Pakistan's Perennial Crises And Lessons For Development*

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June 25, 2024

Abstract

Pakistan went through its most serious financial crisis in 2022-24, following a chain of boom-bust cycles over the last three decades. I discuss the structural roots of Pakistan's perennial crises that have trapped the country into a low-growth high-debt equilibrium with low physical and human capital investment on the supply side, and high reliance on remittances and debt-fueled consumption on the demand side. I discuss the difficult path forward, that must begin with a new political equilibrium, a credible fiscal consolidation path, a commitment to prudent external account management, and a coordinated industrial growth policy.

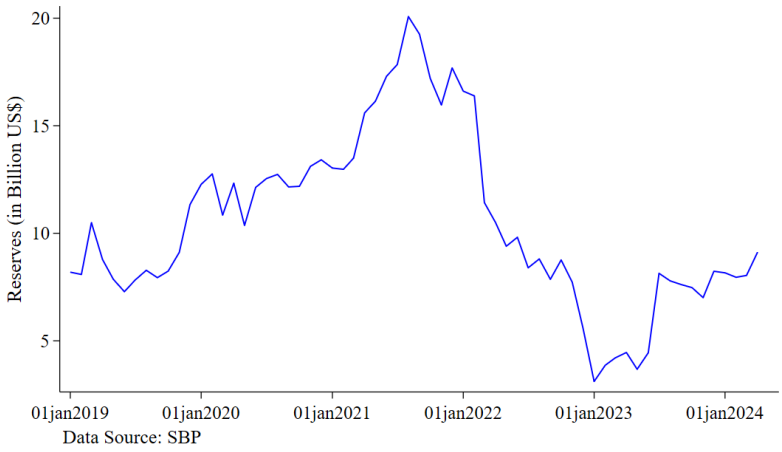
*This article was prepared for the 2024 8th annual macroprudential conference, organized by the Deutsche Bundesbank, the Sveriges Riksbank and De Nederlandsche Bank. I am grateful to Ali Husnain and Asim Khwaja for helpful comments, and Iqra Saleem and Sergio Andre Cristovao Nascimento for excellent research assistance. Contact info: Mian: atif@princeton.edu.

1 Introduction

Pakistan holds the unenviable distinction of having signed twenty three separate programs with the IMF in recent decades (Table A.1). The 23rd IMF program concluded on April 11, 2024, and the government is already negotiating the start of its 24th program[1]. The country remains unable to rollover its existing debt without IMF support - a perennial state of affairs for the last three decades. However, the most recent crisis and the current economic situation is arguably the most dire in its history.

When the Covid-19 pandemic hit in March 2020, Pakistan was coming out of another currency crisis and had recently signed a new IMF extended fund facility in July 2019. While the pandemic generated a recession in Pakistan, like everywhere else, it helped bring stability to Pakistan's external account as oil imports declined sharply due to shut downs. As figure 1 shows, this enabled the central bank to build reserves from around 11 billion dollars in March 2020 to 20 billion dollars in August 2021, while maintaining exchange rate stability and easy monetary policy. A triple play that had been almost impossible in the past.

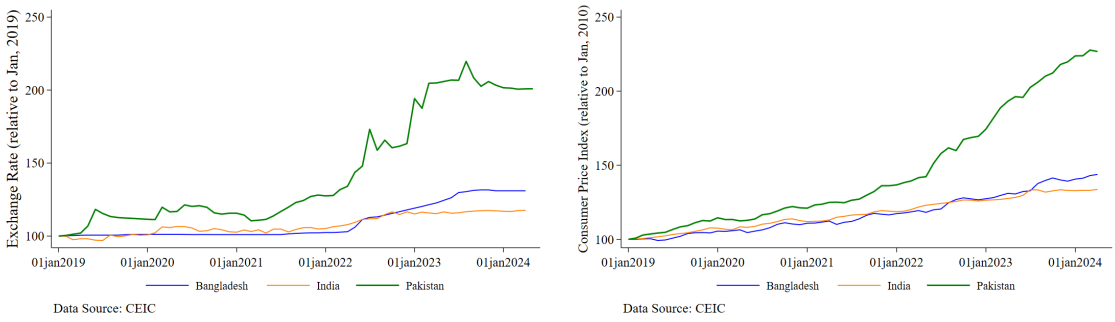
Figure 1: Reserves



However, the situation changed abruptly around the third quarter of 2021 when the pandemic started to recede. Pent-up demand from pandemic savings and the government's significant fiscal (Syed (2023)) and monetary stimulus (Husain (2020)) generated a large boom in domestic demand, which quickly destabilized Pakistan's external account. Pakistan's reserves fell precipitously from 20 billion dollars to four billion, or about one month of imports, in a span of sixteen months. The country experienced a devastating period of default-like circumstances in 2022 with plummeting currency, inflation of around 40%, and the government imposing draconian import restrictions (see figure 2).

[1] I believe this ties Pakistan with Liberia as the country with the most IMF programs in history.

Figure 2: Exchange Rate and Inflation



The financial and economic crisis of 2022 had its roots in the structural imbalances of the economy[2]. The sudden extreme pressure on the external account was in many ways a natural consequence of these structural flaws once the pandemic eased up. However, the situation was also made worse due to ongoing internal political tussles and a lack of coherent policy response during this time. In fact, the political events were so dramatic and out of the ordinary that one foreign journalist described them as "Pakistan beats Netflix".

A consistent source of instability in Pakistan has been the tension between the military and the political class, and their tussles over de facto versus de jure power. The military may have the upper hand in raw power, but it needs a political cover for legitimacy. The military leadership supported Imran Khan and his PTI government when they came to power in 2018, but by 2021 the relationship had bitterly soured. An emboldened opposition thus sought to remove PTI from power through a vote of no confidence in the parliament.

In response, PTI slashed electricity and fuel prices in February of 2022 despite rising oil prices worldwide (Shahzad (2022)). This was done in an attempt to gain public support and thwart the impending vote of no-confidence from the opposition. However, the large fiscal subsidy given to imported oil at a time of rapidly deteriorating external position made a bad situation worse, and the government failed in its bid to stay in power anyways. PTI was booted out of office through a vote of no confidence in April 2022 as the opposition alliance of PDM took power.

The change of government did not reduce political uncertainty though due to multiple major fault lines in motion at the time. For example, outgoing Prime Minister Imran Khan publicly accused the army chief and the United States of conspiring against him. There were repeated calls for protests, implicitly against the army chief. This was unprecedented and unchartered territory in Pakistani politics. The top judiciary was also in deep conflict, sometimes with the powerful military establishment, and sometimes within itself. And for a

[2]Section 2 goes into these structural issues in detail

while, it was not clear who would win out, or how.

As if a raging economic crisis and clashes between the opposition, military and judiciary were not bad enough, even the ruling party could not keep a cohesive front. There was active infighting and jostling for the top finance position within PDM. The incoming finance minister was openly and actively opposed by the previous finance minister of the ruling party, who also happened to be a close relative of party chief. Precious time was wasted in this political infighting, and after five month the old guard won and became the finance minister.

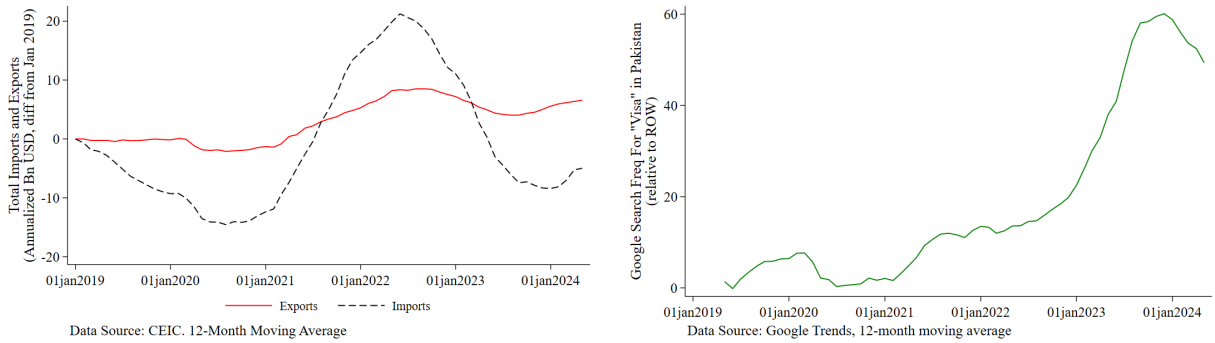
It was obvious to every serious observer that Pakistan had no choice but to reach out to the IMF. However, the new finance minister delayed the inevitable and imposed harsh import restrictions that made it difficult even for domestic producers to import intermediate goods (Younus (2023)). The result was a further collapse in economic activity, making the situation even worse. Ultimately, and with external creditors telling Pakistan that they will not rollover their debts without IMF program, the government was forced into a standby agreement with the IMF in July 2023. Pakistan's economic crisis of 2022-23 started out of the country's structural flaws, but was made much worse by its political theatre of the absurd.

Figures 2 and 3 summarize the dynamics of the economic crisis of 2022 for a range of macroeconomic outcomes. Figure 2 shows how exchange rate and inflation were both stable in the first year of the pandemic due to reasons mentioned earlier. However, as the demand impulse kicks in from the easing of pandemic and the fiscal plus monetary stimulus, inflation started to rise appreciably. Importantly the rise of inflation in Pakistan was considerably stronger than countries like India and Bangladesh in the region, showing that Pakistan's inflation was not just related to a common global shock.

The left panel of figure 3 shows the external imbalance of the post-Covid demand impulse for Pakistan. It is this imbalance that makes the Pakistan experience so much different than other developing countries coming out of the Covid shock. Pakistan's exports benefited from the global rise in aggregate demand as Covid shock begins to recede. The 12-month moving average (annualized) rose by 9.7 billion dollars between February 2021 and June 2022, commensurate with the global rise in demand. However, the increase in local demand for imported goods was significantly larger over the same period, rising by 33.1 billion dollars.

The external imbalance resulted in a rise in trade deficit of 23.4 billion dollars at annual rate, while reserves dwindled down to 9.8 billion dollars. This was obviously unsustainable. The situation demanded immediate policy response: fiscal and monetary tightening, rationalizing energy import prices, and perhaps most importantly, calming fear in markets through political maturity. Unfortunately, instead the country did everything wrong that

Figure 3: Imports, Exports and "Visa" search



could be done in the short run. The incompetence of Pakistan's political, military and judicial elite to cope with the challenge at hand was truly astounding - all the Neros fiddled while Rome burned. While inflation and external account had started to deteriorate months before the change in government, the downward spiral accelerated around April of 2022 with the vote of no confidence.

Pakistan experienced a very harsh "sudden stop" in the first half of 2022 as the country ran out of reserves. There was no choice left but to let the exchange rate go and impose quantity controls on imports in a disorderly fashion. This put in place a massive stagflationary shock as the real economy collapsed while prices soared further. While the rest of the world continued on its post-Covid recovery path, Pakistan's exports collapsed (left panel of figure 3), and the economy went into a serious recession. Producers and exporters had trouble opening new letters of credit for imports, resulting in a supply-side collapse in production at the same time that inflation was getting un-anchored and government was monetizing high deficits.

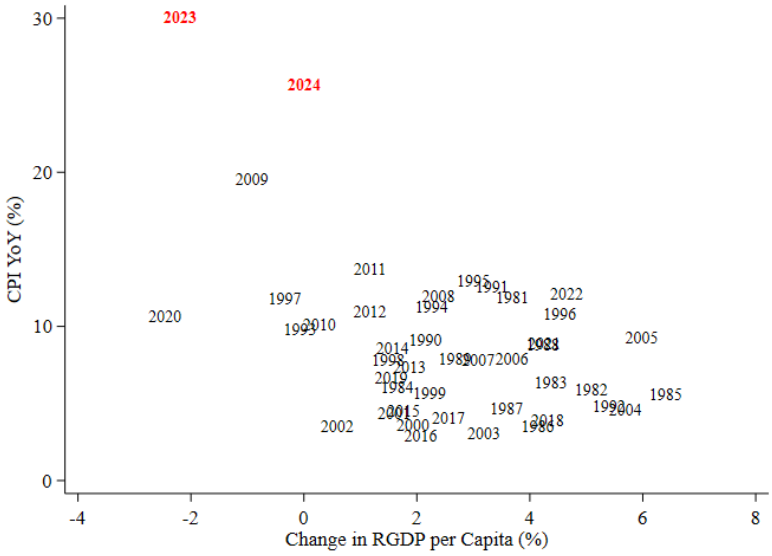
The crisis of 2022 reflects not just an economic collapse, but an institutional collapse as well. There is a deep sense of despondency among people of a level that I have not witnessed before, even though things have hardly been rosy in Pakistan in recent decades. One way to quantify the sense of despondency among people is to measure the extent to which people want to leave the country for economic reasons. The right panel of figure 3 plots the Google trends graph for the search word "Visa" in Pakistan relative to the search of the same word in the rest of the world. There is a large increase of about fifty percent in the intensity with which Pakistanis search for getting a visa out of Pakistan as the 2022 crisis unfolds.

Pakistan's economy is at its weakest today. Figure 4 shows annual inflation and annual real GDP growth from 1980 to present. The last two years have been the worse in country's history with record inflation and the worse two consecutive years of growth[3]. The stagflation

[3]The two other years that come closest - 2020 and 2009 - were both driven by exogenous global events,

of last two years reflects the seriousness of Pakistan's macroeconomic outlook today. Pakistan faces a dual crisis of very weak productivity on the supply-side and an unsustainable debt-financed demand-side.

Figure 4: Historical inflation and growth



Source: IMF World Economic Outlook (WEO)

A squeeze from both supply and demand sides of the economy generates the classic poverty trap equilibrium. The great danger today is that Pakistan's economy is stuck in a poverty trap of low investment and low growth. The high level of debt service leaves no room for public investment that is needed to push the economy out of the low growth trap. Decades of poor decision making and civil-military tussles have anchored negative self-fulfilling expectations. I first describe the structural issues that have brought Pakistan to this position in section 2. Section 3 then discusses the steps that need to be taken to put the country on a different trajectory, and section 4 concludes.

2 The structural roots of Pakistan's Perennial Crises

The post-pandemic boom-bust cycle was the most severe in Pakistan's recent history, but it was by no means an isolated event. Pakistan has gone through a series of boom-bust cycles of various lengths and intensities over the last few decades. The repeated nature of these

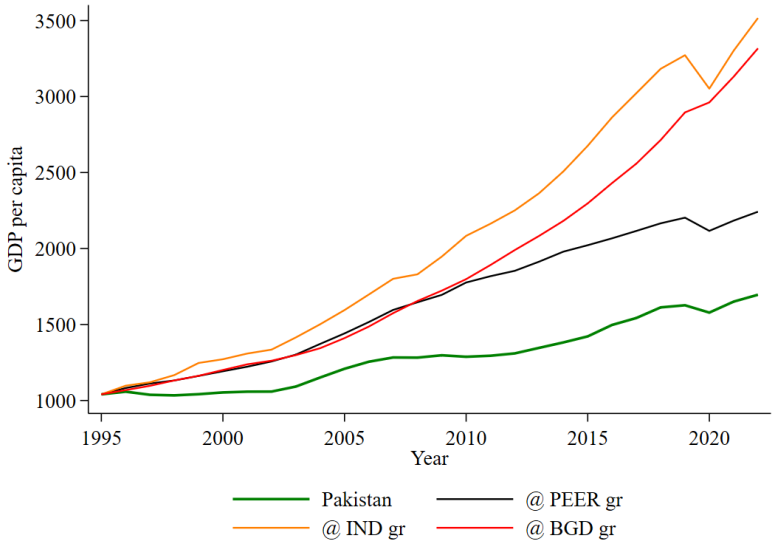
namely the pandemic and Great Recession. The 2022-24 crisis is driven purely by Pakistan's internal weakness.

events and the fact that Pakistan is on its way to a record 24th IMF program suggests that the reasons behind Pakistan's perennial crises are structural. I start by describing the key empirical facts of Pakistan's growth experience that help us understand the structural roots of its economic problems.

2.1 Pakistan's historical growth performance

Pakistan is yet to embark on a sustained growth path. The country has consistently fallen behind other developing countries - when compared to developing countries with similar income per capita, or when compared with India and Bangladesh that share a common history and geography. The green line in figure 5 shows Pakistan's GDP per capita (in constant 2015 dollars) between 1995 and today. Income per capita rose from $1040 in 1995 to $1695 in 2019, and increase of 63% over 24 years.

Figure 5: Pakistan - actual versus counter-factual growth trajectories



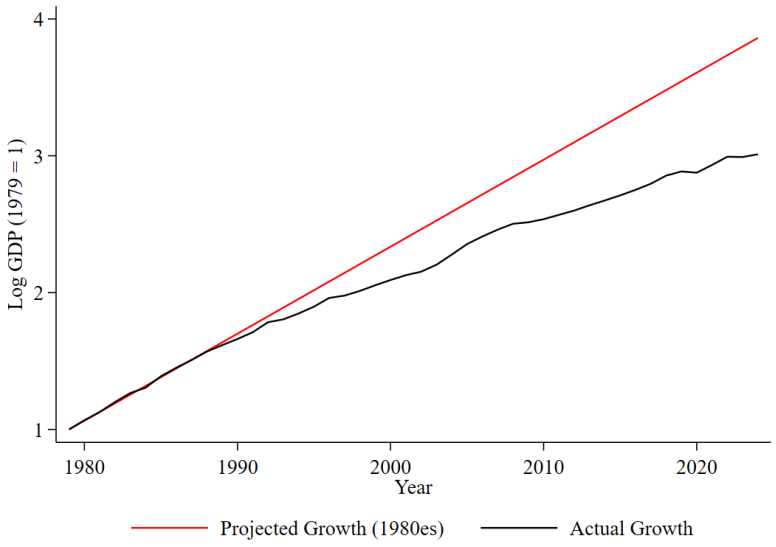
Note: The "peer" performance variable is constructed as follows: first, we estimate a weighted regression of the outcome variable growth on log GDP per capita and its square using population as weights; and then, we estimate what would be the predicted value for Pakistan given its GDP per capita in that year.
Source: World Bank

This growth in income per capita is modest when compared to what it could have been if Pakistan had grown as fast as the average developing country in its income bracket during this period. The black line shows that if Pakistan had grown at the average rate of developing countries in its income bracket, its citizens would be richer by 44% today. The counter-factual income per capita is even higher if Pakistan had growth at the rate of either India (orange line) or Bangladesh (red line). Pakistan's income per capita would have been double (107%

and 96% higher respectively[4]) today if it had managed to grow at the same rate as either India or Bangladesh. In 25 years, the rest of South Asia has become twice as rich as Pakistan.

Perhaps an even bigger worry for Pakistan's growth prospects is that not only has Pakistan consistently fallen behind other developing economies in the world, but its growth has been slowing down over the past three decades. In fact growth in per capita terms appears to have stalled completely in recent years. Figure 6 plots log of real GDP for Pakistan from 1979 to present, with the scale normalized to 1 in 1979. Since it is log-scale, the slope represents rate of growth of GDP.

Figure 6: Pakistan's slowing growth trajectory



Source: World Bank

The red line depicts projected GDP path for Pakistan if it had continued to grow at the average pace it grew during the 1980s. The black line depicts the actual realized path for Pakistan's GDP. Two points are worth noting here. First, the gap between projected GDP path from the 1980's and actual has continued to grow, showing consistent underperformance of overall growth relative to 1980's. Second, and even more worryingly, the slope of realized log GDP has progressively flattened. This suggests that growth is not only consistently below 1980's, but has been slowing down over time. Today's GDP is lower by .86 log points, or 43% relative to what it would have been if Pakistan had maintained the average growth rate from the 1980s. Pakistan's stalling growth shows that economic

[4]Pakistan has had a higher population growth rate than both India and Bangladesh over this period, in total GDP terms, Pakistan's GDP would be higher by 72% and 60% respectively.

fundamentals have progressively worsened over time[5].

2.2 How is Pakistan different from other developing countries?

Why has Pakistan's economic growth consistently lagged behind that of its peers? The most basic "unconditional convergence" theory of growth suggests that countries with lower income per capita should be able to grow at a faster pace since catch up is easier than growth at the frontier. However, we have seen that conditioning on initial GDP per capita, Pakistan consistently lags behind its peer group. One way to understand Pakistan's underperformance is to compare proximate determinants of growth like capital investment, productivity, human capital etc. for Pakistan with other countries at the same level of income per capita.

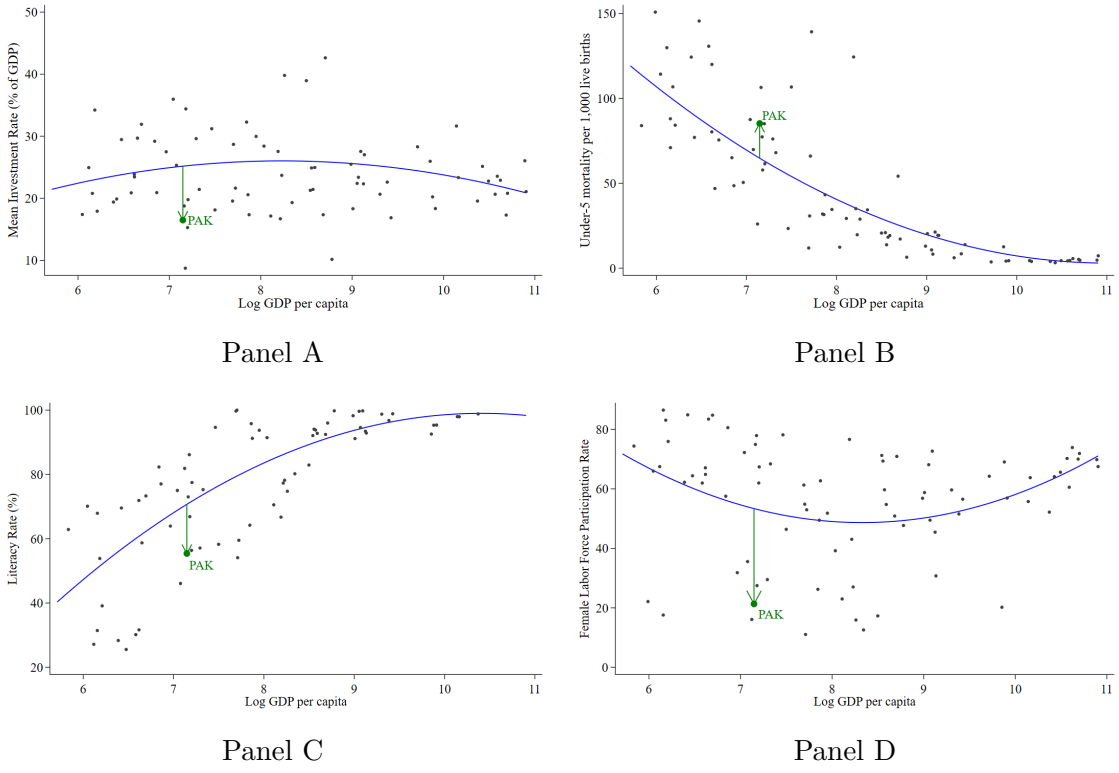
Let Y be a growth factor of interest such as investment rate. I regress Y on log GDP per capita and its square across all countries (excluding Pakistan), with countries weighed by 5% winsorized population. The winsorization avoids giving too large a weight to countries like India and China on one end, while avoiding giving too much weight to very small countries that may introduce all kinds of noise in the analysis. I then compare the predicted value of Y at Pakistan's GDP per capita with the value of Y for Pakistan.

Panel A in figure 7 plots the predicted relationship for average investment rate as a share of GDP during 2001-2020 from the above regression against log GDP per capita. It also shows the scatter plot for investment rate for every country with at least 10 million population, and labels in green the average investment rate for Pakistan during the same period. Pakistan has one of the lowest investment rate of all major economies. It's investment rate is only 16% of GDP on average, or 8.7pp lower than what is predicted for a country at Pakistan's GDP per capita.

Panels B and C in figure 7 repeats the analysis for under-five mortality and adult literacy - fundamental measures of how well and broad-based a country's investment is in health and education. As with investment in physical capital, the figure shows that Pakistan lags seriously behind in both basic health and education outcomes compared to other countries at similar level of income per capita. Pakistan's under-five mortality rate per thousand births is 20.5 points higher than the average for its income per capita. To put the magnitude in perspective, if Pakistan could bring down its mortality rate to the level predicted by its income per capita, it could save 114,000 children *every year*. Pakistan also does poorly when comparing change in child mortality over time. For example, Bangladesh had higher

[5]As another indication of Pakistan's stalling growth, over the last five years, cumulative growth in large scale manufacturing is only 2.7%, when population alone increased by 10% (Finance Division, Government of Pakistan (2024)).

Figure 7: Pakistan's growth determinants versus rest of the world



Note: Blue line is predicted value of y-axis variable on log GDP per capita and its square across all countries (5% winsorized pop-weighted). Green-arrow points to Pakistan. Black dots show literacy rate for countries with more than 10 million population. Values averaged between 2001 and 2020.
Data Source: World Bank

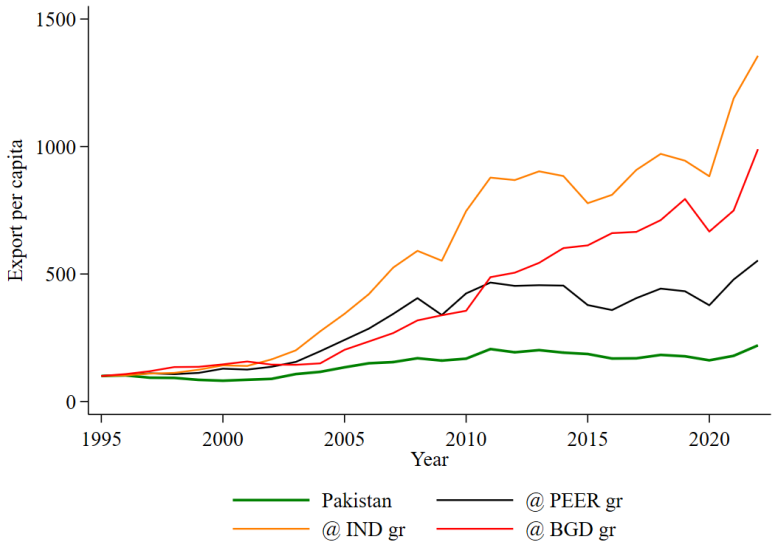
child mortality than Pakistan in 1980 (205 per thousand live births versus 165), but today Bangladesh's child mortality rate is .36 pp lower than Pakistan's. The statistics look similar, both in levels and change over time, if one were to look at child stunting - another basic health measure.

Panel C of figure 7 compares Pakistan's literacy rate with the rest of the world. Pakistan's literacy rate is 15.3 points lower than the predicted average for its income per capita. There would have been 17.3 million more literate adults in Pakistan if the country had managed to educate its population as well as other countries with similar level of income. Pakistan clearly lags behind on two of the most important key determinants of growth:investment in physical and human capital capital. Given these facts, it should not be as surprising that Pakistan has failed to keep up with other countries at similar level of initial income per capita.

Panel D of figure 7 compares Pakistan's female labor force participation with the rest of the world. Pakistan's female labor force participation is 32.1 points lower than the average

for countries with similar income per capita. If Pakistan were to bring its female labor force participation to average for its cohort, that would add 16.6 million women to the formal labor force. Overall the results in 7 reaffirm for the last two decades what Easterly (2012) refers to as "growth without development" with reference to Pakistan for earlier years.

Figure 8: Pakistan's export performance



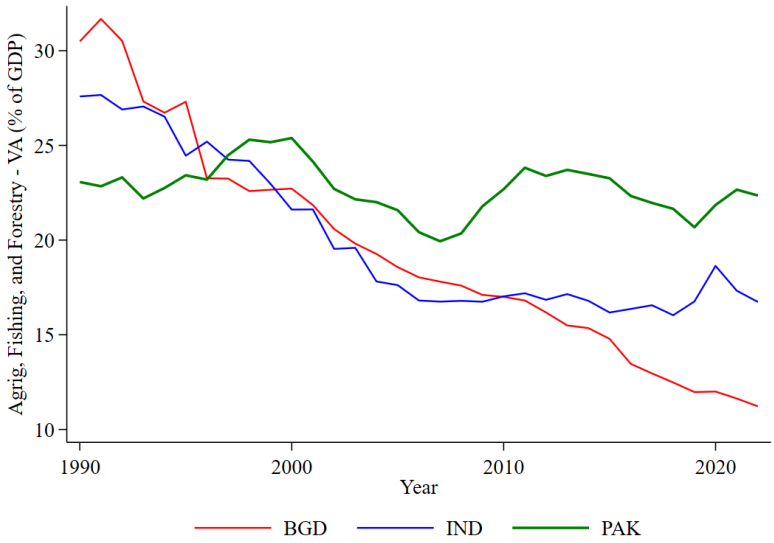
Source: World Bank

Beyond investment in physical and human capital, the third important determinant of growth is global competitiveness. How well does the economy organize itself to compete effectively with the rest of the world? As is well known, success in the export sector is not just important for growth, but it brings in other positive spillovers such as technology and managerial know-how. Pakistan's export to GDP ratio is one of the lowest among developing countries at 12.2 over the 2001-2020 period. The average export to GDP ratio for developing countries at similar level of income is 26.9, while the average export to GDP ratio for India and Bangladesh over the same period is 17.9.

Figure 8 plots Pakistan's export per capita over time, and compares it to that of other developing countries with the same level of income per capita as Pakistan, as well as India and Bangladesh. The "peer" performance variable in this graph is constructed as follows: first, we estimate a weighted regression of the outcome variable growth on log GDP per capita and its square using population as weights; and then, we estimate what would be the predicted value for Pakistan given its GDP per capita in that year. Export per capita is normalized to 100 in 1995. The graph shows a remarkable stagnation in exports for Pakistan relative to the rest of developing world. While India, Bangladesh and typical developing country have

increased their total exports per capita by a factor of 7.8, 5.6 and 4.6 respectively since 1995, Pakistan's exports have only increased by a factor of .45.

Figure 9: Pakistan's lack of structural transformation



Source: World Bank

The stagnation in Pakistan's export growth trajectory over a long period of time is quite telling of Pakistan's structural weaknesses. Not only is Pakistan not growing as well as other countries, but whatever growth there is, it is not coming from the usual shift of the economy away from unproductive sectors to productive ones. This "structural transformation", a key element of successful growth transitions, is missing from Pakistan's trajectory.

Figure 9 compares the share of value added coming from traditional sectors like agriculture over time for Pakistan, India and Bangladesh. A natural part of successful structural transformation is that the economy moves up the value-added chain, leading to a gradual decline in value added coming from more traditional sectors. However, this is not the case for Pakistan in comparison to India and Bangladesh. Pakistan's share of value added coming from agriculture, fishing and forestry has remained stagnant around 25% since 1990. On the other hand, both India and Bangladesh have successful lowered this percentage from 28% and 30% in 1990 to 17% and 11% in 2022 respectively.

To summarize, the evidence presented in this section illustrates the very atypical nature of Pakistan's economy. Pakistan is not an "average poor country". It is a country that has consistently invested a lot less than other countries in its cohort. A country that has distributed the gains of economic growth much more narrowly than other countries at similar levels of income, with the result that average Pakistani's health, education and mortality

statistics look significantly worse. At the same time whatever growth Pakistan has seen, has come from relatively unproductive sectors - with the result that the country has failed to innovate and compete at the global level.

In the face of such stark differences with countries that have similar overall resources, it should not be too surprising that not only has Pakistan had sub-par growth, but even the growth that it has had has proven to be unsustainable. Hence the country has continued to go through boom-bust cycles like clockwork, and going to the IMF a record 24 times in the process.

2.3 The political economy roots of Pakistan's economic woes

Why does Pakistan have an atypical economic structure relative to other developing countries in the region and beyond? The political economy of Pakistan is important in this respect. Pakistan has developed an extractive political, military and economic elite over time that relies more on pure rents, rather than profitability through higher productivity. All countries have elite with disproportionate control over resources and politics. The powerful everywhere try to take whatever advantage they can squeeze from the positions of influence they enjoy. So why is it that Pakistan's political elite turned out to be more damaging in their ultimate consequences? There are four reasons worth highlighting.

First, as Studwell (2014) notes, political power in countries like Korea also formed favored relationships with large private sector firms, e.g. the Chaobol. However, despite such connections, the political system imposed constraints on the favored firms that they must use the advantages gives (e.g. subsidized credit) to boost productivity. This was most famously done by rewarding export performance. As a result, despite providing certain rents, the benefits of higher productivity were shared more broadly.

Pakistan on the other hand turned out to be very different, partly because the large private sector firms were dealt a major in the 1970's through the nationalization program initiated by Prime Minister Zulfiqar Ali Bhutto. As a result, the big industrial houses in Pakistan, that were relatively more productive, suffered major losses and curtailed private investment in a significant way Burki(1986). As the rest of the world opened up to global trade in the 80's, Pakistan's weakened private sector was not in a position to take advantage. The focus of political elite thus shifted to more unproductive ways of rent-seeking.

The second important factor leading to the rise of a rentier elite in Pakistan was geo-political rent seeking, especially by military regimes. For example, the military regime of General Ayub was getting assistance from the United States of around five percentage points of GDP by 1964 (Zaidi(2011)) in exchange for collaboration in the Cold War. The reliance

on geo-political rents would continue in cycles. In particular, during the Afghan with Soviet Union in the eighties, and then the U.S. war against the Taliban post-9/11.

The reliance on geo-political rents during the Afghan war was especially significant in shaping Pakistan's political economy dynamics. Very large sums of money poured into Pakistan, often through various intelligence agencies engaged in financing the war. This created a large dependence among the military and political elite on "easy money" from the outside. The domestic economy boomed, but it was consumption led without much boost in real productivity. Whenever external flows dwindle or slow down, the economy would follow suit. At the same time, while money poured in from the outside, those in power felt little need to invest in domestic productive capacity.

The third important factor shaping Pakistan's political economy was the rise of religious extremism. The political and military elite actively pushed the country toward religious extremism from the 70's onwards. This was partly done to maintain better control over domestic politics in the guise of religious nationalism, and partly to provide ideological support for the US-backed Afghan war against the Soviets. Over time however, the use of religion as a political tool has given rise to increasingly more violent waves of extremism and intolerance. For example, since 2000 there have been more than 16,000 reported incidents of terrorism with over 60,000 killed. The religion card is routinely used to threaten or pressure women, individuals from minority sects or religions, progressive voices, and so on. Even politicians and those in power are now afraid of being accused of blasphemy, were they to run foul of one of the extreme religious groups. From a macroeconomic perspective, this continues to damage Pakistan immensely as many on the receiving end of this religiously motivated violence have chosen to move abroad, or not invest in Pakistan.

The fourth factor shaping Pakistan's political economy is the unstable power dynamic between the military and the politicians. Pakistan neither has a stable democracy where access to power runs through reasonably credible elections (as in India), nor does it have some sort of autocratic one-party rule (as in Vietnam, China or Saudi Arabia). Instead Pakistan has a mixed "hybrid" system where the military is too powerful to be ignored, but not powerful enough to hold outright power indefinitely. The result is a constant cat and mouse game between the so-called military establishment and the politicians. In equilibrium, this leads to myopia since those in power have naturally shortened horizons, and it becomes very difficult to credibly signal long-term commitment to a particular policy.

The end result of these political economy factors is the rise of a rentier elite in Pakistan that is myopic with a focus on extractive and unproductive rent-seeking activities. It naturally leads to a consumption-driven economy that taxes productive capacity and under-invests in human and physical capital needed for long-term growth. The next section

describes some of the poor policy choices coming out of a political system dominated by rentier elite.

2.4 Examples of policy distortions

One major source of rent-seeking for Pakistani elite is the real estate sector. Pakistan is a densely populated country of 235 million people where land is scarce. Most of Pakistan's population initially lived in rural areas where land was either zoned as "agricultural" or was held by government. Since land is a non-reproducible factor in fixed supply, it naturally captures part of the value of aggregate economy activity in the local area as population expands and urbanizes. These are pure rents, and as is well-known, the optimal policy is to tax these rent for public spending without any efficiency loss (see e.g. Arnott and Stiglitz (1979)).

In Pakistan however, the complete opposite has happened, with heavy involvement of military, bureaucracy and political top brass. Large off-balance-sheet special purpose vehicles have developed that are engaged in the development and transfer of land into private hands. The various stages of rent-seeking include land acquisition, land development with public funds, and almost negligible taxation of the transfer to private hands[6]. From a macroeconomic perspective, all of the value and capital gain that is transferred to the elite through this process is essentially rent-seeking: the value represents economic activity from the rest of the economy that is captured by land developed and allotted to the elite.

Contrast the way land is used as a rent-seeking device in Pakistan, with how land was treated in China in the first phase of its tremendous development. All land was owned by the state before China started on the path towards private markets. Local governments used land auctions of this state land to transfer the land to private hands on long leases. The revenue thus generated was then used to fund a large fraction of local infrastructure development (Gyourko et al. (2022)). In essence, the Chinese used expected land rent value to fund public infrastructure, very much inline with what efficient tax policy dictates[7].

Local government spending accounts for about 25% of China's GDP (Doris (2022)), and revenue from land right sales and property taxes accounted for 37% of local fiscal revenue (Huang (2023)). Thus raising public revenue from land and real estate has been a very important component of building infrastructure and public investment in China. On the other hand, the contribution of these sources of revenue in Pakistan is almost negligible as

[6]The further capital gain on sale of these properties in subsequent years is also not taxed much, and in at least some cases, is explicitly exempted from even transaction taxes.

[7]Since the initial sale into private hands, China has not been able to constitute a significant property or land tax system for private property, which is creating problems for the next phase of Chinese development. But that is a separate issue.

most of this value is transferred to private hands of the rentier elite. Property taxes only account for 0.05% of GDP in Pakistan (Abbas et al(2018)), while they account for 2.7% of GDP in the United States, or 54 times more[8]. Ironically, the value of land in Pakistan would have been much higher if the government were able to use part of the value for local public investment as in China and other countries.

Interestingly Chinese local governments offer a deep discount and charge only about one-tenth on land sales that are used for industrial use (He et al. (2022)). This behavior is also inline with the observation in Studwell (2014) that subsidies may be given as long as the use is for productive purposes. Moreover, He et al. (2022) show that this "industrial land use discount" pays for itself over time through future tax revenue from the industries. The real estate example illustrates the two very different models put in place in China versus Pakistan. The Chinese have instituted a "Mandarin model of growth" Xiong (2018) that incentivizes local governments and their officials to boost productivity and infrastructure spending. Connections may give you access to resources, but the system was designed to constrain the use of subsidized resources for productive enterprises. On the other hand the primary focus of Pakistan's rentier elite is to engage in outright extractive rent-seeking as the real estate example illustrates, or generate rents by creating a protected and monopolized domestic market as the next example from the sugar industry illustrates.

Sugarcane is one of the most water-intensive crops, and Pakistan has serious issues of fresh water shortage. Yet sugarcane is one of the dominant crops grown in Pakistan because it is actively protected and supported by the state in many ways and water usage is not priced. The state actively promoted the establishment of sugar mills by providing credit and then protections to the industry. The people who took advantage of state subsidies mostly belong to highly influential political families. Unlike East Asian economies where if subsidies were provided, they were to compete in the export market with the rest of the world, in Pakistan subsidies are often given to industries that are protected and cater to domestic consumption. Other similar example would be the auto, financial and energy sectors in Pakistan[9].

The energy sector provides another example of rent seeking policies that have had wide ranging negative implications for the rest of the economy. Energy is a primary input into practically every production chain, and as such has a strong multiplier effect for the rest of economy given its primary position in production networks (Liu (2019). Since the early 90's, the government has promoted an energy policy that gives sovereign guarantees to independent power producers (IPPs) with a high guaranteed return on equity in dollars.

[8]The bloated valuation of real estate sector in Pakistan can also be seen from market value of residential property as a share of GDP, which is 4.0 for Pakistan relative to 1.75 for the United States (source: Statistica)

[9]Pakistan National Human Development Report (2021) provide details of the overall size of official subsidies that are doled out to Pakistan's elite.

These power plants are often fossil fuel based which the country has to import as well. However, the electricity generated from these plants is largely used by domestic consumers who can only pay in local rupees.

The entire deal structure is loaded with exchange rate, energy price and business risk (e.g. distribution cost) that falls entirely on either the consumers, or the national exchequer. The result is an energy sector that is constantly mired in debt, and electricity prices that are too high for consumers and industry alike. For example, for any large firms, it makes more economic sense (if they have the fixed capital) to set up their own power plant than get connected to the grid. Ironically as financially strongest customers get off the grid, the average cost for remaining customers rises further due to the fixed capacity payments and guaranteed returns. Pakistan's energy sector has been in a debt doom loop due to such energy policies. Since electricity is a primary input into every other sector, the high cost of electricity has a negative multiplier effect for the entire economy[10].

The common theme in Pakistan's rentier economy described above is that power and political privilege are used to extract rents from the rest of the domestic economy. I refer to Pakistan's elite as rentier elite because the explicit and implicit subsidies it derives are not used for high value-added production - as may have been the case in East Asian economies for example - but to generate profits in protected and monopolistic sectors domestically. The rentier elite thus act as a tax on the private sector in Pakistan with negative multiplier effects. Such an environment naturally discourages investment, especially long-term investment, in the private sector.

2.5 Consequences of a rentier elite: twin deficits, reliance on remittances, and debt trap

A rentier economy is parasitic in nature, and as such the biggest challenge it faces is how to keep the body it feeds on sufficiently alive. From a macroeconomic perspective, this constraint shows up as twin deficits, first on the external account and second on the domestic fiscal account. On the external account, a consumption driven rentier economy generates strong import demand, but lack of domestic productive capacity is unable to generate sufficient export capacity. For example, a significant fraction of profits generated from the real estate transactions mentioned earlier is likely to be spent on import demand[11]. The external imbalance creates a sustainability issue, except in Pakistan's case two factors have enabled

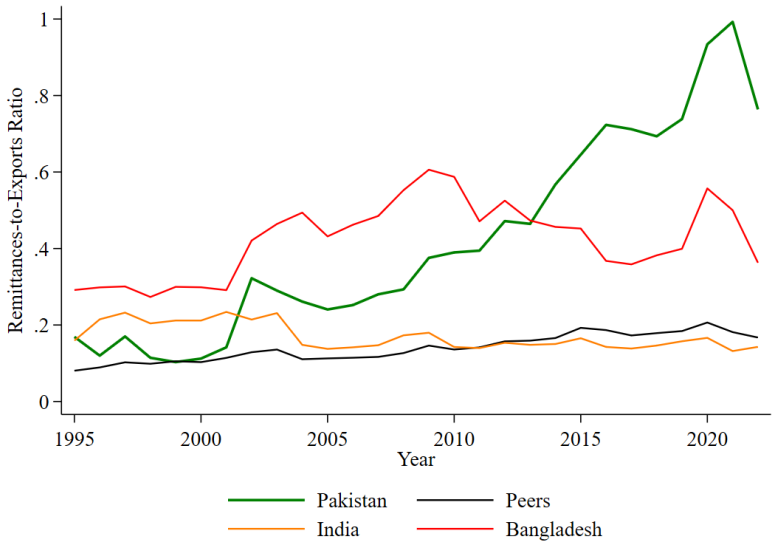
[10] In fairness, one must also fault international multilateral organizations, such as the World Bank, for pushing the IPP policy in developing countries like Pakistan (see Ghana for another example).

[11] The share of income spent on imported goods and services rises at the upper end of income distribution typically.

the elite to stretch-out the external constraint much longer than what otherwise would have been possible.

The first factor is economic migration out of Pakistan. Young workers, primarily men, have been leaving Pakistan in large numbers in search of better prospects abroad. International labor organization estimates that over 11 million Pakistanis work abroad, many in relatively low-paying jobs in the middle east, Europe and North America. These workers send remittances back to Pakistan that total around 30 billion dollars annually, about the same size as the country's total exports. Figure 10 plots Pakistan's remittances-to-export ratio over time. It is noteworthy that not only is this ratio the highest amongst its peers, but Pakistan has been *increasing* its reliance on remittances to fund its external account. Today, about half of the country's annual import is financed by remittances sent from workers abroad.

Figure 10: Pakistan's remittances-to-exports ratio



Source: World Bank

The high dependence on remittances is an equilibrium outcome for a rentier economy like Pakistan's. There is an element of irony in the political economy of this outcome. The external imbalance problem is created by the rentier elite, as they tax the productive potential of the country to generate a high consumption and low investment economy. This economy would not have been sustainable if it were not for the poor of the country who are forced out for economic reasons. The poor emigrants send back remittances to help their families back home, and it is these remittances of the poor that raise the real purchasing power in dollars of the rents of the elite. The remittances of the poor help finance consumption import of

the elite.

The same point can also be made in the context of open economy macro. The very high flow of remittances, relative to the size of the tradable sector, creates a "dutch disease" issue. Exchange rate is over valued relative to the true productive capacity of the economy. But given the political economy of the country, it is an economic problem that suits the rentier elite just fine, since an overvalued exchange rate relative to fundamentals allows them to increase the real value of their purchasing power.

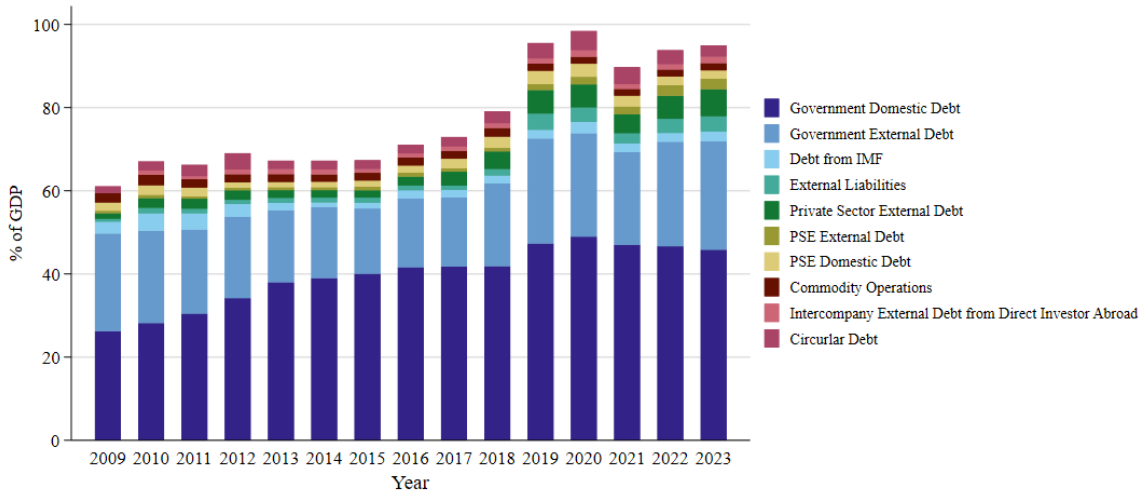
It is for these reasons that "boosting remittances" remains one of the permanent corner stones of Pakistan's policy makers. Governments proudly make announcements whenever remittances reach a new record. The irony is not lost on the government that higher remittances are only a reflection of how much worse the domestic economy has gotten. A ticket to a foreign country is often the only hope for middle and lower middle class Pakistanis. Instead of recognizing this as a symptom of the core problem, the government maintains an active policy of "exporting workforce" - even skilled labor. Perhaps like Haiti, Pakistan's rentier elite recognize how crucial remittances are for their own economic survival.

Overall the governing elite has relied on external grant flows or loans denominated in dollars to plug part of the large imbalance between imports and exports. Only about 15% of external loans have come from the private capital markets, the remaining 85% are sovereign loans (bilateral or multilateral) from the West, Middle East, and most recently China - reflecting the geo-political nature of borrowing. Beyond external imbalance, the other deficit Pakistan has had to worry about is on the domestic fiscal side. The next section discusses Pakistan's overall debt situation and how it connects with the country's perennial crises.

Figure A.1 shows that Pakistan has consistently had a very low tax revenue to GDP ratio of only around 13%. The low tax revenue is due to a combination of, (i) outright tax evasion, (ii) un-taxed politically connected sectors, such real estate, and (iii) large subsidies to businesses through tax expenditure (Finance Division, Government of Pakistan (2023)). A natural consequence of the low revenue base is that Pakistan has not had the needed resources to spend on public infrastructure, health or education. This partly explains why Pakistan does poorly relative to other countries with similar income per capita on human development and public investment measures.

Low revenue also implies that Pakistan has to run significant fiscal deficits, which have become increasingly more difficult to finance. Figure 11 shows the evolution of Pakistan's total debt to GDP over time, as well as its composition. Total debt has exceeded 90% of GDP in recent years. This figure does not include sovereign guarantees, which total another 7 billion dollars as external guarantees, and 5.5 billion dollars in domestic guarantees as of 2024 (or about 3.6% of GDP).

Figure 11: Pakistan - total debt to GDP



Source: SBP

More importantly, total debt in figure 11 does not include government liability stemming from unfunded pension liabilities that have to be paid each year. Figure 12 shows Pakistan's total expenditure on unfunded pension liabilities over time as a share of total revenue collected[12]. Unfunded pension payments have been around a third of domestic debt service payments in recent years, signifying a very high implied debt burden stemming from unfunded pensions.

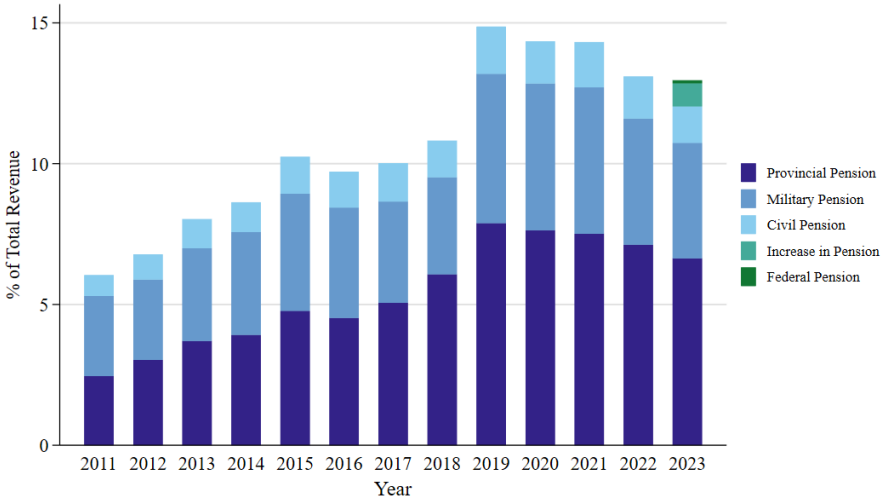
How extreme is Pakistan's overall debt position relative to the rest of the developing world? Figure 13 compares Pakistan's debt service as a share of revenue and gross debt as a share of GDP with 63 other developing countries with data in the IMF World Economic Outlook database for the year 2021. Pakistan and Sri Lanka are the clear outliers relative to the rest of the world. Pakistan (the green dot) and Sri Lanka have the two highest debt service to total tax revenue ratios in 2021 by far.

Even the very poor debt service to revenue ratio for Pakistan in 2021 in figure 13 understates the true extent of the debt service burden. First, the unfunded pension liabilities are essentially government debt as well. The orange dot in 13 adds these pension payments as a share of revenue from figure 12 for 2021. With the addition of pension payments, debt service to revenue jumps by another 14.3 percentage points.

Second, interest rate in 2021 was still very low, and as such the 2021 numbers in figure 13 do not reflect the *volatility risk* embedded in Pakistan's extreme leverage. One way to

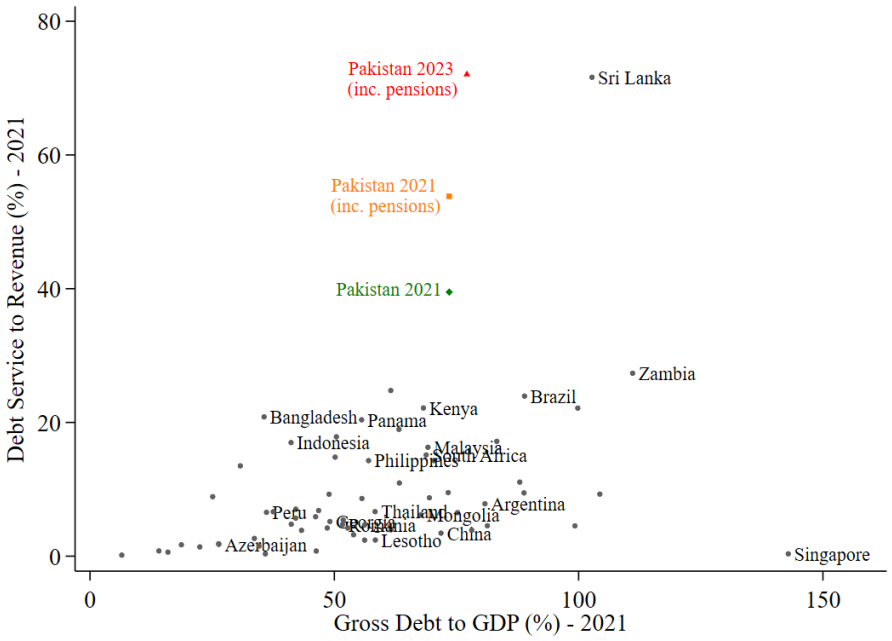
[12]Figure A.2 in the appendix shows the share of pension expenditure as a share of GDP and domestic debt service payment.

Figure 12: Pakistan - total unfunded pension expenditure to revenue



Source: Pakistan's Ministry of Finance Annual Budget

Figure 13: Pakistan's domestic debt sustainability



Source: Pakistan Economic Survey and IMF WEO database

understand this risk is to look at the debt service to revenue ratio when central bank had to raise rates in response to global tightening, rising inflation and a currency crisis. In particular, while the central bank policy rate was between 7 and 7.25 percent for most of

2021, it was ultimately raised to 22 percent over the course of 2022 and 2023 in response to the spiralling inflation and currency crisis.

The red dot in figure 13 shows debt service to revenue ratio for Pakistan for 2023 inclusive of pension payments. The total debt service to total revenue ratio jumped to an astounding 72.1% in 2023 - 59.1% from on the books debt service, and 13% from unfunded pension payments[13]. Another issue that compounds the debt problem further is that debt service is federal government's responsibility, but the federal government does not get to keep total tax revenue generated in the country. As a result of the 18th constitutional amendment passed in 2010, roughly a half of total revenue goes to the provinces[14]. The federal government share of total revenue is not even sufficient to pay for debt service. The federal government has to borrow to pay existing debt holders *and* to pay for all of the administrative civil and military expenditures. It is clearly an unsustainable situation.

3 The way forward

When countries are stuck in a deep rot the core issue is often related to political economy and Pakistan is no different. I highlighted the rise of a rentier elite in Pakistan over time that has snarled Pakistan into a low-growth low-investment equilibrium, with the country remaining an outlier in how poorly it shares prosperity across the wider population.

There is a real danger that the perennial crises may now give way to a perennial poverty trap due to doom-loop dynamics that have set in. Private investment depends on higher order beliefs: I will invest if enough people see value in investing, but if others are running away, it is in my best interest to run away as well. Pakistan is facing a run on its economy, from investors with physical capital and from workers with human capital. How can these dynamics be reversed?

There are large public investment and infrastructure needs to bring about growth. But the government does not even have revenue to pay salaries, how can it invest? In principle, if an investment has positive NPV, the government should be able to raise the necessary funds via borrowing. But this is where we once again run into a catch-22 situation: the government has lost all credibility. The high spreads in private capital markets is a testament to that. How can the market be convinced that the government will use the money it borrows judiciously? And even if it spends it properly, will it be able to tax the proceeds efficiently to pay back the lenders? What is the guarantee that the rentier elite will not expropriate the cash flow?

[13]The 59.1% number comes for Pakistan Economic Survey 2023-23, figure 4.8 and table 4.1

[14]see figure A.3 in the appendix

3.1 A new political equilibrium

Pakistan is stuck in a poverty trap of expectations, the trap that it cannot credibly commit to doing what is needed. The first step has to be a credible political signal that governance will follow different rules going forward. Credible signals, by definition, have to be actions that are costly - people and markets need to know that if the government were not serious, they would not have taken such a tough decision. What could such first steps look like?

One fundamental source of uncertainty is the seesaw between the politicians and the military. Can these two parties come together and hold a credible election followed by a transfer of power to the winner that everyone accepts? Can they agree on a new rule that no army chief will get an extension? Perhaps in a grand bargain of sorts the military can have some institutional role that can be carved out, but the current behind the scenes pushing and shoving between the military and politicians is extremely costly.

A new political equilibrium can be signalled if the government were to start imposing fair taxes on all incomes, including income from traders, retailers, agriculture and real estate. Can the government stop transfer of land and urban development to private hands at huge discounts? Can the government push back on the alarming rise in religious extremism by prosecuting hate speech and arresting the well-known ring leaders behind religiously motivated violence? Can the government set a modern educational curriculum?

These are some of the first step that, if taken, can credibly signal a new political future for Pakistan. Perhaps the military and politicians can collectively agree to some Coasean bargain and agree on a new way forward by taking the steps outlined above. I cannot say much about the likelihood of this happening, except to say that the pressure for change from the consequences of economic collapse is intense. A political restructuring and a new power equilibrium is a necessary condition for Pakistan to move forward[15].

The good news is that if Pakistan can take the hard political decision for a new direction, its economic problems are remarkably small in scale. For example, if Pakistan could add only ten dollars per person in net exports every year, all of its current account problems and currency risk would be gone. A modest expansion in domestic capital markets, e.g. bringing Pakistan closer to developing country stock market capitalization to GDP ratio by 10pp, can solve the unfunded pension liability problem. The broader point is that even modest sustained growth, *if* backed by a credible new political structure can take Pakistan out of trouble within a relatively short time.

[15]There are some terrific political scientists and economists working on various aspects of improving electoral, legal and political systems. A partial list of some of this work includes, Cheema et al. (2023), Gulzar and Khan (2024), Callen et al. (2023), Mehmood (2022), Malik and Malik (2017), Khan et al. (2021)

3.2 The fiscal consolidation transition phase

If the will for a new political equilibrium can ever be mustered, how can Pakistan's economy transition from the current fiscal hole? The 2023 IMF report (International Monetary Fund (2023)) on the stand-by arrangement with Pakistan lays out the fiscal adjustment and baseline growth needed for Pakistan to get out of its current crisis. The required adjustments are significant over the next five years.

The most significant adjustment is a change in the primary balance of 2.5 percentage points of GDP every year for the next five years: from an average primary deficit of 2pp of GDP over the last five years, to a primary surplus of 0.5pp of GDP. Equally important is the assumption that the country needs to do this adjustment, and at the same time double GDP growth rate from an average of around two and a half percentage points over the last five years to 5%. Fiscal consolidation requires that Pakistan somehow withstand a drag of 2.5pp of GDP each year from reduced net primary spending, and yet double its growth rate to 5% over the next five years. As the IMF politely puts it, "the margin of error for policy slippages [...] remains very small". The inherent difficulty of the fiscal consolidation path again underscores the importance of first moving toward a new political equilibrium to back the new trajectory.

An important point that has mostly been ignored in past IMF programs and fiscal consolidation attempts is that fiscal targets alone are not sufficient. It equally matters *how* fiscal targets are achieved, particularly in terms of the choice of tax and spend policies. For example, the growth elasticity of taxes must be kept front and center before deciding on how to raise tax revenue. Some taxes are negative for growth, while others can be neutral or even positive. The focus should be to lean more on the latter, and less on the former.

As an example, taxing non-reproducible capital such as land, or inelastic capital in general, is economically efficient. In fact doing so can even help increase allocative efficiency (Posner and Weyl (2018) and Guvenen et al. (2023)). It is a lot more distortionary to further tax professional salaried class. Similarly, carbon tax on fossil fuel inputs is economically efficient. It drives incentives to increase domestic investment in renewable energy, while also helping balance external account. However, slapping additional cost to unit price of electricity - especially for industry has negative multipliers[16]. Such pass through of taxation policy through production networks and labor supply needs to be carefully assessed.

On the spending side, there is the important question of how to treat public investment expenditure[17] relative to the rest of current expenditure in the budget. From a technical

[16]The high average cost of electricity and the circular debt problem is partly due to bad energy policy of the past that I have highlighted earlier (see Fraser (2005) and Munir and Khalid (2012)).

[17]referred to as Public Sector Development Program (PSDP) in Pakistan's budget

perspective, dynamic scoring tools should be applied to public investment spending so that the extent to which public investment pays for itself via higher future growth is accounted for and not counted toward the deficit. This is understandably a difficult problem given the obvious moral hazard problem of whether the government can be trusted with scoring its own budget.

However, ignoring this issue also creates its own problems. If the government is subject to a hard fiscal constraint, and all expenditure counts the same, public investment is often seen as more discretionary and first to be cut. Pakistan's share of public investment in total outlays has steadily declined from 19.6% in 2017-18 to only 8% in 2023-24 (Nadir et al. (2024))[18] There is value in setting a harsher primary spending constraint on current government spending, but then imposing a less harsh constraint on public investment spending by using dynamic scoring methodology.

The scoring itself can be done by an independent fiscal council, appropriately structured and empowered[19]. In fact such a council along with dynamic scoring rule will also encourage a more efficient design of public investment expenditures. A tighter fiscal constraint on current expenditure, while providing flexibility for public investment via dynamic scoring under an independently empowered fiscal council can bring in fiscal restraint without compromising as much on growth.

3.3 External account sustainability

On the external account front, the 2023 IMF report proposes a current account deficit target of 0.4% of GDP over the next five years. Current account deficit has average about 3% of GDP in recent years (excluding the atypical Covid period). A swing of two and a half percentage points of GDP represents a significant external account adjustment in the short run. Since Pakistan's export sector has not shown much elasticity to relative price adjustments, the current account adjustment must mostly be absorbed by decline in imports. A decline in imports is only possible realistically if the government engineers a slowdown, via large sudden devaluation, combined with significant monetary tightening to curb demand as well as inflationary consequences of devaluation.

In fact, a significant portion of this adjustment has already happened in Pakistan in the last two years. The current account has been brought close to balance in recent months, but only at the cost of negative per capita growth over the last two years. Will the country's

[18]The numbers represent actual PSDP expenditure, consolidating both federal and provincial spending. The actual expenditure is typically only half of budgeted amounts, again reflecting the discretionary nature of PSDP spending, which is not good for growth.

[19]Chile offers a very interesting example of fiscal prudence rules, see Céspedes et al. (2014) and Funk and Velasco (2022).

policy makers learn from this experience and not let current account get into the danger zone again? I have my doubts given the continued love affair with sovereign borrowing as part of official growth strategy.

The government needs to credibly articulate that its external account policy will be different moving forward. It needs to lay out the exact principles that its central bank and ministry of finance will follow to manage the external account in a sustainable and growth-friendly manner. I will describe below what these set of principles should look like.

First, exchange rate has to be market based and the historical infatuation over maintaining an over-valued exchange rate that favors the rentier elite must be resisted. A credible signal to domestic producers that exchange rate policy will be maintained in favor of exporters is important.

Second, I would go beyond what IMF recommends and suggest that Pakistan should target a current account surplus of around one percentage point of GDP. Pakistan has been in serial balance of payment crises for many decades now. It needs to rebuild its credibility in international markets by imposing a harder constraint on itself and building real reserves instead of borrowed reserves. A modest current account surplus would help bring credibility in exchange markets, and make it easier for private foreign direct investment to invest in Pakistan. However, the private FDI policy should be guided by a rational capital control and central bank reserve policy described below.

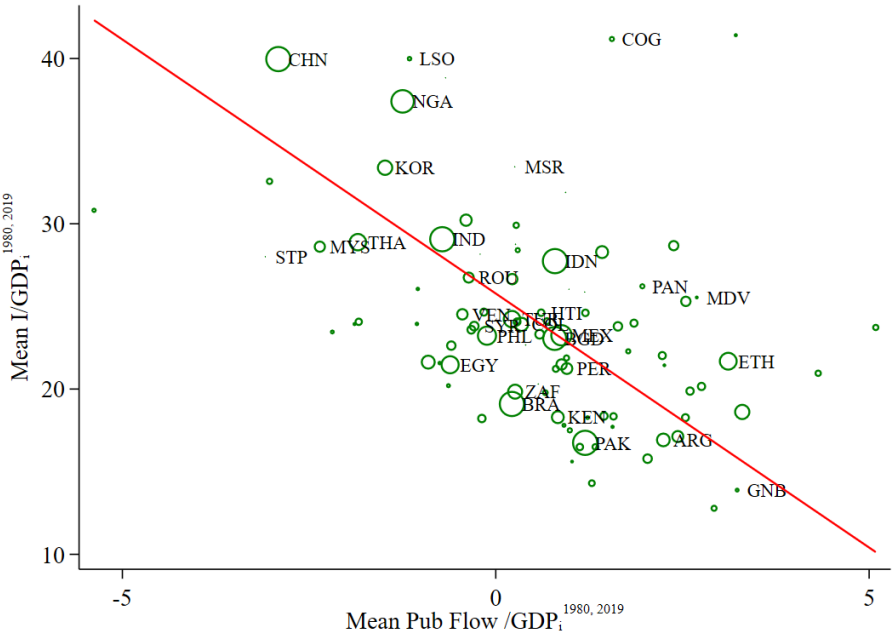
My third suggested principle for external account management is a rational policy of capital controls that is suitable for Pakistan's stage of development. Of particular concern is Pakistan's sovereign borrowing in dollars that needs to stop, as global evidence clearly suggests. The benchmark case of efficient international markets, as in the Feldstein-Horiaka hypothesis or the Fisher separation theorem, suggests that the incremental dollar borrowed from abroad by a saving-constrained country should go toward investment. However, this hypothesis is soundly rejected in the data. In fact, the empirical relationship is completely the opposite of this prediction as each additional dollar of net borrowing from abroad is associated with *lower* domestic investment.

What drives the negative relationship between external borrowing and investment? Figure 14 from Banerjee and Mian (2024) shows a remarkably strong negative relationship between average investment to GDP ratio and average borrowing by the sovereign as a share of GDP over the 1980-2019 period[20]. The magnitude of the negative relationship is also very strong: one additional percentage point of sovereign borrowing per year (as a share of GDP) is associated with 2.9 percentage point lower investment as a share of GDP each year. Sovereigns, like Pakistan, often claim that they are borrowing to boost investment,

[20] A positive flow on the x-axis reflects net borrowing.

but the reality is the opposite. It is often weak governments with poor policies that binge on sovereign borrowing to boost short-term consumption.

Figure 14: Net sovereign borrowing and domestic investment



Pakistan fits this global narrative well. As discussed in the previous section, most of Pakistan's external debt is sovereign borrowing in dollars from official creditors from the West, China and Arab countries. In line with global evidence, none of this borrowing has materially added to Pakistan's investment rate - in fact Pakistan's investment rate has only declined from already very low levels. Sovereign borrowing that does not add to Pakistan's domestic capacity, especially export capacity, creates big balance of payment problems when interest and principal payments come due.

The latest example of this is the 25.4 billion dollars that Pakistan borrowed from China under CPEC (Jamal (2024)). The country already owes 1.8 billion dollars in interest and dividend payments alone for the power sector component of Chinese lending. The financial investments were made under the same IPP policy with sovereign guarantees that I highlighted earlier. The government is currently unable to pay the accrued interest and dividends, and is negotiating to not only roll-over existing debts, but borrow more.

External borrowing in dollars requires extremely careful macro-prudential analysis. For example, a power plant that is built using loans in dollars with guaranteed high returns in dollars is not viable for a poor country like Pakistan. The electricity from such a plant will be consumed by locals paying in Pak rupees. The currency mismatch alone greatly increases

the risk posed by such investment at the macro level. The reality is that none of the sovereign borrowing has come with any proper formal analysis of its viability, or its impact from a macro-prudential perspective.

One element of Pakistan's capital control policy should be to minimize sovereign borrowing, especially in dollars. It should only be allowed under extreme circumstances, and once again I would recommend a macro-prudential council of independent experts who are required to score each sovereign loan the government recommends. Unfortunately, despite repeated evidence to the contrary, the government continues to use sovereign borrowing as the tool to boost investment, as exemplified by the latest push to attract middle eastern money through the recently set up Special Investment Facilitation Council (SIFC).

Beyond restraining external sovereign borrowing, Pakistan also needs to regulate private sector inflows by prioritizing those private sector inflows that lead to foreign direct investment in sectors with positive spillovers, particularly in tradable sector. Capital account convertibility should not be granted to speculative portfolio flows, or flows that invest in low productivity, largely non-tradable sectors such as real estate. Instead foreign direct investment in largely tradable sectors should be prioritized, especially investments that bring in technology and managerial know-how.

An equally important aspect of FDI is that it should have dynamic spillovers by leading to new business opportunities domestically. This can be encouraged by imposing or encouraging a joint venture requirement with domestic firms to better facilitate domestic technology and knowledge transfer. It is better if these joint ventures in preferable sectors can be leveraged with local debt from private banks, or even a minority stake of the government. The equity piece should be jointly owned by foreign investors and local firms to provide appropriate discipline and incentives.

An appropriately designed FDI policy can be further backed by developing domestic capital markets through pension funds. Investments from local pension funds towards such private sector led investments provide much-need patient capital for financing, and potentially high returns for pension funds (and help toward resolving the unfunded pensions problem).

My fourth suggestion for external account sustainability is reserve policy at the central bank. I have already suggested that Pakistan should aim to run a moderately positive current account balance. I have also recommended restraining sovereign external borrowing, and encouraging private FDI flows in technology and tradable sectors, but not speculative and non-tradable sectors. The central bank should hence run a policy of accumulating reserves to net out private sector inflows and run a modest current account surplus suggested earlier. Such a policy would give further confidence to foreign investors by bringing down currency risk, and lower external spreads. Keeping a positive net asset position with the rest of the

world reduces exposure to global financial cycle, that is particularly dangerous for developing economies (see Rey (2015), and Banerjee and Mian (2024)).

Finally, it is important to recognize the natural linkage between fiscal consolidation policy described in section 3.2 and external account management policy described in this section. Tax and spending policies have a direct impact on balance of payments, and should be structured to bring the external payments in further balance rather than imbalance. For example, raising taxes on land, real estate and non-tradable sector - while lowering taxes on the tradable sector would directly facilitate balancing of external account. As would raising carbon taxes on import of fossil fuels.

3.4 Growth and industrial policy

A new political equilibrium, and rational fiscal consolidation and external stabilization policies are necessary to bring the stability and balance needed for sustainable growth. However, the government also needs to think about policies that can best promote and coordinate economic activity that leads to growth. I highlight what such policies may look like in this last section.

First, "personnel is policy" - the decision making process that guides policy formation and implementation leaves much to be desired. I have often said in the past that the nervous system is broken, and that needs to be addressed. The haphazard and unscientific way in which major policies such as the IPP energy policy, or debt-driven sovereign investment policy were implemented reflects a serious lack of due process.

State capacity, especially at the top decision making circles, is extremely important. There is a lot of excellent talent, both in Pakistan and within the wider diaspora, that can be utilized for building state capacity in key areas. I have already given a few examples, such as fiscal or investment council, that can help guide a more rational decision making process[21]. In general, just like the importance of an independent and capable central bank is well-known, Pakistan needs to build independent institutional strength in a range of public decision making institutions.

Second, Pakistan needs a serious revamping of its K-12, vocational, civil service training and higher education infrastructure. I have already highlighted the extremely low literacy rate in Pakistan relative to countries at similar income level. There are 26 million out of school children, and those who are in school have serious learning deficiencies. Only one out of four students in Pakistan can read, or do math and science, at the minimum age-appropriate level (see Tabadlab report Nadeem et al. (2024)). India and Bangladesh do

[21] Some recent examples of work on tax policy and state capacity include, Khan et al. (2019), Khan et al. (2016), Kleven and Waseem (2013), Best et al. (2015), and Aman-Rana (2023)

twice as well, Iran three times as well. In a 2019 "Trends in International Mathematics and Science Study", Pakistan ranked second-lowest among 64 countries. Pakistan's higher education landscape is in an equally poor state, with negligible spending in R&D and science.

Human capital, science and technology lie at the heart of a modern economy. Pakistan cannot aspire to grow successfully with the current state of education and science in the country. Addressing the challenge of educating tens of millions of students, when the infrastructure is so broken, is a huge challenge. Luckily Pakistan has some incredible scholars and experts who can be asked to lead the effort of transforming Pakistan's education and scientific landscape - from designing curriculum, to building infrastructure and processes, to bringing in technology, data and research into the education sector[22]. But as I argued above, such individuals need to be empowered and given independent authority.

Third important element is industrial policy. Pakistan cannot grow with imported energy, and must develop domestic capacity to generate power. The country has some of the best potential globally for solar power, but currently produces only one-hundredth the solar energy that neighboring India produces. The core reason is lack of domestic investment in creating a domestic value chain in solar and battery production. A second area is agriculture, where domestic R&D and investment upgrading value chain can uplift the largest segment of the population.

The development of livable modern cities is another important need. I have talked about the need to tax land and real estate. A city infrastructure and development fund could be created from that revenue, that is dedicated to the design and development of cities, while addressing extremely urgent problem of pollution in cities and climate change more broadly. There are of course many other important areas in growth and industrial policy, but my point here is just to highlight this important area to close out the broader question of macroeconomic reforms[23].

4 Conclusion

Pakistan has consistently lagged behind other developing countries in its search for prosperity. But its economic outlook today is the worst it has ever been. I have tried to lay out the reasons behind this state of affairs, and outlined a way forward. Unfortunately, there is

[22]Some of the world's best long-run research on education has been done by a group of economists in Pakistan, see for example Andrabi et al. (2024), Andrabi et al. (2020), Andrabi et al. (2017), Andrabi et al. (2020) and Andrabi et al. (2015).

[23]Some recent work in Pakistan on finance, trade and macroeconomics includes Afzal et al. (2024), Atkin et al. (2017), Cerkez et al. (2024), Pirzada et al. (2024). There is also starting to be some promising work in the broader area of water, energy and climate change, e.g. Beg (2019), and Ahmad et al. (2023).

little evidence that those in power are wanting to make a real change. For the sake of their almost two hundred and fifty million citizens, who have tremendous potential, I hope they realize there is a better way.

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A Appendix

Table A.1: IMF Programs to Pakistan

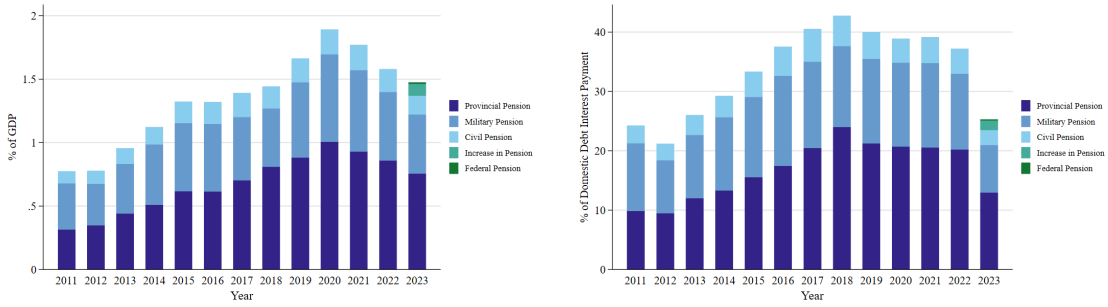
Program #	Facility	Date of Arrangement	Date of Expiration	Amount Agreed
1	Standby Arrangement	Dec 08, 1958	Sep 22, 1959	25,000
2	Standby Arrangement	Mar 16, 1965	Mar 15, 1966	37,500
3	Standby Arrangement	Oct 17, 1968	Oct 16, 1969	75,000
4	Standby Arrangement	May 18, 1972	May 17, 1973	100,000
5	Standby Arrangement	Aug 11, 1973	Aug 10, 1974	75,000
6	Standby Arrangement	Nov 11, 1974	Nov 10, 1975	75,000
7	Standby Arrangement	Mar 09, 1977	Mar 08, 1978	80,000
8	Extended Fund Facility	Nov 24, 1980	Dec 01, 1981	1,268,000
9	Extended Fund Facility	Dec 02, 1981	Nov 23, 1983	919,000
10	Standby Arrangement	Dec 28, 1988	Nov 30, 1990	273,150
11	Structural Adjustment Facility Commitment	Dec 28, 1988	Dec 27, 1991	382,410
12	Standby Arrangement	Sep 16, 1993	Feb 22, 1994	265,400
13	Extended Fund Facility	Feb 22, 1994	Dec 04, 1995	379,100
14	Extended Credit Facility	Feb 22, 1994	Dec 13, 1995	606,600
15	Standby Arrangement	Dec 13, 1995	Sep 30, 1997	562,590
16	Extended Fund Facility	Oct 20, 1997	Oct 19, 2000	454,920
17	Extended Credit Facility	Oct 20, 1997	Oct 19, 2000	682,380
18	Standby Arrangement	Nov 29, 2000	Sep 30, 2001	465,000
19	Extended Credit Facility	Dec 06, 2001	Dec 05, 2004	1,033,700
20	Standby Arrangement	Nov 24, 2008	Sep 30, 2011	7,235,900
21	Extended Fund Facility	Sep 04, 2013	Sep 30, 2016	4,393,000
22	Extended Fund Facility	Jul 03, 2019	Oct 02, 2022	4,268,000
23	Standby Arrangement	July 12, 2023	April 11, 2024	2,250,000
Total				25,906,650

*in '000 SDRs

Source: IMF-Pakistan: History of Lending Commitments

Figure A.1: Total revenue and expenditure as share of GDP

Figure A.2: Pakistan's unfunded pension expenditure



Panel A Panel B

Figure A.3: Revenue transfer to provinces