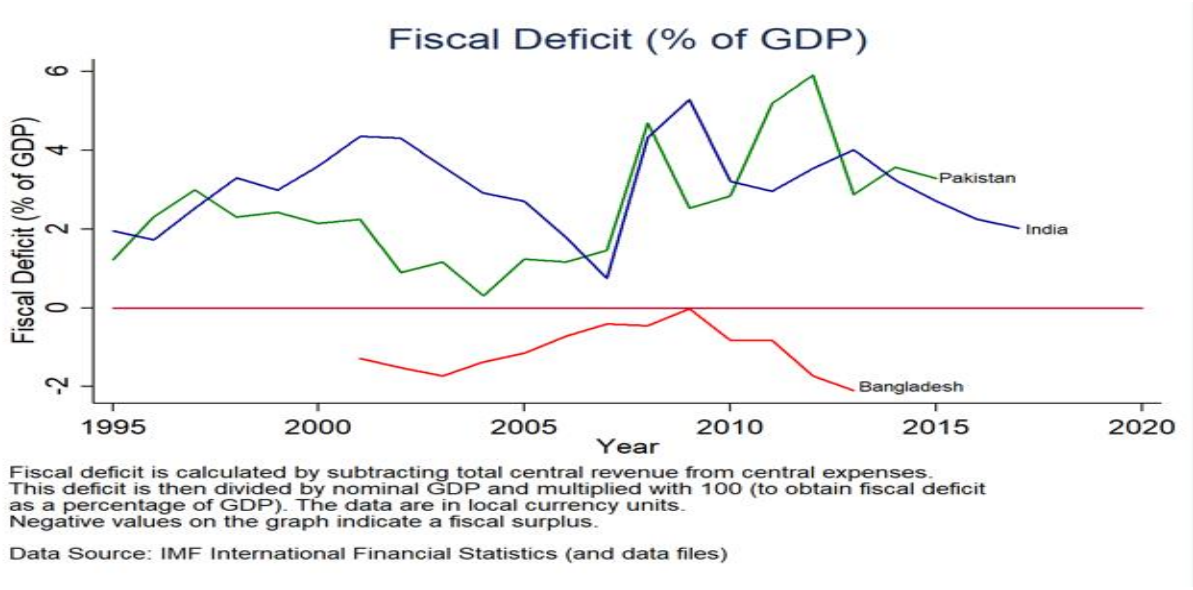


Gross capital formation consists of outlays on additions to the fixed assets of the economy plus net changes in the level of inventories. Fixed assets include land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. Inventories are stocks of goods held by firms to meet temporary or unexpected fluctuations in production or sales, and 'work in progress'. Net acquisitions of valuables are also considered capital formation.

Data Source: World Development Indicators

Turning to the fiscal balance, $(T - G - I_g)$, Bangladesh ran a fiscal surplus for most of the years since 1995 (Figure 11). Seen in conjunction with large and growing overall investment, the country's growth prospects (future income receipts) look good. India and Pakistan, on the other hand, ran large fiscal deficits, with Pakistan surpassing India in the last decade. Combined with the loss of international competitiveness, the rising fiscal deficit clouds the prospects for sustained growth.

Figure 11

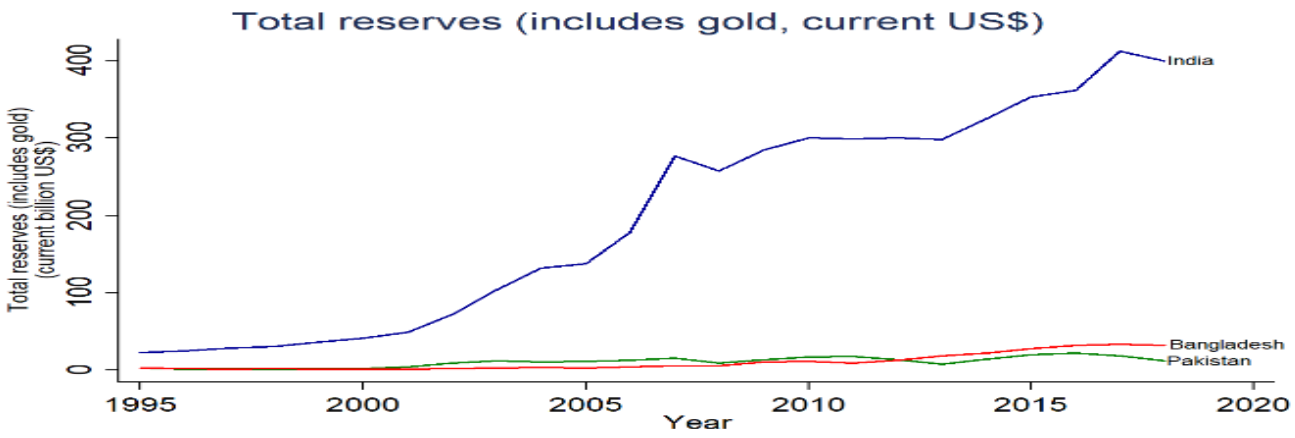


Fiscal deficit is calculated by subtracting total central revenue from central expenses. This deficit is then divided by nominal GDP and multiplied with 100 (to obtain fiscal deficit as a percentage of GDP). The data are in local currency units. Negative values on the graph indicate a fiscal surplus.

Data Source: IMF International Financial Statistics (and data files)

Accumulated international reserves are a buffer that allow the current account deficit to be plugged readily without recourse to other forms of foreign financing. India has seen a spectacular increase in foreign reserves since the mid 1990's now reaching over $400 billion (Figure 12). Pakistan and Bangladesh have seen a more modest increase. However, India has also become a much larger economy because of the high growth rates in the last two decades, which has increased the volume

Figure 12



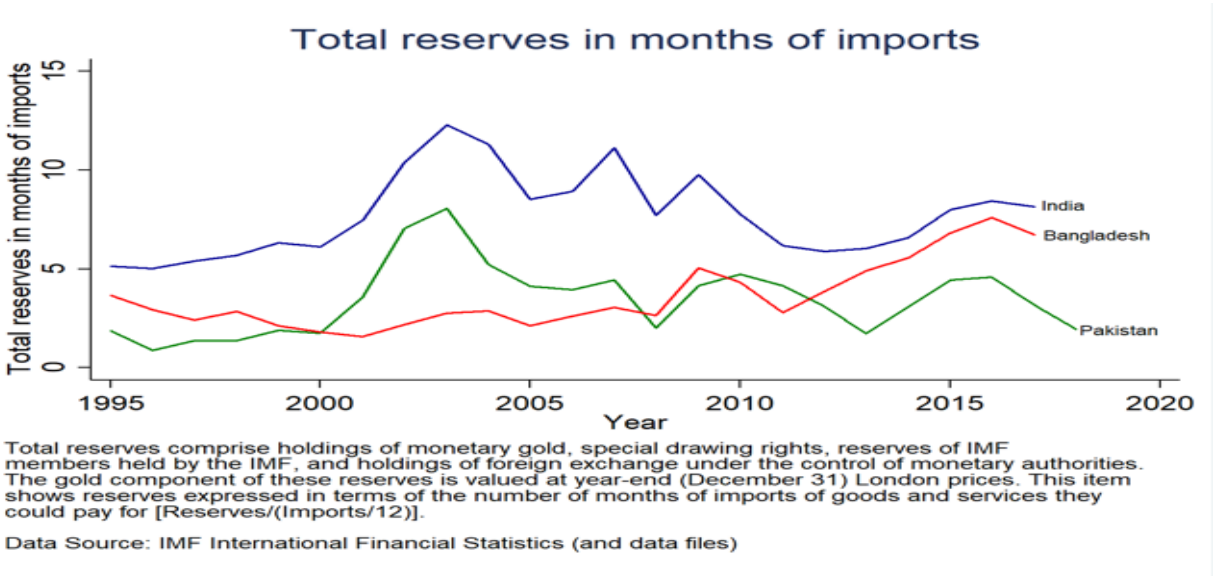
Total reserves comprise holdings of monetary gold, special drawing rights, reserves of IMF members held by the IMF, and holdings of foreign exchange under the control of monetary authorities. The gold component of these reserves is valued at year-end (December 31) London prices.

Data Source: World Development Indicators

of its imports. Market confidence in the value of a country's currency is influenced by the ratio of its reserves to imports – reserves of two months imports regarded as a threshold. With reserves well over 5 months of imports, India does well on that measure as well (Figure 13). For most of the last, Bangladesh's reserves have also been above the threshold. Not so, Pakistan. Since 1995,

there have been several episodes of reserves coming perilously close to the threshold value – the late 1990's, 2008, 2013 and then again in 2018.

Figure 13

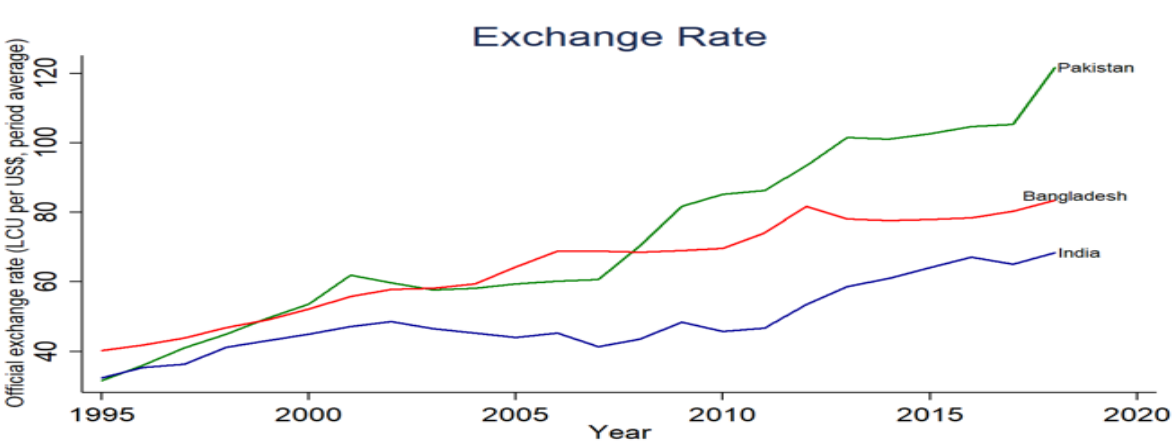


Importantly, the frequent episodes of large losses in international reserves have forced periodic sharp reduction in both private investment and public expenditure resulting in collapse of growth and living standards – the roller coaster.

The depreciation of the nominal exchange rate as an instrument of policy or as a market response to non-sustainable current account imbalances can have a positive impact on the CAB if domestic prices do not increase in response to the depreciation to offset the effect of depreciation on export competitiveness. We note that Pakistan's nominal exchange rate has depreciated more steeply than Bangladesh and India over the period 1995-2018 (see Figure 14) but it has not been able to manage domestic inflation so that its real exchange rate has barely depreciated over this entire period with some years of real appreciation, particular during 2013-18, and many years when it was fairly stable (Figure 15). (Note, unlike nominal exchange rate which is measured as number of local currency that would buy a unit of US dollar so that an increase in the nominal exchange rate implies a depreciation, 'an increase in REER implies that exports become more expensive and imports become cheaper; therefore, an increase indicates a loss in trade competitiveness'.)[8]

[8] See http://datahelp.imf.org/knowledgebase/articles/537472-what-is-real-effective-exchange-rate-reer

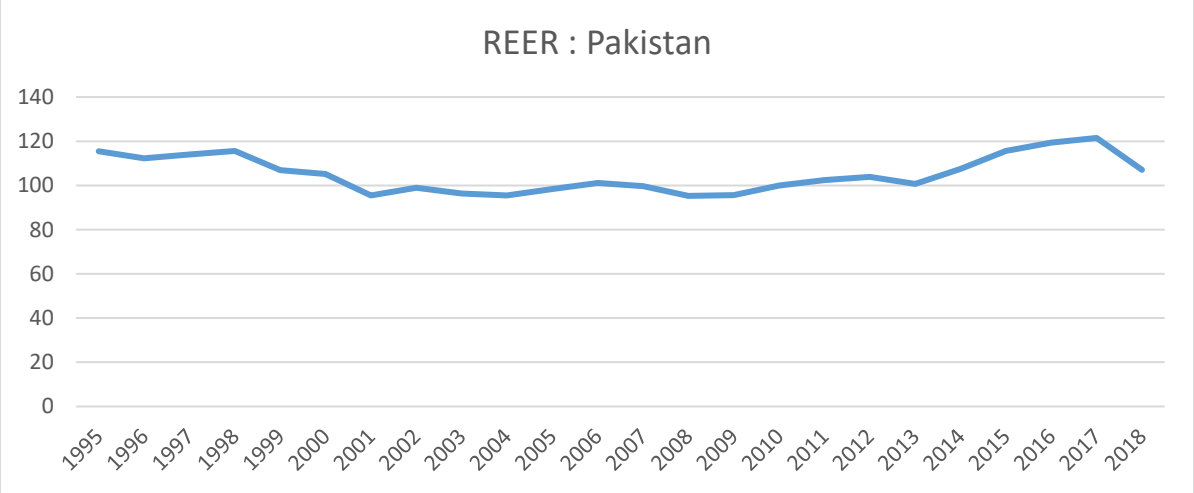
Figure 14



Official exchange rate refers to the exchange rate determined by national authorities or to the rate determined in the legally sanctioned exchange market. It is calculated as an annual average based on monthly averages (local currency units relative to the U.S. dollar).

Data Source: World Development Indicators

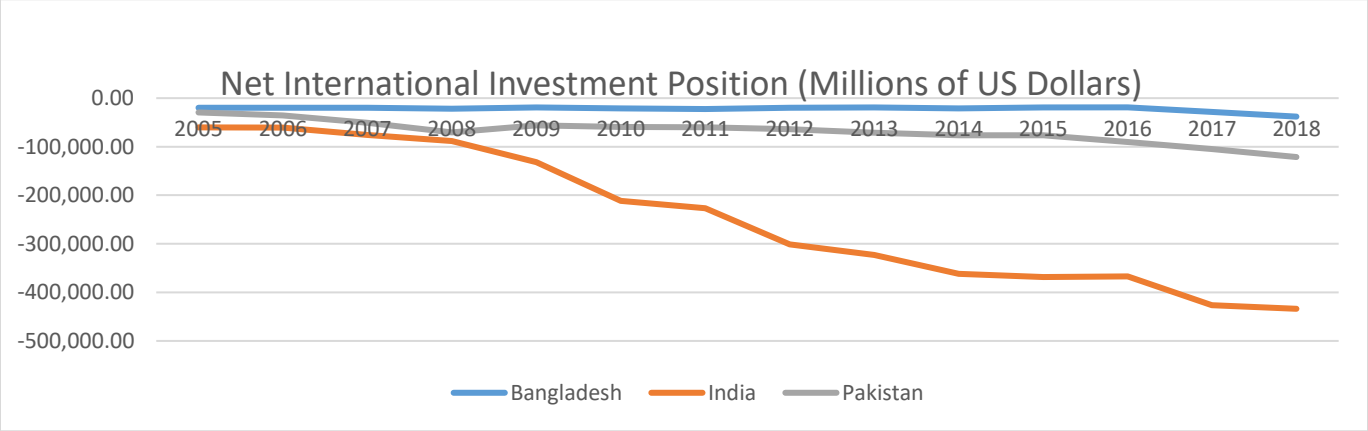
Figure 15



Another variables of interest is the net external wealth or the difference between a country's external financial assets and liabilities – also known as net international investment position (net IIP). The change in net IIP from one year to the next equals the CAB adjusted for capital transfers plus net capital gains on external wealth. These figures were negative for all three countries for the entire period under consideration: 1995 – 2018. In 2018 these figures were: -USD121 billion, –USD434 billion and -USD38 billion for Pakistan, India and Bangladesh. For Pakistan the loss in external wealth has been four fold between 2005 and 2018; for Bangladesh the loss doubled but

for India the loss was seven fold. As share of GDP these figures were -38% of GDP for Pakistan, -16% for India and -14% for Bangladesh in 2018.[9]

Figure 16



In conclusion, the graphs capture a turning point in Pakistan's economic outcomes starting in the early 2000's. Compared to Bangladesh and India, Pakistan's economy became sharply more consumption oriented, savings fell, investment stagnated, fiscal deficit ballooned, the ratio of tax to GDP fell and there was substantial loss of international competitiveness (measured in exports to GDP ratio) and the appreciation of the real exchange rate.

The graphs also show that recent years have seen a sharp increase in remittances and transfer of concessionary capital (aid) to Pakistan. This, combined with loss of international competitiveness, could be seen as evidence of the Dutch disease in Pakistan. However, both India and Bangladesh also experienced sharp increase in remittances and concessionary capital but managed to increase the share of exports to GDP. The more adverse manifestation of the Dutch disease in Pakistan, compared to India and Bangladesh, needs further analysis.

1.1 **Macro-economic management: the IMF tutelage**

Since the early 2000's, the IMF has had a strong presence in Pakistan's macro-economic management. There were IMF programs in 2001-4, 2008-11 and 2013-16. In July 2019, Pakistan signed a fourth program in 19 years.

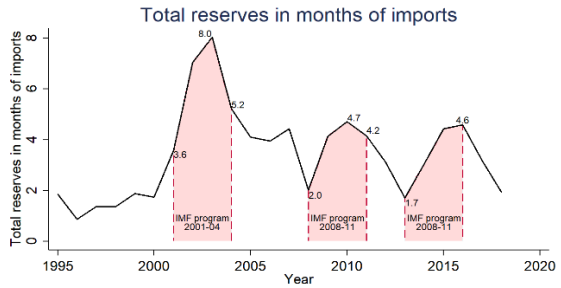
Recourse to the IMF was unavoidable because the balance of payments problems were structural and required multiple year support rather than one off inflow of funds. Borrowing in the intentional

[9] The GDP of Pakistan, India and Bangladesh in 2018 was respectively USD314.6 billion, USD2718.7 billion and USD274 billion.

capital market was very costly and pockets of "Friends of Pakistan'" were not deep enough. Such multiple year support along with credible oversight of macro-economic management that markets seek, can only be provided by the IMF.

How did the previous three programs fair? The short term objectives were met quickly. Reserve accumulation well beyond the threshold level of two months' import was achieved within the first 18 months. The fall in the value of the rupee slowed down – it was actually reversed in the first program. Inflation, measured in consumer prices, fell sharply in the last two programs but rose half way through the first program because of rising energy prices. Both lending and deposit interest rates peaked and then held steady in the 2008-11 program, but were substantially lower at the end of the 2013-2016 program. (See Figures 17 – 20).

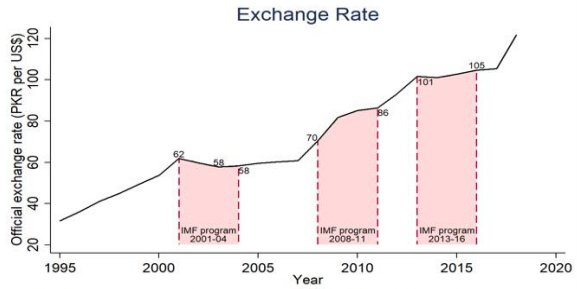
Figure 17



Total reserves comprise holdings of monetary gold, special drawing rights, reserves of IMF members held by the IMF, and holdings of foreign exchange under the control of monetary authorities. The gold component of these reserves is valued at year-end (December 31) London prices. This item shows reserves expressed in terms of the number of months of imports of goods and services they could pay for [Reserves/(Imports/12)].

Data Source: IMF International Financial Statistics (and data files)

Figure 18

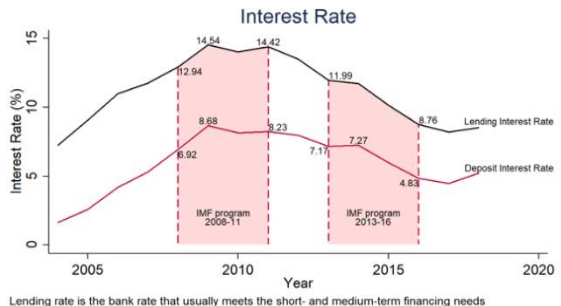


Official exchange rate refers to the exchange rate determined by national authorities or to the rate determined in the legally sanctioned exchange market. It is calculated as an annual average based on monthly averages (local currency units relative to the U.S. dollar).

Data Source: World Development Indicators

Figure 19

Figure 20



Lending rate is the bank rate that usually meets the short- and medium-term financing needs of the private sector. This rate is normally differentiated according to creditworthiness of borrowers and objectives of financing.
Deposit interest rate is the rate paid by commercial or similar banks for demand, time, or savings deposits.

Data Source: World Development Indicators

Inflation is measured by the consumer price index and it reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services. The Laspeyres formula is generally used.

Data Source: World Development Indicators

Importantly, the main target of an IMF program, the current account deficit, was brought to manageable levels at the end of all three programs (Figure 21). Its counterpart, the fiscal deficit, was brought down sharply, perhaps too sharply, in the 2001-4 program but the subsequent two programs ended with higher fiscal deficit, allowing the fiscal policy to stimulate growth (Figure 22).

Figure 21

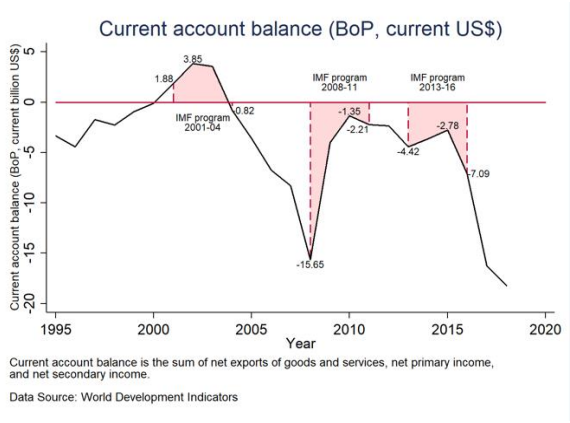
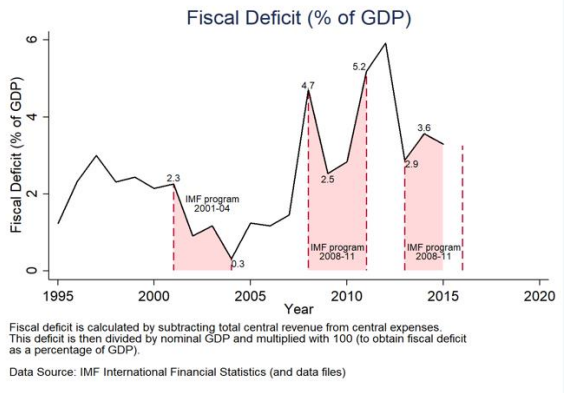


Figure 22



It is striking that the macro-economic consolidation could not be sustained after the completion of all three programs. In the three years after the 2001-04 program, the current account deficit reached a whopping 15 percent and foreign reserves evaporated resulting in the 2008-11 IMF program. By 2013, the current account deficit had again doubled the level at the end of the 2008-11 program resulting in the need for the 2013-16 program. Two years after this program, the current account

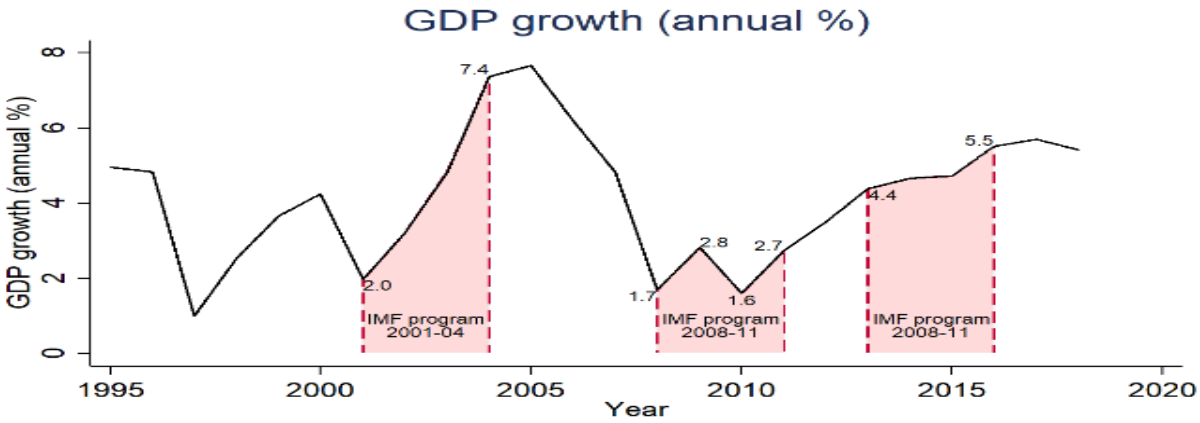
again dipped into hugely negative territory and by the summer of 2018, the fast evaporating reserves signaled that it was time for another IMF program.

This quick review suggests that while each of the three IMF programs achieved their short term objectives, collectively they had failed to address the structural problems of the economy that resulted in frequent ballooning of the current account deficit, sharp draw down of reserves to dangerous levels, and sharp retraction of aggregate demand that slowed down economic growth and job creation. And it didn't seem to matter whether Pakistan was ruled by a military government (General Musharraf, 1998-2007) or a democratically elected government (2008-20018), a left leaning government (Peoples party 2008-13) or a more market friendly government (Nawaz Sharif, 2013-18).

The big picture emerging from this review of the 1995-2018 period is that while economic growth picked up at the completion of each of the three IMF programs (Figure 23), it could not be sustained.

This episodic recovery of growth and macro balances did not shore up business confidence: the investment rate was flat (Figure 24), hovering between 15 and 20 percent of GDP throughout this period (half that of India and Bangladesh). Perhaps because investors could see that tax collection was not improving (Figure 25) even as the government continued to raise expenditure and the country's international competiveness continued to fall even as the economy became consumption and imports driven (Figure 26).

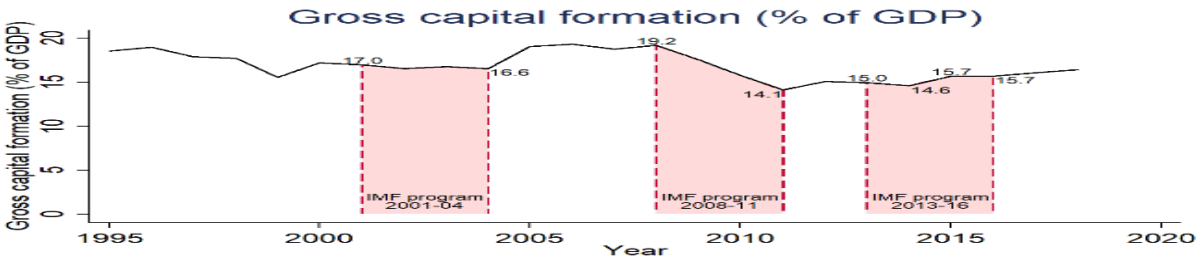
Figure 23



Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2010 U.S. dollars. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

Data Source: World Bank National Accounts Data

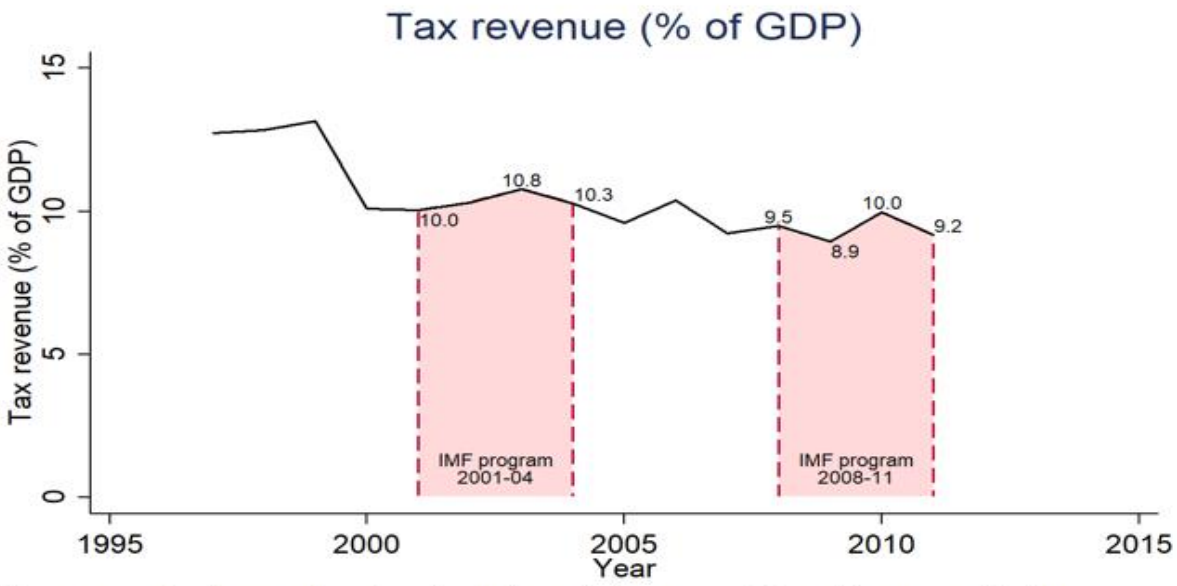
Figure 24



Gross capital formation consists of outlays on additions to the fixed assets of the economy plus net changes in the level of inventories. Fixed assets include land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. Inventories are stocks of goods held by firms to meet temporary or unexpected fluctuations in production or sales, and 'work in progress'. Net acquisitions of valuables are also considered capital formation.

Data Source: World Development Indicators

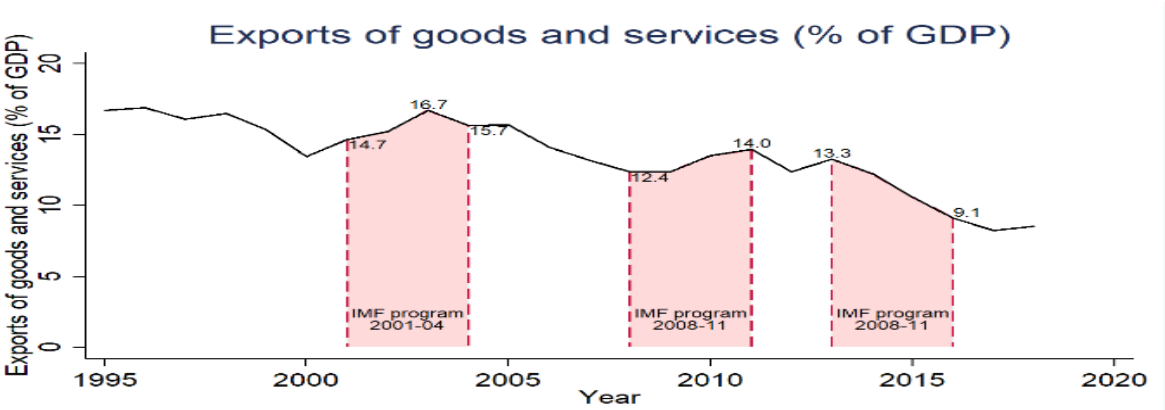
Figure 25



Tax revenue refers to compulsory transfers to the central government for public purposes. Certain compulsory transfers such as fines, penalties, and most social security contributions are excluded. Refunds and corrections of erroneously collected tax revenue are treated as negative revenue.

Data Source: World Development Indicators

Figure 26



Exports of goods and services represent the value of all goods and other market services provided to the rest of the world. They include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services.

Data Source: World Development Indicators

That this prolonged poor economic performance, indicative of deep structural problems of the economy, did not result in widespread political unrest is largely due to a vital strength that has kept inequality in check. Remittances, urbanization, adequate food production and a modern government social safety have combined to reduce the incidence of poverty to levels that look better than those of both India and Bangladesh (Figure 5). However, without addressing the structural problems that have stunted investment and economic growth, this favorable outcome may be temporary and will not keep in check for long citizen frustration at poor prospects of securing quality jobs to improve living standards.

Section 2: Expenditure Analysis

2.1 **Introduction**

Pakistan has faced recurrent balance of payments crises going back several decades. These crises can arise for a number of reasons, of which the large and persistent fiscal deficits is possibly the most important. A deficit reduction strategy must address both the expenditure and revenue sides of the equation. In this section we study how government expenditure can be rationalized and in the following section we look at the revenue side.

Is government expenditure (and therefore the tax required to meet this expenditure) in Pakistan too high? It has been argued that rather than taking as given the level of government expenditures and then seek measures to increase tax revenues to meet the level of expenditures, we should find ways of making the government leaner and efficient. Even those who call for smaller government, accept the importance of public goods (e.g., law and order, defense, education, health, water and sanitation, regulation) but there are divergent views on what should be the size of such public good provision and where the line should be drawn between public and private goods. Researchers also differ on the size of public investment expenditures, whether these crowd-in or crowd-out private investment, whether some of the projects undertaken by the public sector should be operated publicly or privately, whether to divest SOEs, and what is the scope and limitation of public private partnership or PPP. This section addresses some of these issues.

The scheme of this section is as follows. In Section 2, we provide a brief review of the literature on optimum size of government. Next we compare government expenditure in Pakistan with a number of other lower middle income countries. The comparison is of aggregate expenditure as well as of expenditure sub-categories, such as military, education and health. Section 3 reviews the proposition that government expenditure in Pakistan is extremely rigid and it is difficulty to make any substantial reduction in expenditures. Section 4 takes a look at a range of measures to increase fiscal space. These include restraints on government expenditure through legal measures, reduction in subsidies, reforming of SOEs, reform of financial and management systems, Public Private Partnership (PPP), and reform of public investment. In Section 5, we discuss some case studies that provide examples of reform of public procurement, better targeting of public expenditures, better incentives to bureaucrats (monetary and non-monetary) and more cost effective ways of delivering public services.

2.2 Size of Government

Is big government the cause of government deficits in Pakistan, or is poor revenue effort the real villain? In answering this question it is natural to ask: how does one decide what is big or small government? The literature on the optimum size of government has tried to provide such a benchmark in terms of government expenditure (as a share of GDP) by which to assess whether

the government is big or small. An important influence that has spawned this literature is a paper by Barro (1990).[10]

Barro considers an economy in which a representative household maximizes a lifetime utility function, and in which government expenditure (g) is an input in a Cobb-Douglas production function together with capital (k). The production function has constant returns to scale. The government balances its budget and finances g by proportional income tax, τ. For such an economy, consumption, output and capital grow at a constant rate γ. The growth rate in turn depends on the choice of τ and is maximized when at $\tau = \alpha$, where α is the exponent of g in the Cobb-Douglas production function.[11]A benevolent government would rather choose g/y that would maximizes the household utility function rather than one that maximizes growth. It turns out that the utility maximizing value of $\tau = g/y$, also equals α, so that maximizing growth in this setting is equivalent to maximizes household utility.

Barro extends the model to consider government services not only as an input in the production function but also as a variable in the household utility function. These services are also financed by a proportional income tax. The growth rate, γ_h, in this setting is maximized when government productive services as a ratio of y is lower than in the previous case. Barro also shows that unlike the previous case, the expenditure ratio that maximizes the rate of growth does not maximize the utility of a representative household.

Government expenditure that maximizes growth is not necessarily optimum in the sense of maximizing consumer utility but it is often termed as such and there is considerable empirical research that has studied the relationship between government expenditure and economic growth, in particular into the inverted U curve relationship. An overview of the evidence is provided in Asimakopoulas and Karavias (2016)[12] who also present their own results on whether there is a threshold ratio of general government final consumption expenditure below which the impact of increase in government expenditure on growth rate is positive and above which the impact is negative. The authors use a panel data of 129 countries (of which 86 are developing countries and 43 are developed countries) for the period 1980 to 2009 using non-overlapping 5-year periods and averaging the data per variable and country within that period.

Using the full sample, Asimakopoulas and Karavias find that the threshold level of general government final consumption expenditure ratio is 0.1804. When the sample is split into developing and developed countries, the ratios are 0.1912 and 0.1796 respectively. The average spending ratios for developing and developed countries in the sample were 0.1483 and 0.1788

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[10] Barro, Robert J. 1990, *Government spending in a simple model of endogeneous growth*, Journal of Political Economy 98(S5): 103-125.

[11] More formally, Barro considers an economy in which a representative household maximizes a lifetime iso-elastic utility function, the production function is Cobb-Douglas with government expenditure (g) and capital (k) as inputs and returns to scale constant ($y = Ag^{\alpha}k^{1-\alpha}$), and where the government balances its budget and finances g by proportional income tax: g = T = τy. For such an economy, consumption, output and capital grow at a constant rate γ, which is a function of: $\tau = g/y$. This function has an inverted U shape and peaks at $\alpha = \tau$ = g/y.

[12] Asimakopoulos, Stylianos & Yiannis Karavias (2016), *The impact of government size on economic growth: a threshold analysis*, Economics Letters, 139, pp. 65-68.

respectively. By this standard Pakistan's general government final consumption expenditure ratio of 0.124 is below such a threshold.

Another perspective on whether the size of government is big or small is provided in the following quote from Besley (2017)[13]:

For a market economy to flourish, government needs to be effective and constrained but it need not be small. Casual empiricism should make this claim self-evident. Among the richest economies in the world are the Nordics (Denmark, Norway, and Sweden) which seem to thrive (on a wide range of metrics) in spite of their apparent preference for high taxes and public spending. The twentieth century saw governments in advanced countries increase their tax take in GDP from around 10% to 40% while living standards continued to expand.

There is no paradox to explain. Countries which have large governments, measured by share of taxes or spending, also by-and-large have effective governments. So the real focus should be on why this happens in some places and not others – focusing on government size is not only a distraction, it diverts focus from what matters.

Comparison of Government Expenditure in Pakistan with LMICs

There is a rich literature, both theoretical and empirical, that looks at the role of public expenditure, in particular human capital expenditure, on economic growth. We provide a summary of results from one of these studies to motivate a comparison of public expenditure in Pakistan with some other LMICs.

Bose et al. (2007) [14] estimate a relationship between real GDP growth per capita and a set of public expenditures, both aggregated and disaggregated for 30 developing countries using decade averages over the period 1970-90. The authors find that at the aggregated level "the share of government capital expenditure in GDP is positively and significantly correlated with economic growth, but current expenditure is insignificant." At the disaggregated level, the only variables that are significantly associated with per capita growth are government investment in education and total expenditures in education "once the budget constraint and omitted variables are taken into consideration." The authors find that public expenditures such as health, defense and host of others are either insignificant or negative.

We first compare Pakistan government's consumption and investment expenditures with a sample of LMICs to see whether or not Pakistan is an outlier compared with some other countries which

[13] Besley, Tim, Debating the Size of Government is a Distraction, available at: http://www.lse.ac.uk/economics/Assets/Documents/personal-pages/tim-besley/working-papers/debating-the-size-of-government.pdf.

[14] Bose, Niloy, M. Emranul Haque and Denise R. Osborn, *Public Expenditure and Economic Growth: A Disaggregated Analysis for Developing Countries*, The Manchester School Vol 75 No. 5, September 2007, 1463–6786 533–556.

are at a roughly similar level of development. In the next subsection we provide a comparison of expenditures at a disaggregated level.

National accounts data also report Public Investment (or Gross Fixed Capital Formation (GFCF) in the public sector). These are investments by those autonomous and semi-autonomous bodies (including companies), which may be partially or fully owned by the government but produce marketable goods and can raise their own investment finance (e.g., Pakistan Railways, PIA, Post Office, National Telecom Corporation, National Construction Company etc.). The profits and losses of these entities are ultimately those of the government and have an indirect impact on the budget. The government may also provide grants through the budget to these autonomous and semi-autonomous bodies to cover their losses. Therefore public investments of autonomous bodies can also have budgetary implications. In FY2017-18 public sector investment was 19% of the total GFCF in the public and general government sector in Pakistan.[15]

Table 1 provides comparison of General Government final Consumption Expenditure (GGCE) for sub-set of countries in the lower middle income category in 2017-18 (per capita (in current US$) in the range of $1026-$4035).

Table 1 also compares GFCF by both the 'public sector' and the 'general government sector' for a sample of countries in the lower middle income group.

The table suggests the following broad conclusions:

- Government consumption expenditure ranges between 20.8% of GDP (Tunisia) to 4.6% (Nigeria). Pakistan at 12.4% is the 7th highest from a group of 18 countries.
- Pakistan's GFCF in the public and general government sectors is about 5% of GDP, which is less than both India (7%) and Bangladesh (8%).
- Overall government consumption and investment expenditure including investment of the public sector in Pakistan is (17.4%), which is about the same as that of India (18%) and above Bangladesh (14.4%). At the high end is Myanmar (29%) and at the low end is Sudan (7%).
- Overall government/public expenditure distribution in Pakistan is heavily tilted in favour of consumption expenditure.

[15] Government expenditure that covers all tiers of government are referred to as General Government Expenditure. It consists of General Government Final Consumption Expenditure and General Government Gross Fixed Capital Formation. These expenditures are financed from government budgets.

Table 1: General Government Expenditure – Comparison with LMICs

	Angola	Bangladesh	Cameroon	Congo (Rep of)	Egypt	Ghana	India	Indonesia	Kenya	Morocco
GDP per capita (PPP) (current USD)	6440	4364	3771	5652	12390	4738	7761	13056	3461	8587
General Government Final Consumption (% of GDP)	12.9 (2017)	6.4 (2018)	11.5 (2018)	8.3 (2018)	8.4 (2018)	8.8 (2017)	11 (2017)	9.0 (2018)	12.9 (2018)	19.3 (2018)
GFCF (% of GDP)	23 (2017)	31 (2018)	22 (2018)	18 (2018)	16 (2018)	21 (2017)	28.64 (2017)	32 (2018)	17 (2018)	29 (2018)
GFCF Private Sector (% of GDP)	17 (2017)	23 (2018)	19 (2018)	15 (2018)	7 (2018)	17 (2005)	21.5 (2017)	NA	16 (2005)	NA
GFCF in Public sector & GG (% of GDP). Estimate	6.5 (2017)	8 (2018)	3.6 (2018)	3 (2018)	9.1 (2018)	NA	7.16 (2017)	NA	NA	NA
GGCE + GG and Public sector GFCF	19.4 (2017)	14.4 (2018)	15.1 (2018)	11.3 (2018)	17.5 (2018)	NA	18.16	NA	NA	NA

Table 1: General Government Expenditure – Comparison with LMICs

	Myanmar	Nigeria	Pakistan	Philippines	Sudan	Tunisia	Uzbekistan	Vietnam	Lower Middle Income Countries
GDP per capita (PPP)	6662	5980	5544	8935	4759	12483	7020	7435	7630
General Government Final Consumption (% of GDP)	20.6 (2015)	4.6 (2017)	12.4 (2018)	11.9 (2018)	6.0 (2018)	20.8 (2017)	15.0 (2018)	6.3 (2018)	11.2 (2018)
GFCF (% of GDP)	34.37 (2015)	15 (2017)	15 (2018)	27 (2018)	19 (2018)	19 (2017)	30 (2018)	25 (2018)	27 (2018)
GFCF Private Sector (% of GDP)	21.28 (2015)	NA	10 (2018)	23 (2018)	18 (2018)	21 (2009)	29 (2018)	NA	21 (2009)
GFCF Public & GG Sector (% of GDP)	8.08 (2015)	NA	5	4 (2018)	1	NA	1.25	NA	NA
GGCE + GG and Public sector GFCF	28.7 (2015)	NA	17.4 (2018)	16.7 (2016)	7	NA	16.25 (2016)	NA	NA

Comparison of Government Expenditure on Education, Health and Military

In Table 2A – 2C we show how Pakistan compares for a sample of lower middle income countries in terms of government expenditures on education, health and military.[16] The broad conclusions are:

- Military expenditure by Pakistan at 4% of GDP is disproportionately more than all countries in LMICs in our sample. (India is at 2.4% and Bangladesh at 1.4%).
- Pakistan's health expenditure as share of GDP at 0.77% is higher than Bangladesh (0.42), Nigeria (0.47) and Cameroon (0.63) but below all other sample of countries, all of which have a share above 1%, with an average of 1.28% for all lower middle income countries.
- General government expenditure on education in Pakistan as percentage of GDP is also among the lowest in LMICs but almost double that of Bangladesh. Education expenditures as percentage of GDP range between 1.5 in Bangladesh to 6.6 in Tunisia. Pakistan's share of 2.8% is less than India's share of 3.8% and considerably less than the average for the lower middle income countries of 5%.

The high share of military expenditure in total expenditure in Pakistan is at the expense of what would be more productive expenditures, such as education, health, skills development or R&D. Unfortunately, it appears unlikely that this expenditure will be cut down radically in the near future.

The comparison of education and health expenditures with Bangladesh is instructive. In Bangladesh education and health expenditures are among the lowest compared with other LMICs represented in Table 2 but several of its health indicators are very robust at least compared with Pakistan. This could suggest more important role of the private sector and non-governmental health and education providers or more efficient service delivery in Bangladesh. The government in Pakistan may be constrained to increase its expenditure on social sectors but it could learn from Bangladesh on how to get greater mileage from its limited budget. Some of these options are discussed later in this section.

[16] Expenditure on education includes current and capital expenditures as well as transfers. Expenditure on health includes public expenditure on health from domestic sources. Military expenditure includes all current and capital expenditures on the armed forces, including peacekeeping forces; defense ministries and other government agencies engaged in defense projects; paramilitary forces, if these are judged to be trained and equipped for military operations; and military space activities. Such expenditures include military and civil personnel, including retirement pensions of military personnel and social services for personnel; operation and maintenance; procurement; military research and development; and military aid (in the military expenditures of the donor country). Excluded are civil defense and current expenditures for previous military activities, such as for veterans' benefits, demobilization, conversion, and destruction of weapons. World Development Indicators, World Bank available at: https://databank.worldbank.org/source/world-development-indicators

Table 2A: Comparison of Government Expenditure on Education

	Angola	Congo (Rep)	Ghana	India	Myanmar	Nigeria	Egypt	Morocco	Phillipines	Uzbekistan
GDP per capita (PPP)	6441	5652	4738	7761	6662	5980	12390	8587	8935	7020
Education exp. (% of GDP)	3.5	4.6	4.5	3.8 (2013)	2.2 (2017)	3.1 (1975)	3.8	5.3 (2009)	2.7 (2009)	6.4 (2017)
Govt Exp per student, primary (% of GDP per capita)	NA	12 (2010)	7.9 (2014)	9.8 (2013)	7.6 (2017)	NA	10 (2017)	19.6 (2013)	9.0 (2008)	NA
Govt Exp per student, secondary (% of GDP per capita)	NA	17.0 (2002)	26.2 (2014)	16.8 (2013)	11.3 (2017)	NA	14.0 (2017)	36.5 (2012)	9.1 (2008)	NA
Govt Exp per student, tertiary (% of GDP per capita)	103.5 (2006)	90.5 (2013)	74.8 (2014)	49.2 (2013)	16.7 (2017)	NA	NA	82.2 (2009)	10.5 (2009)	NA

Table 2A: Comparison of Government Expenditure on Education

	Pakistan	Sudan	Vietnam	Lower Middle Income	Bangladesh	Cameroon	Indonesia	Kenya	Tunisia
GDP per capita (PPP)	5543	4759	7435	7630	4364	3771	13056	3461	12483
Govt Exp on Education exp. (% of GDP)	2.8 (2017)	2.2 (2009)	5.7 (2013)	5.0 (2014)	1.5	3.1	3.6 (2015)	5.2 (2017)	6.6 (2015)
Govt Exp per student, primary (% of GDP per capita)	9.6 (2016)	NA	21.3 (2013)	11.5 (2012)	7.7 (2009)	5.3 (2012)	13.3 (2015)	10.8 (2015)	17.4 (2008)
Govt Exp per student, secondary (% of GDP per capita)	10.9 (2016)	NA	NA	NA	10.2 (2016)	17.4 (2012)	10.5 (2015)	21.3 (2006)	52.8 (2015)
Govt Exp per student, tertiary (% of GDP per capita)	28.0 (2017)	NA	34.5 (2013)	NA	30.8 (2016)	19.0 (2013)	19.5 (2014)	75.3 (2015)	55.2 (2015)

Table 2B: Comparison of Domestic Government Expenditure on Health (% of GDP)

	Angola	Congo (Rep)	Ghana	India	Myanmar	Nigeria	Egypt	Morocco	Phillipines	Uzbekistan
GDP per capita (PPP)	6441	5652	4738	7761	6662	5980	12390	8587	8395	7020
Health exp. (% of GDP)	1.27 (2016)	1.96 (2016)	1.71 (2016)	0.93 (2016)	1.02 (2016)	0.47 (2016)	1.36 (2016)	2.74 (2016)	1.38 (2016)	2.92 (2016)
Health exp (per capita PPP Current $) 2016	82.02	111.31	72.64	61.4	58.48	27.84	151.29	218.21	107.97	192.31

Table 2B: Comparison of Domestic Government Expenditure on Health (% of GDP)

	Pakistan	Sudan	Vietnam	Lower Middle Income	Bangladesh	Cameroon	Indonesia	Kenya	Tunisia
GDP per capita (PPP)	5543	4759	7435	7630	4364	3771	13056	3461	12483
Health expenditure (% of GDP)	0.77 (2016)	1.1 (2016)	2.68 (2016)	1.28 (2016)	0.42 (2016)	0.63 (2016)	1.4 (2016)	1.65 (2016)	3.94 (2016)
Health exp (per capita PPP Current $)	40.21	58.04	168.99	82.71	16.27	22.57	162.25	51.93	456.68

Table 2C: Comparison of Domestic Government Expenditure on Military (% of GDP)

	Angola	Congo (Rep)	Ghana	India	Myanmar	Nigeria	Egypt	Morocco	Phillipines	Uzbekistan
GDP per capita (PPP)	6441	5652	4738	7761	6662	5980	12390	8587	8935	7020
Military exp. (% of GDP)	1.8 (2018)	2.5	0.4	2.4	2.9	0.5	1.2	3.1	1.1	2.0

Table 2C: Comparison of Domestic Government Expenditure on Military (% of GDP)

	Pakistan	Sudan	Vietnam	Lower Middle Income	Bangladesh	Cameroon	Indonesia	Kenya	Tunisia
GDP per capita (PPP)	5543	4759	7435	7630	4364	3771	13056	3461	12483
Military Exp (% of GDP)	4.0	2.3	2.3	1.9	1.4	1.3	0.7	1.2	2.1

2.3 Rigidity of Government Expenditure

Budgetary government expenditure is not the same as the sum of general government consumption and investment expenditure. Unlike national income accounts data, budgetary spending also includes interest on government debt, pensions, social security and other transfer payments. Also the investment component of the budget expenditure is a subset of the overall government/public sector investment because some investments by SOEs are financed outside the budget.

Consolidated budgetary expenditure was about 21.6% of GDP in 2018 (of which 57% were expenditures of the federal government). A one percentage point reduction in fiscal deficit would require, assuming no change in revenue, a reduction in budgetary expenditure from 21.6% to 20.6% - i.e., a 4.6% reduction in all budgetary expenditure (federal and provincial). In the following we evaluate the scope for expenditure reduction at the federal level.

In 2018 about 66% of total federal expenditure,[17] was on three expenditure heads: interest payments (34%), defense (24%) and pensions (8%). Interest expenditure is a baggage from overspending in the past. Default on interest payments can invoke international retaliatory measures and have serious repercussions in the domestic financial markets. Realistically these payments can be curtailed over time through reduction in non-interest budgetary expenditures. Reduction in defense expenditure appear highly unlikely given the security environment, threat perceptions and the civil-military power balance. Pensioners do not have a strong voice and therefore reduction in their pensions and allowances is more feasible. Unsavoury as the option may sound, pension outlay can be kept in check by keeping the increase in pensions below the rate of inflation.

Wages and salary were about 5% of total federal government expenditures in 2018. Wages and salaries of civil servants can be curbed by keeping a tight leash on salary increments but unless this is a short term measure, the consequences would be greater corruption and a demotivated civil service. The quality of new entrants would be compromised as well, which will have serious long-term consequences.

Excluding wage bill, running of civil administration at the centre cost 4.2% of total federal government expenditure in 2018. Maintenance and rehabilitation of public assets is part of this expenditure but it a very small share of the overall expenditure. A World Bank Study reports that repair and maintenance expenditure has never exceeded 0.5 percent of total government spending (World Bank (2011, P. V).[18]

The grant and transfer element in the federal budget was 9% of total federal expenditures in 2018, which includes grants to cover losses of SOEs and contingent liabilities. About half of grants and

[17] Total federal expenditure includes current expenditure, development expenditure and net lending. The latter (net lending) includes loans to SOEs to cover their losses, development loans to provinces and SOEs as well as foreign development loans to provincial governments routed through the federal government.

[18] The World Bank, *Pakistan: From Raising Spending to Spending for Results - A Review of Public Expenditure, Procurement and Financial Management Practices*, Report No: 52442-PK, April 2011.

transfers was on account of contingent liabilities. Contingent liabilities are receipts of Coalition Support Fund,[19] which are then transferred to the armed forces.

Subsidies accounted for 3.35% of the total expenditure in 2018. The largest component of budgetary subsidies was that of electricity subsidies (Rs68.5 billion).

Development expenditures and net lending was 19% of total federal expenditure in 2018. These expenditures, in the public perception, are the more productive component of government expenditure and associated most closely with economic growth, but historically have borne the brunt of cuts in public expenditure to keep fiscal deficits within target.

2.4 Increasing Fiscal Space through Non-tax Measures

The previous section profiled federal government expenditures, and made the case that a large part of the expenditures (66%) were on interest payments, defense and pensions, which have little scope of being curtailed in a major way in the near term. Another 5% was salary of civil servants which can at best be frozen but cannot be reduced; 4.5% were contingent liabilities that were a pass through item; and 19% was incurred on development expenditure, which have often borne the brunt of cuts to overall expenditures. This leaves about 4% for the running of civil service (other than wages and salaries) and for maintenance and upkeep of public assets; 5% for various forms of grants and transfers from the federal government including transfers and loans to SOEs to cover their losses; and 3.35% for subsidies including subsidies to equalize tariffs across Discos. There may be some scope of economizing on certain expenditure categories, in particular subsidies, which we will discuss below, but there is considerably greater scope of efficiency and better targeting of public expenditure, which we discuss in greater detail in this section. We start, however, by considering budget rules or institutional oversight to constrain government from exceeding a certain expenditure/deficit target.

2.4.1 Restraining Deficits Through Budget Rules

The total public debt (FRDLA definition) in Pakistan was 67% of GDP in 2018. Interest payment on public debt accounted for 34% of total government spending in 2018. These payments are the result of excess of expenditure over revenue in the past and the financing of this deficit through borrowing, both domestic and foreign. The overspending in the past has narrowed the operational space of the government today. The taxation and spending decisions today will determine this operational space in the future. If each government is left cleaning up after the previous for the first few years of its tenure, then it is severely constrained to implement any economic agenda that the electorate may have mandated. This call for measures that restrains government spending.

The argument that fiscal discretion should be restrained, parallels the argument for the independence of the central bank, which would allow the monetary policy to be conducted in a manner that it is not a handmaiden of the fiscal policy. When it comes to monetary policy there is a trend toward tying governments' hands but not so in the case of fiscal policy (see Fatas and

[19] These funds are reimbursements for the expenses incurred by Pakistan's armed forces to facilitate NATO coalition forces with their transportation/logistics through Pakistan for their operations in Afghanistan.

Mihov (2003)). There is also evidence that aggressive use of discretionary fiscal policy can increase volatility of output and harms economic growth and political constraints or the institutional environment can explains the observed variations in fiscal policies (see Fatas and Mihov 2003, 2013).

In Pakistan there is a legislation in place in the form of FRDL Act of 2005 that was expected to restrain governments' revenue, expenditure and debt policies in a way that macro balances were not severely disrupted, but the actual practice is very different. The following is a summary of the limits prescribed by FRDL Acts and the actual practice in recent years[20]:

FRDLA Provision: Limiting of federal fiscal deficit excluding foreign grants to four percent of gross domestic product during the three years, beginning from the financial year 2017-18 and maintaining it at a maximum of three and a half percent of the gross domestic product thereafter.

Practice: The federal fiscal deficit (excluding grants) was recorded at Rs 2,243 billion or 6.5 percent of GDP during 2017-18, thus, remained higher than the threshold of 4 percent.

FRDLA Provision: *Ensuring that within a period of two financial years, beginning from the financial year 2016-17, the total public debt shall be reduced to sixty percent of the estimated gross domestic product.*

Practice: Total public debt and total debt of the government as percentage of GDP stood at 72.1 percent and 66.5 percent respectively at end June 2018, thus, remained higher than the 60 percent threshold.

FRDLA Provision: *Ensuring that within a period of five financial years, beginning from the financial year 2018-19 total public debt shall be reduced by 0.5 percent every year and from 2023-24 and going up to financial year 2032-33 a reduction of 0.75 percent every year to reduce the total public debt to fifty percent of the estimated gross domestic product and thereafter maintaining it to fifty percent or less of the estimated gross domestic product.*

Practice: Instead of decreasing by 0.5 percent of GDP, in the financial year 2018-19 public debt increased from 72.1 percent of GDP in 2017-18 to 84.8 percent of GDP in 2018-19.

FRDLA Provision: *Not issue "new guarantees, including those for rupee lending, bonds, rates of return, output purchase agreements and all other claims and commitments that may be prescribed, from time to time, for any amount exceeding two percent of the estimated gross domestic product in any financial year: Provided that the renewal of existing guarantees shall be considered as issuing a new guarantee.*

Practice: During 2017-18, the government issued new guarantees including rollovers amounted to Rs 324 billion or 0.94 percent of GDP.

[20] The summary is based on (1) Government of Pakistan, *Fiscal Policy Statement*, Ministry of Finance, 2018-19, pp. 34-35, and the data on public and government debt reported in the State Bank of Pakistan, Annual Report 2019, Statistical Supplement, Chapter 8.

As the above progress report indicates, provisions of FRDLA 2005 as amended in 2016 by the PML-N government were not adhered to even by the government that enacted the Act in its amended form. However, the violations of the Act is not the prerogative of the PML-N government alone. The PPP government violated the provisions of the Act during its tenure, and the PTI government is on course to follow the practice of its predecessors. Each government holds the previous government responsible for its own violation of the law. The reason that the Act has been violated with impunity is that there are no sanctions for violating the Act. When the parliament approves a finance bill and the supplementary budget, it also approves the implied deficits and debt, and if the levels of deficit and debt violate the provisions of FRDLA then the violations are implicitly indemnified when the parliament passes the bill.

One way of tying the hands of the government is through a constitutional amendment to strengthen certain provisions of FRDLA so that their violation is made more onerous (e.g. if a finance bill implies a violation of FRDLA then its passage must require, say, a sixty percent majority of the house). However, the constitutional route to restraining government spending may not only be impractical, but as the budgetary consequences to Covid-19 pandemic suggest, tying the hands of the government through very onerous budgetary rules could have very grim social consequences. An alternative may be the establishment of independent budget agencies as in Sweden and the U.K.:

"In this environment, the recent trend toward the establishment of independent budget agencies, such as Sweden's Fiscal Policy Council and the UK's Office of Budget Responsibility, charged with the task of monitoring and evaluating fiscal policy decisions, is a salutary one. There are different models for what they should do, but such agencies have the capacity to evaluate policies using more sophisticated criteria than would be practical in the construction of budget rules. There is a trade-off, of course, in that such appointed and independent agencies lack the enforcement power at least officially vested in budget rules. But this drawback is more superficial than real in comparison to budget rules that exist but may not be enforceable, or may enforce bad outcomes. Also, more than simple budget rules, independent fiscal entities can expose gaps in logic and provide additional support for needed changes in fiscal policy that may require implementation over a period of years."[21]

2.4.2 **Revisiting Subsidies**

As noted earlier, subsidies amounted to Rs148 billion and accounted for 3.35% of the total federal expenditure in 2018. This included Rs22 billion subsidy on food, wheat and related operations, and Rs11 billion subsidy on fertilizer, and thus in effect an indirect subsidy on food. Provincial governments have their own budget for such subsidies as well.

The largest component of budgetary subsidies was that of electricity subsidies (Rs115 billion). This constituted 0.33% of GDP. "At times in the past decade, electricity subsidies have cost the

[21] Auerbach, Alan J., *Budget Rules and Fiscal Policy: Ten Lessons from Theory and Evidence*, Paper presented at a conference on Government Debt in Democracies: Causes, Effects, and Limits, Berlin, November 30-December 1, 2012.

Government of Pakistan more than 2 percent of GDP, adding to the national debt and weakening the country's external position. As one element of its reforms of the energy sector, the Government of Pakistan has reduced residential electricity subsidies to around 0.4 percent of GDP over the three years to 2016. This reduction has been achieved partly through cuts to subsidies on the highest-volume residential consumers (as well as commercial and industrial users), and partly by virtue of declining costs of energy worldwide."[22]

Since government sets tariffs at the level approved by NEPRA for the most efficient Disco (typically IESCO and LESCO), all other Discos then have to be given subsidy that equals the difference between their NEPRA-approved tariff and the government notified tariff.

One objective for this form of tariff setting is to provide uniform tariff to consumers across Discos. This objective can be met without setting tariff at the level of the most efficient Disco. A uniform tariff can be set at a level that is sufficiently above the tariff approved for the most efficient Disco so that the subsidy cost of tariff-equalization for one set of Discos is matched by the above normal profits of the other set.[23]

Another objective of tariff setting by the government is to provide subsidy to consumers that may not be fully reflected in the tariff approved by NEPRA. The tariff schedule notified by GOP distinguishes between different categories of consumers. It distinguishes between residential, commercial, industrial and agricultural consumers, and further distinguishes consumers within the residential category. Electricity consumers in the 0-50 kW per month consumption-slab are called 'life-line' consumers. When GOP sets a uniform tariff schedule across Discos, there is an implicit subsidy built in for consumers in the lower consumption slabs, particularly for the life-line consumers. The proposal of a uniform tariff that is set sufficiently above the tariff approved for the most efficient Disco can still preserve the policy of subsidizing or cross subsidizing consumers in the lower consumption slabs, if such subsidization is considered essential.

A 2016 World Bank report[24] argues that electricity subsidies in Pakistan are poorly targeted: "Even though recent reforms have made subsidies slightly less regressive, the richest 20 percent of households still receive 40 percent more in subsidies than the poorest 20 percent of households." The report goes on to argue that, "The removal of electricity subsidies would arguably improve the sustainability of the sector and free up fiscal resources for more equitable social spending, but the consequent increases in electricity prices would have a significant negative welfare impact on poor households unless they are offset by other assistance."

[22] The World Bank, Residential Electricity Subsidies in Pakistan: Targeting, Welfare Impacts, and Options for Reform, Report No: ACS22806, August 2017, P. 1.

[23] Under this arrangement, Discos whose NEPRA approved tariff is below the tariff set by GOP, will make a profit equal to the difference (per unit) between the two tariffs, which will eventually be repatriated to the federal government as profits of SOEs; but Discos whose NEPRA-approved tariff is above the tariff set by GOP, will receive a tariff equalization subsidy.

[24] The World Bank, Residential Electricity Subsidies in Pakistan: Targeting, Welfare Impacts, and Options for Reform, Report No: ACS22806, August 2017, P. 2.

The report mentions that one third of the poorest households are not even connected with the grid. This group is clearly excluded from electricity subsidies, which suggests that these subsidies may not a very equitable means of providing energy assistance.

The report proposes designing assistance that targets the poor more effectively using the proxy means testing (PMT) database and the administrative infrastructure that is already in place. The report proposes providing bill credits in place of price-based subsidies, which would "make billing simpler and provide equal assistance to all targeted households." The report also suggests how the transition to a more effective energy assistance policy can be managed in a politically sensitive manner.

The point about better targeting of subsidies applies more generally, in particular to food subsidies, which is the other important component of overall federal subsidies. Subsidized food sold through the Utility Stores Corporation (USC) is untargeted. The possibility of subsidy going to the undeserving is substantial, not to mention the mismanagement and losses that characterizes USC. Although utility stores have been the conduit for providing subsidized sugar and wheat during the recent wheat and sugar crisis, and while many poor would have benefitted, there is no telling how much of the targeted population benefitted and how much was siphoned off.

The case for food subsidy is, however, very strong. The World Food Program reports that 44% of Pakistani children under the age of 5 years of age are stunted and 15% are severely malnourished. Draught effects 4 million people in southern Pakistan. There are 17000 vulnerable families displaced in Khyber Pakhtunkhwa and in addition there are an estimated 1.4 million afghan refugees in the country. The food insecurity and nutritional requirements of all these groups need to be addressed.[25] Food programs that are conditional on livelihood trainings and labour on special government/non-government projects is one way of targeting food programs.[26] Public Work programs such as the Peoples Works Program that were pursued under the PPP government, could be tailored for such conditional transfers

2.4.3 **SOE Reform**

The Ministry of Finance, Government of Pakistan, produced a report in 2016 on 197 SOEs under the purview of the federal government.[27] The report covers ten key federal authorities but lists another 41 authorities and regulatory bodies that are not covered in the report. These latter include SBP and SECP, OGRA, NEPRA, CAA. Of the 197 SOEs covered in the report, 134 were commercial companies, 45 non-commercial companies, 8 DFIs and 10 federal authorities. These SOEs employed about 424000 employees.

[25] Mentioned in a USAID Food Assistance Fact Sheet, March 7, 2019: https://reliefweb.int/sites/reliefweb.int/files/resources/FFP%20Pakistan%20Fact%20Sheet_3.7.2019.pdf
[26] World Food Program (WFP) undertakes such programs and USAID assists it in such programs. See https://reliefweb.int/sites/reliefweb.int/files/resources/FFP%20Pakistan%20Fact%20Sheet_3.7.2019.pdf
[27] "Barring entities related to defense or otherwise deemed to be strategic in nature." Government of Pakistan, Ministry of Finance Implementation and Economic Reforms Unit, *Federal Footprint – SOE Annual Report 2015-16.*

Losses of SOEs in 2015-16 amounted to Rs45 billion.[28] In the previous two years SOEs had made profits (Rs193.5 billion in FY2013-14 and Rs52.9 billion in 2014-15).[29] Pakistan Steel Mills and PIA were among the top loss making SOEs together with a number of Discos both in 2014-15 and 2015-16. These losses ranged between Rs19-26 billion annually for PSM, and Rs30 to 45 billion annually for PIA.

Reviewing the performance of SOEs for the FY2015-16, the reports makes the following case:

"In Pakistan, [some] important SOEs continue to provide critical services on noncommercial terms – primarily as a socio-economic policy objective. For instance, Pakistan Railways subsidizes select routes to provide mobility and connectivity to far flung areas. Trading Corporation of Pakistan (TCP) and Pakistan Agriculture Storage and Services Corporation (PASSCO) undertake import of essential commodities to help ensure their availability to the common man at affordable prices. Their interventions in the market is in the larger public interest to ensure fair price to growers, as well as to keep the commodity markets stable, both in terms of supplies and prices. Similarly, the government continues to provide electricity subsidy to domestic consumers who consume less than 300 Kwh of electricity as well as consumers of agriculture tube wells to ensure lower input costs for agriculture produce. If properly priced and contracted, delivering these services and products would improve their profitability. The reality, however, is that SOEs are largely governed by a socio-economic agenda, keeping in mind remote population base, and services priced below value to keep cost of living affordable for large number of individuals. This [.] in turn depresses SOE profitability but increases employment opportunities and augments services in areas that are not tapped adequately by the private sector. However, the overall outlook of the SOEs remains commercial in nature with key sectors such as energy, transportation and financial competing for resources, consumers and revenues with the private sector."

The report points out that the GOP supports SOEs through (i) loans – domestic and foreign, (ii) subsidies, (iii) loan guarantees, and (iv) grants. In 2015-16, the support under these heads was respectively, Rs181 billion, Rs223 billion, Rs128.5 billion, and Rs37 billion (to Railways). The total support amounted to Rs570 billion. In the previous two years the total support amounted to Rs555.5 billion (2013-14) and Rs531 billion (2014-15).

In 2016, the asset base of all SOEs in Pakistan was Rs11.5 trillion (USD97 billion) of which about Rs9 trillion were assets of commercial SOEs. A rate of return on assets comparable to the average KSE-100 index return between November 1991 and June 2016 would have added a net return of

[28] "The actual loss is largely a result of the losses booked on the balance sheet of DISCOs. The profitability for DISCOs declined due to a pending court order between the Ministry of Energy (Water and Power Division) and NEPRA, that prevented the revised actual tariff for implementation on account of prior year adjustments. With new tariff notified in March 2018, it is expected that DISCOs will recoup these losses in subsequent years." Government of Pakistan, *SOE Annual Report 2015-16*, P.16., Ministry of Finance, Implementation and Economic Reforms Unit.
[29] "The full financial results of National Highway Authority (NHA) are […] not consolidated in the [summarized] analysis. This is because the deficit incurred by the NHA is an example of a classical public good – where investments have been made by the GOP with a belief that new infrastructure investments will accelerate the rate of economic growth and are essential for increased employment opportunities and improved infrastructure linkages." Government of Pakistan, Ministry of Finance Implementation and Economic Reforms Unit, *Federal Footprint – SOE Annual Report 2015-16*, P. 43.

over Rs1 trillion in 2016[30] on its commercial assets. Instead SOEs suffered a net loss of Rs45 billion in 2016 overall; in the previous two years, SOEs made profits but the rate of return on assets was only a fraction of the potential return. The socio-economic role that SOEs are expected to play provides some rationale for SOEs having a lower rate of return than this possible target rate but as the MOF report stresses, the overall outlook of SOEs is commercial in nature. This calls for SOE reform including divestitures, privatization and restructuring.

The report on SOEs provides a review of SOE reform in 2015-16 and mentions multi-faceted reforms that it undertook "based on many pillars, such as divestment through strategic partnership and public offerings, strengthened enforcement of corporate governance rules, implementation of restructuring plans and regulatory reforms."[31] On corporate governance it mentions the following:

"In order to institutionalize corporate governance initiatives for SOEs, the Public-Sector Companies (Corporate Governance) Rules 2013 have been amended in 2017 to reflect renewed best practices. These Rules help clarify roles of different stakeholders involved in the management of SOEs. A gradual shift towards a balanced Board has been stipulated in the Rules including the participation of independent directors. Role and functions of the Board have been clarified and offices of Chairman and CEO have been separated."

Hussain (2018) has also proposed a system of corporate governance of public entities whose public ownership is to be retained for strategic reasons. He suggests that "the underlying principle for guiding public-sector corporations should be the separation of policy control and operational and financial control." He proposes that policy control must rest with the relevant ministry and the operational and financial control with an independent board. A CEO is to be selected through a transparent process and on merit. The board would enter into a performance contract with the CEO. An annual performance report would be presented to the ministry, which would prepare a comprehensive report for parliament based on similar reports submitted by corporations under its control.[32]

Beyond the immediate, the MOF report on SOEs suggests the following reform measures:

1. Reduce the SOEs reliance on Public Sector Development Program (PSDP) which would strengthen SOE's own corporate governance, investments, and credit structures

[30] The KSE-100 index had a value of 2000 when it was launched in November 1991. On June 17, 2016 it reached a value of 38777. This gives an average annual nominal return of about 12 percent over a period of about 24.5 years. For KSE-100 index values see: https://en.wikipedia.org/wiki/KSE_100_Index

[31] The report provides the following specific details: "In the last four years, the GOP undertook several transactions such as the sale of minority shareholding in United Bank Limited, Allied Bank Limited, Habib Bank Limited and Pakistan Petroleum Limited and the strategic sale of National Power Construction Company during FY2015/16. Through these divestments, the Government raised Rs.173 billion, including over US$ 1.1 billion from foreign investors. In the power sector, the governance of DISCOs, three GENCOs, and the NTDC was transferred to the new boards of directors and management. Further, the State Life Insurance Corporation (SLIC) and Pakistan International Airlines were corporatized and a restructuring process of House Building Finance Corporation (HBFC) was completed. The GOP's revitalization strategy for Pakistan Railways also started showing results which are reflected in its operational and financial data for FY2014, FY2015 and FY2016." Government of Pakistan, Ministry of Finance Implementation and Economic Reforms Unit, *Federal Footprint – SOE Annual Report 2015-16*, p.28.

[32] Ishrat Hussain, *Governing the Ungovernable: Institutional Reforms for Democratic Governance*, Oxford University Press, 2018, pp. 17-173.

and allow PSDP resources to be deployed for achieving long-term development objectives of the government, such as education, health and infrastructure.

2. Fast-track information technology based systems including comprehensive Enterprise Resources Planning (ERP) modules.[33]
3. Create an environment in which SOEs operate independently of political affiliations with independent boards that regularly evaluate their financial and non-financial performances.
4. To attract qualified and talented people to join SOE ranks, offer competitive salary packages with performance based reward system.
5. To make SOE regime open and transparent, implement a comprehensive IT-based monitoring and evaluation architecture.

While reforming SOEs through improvement of corporate governance and through measures to improve their operational efficiency should be pursued, privatization of SOEs is also an option. Pakistan undertook major privatization of SOEs in the early 1990s and as many as 172 transactions were completed between January 1991 and September 2015, yielding Rs649 billion (about $6.5 billion).[34] Among the major privatizations were those of nationalized banks such as MCB, HBL, UBL, Allied Bank, the telecom monopoly PTCL and the Karachi electricity utility KESC (now prenamed K-Electric). The Pakistan Steel Mills would also have been privatized, had it not been for the intervention of the Supreme Court that reversed the decision.

The privatization experience has been a mixed one in Pakistan. Hussain (2018) provides the following assessment of the aftermath of the breakup of the PTCL monopoly:

"[A] single public sector corporation, PTCL, enjoyed a monopoly of telephony services and the results were disastrous in terms of coverage, services and pricing. Since the breakup of this monopoly and the entry of the private sector, introduction of mobile technologies, and transparent auction of spectrums, there has been unparalleled upsurge in the services provided by the sector."

A few points needs to be noted. First, the above assessment is that of the merits of competition and deregulation of the telecom industry, and not necessarily that of the merits of privatization of PTCL. The entry of mobile technologies predate privatization of PTCL in 2005 by more than a decade with deregulation policies in early 2000 providing further boost to the industry. Thus

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[33] The report argues that: "The advantages of ERP implementations are immense. First, ERP applications can turn SOEs into sustainable, streamlined, data driven organizations - providing prompt decision making tools for customers, employees and owners. Second, it focuses on production chains, allowing firms to analyses where they are wasting resources, and where they can sharpen up their processes. For example, an integrated warehouse management system can allow manufacturers to maintain just in time deliveries, with finely calibrated stock levels. Last, ERP is an effective way to structure organization processes so that every employee has a clearly defined role and can carry out their duties effectively which allows efficient communication and reducing friction between organization teams." Government of Pakistan, Ministry of Finance Implementation and Economic Reforms Unit, *Federal Footprint – SOE Annual Report 2015-16*, pp. 39-40.

[34] Ishrat Hussain, *Governing the Ungovernable: Institutional Reforms for Democratic Governance*, Oxford University Press, 2018, pp. 168.

mobile technology was thriving even before the government sold 26% of its shares and gave up management control of PTCL to the UAE-based Eitsalat in 2005.

Another thing to note is the weakness in the handling of the PTCL privatization. Eitsalat has not paid $800 million of the agreed price of $2.6 billion even after 14 years of privatization because of a dispute over the value of properties that PTCL claimed it owned at the time of privatization, but later turned out not to be the case.

The privatization of KESC is another example of privatization that has been a mixed bag. It has not delivered on the promised expansion in power generation and has also been in payment default of several billion rupees to public sector utility companies (SNGPL and SSGPL) from which it purchases natural gas for power generation.

The privatization of banks is usually regarded as a success story.[35] A strong critique of privatization in the banking and energy sectors is provided by Munir and Naqvi (2018).[36]

"In both the cases […], it is clear that privatization was carried out in a way which led to the privatization of profits but socialization of losses. Particular interests were advanced in the name of universal ones, and carrots extended without corresponding sticks. The case of energy is straightforward. A rent-seeking regime was set up in the name of privatization. All risk remained with the taxpayer while lucrative returns were guaranteed to the investors. Given that most of the new capacity was furnace oil based, and oil prices went from US $20 to US $120 in this period, the government had to keep buying power from private producers at higher and higher prices. This expense was passed on to the consumer through higher tariffs and taxes (imposed on various goods to generate revenue to pay). Ordinary citizens also paid indirectly when rampant energy shortages caused by the state's inability to buy expensive power from the IPPs became one of the major drags on economic growth.

"The case of banking was similar. The interest banks charge borrowers is supposed to be a reward for the risk the bank takes in case of possible defaults, while a bank's profits are justified on account of the risks banks take in selecting good projects to which to lend to. In the case of the privatized commercial banks, it is clear that the shareholders of privatized banks (including foreign investors) were profiting from investment in risk-free government bonds, rather than through making risky investments in the real economy."

[35] For example Ishrat Hussain makes the point that banking and financial services, and cement and automobile sectors have performed extremely well and attracted investment from foreign and domestic sources. He mention HBL and UBL, which have been paying dividends and corporate tax after privatization and the residual value of government shares has risen several-fold. (*Governing the Ungovernable: Institutional Reforms for Democratic Governance*, Oxford University Press, 2018, pp. 168)

36 Munir, Kamal and Naqvi, Natalya (2017) *Privatization in the land of believers: the political economy of privatization in Pakistan*, Modern Asian Studies, 51 (S6). pp. 1695-1726. ISSN 0026-749X

The present government appears to have revived the privatization program, which seemed dormant for several years. A number of SOEs, presumably with minimal operational, financial and HR issues, have been identified for privatization.[37]

To conclude, SOEs are a drain on fiscal resources and even when they are profitable the returns on investments are abysmally low. There is some merit in the public good argument but 'if the overall outlook is commercial', as is claimed in the SOE Annual Report 2015-16, then the SOEs have to do better than they have so far. Reform of SOEs is an imperative and the direction that such reform can take is well articulated in the SOE Annual Report. Some SOEs can also be privatized but Pakistan's experience with privatization has been mixed. The experience of PTCL, Pakistan Steel and KESC should not be lost sight of when considering new privatization.

2.4.4 Allocation and Operational Reform

This section divided into two sub-sections. In the first subsection we discuss the reasons for the low efficiency of public expenditures and how it can be enhanced. In the second subsection we address what constrains government's operational efficiency and how it can be improved. The discussion relies heavily on a report of the World Bank (we refer to it in this section as the WB Report or simply as 'the report').[38]

The report "identifies some fundamental weaknesses in the expenditure, debt, cash and financial management systems and procurement processes" and proposes "a set of policy and institutional reforms which can help in removing these shortcomings which will greatly enhance the efficiency of public expenditure."

2.4.4.1 Enhancing Allocative Efficiency of Public Expenditure[39]

Development spending versus the rest

Pakistan government's non-interest, non-defense spending (average over 1991/92 to 2005/06) was among the lowest in the world in per capita terms. Given the large share of interest payments in government expenditure, reducing this cost would allow greater allocation of resources for development spending. Fiscal stability can bring down interest cost and would be one of the most important reform to allow greater spending for development. Some of measures proposed in the report to bring about fiscal stability include maintaining defense expenditure at 3% of GDP, targeting energy and oil subsidies to only the poor, and moving from high cost, shoer-term

[37] Government of Pakistan. A Roadmap for Stability, Growth and Productive Employment, Finance Division, Islamabad, 8th April, 2019, p. 17.

[38] *Pakistan: From Raising Spending to Spending for Results - A Review of Public Expenditure, Procurement and Financial Management Practices,* Report No: 52442-PK, April 2011.

[39] "Allocative efficiency refers to the capacity of government to distribute resources on the basis of the effectiveness of public programs in meeting its strategic objectives. It entails the capacity to shift resources from old priorities to new ones, and from less to more effective programs." World Bank (2011, P. 37).

borrowing from National Saving Schemes to low cost, long-term borrowing from Pakistan Investment bonds.

Social vs. Infrastructure Sectors

International comparison of social sector outcomes suggests that Pakistan is an under-performer but when a similar comparison is made for physical infrastructure, Pakistan turns out to be an over-performer. Possible reason (as argued in the WB Report) is that social sectors are labour intensive and involve specialized skills that are in short supply. Further, unlike infrastructure projects which are handled by the federal government, social sectors are handled by provincial and local governments, where the level of overall governance is weaker. The problem is aggravated by the political interference that is more prevalent at the provincial and local government levels. Finally, poor management within the education and health departments, the two biggest departments in the social sector, which are managed by their own cadre instead of professional managers, and who are "generally unwilling to adopt measures which can impact the interest of their own cadres."

Recurrent versus Development expenditures

The WB Report shows that during the period 1996/97 and 2009/10, repair and maintenance expenditure never exceeded 2 percent of development spending with a number of years when these expenditures were less than one percent. During periods of fiscal austerity, R&M spending takes a bigger hit than development spending. Consequently as existing capital is eroded because of poor maintenance and new capital is injected in the form of development expenditure, net investment is only a fraction of the development allocation.

International data suggests that for any initial investment, the recurrent expenditure required in subsequent years is relatively greater in the education and health sectors compared with, for example, roads. It follows that the preference for development spending over recurrent spending is likely to have a greater adverse effect on the services of the social sectors.

The report argues for equal, or more, importance be given "to adequate management of existing assets, as to creating new assets." It suggest how incentives within the budgetary process can be changed to achieve these objective.[40]

[40] The report offers the following options:

- Integrate development and recurrent budgets so as to allow the spending units to decide on their expenditure on the activities, development or R&M;
- Link asset creation with asset management at each sector level. This could be done by reclassifying the R&M spending as development expenditure, so that the asset management and asset creation decision are made in unison.
- Ring-fence R&M expenditure by amending the FRDL Act. This would require defining floor levels of R&M spending [in] the FRDL Act in the same way as is done for pro-poor and social expenditures.
- Earmark user charges for R&M activities (e.g., irrigation, roads). This may entail, taking these user charges out of the Consolidated Fund and giving the spending entity the right to collect and retain these revenues, but for an earmarked […] use. Alternatively, these user charges would get deposited in the Consolidated Fund, but the Finance Ministry/Department would transfer then out of the Consolidated Fund into the spending unit account (e.g. road fund)."

Inter-Governmental Allocation

The historical legacy of a strong centre and weak provinces in terms of both financial resources and functional responsibilities has left the provinces with weaker service delivery cadres. There has been an even greater imbalance between the provincial and the local governments, which is then reflected in the skills and capabilities of the provincial and local government service cadres. The 7th NFC award, the 18th amendment and the constitutional recognition of the local government as a tier of the government holds promise for more strengthened sub-national governments and better service delivery at sub-national levels. The resource transfer arrangement under the 7th NFC award has left the centre financially weaker but this is partly because of the inability of the federal government to retire, trim or transfer to the provinces all the employees made redundant in the ministries that have been devolved to the provinces. The silver lining is that the greater financial vulnerability has added pressure on the federal government to rethink its strategy to broaden its tax revenue base. In the meantime, the federal government continues to convince or coerce provincial governments, at least in the provinces that are ruled by the same political party that controls the centre, to generate sizeable fiscal surpluses so that the consolidated fiscal deficit remains within target. Thus, despite the greater fiscal resource transfers, the provinces do not have an autonomy on the use of the resources at least till such time that the federal governments can get its fiscal house in order.

The 18th amendment is not without its critics. For example Shah (2012)[41] argues that the dual federalism model with strong centre and provinces/states is unsuited for Pakistan. He identifies several pitfalls including weaker and fragmented local governments and adverse impact on public service provision because of concentration of administrative power at the provincial level. He states that: "The new world economic order dictates that economic relevance of intermediate orders of government (provinces and states) has diminished, while that of local governments has expanded." He proposes an hourglass model of federalism in which the centres of power and responsibilities are the federal government and local governments with provinces having a role of providing inter-local services and coordination between local governments and between the local and central governments.

The 18th amendment has introduced greater clarity on whether it is the federal or the provincial governments that is responsible for policy making or service delivery in a particular area. This leads to greater accountability (Shah, 2012). Despite his misgivings about empowered provinces creating incentives for weaker and numerous local governments, we believe that the fierce competition between political parties will force governments to demonstrate better service delivery and if this requires devolution of functional responsibilities to the local bodies with the financial resources to back these responsibilities, then this is what they would do.

The Institutional Framework Underlying the Allocation Process

The budget making is heavily dominated by the Ministry of Finance with a strong role of the Planning Commission in the preparation and implementation of development budget. The involvement of the business community, academics, civil society and the general public is limited to their participation in seminars that MoF organizes to solicit their view for the budget.

[41] *The 18th Constitutional Amendment: Glue or Solvent for Nation Building and Citizenship in Pakistan*, The Lahore Journal of Economics, Volume 17, SE, September 17: pp. 387-424.

Legislators' role is also limited to debating the budget once it is presented in the parliament and to introducing cut motions (reductions in proposed allocations) – they cannot propose new proposals or increases in expenditures once the budget is presented.

The Finance and Planning Divisions/departments not only dominate in the allocation of expenditures across sectors but also among expenditure heads, activities and schemes.[42] The report argues for "a "performance" oriented budget process which stresses analytical insight into actual purpose of proposed budget allocations and decentralized responsibility and accountability for use of budgetary allocations to achieve those purposes.

The development and recurrent expenditures are compartmentalized with little linkage between the two. Development budget gets the most thorough review, followed by "new" recurrent budget or the expenditure on activities that are transferred from development budget to the recurrent category but more from the perspective of "whether enough resources are available to make operational the facilities created from the development budget." The "permanent" recurrent budget, which is the recurrent budget on on-going activities, is not reviewed at all. This implies that any development work that finds its way in the budget will then be financed for the life of the project. There is no weeding out of activities that are obsolete or out of sync with new strategic objectives of the government.

The system of expenditure allocation, disbursement and audit within the government is mostly geared to ensuring that procedures and hierarchies have been followed; to keeping track of expenditure growth; and to watching that allocation targets are met. There is little emphasis on the productivity of expenditures in terms of service delivery. The legislative orientation for resource allocation and accountability for its use is not very different. Resource allocation is not driven by strategic objectives, which has allowed resource allocation to be based on incremental budgeting, with the result that "efficient and inefficient activities get equal treatment and many obsolescent activities just continue for years."

The federal and provincial governments have moved in the direction of medium-term budgeting in the form of Medium-term Development Framework (MTDF) in the case of the federal government and Medium-term Budget Framework (MTBF) in the case of provincial governments. These two processes need to be integrated, which "requires a strong ownership for medium-term budgeting and willingness to provide adequate human, training, and technical resources to institute medium-term [budgeting] across all ministries and levels of government." This longer-term budget perspective on budget making should be supplemented with performance-based budgeting.

[42] "For example, no re-appropriation from, or to, or within, establishment charges can be made without the prior concurrence of Finance Division/department. Such centralized controls discourage line ministries to save on wages and divert funds to enhance allocation for R&M expenditure. This has been a particular problem for departments (e.g. social sectors) which have a higher wage portion in their budgets. Moreover, this process only creates an illusion of better control, but compromises effectiveness of expenditure." (World Bank 2011, P. 55)

2.4.4.2 Raising Operational Efficiency[43]

Pakistan's Operational Efficiency

Based on analysis of a sample of 37 development projects, the authors of WB report estimated that in Pakistan it took, on average, twice as much time to complete a project than approved initially, which inevitably results in cost overruns. For a subset of projects, the costs overruns was estimated to be more than 180%. The time and cost overruns were greater for infrastructure projects than for social sector projects and greater for projects that were jointly financed by federal and provincial governments than those which were financed from a single source. The absence of any penalty for time and cost overrun also leads to project planning that is ambitious and unrealistic, with a typical project planned to be completed in 3 years, when the global norm was of about 5 years. The authors found that of the 37 projects in the sample, only 70% were completed at the end of 5 years, which was 30% lower than the international standard.

The report identifies a number of factors that result in poor operational efficiency. These are: (1) weak governance, (2) Inadequate investment in upstream activities, (3) Insensitive funds release system, (4) Weak internal controls for projects, and (5) Diffused chain of accountability and lack of coordination and ownership across government agencies.[44]

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[43] Defined as the ratio of outputs produced or purchased by government agencies to the resources spent by them. World Bank (2011, p. 61).

[44] A brief summary of their analysis is as follows: (1) *Weak governance*. Except for public regulation, Pakistan falls short of best performing countries in South Asian countries on every single indicator of governance: (i) political stability, (ii) public voice, (iii) corruption control, (iv) rule of law, (v) regulation quality, and (vi) government effectiveness. Failure in any one of these dimensions causes failure in other dimensions, and collectively impact the efficiency and effectiveness of public expenditures. (2) *Inadequate investment in upstream activities*. Typically a number of upstream activities involving a project are not undertaken at the time of the project preparation. This includes activities such as "site identification, consultation with communities, basic design and costing of the project, appointment of key project personnel". This then results in revised project cost within a year of its approval. "There are both economic and political factors that have contributed to weak project preparation and selection process. First, there is no explicit provision of fund in the budget for undertaking upstream activities. Second, the selection process does not recognize or reward good project preparation nor tracks and penalizes projects with poor execution record. Finally, in some instances the due diligence work involving a project is compromised because of political pressure." World Bank (2011, p. 64). (3) *Insensitive funds release system*. At the time the report was being compiled, it took 111 days, on average, at the federal level and 138 days at the provincial level for the release of funds to the contractor/ consultant after the request had been made by the Project Director. (4) *Weak internal controls for projects*. The report points out that as soon as funds are released for the project, these are treated as actual expenditure by the office of the Controller General of Accounts (CGA) when in effect these are 'advances' before the funds are actually spent. Another anomaly is that expenditures are budgeted at the level of detail defined in PC1 that does not accord with the level of detail that accords with good accounting practices. As a result significant budget resources that in the books of GDA are treated as 'funds paid' are in reality unpaid and "should have been treated as part of government fiscal balances." (5) *'Diffused chain of accountability' and lack of coordination and ownership' across government agencies*. There is a lack of coordination between the line ministries, Planning Commission, Finance Department and AGPR at the federal level which is reflected in an upsurge of AGPR workload on June 30th (the last day of the fiscal year), lapse of funds and extensive delay in subsequent release. The fact that this pattern is repeated each year means that there is not even an effort to resolve issues that are of a recurrent nature. There are similar coordination failures involving projects that involve federal and provincial governments and between provincial and district governments. For projects funded from PSDP and executed by the federal government under supervision of provincial or district governments, there is the further problem of the executing agency not being accountable to the provincial or district governments.

The report argues for improving *cash management to reduce unwarranted fiscal costs, addressing financial management issues* and *making public procurement more transparent and effective*. We summarize below the reforms proposed in the report in these three areas. For details see World Bank (2011, pp. 66-77).

Better Due-diligence at the Project Level

Introduce filters to block projects that have not met a certain level of readiness standard. In the case of infrastructure projects, lack of site selection and land acquisition are likely to be the main reasons for project delays and sufficient progress on these should be part of the Project Readiness Filter. Identification of a fulltime project director should also be part of the filter. For social sector projects, provision of the recurrent costs becomes an obstacle and an analysis of such costs and their provisioning should be included in the PRF.

The report finds that the leadership and teamwork of Project Directors (PDs) was a common factor across successful projects. A database of PDs should be created to monitor their performance. PDs should be incentivized in the form of financial benefits if projects are completed within time and budget.

Public Financial Management Reforms

Undertake Business Process reengineering. The report found that there were 29 steps involved in the release of funds and 22 steps in expenditure execution, most of which were redundant. GOP could make the system of tracking and publishing the average time taken for release of funds at each activity center fully functional. In the medium-term, GOP should introduce a file clearance system that enables 'fund release files' to be submitted and approved by different activity centers simultaneously and not sequentially as is the current practice."

Annual performance audits. Since expenditure on development projects constitutes a significant part of public expenditures, the report recommends annual performance audits in addition to financial audits of these projects to improve their operational efficiency. The current scope and coverage of performance audits is limited.

Strengthening internal controls at the project level. Continue with the efforts "to improve on the reconciliations of fiscal balances through timely reconciliation between accounting offices and expenditure DDOs"[45] but without full connectivity of province-wide MIS systems with the revenue and banking services, fiscal balances and monetary balances will continue to be irreconcilable.

Legislative and Public Scrutiny. The report points out that the audit reports are often very scathing but the findings of the audit reports result in (a) inadequate remedial actions, (b) no guaranteed enforcement of audit or Public Accounts Committee (PAC) recommendations, and (c) absence of any coherent and transparent monitoring of the enforcement process. The audit reports have to be audited by the PAC but there is a back-log of many years of unaudited reports. Catching up with these audits seems unlikely. The legislative scrutiny of public resources has to be strengthened.

[45] DDO stands for Drawing and Disbursing Officer.

Procurement Reforms

Shortening the procurement cycle. "Perhaps one of the most telling indicators of procurement performance is the length of time it takes to complete the bid process, from posting of notice to the award of contract." This can be a year or more in certain cases.

The time taken is reflective of the institutional capacity and degree of empowerment that decision makers have. Decisions are not taken at the level of the evaluation committees but at the highest level in an organization. Effort to build procurement capacity building by Public Procurement Regulatory Authority (PPRA) have to be strengthened to shorten the procurement cycle.

Formulating and Implementing Regulations. During the application of procurement rules various issues emerge that require the rules be made clearer, more logical, and user friendly. PPRA should be alert to these requirements and issue regulations whenever the circumstances so demand.

Monitoring and Evaluation. A process that is less onerous than a judicial process to register and follow up on the complaints of bidders and contracting parties needs to be put in place.

2.4.5 Fostering Partnership with the Private Sector

One of the ways in which the government could reduce its budgetary expenditures on infrastructure (physical and organizational) and reduce the burden on its over-stretched human resources, without compromising on the delivery of services that such public sector investments make possible, is to create conditions where the private sector undertakes such investments by raising its own equity or debt and then provides the services to the public over a long period of time in return for a fee to recover its costs together with an acceptable return on investments. Engaging the private sector in such an arrangement would fall within the rubric of public-private partnership. There are many variants of such partnership of which some are mentioned below. The challenge for the government is to create the conditions where substantial private investment and management resources can be forthcoming to substitute for public resources thus helping it make substantial reduction in its budgetary expenditure as well as bring about an improvement in the management and quality of service delivery.

A broad definition of PPP is that it is a '*long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance*'.[46]

PPP contracts are typically long-term contracts of 20-30 years and described in terms of three broad parameters: (1) the type of asset involved, (2) what functions the private party is responsible for, and (3) the private party payment mechanism.[47]

[46] See World Bank, *Public-Private Partnerships Reference Guide Version 3.0*, 2017.
[47] Ibid

PPP: Advantages and Pitfalls[48]

The following are the presumed advantages of PPP in addressing infrastructure challenges (see World Bank 2017, pp. 16-17):

- Under the right circumstances, PPPs can mobilize additional sources of funding and financing for infrastructure.
- By subjecting potential projects to the test of attracting private finance, PPPs can enhance project selection.
- The incentives of the private sector can be aligned with the interests of the contracting authority throughout the entire life cycle of the project, including the implementation phase. This alignment occurs by tying-in the private operator's revenue to a set of pre-agreed performance indicators and by requiring the latter to invest significant, long-term capital.

There is also the possibility that rather than solve the problems, PPP may make matters worse. In negotiating contracts with PPP, the government may accept higher fiscal commitment and risks than would be financially prudent. If project planning and project selection is a problem then PPP does not address this because it is a responsibility that would continue to vest in the public sector. The extent to which the private sectors invests in infrastructure and how well it maintains it, depends on effective contracting and procurement by the government.

Pakistan's Experience with PPP

There are 85 PPPs that are active in the Pakistan-with investment of nearly US$24 billion. Most of these projects are in the electricity sector, but there are a few in transportation, sanitation and health care.[49] The most prominent example of PPP in Pakistan is the Independent Power Producers (IPPs). The first IPP in Pakistan was a 1292 MW Hubco thermal power plant, which started commercial operations in June 1996. The experience from Hub Power Project cleared the way for the 1994 Power Policy for attracting more private investment in the power sector.[50] Other power policies followed under the governments of Pervez Musharraf in 2002 and Nawaz Sharif in 2013. All power policies were similar in terms of offering the IPPs a fixed tariff that covered costs, guaranteed a certain return on investment, and a guaranteed bulk purchase by the government.

The experience with IPPs in Pakistan suggest that PPP is a bumpy road. The fixed tariff offered to IPPs in the 1990s was questioned by the PML government (led by Prime Minister Nawaz Sharif) as soon as it came to power. The 1994 policy served the purpose of addressing short-term energy shortages but more power was contracted than the economy could absorb in the short term, especially because of anemic growth in that period. The speed in awarding contracts added to the

[48] The analysis is based on The World Bank, *Public-Private Partnerships Reference Guide Version 3.0*, 2017.
[49] Nyirinkindi, Emmanuel, *PPPs Can Build the Foundation for the Sustainable Growth That Pakistan Needs*, Management Accountant, Volume: 28.1 Jan-Feb, 2019.
[50] The power policy announced in 1994 by the PPP government of Benazir Bhutto offered the IPPs an indicative tariff of US cents 6.5 per kWh for the first ten years and a levelized tariff of US cents 5.91 per kWh. This was expected to cover their costs of production, debt servicing cost and 18% return on equity at a plant factor of 60%. Power was to be purchased in bulk by one of the SOEs. The policy attracted about 3000 MW of generation capacity over the next few years.

perception of corruption even though the prices offered under the 1994 policy were comparable with those offered by Indonesia, Philippines and India at that time (see Fraser (2005)). In July 1998, the PML-N government served Notices of Intent to Terminate to seven IPPs on grounds of corruption and to two on technical grounds. Evidence on corruption charges were not presented in court and Hubco was constrained by courts to seek international arbitration. Eventually a number of IPPs agreed to tariff reductions.

Despite the experience with IPPs in the 1990s, Pakistan has not moved to procuring power through competitive bids, and the power purchase agreements by the PML-N government that started in 2013, have again led to contracting excess generation capacity, which is expected to increase further in the next few years.[51] This will inevitably translate into either higher power tariffs for the consumers or take the form of additional fiscal burden on the economy. The demand and supply mismatch is only one of issues with IPPs. The shift in power generation from hydro power to thermal power as a result of the 1994 power policy and the 2002 power policy has increased the vulnerability to shocks in international oil prices both in terms of electricity cost for consumers and the pressure on the balance of payments. When gas scarcity was not an issue, cost of gas-based power generation kept the overall price of electricity low. When the level of domestic supply of natural gas fell, power producers switched to oil-based generation as a back-up and later to imported LNG. Since 2013, low-cost coal-based generation has been prioritized, which has been criticized for its environmental impact. Yet another dimension of several PPPs is the implicit sovereign guarantees of the debt raised by IPPs. Although the government does not provide direct sovereign guarantees but the guaranteed purchase of a certain percentage of power generated is effectively a sovereign guarantee.

The issues identified in the case of IPPs are illustrative of the complexities involved in entering into PPP, of what can go wrong and the skills and capacity required to foresee the multitude of problems that can arise, to negotiate contracts in the light of these uncertainties and to renegotiate contracts when circumstances change.

Countries such as Chile and South Africa which have a history of successful PPP programs have a PPP framework in place. The constituent of this framework are: (1) policy, (2) legal framework, (3) processes and institutional responsibilities, (4) public financial management approach and (5) other arrangements.[52]

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[51] Arshad, Naveed, Najeeb Ullah, Basit Tanvir Khan, Mohammad Abubakr Javed, Malik Muhammad Arslan and Muhammad Hammad Qureshi, *Electric Vehicles in Pakistan: Policy Recommendations Volume I Cars*, Energy Institute LUMS and U.S.-Pakistan Centre for Advanced Studies in Energy (USPCAS-E) at UET-Peshawar, January 2019, pp. 20-21. Available at: http://web.lums.edu.pk/~eig/pdf/evPrinting.pdf

[52] Their brief description is as follows (see World Bank (2017, p. 58): Policy: articulation of the rationale behind the government's intent to use PPPs to deliver public services, and the objectives, scope, and implementing principles of the PPP program. *Legal framework*: laws and regulations that underpin the PPP program – enabling the government to enter into PPPs, and setting the rules and boundaries for how PPPs are implemented. *Processes and institutional responsibilities*: the steps by which PPP projects are identified, developed, appraised, implemented, and managed, ideally within the Public Investment Management system; and the roles of different entities in that process. A sound PPP process is efficient, transparent, and is followed consistently to effectively control the quality of PPP projects. *Public financial management approach*—how fiscal commitments under PPPs are controlled, reported, and budgeted for, to ensure PPPs provide value for money, without placing undue burden on future generations, and to manage the associated fiscal risk. *Other arrangements*—how other entities such as auditing entities, the legislature,

Existing Institutional Arrangement

In Pakistan, an Infrastructure Project Development Facility (IPDF), was formed as a company by the Ministry of Finance in 2006 to assist the implementing agencies in the development, structuring and procurement of their infrastructure projects on PPP basis. In 2017, the PPP Authority Act was promulgated and IPDF was converted into PPP Authority. The PPP Authority is an independent corporate body with a Board. The functions of the Authority include:

- Ensuring projects are consistent with national and sectoral strategies
- Ensuring value for money for the government
- Assessment of fiscal risks for the government
- Advise and facilitate implementing agency/agencies
- Approve PPP projects, not requiring government support
- Approve PPP projects that require Viability Gap Fund (VGF) from the Authority
- Undertake both green-field and brownfield projects including on-going projects funded by PSDP
- Support the Government in achievement of annual development targets through private sector participation.

PPPA attract private sector investment by:

a) Developing such policies that incentivize private sector to participate in the development of projects. These incentives include provision of land to private parties free of any encumbrances, development rights, utilities etc.
b) Ensuring that private party's returns correspond to the risks transferred to private party and are well protected.
c) Developing projects in a manner that they are bankable and the private party can meet its financing needs from local/international financial institutions and the project meets its development timelines.

IPDF, the predecessor of the PPP Authority, successfully completed PPP with NHA including: a) Overlay and modernization of Lahore-Islamabad Motorway (M2) b) Construction of Karachi-Hyderabad Motorway (M9) on BOT basis c) Construction of Lahore-Sialkot Motorway on BOT basis d) Construction of Habibabad Bridge on BOT basis. Since PPPA was established recently, no infrastructure project has been developed from its platform as yet.[53]

Appropriateness of Existing Institutional Arrangements and Reform Options[54]

An assessment of institutional limitations that are obstacles to the development of PPP in Pakistan is provided in World Bank (2011). It discusses the limitations at the level of policy development, dissemination, monitoring and enforcement, limitations in project development support, and

and the public participate in the PPP program, and hold those responsible for implementing PPPs accountable for their decisions and actions.

[53] The section describing the PPPA, its aims and objectives are taken from an interview by the CEO, PPPA, Mr. Muhammad Tanvir Butt, published in Management Accountant, Volume : 28.1 Jan-Feb, 2019.

[54] World Bank (2011, pp. 86-88)

limitations in financial management. Although developments such as the PPPA has overtaken some the institutional arrangement that existed at the time of the World Bank assessment, most of the analysis is probably still relevant and reader is referred to the report for details. The report also suggests reform options. These include the following:

a) Establishing a legal framework that sets out the roles and responsibilities for the contracting parties and for dispute resolution.
b) Developing a clear route to PPP projects that is distinct from that adopted for PSDP projects.
c) Clarifying roles and responsibilities of IPDF (the predecessor of PPPA). The core responsibilities it identifies are policy dissemination and enforcement, providing advisory services to the contracting authorities and/or become joint sponsors of projects with the contracting authority, and facilitating and managing third party advisory services.
d) Clarity on sector policies regarding PPP. These sectoral policies should be consistent with the overall legal framework, but should also clearly highlight the areas and role for greater private sector involvement in the sector.
e) Involving the line ministries, and other contracting authorities as leading or equal partners in all stages of project development cycle -- from project identification to post-contract monitoring.
f) Develop the capabilities to evaluate and decide any requests from the private party for government guarantee and to negotiate these guarantees with private investors. Since every guarantee generates a contingent liability for the government, monitoring the impact of these liabilities on the fiscal situation should be integral task to fiscal management. Similarly, any subsidies provided as part of the PPP arrangement must be consistent with the overall government policies on the provision of subsides.

2.4.6 **Reform of Public Investment**[55]

An international comparison of Pakistan's public investment efficiency by Haque et al (2020) suggests that although efficiency of public investment in Pakistan is higher than international average, it is less than one half of that of the best performing comparator countries.

Investment efficiency estimates in each year vis-à-vis the "best years" are also obtained for Pakistan using time series data from 1964-65 till 206-17.These estimates indicate that for an average year, efficiency of public investment is a little more than half of the efficiency in the best years. Furthermore, there is definite underlying declining trend over this 52 year period. On the average, efficiency declined by 50 bps (i.e.by 0.5%) every year.

Haque et al. (2020) then calculate a Public Investment Management Index (PIMI) for a number of developing countries using 2010 data, and find that Pakistan's PIMI is lower than most developing countries. to the citizens.

The study evaluates the PIM system in Pakistan on the basis of the following characteristics identified by the World Bank that a PIM system should have. These are: (i) guidance and screening, (ii) project

[55] This section is based on: Haque, N, H. Mukhtar, N. Ishtiaq and J. Gray, *Doing Development Better* (1st ed.), Pakistan Institute of Development Economics, 2020.

preparation and appraisal, (iii) appraisal review, (iv) recent distortions in selection and budgeting processes, (v) project implementation, (vi) public procurement, (viii) project monitoring and evaluation, (viii) project completion and service delivery.

Their main conclusion from a careful and comprehensive analysis of the PIM system in Pakistan is that: "On paper, PIM in Pakistan has all these desired characteristics [.]. However, in practice some of the desired components of PIM have fallen into misuse, while others have developed serious defects."

The following key concerns are noted:

- No requirement for ministries to prepare and follow sector plans.
- A breakdown of a quality-controlled process for project identification, design, preparation, and appraisal.
- Failure to observe the correct sequencing of the investment cycle.
- Failure to control the number of projects entering into the budget.
- Lack of a medium term budgetary framework to provide a firm indication of the future availability of recurrent operating costs for the utilisation of completed projects.
- Almost total absence of systems to ensure proper maintenance and routine rehabilitation of completed public assets.
- Lack of any evaluation process to guide the planners and implementers on successful solutions to problems that arise during various stages of project cycle and in delivery of public services

The authors then propose a PIM Reform Programme built around the following five pillars:

1. Creation of a legal basis for planning, PIM and the management of public sector assets.
2. Reform of the detailed PIM procedures to ensure completeness and effectiveness**.**
3. Reform of the overall budget management system to provide real integration across the development and recurrent dimensions of the budget.
4. Institutional reforms for an effective PIM system.
5. Institutional and Individual capacity development for a modern PIM system**.**

The reform program recognizes the role of medium-term development strategies such as the New Growth Framework and Vision 2025 but proposes the role of the Planning Commission to provide a strategic direction and vision. The development of sectoral plans that are consistent with the strategic vision is to be decentralized to the line ministries and departments.

"Each ministry or a group of ministries and agencies at the national, the provincial and the local (say social sectors, Energy, water and agriculture) would develop clear objectives and activities and policies in the coming period to constitute what can be called sectoral action plan going forwards. Such plans would identify very clearly what the outcomes will be for productivity, growth welfare employment and what investments, policies reforms will be necessary to make these happen. There should be some agencies at both federal and provincial levels who should be in charge of whetting these plans or programs." These sectoral plans would then guide the process of identification of development projects and programs.

A similar delegation to line ministries is envisaged in preparation of annual budgets. The budget would integrate both the development and recurrent budgets and formulated to deliver on service delivery

both in the short-term and the medium-term. The reform program proposes strengthening capacities within each ministry/department to supervise all stages of the budget planning and budget management.

We note that some of the above recommendation that pertain to the legal basis for planning have been included in the Public Finance Management Act 2019. Whether the provisions of the act are followed in letter and spirit or whether the Act meets the same fate as FRDLA, remains to be seen.

2.4.7 **Achieving better expenditure outcomes: Case Studies**

Making Procurement More Transparent and Effective[56]

Governments spend a very large part of their budgets on procurement. The Punjab government spent Rs350-400 billion (in 2017) on procurement from the private sector. Improving the efficiency of public procurement can therefore be a cost-effective way of delivering public services.

Procurement for big ticket items involve competitive bidding but smaller purchases that do not require vendor selection through open competitive bidding, constitutes a substantial part of Punjab government's non-salary expenditures.

A typical procurement process for petty purchases proceed as follows. A demand for an item is generated in an office, it goes to the DDO for approval. If the DDO approves the request, the Procurement Officer (PO) surveys the market for rates for the items. For any purchase to go through, it has to be sanctioned by the DDO who does so after taking into account the budgetary position. If the price is below Rs50,000, the DDO can sanction the order for the item. If it is above Rs50,000, the DDO is required to ask for at least three quotations, and the item is purchased from the vendor who quotes the lowest price. The next step is pre-audit by the AG Office and approval of the bill or voucher. Legally, goods and services have to be received and inspected before a request for payment can be made to the AG Office for pre-audit and release of funds for payment to vendor. The PO has to prepare the necessary documents and present these together with the voucher for the procured items to the AG Office. Once the bill is approved by the AG Office, the payment is received and then the vendor can be paid.

The AG Office can refuse request for payment if it decides that the paperwork submitted by the PO is not in order. Typically the AG Office rejects the payment without disclosing the reasons. This creates delays in payments of bills, uncertainty about when the bills would be cleared, rent-seeking and a market for approval in the AG Office.

A team of researchers studied the procurement system in Punjab. In the pilot phase they visited procuring agencies and carried out extensive interviews and observations. They identified the following main factors adversely affecting procurement performance in Punjab:

i) misaligned incentives of procurement officers, in particular lack of (financial) incentives for procurement officers, and

[56] This section is based on: Bandiera, Oriana, Michael Best, Adnan Khan, Andrea Prat, Maha Rahman, Sher Afghan Asad, Khawaja Hussain, Ahsen Omer Majid and Ameera Jamal, *Motivating Bureaucrats: Autonomy Vs performance for Public Procurement in Pakistan*, International Growth Centre, Final Project Report, S-37407-PAK-1 September 2017

ii) procedural constraints in the system.

The team also found that because of the lack of information on purchases made by procuring agencies, some offices paid much more for goods that were otherwise identical.

The following policy reforms or interventions were designed by the researchers to determine how value for money could be maximized:

- introduction of an IT based system called the Punjab Online Procurement System (POPS) that captures detailed information on the purchases made by offices
- modifying rules of procurement to give DDOs more autonomy
- provision of financial incentives in the shape of an Performance Based Honorarium

With the support of the Punjab government, the above policy interventions were introduced in a representative sample of offices and districts during 2014-16. To evaluate how modification of the procurement rules and provision of financial incentives impacted the effectiveness of procurement, a randomized control trial (RTC) methodology was adopted.

As part of the project, an online procurement system, POPS, was developed which replicates an actual purchase cycle of an office. Many functions that were performed manually are now handled by POPS. It can automatically generate the required documents for pre-audit. It allows users/officers to view the budgets released and available under each budgetary head and to plan their purchases efficiently. It also allows supervisors to monitor the performance of their sub-officers, for instance by tracking their speed of procurement and the prices paid, and has contributed to transparency and accountability.

As of September 2017, POPS had been implemented and adopted by 1200 government bodies in 34 districts of Punjab. The scope of the POPS system is being expanded by the Punjab government and likely to be used for improved budget management and for better audits.

For the RCT interventions a randomized sample of offices was divided into four groups.

Group 1: *Incentives*:
Financial incentives were offered to DDOs on the basis of their performance as measured by value-for-money achieved.

Group 2: *Constraints or Rules*:
Relaxing structural or procedural constraints, by:

1. Increasing the permanent advances (petty cash) of the offices to a maximum of Rs100 000.
2. Releasing the budget to the cost centers earlier and in larger amounts.
3. Circulation of a list of pre-audit documents that outlined the rules for pre-audit in detail.

Group 3: *Incentives and Constraints*
DDOs' in this group were provided with both financial incentives and increased discretionary power through the combination of interventions in Group 1 and 2.

Group 4: *Control*
This group did not receive any intervention and so served as the counterfactual to measure treatment effects.

Offices in all four groups, including the control group, were required to enter details of their transactions into POPS.

The following are preliminary results emerge from regression estimates from the data obtained from the RCT intervention.

- When direct financial rewards that are tied to performance in achieving value for money are provided to officers, they put in greater effort to improve performance.
- When procurement officers are given more discretion in how they perform their procurement duties, they are able to use this additional flexibility to improve procurement outcomes.

The researchers conclude that: (1) there is significant scope for government officers in charge of procurement and their staffs to achieve greater value for money in procurement, and (2) the existing procurement regime is perhaps too stringent and compromises the value for money; "revising rules to give bureaucrats more discretion while also holding them accountable for better-measured outcomes is potentially a very promising way to have a large impact in improving the efficiency of procurement at a low cost."

Targeted Social Protection: Benazir Income Support Program (BISP)[57]

In 2008 Pakistan initiated its most ambitious social protection program – the Benazir Income Support Program (BISP). It was an unconditional cash transfer program that intends to target the poorest 20% of the population. The short term objective of the program was to cushion the poor from the adverse impacts of the commodity shock, but its broader objective was to provide a minimum income support to the chronically poor and those who are more likely to be affected negatively by future economic shocks.

Initially, the poor were eligible for Rs1000 per month cash transfers, and were identified through the parliamentarians. An amount of Rs26.6 billion were disbursed to 1.76 million families in 2008-09. Later, in 2010 a nationwide survey was conducted to identify more objectively the poor households, and therefore eligible for the cash grants. "The Nationwide Poverty Scorecard Survey, the first of its kind in South Asia, enabled BISP to identify eligible households through the

[57] The discussion and information on BISP is based on: Nabi, Ijaz, *Two Social Protection Programs in Pakistan*, The Lahore Journal of Economics 18 : SE (September 2013): pp. 283–304; and the BISP website: https://bisp.gov.pk/cash-grant/

application of a Proxy Means Test (PMT) that determined the welfare status of the household on a scale between 0-100."[58] The survey has the following features (see Nabi 2013):

- It identifies 7.2 million households who are living below a cut-off score of 16.17.
- It creates a large and reliable national registry of the socioeconomic status of around 27 million households across Pakistan.
- It uses GPS to map data for the entire country to help make informed decisions (e.g., to respond to natural disasters and other emergencies).
- It validates the targeting process through third-party evaluation.

In 2016, the number of beneficiaries had gone up to 5.7 million. By design, the recipients of cash transfer in the program are women. Till 2016 Rs412 billion had been disbursed to its beneficiaries. The BISP budget in 2019-20 is Rs180 billion.

"Rolling out an income support program that minimizes leakages and reaches the intended population in a country the size and diversity of Pakistan was not easy. It took a couple of years of intense engagement with the world's best technical experts and resolute commitment by the Pakistani management to get things right." (Nabi 2013).

During 2008-9 to 2011-12 when the BISP was being institutionalized, the best practices from around the world were tailored to the Pakistani environment to develop a modern and efficient social protection system. A number of innovations were introduce which included, (i) switching from community-based targeting to more scientific targeting, (ii) developing one of the largest databases of poor households, (iii) providing cash transfers through innovative technology, and (iv) using third-party evaluations of processes and the program to assess its efficiency and improve the quality of services. (See Nabi 2013).

As part of the evaluation of the program, a baseline survey was conducted by an independent social research firm, which was followed up with another survey by the same firm. The following primary and secondary impacts of the program were reported:

Primary Impact: a 22% reduction in poverty; a 6 percentage point reduction in poverty gap; reduction in rates of malnutrition among girls (aged 0-59); and 64% of female beneficiaries retain control over the cash transfer, in terms of how the transfer is spent.

Secondary Impact: decrease in the proportion of working aged men engaged in casual labour but increase in the proportion of men who are self-employed that suggests BISP may be supporting the adoption of less vulnerable livelihood strategies; it has reduced the proportion of boys who engage in child labour; it is associated with an increase in the reported expenditure on health; it has induced an increase in the propensity to save amongst beneficiary households in Khyber Pakhtunkhwa.

[58] The survey was started in October 2010 and was completed across Pakistan except two agencies of FATA i.e. North and South Waziristan. https://bisp.gov.pk/cash-grant/#objective946d-4435

BISP was initially conceived as a cash transfer program; it later expanded its scope to conditional cash grant (Waseel-e-Taleem).[59] Under the program some 2.2 million children had enrolled in 50 districts and Rs8 billion had been disbursed to cover their fee at the rate of Rs250 per child per month.

Until recently the program had been lauded, both locally and internationally, for its highly effective targeting of the poor, and for the transparency of its distribution mechanism. The National Socio Economic Registry (NSER) that was created as a result of the Poverty Score Card Survey in 2010-11, has been the basis for determining eligibility of both the conditional and unconditional cash transfer programs. Besides BISP, there have been more than 30 government/non-governmental institutions that are currently using BISP data for targeting of their programs.[60] The BISP program and the registry on which it is based, has been the backbone of the social protection programs of the PPP government that started it as well as the governments that followed. The registry needs updating to reflect changing demographics, age and earnings so that the social protection program could be better targeted. The updating of the registry is currently underway.

Recently the BISP was at the receiving end of some bad publicity when the Chairperson of the Board revealed that cross checks of the beneficiary information with the NADRA database revealed that as many as 15% of the beneficiaries did not qualify for the program. It is too early to say how the system was broken into or what lapses occurred. However, when the when the Covid-19 pandemic struck, and country was in a lockdown and an emergency economic relief program had to be set in motion, it was the BISP (rebranded as Ehsaas program by the PTI government) and its registry that allowed the government to target the poor and vulnerable.

To sum up, social protection and subsidy programs if poorly targeted are wasteful of public resources and end up benefiting those who are not the intended beneficiaries. BISP is an example of an effectively designed social protection programs, recent hiccups notwithstanding. Even when properly targeted social protection programs can become permanent liabilities for the government. Alternatives such as asset transfers hold greater promise for gradually reducing the burden of supporting the poor by helping them graduate out of poverty.[61] Additional societal benefits from the current social protection programs can be obtained by making them conditional on school

[59] Other programs that were started by BISP – Waseela-e-Rozgar (skills training), Waseela-e-Haq (entrepreneurship development), and Waseela-e-Sehat (health) – are no longer mentioned on the BISP website. These have either been discontinued or absorbed into other programs.

[60] See https://bisp.gov.pk/nser/#nser-bdba-99ef

[61] Experimental work in a number of countries provide convincing evidence about the effectiveness of asset transfer programs in addressing poverty and in graduating out of poverty. In Pakistan asset transfers as a form of social protection have been carried out by PPAF (Pakistan Poverty Alleviation Fund) for a number of years. Are asset transfers an effective mechanism for addressing poverty reduction and are cash transfers more effective than asset transfers (or vice versa) in addressing the various dimensions of poverty in Pakistan? This is a question that a team of researchers consisting of Prof. Imran Rasul, Prof. Adnan Qadir and others are investigating. (See https://www.cerp.org.pk/project/assets-for-livelihoods)

enrollment of children, pre-natal care, and inoculation of young children against more common forms of debilitating diseases.

Section 3: Tax Analysis

1. Introduction

Pakistan's tax revenues as a percentage of GDP (12.9% in 2018) compares favourably with the average of lower middle income countries (12% in 2017). Its overall revenue (tax and non-tax) was about 15% of GDP and budgetary expenditures 21.6% of GDP.

We argued in the last section that most budgetary expenditures were inflexible (interest, defense, pensions) but there was some scope for more efficient utilization of budgetary expenditures, better targeting of subsidies, reform of SOEs and the public investment program, and better operation and financial management of public expenditures. There was scope also for shifting the burden of development expenditure onto the private sector through greater public-private partnership. While these efforts should be ongoing, the gap between budgetary expenditures and revenues (tax and non-tax), which was 6.5% in FY2018 and about 9% in FY2019 (provisional estimates), must be addressed simultaneously through major effort to increase tax revenues on a sustainable basis.

Fenochietto and Pessino (2013)[62] estimate a stochastic production frontier for a panel of 113 countries to calculate countries' tax capacity – the maximum level of tax revenue that it can collect controlling for demographic, economic and institutional characteristics. They report Pakistan's tax capacity to be 22.3 percent of GDP in 2011. Given Pakistan's tax-GDP ratio of 12.9% and assuming tax capacity is unchanged from 2011, there is a potential for raising an additional 9.4% of GDP as tax revenue and therefore bridging the revenue expenditure gap is quite feasible.

In the following section we provide an overview of the federal and provincial tax structure in Pakistan and see how this structure has changed over time. Next we provide a brief review of the optimal tax literature. This is followed by a section that tries to understand why Pakistan is unable to achieve its revenue potential. The last section summarizes the recent research on taxes in Pakistan, in particular, research on income and corporate tax, value-added tax, agricultural income tax and urban land and property tax.

2. Overview of Tax Structure in Pakistan[63]

Poor revenue mobilization is a perennial problem for Pakistan. Figures 1-4 summarize the country's tax history by highlighting the stylized facts surrounding the taxation effort in the country. Figure 1 provides a plot of logarithm of per capita GDP and tax to GDP ratio in 2017 for 108 countries. A regression line is also drawn. A point on the regression line indicates the average tax-to-GDP ratio (which is read on the Y axis) for countries whose per capita GDP in logarithm is

[62] Fenochietto, R and Carola Pessino (2013), *Understanding Countries' Tax Effort*, IMF Working Paper, WP/13/244, International Monetary Fund.
[63] Based largely on Mukhtar and Nasim (2016)

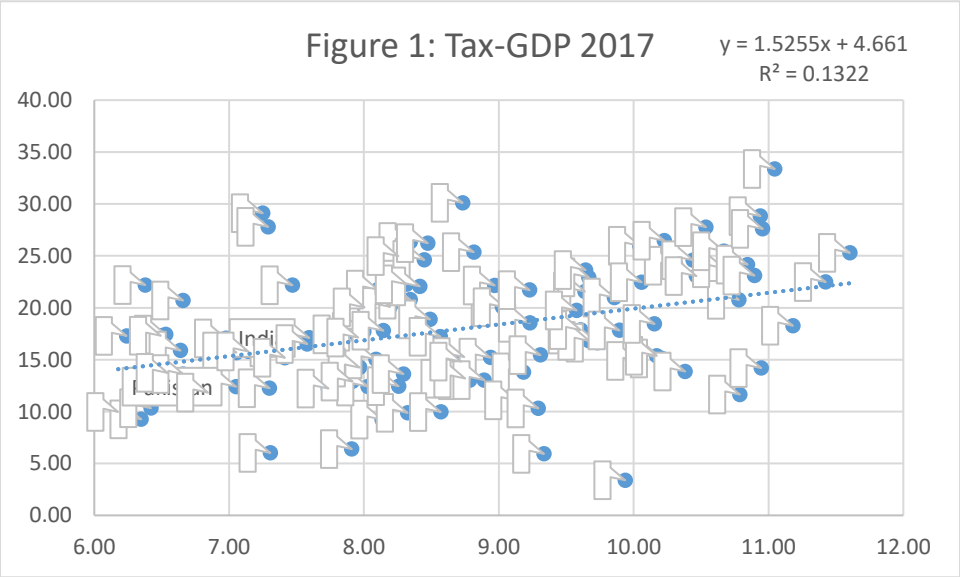
read on the X axis. Countries above the regression line did better than predicted for the average country and those below the line did worse. Pakistan belonged to the latter category.

Figure 2 provides the pattern of tax, non-tax and total revenue (% of GDP) for Pakistan since FY2005-06. Overall revenues that had dropped to as low as 12.3% in FY2010-11, had increased to 15.1% in FY2017-18 but has taken a sharp downturn after that. Similar improvement in tax revenue is seen over the last decade with tax revenues going up from 9.3% in FY2010-11 to 12.9% of GDP in FY2017-18. The more dramatic has been the drop in non-tax revenues from 4.3% in FY2013-14 to 1.1% in FY2018-19. The drying up of Coalition Support Fund has been a major contributory factor.

The federal revenue (Figure 3) over the last 14 years exhibits a very similar pattern as the consolidated revenues in Figure 2, which is not surprising considering the dominant share of federal revenues in total consolidated revenues (federal share of 11.4% of GDP compared with provincial share of 1.1% in FY2018-19).

Figure 4 shows that a big change in the trajectory of provincial tax revenue started in FY2011-12. In that year the provincial government of Sindh decided to start collecting sales tax on services through its Revenue Board, with other provinces following suit. The tax was earlier collected by the federal government and transferred to the provinces.

Figure 5 shows that in most years, federal budgeted revenues have overshot tax collection, sometimes by more than 2 percentage points, indicating the weakness of the federal government's revenue system; and forcing the federal government to make adjustments on the expenditure (or financing) side of the budget.



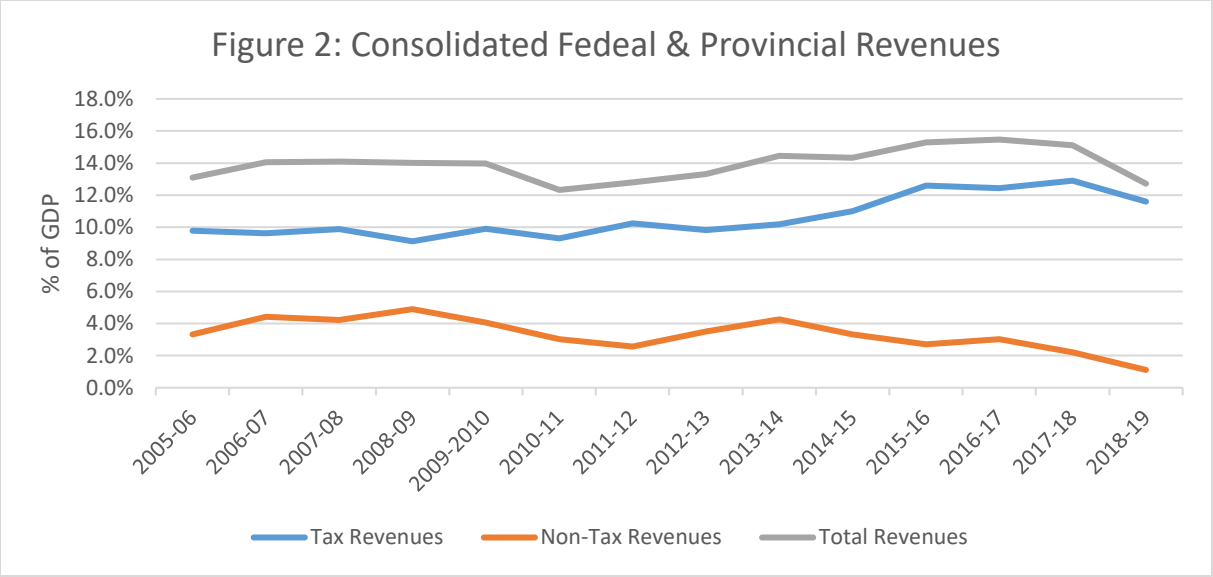


Figure 2: Consolidated Fedeal & Provincial Revenues
% of GDP
18.0%
16.0%
14.0%
12.0%
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
2005-06
2006-07
2007-08
2008-09
2009-2010
2010-11
2011-12
2012-13
2013-14
2014-15
2015-16
2016-17
2017-18
2018-19
Tax Revenues
Non-Tax Revenues
Total Revenues

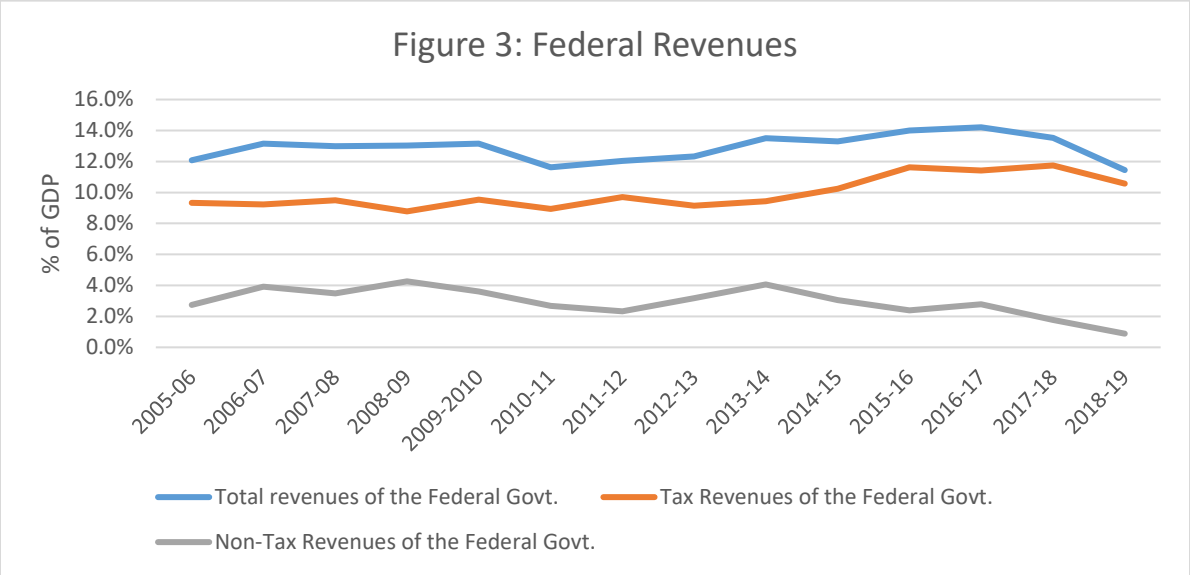


Figure 3: Federal Revenues
% of GDP
16.0%
14.0%
12.0%
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
2005-06
2006-07
2007-08
2008-09
2009-2010
2010-11
2011-12
2012-13
2013-14
2014-15
2015-16
2016-17
2017-18
2018-19
Total revenues of the Federal Govt.
Tax Revenues of the Federal Govt.
Non-Tax Revenues of the Federal Govt.

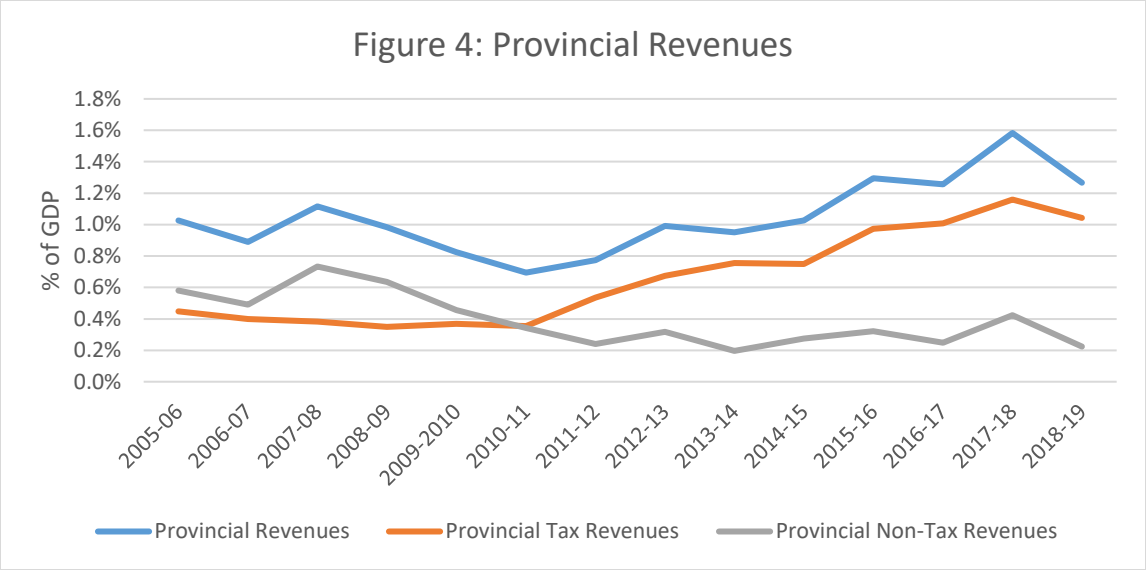


Figure 4: Provincial Revenues
1.8%
1.6%
1.4%
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
% of GDP
2005-06
2006-07
2007-08
2008-09
2009-2010
2010-11
2011-12
2012-13
2013-14
2014-15
2015-16
2016-17
2017-18
2018-19
Provincial Revenues
Provincial Tax Revenues
Provincial Non-Tax Revenues

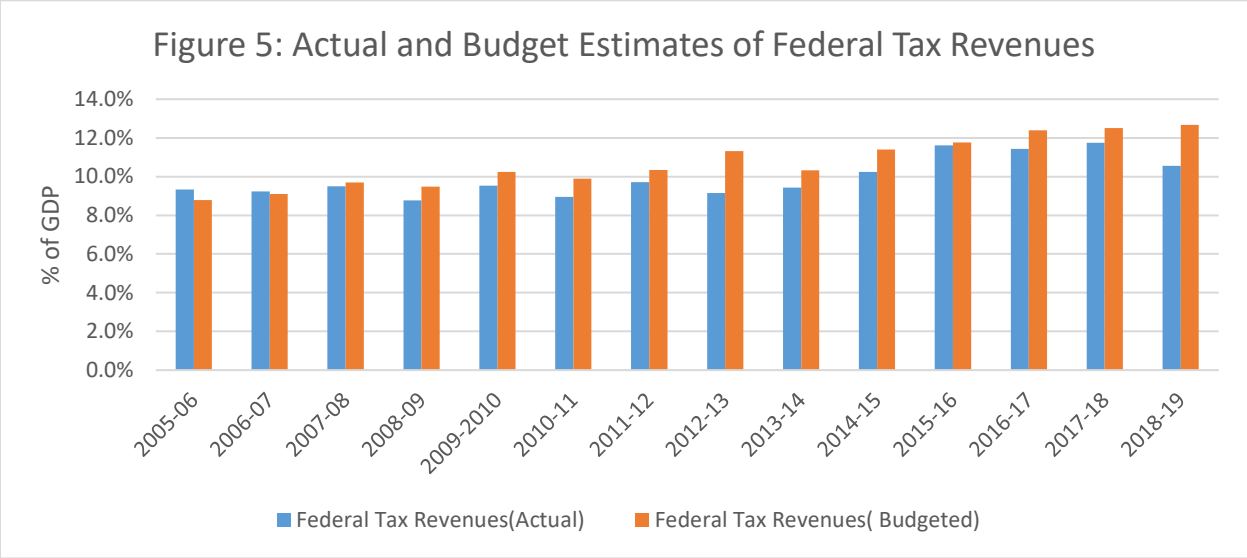


Figure 5: Actual and Budget Estimates of Federal Tax Revenues
14.0%
12.0%
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
% of GDP
2005-06
2006-07
2007-08
2008-09
2009-2010
2010-11
2011-12
2012-13
2013-14
2014-15
2015-16
2016-17
2017-18
2018-19
Federal Tax Revenues(Actual)
Federal Tax Revenues(Budgeted)

Table 1 below provides ratios of major sources of taxes as percentage of GDP at two points in time, thirty years apart – FY1987-88 and FY2017-18. During this period the GDP was rebased in FY1999-2000 and again in FY2005-06 and therefore the ratios in which GDP appears in the denominator are not strictly comparable but they provide a broad sense of how the tax structure has changed over the last three decades.

Table 1: Comparison of Revenues: 1987-88 and 2017-18 (Percentage of GDP)

	1987-88	**2017-18**
Income tax/Direct taxes	1.7	4.4
Customs	5.6	1.8
Sales Tax	1.3	4.3
Federal Excise	2.6	0.6
Petroleum and gas surcharges	1.9	0.6
Other federal taxes (WWF, capital value tax, capital gains tax)	0.05	0.0
Total Federal tax revenues	13.15	11.7
Federal non-tax revenue	3.25	1.8
Total Federal revenue (tax and nontax)	16.4	13.5
Total provincial own tax revenue	0.66	1.2
Total provincial own tax revenue and non-tax revenue	0.9	1.6
Total tax revenue (federal and provincial)	13.82	12.9
Total revenue (federal and provincial)	17.3	15.1

Source: Pakistan Economic Survey (various issues), Government of Pakistan.

Comparing the tax structure in FY1988 with FY2018, the following stand out.

- The overall tax revenues as a percentage of GDP has not changed radically over the last three decades.
- In FY1988 trade taxes dominated overall taxes in Pakistan. Since then trade taxes as share of GDP has declined drastically with sales tax and income tax becoming far more important.

- Revenue from federal excise and surcharges on gas and petroleum products have declined in importance as a source of revenue for the government over this period.
- Provincial share in total tax revenue has increased from under 1% of GDP to 1.6% percent of GDP.
- Federal non-tax revenue as a source of revenue has decreased from about 3.5% of GDP to 2.2% of GDP.

The VAT type sales tax to replace the sales tax in an excise mode, came into effect on November 1, 1990 under the government led by Prime Minister Nawaz Sharif, but much of the preparation for the sales tax under VAT mode was undertaken during the Benazir Bhutto led government of PPP during 1988-90. The revenue from the new sales tax under the VAT mode was expected to offset the loss in revenue from the liberalization of the trade tax regime. However, the substitution of relatively simple trade taxes by a documentation-intensive VAT in the presence of a large informal sector has come at considerable cost to public finances with tax revenue as a ratio of GDP reaching as low as 9.1% of GDP in FY2008-09. Collection efficiency of sales taxes on goods and services in Pakistan and other issues of implementation of a comprehensive VAT are discussed later in the section.

Some of the changes in the share of taxes, as given in Table 1 above, is a change in nomenclature. About 70% of income tax collection is in the form of withholding taxes. Some of these withholding taxes are final discharge of tax liability and act as trade tariffs (e.g. withholding taxes on imports) or excises (e.g. various withholding taxes on sales and services).

Provincial own-tax revenues have increased by 0.7 percentage points in the last three decades. This increase in provincial revenues is largely the result of tax collection of sales taxes on services by provinces since the 18th constitutional amendment that removed any ambiguity about jurisdictions of sales tax on services and the provinces taking ownership of sales tax collection in which the Sindh government took the lead (FY2011-12), followed by Punjab (FY 2012-13), KP (in FY2013-14) and Balochistan (FY2015-16). The tax revenue from GST on services constituted 56 percent of total tax provincial tax revenue in FY2017-18. The other main sources of tax revenue for the provinces are stamp duties and motor vehicle tax. The provinces have not been able to exploit the rich potential of income tax from agricultural incomes and from urban immovable property tax. We discuss these in Section 5.

3. The Theory of Tax Design

In raising a given level of tax revenue what considerations should be important for policy makers? Since taxes, in general, involve what is known as deadweight loss or efficiency loss, minimizing such losses can be a possible objective. An equitable distribution of the taxation burden can be another consideration. Taxation can also be used to address issue of environmental and other externalities or to encourage and discourage consumption of certain goods. In this section we provide a very brief overview of the optimal taxation literature that address the issues of efficiency and distribution in taxation design.

Commodity and Income Taxation

If efficiency was the only consideration, if all individuals were identical and the only form of taxation available was commodity taxation then an important result due to Ramsey (1927)[64] is that taxes should be inversely proportional to the elasticity of demand provided cross-price compensated demand elasticity was zero and supply of goods was perfectly elastic. In other words, if efficiency losses are to be minimized then the tax rate should be higher on goods whose demand is more inelastic.

The information content of Ramsey taxation when compensated cross-price elasticities are non-zero is more demanding.[65] The same is true with more general forms of optimal commodity taxation that take into account distributional considerations.[66] From an administrative perspective, however, a uniform taxation is both simpler and more economical to implement than Ramsey taxes. Under special conditions of quasi separability between leisure and goods (implying that all goods complement leisure equally) the Ramsey rule is consistent with uniform taxation.[67]

As Sørensen (2006)[68] points out: "very little is known about the size and even about the sign of the compensated cross-price elasticities between leisure and all the various goods and services, so the empirical basis for differentiating indirect taxes is very weak. Based on the principle of insufficient reason, one could therefore argue that tax policy makers should act as if all commodities were equally substitutable for leisure."

How do the results extend if we allow income tax as a tax instrument in addition to commodity tax. Atkinson and Stiglitz (1976)[69] have shown that if policy makers could employ a commodity tax as well as an income tax and if a non-linear income tax schedule could be chosen, then provided

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[64] Ramsey, F. (1927), *A contribution to the theory of taxation*, Economic Journal 37, 47-61.

[65] The generalization of this result is the Ramsey rule: $\frac{\sum_k t_k s_{ik}}{x_i} = -\theta$, where $s_{ik}$is the utility compensated change in demand for the ith good when the kth price changes, x_i is the demand for good i, and θ is a positive number independent of i (see Stern 1987, p. 30-32) in Newberry, David and Nicholas Stern, The Theory of Taxation for Developing Countries, Oxford University Press, 1987.

[66] Optimal commodity taxation that take into account distributional considerations are derived by Diamond and Mirrlees (1971) [Diamond, P.A. and J.A. Mirrlees, 1971, Optimal taxation and public production, American Economic Review 61,8-27 and 261-278] and by Atkinson and Stiglitz (1976) [Atkinson, A.B. and J. Stiglitz (1976), *The design of tax structure: direct versus indirect taxation*, Journal of Public Economics 6, 55-75]

[67] A utility function is weakly separable between goods and leisure when the marginal rate of substitution between any two goods is not affected by the quantity of leisure consumed.

[68] Sørensen, Birch Peter, *The Theory of Optimal Taxation: What is the Policy Relevance*?, EPRU Working Paper Series, No. 2006-07, University of Copenhagen, Economic Policy Research Unit (EPRU), Copenhagen, August 2006, P. 7.

[69] Atkinson, A.B. and J. Stiglitz (1976), *The design of tax structure: direct versus indirect taxation*, Journal of Public Economics 6, 55-75.

it is differentiable and the utility function is weakly separable between leisure and all consumption goods, then commodity taxation is uniform.[70] [71]

Besides the theoretical arguments, there are other considerations that favour uniform commodity taxation. "The first one is that a uniform VAT is much easier to administer and much less susceptible to fraud than a VAT system with several differentiated rates. In practice this is undoubtedly a strong argument in favor of uniformity. The second point is that a commodity tax system differentiated according to Ramsey principles would require frequent changes in tax rates in response to changes in tastes and technologies. This would introduce an extra element of risk and uncertainty into the tax system which might hamper long-term planning and investment. A third point is that acceptance of differentiated taxation as a general principle might invite special interest groups to lobby for low tax rates on their particular economic activities. From a political economy perspective, adherence to a principle of uniformity may therefore provide a stronger bulwark against wasteful lobbyism." (Sørensen (2006), pp. 7-8).[72]

However, the case for selective taxes and subsidies and therefore differential commodity taxation can still be made if commodities generate positive or negative externalities. Furthermore household production provides another reason for differentiated taxation. Kleven, Richter and Sørensen (2000)[73] show that "if utility is homothetic in services and other goods, and if goods and services are weakly separable from leisure, so that uniform commodity taxation would be optimal in the absence of home production, the optimal tax structure will certainly involve a relatively low tax rate on those market produced services which could alternatively be produced within the household sector." Extending these ideas, Kleven (2004)[74] has proposed an innovative way of estimating optimum differentiated commodity taxation for which the information requirement is more manageable than previously thought possible and tax policy depends on observable variables rather than unobservable compensated elasticities as in the Ramsey model. (See Sorensen 2006).

The optimal tax theory does not provide unambiguous guidelines about the degree of personal income tax progressivity. By assuming a Cobb-Douglas utility function, Mirrlees (1971)[75] calculated optimal income tax for the U.K and found that it was approximately linear, that marginal tax rates were low and that income tax was not a very effective tool for reducing inequalities. Researchers have looked at the implications for income tax progressivity under different

[70] The result is derived by Atkinson and Stiglitz (1976), and it assumes individuals with identical tastes but unequal ability (endowments). The authors show that if an income tax schedule of any form is available then under the given assumptions, the case for commodity taxation disappears altogether. The uniform taxation is also consistent with the optimality conditions derived by the authors. Also see Stern (1987, pp. 45-46) in Newberry, David and Nicholas Stern, The Theory of Taxation for Developing Countries, Oxford University Press, 1987.

[71] The role for differential commodity taxation can be reestablished if tastes are assumed to be heterogeneous (see Saez 2000).

[72] Sørensen, Birch Peter, *The Theory of Optimal Taxation: What is the Policy Relevance*?, EPRU Working Paper Series, No. 2006-07, University of Copenhagen, Economic Policy Research Unit (EPRU), Copenhagen, August 2006.

[73] Kleven, H.J., W. Richter and P.B. Sørensen (2000). Optimal taxation with household production. Oxford Economic Papers 52, 584-594.

[74] Kleven, H.J. (2004). Optimum taxation and the allocation of time. Journal of Public Economics 88, 545-557.

[75] Diamond, P.A. and J.A. Mirrlees, 1971, Optimal taxation and public production, American Economic Review 61,8-27 and 261-278.

assumptions about the choice of social welfare function or the choice between equity and efficiency, and about the distribution of ability. Depending upon these choices and assumptions, very different recommendations about the degree of income tax progressivity emerge. (See Slemrod (1990)[76] and Mankiw (2009)[77])

Taxation of Capital Income

Capital income takes many forms such as interest, dividends, capital gains, business profits, the value of the housing services enjoyed by owner occupiers, etc.[78]

A theorem due to Diamond and Mirrlees (1971), known as production efficiency theorem, provides a justification for not taxing income from capital. The result states that if commodity taxes were the only feasible instrument that could be set without constraint and (therefore optimally), if returns to scale were either constant or all profits could be taxed away, then taxes should be set to achieve production efficiency.[79] Furthermore production efficiency requires that intermediate goods are not taxed. It follows that capital goods, which are intermediate goods, should not be taxed. Noting also that taxation of capital is equivalent to taxing capital income[80], one implication of production efficiency theorem is that capital incomes should not be taxed.

The production efficiency theorem also provides a justification for VAT type taxes in which taxes on intermediate inputs are rebated (see Stern, Chapter 3 in Newberry and Stern 1987, p. 65).[81] Since production efficiency rules out taxes on intermediate goods, it also rules out tariffs on imported intermediate inputs as well.[82]

Among the other more influential papers in the literature that provide a rationale for zero taxation of capital income, at least in the very long run or the steady state, are Chamley (1986)[83] and Judd (1985)[84]. Their models assume infinitely lived individuals in which the government can tax both labour and capital income. The lack of realism of the models' assumptions, in particular of the infinitely-lived agents, has come under scrutiny and alternative models have been proposed. A

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[76] Slemrod, Joel, *Optimal Taxtion and Optimal Tax systems*, Journal of Economic Perspectives — Volume 4, Number 1 — Winter 1990 — Pages 157–178

[77] Mankiw, N. Gregory, Matthew Weinzierl and Danny Yagan, *Optimal Taxation in Theory and Practice*, The Journal of Economic Perspectives, Vol. 23, No. 4 (Fall, 2009), pp. 147-174.

[78] Sørensen, Birch Peter Can Capital Income Taxes Survive? And Should They? CESifo Economic Studies, Vol. 53, 2/2007, 172–228.

[79] See Slemrod (1990. P. 162).

[80] See Judd, Kenneth L., *The Optimal Tax Rate for Capital Income is Negative*, NBER Working Paper No. 6004, April 1997.

[81] Newberry, David and Nicholas Stern, The Theory of Taxation for Developing Countries, Oxford University Press, 1987.

[82] Commodity taxes on imports are retained if these are final goods, just as commodity taxes on domestic final goods.

[83] Chamley, C., *Optimal Taxation of Capital Income in General Equilibrium with Infinite Lives*, Econometrica 1986, 54, , 607–22.

[84] Judd, K., *Redistributive Taxation in a Simple Perfect Foresight Model*, Journal of Public Economics 1985, 28, 59–83.

much stronger attack has come recently from Straub and Werning (2020)[85]. In their words: "[W]e question the Chamley-Judd results by arguing that a zero long-run tax result does not follow even within the logic of these models. For both the models in Chamley (1986) and Judd (1985), we provide results showing a positive long-run tax when the intertemporal elasticity of substitution is less than or equal to 1. We conclude that these models do not actually provide an unambiguous argument against long-run capital taxation." Straub and Werning (2020, p. 87).

Sørensen (2006) takes a more practical view and assumes that the government must raise certain revenue from capital income taxation, and then asks whether optimal tax theory recommends a uniform tax on all forms of capital?

There are a number of arguments that favour neutral capital income taxation which are similar to the arguments presented earlier against differentiated commodity taxation. "First, even if differential capital income taxation may be theoretically optimal, we do not have firm empirical evidence on all the substitution elasticities in production and consumption that would be necessary to implement the optimal degree of tax differentiation. Second, the optimal degree of tax differentiation will change with changes in tastes and technology, creating an unstable tax system. Third, differentiating capital income taxation across sectors would require drawing a borderline between the different sectors, inducing firms to reclassify themselves as belonging to tax-favored sectors. Fourth, with differential capital income tax rates across sectors, conglomerate firms operating in several sectors would have ample opportunities to reduce total taxable profit through transfer-pricing. Fifth, accepting differential capital income taxation as a general principle invites special interest groups to lobby for tax concessions." (Sorensen 2006, P.15).[86]

After demonstrating this strong case for capital income tax neutrality, Sørensen then shows that the case is less clear cut in an open economy and if international information exchange that allows effective implementation of residence-based capital tax is not feasible. When it is more realistic that tax authorities can only tax capital invested within the domestic economy and some level of revenue has to be raised from capital taxation, then optimal taxation in general implies differentiated capital taxation.

Sørensen concludes "[T]he practitioners' case against selective direct and indirect taxation remains strong. Hence the burden of proof should always be carried by those who argue for deviations from uniformity and neutrality, and such deviations should be accepted only in those few cases where theory and evidence clearly indicate a high welfare cost of uniform taxation."

In OECD countries, although personal income tax is the most important tax instrument in terms of revenue generation, it has not replaced consumption tax as is suggested by optimal tax theory. Trade taxes also continue to play a role. Similarly capital incomes is also taxed even if the taxation rates have declined over time.

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[85] Straub, Ludwig and Iván Werning, Positive Long-Run Capital Taxation: Chamley-Judd Revisited, American Economic Review 2020, 110(1): 86–119.

[86] Sørensen, Birch Peter, *The Theory of Optimal Taxation: What is the Policy Relevance*?, EPRU Working Paper Series, No. 2006-07, University of Copenhagen, Economic Policy Research Unit (EPRU), Copenhagen, August 2006.

Developing countries are much more removed from the taxation structure suggested by the optimum tax literature. For instance commodity taxes and trade taxes are very important part of the tax portfolio and the share of personal income tax is relatively small. With a very large informal sector and a weak tax administration system, developing countries fail to meet some of the basic tenets of the optimum tax theory.

4. What explains Pakistan's failure to achieve its tax potential?[87]

The governments in Pakistan have made repeated attempts to increase revenue by revamping tax policy and undertaking tax administration reforms. Tax revenue picked up during 2013 -2018, increasing from 9.8 percent of GDP in FY2013 to 12.9 percent in 2018 but dropped again to 11.6 percent in 2019. As indicated earlier, in terms of tax revenue collection, Pakistan has underperformed relative to the average of countries with the same per capita GDP (see Figure 1, above).

The present revenue problem of Pakistan is multi-faceted – from constitutional to legislative, from political to legal, from policy induced to administrative and from structural to motivational. Major changes are needed in all these areas to establish a taxation system that can improve revenue collection and tax equity in the country.

Constitutional and Legal Aspects

The Constitution of Pakistan has made some unwarranted bifurcations in income and sales taxes, with a portion of each of these taxes assigned to the federal government and others to the provinces. Thus taxation of income from agriculture is a provincial subject and taxation of all other incomes falls within the federal domain. Similarly, the federal government has jurisdiction over sales tax on goods but the taxation of services is a provincial domain. This division of tax authority on the basis of the source of income or type of economic activity is by no mean innocuous, as it thwarts establishing an integrated tax system for the two most important taxes (income and sales).

At the legislative level, the tax laws allow large exemptions from payment of all major taxes, which cause substantial erosion of tax bases. Large tax expenditure or large scale exemptions from income and sales taxes and excise and custom duties, impair the equity of the tax system. The number of loopholes and lacunae in the tax laws make it almost impossible to bring culprits of tax evasion or tax fraud, to justice. Tax policy has been used more as a tool of government patronage for vested interest groups than to enhance productivity or efficiency of the taxation system. There is a strong disconnect between FBR's headquarters and its field formation, which dilutes or completely stifles certain reform measures initiated by the headquarters. Moreover, the tax administration also suffers from problems of inefficiency, poor training and organization, weak

[87] This section relies heavily on: Mukhtar and Nasim (2017), *The 2016-17 Federal Budget: An Analytical Review*, Working Paper, Institute of Development and Economic Alternatives.
http://www.ideaspak.org/images/Publications/Fiscal-Federalism/Analytical-Review-2016-17-Budget.pdf

incentives and corruption. While these problems are not unique to the tax departments, their presence in the tax departments has a much greater impact on the financial health of the economy.

Structure of the Economy

The structure of Pakistan's economy has resulted in low tax buoyancy. Most of the taxes collected in Pakistan are from the manufacturing sector, which has shown sluggish growth over the last decade. GDP growth during this period has come primarily from the services sector which is very lightly taxed. Hence, additional revenue measures are taken each year just to keep the tax-to-GDP ratio from falling. Finally, changes in the fiscal federalism paradigm have badly eroded incentives for greater revenue collection efforts at both the federal and provincial levels. The Seventh NFC Award sharply increased the share of provinces in federally collected taxes. As such, from every additional revenue effort of Rs10 by the federal government, it gets to retain only Rs 4.25, the remaining Rs 5.75 are transferred to the provinces. On the one hand it distorts the political cost of revenue relative to its benefit for the federal government, lowering the incentive for collecting greater revenue. On the other hand, with the provinces getting the "windfall" in terms of higher revenue transfers from the federal government, there is lower appetite for the provinces to be more aggressive on the revenue front.

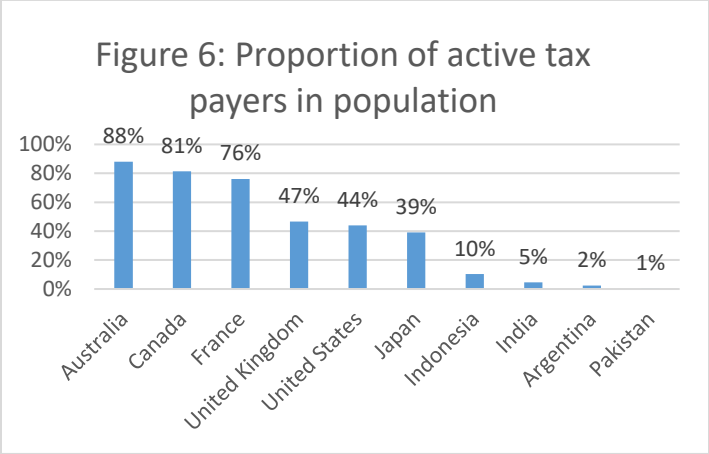
Large informal sector

Pakistan has a thriving untaxed informal and undocumented economy which the tax authorities have not been able to bring into the tax net. Pakistan's informal economy was estimated by Arby et al. (2010) to be over 20% in 2010, down from 30 percent before 2000.[88] A study by Ahmed and Rider (2008)[89] estimated federal tax gap for FY2004-05 and found federal tax gap (Rs409.5 billion) to be 69% of tax receipts (Rs590.4 billion). Bringing this very large informal sector into the tax net would be challenging without effort on multiple fronts to address the problem.

[88] Arby F, M. J. Malik and M. D. Hanif, *The Size of Informal Economy in Pakistan*, SBP Working Paper Series, No. 33, May 2010, State Bank of Pakistan. Available at: http://www.sbp.org.pk/repec/sbp/wpaper/wp33.pdf

[89] Ahmed, Robina Ather and Mark Rider, *Pakistan's Tax Gap: Estimates by Tax Calculations and Methodology*, International Studies Program, Working Paper 08-11, December 2008, International Studies Program, Andrew Young School of Policy Studies, Georgia State University.

A reflection of the large informal economy is the extremely small proportion of active taxpayers in the population. Thus a large number of businesses and individuals remain outside the tax net even when many of them should be contributing towards government revenue. The FBR embarked upon the Broaden the Tax Base (BTB) scheme, which uses third-party data to identify potential taxpayers (who presently are not registered with the FBR). The official accounts of the progress on tax notices sent out to non-filers and the extent of enforcement are encouraging.[90] These and other efforts have resulted in the number active income taxpayers to increase from 0.98 million in FY2014 to 1.46 million in FY2018[91] and reported to have gone up to 2.154 million in FY2019.



Administrative Limitations

The tax administration is often faulted for a flourishing informal sector. In the last few years FBR has tried to tap into the informal sector by expanding the scope of withholding taxes and applying a higher tax rate on those who do not file their tax returns. Estimates based on 2014 income tax data suggest that 37% of all income taxes and 60% of all withholding income taxes were paid by non-filers.[92]

While FBR has been quite successful in tapping into the informal sector and raising revenue through withholding taxes on all manner of transactions, it has failed to exploit the transaction and consumption database on filers and non-filers to expand the income tax base or to make major tax recoveries from the public.

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[90] The progress on BTB is reported on the FBR website: https://www.fbr.gov.pk/directorate-general-of-broadening-of-tax-base-achievements/11036. It reports that as of June 2016 (the last such update on the FBR website) about 280000 tax notices were issued in a period of three years; 58000 tax returns were enforced; and Rs2.4 billion raised as tax revenue. This progress report differs from that in the Pakistan Economic Survey, 2018-19. P. 62, which reads: "For Broadening of Tax Base (BTB), FBR has taken several initiatives including the distinction between filers and non-filers at the withholding tax stage and the use of third party data. Initially, the objective was to incorporate 300,000 new taxpayers in three years. The BTB drive was successful. During the years 2013-14 to 2016-17 FBR issued 596,464 notices and enforced 264,539 income tax returns."

[91] State Bank of Pakistan, Annual Report 2017-18, Box 4.2.

[92] See Nasim, Anjum, "What the data from 2014 reveals about income tax, Part 1: Tax filers and non-filers", Pakistan's Growth Story, CDPR, November 15, 2016.

Recent work by Khan et al. (2016) [93] and Khan et al. (2019)[94] based on randomized control trials demonstrates that incentives for tax collectors can have substantial impact on tax revenue collection. These incentives can be monetary and non-monetary. Monetary incentives linked bonuses to tax collection. Non-monetary incentives linked posting of bureaucrats to preferred locations. The evidence from these studies is discussed later in Section 5.

Tax Exemptions

One of the key factors behind Pakistan's low tax-to-GDP ratio is that the bases of all major taxes are badly perforated by a large number of tax exemptions and tax concessions granted to various sectors, sub-sectors and economic activities.[95] While a number of exemptions relate to bilateral and multilateral agreements (e.g. Independent Power Producers, Free Trade Agreements, etc.) signed by the government, a sizeable number of exemptions and concessions are outcomes of ad hoc policy decisions of the government to protect and/or to provide incentives for accelerated industrialization, attract foreign investment or to benefit preferred groups in population. These exemptions and concessions not only imply a substantial revenue loss to the government (see Figure 7), but also adversely impact the functioning of the economy and growth prospects by creating distortions in the economy and inequities in the tax system.

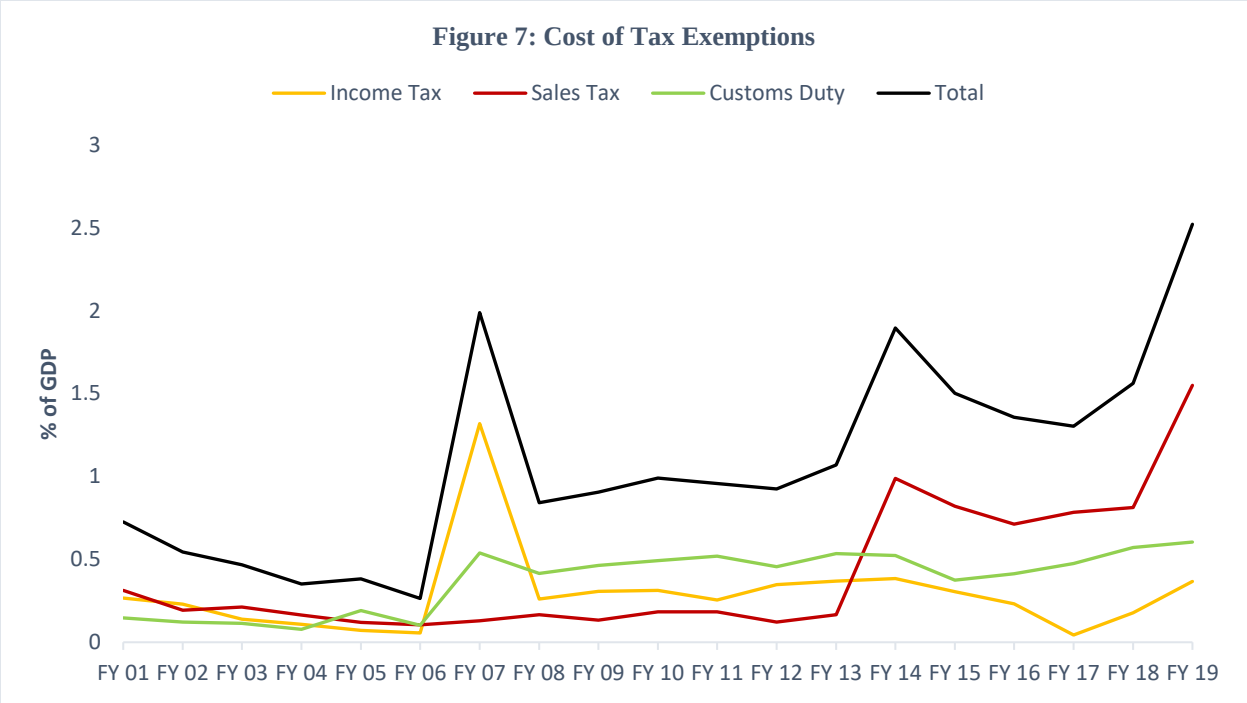
SBP Annual Report 2017-18 shows that overall tax expenditure increased from 1% of GDP in 2010-11 to 1.9 % in 2013-14, as exemptions from payment of GST shot up due to exempting some major sectors from payment of tax. As a result of government efforts, cost of tax exemptions declined to 1.3 % of GDP by 2016-17 but increased again to 2.5% of GDP by 2018-19.[96] Although FBR had made substantial progress in identifying and removing some of the major distortionary tax exemptions, there has been an upward trend again in exemptions on GST and customs. We note that the tax exemptions eliminated are those which are identified as exemptions under the present tax laws but, as we mentioned earlier, there are sub-sectors and economic activities that are effectively exempt because tax authorities are unable to tax them. Little, and usually ineffective, attempts are made to ensure these sectors and activities comply with tax laws.

[93] Khan, A. Qadir,, Asim I. Khawaja and Benjamin. A. Olken, *Tax Farming Redux: Experimental Evidence on Performance Pay for Tax Collectors*, Quarterly Journal of Economics, Volume 131, Issue 1, February 2016, Pages 219–271.

[94] Khan, A. Qadir,, Asim I. Khawaja and Benjamin. A. Olken, *Making Moves Matter: Experimental Evidence on Incentivizing Bureaucrats through Performance Based Postings*, American Economic Review, Vol 109, No. 1, January 2019 (pp. 237-70)

[95] In addition, a number of activities have remained outside the tax net on account of the lack of information available on them.

[96] Also see Cevik, Serhan "Unlocking Pakistan's Revenue Potential", IMF Working Paper WP/16/182; August 2016 p.8.



Poor Tax Audit

Tax enforcement has remained one of the weakest areas of Pakistan's tax administration system. While the FBR has made progress in terms of streamlining its organizational structures, automation of tax records, processing information, reengineering its processes, and facilitating the taxpayers, especially large and medium-sized taxpayers, the enforcement of tax laws and rules has remained inadequate. Although most of the federal taxes encourage self-assessment by taxpayers, the number and quality of tax audits conducted by the authorities remain insufficient to encourage correct assessment by a large number of taxpayers. This weakness in tax enforcement encourages tax avoidance. In an attempt to overcome this deficiency, the FBR developed a system in FY2011-12 which adopted universally accepted parameters for identifying the riskiest (in terms of improper assessment of tax liability) taxpayers for the purpose of tax audits. However, the risk-based audit system ran into some legal difficulties. The authorities have amended the tax laws to avoid future court rulings against the system, yet the application of risk-based audits have not yet been restarted. Moreover, tax demand generated from this process and additional tax collected from revamped audits remained woefully small.

In conclusion, tackling these problems requires a thoughtful political leadership that can build a consensus across political divide to introduce necessary amendments in the law and Constitution, make changes in tax policies, and bring about improvements in the performance of the tax department through a combination of incentives, training and reorganization. It would also require that the tax department is motivated to better exploit the information obtained from third-party sources, follow up on withholding tax records on non-filers, collate information from databases on expenditures and transaction, and pursue information on undeclared asset holdings. Most

importantly, this will require perseverance and patience as such reforms and changes will take time, much more time than the tenure of any government in power.

5. Tax Potential and Reform Options: An Overview of Research on Tax Issues in Pakistan

This section discusses recent research on revenue generation through taxation measures. The research has mostly concentrated on income tax, value added tax, agricultural income tax and property taxation.

5.1 Income Tax

Table 2 compares some major taxes across a thirty year period (1987-88 and 2017-18). As a share of GDP, income tax has increased from 1.7 percent to 4.4 percent. The major increase in income tax is the result of a proliferation of withholding income taxes, starting in the 1990s.

Withholding Taxes

Some of the withholding taxes are akin to taxes on inputs, exports, imports and excise on goods and services and are merely masquerading as income taxes.[97] The dramatic increase in the share of income taxes reported in official documents over the last three decades is therefore quite misleading.[98]

Withholding taxes are presumptive income taxes; some of the withholding taxes are adjustable against the final income tax liability and the others are non-adjustable and treated as final discharge of tax liability. An example of the latter would be a tax on dividends at the rate of 15% typically (but also 7.5% and 25% in certain cases).

An example of adjustable withholding tax is the tax on mobile phone subscribers (under section 236 of the Income Tax Ordinance). However, in practice, the tax is not adjustable for the segment of mobile phone users who do not file their tax returns, either because they are tax evaders or because their incomes are below the income tax threshold. While withholding taxes on mobile phones is one of the indirect ways of taxing individuals who are eligible to pay income tax but do not do so, it also acts as an sales tax on those users of mobile phones whose incomes are below the

[97] In FY2017-18, these withholding taxes were levied on salaries (12.7% of total WHT), dividends (5.5%), contracts (27%), imports (20.9%), exports (2.7%), telephone bills (4.5%), electricity bills (3.2%), bank interest (4.4%), cash withdrawals (3.2%) and others For detailed breakup see Fiscal Policy Statement 2018-19, Ministry of Finance, Government of Pakistan: http://www.finance.gov.pk/publications/FPS_2018_19.pdf

[98] Starting with tax year 2020, the final tax regime (FTR) has been abolished for a majority of cases. "The final tax regime (FTR) for resident taxpayers was introduced in 1992, whereby income of a certain category of persons (i.e. commercial importers, sale of goods, execution of contracts, etc.) was considered as final tax liability in respect of income of such persons. Now, FTR has been abolished in a majority of the cases, and relevant incomes streams have been made subject to minimum tax in all cases (other than exports, dividends, prizes and winnings, sale of petroleum products, etc.), with tax deducted/deductible to be treated as minimum discharge of tax liability. However, in case tax liability on income worked out on a net income basis exceeds such liability, the excess amount would have to be paid/discharged by such persons, along with the return of income." http://taxsummaries.pwc.com/ID/Pakistan-Corporate-Taxes-on-corporate-income

income tax threshold and are not required to file an income tax return – this tax is over and above the actual GST on these services. The gross tax collected from this source amounted to over Rs40 billion in FY2017-2018 (out of a total gross income tax collection of Rs1585 billion).

Personal and capital income taxation

The Income Tax Ordinance categorizes income in many different ways with different tax rates applicable to each income category. The Income Tax Ordinance provides tax rates for the following categories of income:

- Incomes of 'Individuals and Association of Persons', with further distinction between salaried and non-salaried individuals.
- Taxable income of Companies, with further distinction between banking companies, non-banking companies and small companies.
- Dividend income
- Profit on debt
- Payments to non-residents (for royalty and fee for technical services)
- Shipping and air transportation income of a non-resident person
- Income from property
- Capital gains from disposal of securities
- Capital gains from disposal of immovable property
- Income of builders
- Income of developers

Within each category there are further distinctions with different tax rates applicable within these sub-categories.

Some companies that do not pay income taxes or pay too little tax, are required to pay a minimum turnover tax. The FBR does not have the capacity to audit a large number of firms that evade taxes. In recognition of this constraint, a turnover tax was instituted. The welfare implications of this tax has been empirically studied by Best et al. (2015), which we discuss later.

Individuals are taxed at a progressive rate. The same is the case with Association of Persons (AOPs).[99] The progressive taxation of AOPs may be justified on the grounds that it combines personal income and capital income and separating the two is not feasible. The progressive tax on incomes of builders and developers could have a similar explanation.[100] However, this explanation cannot be extended to the progressivity that is built into taxation of profit on debt, income from property and capital gains from immovable property.

[99] As of tax year 2020, incomes of 'individuals and association of persons' of up to Rs400,000 were exempt from taxation with the highest tax rate of 35% on incomes exceeding Rs6 million.

[100] Note that income of builders and income of developers are presumptive incomes and tax is applied to the area built or area developed.

Furthermore the progressive structure for one category of income bears little relation to the progressivity in another. For example, in the case of income from property, the highest rate of 35% applies to incomes that exceed Rs8 million compared with incomes of individuals and AOPs where this rate is applied to incomes above Rs6 million.

Tax rates on large and small companies

Within the category of companies there is a distinction at present between banking companies and non-banking companies. The tax rate on banking companies is 35% and on non-banking companies it was fixed at 29 percent of taxable income for the tax year 2019 and onwards. On top of the corporate tax there is a 4% super tax on banking companies. (A super tax on a person with income exceeding Rs500 million has been abolished from tax year 2020). These tax rates compare with average rates of 28.81% in Asia, 18.38% in Europe, 23.93 in OECD and 23.03% in the world in 2018.[101]

Tax on small companies was much lower at 24% in tax year 2019, which will go down gradually to 20% from 2023 onwards.

Comparison of effective tax paid by individuals on their corporate investment with tax on profit on debt

In addition to corporate tax of 29% to 35%, there is a withholding tax on company dividends which in most cases is 15% (under the Finance Act 2019). This in effect means that an individual who buys shares in a large corporation, pays a tax of 39.65% on the returns from his investment (29% as corporate tax and 15% on the after-tax profits), irrespective of his other earning. In comparison a debt instrument would attract a in the range of 15% to 20%.

We are unable to understand or explain the huge discrepancy between tax rates applicable to the two forms of capital income.

Income taxes as corrections for distortions and as incentives for investments

A large company may finance most of its production and operations from debt and the cost of debt can be treated as a cost item in calculating taxable income of the company. On the other hand a small company may not have the same access to loans from banks and may have to rely largely on the equity. For the same production order, a large company is likely to make a larger profit than a small company. Thus even with a higher tax rate, the after-tax profit from investment in a large company may be greater than in a small company. The lower tax rate on small companies could be rationalized as a way of correcting the other distortions in the economy.

The unequal access to debt finance is a distortion that needs to be corrected, possibly by encouraging banks to cater to the special needs of small businesses. Using the tax system as a

[101] https://taxfoundation.org/corporate-tax-rates-around-world-2018/

vehicle to address this distortion and all manner of other distortions, ends up making the tax system highly complex and non-opaque.

Similarly the notion that government should offer low tax rates to attract greater investments in particular sectors needs to be revisited. The tax rate is only one part of the overall tax and incentive structure for investments. The overall tax burden as captured by Average Effective Tax Rate (AETR) and the Marginal Effective Tax Rate (METR) suggest that tax burden differs by sectors and by type of assets.[102] Good tax policy would suggest that policy makers should not discriminate between sectors and assets for investment purposes unless there are very good reasons, e.g., for reasons of export growth or greater employment in a region.

There has not been any serious study of the cost and benefits of tax and investment incentives in Pakistan. It is not clear whether the benefit of such incentives outweigh the costs. The international experience on this is mixed. The emerging consensus is that more important than tax incentives (lower tax rates or tax holidays) are other elements of investment climate, such as macroeconomic stability, quality of infrastructure, skill level of the workforce, location, size of the domestic market, regulatory environment and the rule of law (World Bank, Pakistan Tax Policy Report (2009).[103]

Capital income taxation in Pakistan and optimal capital taxation

As noted in our review of optimal taxation, there is a case for zero taxation of capital income but if capital income is to be taxed, then uniform taxation of capital income should be the default, and any departures must have justification in theory and evidence.

If FBR had a rationale for taxing corporate incomes, small companies and AOPs unequally and for levying non-neutral taxes on capital incomes, it has not been preserved in any public document. It seems very likely that some tax clauses and amendments are there to correct for distortions but hiding behind these corrections are also distortions to serve particular vested interests.

The administration of income tax is one of the major bottlenecks in effective implementation of the taxes. The limitation of the tax administration must be kept in mind when designing a tax system. Tax compliance involves its own cost. A complicated tax system can add enormously to the cost of tax compliance. The World Bank Report: Comparing business regulation in 190 economies, the total number of hours involved in paying taxes in 2019 in Pakistan was 293.5 hours with 47 tax payments involved per year on average. The global average was 237 hours.

Informality and Turnover Taxes

As mentioned in Section 3, a key result of the optimum tax theory is that there should be no taxes on intermediate inputs including imported intermediate inputs. This result can be seen as the basis for the tax reform that has focused on value-added tax that rebates taxes paid on intermediate

[102] See Alm, James and Mir Ahmad Khan, *Tax Policy Effects on Business Incentives in Pakistan*, Working Paper 1705, Tulane Economics Working Paper Series, July 2017.
[103] Pakistan Tax Policy Report: Tapping Tax Bases for Development, Report No. 50078-PK, World Bank, July 2009.

inputs; and reduction, if not elimination, of trade tariffs. The results of the optimum tax theory are based on the assumptions that there is no tax evasion and there are no administrative costs in tax enforcement. These assumptions do not hold even in the most developed countries but in the developing countries the administrative machinery for tax enforcement is generally weak and tax evasion is consequently pervasive. This explains the resistance to tariff reduction in developing countries and widespread reliance in developing countries on some form of minimum tax schemes that either taxes profits or turnover, whichever is greater. The turnover tax is in general lower than profit tax (0.5 percent versus 35 percent on companies in Pakistan). The turnover tax is effectively a tax on value added as well as on inputs. The tax violates the principle of production efficiency that requires that inputs should not be taxed. This loss in efficiency has to be weighed against revenue efficiency (compliance) that the minimum tax schemes make possible. This tradeoff is theoretically explored by Best et al (2015)[104] in both a partial equilibrium (with only final good production) and general equilibrium (with intermediate good production) setting and empirically explored in a partial equilibrium setting in the context of Pakistan.

The authors "estimate that turnover taxes reduce evasion by up to 60-70% of corporate income compared to profit taxes." They also "find that a switch from profit taxation to turnover taxation (at a much lower tax rate) can increase corporate tax revenues by 74% without decreasing aggregate after-tax profits (hence representing a welfare gain). The reason is that the loss of production efficiency is more than compensated for by the increase in revenue efficiency due to larger compliance. While these gains are based on a uniform turnover tax on all firms, [it is argued] that heterogeneity in evasion may justify a minimum tax regime that limits turnover taxation to a subset of firms with low reported profit rates." As noted above these conclusions are based on a partial equilibrium analysis and the general equilibrium analysis may be different.

General Sales Tax

The GST was legislated in 1990. It was expected to replace the existing sales tax on goods with a tax in the value added mode unlike its predecessor which was a turnover tax (an excise tax at the manufacturing stage) - see Ahmad (2011).[105] The GST was also expected to generate sufficient revenue to substitute for the revenue loss from liberalization of the trade regime that gained momentum around the same time. Among the advantages of a value-added tax are that it eliminates the cascading involved in turnover taxes, reduces distortions in relative prices and the incentives for industries to vertically integrate, and enhances competitiveness of exports (by removing any taxes on exports and rebating all input taxes on exports).[106]

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[104] Best, Michael Carlos, Brockmeyer, Anne, Kleven, Henrik Jacobsen, Spinnewijn, Johannes and Waseem, Mazhar (2015) Production versus revenue efficiency with limited tax capacity: theory and evidence from Pakistan. Journal of Political Economy, 123 (6). pp. 1311-1355. ISSN 0022-3808.

[105] Ahmad, Ehtisham, *Why Is It So Difficult to Implement a GST in Pakistan*? Working Paper, International Growth Centre, May 2011.

[106] Heady, Christopher, *Tax Policy in Developing Countries: What can be Learned from OECD Countries, OECD, 2002* (Paper prepared for presentation at the seminar 'Taxing Perspectives: A Democratic Approach to Public

GST Revenue and Efficiency

From the base year (FY1990), nominal GDP in Pakistan has grown at an average annual rate of 16.6% and federal sales tax on goods has grown at an average annual rate of 18.3%.

As a ratio of GDP, the sales tax or GST – both federal and provincial – has increased from 3.3% to 5% over this period. During the same period, excise taxes (federal and provincial) have dropped from 4.9% of GDP to 0.6%.

The fact that GST has largely replaced excise taxation is a good development except that if the value chain of a GST is broken because of tax exemptions provided by FBR, then the tax works as an excise and no longer neutral across goods as intended. The fact that after declining for a few years, exemptions from GST have shown an increase since FY2016 suggests that the road to a comprehensive GST is by no means linear.

A common measure for comparing VAT efficiency across countries is C-efficiency. It is calculated by taking the ratio of VAT revenue to consumption (typically private consumption) and dividing this ratio by the standard VAT rate.[107] In effect, it would be the ratio of VAT revenue to the potential VAT revenue if the standard VAT applied to all private consumption. The C-efficiency of GST on goods and services was 36% (in 2018)[108] in Pakistan compared with Sri Lanka (47%), Turkey (48%) and New Zealand (93%) as reported in Ahmad (2011).[109] Tax efficiency depends on a number of factors such as the presence of an informal sector, tax avoidance strategies that exploit loopholes in the tax laws, tax exemptions, tax incentives, zero rating of goods,[110] VAT threshold, documentation requirements, and the fear of attracting income tax scrutiny.

We note that in FY2017-18, about 55% of the sales tax collection was at the import stage. Although this share fluctuates from year to year, it was the same two decades ago. The GST at the import stage is simpler than the GST on domestically produced goods.

Political Economy Issues

In discussing why the business community in Pakistan would be opposed to reform of GST that should be in its interest, Ahmad (2011) makes the following observation:

"Part of the problem is legal – the FBR has the power to amend and change the base of the tax without reference to Parliament through the issuance of SROs. They continue to treat the GST as if it were an excise tax, with fixed price and presumptive regimes. … The power to grant

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Finance in Developing Countries', at the Institute of Development Studies, University of Sussex on 28-29 October 2002.)

[107] For the merits and limitations of this and other measures of VAT efficiency see chapter 4 in Ebrill, Michael Keen, Jean-Paul Bodin and Victoria Summers, *The Modern VAT*, International Monetary Fund, Washington, D.C. 2001.

[108] The C-efficiency is calculated at 17% standard rate for goods. The standard rate for services was 16% in Punjab, and Sindh but 19.5% for telecommunications.

[109] See Ahmad, Ehtisham, *Why Is It So Difficult to Implement a GST in Pakistan*? Working Paper, International Growth Centre, May 2011.

[110] Sokolovska, Olena and Sokolovskyi, Dmytro, VAT efficiency in the countries worldwide, Research Institute of Financial Law, State Fiscal Service of Ukraine, 2015.

exemptions suits the tax administrators as it provides a basis for bestowing favors, and appeasing the interest groups. Thus, the interests of administrators and the powerful vested groups reinforce each other."

The problems with VAT are not unique to Pakistan. Developing countries generally encounter many of the same problems that Pakistan does. Consider the following quote from Bird and Gendron (2006, P. 17) [111]:

"Potential taxpayers have many ways to escape the fiscal system in most developing and transitional countries. They - or their tax base - may flee abroad. Or they may remain but hide in the shadow economy. Or they may secure some form of favourable treatment by exerting influence in various ways (legal or otherwise) to have changes made in tax law or its interpretation. Even if through an oversight they find themselves somehow trapped within the taxation system, they may seek forgiveness through amnesty laws or specific grants of relief. In some countries the record over the years of repeated erosion of the base of the VAT through concessions at many levels as well as outright evasion suggests that many or all of these processes have been at work."

They mention that VAT that, in principle, is a self-assessed tax must satisfy certain conditions that "include such things as simple, clear, stable tax laws; adequate service and support to taxpayers in complying with tax obligations; simple procedures for registration, filing, payment and refund; effective collection enforcement; reasonable audit coverage; strict application of penalties; and provision for independent review." As they point out most developing countries do not meet all or even most of these conditions.

Strengthening Tax Administration

Good tax administration requires sound analytical work. International experiences are helpful but every country faces a unique set of problems, and these problems change over time. Solving these problems and keeping up with the new challenges requires a systematic approach to assembling and analyzing data, which would dictate improvement in policies and administration to deal with emerging tax issues. (see Bird et al. 2005, pp. 131-135).

Unfortunately there is very little systematic analytical work that is produced by the tax departments at the FBR or by the tax departments in the provinces. It is not that the officers at the tax department are incapable of such work. In fact some of the officers have gone on to do outstanding analytical work as researchers and academics using data generated within the tax department. Such work is not the priority of the government or the tax departments, and very little human and financial resources are dedicated for such analytical work. The departments depend for advice almost entirely on external agencies, in particular donor agencies and their consultants. Such advice is typically based on best practice in other countries but isn't nuanced or contextualized.

[111] Bird Richard M. and Pierre-Pascal Gendron, *Is VAT the Best Way to Impose a General Consumption Tax in Developing Countries*? International Studies Program, Working Paper 06-17, Andrew Young School of Policy Studies, Georgia State University, May 2006.

It is the experience of the authors that the tax department is extremely reluctant to share data with researchers and academics even when they volunteer to carry out the analytical work for the department. Since researchers usually come back with request for more data and information that places additional demand on the officers' time with little professional recognition, the tendency is to procrastinate and give the researchers the run around. Some doors are opened if the men at the helm of affairs at FBR and the Ministry of Finance are enlightened and see the value for such work but when these officers are transferred to other posts, the cooperation stalls and the research effort comes to a grinding halt. Any tax-related research is therefore sporadic and ad hoc with no systematic and institutional commitment to making tax research an integral part of tax policy and tax design.

Tax Refunds

Pakistan has followed international norm of destination-based VAT, and consistent with this principle exports have been zero-rated. Zero-rating of any good involves refund of all taxes paid on intermediate inputs that go into its production. However, exporters in Pakistan do not have a good experience with refunds.[112] Their tax refunds on inputs can remain stuck at CBR/FBR for month if not years, and even if input taxes are refunded eventually, businesses suffer on account of loss on working capital. Such inordinate delays effectively means that exports are being taxed and their competitiveness impacted. In 2011, under intense pressure from exporters, the government tried to address this issue by exempting major export sectors (textiles, sports goods, leather products, surgical instruments, carpets and rugs) altogether from GST. This concession had addressed the reimbursement problem of exporters but has also deprived the government of revenue from GST on domestic sale of these products. In the past few months the government has reverted back to zero-rating of exports (instead of exemption of the entire value chain of exportable goods) but the resistance from the exportable sectors was very strong and for good reason.

As noted above, in a highly contested market of exports, competitiveness depends on timely refunds of input taxes. Processing of refund claims at the FBR does not meet the exporters' expectations and they are frequently found petitioning the government, through various means including newspaper Ads, for tax refunds. Automatic refund of claims is also not advisable. FBR has to be vigilant against fake receipts, and fraudulent claims and therefore, a certain percentage of the refund claims have to be audited. The requirement for audit brings tax collector and tax payers in contact. If history of such contacts is something to go by, businessmen can expect considerable degree of extortion when large refund amounts are involved.

Administration of VAT and processing of VAT refunds is a challenge that most countries have to deal with. Harrison (2008) discusses several approaches that have been adopted worldwide. The schemes he discusses are: (a) zero-rated supplies to exporters, (b) large scale cross-checking of

[112] VAT refunds could also accrue to non-exporters, e.g., to taxpayers supplying zero-rated goods and services to the domestic market or to traders who face a temporary slump in sales that result in temporary credit balance or to enterprises that have made large purchases of capital goods relative to sales or to traders who face dual rate structure with output taxed at a lower rate than inputs. (See Harrison, Graham, *VAT Refunds* in VAT in Africa, editor Richard Krever Pretoria University Law Press, 2008, pp. 143-144).

invoices, (c) certification of refund claims by certified public accountants (CPAs), (d) preferential treatment of good compliers, (e) purchases paid through banking system, (f) VAT bank accounts, and (g) deferment of VAT on capital goods. He then evaluates each one along the following dimensions: (1) reduces or eliminates refund delay, (2) reduces number of refund claims, (3) enhances protection of revenue base, (4) reduces taxpayers' compliance costs, (5) saves administrative resources. His conclusion is that most schemes add to both administration costs and compliance costs. Only scheme *d* results in a reduction in these costs, and at the same time speeds up refunds of most traders and enhances VAT revenue base.

Pakistan adopted the preferential treatment scheme in the late 1990s with refund claimants categorized into three groups: 'gold', 'silver' and 'others' with the 'gold' claimants getting their refunds typically without pre-audit in 3-5 days, the silver claimants have their claims processed within 15 days provided the claim does not exceed an upper limit. Other refund claimants are subject to pre-refund verification under a specified set of circumstances. (See Harrison (2008) for details on this and other desirable features of an effective VAT refund system that are especially suitable for developing and transitional countries).

GST with Split Jurisdictions

Constitutionally the sales tax on goods is in the federal domain but the sales tax on services is constitutionally a provincial subject. Provinces can delegate collection to the federal government, which was the case up till 2011 after which the provinces started to assume collection responsibilities except for taxes on telecommunication, banking and insurance, which are still collected by the federal government and transferred to the provinces (see below). [113] A federal excise tax in the GST mode is imposed on the banking and insurance sector (with crediting of taxed inputs and crediting/payments of refunds to businesses using these services).[114] Ahmad (2011) suggests that Pakistan has followed the international best practice on such taxation although many counties including EU have exempted these services from taxation.

Financial services are difficult to tax under the value added mode and various ways have been proposed in the literature on the best way to tax these sectors. Bird, Gendron and Rotman (2005) provide an summary of alternative ways of taxing financial services and suggest that the simplest way for developing countries would be to exempt the sector from value added taxation altogether. The countries still benefit from the VAT collected on inputs purchased by the financial sector but not the additional tax that could be collected from the value added by the financial sector.

If sales taxes are to be levied in the value added mode then the split jurisdiction (with federal government responsible for tax on goods and the provincial governments responsible for tax on services) creates problems of refund claims across provinces and between provinces and the federal government. Despite claims to the contrary, the sales tax on services is collected in the

[113] "In both India and Pakistan […] a key obstacle to arriving at coherent VATs has been a constitutional restriction originating in the 1935 Government of India Act, which allocates the powers to tax goods and services uniquely to distinct levels of government —a distinction running counter to the appeal and logic of the VAT, which must apply on an integrated basis to both." Michael Keen, *Taxation and Development – Again*, IMF Working Paper, WP/12/220, September 2012.

[114] Ahmad (2011, P. 13)

excise mode and not the value added mode and suffers from disadvantage of tax cascading. The split jurisdiction also creates situations where tax can be exported, i.e., it is levied in one province but is borne by consumers of another province.

According to Bird et al. (2005) international experience suggests no one has managed to work out an acceptable system of taxing sales at two levels of government. In the last two years (since July 1, 2017) India has introduced a comprehensive GST replacing a number of indirect state level and central government taxes (including tax on services imposed by the central government and GST on goods levied by state governments). The tax was introduced through a constitutional amendment. The GST is a Dual VAT, consisting of two components: one levied by Centre (CGST) and another levied by States and Union Territories (SGST). The Centre is responsible for levying and collecting CGST and States for levying and collecting SGST on all transactions within a State. For inter-state transactions (and imported goods or services), an Integrated GST (IGST) is levied by the Central Government. The Dual VAT is a destination-based tax, which is paid to the state where the goods or services are consumed not the state in which they were produced. A GST Council or the governing body has been formed which consists of 29 state-level representatives, one from each state, and three representatives of the central government. The Council is responsible for tax rates, tax rules and regulations.

In the context of Pakistan Ahmad (2011) discusses options for administering federal and provincial GST. These consists of (1) a single agency for the federal and provincial governments, (2) complete provincial administration, and (3) hybrid solution. Within the hybrid solution he discusses in greater details (i) standalone services (ones that do not significantly affect other sectors, or provinces, in terms of credits or refunds, (ii) services requiring input credits or forming inputs into other sectors, and (iii) telecommunication. The last of these three is a sub-category of the second but as the largest revenue earner it was selected for more in depth analysis. The solution Ahmad provide under the hybrid version are ways to salvage the value-added tax as best as possible under the existing arrangement with provinces taking charge of sales tax on services. Ahmad regards the present dispensation as unsatisfactory and proposes renegotiating a new arrangement within the NFC framework which would give the provinces a more assured share of total revenue and some control over rates. He suggests dual-GSTs on the Canadian model or preferably “the Italian IRAP, an origin-based GST with rates determined by the region that sits on the central GST base, and can be administered by a single administration.”

Equity Considerations

One of the objections to GST is that its incidence is on the consumers and therefore the burden of taxation on the poor is unavoidable. A case is then made to exempt goods from VAT that are a major share in the consumption bundle of the poor. The counter argument is that equity is a property of the tax and expenditure system as a whole and not individual taxes. Thus a progressive income tax, together with a social protection program can address the equity considerations and that each individual tax should not be burdened with meeting the equity requirements. Furthermore, whether the sales tax is regressive, neutral or progressive should be seen in the

context of the tax that it has replaced or is the likely alternative (given constraints on raising income from other sources). The comparison with an excise tax in the context of some other countries suggest that "even in instances when VAT itself appeared regressive, the change from import and excise taxes to general sales taxes such as VAT motivated largely by trade liberalization appeared in general to have made tax incidence a little more progressive in most poor countries."[115]

In Pakistan, major category of goods that are exempt from taxation are computer software, poultry feeds, medicines and unprocessed agricultural produce of Pakistan.[116] There is a whole array of specific goods that are either exempt or charged a reduced or fixed tax rates.[117] The incidence of the sales tax regime as it exists today with its exemptions, zero rating, reduced rates and fixed rates has not been studies recently. An earlier work suggests that when households are ranked according to their consumption, then the incidence of the tax is slightly progressive.[118] The argument for using consumption rather than income is that if households base their spending on their expected lifetime income, then consumption in a given year is a better proxy for lifetime income than current income.

Informality

The issue of informality or tax compliance is one of the most challenging tasks that tax administrators face. In deciding how to best employ administrative resources, the tax department has to weigh the revenue advantages (and the gain from production efficiency) of extending the net to micro and small enterprises, against the administrative cost of doing so, and also weigh whether the administrative resources are better spent extending the net to the hard-to-tax sectors or improving refunding to exporters.[119] There is a threshold beyond which the costs outweigh the benefits and the threshold VAT is the result of such a balancing act. The larger the size of small and micro enterprises and the hard-to-tax sectors the smaller the formal sector from which VAT revenue can be generated. There is of course the temptation to increase tax revenue by raising the tax rate on the formal sector. This can of course create incentive for the formal sector to move their activities into the shadow economy and can also reduce the incentive for the shadow economy to transition into the formal economy.

To the extent that the informal sector has to buy its inputs from the formal sector, some of the tax is passed on to the informal sector. Similarly it is to the advantage of the formal sector to purchase its inputs from VAT registered sellers rather than from non-registered ones. These are some indirect ways in which the tax is passed on to the informal sector or the scope of the

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[115] See Bird and Gendron (2006, P. 24), for these conclusions that are in turn based on K. Chu,, H. Davoodi, and S. Gupta, "Income Distribution and Tax and Government Social Spending Policies in Developing Countries," Working Papers No. 214, UNU/WIDER, December 2001; R.M. Bird and L. De Wulf, "Taxation and Income Distribution in Latin America: A Critical Review of Empirical Studies," IMF Staff Papers, 20 (1973): 639-82.

[116] As stated at the FBR website: https://www.fbr.gov.pk/sales-tax/131167/131269

[117] The details are available in the Sales Tax Act 1990 (as amended till December 2019) available at: http://download1.fbr.gov.pk/Docs/20201281315213608SalesTaxAct,1990(31.12.2019).pdf

[118] Refaaqat, Saadia, *Social Incidence of the General Sales Tax in Pakistan*, IMF Working Paper, WP/03/216, November 2003.

[119] Michael Keen, *Taxation and Development – Again*, IMF Working Paper, WP/12/220, September 2012 (p. 15)

informal sector reduced. Other ways of extending the net to the hard-to-tax sectors is to minimize the documentation requirement and simply charge a license fee. (See Bird and Gendron (2006) and Keen (2012)).

Several attempts in the past few decades have been made by the governments in Pakistan to extend the VAT net to small traders but these efforts have always ended with governments conceding to the trader's intransigence. History repeated itself again last year when the government conceded to the traders' demand on the level of sales to exceed Rs100 million to qualify as a withholding agent and for the electricity bill of the shops/stores to exceed Rs1.2 million a month for it to be registered for sales tax purposes.

Agricultural Income Tax[120]

Agricultural income tax (AIT) is potentially among the most important sources of provincial tax revenues. In the financial year FY2018, the share of 'important crops' and 'other crops' in gross domestic product (GDP) was about 8 percent (at current prices). Agricultural income tax, which is levied on income from crop farming but effectively collected as a per-acre land tax, was about Rs2 billion. In comparison, direct tax revenue—overwhelmingly, income tax—collected from non-agricultural sources of income or, more specifically, from non-crop sources of incomes,[121] was Rs1537 billion.

This contrast between the collection of income tax from the agricultural and non-agricultural sectors stems from a constitutional provision that empowers the Parliament (consisting of the President, the National Assembly and the Senate) to tax all sources of income except agricultural income, which is the exclusive preserve of the provincial assemblies and governments.

Additionally, agricultural income and land tax rates have not been revised periodically to reflect changes in the nominal income of farmers and landowners. In Punjab, which accounts for over 66 percent of the country's cropped area, tax rates on agricultural land and incomes had remained frozen at the levels set in 2002 and 2000 respectively till they were revised by the Finance Act 2019.[122] The case of Sindh is almost similar, which accounts for 18 percent of the cropped area.

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[120] This section is based on Mukhtar, Hanid and Anjum Nasim: *Agricultural Taxation in Punjab: The Missing Billions*, Working Paper No. 01-16, Institute of Development and Economic Alternatives, February 2016.

[121] According to Article 260 (1) of the Constitution of Pakistan (Government of Pakistan 2015): "'Agricultural income' means agricultural income as defined for the purpose of the law relating to income tax." The relevant law at the time the Constitution was approved was the Income Tax Act 1922. The present income tax law is the Income Tax Ordinance 2001, which provides a definition of agricultural income. This definition can be interpreted in a narrow sense as income from crop farming and renting of land, or more broadly to include income from livestock, animal husbandry, poultry farming, horticulture, etc. We are not aware of a case law interpretation of agricultural income. However, from the circulars issued by the Central Board of Revenue (the predecessor of the Federal Board of Revenue, the tax administrative wing of the Ministry of Finance) and from the time-bound tax exemptions provided to various land-related business incomes, it is obvious that the federal government in Pakistan interprets agricultural income only in the narrower sense of the term, i.e., as income from crop farming and from renting of land (See Nasim [2013] for sources and references).

[122] Under the Punjab Agricultural Income Tax Act (PAITA) 1997, tax on irrigated cultivated land is charged at the rate of Rs0 per acre for cultivated land not exceeding 12.5 acres, Rs300 per acre for cultivated area exceeding 12.5 acres but not exceeding 25 acres, and Rs400 per acre for cultivated area exceeding 25 acres but not exceeding 50 acres

The constitutional provisions that allow provinces to tax agricultural incomes and the federal government to tax all other sources of income have allowed disparate tax treatment of income on the basis of its source. This not only creates inequities but also promotes tax evasion. However, some authors have shown that there is a case for differentiated tax treatment of agricultural income in developing countries (see e.g., Bird [1974] and Skinner [1991a, 1991b])

Punjab Agricultural Income Tax Act (PAITA) 1997 allows for the taxation of agricultural incomes but it also allows for tax to be collected as a land tax (unless income tax exceeds land tax). However, the tax is effectively collected as a land tax. Mukhtar and Nasim (2016) have estimated potential tax revenue in Punjab under four different modes. The first three tax modes are based on PAITA 1997 and consist of a pure land tax, a combination of land and income tax, and a pure income tax. The fourth mode is based on Income Tax Ordinance (ITO) 2001 and shows the tax that farmers would have paid if agricultural incomes were taxed at rates comparable with incomes in non-agricultural sectors. The authors estimate that in FY2014, the tax yield under the four modes would have been Rs2 billion, Rs15 billion, Rs114 billion and Rs54 billion, respectively.

Administrative Issues and Intergovernmental Relations

In Pakistan, agricultural land tax/AIT collection is the responsibility of the provincial boards of revenue (BOR), which historically collected land revenue and maintained records of land ownership and transfers. As an institution, the BOR has atrophied, even for the purposes of performing its traditional role, and it is hardly suited for collection of an income tax. Reform of the revenue system and strengthening of collection agencies is essential for effective and buoyant revenue collection from agriculture. The resistance to taxation from interest groups and lobbies may be an important hindrance to taxation but resisting such pressure can be more feasible if institutions are in place to carry out the government‘s edict. The investment in capacity building and reform of the agricultural land/income tax system also makes economic sense. As estimates by Mukhtar and Nasim (2016) show, such investment promises potential revenue of about Rs50 billion or more annually at 2013–14 prices for many years to come, though there may be year to year fluctuations because of weather-related output shocks and volatility of commodity prices. Over time, fragmentation of holdings may tend to reduce the revenue potential but there may be counter-tendency because of higher yield, output and income.

The Federal Board of Revenue (FBR), the revenue collection arm of the Ministry of Finance, has in the past collected some taxes on behalf of the provincial governments, notably sales tax on services. The provincial governments have set up their revenue authorities and taken ownership of revenue collection of sales tax on services. The institutional weakness of the tax collecting

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and Rs500 per acre for cultivated area exceeding 50 acres. Unirrigated land is also taxed, with two acres of unirrigated land treated as one acre of irrigated land. Irrigated orchards are taxed at the rate of Rs600 per acre and unirrigated orchards at the rate of Rs300 per acre.

Under its Second Schedule, PAITA 1997 defines rates of income-based tax. There is an exemption limit of Rs400,000. A fixed tax of Rs1000 is levied on income that exceeds Rs400,000 but does not exceed Rs800,000. A fixed tax of Rs2000 is levied on income that exceeds Rs800,000 but does not exceed Rs1200,000. The tax rate is 5 percent for income between Rs1200,000 and Rs2400,000 per annum; for income between Rs2400,000 and Rs4800,000 per annum, the tax is Rs60,000 plus 10 percent of the income above 2400,0000; for income above Rs4800,000 per annum, the tax is Rs300,000 plus 15 percent for income above Rs4800,000.

agencies at the provincial level would suggest a need to farm out AIT to FBR. This, however, may not be feasible for a number of reasons. While the FBR's own record with income tax enforcement and compliance is not the most illustrious, the federal government may also not have the incentive to collect revenue for BORs. On the other hand, the provinces may not want to admit their administrative limitations and invite an overbearing federal government into their revenue affairs. However, with certain incentives, the FBR could agree to send out lists to the BORs of all tax filers who have declared agricultural income in their tax returns, with an estimate of potential revenue collection.

Mukhtar and Nasim (2016) have shown, potential revenue from AIT in Punjab was around Rs50 billion in fiscal years 2010, 2012 and 2014 but it was considerably greater (Rs78 billion) in FY2011 and considerably less (Rs34 billion) in FY2013. These fluctuations are partly explained by fluctuations in agricultural income over this period. An income tax typically has the flexibility to adjust the tax burden to these cyclical fluctuations in income, but a proper agricultural income tax is unlikely to be implemented for a long time. Until a political constituency takes root that allows a non-discriminatory AIT to be legislated, and institutions are developed that can translate policy into practice, alternative forms of agricultural taxation will have to be considered that are simpler and politically less toxic.

As mentioned earlier, the NFC, as part of its award in 2010, called on provinces to initiate steps to effectively tax the agriculture and real estate sectors. However, there was nothing in the award to incentivize such an undertaking by provinces. No target was set, nor any timeline provided. The 7th NFC Award was another opportunity lost for making the provincial governments ramp up their AIT and real estate taxation. Under the 18th constitutional amendment, the revenue share of the provinces agreed in the 7th NFC Award will be the lower bound in future NFC awards.

Options for Agricultural Taxation

While income-based agricultural taxation has substantially greater revenue potential in Punjab than the current land-based regime, the shift to income-based taxation along the lines of personal and corporate income tax may not be possible in the near future. However, interim options can be explored. In this section, we discuss some forms of taxes that may be administratively feasible in in the short or medium term.

Land Tax

A per-acre tax is perhaps the simplest form of land taxation. Its simplicity derives from the fact that it invokes no ownership characteristics (see World Bank 1999); much of the simplicity is retained if the tax varies by irrigation status, i.e., irrigated or unirrigated. However, the tax can be regressive if no allowance is made for the quality of land and for the possibility that poor farmers own less productive land (Skinner 1991b, p. 499). These features make the tax less attractive, and imply that some owner and quality characteristics ought to be considered.

The current land tax regime in Punjab invokes land and ownership characteristics and therefore loses the simplicity associated with a per-acre tax. The tax is levied on cultivated rather than

cropped area, which compromises the progressivity of the tax. However, the tax is not likely to be regressive either because of the generous threshold limit allowed in PAITA 1997.

The simplicity of a per-acre tax can be retained without compromising the tax revenue potential obtained from treating farm income as business income. Mukhtar and Nasim (2016) derived total tax revenue that would be generated in each farm size category if farmers paid the same income tax rates as applicable to business incomes for FY2010. They then divide this total revenue within a farm-size category by the number of acres in that farm-size category to obtain the per acre tax in each farm size category. The per-acre tax ranges from Rs0 for farms smaller than 2.5 acres to Rs6,705 per acre for farms of 100-150 acres. By comparison, under PAITA 1997, in FY2010, the tax rate for farmers with cultivated irrigated area of 12.5 acres and above ranged between Rs150 per acre and Rs250 per acre. The contrast between the tax rates applicable under PAITA 1997 and the tax rates calculated by Mukhtar and Nasim imply that in order to make the structure of land-based tax comparable to the structure of tax on non-agricultural income (in the sense that farm income is taxed at the same rate as similar income in the non-agricultural sector), the exemption limit of the land-based tax needs to be lowered from 12.5 acres to 2.5 acres and the tax rates require a substantial increase.

Land-based tax thus remains one easy choice for imposing presumptive tax on agricultural income. The tax rates presented in Mukhtar and Nasim (2016, Table 7) present one option. Variations on the existing land tax with lower threshold limit and higher tax rates are other options. Presently, tax from land-based agricultural tax is only a fraction of the tax that is collected from businesses in the non-agricultural sectors that generate similar levels of income. The revision of tax rates and threshold levels can bring some parity between taxation of income from different sources, which is one of the tenets of a good taxation system.

Presumptive Income Taxes

An income tax in agriculture along the lines of personal and corporate income tax may not be possible for quite some time. The limited ability of farmers to maintain records and accounts and of the provincial tax administration to assess, audit and collect taxes, makes it very unlikely that a modern income tax will be extended to the agriculture sector anytime soon. For the near future, the tax will be some form of presumptive income tax, which would involve estimating the gross value of output (GVO), subtracting from it an estimate of the cost of production (COP), and then applying an appropriate tax rate. International experience suggests that some countries try to obtain actual values of both revenues and costs while others work with estimates of either or both.[123]

The PIU-based land tax, which the PPP government tried to introduce in 1977, and which caretaker governments also attempted in 1993 and 1996, is a form of presumptive income tax that takes into account the productivity differences of land. Most farmlands in Pakistan have an assigned produce index unit (PIU) but these have not been updated for several decades. The changes in absolute and relative land productivities make the existing PIUs unreliable as a basis for land taxation. However, if periodically upgraded, the PIU-based tax on agricultural incomes could be made a buoyant

[123] See World Bank (1999, chap. 2) for details.

source of provincial revenues. Khan and Khan (1998) suggest how PIUs can be used to determine taxable income, and also propose a method for updating these units, which have not been revised since the late 1940s.

Skinner (1991a, p. 130), takes the view that "When markets for land are thin or incomplete, the difficulty of assigning market value or net income to each parcel is likely to ensure that such land taxes are rarely used." He goes on to say: "But there are alternative methods of collecting land tax which avoid the necessity of tax assessors placing a market value on each parcel with periodic updating. For example, a crude index of land quality depending on the soil type, distance from major roads, and irrigation facilities can be determined for each plot of land. The tax assessment could then be calculated by multiplying the year-specific tax rate by the permanent index, thereby avoiding the necessity for yearly reassessment." This optimism is tempered, however, with the caution that "it is unlikely that the tax rate could be set at a high level, since net income from land may vary widely even within these crude assessments of quality, leading to horizontal inequities." The tax can still be an important source of revenue for local governments, which have few tax instruments available to them and whose modest revenue requirements "imply a low land tax rate, reducing evasion and allowing for a simpler tax structure." (Skinner 19991a, p. 130). The earmarking of land tax for use where it is collected is also recommended by Ahmad and Stern (1991, chap. 8).

Once taxable income and tax liability is determined using PIUs or other simpler indices, revenue authorities still have to collect revenue from the taxpayers. The Punjab Land Revenue Act 1967 gave wide ranging powers to the revenue officers for recovery of land-revenue arrears, including arrest and detention of the person, sale of movable property, and attachment or sale of the holding in respect of which the arrears is due. Unlike the land revenue act, no provision is included in PAITA 1997 for attachment or confiscation of a defaulter's land or property, or his or her detention. The lack of such penalties makes it difficult to enforce revenue collection. This applies to any tax, be it the tax under PAITA 1997 or the per acre land tax or the presumptive income tax. Collection issues also arise in the context of output taxes discussed in the following subsection.

Litigation is an inevitable consequence of tax assessments but such litigation will not be unique to agricultural income or land taxation. Provincial BORs could benefit from the experience of FBR and that of tax-collection authorities in other countries. To avoid the choking of the legal system with appeals, tax laws could be strengthened, e.g., by requiring minimum tax payment (as a percentage of tax liability) before an appeal is entertained and building in a tax mark-up if the decision goes against the litigant. This has to be balanced by compensating litigants for their opportunity cost and expenses if the decision goes against the revenue authority.

Taxing Agricultural Outputs

As discussed earlier, historically many countries, including Pakistan, have opted for some form of output taxes over agricultural land tax or AIT. The relatively high administrative costs for effective implementation of land/income taxes probably explain the preference for, say, an export tax on agricultural goods over land/income taxation.

Unlike land tax and AIT, the taxation of goods (such as the taxation of agricultural output or marketable surplus) falls exclusively within the federal legislative domain in Pakistan.[124] The constitutional tax assignment between the center and the provinces limits the scope of an optimum tax, which is a combination of an output tax and a land tax.[125]

In the run-up to the provincial budget for FY2014, the Punjab government had considered a form of agricultural output tax, but was eventually not included in the provincial finance bill. The proposal entailed a tax, as a percentage of sales, on a few major crops at the point of sale. The tax was to be called a withholding agricultural income tax but was in effect a disguised form of an output tax on a few agricultural products. As an output tax, it could have faced a legal challenge for encroaching into federal jurisdiction. Possibly to avoid this legal challenge, there was to be a provision to allow the agricultural income tax payable by farmers to be adjusted against the withholding tax paid on their produce at the sales stage. However, in the absence of a tax administration machinery that could have assessed farmers' income taxes and process claims for tax refunds, the withholding tax would have acted as an output tax and rather than an income tax.

Property Tax

Urban land and property taxes contribute 2% of GDP in OECD countries compared with 0.018% of GDP in FY2019 in Pakistan. Collier at al. (2018)[126] list four key reasons for taxing urban land and property:

1. These taxes yield substantial revenues for governments and can have a large impact on the ability of municipal governments to deliver public infrastructure and services.
2. These taxes are fairer than other forms of taxes. "Taxing land and properties allows governments to capture some of [the] increases in land and property prices that result from forces outside of the owner's control and are in part the direct result of public investment. If designed appropriately, those individuals who gain more from public services and population growth can be taxed for the benefit of the wider community."
3. These taxes provide self-sustaining return on investment. "[A]nnual land and property taxes can allow governments to obtain returns on their investments in public services and infrastructure that raise the value of nearby land and/or property. These taxes enable a virtuous cycle where appreciating urban land and property values finance the public investments which make the city more productive.
   Implementing these taxes therefore provide governments with higher future income streams, on the basis of which it may be possible to finance current projects through capital markets."
4. These taxes are more efficient than other form of taxes. "The fixed supply of land in a city means that taxing this asset does not negatively affect urban investment and in some

[124] The Federal Legislative List under the Constitution includes: "Taxes on the sales and purchases of goods imported, exported, produced, manufactured or consumed, except sales tax on services."
[125] See Hoff (1991).
[126] Collier, P., Glaeser, E., Venables, A., Manwaring, P., and Blake, M. (2018) *Land and property taxes: exploiting untapped municipal revenues*. IGC Cities that Work Policy Brief.

> cases can encourage more efficient land use. This is unlike taxation on work or savings that can incentivize individuals to work or save less… Taxing land and property, though less efficient than taxing land alone, has been found to be less harmful to investment and growth than other taxes such as income and corporate tax.

One disadvantage of annual land and property taxes is that they are a tax on the stock of assets, and not income flows. The tax may therefore be difficult to pay for groups who own high value assets but do not have the commensurate high incomes. This can be addressed by allowing tax deferral so that any outstanding tax can be paid at the time the property is sold or inherited. (Collier at al. 2018, P. 4).

Forms of property taxation

For property tax purposes, policy makers can either tax property (excluding land) or land (excluding property) or a combination of land and property. There are advantages and disadvantages associated with each. Pure land taxation is considered most desirable from an efficiency point of view but a combination of land tax and low property tax may be more desirable if distribution considerations are also important. Collier et al (2018) argue that certain practical considerations also favour a combination of land and property tax over a pure land or pure property tax.[127]

Property tax revenue can be affected by the exemptions which can be based on land/property use, value and ownership. There are advantages to some of these exemption (e.g. exemptions given to schools or to lower value assets) but generous use of exemptions can seriously erode tax revenue or shift the burden on to a narrower base. It is best to keep the tax rate low but have a broad tax base to adequately provide urban public services.

Tax Rate

Collier et al. (2018) report tax rates in the range of 0.5 to 1 percent in Europe and the US, between 1 – 2 percent in China and Philippines, 0.15 – 0.5 percent in South Korea and about 1% in Kenya. Property taxes rates should be set keeping in mind the requirement for municipal services, taxpayers' incomes and other taxes that they pay including land/property related taxes (e.g., capital gains tax). Differentiation of tax rates on the basis of residential and commercial properties or between developed land and vacant land is quite common. Some countries tax vacant plots very highly to discourage speculation and encourage rapid development. Taxation of commercial properties can be viewed as a tax on intermediate inputs and violates the principle of production

[127] "Two such considerations are data availability and taxpayer understanding. If there is insufficient data on transactions of land and property, or on the current value of buildings alone, it is difficult to isolate the separate values of land or property. It may therefore be easier to value and tax land and property together. Taxpayers are also far more likely to understand a tax system based on the composite value of land and property because they are likely to be more aware of the market value of the two assets combined." Collier, P., Glaeser, E., Venables, A., Manwaring, P., and Blake, M. (2018, p. 5) *Land and property taxes: exploiting untapped municipal revenues*. IGC Cities that Work Policy Brief.

efficiency (see Mirlees et al. (2011, Chapter 16).[128] Variation in tax rates also adds to the complexity of the tax system and brings the system of tax administration under stress. If administrative capacity is limited, a single tax rate may be preferable to multiple tax rates.

Best Practices (Ref Collier et al 2018)

1. To ensure that all land parcels are titled and registered, keep land cost registration low. Where land ownership cannot be established, data on occupancy can form the basis of land/property tax base. Satellite data and surveys can be used to collect data on physical characteristics of properties and basic cadasters developed.
2. Match valuation methods to administrative capacity. These range from capital market values, which is the most accurate but administratively most demanding, to area based valuation, which is the simplest.
3. Automation and digitizing billing and payment can be key to improving tax collection by allowing efficient monitoring and collection and reducing opportunities for corruption.
4. Reform of land and property tax requires public support for which the benefits of taxation should be tangible. Public investments should be matched with efforts to raise awareness of the link between property taxation and public investments.

Property Tax System in Punjab, Pakistan

The current property tax in Punjab is levied under the Punjab Urban Immovable Property Tax Act, 1958. It is collected by the Excise and Taxation (E&T) Department of the Punjab government. Although the tax is collected by the provincial government, it is transferred to local governments after deduction of service charges.

Under the act, as amended, most recently by the Punjab Finance Act 2014, the tax is levied at the rate of five percent of annual value of buildings and lands that fall within the 'rating area'. The annual value of land and buildings is to be ascertained by estimating the gross annual rental value of such land and buildings.[129] This provision of the Act is then overridden by the following clause:

> ***Valuation Tables to Ascertain Annual Value***: *Notwithstanding the provisions of section 5, the annual value may be determined on the basis of such valuation tables and for such localities as may be notified by or under the authority of the Government.*
>
> *Provided that the annual value of a vacant plot shall be in accordance with the valuation table notified for respective locality of the rating area.*

Urban properties are classified into 7 categories/bands from A to G. Annual value of residential and commercial properties are calculated from a valuation table. The valuation table provides one formula for calculating the value of land and another for calculating the value of building. The

[128] J. Mirrlees, S. Adam, T. Besley, R. Blundell, S. Bond, R. Chote, M. Gammie, P. Johnson, G. Myles and J. Poterba, Tax by Design: The Mirrlees Revew, ISBN: 978-0-19-955374-7, Oxford University Press: September 2011.

[129] For a full statement under the act, which also allows for adjustment to the rental value, see Section 5 of the Act.

value of land and the value of building are then added to obtain annual rental value, which is also treated as the annual value of the property (land and building). This annual value is then multiplied by 0.05 to calculate property tax. The Act also provides exemptions to several categories of property owners including widows, retired government servants and small property owners; buildings owned and administered by federal and provincial governments, government owned schools and hostels; mosques, churches and other places of public worship. (For full details of these and other exempt categories, see Section 4 of the UIPT Act 1958).

To value properties and the property tax, the following information is required:

1. Property band (categorization into band A to G).
2. Land area of the property up to 500 square yards and above 500 square yards.
3. Covered area of buildings/structures up to 3000 square feet and above 3000 square feet.
4. Whether the property is residential, commercial or industrial.
5. Whether the property is rented or owner occupied.
6. Whether a commercial/industrial property is on the main road or off the main road.
7. Whether or not a property qualifies for tax exemption or tax rebate.

Total UIPT collection in Punjab in 2018 was Rs2.3 billion (accounts data). Overall property tax collection in all four provinces in Pakistan in 2018 was Rs5.6 billion. This was 0.016 percent of GDP. The tax collection in 2018-19 was Rs7 billion (0.018 percent of GDP).

Recent Property Tax Studies

In a policy brief Nabi and Sheikh (2011)[130] report some of the property tax reforms as proposed by the task force on tax reform set up in 2008 by the then Chief Minister of Punjab, and their projected revenue impact. Although the recommendations of the task force tackled other issues such as extending the coverage to include new rating areas, complete reform of the system of exemptions, strengthening tax administration and improving collections, the core recommendations addressed issues of valuation and tax rates.

Valuation: The task force recommended that the interval between successive surveys/re-assessments be reduced from 5 years to 3 years and the Punjab UIPT Act, 1958 be amended accordingly. It also recommended that tax demand be indexed to annual inflation for each year till 2015.

Tax Rates: The task force also addressed the issues of tax rates and the differential between the tax liabilities of self-occupied versus rented properties (tax rate on rented properties was 10 times the rate on owner-occupied properties). Various simulations were run to assess: (a) the impact on revenues, and (b) the impact on the taxpayers. The task force recommended reducing the tax rate to 10% from their rate of 20% to 25% at that time while reducing the tax differential between self and rented properties to zero in a phased manner, achieving 1:1 parity by 2018.

[130] See Nabi, Ijaz and Hina Sheikh, Reforming the Urban Property Tax in Pakistan's Punjab, Policy Brief, International Growth Centre, May 2011.

By applying new valuations (by increasing it to Rs60 per square yard/feet from the existing valuation of Rs12 per square yard/feet), reducing tax rate to 10% (from the existing tax rate that ranged between 20% to 25%) and the differential down to 1:5 (from 1:10 at the time), the revenue demand jumps from the Rs2.8 billion in 2008 to over Rs5.0 billion whereas complete elimination of the differential would result in revenue demand increasing to over Rs8.0 billion.

To assess the political viability of reform, the task force estimated the impact these changes would have on the tax payers. As in any reform process, some categories stood to gain whereas for others there was an increase in the tax burden. Nabi and Sheikh (2011) point out that the increases were highly affordable but despite the low impact on household budgets, there was resistance to the proposed reforms by important players in the ruling PML-N.

Khan et al (2016) [131] and Khan et al (2019)[132]

To ascertain properties and their status, the E&T department relies very largely on its tax inspectors. The discretion available to inspectors in recording properties and their covered areas and assigning them any given status (e.g., rented or owner-occupied, residential or commercial, exempted or non-exempted) allows considerable scope for collusion between taxpayers and tax collectors (inspectors) at significant cost to the provincial government in the form of lost property tax revenue.

In a paper, Khan et al. (2016) report results based on an RCT experiment in Punjab that show that when a three person team of property tax collectors was given bonuses for tax collection above a historically-predicted benchmark, the growth in collection was greater by 46 percent compared with those tax circles where such bonuses were not given (controlled group). The authors show that this was predominantly because of increase in assessed value of property rather than through increased recovery or changes in exemptions granted. They also find that the increase in tax revenue was not accompanied by any decline in a typical taxpayers' perception about the quality of service of the tax office. The increase in the value of the assessed property in any one year, implies not only an increase in that year but in all subsequent years. Thus the potential benefit of incentive payments is spread over several years.

In another study Khan et al. (2019) considered non-monetary benefits in the form of postings to preferred locations. The authors find that the promise of performance-based postings substantially raised revenues. The revenues were about 5 percentage points higher in treatment groups than in control groups in the first year and 9 percentage points higher in treatment groups than in control

[131] Khan, A. Qadir,, Asim I. Khawaja and Benjamin. A. Olken, Tax Farming Redux: "Experimental Evidence on Performance Pay for Tax Collectors, Quarterly Journal of Economics", *The Quarterly Journal of Economics*, Volume 131, Issue 1, February 2016, Pages 219–271.

[132] Khan, A. Qadir,, Asim I. Khawaja and Benjamin. A. Olken, *Making Moves Matter: Experimental Evidence on Incentivizing Bureaucrats through Performance Based Postings*, American Economic Review, Vol 109, No. 1, January 2019 (pp. 237-70)

groups in the second year. This amounts to an increase in the growth rate of tax revenues of 41 percent in the first year and of 30 percent in the second year.