

Pakistan

Moving the Economy Forward



— Edited by —

Rashid Amjad and Shahid Javed Burki

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Preface

Today, well into the seventh decade of its existence as an independent state, Pakistan is passing through a critical period. It is navigating a perfect storm and faces not one but several daunting challenges. Extremist forces continue to challenge the state and the Constitution. The economy remains under stress and depends on large external flows to remain solvent. The rate of population growth remains relatively high; every year, the country adds close to four million people to its large population. Its human resources are poorly developed. There are severe power shortages; apportioning the limited supply of power means plunging large areas into complete darkness several times a day and for several hours at a time.

While fully aware of the depth and spread of such problems, we were equally convinced that there were enough “positives” in Pakistan’s economic and social systems to think in terms of a better future for the country. It is difficult to practice development economics without a tinge of optimism. Pakistan is richly endowed with resources that could be deployed to produce a higher rate of growth. It has the world’s largest contiguous irrigated area, for instance, and if it were to move toward the production of higher value-added crops, agriculture could become an even more significant part of the economy. The country has rich, if largely unexplored, mineral resources and traditional engineering skills that could be developed into supply chains to feed some of the large industrial production systems in the neighborhood. There is also Pakistan’s proximity to Asia’s two mega-economies, China and India—not only could it develop strong and beneficial economic relations with these two economic powerhouses, but it could also provide land routes for commerce, linking China and India with energy-rich Central Asia and the Middle East.

Supportive public policies are required to make these and other “positives” work for the country. We felt that a collection of essays by a group of development scholars and practitioners was needed—one that policymakers could use in making public policy choices. In asking writers to contribute to this volume, we agreed that the following three criteria would be kept in view. First,

Preface

the discussion should be about the future. One could analyze the past, but only if it informed one's thinking about the future. Second, the book would deal with a variety of topics but not venture into disciplines that were very far from economics. In other words, the proposed volume would be a book by economists on economics, but written to evoke interest among and be understood easily by a general readership. By focusing on many subjects within the broad discipline of economics, we wanted to emphasize the “micro” without neglecting the “macro”. Third, we would invite authors to present their recipes for the future, keeping in mind that Islamabad is searching for solutions to the country's many problems.

As its title suggests, this is a forward-looking book. It is also a collection of essays that discards the notion that Pakistan is inexplicably condemned to being the “sick man” of South Asia. As the volume's coeditors, we have enough international experience between us to know that there are no permanent trends in the lives of individuals or nations. Countries have their ups and downs; Pakistan is passing through a “down”. It has enough inherent strength, however—in its people and its endowments—to pull itself out of this difficult situation.

As a politician said not too long ago, a crisis is too precious a thing to waste. Pakistan is, undeniably, in a deep crisis—a fact that all its citizens recognize. What is needed at this juncture is a development paradigm that seeks to “go over” the number of obstacles that have slowed down the pace of the country's economic and social advance. To carry the metaphor forward, these are not “speed bumps” that we need to cross by slowing down; these are real walls that block our way. We need to pull them down, not skirt around them as we have tended to do in the past. Bringing the walls down involves something economists call structural change. Policymakers in Pakistan have shied away from this, taking the easy route ahead and avoiding the economic reforms so badly needed to make the economy more productive and efficient. This structuralist approach is the main theme of this collection of essays. Reading them together—as they should be read—there are enough ideas present to help policymakers move the country forward and onto a trajectory of high, sustained, and inclusive growth.

In putting this volume together, we must acknowledge a number of people and institutions that have made this book possible. First and foremost are the authors of the different chapters, who set aside their precious time to contribute to the volume and have done so purely as a labor of love and because of their commitment to improving the lives of the people of Pakistan. We must also

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Rashid Amjad
Shahid Javed Burki

1

Overview

Rashid Amjad and Shahid Javed Burki

The central question that the contributors to this volume seek to answer is how to reverse the current prolonged period of low growth and high inflation—stagflation—that Pakistan has experienced over the past five years, and to suggest and implement measures that would decisively move the economy onto a higher, more sustainable growth path. Eight key messages emerge from the studies presented in this volume:

- There is an urgent need to revive investment, which has fallen dismally to 12.5 per cent of gross domestic product (GDP) in 2011/12 from its peak of 22.5 per cent in 2006/07. This could be done by improving the investment climate and removing binding constraints—especially in energy—on new domestic and foreign investment. Pakistan needs to increase its investment-to-GDP ratio to over 30 per cent over the next decade if it is to generate sufficient employment to productively employ its fast-growing labor force and compete effectively with other rapidly growing developing countries. However, in the medium term, investment may continue to be constrained by resource availability and so, in the near future, a large part of the revival of growth will have to come from exploiting unused capacity and productivity gains.
- Pakistan’s economic problems are structural and not just cyclical. Deep economic reforms are needed to remove structural imbalances to increase efficiency and competitiveness, and to spur entrepreneurship

and innovation in the economy. Undertaking these reforms will require political will and a carefully sequenced pace of critical reforms so as to ease the burden of adjustment.

- The binding constraints to Pakistan’s growth need to be overcome to revive the economy and ensure sustainable growth. These include tackling the crippling energy shortage, increasing revenues to regain macroeconomic stability and reduce the current unsustainable fiscal deficit, and ensuring the availability of water to meet the needs of the agricultural economy.
- Exports should be made a major driver of economic growth. This will mean reversing Pakistan’s past poor performance in integrating with global markets—reflected in the country’s stagnant share in global exports. It will need bold steps to create and take advantage of regional trade opportunities, including trade with India. Critical to the success of this strategy will be to improve the quality of Pakistan’s human resource, which could provide the cutting edge in a highly competitive global economy.
- The economy has been badly mismanaged, not just in recent years, but also over a long period of time. This has considerably hampered its economic performance and reflects poor economic decision-making, uncoordinated responses, lack of implementation, rampant corruption, and poor governance.
- Pakistan must aim not only for sustained and higher growth, but also for inclusive growth such that the poor and vulnerable both participate in as well as share the gains of economic growth—allowing the benefits of development to spread to the country’s less developed economic regions.
- After the passage of the National Finance Commission (NFC) award and the 18th Constitutional Amendment, a much greater responsibility falls on the federating units. The provinces will now have to play a major role in economic management and to improve the welfare of the people. This will require their greater participation in overall macroeconomic management as well as close coordination between the federal and provincial governments in formulating and implementing development plans.

- Having alternated between the ascendancy of the state and private enterprise for decades, the country needs to settle into a mutually supportive relationship between these two components of the economy. The private sector should play the leading role in all economic activity but within a well-functioning regulatory environment developed by the government. The government’s primary role should be to provide social and physical infrastructure, support for cutting-edge research, and affordable social protection and safety nets for the poor.

Pakistan has enormous potential for high and inclusive growth if its resources are well and effectively managed. The policy recommendations emanating from this volume can play an important role in realizing this potential.

Lessons from the past

Pakistan’s economic performance over the past 65 years has both confounded its critics—when the country has performed much better than expected, especially in the early years—and disappointed those who had high expectations, given its initial start and economic potential. Hasan (Chapter 2) traces Pakistan’s economic history since independence as the economy went through recurring cycles of high and low economic growth. He identifies factors responsible for these episodes under different regimes and seeks to answer the key question of why “sustained growth has been elusive.”

Hasan also makes the important observation that political tension with India, which led to three wars between the neighbors (1948, 1965, and 1971), has played an important role in determining policy choices. One example is Pakistan’s decision not to devalue its currency in 1949, which led to the cessation of trade between the two countries and the start of import-substitution industrialization that fed on the Korean boom as the price of raw materials increased dramatically. Moreover, the dispute over the division of Indus river waters remained unsettled for the first decade and a half. These tensions have meant that Pakistan had to set aside far more resources for defense than it could economically afford.

The broad lesson he draws from Pakistan’s experience is that, while its average growth of around 5.2 per cent between 1960 and 2010 might be considered respectable, it certainly does not match its potential, especially when compared

with the fast-growing East Asian economies and more recently China and India. Pakistan's past economic performance should not be a source of comfort because output and employment have slowed down severely over the last four years and the prospect of strong economic revival has become uncertain.

Hasan identifies the following factors that have constrained Pakistan's growth over the years:

- High spending on defense to counter the real or perceived threat from India.
- High population growth.
- The considerable neglect of human resource development, in particular, education.
- A low savings rate and the inability to translate large foreign aid inflows into high, sustainable levels of investment and growth.
- A steady decline in governance, which has resulted in a serious institutional decline, a decline in public services, and a slow reduction in poverty incidence.
- Major missed economic opportunities.

Amjad (Chapter 3) traces the economy's more recent growth cycle, spanning the Musharraf regime and subsequent Pakistan People's Party (PPP) government from 1999/2000 to 2012/13. He argues that, despite the revival of economic growth and upturn during the Musharraf period, Pakistan's fundamental economic structure did not change; it could not, therefore, stand up to the external global economic shocks that started in 2007/08 with unprecedented increases in oil and food grain prices, followed by the global financial meltdown and ensuing recession.

Amjad argues that much of the problem that arose as growth first increased and then plummeted stemmed from (i) the Musharraf government's failure to take advantage of the spurt in economic growth, and (ii) the succeeding PPP government's failure to take concerted action necessary to restore macroeconomic stability and revive growth. Indeed, he suggests that by the end of its term, the PPP government could rightly be accused of gross negligence, wanton economic mismanagement, and rampant corruption.

The strength of Amjad’s chapter is that it covers in some detail issues related to economic management, including lessons from the International Monetary Fund programs that both governments entered into soon after taking office, though for very different reasons. He also assesses the current institutional arrangements for economic decision-making and how these can be improved, including the role of the Ministry of Finance in budget making and the Planning Commission in development planning and monitoring economic reforms.

Burki’s chapter (Chapter 4) is important in that it takes a broader socioeconomic–political view of where the economy is today and what challenges it faces, and then recommends policies to revive the economy as well, a medium-term strategy, which, as he states, “builds on the ‘positives’ in Pakistan’s current economic situation.” Burki’s basic hypothesis is that the country may well be on its way to developing a new way of managing its affairs and he traces this to the political development that began after March 2007 with the lawyers’ movement and the restoration of the Chief Justice of Pakistan.

Besides the economic factors responsible for the longest downturn in Pakistan’s economic history, he identifies other important factors that have resulted in a deep economic malaise, harming the economy in ways that are not easily quantified. The impact on economic stability and development, for instance, has also resulted in very high direct costs to the economy. Among the factors responsible is the rise of extremism, which has taken many forms, including an armed insurgency in parts of the Federally Administered Tribal Areas, sectarianism, and communal violence.

Overcoming major constraints

To move the economy forward, it is vital to overcome the major constraints to economic growth and to search for practical solutions—especially in the short term—to revive the economy. This section analyzes three of these major constraints: energy, revenues, and water.

An important conclusion that emerges from the chapters dealing with these issues is that poor economic management in the form of ad hoc and inconsistent policy responses has contributed greatly to the current situation. This poor economic management results from lack of technical expertise, a tendency to

follow donor-driven advice without examining alternative options, rampant corruption, inter-provincial rivalries, and strong vested interests.

The energy crisis

Given the overwhelming impact of energy shortages, both direct and indirect, on the economy and people's lives, several chapters in the book (including those by Hasan, Amjad, and Burki) draw attention to the problem and suggest solutions.

Malik (Chapter 5) presents a comprehensive review of how the problem arose, what factors have accentuated it, and why there are no simple solutions. She then describes in some detail areas of policy action that could help ease the crisis and gradually overcome it.

The energy crisis is not manifest merely in terms of its direct impact on output and the fact that it has shaved off 1.5 to 2 percentage points of GDP growth over the last five years. It is also responsible for digging a large hole in government finances and causing the fiscal deficit resulting from untargeted subsidies on energy consumption to balloon; it has also resulted in the emergence of an unending circular debt of huge proportions (almost 3 per cent of GDP).

The root causes of the problem can be traced to Pakistan's decision during the 1990s to opt for an energy mix that involved independent power producers (IPPs) who set up oil- and gas-fired energy plants to overcome the country's energy shortages. As the price of oil increased from around USD 15–20 a barrel to USD 100–140, these plants could only supply electricity at high prices, which had to be subsidized for fear of public reaction spilling over into street violence. Prices were not adjusted during 2004–07 till the subsidy became unsustainable; when, eventually, they were adjusted in 2008 and over the years, they were never done so in sufficient measure to overcome the cost and prices charged to consumers. The result has been a widening gap between supply and demand and between costs and prices. The prices also reflect almost 30 per cent worth of losses from theft and technical factors, of which theft comprises almost 60 per cent.

What, then, are some of the more short-term solutions (12 to 18 months) to the problem? Malik (Chapter 5) and Burki (Chapter 4) suggest the following measures:

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- Increase output through the best use of existing capacity, which would mean diverting oil and gas from inefficient public sector thermal plants to private sector plants (IPPs), which have excess capacity and can generate electricity at a lower cost.
- Eliminate the recurring circular debt by (i) cutting down online losses resulting from theft and then (ii) gradually increasing prices to cover costs once consumers are assured of a more regular and continuous supply and that they are not paying for the inefficiency of the system, including corruption and theft.
- Shift some of the major IPP thermal power plants from oil and gas onto imported coal. This would reduce costs and also allow these large plants to work at full capacity.
- Shift the ownership of all thermal plants operating in the public sector to an entity that can sell part of its share to the private sector. This entity could also issue bonds backed by its assets to liquidate the accumulated circular debt.
- Encourage the provinces to invest in the development of the energy sector (which, under the 18th Amendment, they are empowered to do), with the assurance that their power supply from the national grid will not be reduced.
- Transfer the distribution companies operating in different provinces to the provinces so that they can take effective steps—backed by law enforcing agencies—to stop theft and reduce line losses.
- Develop a market for trading power in which provinces can sell and buy electricity from each other.

Medium- to long-term solutions include the following:

- Correctly price power consumption to attract private investors.
- Change the country's currently expensive energy mix by utilizing its enormous coal supplies, especially the unexplored 185 billion tonnes of coal reserves in Thar. The shift to coal should be accompanied by measures to reduce its environmental impact.
- Build run-of-the-river hydropower projects.

- Move to alternative environment-friendly energy generating systems, including wind power, biogas, and solar energy.
- Build more major dams: start by raising resources for the construction of the Bhasha-Diamer dam and plan to build two major dams over the next decade and a half.
- Actively pursue the completion of the Iran–Pakistan gas pipeline and establish links with energy networks from Central Asia through Afghanistan.

Macro-stability: Raising revenues and reducing the fiscal deficit

If crippling energy shortages is the first of the major constraints to economic revival and sustained growth, the second is the rising unsustainable fiscal deficit as government expenditures outstrip revenues. Without a determined effort to raise the currently very low revenue levels in terms of current expenditures, macroeconomic stability will remain elusive. Of course, raising taxes must be accompanied by cutting down sharply on wasteful expenditures; the government must demonstrate that these resources are being efficiently used and reflected in improved public services, including the security and law and order situation.

This critical issue is analyzed in a number of chapters, but Pasha and Pasha (Chapter 7) present a detailed account of the existing system of tax collection in Pakistan and the path that tax reforms must take if tax revenues are to increase from the current dismal level of less than 10 per cent of GDP to around 15 per cent over the next few years. Most manifestos issued by the mainstream political parties have endorsed this or similar goals.

The package of tax reforms that Pasha and Pasha identify has a focus on direct taxes, which would not only result in an increase in tax yields but also make the tax system more progressive. The measures suggested to achieve this include levying an effective agricultural income tax; reintroducing the wealth tax; instituting a minimum tax on turnover; targeting tax exemptions; rationalizing tax rates; developing property tax; and providing incentives for tax payers to file returns.

In the domain of indirect taxes, the authors propose introducing a broad-based integrated value-added tax (VAT) and bringing into the tax net major services currently not covered by the sales tax. They also propose rationalizing

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the statutory tariff rates into essentially three slabs of 5 per cent, 15 per cent, and 25 per cent, and simultaneously withdrawing most of the statutory rules and orders, except those pertaining to trade agreements.

Finally, the authors hold the view—shared by many—that radical changes are needed in the Federal Board of Revenue to make it more efficient and effective.

The critical role of tax reforms in making devolution work

In Chapter 14, Ahmad examines whether the major reforms undertaken through the 7th NFC award and the 18th Constitutional Amendment will work effectively and ensure higher living standards for all people in all four provinces. In this context, he also examines in detail the downward slide in Pakistan's tax-to-GDP ratio and argues that unless effective measures are taken to raise revenues, any structural shifts involving significant decentralization to the provincial governments are “of little more consequence than shifting deckchairs on the Titanic.”

Examining the recent history of tax reforms in Pakistan, he points out that the government's approach to the IMF in 2008 was predicated on tax reforms. He argues that the failure of tax reforms has seriously jeopardized both the NFC award and the 18th Amendment. Indeed, as he starkly puts it, “without the tax reforms, the NFC award is just a mirage in the desert.”

Ahmad points out that the greatest shortcoming of the decentralization process in developing countries—and this must also apply to Pakistan—is the lack of attention given to adequate own-source revenues at the subnational level. He details China's successful reforms undertaken during 1993/94 from which Pakistan could learn. An important recommendation he makes is that provinces and districts should be provided flexibility in generating their own-source revenues.

Water: Maintaining and harnessing the Indus basin irrigation system

Pakistan, it is rightly said, is the gift of the Indus and, as Chaudhry states in Chapter 8, “Pakistan's Indus Basin irrigation system is the strong heart of the country's economy.” The chapter provides a historical overview paying tribute to the British irrigation engineers who created the original system (1847–1947)

and the Pakistani irrigation engineers and institutions (particularly the Water and Power Development Authority and provincial irrigation departments) who have added new dams and barrages, built new link and branch canals, and maintained the world's most complex and extensive irrigation system.

A critical concern is whether adequate policy measures have been taken and investments made to increase surface water storage in line with rising demand and to rehabilitate the Indus irrigation system. Chaudhry provides details of the important projects that have been built in the last decade, largely financed by the Government of Pakistan, including (i) the Mangla dam raising project, which added 2.9 MAF to its existing capacity of 6 MAF; (ii) the Greater Thal Canal project in Punjab, which created a new culturable command area (CCA) of 1.5 million acres; (iii) the Kachi Canal project for Balochistan, covering Dera Bugti, Naseerbad, and Thal Magsi, and creating a CCA of 0.71 million acres; and (iv) the Raine Canal project area in Sindh, covering Ghotki, Khairpur, and Sukkur, and creating a new CCA of 0.41 million acres. In addition, an irrigation system rehabilitation project started in Sindh is now nearing completion.

The author highlights the fact that, with the exception of a few barrage irrigation projects, the World Bank has provided no funds for such projects and its focus since 1997 has been solely on institutional development and, in the long term, to encourage the privatization of the irrigation system. (This is very similar to the World Bank's early decision since 1987 not to lend for energy development and focus on the privatization of the energy sector instead.)

Excluding climate change requirements, Chaudhry estimates that Pakistan optimally requires about 22 MAF of storage on the Indus—its present storage capacity is about 8 MAF at Tarbela and an additional 6 MAF if the construction of the Bhasha-Diamer dam goes as planned at an estimated cost of USD 8 billion. He, therefore, recommends building additional storage capacity in the form of two dams on the Indus to deal with the present situation. While the Asian Development Bank has indicated support for Bhasha-Diamer, the World Bank has recently shown interest in funding a hydroelectric project at Dasu downstream of Bhasha-Diamer and upstream of Tarbela. Chaudhry also draws attention to the increasing pressure on the Indus Water Agreement signed in 1960 as the Indian Punjab runs out of groundwater and India continues to build barrages on the rivers that were allocated to Pakistan under this agreement.

The six major conclusions of this chapter are that Pakistan should focus on (i) creating additional surface storage; (ii) preserving surface water, particularly by lining canals; (iii) controlling ground water and salinity by discouraging excessive tubewell use; (iv) encouraging general efficiency of irrigation water use through better pricing policies and improved land management techniques; (v) enhancing yields through improved farm practices; and (vi) fully meeting the environmental concerns of the Indus delta, river system, and wetlands.

Increasing exports: A new driver of economic growth

A major thrust of this volume is that, unless Pakistan is able to increase its currently stagnant share of exports in GDP (around 10 per cent) and its share of exports in world trade (around 0.15 per cent), it will be very difficult for the country to generate either sustainable or higher economic growth. Pakistan's poor performance in integrating with and taking advantage of the fast pace of globalization prior to the financial crisis is brought out in a number of chapters (Hasan, Chapter 2; Amjad, Chapter 3) but Ahmed, Hamid, and Mahmud (Chapter 6) focus on measures to increase overall exports.

Textiles and garments (T&G) have dominated Pakistan's exports since the 1960s, but their combined share has fallen from about 73 per cent of total exports in 2000 to 53 per cent in 2012. On the other hand, the small and medium enterprise (SME) sector's share of total exports has increased steadily, with the bulk of SME units operating in industrial clusters around Karachi, Lahore, and the Sialkot–Gujrat–Gujranwala triangle in central Punjab. The cement sector has also performed better.

Ahmed et al. identify T&G and SME exports as key potential export drivers in the manufacturing sector in the medium term. They argue that cement exports have been channeled mainly to Afghanistan and these may taper off following the withdrawal of international troops in 2014 and downturn in coalition civilian aid. They may, however, increase if India reduces its nontariff barriers (NTBs) against Pakistan's cement exports.

For T&G, the authors are hopeful of Pakistan's prospects, given that it was accorded GSP-plus status by the European Union (EU) in 2014 and that there are opportunities to exploit as China (with current T&G exports of USD 223 billion

in 2012) moves from low-end manufactures to higher value-added products. In the case of SME exports, they identify sports goods, surgical instruments, furniture, metal manufactures, and automobile parts as ideal export drivers in the medium to long term.

In the agriculture sector, besides rice, they identify cotton as an export driver based on a 50–80 per cent potential increase in cotton production in the next five to seven years as a result of using BT cottonseed. This could, in turn, increase cotton exports by over USD 3 billion per annum and, if converted into textile products, by a multiple of this amount. They also identify high-value nontraditional agricultural exports, such as fruits and vegetables, and *halal* meat and meat preparations, as having considerable potential. Finally, the authors point to the large potential that lies in emulating India by expanding knowledge-based exports, including information and communication technology, as well as entertainment and health services. In some IT areas, Pakistan is doing even better than India as some of its firms are engaged in “product development”—an area in which India is relatively weak.

As a strong proponent of increasing the export-orientation of the Pakistan economy, Hasan (Chapter 2) argues that the pessimism some observers have expressed about future globalization is not justified, and that even despite the slowdown in international trade, “Pakistan can hope to gain a market share provided it follows policies that strengthen competitiveness, diversify the product mix, and move up the value chain.” Some specific policies he suggests, complementing those mentioned earlier, include:

- Instituting an exchange rate that would fully reflect the differential between movements in Pakistani prices and the international price level. Here, it is important to note that the large and increasing share of remittances does in fact raise the real effective exchange rate relative to what it would be based on the current account balance; to some extent, this does make it more difficult for Pakistani exporters to compete in global markets.
- Promoting foreign investment through joint public and private sector initiatives in textiles, clothing, and other promising export sectors from countries such as the Republic of Korea, Hong Kong, Malaysia, and Taiwan.

Overview

- An in-depth review of the free trade agreement signed with China and the establishment of a free trade zone with the country; the latter is likely to increase exports.
- Encouraging the development of export supply chains and linking these efforts to the National Trade Corridor Improvement Project.
- In the context of the Strategic Trade Policy Framework (2009–12), reducing the anti-export bias in the current incentive structure by withdrawing protection from inefficient industries, and minimizing taxation at the investment stage.
- Coordinating more closely between the commerce ministry and related ministries, including industry and textiles, as well as the Planning Commission and the provincial governments. This degree of interface is sadly missing and sorely needed.

Encouraging regional trade

India–Pakistan trade

Over the last few years, there has been considerable progress in removing barriers to trade between India and Pakistan. While India had granted most-favored-nation (MFN) status to Pakistan in 1996, the latter moved in 2011 from a positive to a much smaller negative list for imports from India and has in principle agreed to granting India MFN status in early 2013.

In a carefully crafted and well-analyzed paper, Pasha and Imran (Chapter 12) examine the prospects of India–Pakistan trade, including the level of import tariffs in the two countries and their potential impact on the volume of trade as well as NTBs. Pasha and Imran establish that the low trade complementarity between Pakistani exports and India arises primarily because Pakistan does not have a diversified export base and its two major product groups—agricultural items and textiles—also account for a significant portion of India’s total exports. They do point out, however, that if free trade were to take place between the two countries, further specialization could develop with Pakistani exporters finding “niche” markets in India. A number of Pakistani manufacturers in favor of granting MFN status to India also hold this view.

Having examined the existing tariff and subsidy regimes for agricultural products and tariffs on textiles and clothing, Pasha and Imran reach the important conclusion that, as a result of these measures, India has effectively restricted imports, which will deny access to Pakistani exporters in these two vital sectors. They strongly advocate, therefore, that Pakistan seek the withdrawal of specific duties on textiles and clothing and opt for the application of only ad-valorem duties. The study also shows that, compared to India, Pakistan operates fewer and less vigorous NTBs. These issues need serious consideration in both countries.

Overall, based on existing export patterns, Pasha and Imran project that, in the medium term, imports from India could rise to almost USD 7 billion to USD 8 billion, while Pakistan's exports would rise to around USD 1 billion. This quantum jump in bilateral trade could result in the fear of "serious injury" to industries in Pakistan that have enjoyed high protection levels in the past. It will be, therefore, necessary to build up the capacity of the Ministry of Commerce and National Tariffs Commission to investigate such complaints and take necessary safeguards as allowed under the World Trade Organization and South Asia Free Trade Area agreement.

Other studies present much larger estimates of the increase in trade resulting from the lifting of trade restrictions between the two countries, and some believe that the quality and novelty of Pakistani products will considerably enhance their demand in Indian markets. International experience of trade between neighbors (EU, NAFTA, and ASEAN) also shows that opening up trade results in major changes to the existing pattern of exports as dynamic forces are unleashed.

The other key conclusion that Pasha and Imran draw is the need for Indian exporters to gradually move into Pakistani markets even after they are granted MFN status. This is so that a large, stark trade imbalance does not arise in their favor, which would otherwise lead to agitation by the affected parties and seriously slow down the whole process.

Remittances and the Pakistani diaspora

Under the overall rubric of increasing foreign exchange earnings Amjad, Irfan, and Arif (Chapter 11) analyze the remittances market in Pakistan and attempt to explain the almost tenfold increase in official remittances between 1999/2000

to 2011/12—from around USD 1.5 billion to over USD 13 billion. The share of remittances in GDP has risen to 5.5 per cent; in terms of foreign exchange earnings, these flows are equal to half of Pakistan's total exports of goods and services. The main reasons for this increase in remittances is traced to: (i) a shift from unofficial (and unrecorded) channels (*hawala*) to official channels; (ii) an increase in the number of Pakistanis living and working abroad; and (iii) a rise in migrants' skill levels. As to the unofficial flow of remittances, though they suggest their share has decreased over the years, the authors' rough estimates suggest that these amounts could still be as high as USD 5 billion. Other estimates are even higher.

By analyzing in detail the functioning of the remittances market, Amjad et al. make the important observation that remittances entering Pakistan have a far greater multiplier impact on the economy than remittances through unofficial channels, which normally result in movements of currency within Pakistan and within the destination country. They also make the key point that these remittances represent real demand for Pakistani rupees, which are backed by the foreign currency of those who demand Pakistani rupees. They play down the general notion that these official remittance flows represent the “whitening” of black money from Pakistan.

Based on the results of a household survey, their chapter also investigates why migrants prefer to send remittances through unofficial or hawala channels, and suggests incentives and measures (such as the Pakistan Remittance Initiative) for them to be sent through official channels.

Improving governance, transparency, and accountability

An important premise of this volume is that, if Pakistan's economy is to move forward, then the current decline—indeed rot—that has set in its public services and institutions needs to be reversed rapidly. This is extremely unfortunate though, sadly, a trend not restricted to Pakistan. As Hasan (Chapter 2) recounts, Pakistan was able to establish its economic viability, and later it also displayed economic resilience through an outstanding and upright civil service.

Husain (Chapter 9) asks why the quality of economic governance and decision-making and the capacity of the country's key institutions have gradually deteriorated over time. He believes that Pakistan's main constraints to maintaining

macroeconomic stability, sustaining economic growth, and delivering public services to the poor are weak governance and the gradual but perceptible decline in institutional capacity.

Husain argues that a major reason for poor economic management is that governments have operated with short-term horizons—so as to claim credit for their ostensible performance during their tenure of office—rather than according to what the long-term national interest may dictate. He identifies a number of important developments that warrant wide-reaching reforms. These include inadequate checks and balances in the existing institutional arrangements, which have been further changed by the 18th Constitutional Amendment.

The author also argues that the state's failure to perform its functions is most glaring in terms of the government's ability to serve its citizens. Acts of terrorism, violence, and extremism have become so frequent over the last several years that "*the writ of the state does not appear to exist any longer*" (emphasis added).

Husain presents a proposed governance reform agenda for restructuring and revitalizing government institutions. The measures suggested include the need to reduce the discretionary authority exercised by government functionaries at all levels; this needs to be minimized and made more transparent, including through the introduction of e-governance, e.g., in land records and land titling. He also suggests that the role of the Council of Common Interests in formulating national policies after the 18th Amendment be defined more clearly and strengthened. He recommends creating incentives that would encourage competing civil servants to upgrade their skills and instituting promotions based on past performance and potential for shouldering greater responsibilities. Finally, he emphasizes giving high priority to reforms in areas that affect people's daily lives, such as education, health, the police, and land administration.

This is an important agenda for undertaking reforms and an implementation system should be set up to track these reforms.

Reviving private investment: The role of foreign firms

Hamdani (Chapter 10) analyzes foreign companies that operate in Pakistan and "assesses the potential for a more ambitious industrial strategy:

private-sector-led, fueled by FDI, and supported by policies and institutions that encourage technological deepening.” He points out that the dynamic private sector that took shape after independence and in the earlier years of the 1950s and 1980s attracted foreign participation. Foreign direct investment (FDI) was initially permitted in manufacturing, with larger investments used to form joint stock companies with local equity participation. He lists a galaxy of multinational companies that invested in Pakistan soon after independence and in the 1950s and 1960s.

When private investment fell in the 1970s with the spate of nationalization carried out by the PPP government, so did the foreign investment. However, it picked up in the 1980s, growing at an annual average rate of 22 per cent. FDI growth fell to only 8 per cent in the 1990s, despite policy reforms and generous incentives. On the other hand, India emerged as a major destination for foreign investors during this period. Pakistan’s FDI inflows only picked up in 2003 and peaked at around USD 5 billion in 2007, after which they fell drastically, while increased repatriation of profits further reduced net inflows. During the upturn, FDI shifted from manufacturing to services. In 2008, three industries—finance, telecommunications, and power—amounted to nearly half the FDI stock.

The author argues that foreign manufacturing affiliates in Pakistan have, in general, failed to develop an export-oriented approach in part due to the protected markets in which they operate. This is in contrast to the experience of other countries where, over time, they have graduated to becoming major players in global markets. Pakistan could do the same by encouraging foreign firms to deepen links with domestic suppliers and to produce for export.

Hamdani spells out policy measures needed to revive private investment, given that FDI and private investment have moved in tandem over the years. He argues that the government’s role in industry should be less of a player—with public enterprises being autonomous and self-sufficient or privatized—and more that of a referee to ensure that markets run efficiently and that laws are well administered.

A change in policy direction, together with efforts to overcome the current energy crisis, build technological capability through investment in research and development, and promote links between education and training could prepare

the ground for attracting and benefiting from FDI. By addressing investor confidence, profits would be reinvested and the large repatriations curbed. He believes that, were Pakistan to create the right policy environment, there is every reason to expect FDI of USD 10 billion annually or twice the highest level attained in the past.

Ensuring inclusive growth: Reducing poverty

The merit of the study by Chaudhry, Chaudhry, Haseeb, and Afzal (Chapter 13) is that it moves beyond the income measurement of poverty (as defined by a poverty line) toward a more comprehensive analysis of what makes people “poor” and what the best way is to target poverty in Pakistan. They argue that the official poverty line based on income misses out a large share of those who should be counted among the multidimensional poor.

Their study focuses on three dimensions of poverty—income, education, and health—using data from the Pakistan Social and Living Standards Measurement Survey for 2004, 2008, and 2010. In terms of the income-based poverty line (USD 1.08 per day in 2004 and USD 1.25 per day in 2008 and 2010), their results show that the number below the poverty line declined from approximately 20 per cent to 16 per cent between 2004 and 2010, and then increased marginally to 16.5 per cent by 2010, which was not statistically significant. Urban poverty declined from 11.5 per cent in 2004 to 9.2 per cent in 2008 and remained approximately the same till 2010. The percentage of the rural poor fell significantly from 25 to 19 per cent between 2004 and 2008, and though rural poverty increased from 19 to 20 per cent, it was not statistically significant.

In terms of the second indicator of poverty—education—the study focuses on the percentage of people without primary education: their results show that there was a significant decrease in the number of people above the age of 20 without primary education between 2004 and 2008 from approximately 59 per cent to 55.5 per cent. Again, there was no significant decrease in the number between 2008 and 2010. The fall in the number of those below the age of 20 with primary education between 2004 and 2008 is seen both for men (44.6 per cent to 40.6 per cent) as well as for women (73.9 per cent to 70.5 per cent). However, between 2008 and 2010, there is no significant change.

The health dimension of poverty is measured by the source of clean drinking water. The study's results show the number of those without access to drinking water; in contrast to the other two indicators, it increased from 11 to 15 per cent between 2004 and 2008, and this higher level was also observed in 2010.

By using a multidimensional measure of poverty, the chapter brings out starkly the percentage of the overall population that is poor in terms of at least one criterion (income, education, or health). They estimate this at 73 per cent of the overall population in 2004, which then fell to about 70 per cent in 2008 and remained constant till 2010.

The chapter also examines the association between those below the poverty line, the circumstances in which they were born, and the factors determined by their own efforts. On the whole, the authors' results imply that parents' income and education are significant in determining if their children on becoming adults live above or below the poverty line. Their study also shows that factors such as education have a significant impact on determining a person's income.

Main conclusion

The studies in this volume will, the editors hope, assist the government that comes into power after the elections both at the federal and provincial levels, to meet public expectations, especially after its great disappointment with the performance of the previous coalition administration. Experience from other economies in stress suggests that there can be fairly rapid recovery if the quality of governance is improved and if the right set of policies is adopted. A program aimed at reviving growth should distinguish between the economy's immediate needs and those appropriate for the medium and long term.

The analysis and policy recommendations emerging from the studies on which there is broad consensus suggest that policymakers need to focus on the following areas over the next 12 to 18 months:

- Restoring macroeconomic stability and reviving private investment.
- Increasing the supply of electricity by tackling the problem of “circular debt” that has kept IPPs from utilizing their installed capacity.

- Restructuring public sector enterprises to make them profitable. Privatizing loss-making enterprises with the active participation of both management and workers is one option to consider.
- Opening up further trade with India and granting it MFN status at the earliest.
- Improving economic management, radically improving the quality of governance, and firmly stamping out rampant corruption.

The strong revival of growth on the lines suggested above, together with a strengthened “income support program” would help reduce poverty and contribute to a fairer share of growth benefits than in the past. Much greater emphasis on job creation through the expansion of labor-intensive exports, small industry, and agriculture could dramatically transform the employment situation, especially for women and the young, educated unemployed. On the other hand, strictly controlling economic rents and corruption practices that benefit the few will improve government revenues and enable access to good quality social services for the poor and middle classes.

Indeed, the first two elements listed above are closely linked. Restoring macroeconomic stability will mean reducing the fiscal deficit and that will require removing or drastically reducing untargeted subsidies, the bulk of which originate in the energy sector. The real challenge for the new government will be to reduce power sector losses and improve efficiency. This would help cushion the impact of increases in energy prices to cover costs and, by reducing the recurring circular debt, allow energy supplies to be increased and power outages reduced.

Regaining macro-stability will also require increasing revenues, and the new government should consider introducing a VAT as soon as possible as well as bringing agriculture into the tax net and imposing a general sales tax on services in sectors that are currently not covered. The provinces should also take responsibility in areas that fall under their tax jurisdiction. As for raising private investment, first and foremost, there is a need to restore business confidence. Improving the security situation, reducing the energy gap, and improving the quality of governance together with immediate measures to stamp out corruption can go a long way in attracting new domestic and foreign investors.

Overview

Measures in the medium and long term, as suggested by the studies in this volume, coalesce around a medium-term strategy that could gradually move the economy onto a higher growth trajectory of around 8 per cent. The strategy should:

- Implement economic reforms to remove the major constraints to economic growth; this would also help unleash the major drivers of economic growth including moving toward a much higher level of investment and exports.
- Effectively tap emerging forces that could propel the economy forward, namely the population of young, educated women, and large Pakistani diaspora.
- Invest in people by significantly increasing the resources committed for education and health.
- Afford a much greater role to provinces in overall economic management and the formulation of development plans; and ensure better integration between the policies and plans of the provinces and those of the federal government.
- Carry out comprehensive reforms to strengthen institutions and reduce corruption for better economic management.
- Make a determined effort to reduce the high-growth rate of population.

Failed Economic Promise

Lessons from Pakistan's Development Experience

Parvez Hasan*

Introduction

Pakistan has had a checkered economic and political history. The country's periods of rapid growth in the 1960s, the first half of the 1980s, and 2002–07, have been followed by periods of sharp economic slowdowns. Sustained economic growth has been elusive; there has been no real deepening of the structure of the economy, and social and distribution issues have become increasingly troublesome. Yet Pakistan has somehow managed to attain an annual average gross domestic product (GDP) growth rate of 5.2 per cent and a per capita income growth rate of 2.5 per cent over the last half century (1960–2010) that has more than trebled the average living standard over the period.

The distribution of gains from growth has, undoubtedly, not been equitable. However, the country's economic record, though of course not able to match that of East Asia—especially China, and more recently India—seems to compare favorably with the average for developing countries. This is no mean achievement considering the great deal of political instability and long periods

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of military rule that entailed relatively good governance but a high cost in terms of defense spending, continued tension with India, and weakening institutional authority.

However, Pakistan's past economic performance is also somewhat misleading because the growth of output, investment, and employment have very seriously slowed down after 2008 and the prospect of strong economic revival has become uncertain (Institute of Public Policy, 2012, Chapter 2). GDP growth averaged less than 3 per cent per annum over 2008–12. Gross fixed capital formation dropped more than 30 per cent in real terms over 2008–12 and the ratio of fixed investment to GDP at around 11 per cent in the financial year (FY) 2012 was at its lowest level in half a century. Public finances have deteriorated very significantly and external finances are being kept afloat largely as a result of substantial workers' remittances, both through official channels and money market companies. Consequently, gross national product (GNP) growth has averaged 3.6 per cent per annum or is 0.7 per cent higher per annum than GDP growth over the last four years (2008–12).

In looking for lessons from Pakistan's development experience, we cannot and must not overlook the factors that have made fairly respectable growth rates possible for long periods despite considerable odds. But the more important questions relate to the many missed opportunities that have come Pakistan's way and the many policy missteps that kept it from attaining its fairly widely heralded economic promise in the 1960s. Most urgently, a look at the country's development experience is essential to learn lessons on how to break out of the economic stagnation that now threatens not only people's economic wellbeing but also the country's political future.

Salient aspects of economic history

Before drawing lessons from Pakistan's development experience, it is necessary to provide a thumbnail sketch of the major economic periods it has undergone.

When the idea of Pakistan was put forward in the 1940s, doubts were continually expressed about its economic and financial viability. Despite the turmoil caused by Partition, the early development of tension with India and frequent changes in what were weak governments without a strong public

mandate, the 1950s marked a period of rapid industrialization. The decade laid down the basis of future growth by sharply increasing investment, both in physical and human capital, and creating strong economic institutions, notably the State Bank of Pakistan, the Water and Power Development Authority (WAPDA), Pakistan Industrial Development Corporation (PIDC), and Pakistan Industrial Credit and Investment Corporation (PICIC). By 1959/60, fixed investment in West Pakistan (now Pakistan) had risen to 11.5 per cent of GDP from 4.1 per cent in 1949/50, with public investment accounting for nearly two-thirds of capital formation (Hasan, 1998). It may seem surprising but education was not neglected in the 1950s. Gross primary enrolment grew by 10 per cent per annum though girls' enrolment accounted for only 22 per cent of the increment.¹

The financing of investment, however, relied excessively on external flows—a pattern that was to become endemic. While private investment, especially in the rapidly growing textiles sector was financed mostly by reinvested burgeoning profits under strong protection, the more-than-six-fold increase in real public investment in the 1950s relied on foreign assistance and money creation.

Apart from foreign assistance, there were three main drivers of growth in the early years: (i) a competent, committed, and honest bureaucracy with strong economic leaders such as Ghulam Mohammad, Chaudhry Mohammad Ali, Ghulam Faruque, and Zahid Hussain; (ii) a large number of migrants consisting of well-educated professionals who played a vital role in strengthening the civil services and the financial sector; and (iii) private sector entrepreneurs led mainly by members of the Bohra, Memon, and Khoja communities that had migrated from India and settled in Karachi, making it Pakistan's premier industrial city.

The annual economic growth rate that had been a little over 3 per cent in the 1950s shot up to nearly 7 per cent in the 1960s, and in the heyday of the Ayub era in the mid-1960s, Pakistan's development efforts were hailed as a rare success story (Papanek, 1996). The transformation in economic performance compared

¹ Note, however, that only 5–6 per cent of primary school-going-age girls were in school in 1948, and even girls' enrolment increased much faster than the rate of growth of population, though less than 8 per cent of primary school-going-age girls were in school by 1960.

to the previous decade was the result of both a massive increase in foreign aid and investment, economic liberalization, technological breakthroughs in agriculture, and exceptionally well-coordinated economic policies and speedy decision-making supported by strong planning processes. A less well-known fact is that real defense spending from Pakistan's own resources grew little during 1960–65, the size of the army was kept strictly under control, and all the incremental expenditure on weapons and equipment was financed through substantial US military assistance.

Public investment and aid flows were especially stimulated by large expenditures under the Indus Basin Water Treaty signed with India in 1960. The treaty was a consequence of the initiative taken by the World Bank. Including the expenditure on Indus Basin replacement works of about USD 1.2 billion, water and power investment totaled USD 2.5 billion (about 3.6 per cent of GDP) during the 1960s and accounted for more than 50 per cent of total public spending. Fixed investment reached an all-time peak of 20.8 per cent of GDP in 1964/65, with more than 50 per cent financed through external assistance. The massive long-term investment in infrastructure was critical in sustaining agricultural growth through the mid-1990s.

The 1965 war with India had the disastrous consequences of a decline in aid flows, upsetting the balance between defense and development, and setting in motion currents that led to the separation of East Pakistan in December 1971. The near-doubling of defense spending between the first and second half of the 1970s was also a major setback for education—additional primary school enrolment during 1965–70 was one-third less than that in 1960–65. Based on an imperfect knowledge of the level and rate of growth of population, the Third Plan had set an ambitious 70 per cent enrolment target for 1969/70—the actual result was only 40 per cent enrolment.

Had it not been for the country's exceptional agricultural growth rate of 5 per cent made possible by speedy private tubewell development and the highly successful exploitation of the green revolution in wheat and rice production, economic activity would have slowed down very seriously in the second half of the 1960s. Even so, the fixed investment-to-GDP ratio fell to 14.3 per cent by 1969/70. More importantly, the exchange rate and trade policies that were initially supported by the large influx of aid flows had progressively distorting effects on the economy.

The large supplies of long-term credit available for industry through PICIC and the Industrial Development Bank of Pakistan at a grossly overvalued exchange rate led to wasteful and unviable investments. The multiple exchange rate regime that had been put into place under the export bonus scheme in 1959 created an effective subsidy to manufactured exports of over 100 per cent for textiles, while substantially taxing agricultural exports. This stalled industrial deepening and inhibited the development of a really competitive diversified manufactured export base while low value-added cotton yarn exports were aggressively promoted.

Zulfikar Ali Bhutto's five-and-a-half-year civilian government rule encompassed a wide range of economic policy initiatives and state interventions. While Bhutto did not have a grand design for the economy and only a vague belief in socialism, he felt he had the popular mandate to curb the power of the industrialists and bureaucrats and improve the lot of the poor. He, therefore, vastly expanded the state's role in economic activity by nationalizing education, banking, insurance, and a number of heavy industries. While he did not nationalize light industry, the Punjab government under the Pakistan People's Party invested in several sugar and textile mills. Including the large and not very economical steel mill and other investments in cement, fertilizers, and heavy industries, public sector industrial investment grew tenfold in real terms, while the large-scale private industrial sector essentially shriveled because of perceived hostility to the "twenty-two families".

It is not an exaggeration that Bhutto's economic policies virtually halted the growth of the modern industrial sector and reinforced the anti-export bias of the country's industrial strategy. To this day, labor-related and other regulations adopted have continued to provide strong disincentives to the growth of large-scale industry.

Other Bhutto policies that had a negative impact on long-term growth were the large increase in defense establishment (even after the country was reduced by half); the nationalization of educational institutions; a cavalier attitude toward public spending (that his successor and nemesis, General Zia-ul-Haq eagerly replicated); and the serious erosion of the capacity and authority of public institutions, especially those responsible for planning. A great deal of the responsibility for the failures in basic education, which remain an important constraint to growth, can be traced back to the decision to nationalize educational institutions in 1972. As a direct consequence of this decision, the

government's management capacity was extended, competition for resources within the education sector deepened the urban bias of education, and the development of basic education and literacy slowed down.

In terms of Bhutto's short-term policies, three points stand out. On the positive side, following his populist instincts, his decision to greatly relax passport controls did much to help migrant workers and initiate a stream of remittances that, for a while, became a flood in the first half of the 1980s. The same populist instinct led Bhutto to postpone energy price adjustments that became necessary after the first oil shock at the end of 1973. Consumers were protected through grants and loans from friendly Arab countries, and it was only after the second oil shock in 1979/80 that the painful adjustment of energy prices was undertaken in Zia-ul-Haq's time. Meanwhile, a well-functioning public entity such as WAPDA had become a loss-making enterprise. Finally, the loss of fiscal and monetary discipline in the Bhutto years had the consequence of triggering strong inflationary pressure—consumer prices doubled between 1972 and 1976—that wiped out a good part of the gains accruing to labor through increases in nominal wages.

GDP growth in the Bhutto period, though a respectable 4.9 per cent per annum, suffered as a result of several natural disasters, including floods and drought. The substantial additional availability of irrigation water from Tarbela dam was delayed by two years due to technical problems, which proved to be a lucky break for Bhutto's successor, Zia-ul-Haq, who took power in 1977.

Compared to other Pakistani rulers, Zia-ul-Haq took relatively little interest in the economy, partly because it performed quite well through most of his period as a result of a number of exogenous factors. Agricultural growth recovered to nearly 4 per cent per annum during 1977–88 from a dismal 2 per cent during 1972–77. A good deal of this was not related to price policies but rather to the huge addition to water supplies from Tarbela and private tubewells, and to the breakthrough in cotton productivity in the mid-1980s. The fivefold jump in workers' remittances between 1976/77 and 1982/83 to a peak of nearly USD 3 billion or 10 per cent of GDP was another strong boost to economic activity. At the same time, external assistance for the Afghan Mujahedin, estimated to be USD 5–7 billion in the first half of the 1980s and channeled through Pakistan also helped the economy.

Lulled by high-economic growth and a comfortable foreign exchange position, Zia-ul-Haq's regime, with Ghulam Ishaq Khan as finance minister, made economic decisions and policy choices that were to have serious long-term consequences. First, the defense budget, which had already expanded significantly under Bhutto, increased by more than two-and-a-half times in real terms or at an average rate of 9 per cent per annum. The result was a sharp rise in public expenditure and sizable fiscal deficits since there was only a marginal improvement in the tax-to-GDP ratio. At the same time, development outlays were squeezed, rising only 3 per cent per annum over 1977–88 in real terms: by 1987/88, defense spending had overtaken development spending.

The shift in priorities and the way in which budget deficits were financed had two results. They led to a slowing down in investment and a sharp rise in public debt. The rise in national savings as a result of the large inflow of remittances made it possible to finance the large deficits, mainly through nonbank borrowing, especially as government savings schemes offered highly favorable tax-free interest rates. This kept inflation low but the large pre-emption of savings by the public sector crowded out the private sector and dampened private investment.

Combined with stalled public development expenditures, this resulted in an essentially stagnant investment-to-GDP ratio that had negative consequences for long-run growth. Although economic policies became more market-friendly, Zia-ul-Haq did not do much to reverse the nationalization of the Bhutto period. Ghulam Ishaq Khan had an instinctive distrust of the private sector, and the bureaucracy had quickly come to appreciate the power and privilege that an extended public sector afforded.

Finally, two important structural problems—the high population growth rate and the serious lag in education—were neglected. Additionally, the two policy problems inherited from the 1960s and 1970s—the inelasticity of the tax system and the strong anti-export bias of trade policy—actually worsened because of increasing reliance on foreign trade taxation.

The succession of weak political governments that followed found it difficult to deal with the worsening macroeconomic balances and buildup of debt. There were, however, major efforts, starting with the first Nawaz Sharif government in the early 1990s, to liberalize the economy, expand the role of the private

sector, and redress the imbalances in the social services. Investment controls on both domestic and foreign investors were greatly relaxed; the foreign exchange regime was substantially liberalized; high tariffs began to be dismantled; the economy's heavy reliance on foreign trade taxation was reduced; private sector involvement in infrastructure, especially energy, was encouraged; and the prices of agricultural outputs and inputs were aligned more closely with international prices. At the same time, interest rates were considerably liberalized and credit subsidies reduced. A start was made to privatize public sector assets, not only in industry but also in banking, telecommunications, and energy.

Privatization efforts and the shift toward the private sector were influenced largely by pragmatic considerations. The losses of public sector enterprises hastened the decision to divest industrial assets. The policy decision to involve the private sector in energy and infrastructure development reflected the realization going back to 1987 that public sector funds had become had become a major constraint to development.

However, for a number of reasons, the reforms did not succeed in avoiding an economic slowdown and an external debt crisis by the end of the 1990s. The biggest factor was the failure to reduce macroeconomic imbalances: sizeable deficits financed by credit creation led to a large spurt in inflation and a loss of competitiveness as exchange rate adjustment lagged. The attraction of large foreign currency deposits with a large implicit interest rate subsidy sustained consumption and imports at a high level but sowed the seeds of a future foreign exchange crisis.

The effectiveness of public sector resource use also deteriorated; the well-intentioned Social Action Program to expand and improve primary education, basic healthcare, family planning, and rural water supply and sanitation did not deliver because of leakages, such as the phenomenon of “ghost schools” and “phantom teachers”. Finally, growing abuses in the largely public sector-controlled financial system led to the siphoning off of valuable resources. The result was that per capita GDP growth slowed down to 1 per cent per annum in the 1990s compared to the average of over 3 per cent per annum during 1960–90 and the rate of investment declined significantly.

Overall, the period under General Pervez Musharraf delivered high growth for a number of years (2002–07), partly as a result of good management and

partly as a result of good luck (see Hasan, 2011). For a few shining years, a new economic dawn even appeared possible, but the return of old-style politics after the 2002 elections and the increasing compromises made by Musharraf to stay in power led to policy mistakes. When adverse exogenous shocks struck—the 2005 earthquake and the sharp rise in international oil prices during 2005–08—the government in its hubris ignored the need for adjustments, hoping to ride the tide on the mistaken assumption of wide public approval. As a result, the need to deepen structural reforms was put on the backburner, and thus, in terms of fundamentals, Pakistan’s economy in 2008 found itself in not much better shape than it was at the end of the 1990s. However, credit must be given to Musharraf for giving greater voice to women, local bodies, and the media—initiatives that, in the long run, benefitted governance considerably.

Lessons from experience

Positive policy actions

This brief economic history narrative throws up several points. Political leaders, both civil and military, have had a major impact on the course of economic and social development. Positive features of their regimes include the emphasis on infrastructure development in the early years; the rapid development of the textiles industry in the mid-1950s, initially under heavy protection; the sharp acceleration of growth in the Ayub era through an unmatched rise in investment—especially in water and power—through large foreign aid inflows and effective planning and policy coordination; Nawaz Sharif’s major initiatives for economic liberalization in the early 1990s; and Musharraf’s strong push for both stabilization and growth in the first half of his rule. The 1950s and the 1960s were also periods of institution building, including the establishment of public enterprises that worked.

Early policy mistakes

Notwithstanding the positive side, there is a long list of policy mistakes made and opportunities missed over several decades, which is vital to understanding why Pakistan has been unable to achieve a sustainable high rate of growth. The decision in September 1949 not to follow the devaluation of the pound sterling and Indian

rupee, in the final analysis on the ground that it would make Pakistan look good in relation to India, was costly because it led to a trade deadlock with India and eventually a sharp reduction in trade with the big neighbor—though it yielded some benefits in import substitution, such as in fruit production.

Next, a huge foreign exchange windfall—worth several billion dollars in today's prices—from the Korean War boom that increased the prices of jute and cotton, was frittered away in 18 months in the totally unsustainable liberalization of imports under an overvalued exchange rate regime. The fact that imported cloth became cheaper than in India for a while was a source of great pride for citizens as well as populist politicians. Meanwhile, the emerging elite, both civil and military, indulged in large imports of luxury automobiles with low import duties at an overvalued exchange rate.

These early policy mistakes clearly point to the two fundamental drivers of policy that have continued to shape economic development in Pakistan for most of its history: tension and competition with India, and the real or perceived need to maintain a high level of defense spending.

Because relations with India deteriorated early after independence, especially on the issue of Kashmir, a strong defense capability was a top priority, even under successive civilian governments in the early years. It is to Ayub Khan's credit that he gave very high priority in the early years of his rule to economic development by containing military spending, partly because military assistance obviated the need to spend money on arms and equipment. However, hubris and the miscalculation that resulted in the 1965 war with India led to a sharp increase in military spending as US military assistance disappeared. After a military defeat and the separation of East Pakistan, real defense expenditures were increased under Bhutto and rose sharply under Zia-ul-Haq. With the debt hangover, real defense expenditures did not increase in the 1990s but neither did other public spending.

High spending on defense has been a constraining factor on social and economic development almost throughout Pakistan's history. The problem has been compounded by the fact that, after the mid-1980s, government revenue expenditures in most years have not covered current expenditures, including defense, necessitating government borrowing to finance nondevelopment expenditures. Another way of putting it would be that governments have desired strong defense but not been able to raise the commensurate tax revenues.

Several other factors and policies that have also affected economic outcomes adversely are: (i) high population growth; (ii) the neglect of education; (iii) the persistent failure to exploit tremendous opportunities offered by rapidly growing international trade in manufactured goods; (iv) a low savings rate and the inability to translate large foreign aid inflows into a high, sustainable level of investment and growth; and (v) an almost steady decline in governance over the decades, which is now reflected in serious institutional decline, the weakening of public services, and slow reduction in poverty incidence.

High rate of population growth

Pakistan's population is six times what it was at independence in 1947, having increased from 30 million to 180 million in 60 years. Its high average population growth rate of 2.8 per cent per annum has seriously affected the level and sustainability of growth in per capita income. At the same time, high population growth has contributed to an abysmal record in social and human development and to persistently high levels of poverty despite an agricultural sector that has performed reasonably well for long periods.

Of course, low level of tax revenues, high levels of spending on defense, and poor governance of the large public education sector are also responsible for the low level of human development in Pakistan. However, if the annual population growth rate had been only half a per cent lower over Pakistan's history, its population would be more than 25 per cent smaller than it is today. The political, economic, and social landscape might then have been vastly different, and the divisions in society not as deep as they are now.

The population control policies of the 1960s and 1970s did not succeed because of the excessive focus on provision of contraceptives. During Zia-ul-Haq's rule, the policy on limiting family size was, at best, ambivalent. This was in sharp contrast to the effective policy success in Bangladesh, which focused on reducing desired family size through women's education, employment, and social mobilization.

Neglect of education

The makings of a disaster in education have been a slow process. Progress in education was reasonable during 1950–65. High targets for universal education

were set from the beginning, but then there were three major setbacks. First, as noted earlier, after the 1965 war with India, the sharp increase in defense spending, reduction in foreign aid inflows, and the urgent need to increase food grain production dealt a blow to the allocations for the social sectors.

Second, Bhutto's nationalization of educational institutions in 1972 had continually weakened the effectiveness of public sector education expenditures and educational institutions. Third, the allocations for education remained low during the Zia period despite the iqra tax. More attention has been given to the social sectors, including education, during the last two decades, but the results have been mixed because of poor governance and the reemergence of serious financial constraints (see Chapter 9 of this volume).

Less than 60 per cent of Pakistan's adults are literate. The situation is worse for women with less than 40 per cent of adult females literate. Despite rapid progress in increasing primary enrolment across regions and gender, only three out of five children aged 5–9 years are enrolled in primary schools, and only two-thirds of those who enroll actually complete Grade 5. Currently, public educational expenditures are only 2 per cent of GDP. In almost all these respects, Pakistan compares unfavorably with India and Bangladesh.

Missed export opportunities

As discussed in detail in Chapter 6 of this volume, an important feature of Pakistan's history is that it has continued to fall behind other developing countries in export development and has not exploited the tremendous opportunities for exports offered by international developments. Stimulated by growth in world income, the liberalization of trade, reduction of tariffs, and technological changes reducing transport costs and improving information flows, world trade has grown at a much faster pace than world output since the 1960s.

The leading edge of this expansion was the growth in world exports of manufactured goods, which increased steadily from 1970 to 2011 at an average annual rate of 10 per cent. The share of Chinese manufactured exports alone has grown from less than 1 per cent to 15 per cent over 1980–2010. Other major developing countries have also increased their share in world manufactured exports from 7 per cent to 22 per cent over the period. In contrast, Pakistan's

share has improved only marginally from 0.12 per cent to 0.16 per cent and is now probably lower than it was in 1970 (Hasan, 2011).

Table 2.1, which provides a country comparison on the basis of the total export of goods and services, presents clear evidence of how far Pakistan has fallen in orienting its economy toward exports, which have been virtually the engine of global growth. China and most other East Asian countries are in a class by themselves, but even traditionally inward-looking economies such as India, Turkey, and Bangladesh have increased their export orientation remarkably in the last 30 years. In 1980, India had an export-to-GDP ratio (6 per cent) half that of Pakistan (12 per cent); now its ratio at 23 per cent far exceeds that of Pakistan. Even Bangladesh has moved ahead in this respect.

Table 2.1: Export of goods and services as a percentage of GDP

Country	1960	1970	1980	2000	2008	2009	2010
Bangladesh	NA	NA	5	14	20	19	18
China	NA	3	11	23	35	27	30
India	4	4	6	13	24	20	23
Indonesia	15	13	34	41	30	24	25
Pakistan	NA	8	12	13	13	13	14
Thailand	16	15	24	67	76	68	71
Turkey	2	4	5	20	24	23	21
Vietnam	NA	NA	36 (1990)	55	78	68	78
Lower middle-income countries	11	11	17	26	30	26	28

Source: World Bank.

Why has Pakistan fallen so far behind in the export field? (See Institute of Public Policy, 2008, Chapter 9). There are several reasons for this that are rooted in past policies and attitudes toward exports. First, export growth was never a central pillar of development strategy a la Korea, Malaysia, and China. Second, exports were not as profitable as sales in the domestic markets, which were heavily protected for a long period. The anti-export bias in policy was reinforced by an industrial strategy that favored manufacturing based on

processing domestic raw materials. Export development based on imported inputs was strongly discriminated against by generally high-import duties. Finally, the spurts of export growth that materialized in the 1960s and 1980s were, to a large extent, supported artificially by indirect subsidies to the textile sector, which kept the domestic price of cotton well below the international price and, thus, encouraged relatively low value-added textile exports, notably cotton yarn.

Over time, many of the distortions in trade policy acting against exports were removed or reduced, but this liberalization of trade in Pakistan has not resulted in major gains in exports. One explanation for this is that Pakistan's real exchange rate was periodically overvalued, for example, after the mid-1990s and again after 2004/05. Moreover, some of the consequences of past policies, including the neglect of human capital development, insufficient investment in infrastructure, and excessive attention to textiles remain with us and are reflected not only in the relatively low level of our manufactured exports but also in the structure of these exports.

Among large developing countries, Pakistan has the least diversified pattern of manufactured exports with the exception of Bangladesh. Nearly 75 per cent of Pakistan's manufactured exports consist of textiles and clothing compared with less than 12 per cent for developing countries as a group and 6.5 per cent for the world as a whole. While Pakistan is a major exporter of textiles and clothing—accounting for nearly 2 per cent of world exports—its exports of manufactured exports other than textiles and clothing are small. At USD 4.5 billion in 2011, they were only 0.04 per cent of world exports of manufactured goods. In comparison, Vietnam, a relatively new exporter, had other manufactured goods exports ten times that of Pakistan in 2011.

Savings, investment, and foreign aid

Pakistan has received enormous amounts of foreign aid over the last half-century or so. Both in per capita terms in constant dollars and as a percentage of gross national income (GNI), net official development assistance (ODA) peaked in the 1960s but declined as repayments on all fronts except grant aid naturally continued to climb. Even so, net ODA in the last decade was 1.7 per cent of GDP—close to 10 per cent of gross fixed investment.

As Table 2.2 shows, the availability of foreign aid in relation to national income in Pakistan compared to that in India was fourfold in the 1980s; during the last decade, the difference has grown more than eightfold. The more important point is that aid flows are no longer significant for India for sustaining its fairly high rate of investment and growth, whereas Pakistan's growth and investment are in the doldrums and the country is far from reviving sustained high growth on its own.

Table 2.2: Net official assistance to Pakistan and India

ODA	Pakistan			India		
	1960s	1980s	2000s	1960s	1980s	2000s
Per capita net ODA in current USD	7.7	10.2	11.1	2.0	2.4	1.3
Net ODA as % of GNI	7.1	3.1	1.7	NA	0.8	0.2

Source: World Bank.

It would be difficult to argue that foreign aid in Pakistan was used particularly ineffectively compared to most other developing countries. Indeed, the large early aid inflows financed an extraordinary level of investment in the water and power sectors in the 1960s and 1970s, partly for Indus Basin works under the water treaty with India that was facilitated by the World Bank. These large investments helped sustain the high agricultural growth of 4 per cent per annum over 1960–2000.

The more serious problem was that large external flows—foreign aid in the 1960s and 1970s, workers' remittances in the 1980s, resident foreign currency deposits in the 1990s, and direct private investment in 2003–08—reduced incentives for export development on one hand, and on the other, allowed policymakers to avoid difficult choices between consumption and savings. Judging from the long-term trends in gross capital formation (Table 2.3), and the foreign savings available to finance the current account balance of payments deficits, it would appear that gross national savings, which averaged 14–15 per cent of GDP in the 1980s and the first half of the 1990s, have shown no clear upward trend. After a brief growth spurt to over 20 per cent

of GDP during 2002–04, gross national savings have dropped almost steadily since and touched a low level of 13 per cent of GDP in FY2012 (see Institute of Public Policy, 2012; Hasan, 1998).

Table 2.3: Gross fixed capital formation as a percentage of GDP

Country	1960	1970	1980	2000	2008	2009	2010
Bangladesh	NA	NA	14	23	24	24	24
China	NA	24	29	34	41	46	45
India	13	14	18	23	32	32	30
Indonesia	NA	NA	22	20	28	31	32
Pakistan	11	14	18	16	20	17	14
Thailand	14	24	28	22	27	24	25
Vietnam	NA	NA	NA	28	35	35	36
Lower middle-income countries	NA	14	20	21	27	26	26

Source: World Bank.

Apart from the relative ease with which external resources were available, other factors also help explain Pakistan’s dismal savings performance. The political leadership has rarely emphasized the importance of sacrifice and savings for long-term development. Indeed, the governing elite has often set high standards of conspicuous consumption. At a more basic level, the low measured savings rate reflects low confidence in the future. Indeed, real savings are understated because of considerable capital flight. The high savings rate during 2002–04 partly reflected returning capital because political stability seemed to be assured and the investment climate had improved considerably.

In addition, for long periods, the high population growth rate meant that Pakistan had a dependency ratio (the ratio of dependent children to the working-age population) of 0.9, compared to 0.7 in India and 0.5 in China (Hasan, 1998, p. 36). Finally, for most years since the mid-1980s, general government savings have been significantly negative—in many years, as high as 3 per cent of GDP—as stagnant or slowly growing tax revenues have not been able to cover government current expenditures in most years.

The low ‘available’ savings are reflected in the persistently low level of gross fixed capital formation. As mentioned earlier, after a recovery during 2005–08 from the low level reached in 2000, fixed investment as a percentage of GDP has, again, fallen to a very low level.

Deteriorating governance, institutional decline, and weakened public services

Looking at Pakistan’s history over the last half-century, governance failures stand out even more than growth disappointments. Indeed, poor governance has been even more of a problem than poor policy choices. Had governance not deteriorated so much and the strength of public institutions not eroded over time, the resources mobilized through taxation would have been more adequate and the quality of public services—especially law and order and education—would not have declined so precipitously. Poor governance hurts the poor and low-income groups especially as they depend more heavily on public services (see also Chapter 9 of this volume).

Over time, growth and governance problems became increasingly intertwined. Because growth benefits were not widely shared, the quality of public services, especially education, deteriorated; the pace of poverty reduction slowed down; and the tensions in society began to erupt with increasing frequency in ethnic, sectarian, and random violence. Now, the extremely uncertain security situation has become a major constraint to investment and growth, second only to power shortages. The biggest threat to the country and the economy comes from the militants and jihadists who want to impose their narrow version of Islam. Only belatedly is there a realization that the Pakistani Taliban pose an existential threat to the country as a modern, moderate, and progressive state (Amir, 2012).

Unfortunately, the religious extremists draw some tacit support from sections of society that rightly perceive widespread corruption, growing income inequalities, and lack of any meaningful accountability of the political leadership as the very antithesis of Islam. These quiet sympathizers do not see, however, the dangers of an extremist, theocratic, authoritarian rule.

The greatest sources of public dissatisfaction are high-level corruption and a governance style that does not give regard to merit and integrity in key appointments. The 2011 Transparency International corruptions perception index puts Pakistan’s score at 2.5—on a scale of 0 (worst) to 10 (best)—and

137th out of 182 countries. Pakistan's score is well below India's (3.1), lower than Bangladesh's (2.7), and very close to that of Nigeria (2.4).

Why did governance, which was relatively good till the end of the 1960s, decline so sharply over time? In the early years, the sanctity of public expenditure was observed and there was not the cavalier attitude toward the use of public funds. High-level corruption was relatively rare. It seemed that the politicians who grew up under the British Raj and were either lawyers or feudal landlords did not focus on accumulating fortunes. Relatively new public entities such as WAPDA and PIDC had strong leadership and were fairly effective because they had more operational freedom, including the ability to adjust prices. Later governments were either populist or weak and unsure, and tended to postpone difficult decisions for the sake of short-term gain.

Arguably, extra-judicial interventions, first by Ghulam Mohammad as Governor General in 1951 and later by military regimes, and disregard for the Constitution—facilitated by either a pliant or weak higher judiciary—were the root cause of the problem. It needs to be noted, however, that in some respects Pakistan's military regimes were less arbitrary than some democratically elected leaders, starting with Z. A. Bhutto. The democratic governments of Benazir Bhutto and Nawaz Sharif that followed the end of Zia-ul-Haq's rule in 1988 did not play by democratic norms and often proceeded to persecute opposition leaders. For instance, the well-conceived establishment of a high-level public accountability bureau was undermined by its use as a political tool. Meanwhile, the core competency and authority of the bureaucracy—central to effective administration and the delivery of public services—declined steadily because of falling real compensation and frequent political interventions in violation of rules and regulations.

The early Musharraf years saw a significant improvement in economic management with greater reliance on technocrats and greater stress on merit in recruitment and promotion. Ultimately, however, political compromises after the 2002 elections limited progress on some fundamental issues such as improving tax administration and reforming the civil services.

Poor economic management and the shift to better governance

The last five years (2008–13) represent something of a paradox. On one hand, governance has declined further, corruption has risen, and effective decision-

making has suffered because merit has not been the key criterion for senior appointments. Militancy and terrorism have increased and the authorities have dragged their feet on holding high-ranking public servants accountable for abuse of power. On the other hand, the higher judiciary, especially the very independent-minded Supreme Court, has become highly proactive in governance issues. A freer media, especially the electronic media, has also come to play an important role in highlighting public policy issues and exposing wrongdoings.

Some basic constitutional changes augur well for the future of democracy in a meaningful federal setting. The 18th Amendment to the Constitution, passed in April 2010, restored in letter and spirit parliamentary democracy and the relationship between the federation and the provinces as envisaged in the 1973 Constitution. This amendment does more than repeal the 17th Amendment introduced by Zia-ul-Haq, which gave enormous authority to the President. It transfers major economic powers to the provinces by abolishing the concurrent list in the 1973 Constitution.

The amendment also lays down procedures for nominating judges for the higher judiciary, makes the office of chief election commissioner autonomous of both the executive and the Parliament, and prescribes a procedure for appointing the head of the Accountability Bureau. Through the subsequent 19th and 20th amendments, procedures for appointments to the high courts and Supreme Court are clarified and arrangements for caretaker governments to oversee elections laid out with the final authority on the caretaker Prime Minister being given to the chief election commissioner in case the outgoing Prime Minister and leader of the opposition are unable to agree on a nominee.

The substantial devolution of power to the provinces is underpinned by the 2009 National Finance Commission award, which substantially increased the share of the provinces, and within the provincial allocation, the share of the two poorer provinces, Balochistan and Khyber Pakhtunkhwa. However, it has been rightly pointed out that, ideally, the transfer of additional resources to the provinces under the award should have followed the transfer of increased executive responsibilities to avoid wrangling over additional resource transfers and a significantly weakened federal revenue position.

The impact of significant new structural changes will depend on, among other things, how effectively the provinces improve the efficiency of expenditure

and mobilize additional taxation to meet their greatly enhanced responsibilities in the social sectors. One key question is whether the provinces will take steps in turn to devolve greater authority to the local level as broadly envisaged by the Musharraf government.

The above discussion clearly suggests that, first and foremost, good governance in the broadest sense and realistic national agendas focusing on equitable economic development are critical to “moving Pakistan’s economy forward.” What Pakistan needs is an enlightened leadership that can take a long-term view, inspire national confidence and cohesion, and that does not concern itself unduly with perpetuating its own rule. Although this cannot be ordained, a democratic set-up with decentralized authority, guarantees of open and fair elections at all levels, and strong deterrents against abuse of power and law-breaking applied to all citizens is a prerequisite.

The need for a national economic strategy

The above discussion clearly suggests that, first and foremost, good governance in the broadest sense and realistic national agendas focused on equitable economic development are critical to “moving Pakistan’s economy forward”. What Pakistan needs is an enlightened leadership that can take a long-term view, inspire national confidence and cohesion, and that does not concern itself unduly with perpetuating its own rule. Along with an agreed governance agenda, the major political parties need to seek a broad consensus on key elements of a long-term economic strategy encompassing at least six broad areas:

- Better political and economic relations with India, especially the opening of trade, travel, and investment.
- A better balance between defense and development.
- Recognition of the major role that the private sector has to play in economic development—not a private sector that actively seeks economic rents and government patronage, but one that is open to fair completion from both inside and outside.
- A strong revival of investment in both human and physical capital.

- Strong export orientation with emphasis on technological changes, productivity improvements, and diversification.
- Greater attention to population control.

Many of these subjects are discussed in other chapters in this book, and so this chapter is confined to only a few points where policies need either more thrust or better definition.

Population

The onset of Pakistan's population transition has also meant a fall in the growth rate of population to 1.8 per cent per annum. However, at 3.6 per cent, the fertility rate is still high. Policy action should, therefore, focus on the high fertility rate of 4.5 in rural areas through the continued acceleration of women's education and employment opportunities, and on the availability of family planning services. In general, and especially in rural areas, policy efforts to encourage a reduction in birth rates will help increase savings, reduce poverty, and make it easier to improve social indicators.

Exports

Another area in which Pakistan's policymakers need to make a resolute commitment and a big push—beyond the crippling energy crisis—is increasing the economy's export orientation. As discussed earlier and as Table 2.1 illustrates, Pakistan did not make much use of the opportunities offered by the almost explosive growth in global trade, especially in manufactured goods, and fell far behind other major developing countries. However, it is not too late to change course and focus.

Even with international trade slowing down somewhat, Pakistan can hope to gain a market share provided it follows policies that strengthen competitiveness, diversify the product mix, and move up the value chain. In the foreseeable future, Pakistan cannot catch up with its competitors in the rate of capital formation. It must rely on sharper gains in factor productivity to move onto a higher growth path. Rapidly rising exports can be an important instrument for improving productivity and keeping capital requirements for growth low.

Specific policy actions that should be taken to promote exports include:

- An exchange rate that fully reflects the differential between movements in Pakistani prices and the international price level.
- Strong incentives for new investments and skill upgrading in textiles that increase the scale of and update technology, and encourage mills with low productivity and profitability to exit the industry.
- A determined push aimed at small and medium industries to expand and diversify exports in areas outside textiles.
- Joint public and private sector efforts to promote foreign investment in textiles, clothing, and other promising export sectors from East Asian countries that are losing ground in labor-intensive industries due to high and rising wage costs.
- A special focus on expanding exports to regional partners, especially China and India. The large negative trade balance with these countries could provide some leverage.
- A special and speedy implementation review of the free trade agreement and establishment of a free trade zone with China, and assessment of their likely impact on exports in the near term.
- A similar review of key constraints and principal opportunities for expanding trade with India.
- Focus on the development of export supply chains using the work being done in the context of the National Trade Corridor Improvement Project.
- Strengthening monitoring mechanisms, including quarterly meetings of the high-level Export Board.
- Implementing the recommendations of the Strategic Trade Policy Framework 2009–12 to reduce anti-export bias by withdrawing protection from inefficient industries, minimizing taxation at the investment stage, and eliminating or zero-rating customs duty on important inputs to textiles and clothing exports.
- Closer coordination of commerce ministry policies and activities not only with the textile ministry but also with all other production-related ministries, which appears to be sorely needed.

Investment

The control of fiscal deficits, which have averaged over 7 per cent of GDP annually in recent years, should be a top priority; this will require improvements in tax revenues, sharp cutbacks in wasteful administrative expenditures, restraints in military purchases, and a solution for loss-making enterprises. This may appear to be a very tall order, but the fact is that there have significant slippages in these areas and resolute government action has been lacking. There has not been much attempt to introduce austerity in spending—public or private. Real private consumption in 2011/12 was 27 per cent higher than in 2007/08, suggesting that there is certainly room for belt-tightening, especially because of substantial income inequalities.

In the somewhat longer run, resources need not be a major constraint to reviving growth and investment. Provided the security situation and governance improve, and economic relations with India expand, investors' confidence—both domestic and foreign—in Pakistan will revive. Capital flight will slow down and, in time, be reversed. There is a large amount of Pakistani capital sitting on the other side hesitant to invest because of noneconomic factors.

Similarly, foreign private investment both from the Middle East and more successful exporting countries in East Asia, including China, who are feeling the pressure of rising real wages, is a strong potential source of financing development, improving technology, upgrading labor skills, and finding export markets. It is worth recalling that, under improved investment climate conditions, foreign private investment totaled more than USD 12 billion or 2–2.5 per cent of GDP in the three years FY2005–08, though it was unfortunately not focused on exports and the main productive sectors.

Human capital

Strengthening the country's substantial but neglected human capital resources is as important as reviving physical capital formation. This is not, however, just a matter of increasing public resources for education, which are admittedly at a very low level. As the growing buoyancy in the private education sector suggests, families are willing to save and invest in their children's education, provided there is a reasonable confidence in the quality of education being imparted.

The public sector has failed this test. Deep structural reforms are needed that aim to increase the effectiveness of spending, the quality of the curricula, and much greater accountability of teachers. Increasing the transfer of authority to local bodies, public-private partnerships, and even school vouchers that can be used in private schools are some critical steps that should be seriously considered and implemented.

The mechanics of change

None of these changes can occur or be successfully implemented until there is strong political commitment. Even robust political will, however, needs to be backed up by empowered and informed institutions, and workable instruments of change that improve governance. During the last few years, legislators in the national assembly and the Supreme Court have, by and large, shown enlightened leadership. The independent media is vigorous in its critiques, though perhaps not always well informed. Some independent policy institutes are doing a heroic job. Nevertheless, there appears to be an intellectual vacuum, which hurts informed public debate and limits the impact of what would be more balanced and less biased media reach.

The level of academic research and economic literacy is low. This is partly because Pakistan has relied for long periods on analyses carried out by international financial institutions, notably the World Bank and International Monetary Fund. Many of the country's domestic policy institutes remain dependent on foreign funding.

The state's major organs require more intellectual support and analysis. For instance, the Council of Common Interests has become critical to resolving disputes among and between the provinces and center, but there has not been much thought to giving it an independent secretariat. Similarly, the important National Finance Commission could, as is the case in India, benefit from the assistance of a professional group. Finally, the Parliament should consider establishing an independent budget office to inform and educate politicians and clarify policy choices.

The governments both at the federal and provincial levels need to deepen their involvement with private sector bodies, but especially with independent institutions such as the important Pakistan Business Council.

Among the existing institutions, the role of the Planning Commission needs to be redefined and its function of liaison and coordination with provincial planning authorities needs to be considerably strengthened in light of the new distribution of powers. It also needs to become a leaner outfit, discarding some of the functions not central to planning processes. The Debt Policy Coordination Office that was established more than a decade ago needs to be invigorated with strong leadership. Its performance so far, either as a source of reliable debt statistics or regular analysis of Pakistan's debt situation, has been greatly disappointing.

In terms of instrumentalities, an independent, well-paid, and honest civil service remains crucial for improving governance. One focus should be on the remuneration and quality of the top tiers, i.e., grades 19 to 22. The World Bank (2003) points out that even a 100 per cent real pay increase for the higher grades would cost only 0.1 per cent of GDP, the bulk of which could be financed through the "natural attrition" of lower-grade staff focused on areas where employment is excessive and services are no longer needed.

Conclusion

Looking forward, nothing seems quite as important as restoring the public's confidence in the government and the country. While a number of important constitutional steps have been taken in the last two years to strengthen the basis of a democratic set-up based on a working federation, it remains to be seen whether the elections will result in a strong leadership committed to better governance and sounder economic management.

The country's main political leaders need to come together to attempt to define and agree on the major parameters of better governance and a long-term economic vision. The goal should be to develop a broad consensus on the main items of a governance agenda and the key elements of a long-term economic strategy. Just as the 2006 Charter of Democracy (between the country's main political parties) triggered many helpful constitutional changes aimed at strengthening democracy, a charter of governance and growth, implemented seriously, could improve governance and invigorate growth. Above all, it could strengthen national unity and increase public confidence.

The chapter has also proposed a parallel six-point economic strategy that draws on Pakistan's experience and especially its shortcomings in the past. It should aim to (i) develop better political and economic relations with India by opening up trade, travel, and investment; (ii) achieve a healthier balance between defense and development; (iii) nurture the private sector as a key player in economic development, but a private sector that allows fair competition from both inside and outside rather than one that seeks economic rents and government patronage; (iv) revive investment in both human and physical capital; (v) orient the economy strongly toward exports with an emphasis on technological changes, productivity improvements, and diversification; and (vi) pay greater attention to managing the country's population.

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Economic Management Under IMF Tutelage

Key Lessons from the Musharraf and PPP
Rule 1999–2013

Rashid Amjad*

Introduction

A fundamental premise of this chapter is that Pakistan's poor economic performance is as much due to poor economic management as it is to fundamental structural constraints. Indeed, poor economic management is an important reason why these constraints persist. This chapter, therefore, assesses how well or poorly the economy was managed during 1999–2013: the period spanning the governments of General Pervez Musharraf and the Pakistan People's Party (PPP). Our aim is to look at what economic policymakers did right and what they did wrong—most importantly, what they did not do and should have done. In assessing this performance, we also critically evaluate the part played by agreements entered into by both governments to obtain financial support from the International Monetary Fund (IMF) to overcome recurring macroeconomic imbalances and possibilities of default on external debt repayments. These agreements and resulting conditionalities, which covered almost half the period under review, also had an important influence in economic decision-making and the way the economy was managed or mismanaged in this time.

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In examining this performance, we have not separated the sub-periods covered respectively by the two governments. This has merit in that it allows us to identify the critical economic factors that helped the country break out of the recession of the 1990s, the revival and acceleration of growth in 2003–07, the economic downturn that followed soon afterward, and the outset of the current stagflation that persisted throughout the PPP's tenure, which ended in 2013. In so doing, we avoid merely blaming one or the other government in power for the problems and challenges that arose, and instead attempt to evaluate the relative performance and weaknesses of both in economic management, which were responsible for the economy's inability to move onto a sustainable growth path.

As we shall see, much of the problem that arose as growth first increased and then plummeted stemmed from two factors. First, the Musharraf government did not take advantage of the spurt in economic growth to introduce much needed economic reforms; extremely poor economic management in its last few years in office also resulted in unsustainably high fiscal and current account deficits. Second, the succeeding PPP government failed to take the concerted action necessary to restore macroeconomic stability—overcoming or at least easing the formidable energy crisis—and revive economic growth. Indeed, for most of its term in office, the PPP government could rightly be accused of gross negligence, wanton economic mismanagement, and wide-scale corruption.

In this context, the key issues we will examine are framed as follows:

- Since both governments entered into IMF agreements to obtain badly needed foreign exchange at the start of their tenures, a key question is whether it was necessary to enter into such agreements at all or if other options were available. If this decision was deemed necessary, we need to examine how well the government's economic team negotiated the terms and conditions on which these loans were obtained. Finally, and most importantly, we ask if they were able to deliver on the terms agreed, and if not, what circumstances led to the premature termination of the agreement.
- We will identify some of the major mistakes made in taking or not taking certain key economic policy decisions during this period. This will allow us to gauge the two governments' performance in concrete

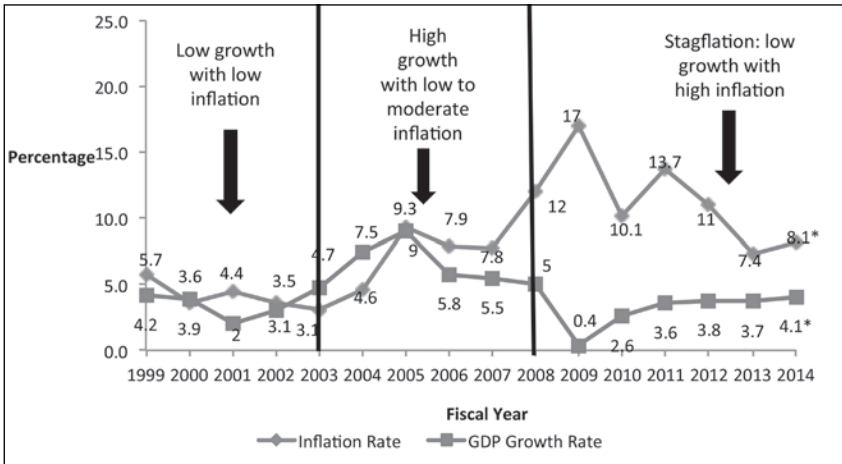
terms, especially as we can then determine the negative impact of particular decisions and what may well have been possible had opportune decisions been made.

We also attempt to capture what we believe is a strong underlying dynamism in the economy resulting from forces that are not fully documented and, therefore, not reflected in the official statistics. This analysis helps capture more fully the behavior of the economy than if we were to base its performance on key macro and sectoral variables (as done in Chapters 2 and 4 of this volume). It also provides a more realistic backdrop against which to appraise economic decisions made in this period as well as their effects on the overall economy.

The Pakistan economy: Bust-boom-bust cycle (1999–2013)

Let us first present some stylized facts that are relevant to the economy’s performance over the 1999–2013 economic cycle (see Figure 3.1).

Figure 3.1: Pakistan’s macroeconomic performance, 1999–2013



Note: * = provisional.

Source: Pakistan Economic Survey for 2013/14.

First and foremost, over almost the entire period starting post-9/11 in 2001, Pakistan has been a frontline state in the war against terrorism. This has

taken a considerable economic toll both in terms of direct costs as well as in undermining business confidence, and the severity of the latter has increased over the years. This situation has, at the same time, allowed Pakistan to become a recipient of higher levels of donor funding, both military and development aid.

Second, both governments of this period started under the shadow of a looming debt default though the circumstances responsible for this were quite different. The Musharraf coup took place only a year after the Pakistan nuclear test in May 1998, which had led to the imposition of international economic sanctions including suspended aid inflows and a sharp slowdown in the economy that brought it to the brink of default. The newly elected democratic government that took over in March 2008 inherited a precariously balanced economy with untenably high fiscal and current account deficits, falling foreign exchange reserves, and a strong imminent threat of debt default and bankruptcy.

Third, at the start of their terms, both governments entered into agreements with the IMF to bail them out of their economic predicament. The Musharraf government entered into a one-year stand-by arrangement (SBA) of USD 596 million in June 2000. On successful completion, it followed this with a three-year poverty reduction growth facility (PRGF) arrangement amounting to USD 1.3 billion in December 2001. The elected coalition government that took over in March 2008 entered into a 23-month SBA with the IMF in October 2008 of USD 7.6 billion, which was augmented in August 2009 to USD 11.3 billion and extended through December 2010. It was then extended by another nine months till September 2011. What is important to note is that, during the 13-year economic cycle, the economy was under the aegis of an IMF program over half the time. While these loans helped tide over the immediate economic crisis and restore confidence, they also had important implications for economic management—including the flexibility that could be exercised in policymaking—over these years.

Fourth, throughout this period, the economy was run under an almost open or fully liberalized foreign exchange regime. This meant that residents could open foreign exchange accounts and send out foreign exchange with hardly any restrictions. It is important to note here that many other developing countries—including those like Pakistan who received large amounts of remittances—had liberalized their foreign exchange regimes but not to the extent that Pakistan had done in this period. These virtually unrestricted foreign exchange flows—

through formal or informal channels, legal as well as illegal—made the economy vulnerable to international developments such as the economic collapse in Dubai (following the global financial meltdown in 2008) where Pakistanis had, over the years, channeled funds in large amounts.

Fifth, the period 1999–2013 saw an almost tenfold increase in remittance flows into the economy, from around USD 1.5 billion in 1997/98 to an expected USD 14 billion in 2012/13. These flows provided critical support to both governments in the face of a precarious current account trade situation in most years. These increases were the result of a significant rise in the number of overseas Pakistanis with higher skills as well as due to a shift in remittance flows from illegal to legal channels following 9/11 and increased vigilance over such flows (see Chapter 11 and Amjad, Arif, & Irfan, 2012). With a Pakistani diaspora now estimated to be around 6 to 8 million (some say even higher), this also points to the strong links between the global and Pakistan economy.

Finally, this period witnessed a series of unfortunate natural disasters: the drought in the earlier years of the Musharraf government, the tragic earthquake in the winter of 2005 in northern Pakistan and Azad Kashmir, and the floods of epic proportions in the autumn of 2010. Their economic and human cost, especially of the last two disasters, was extremely high and, though in the case of the first, substantial international humanitarian assistance was forthcoming, in the case of the latter it was far less, given the magnitude of the disaster.

It is with this backdrop in mind that we must view both the macroeconomic developments that took place in terms of growth and inflation (Figure 3.1) as well as the lack of any sustained improvement in any of the key variables during these years. As discussed in detail in Chapter 2, after improving briefly in 2003–07, the economy reverted to low levels of savings and investment, low revenues resulting in increasingly high fiscal deficits, inadequate build-up of infrastructure (especially the consequent rising energy gap), and poor human development indicators as investment in education and health remained very low. Not surprisingly, therefore, there was very little or no improvement in productivity (with the exception of the growth spurt in 2003–07) and no real structural change in terms of inter-sectoral shifts in the labor force or in the sectoral composition of gross domestic product (GDP).

Economic dynamics

It would, however, be a gross mistake to judge the Pakistani economy's performance during this period—especially its last five years (2008–13)—simply in terms of the behavior of key macro-variables, however important they might be in guiding policymakers. While these variables do reflect, at a broad aggregate level, the state of the documented economy, they do not fully reflect the size of the real economy or capture the economic dynamism they unleash. The latter, especially, can help explain the economy's resilience and indeed buoyancy, even during the economic downturn.

There is an important reason for investigating these economic forces, which the official macroeconomic estimates do not reflect. Over 2008–13, the economy was afflicted by deep stagflation with low growth and high inflation. It faced a severe energy crisis that, according to recent studies, shaved off as much as 2 per cent of GDP (see United States Agency for International Development, 2013). How does one, then, explain at the same time the vibrancy of many economic sectors and other positive developments, such as the decline in extreme poverty, which is quite contrary to what the macroeconomic picture would predict?

Let us illustrate some of these positive developments.

During the downturn, corporate profits remained robust and companies quoted on the stock market—especially in the foods, cement, automobile, and motorcycle sector—grew at a healthy pace. Sales in the foods sector, for instance, increased by 20–25 per cent per annum during these five years, while corporate profits, according to one source, grew on an average by 15 per cent each year (see Bloomberg, 2012).¹

Studies based on various rounds of the Household Income and Expenditure Survey (HIES), including those in this volume (see Chapter 13), show that poverty *declined* during the period 2007/08 to 2010/11. Almost all studies had projected a very large increase in poverty, given the very high rate of food inflation (almost 80 per cent) and the expected rise in unemployment as a result of the economic downturn. Amjad (2012) has tried to explain these positive trends in poverty reduction (from around 17.2 per cent to 12.4 per cent) by arguing that positive

¹ According to a report in Dawn (“Corporate profits”, 2013) quoting the CEO of a securities company: “Whereas the overall GDP has grown by an average three per cent in the last five years, corporate earnings have grown on average by an impressive 15 per cent.”

factors such as the manifold increase in remittances, improved terms of trade for agriculture, and rising rural real wages may have negated or at least considerably dampened the impact of the negative factors (low per-capita income growth, high inflation, and declining real wages in manufacturing).

Then there is the emergence of a significant middle class in Pakistan in this period. Based on HIES data and using an “extended” definition of the middle class, Nayab (2011) estimates that it could constitute around 35 per cent of all households (19 per cent according to the strict definition) in 2007/08. In a more recent study, she has shown that this ratio increased to 42 per cent (24 per cent according to the strict definition) in 2010/11 (Nayab, 2013). The rise of the middle class also explains the rise in consumption expenditure on food items, cosmetics, small cars, and motorcycles.

Clearly, something else is happening that the official macro-data has failed to capture. Is Pakistan a two-speed economy, one that you see and one that you do not see in the official figures?

Economic forces potentially driving the two-speed economy

What factors continued to drive the economy despite poor macroeconomic indicators? We argue that this dynamism emanates from two major sources with both positive and negative consequences.

The first is a large undocumented economy that traverses not just the informal sector but also the formal economy. Recent estimates by the Pakistan Institute of Development Economics (PIDE) suggest that the undocumented economy, as measured by consumption estimates, could be as large as 91 per cent of the documented economy.² The methodology used in the PIDE study

² Kemal and Qasim (2012) calculate total consumption in the economy based on the household Pakistan Social and Living Standards Measurement Survey for 2007/08, and adjust for mis-invoicing in imports and exports based on a recent PIDE study. They calculate the “true” estimate of GDP (implicitly accepting official estimates of investment) and then compare it with GDP estimates reported at current prices in the national income accounts for that year. These estimates show that the undocumented economy (which they mistakenly term the informal economy) was 91 per cent of the formal economy. On the assumption that the consumption estimates might include elements of investment, they calculate the size of the undocumented economy to be between 74 and 91 per cent of the documented economy.

needs to be refined further and has many shortcomings, but it does suggest that earlier estimates, which put the undocumented or hidden economy near 30 to 40 per cent, could be widely off the mark. What needs to be kept in mind is that the undocumented economy is found not only in the informal economy but also in the formal economy since even registered firms underreport their production and profits considerably to avoid taxes. Many do not report these accounts at all.

The second factor is the existence of a large Pakistani diaspora (see Chapter 11) that injects considerable purchasing power into the Pakistan economy, not just through remittances, recorded and unrecorded, but also through other flows, legal and illegal. These flows are facilitated considerably by the existing foreign exchange regime, which allows both residents and nonresidents to transfer money abroad with few or no restrictions. Remittances only through formal channels increased from around 1.5 per cent in 1999/2000 to nearer 5.5 per cent of GDP in 2012/13.

As regards the inflow of remittances through informal channels, it is true that these have declined gradually post-9/11 due to the much stricter international vigilance of such flows. Despite this, some estimates suggest that, in 2010/11, these flows may have been as high as USD 4–6 billion, i.e., around 2–3 per cent of GDP (see Chapter 11). Then there were capital flows in the shape of private transfers, mainly from Pakistan to the Middle East (with Dubai as the hub). Informed sources suggest that these flows might have been as high as USD 8–10 billion in the shape of investments made in Dubai during the Musharraf period. A large part of this money, or what was left of it, also flowed back sharply after the global meltdown and the collapse of the Dubai real estate boom in early 2009.

To these two factors over which the government had little influence, one must add the large favorable shift in terms of trade for agriculture and the rural economy resulting from the policies of the PPP government soon after taking power. The PPP government increased the prices of agricultural commodities. In particular, the procurement price of wheat was increased from PRs 450 per 40 kg to PRs 950 per 40 kg in 2008/09; this, along with the rising world price of rice and domestic prices of other agricultural products (vegetables, milk, and poultry) injected a large amount of purchasing power into the rural economy. This resulted in a large increase in consumption and an increase in the demand for rural labor, which was reflected in a rise in

agricultural workers' real wages (see Amjad, 2012). It also fuelled inflationary pressures in the economy.

Other factors responsible included the following: there was no marginal rise in taxes, i.e., hardly any increase in the tax-to-GDP ratio in this period. There was also the generous increase in money wages for government and public sector employees, which more than doubled during 2008–13, with a hefty 50 per cent increase announced in the budget for 2010/11. Provincial governments also had to follow suit.

There was also what is called the “whitening” of black money (tax evasion, bribes, etc.), which is partly not reflected in GDP, but even where it is (e.g., investment in public sector projects), once “whitened”, it flows mainly into current consumption. There are also the illegal funds generated in Afghanistan and the bordering tribal belt by the cross-border heroin trade (valued at approximately USD 5 billion a year) as well as money shaved off donors' civilian aid to Afghanistan by politicians and others (total donor assistance to Afghanistan as civilian aid was as high as USD 8 billion in 2011/12). A part of this money flows into Pakistan and is used to buy houses, properties, and businesses within the country.

The “real” size of the Pakistan economy

The size of the Pakistan economy in terms of its gross national product (GNP) is estimated at the current exchange rate to be near USD 250 billion in 2011/12. In addition to this, however, there is a significant undocumented economy, parts of which we have identified. What, then, is the “real” size of the national economy?

Clearly, any estimate must be taken as tentative and, at best, speculative. It is quite possible that, if we take into account the flows not reflected in the official estimates, this could be between USD 400 billion and 500 billion. If Pakistan's GNP is, as we suggest, possibly double its current estimated size, this would have important implications for judging the performance of its economy and how well it is being managed. For one, it would show the potential revenue that could be generated and which is currently untapped. The current low investment and savings level is more difficult to judge. If the current official statistics on investment are robust, this would suggest that the economy is working on a very

low capital–output ratio and, therefore, using existing resources very efficiently. More probably, investment is also underestimated.

It is also important to note that, while consumption expenditure rose significantly due to the factors identified, they did not result in increased investment. Indeed, investment levels fell by almost half during the PPP government rule. The fall in private investment was clearly the result of the prevailing security situation, compounded by severe energy constraints.

Economic policymakers, however, operate with the statistics they have and policies are decided on the basis of official macroeconomic indicators. One can, however, speculate that this somewhat healthier economy than the official statistics depict may have reduced the pressure to make difficult economic decisions. If this was so, then policymakers were deluding themselves. What they should have done was to take strong measures to document the economy and realize its full potential especially in generating resources for the investment Pakistan badly needed to improve its infrastructure (water and power) and dismal human development indicators.

Pakistan and the International Monetary Fund (IMF) over the economic cycle³

Economic management with International Monetary Fund (IMF) tutelage

Countries turn to the IMF for support almost as a lender of last resort when they face severe problem of balance of payments and risk defaulting on the repayment of loans or simply becoming bankrupt. Pakistan has entered into as many as 11 agreements with the IMF over the last 20 years. Except for two that were successfully completed, all the agreements were scuttled well before completion mainly because of lack of progress in implementing the agreed reform program. The two successfully completed were the one-year SBA signed in June 2000, followed by the three-year PRGF availed in December 2001, both under the Musharraf government.

When a government enters into an agreement with the IMF, both parties mutually agree that the former will take a number of measures to regain

³ For a succinct summary of relations between Pakistan and the IMF, see Ahmed (2012).

macroeconomic stability and implement economic reforms to overcome the structural imbalances and constraints that were responsible for bringing on the economic crisis. Macroeconomic stability and economic reforms are expected to help propel the economy onto a sustainable growth path.

In the short term—given, in most cases, the huge and increasing macroeconomic imbalances—drastic measures are adopted to restore macroeconomic stability. These are deemed necessary in the immediate future to avoid default (as foreign currency reserves dwindle) and to restore private and foreign investors' confidence. Accordingly, the government adopts fiscal and monetary policy measures to induce a severe compression in demand, which results primarily in slowing down the economy, reducing imports, and stabilizing the foreign exchange situation.

Fiscal measures concentrate on reducing the fiscal deficit, mainly by reducing sharply the public sector development program (PSDP) and other austerity measures. Monetary measures concentrate on reducing the money supply mainly by imposing strict controls and targets on government borrowing from the central bank and by raising the interest rate to dampen private sector borrowing from commercial banks. Since strict targets are specified for the reduction in the fiscal deficit and monetary targets are set for regulating the money supply, both the finance minister and governor of the central bank sign off on IMF agreements.

These short-term measures are complemented by a series of economic reforms aimed at improving performance to revive growth and move the economy into a position of sufficient economic strength to repay the IMF loan. These reforms encompass taxation measures to increase revenues; opening up the economy to greater internal and external competition to increase efficiency and competitiveness—by lowering tariffs, removing untargeted and unsustainable subsidies, improving the performance of public state enterprises, and privatizing public utilities—financial sector reforms to improve the functioning of the banking sector and other financial intermediaries; and reforms to improve governance encompassing the functioning of the civil service, the judicial system, and local government.

As one can see, the economic reform program entered into with the IMF can be all-encompassing. Even if the government takes broad ownership of the need for such reforms, this ties it down to carrying out these reforms within a

strictly monitored timetable, reducing the flexibility of the pace and sequencing of the reform process.

In recent years, the economic costs of entering into an IMF program have attracted considerable criticism, given the resulting very low economic growth and rise in unemployment and poverty. As a result, the standard programs now include measures to protect the poor and vulnerable through appropriate safety nets. The PRGF perhaps best represents the new IMF facility, which caters to reforming the economy while at the same time emphasizing measures that would help reduce poverty and improve social welfare.

The grey areas in working out the details of an IMF program and its implementation tend to include the following:

First, the standard IMF model that calculates the needed compression in demand to restore macroeconomic stability and the resulting growth rate can, in many cases, be far off the target with growth plummeting far more than planned.

The second grey area is the sequencing and timing of economic reforms to be undertaken as part of the program. Facing a balance of payments crisis and possible default, the major aim of the government negotiating team is to obtain the first tranche of the loan as quickly as possible and so stabilize the situation and calm the markets. This can result in them promising far more than they can deliver. It is all too well to suggest that the government should take ownership of the agreed program (see Ahmed, 2012) but, in fact, its bargaining position may be weak and may be further weakened if its negotiating team is inexperienced or technically incompetent.

The third grey area is the country's capacity to pay back the loan in the stipulated time. As part of the program, an exercise is undertaken to gauge this ability, but this is difficult because the projections assume that, if the program conditionality is met, the economy will have regained its strength and be in a position to rebound. In many cases, this is placing far too great a faith in economic reforms to show dividends in a few years after the reforms are introduced. Structural reforms take time to embed themselves in the economy and raise its growth potential. The time for repayment of the IMF loan is, in most cases, far too short to allow this to happen. Not surprisingly, therefore, the country often finds itself unable to repay the loan and is forced to go back to the IMF to pay back the loans it had borrowed in the first place.

The truth is that, in most cases, the government gives very little consideration to repayment and focuses mainly on coming to an agreement and obtaining the loan. It is not, therefore, a coincidence that very rarely do governments publicize the repayment part of the loan obtained, and once the loan agreement is signed, restrict themselves to taking credit for having successfully completed an agreement with the IMF and obtained the loan.

International Monetary Fund (IMF) programs 1999–2013

We now review the circumstances in which the three IMF programs were signed—two by the Musharraf regime and one by the PPP government. This section also looks at the size of the loan and how its disbursement was sequenced as well as the main conditionalities to which the government and the IMF had agreed.

In the case of the Musharraf government, at first, given the strong feeling against the military coup, it was only able to reach a one-year SBA of USD 590 million with the IMF in 2001. The Musharraf economic team used this year to establish its credibility with the IMF with its commitment to faithfully executing the agreed conditions. Over the course of the year, the Planning Commission prepared the Interim Poverty Reduction Strategy Paper (PRSP). This document was accepted by the IMF, which together with the government's resolve shown to implement economic reforms paved the way for the signing of the three-year PRGF for a loan of USD 1.1 billion in December 2001.

Some might argue that the events of 9/11 a month earlier—which had considerably strengthened the hand of the Musharraf economic team negotiating with the IMF—explain why the latter agreed to a bigger loan under the PRGF. From a pariah regime, 9/11 transformed the Musharraf government into a critical partner of the West in the war to be waged against terror. Pakistan was now a frontline state in this conflict.

These ifs and buts remain but, by and large, the Musharraf economic team had also performed well in initiating reforms in key sectors of the economy (Husain, 2003) and formulating a poverty reduction strategy that paved the way for the PRGF to be signed. Over the next three years, the economy stabilized and on the surface there was a surge in economic growth; with increasing business confidence and improving government finances, there was also a steep increase in both private and public investment.

The IMF and the government were euphoric over the results achieved.⁴ The government did not even ask for the last tranche of the payment due under the PRGF and informed the IMF that it was not extending the facility. There was talk of the “begging bowl” having been broken, the country’s dependence on loans and aid now a story of the past, and the economy now being well set on a path of unbridled growth.

Now, outside the aegis of the IMF program, however, old habits of uncontrolled government spending reappeared. The fiscal deficit began to increase. Imports increased much faster than exports and the current account became vulnerable once again. The “strong” economy began to show signs of weakening. By the time the unprecedented increase in global oil and food prices struck in the course of 2007, the economy had begun to flounder. The government starting in March 2007 faced strong street protests on the ouster of the chief justice of the Supreme Court. The Musharraf government shied away from passing on the higher import prices of oil, energy, and food grains to consumers. The interim government that took over in September 2007 followed suit as elections were around the corner. The budget deficit increased to alarming levels. The foreign reserves built up during the good years began to be rapidly depleted.

What needs to be recognized is that the economy was always vulnerable to external shocks, the macroeconomic turnaround had not been sustained, and the gains of the earlier years under the IMF program had been frittered away (see Amjad & Din, 2010). The government, and sadly the IMF too, had got caught up in their own rhetoric and started believing prematurely that they had brought about a structural shift in the economy (see Lorrie & Iqbal, 2005). The fact was that, while some reforms had been undertaken, these were certainly not sufficient or sustained enough to ride out the economic shocks. Compounded by poor economic management, once outside IMF tutelage, the economy was poised to stumble.

The PPP-led coalition that took over in March 2008 inherited an economy on the verge of financial collapse. The fiscal deficit was near 9 per cent

⁴ See the speeches of the directors of the IMF that deal with Pakistan during this period (www.imf.org/external/country/pak/). Indeed, the IMF’s highly positive assessment of the Pakistan economy continued well into 2007 even when there were clear signs that major problems were emerging that threatened both growth and macro-stability.

and the current account deficit stood at 8 per cent. With continuing high oil prices, foreign exchange resources were being depleted rapidly and the currency was coming under increasing pressure. There was no option but to resort to a strong dose of stabilization and restore macroeconomic balance and confidence, especially at the outset of the global financial meltdown. A panel of economists set up by the government also reached the same conclusion, albeit stabilization with a human face. But were there any other options besides the IMF?

In the first month, the Pakistan Muslim League (Nawaz) (PML-N) was part of the coalition and held the finance portfolio. Its view appears to have been that, while stabilization was necessary and would be undertaken, there was no immediate compulsion to go to the IMF.⁵ It proposed raising domestic resources by utilizing the unspent government expenditures that government departments and autonomous organizations had accumulated over the years, and that were lying idle with commercial banks. The foreign exchange crisis, rising pressure on the currency, and a possible run against the rupee could, it felt, be resolved through short-term borrowing from friendly countries, raising funds from the Pakistani diaspora by floating bonds, and keeping the exchange companies in check through strong administrative measures. In addition, steps would be taken to attract foreign remittances.

However, once the PML-N left the coalition and the PPP assumed the finance portfolio, the donors—represented by the major Western governments—appear to have put a major squeeze on them to go to the IMF. Although the PPP-led government did try to obtain some short-term financial support from Saudi Arabia and China, there seems to have been a trust deficit even with its friends, all of whom appear to feel that only the IMF could keep the government on track and enforce badly needed reforms. This was unfortunate because an injection of funds could have given the democratic coalition the time it needed to carefully work through its strategy to stabilize the economy and, if needed, go to the IMF.

It is important to evaluate the IMF's involvement in the management of the economy with the PPP government, not just in terms of what was agreed

⁵ Based on the author's discussions with senior policymakers advising the then finance minister.

upon under the SBA signed in October 2008. The imprint of the IMF was clearly reflected in the budget announced in June 2008 by the new government. The macroeconomic framework—including growth estimates—was revised downward and annual development plan expenditures cut down, in part to satisfy the IMF. Indeed, it would appear that the government agreed to seek IMF assistance before the budget was announced, and that it incorporated a number of measures agreed to in the June 2008 budget, even though the SBA was formally signed in October 2008.

To view the October 2008 SBA without taking into consideration the role the IMF played in influencing the budget making process that was announced in June 2008, is therefore, not the correct way of evaluating the IMF's involvement with the new government. By so doing, it has led to claims that the IMF has been soft on Pakistan, some say because of US pressure, and the agreement was generous in the amount pledged—an unprecedented USD 7.6 billion, as well as in the conditionalities agreed on. The reform package was not frontloaded and the fiscal deficit target had been slightly raised to accommodate the newly launched Benazir Income Support Program for direct income support to poorer households (see Sherani, 2012).

This in no way suggests that the measures adopted in the 2008 budget were not needed. Clearly, as said earlier, foreign exchange reserves were falling dramatically and the exchange rate was coming under pressure. The real issue is whether the intensity of deflationary measures adopted in the 2008 budget—as well as those reflected in the subsequent SBA signed in October 2008—were of the right magnitude, and whether the burden of adjustment placed on the economy was one that it and the people could bear.

The other issue is whether the situation was so desperate that Pakistan needed to enter into a huge USD 7.6 billion SBA knowing well that repayments would be due after three years of the first disbursement. Again, those involved in negotiating the loan have argued that such a large amount was needed to calm the market and restore confidence in the Pakistan economy.

Others may disagree. Would it not have made sense to initially agree on a smaller program, firm up a medium-term strategy, and then be in a good bargaining position to enter into an agreement, perhaps even a PRGF (which offered much better terms of repayment) as the Musharraf government had done?

In the circumstances, the PPP faithfully carried out the strong stabilization measures agreed on to regain macroeconomic stability. But the price paid was high, given the “*malba*” or debris left behind by the previous government, which had fallen into economic paralysis in its last year. The results were far worse than anyone had predicted, including the IMF and the Panel of Economists (see Amjad, 2008). Growth plummeted to 0.4 per cent and inflation reached an unprecedented 17 per cent - the highest in the country’s history. If this was a soft program, then heaven help Pakistan had it been cajoled into accepting a strong one.

Although these measures restored some stability to the macroeconomic situation, the resulting unpopularity seriously impaired the government’s resolve to carry out the program. To make matters worse, that autumn marked the beginning of the global financial meltdown. As they say, when troubles come, they come in battalions.

Despite what may be termed a promising start to the IMF program—in that a semblance of macro-stability emerged and growth picked up in 2009/10—even after an agreement to increase its size and extend its duration by another two years, the program’s days were numbered. The finance minister who formulated and announced the June 2008 budget was replaced soon after by a hard-nosed banker with a reputation for getting things done. The SBA was signed under his tutelage in October 2008. He too did not last long (around 15 months), mainly due to his strong commitment to economic reforms and opposition to the policy of setting up rental power plants in a nontransparent manner.

The finance minister’s departure in early 2010 marked an important turning point in the way the economy was managed. Though a new finance minister took over, economic decision-making shifted to the highest echelons of the ruling party. Pragmatic politics rather than economic factors became the main criteria in running the economy. Economic reforms were placed on hold, and even the few new economic team had been able to introduce were soon reversed.

Economic management under International Monetary Fund (IMF) tutelage: Key lessons

We now turn to some important lessons that emerge from the IMF programs adopted during this economic cycle that should be kept in mind for future negotiations:

Both regimes failed to gauge the initial impact of their respective programs on economic growth. The economy slowed down to standstill levels, making an economic revival that more difficult. This sharp contraction was caused primarily by the compression in demand through a steep decline in the budget deficit to the level stipulated in the IMF program and mutually agreed to. It would appear that the IMF model used to make the projections might be well off the mark. More importantly, it is necessary to be very cautious when agreeing on the targeted fiscal deficit for the initial years, given its very strong impact on the economy.

To achieve this sharp decline in the fiscal deficit, the brunt of government expenditure cuts fell on the federal PSDP—the “low-hanging fruit” under both regimes—and this was a major cause of the more-than-expected decline in economic growth, given its deep linkages with the rest of the economy.⁶ This sharp decline in public development expenditure results in high costs to the economy since the completion of many ongoing projects is lagged with high costs, leading to shortages in badly needed social and physical expenditure.

The terms and conditions on which a loan from the IMF is obtained need to be worked out very carefully, especially the strategy for loan repayment. This is clearly one of the lessons from the 2008 SBA. There was much euphoria on the size of the loan obtained, but in hindsight with little attention to how it was to be paid back. When the time has come to pay back the loans in 2013, they have put extreme pressure on the country’s low and declining foreign exchange reserves.

Pakistan’s experience also shows that, in most cases, it turns to the IMF when its economic situation is very desperate and, hence, its bargaining position very weak. It also means that, IMF or not, fairly strong stabilization measures are needed to restore the situation. This failure stems from poor economic management, a failure to make important decisions in time, and reluctance to take remedial measures when needed, e.g., adjusting the exchange rate to reflect the impact of domestic inflation.

In undertaking an agreed economic reform’s program with the IMF, the need for and importance of undertaking reforms is not as crucial as allowing oneself sufficient flexibility to pace these reforms and seeking alternative solutions if

⁶ The fiscal multiplier of a cut in the national PSDP equivalent to 1 per cent of GDP leads to a 2 per cent decline in GDP in the same year (Pakistan, Planning Commission, 2011a).

economic circumstances so dictate. An example of this was the need in 2006 to opt for public sector investment in the energy sector, when the energy gap was fast widening to dangerous proportions and the private sector was not forthcoming. The Musharraf economic team led by the finance minister, who was also the Prime Minister, continued under the strong influence of the international financial institutions to hope that the private sector would fill this gap; this turned out to be a mirage.

One must also keep in mind when negotiating an IMF-driven reform program that its fundamental premise is that a market-driven private sector is the cure for all economic ills. In some cases, this may be the right path to take. What one must, however, avoid is being pushed into an economic reform the consequences of which one has not sufficiently thought through. A good example of this was the decision to “unbundle” and privatize the Water and Power Development Authority (WAPDA), which the IMF and World Bank strongly supported. It should have been kept in mind that WAPDA had, over the last 30 years, built up its knowledge base and reputation as a world leader on water and energy issues. The cost of giving all this up without first seriously examining options to improve its performance was a serious mistake. This is a prime example of economic dogma trumping economic commonsense. The result was that the country ended up with the worst of both worlds—a decentralized, inefficient structure still working in the public sector.

The analysis of Pakistan’s experience with the IMF would not be complete without saying a few words on the latter’s own performance in this relationship. It is now clear that the technical skills displayed in the design of the 2008 program left much to be desired and that not just Pakistan, but the IMF too, can learn from this experience.

The mismanagement of the economy: An analysis of some key decisions made and not made

Pakistan’s policymakers and economic managers have, in the past, built up a reputation for being experienced and adept at economic decision-making. However, from their performance over the period analyzed, it strongly appears that glaring mistakes were made and that, except for a short-lived economic growth spurt, the economy emerged as weak, if not weaker, as at the start.

The discussion below points to some of the controversial decisions made during this period.

Monetary stimulus: Jump-starting the economy, 2002–04⁷

At the end of 2002, the Musharraf government found itself in a classical economic quandary. The strong stabilization measures adopted under the IMF program had brought about macro-stability, but the economy was caught in a low-level equilibrium trap of stability with very low growth. The State Bank of Pakistan decided to jump-start the economy with a monetary stimulus by pumping in money at very low interest rates to encourage private investment. It also encouraged leasing and other arrangements to fund expenditures on consumer durables, including the purchase of motorcars. While these measures, together with other favorable developments, ignited economic growth, the resulting monetary overhang fuelled inflation as the stimulus was too strong and its duration too long (see Janjua, 2005). It also fuelled an energy-intensive consumer-led boom. The result was much-higher-than-expected inflation as well as a rising energy gap.

Lack of coordination between finance and planning, 2006/07

In the Islamabad Secretariat, the Planning Commission and Finance Ministry are adjacent to one another with the two blocks, 'P' and 'Q', joined by a corridor. Despite their physical proximity, the lack of coordination between the two—indeed, some would say, tension—is responsible for many of the economic ills the country faces.

The best example of this is their lack of timely action to at least contain the energy crisis, since solving it would need much more concerted long-term action. The Planning Commission had projected energy demand based on historical trends. Jump-starting the economy with a loose monetary policy and the Finance Ministry's implicit backing, together with fast-rising remittances, fuelled consumption and increased energy demand much faster than projected. When the Planning Commission realized its mistake, as mentioned earlier, it proposed setting up short-gestation hydel power plants in the public sector.

⁷ In his careful analysis of the Pakistan economy, identifying the causes and management of the 2008 global economic crisis, Haque (2010, p. 36) concludes that, "it was primarily the shift in monetary policy in 2002–03 that set the economy on an unsustainable course."

This was shot down by the Finance Ministry, which argued strongly against any further public investment in energy. WAPDA, instead of taking a strong stand, also decided to kneel before the financial czars.

Electioneering economics, 2006/07

At the outset of the financial year 2006/07, the economy was precariously balanced and vulnerable to external economic shocks. Inflation was hitting double digits and the fiscal and current account deficits were rising at an alarming rate. This would have been an opportune time to slow down expenditures and allow the economy to cool down. However, it was also the Musharraf government's last year in power with general elections to follow in the second half of 2007. The Prime Minister-cum-finance minister did not pay any heed to economic advice that would show up any structural weaknesses in the economy and decided to gallop ahead with a targeted growth rate of more than 7 per cent to show for his laurels. He cited the very high growth at which India and China were growing. The Planning Commission advised caution but was ignored.⁸ Surprisingly, the State Bank also decided to support the government's stance to target a high growth rate.

When the unprecedented increase in global oil and food prices hit the economy in the second half of the financial year, the economy veered out of control. The current account deficit began to increase. The fiscal deficit also rose because the government, in the face of a strong lawyers' protest movement, lacked the political strength to pass on higher prices. This shock marked the end of the Musharraf boom. It also showed the difficulty of overcoming an external shock when the economy is precariously balanced. The Pakistan economy faltered well before the advent of the global financial meltdown.

Unprecedented increase in wheat prices, 2008/09

During the wheat "fiasco" of 2007, the government first proclaimed a bumper harvest, allowed the export of wheat, then faced wheat shortages, and had to import wheat at a much higher price.⁹ This brought into prominence the need

⁸ Based on discussions with senior officials of the Planning Commission at that time.

⁹ Wheat was exported at USD 200/tonne and then subsequently imported at USD 300/tonne.

to examine the whole issue of ensuring food security and setting an appropriate procurement price, especially given the sharp spike in world prices for oil and food grains, including wheat.

How should this price be determined? In May 2008, the Planning Commission set up a Food Security Task Force headed by a former finance and agriculture minister, which included a number of prominent specialists in the field. In its interim report (Planning Commission, 2008) in September 2008, it proposed fixing the procurement price of wheat at PRs 950 per 40 kg. Earlier, on taking over in March 2008, the new government had increased the procurement price from PRs 425 to PRs 625 per 40 kg at the start of the wheat-harvesting season. Its justification was based on the premise that, due to adverse terms of trade and rising global prices, the wheat supply had not kept pace with demand and led to the import of wheat at a much higher price. Additionally, as a result of increasing oil prices, the prices of fertilizer and energy had increased, squeezing the further declining profits of farmers. To offset the resulting increase in food inflation estimated by the task force, a comprehensive safety net was proposed, which would rely primarily on the Benazir Income Support Program.

Unfortunately, the task force's recommendations—especially those pertaining to the impact on the overall economy—were never examined seriously. Indeed, after hearing the views of the task force and of the Ministry of Agriculture (which recommended the even higher price of PRs 1,050 per 40 kg based on the import price), the Prime Minister decided to fix the price somewhere between the two levels recommended.

The decision was ultimately a political one as the PPP coalition government represented large farmers both in Punjab and Sindh. The cost to the economy was ultimately extremely high.¹⁰ The unprecedented price increase injected a large dose of inflation into the economy that took years to work itself through. Moreover, as global wheat prices fell to nearer PRs 750 per 40 kg by the time the wheat crop was to be harvested, the federal and provincial governments of Punjab and Sindh had to procure large amounts of wheat

¹⁰ The Punjab government's representative at this meeting opposed the very high procurement price being proposed for wheat since he was aware that the Punjab government would have to buy a large part of the marketable surplus.

which they did not have the space to store as well large borrowings from the State Bank that locked in money in the “food” circular debt.

It would have been much more prudent to fix a somewhat lower procurement price (say, around PRs 800 per 40 kg), but the macro-implications of setting the higher prices were never examined and the fact that global prices could fluctuate in large bands was also ignored.

7th National Finance Commission award: “On a wing and a prayer” 2009

The 7th National Finance Commission (NFC) award is rightly seen as a major step forward in addressing the genuine grievances of the smaller provinces by distributing a larger share of federal revenues to them, and by moving from a single criterion, i.e., population as a basis for distribution, to multiple criteria that encompass size and other variables. Its politics was right and so was, some would say, its timing. But its economics has gone horribly wrong. The award was based on the important assumption that the tax-to-GDP ratio would gradually increase by 1 per cent each year. Unfortunately, it has remained stagnant. This has put considerable pressure on federal resources, especially given the large unexpected increases in expenditure on security and law and order. Additionally, no incentives were put in place for the provinces to generate resources and linking this performance to an increased share in the divisible pool of resources.

What has happened is that the provinces, now somewhat flush with funds, have simply not made the effort and taken the politically easier route of not imposing any new taxes (agricultural incomes) or increasing tax rates in line with economic realities (e.g., property tax in the Punjab). Nor has sufficient attention been given to building the capacity of provinces such as Balochistan and Sindh to use these resources more effectively.

One of the reasons for some of the poor decisions made in this context is that the NFC body effectively failed to do its homework. Many countries set up research institutions to examine issues related to the distribution of resources among their federating units; these institutions also serve as research secretariats to the permanent NFC body. This could initially be done by setting up a similar unit at, for example, PIDE, to carry out these functions.

Procrastination, thy name is R-GST 2010

It has now been over a decade and a half that the government has come close to adopting a value-added tax (VAT) but at the last moment lost courage to do so. The best opportunity was during the Musharraf period when the economy was growing at a healthy pace but the government vacillated. The democratic government that followed came very close to imposing VAT since it was part of the IMF agreement, but in the end, got cold feet because one of its coalition partners strongly opposed it.

The real hurdle in the way of imposing VAT (“christened” the R-GST by the last finance minister) is not, as is normally argued, that the Federal Bureau of Revenue or private sector firms lack the capacity to implement it, or that much more preparatory work is needed. The real underlying reason is that it would lead to the documentation of the economy and, therefore, bring into the tax net a large part of the economy that defaults on tax payment. Here, politics holds hostage an economic reform that is simply necessary to improve government revenues and allow the economy to function better.

Strengthening short-term economic management

For prudent economic management, the real challenge is to develop the political will and finesse to take important decisions, to ensure that they are properly formulated and implemented, and to monitor progress. Our analysis shows not only why important decisions are not made but also, equally importantly, that decisions are made without their consequences having been considered and with a lack of coordination between important government agencies at the federal level as well as between the provincial and federal governments.

The real question, therefore, is how to build in institutional mechanisms that will ensure better management of the economy, especially in light of the 7th NFC award and the 18th, 19th, and 20th Constitutional Amendments.

Let us start with the existing institutional framework for the short-term management of the economy, i.e., primarily the annual budget and the annual plan of the federal government and the corresponding provincial budgets and development plans. On paper, there is an elaborate process to ensure consistency and set realistic targets. In reality, this entire exercise is more procedural than practical, with no real attempt to test the authenticity of the targets set or

projected, no clear mechanisms in place to gauge how they will be achieved, no serious attempt to monitor progress, and worse, hardly any serious attempts to ensure that the targets set are adhered to or modified after sensible debate and discussion.

The current practice, under a medium-term budgetary framework (MTBF)¹¹ started in 2009 is to prepare the budget through a budget strategy paper (BSP). The exercise starts four or five months before the presentation of the budget in end-May or early June. It consists of two parts: a macroeconomic framework and a budget exercise. The team responsible for developing the macroeconomic framework is led by the chief economist of the Planning Commission and includes senior representatives from the Ministry of Finance, the Economic Affairs Division, Federal Bureau of Revenue, State Bank of Pakistan, and Federal Bureau of Statistics. It is tasked with coming up with the targeted growth rate, fiscal deficit, trade and current account deficit, revenue and expenditure targets, including development expenditures, and targets for money supply.

The framework is based on a consistency model. In reality, when the economy is being run under an IMF program—as it was for most of the period under review—the growth rate is determined outside this framework by the IMF in discussions with the Finance Ministry. So are almost all the other key variables, including the targeted size of the fiscal deficit, revenue targets, and other key variables. Once these variables are fed into the consistency model, it generates the other variables.

The exercise has other shortcomings too, the most important of which is the lack of any meaningful inputs from the provincial governments. The fiscal revenue targets are the mirror image of the planned expenditure and perhaps the weakest part of the exercise.

The first task must be to empower the macroeconomic team, regardless of whether or not the economy is being run under an IMF program. Even if the final targets are to be negotiated with the IMF, the macroeconomic team must carry out its own exercise first and this should be the basis of negotiations

¹¹ For details, see the Ministry of Finance website (titled MTBF Secretariat), which has sections on the MTBF overview and budget preparation process (www.finance.gov.pk/main.htmls).

with the IMF. As a minimum, the chief economist must be part of the Finance Ministry's team that negotiates the macroeconomic targets with the IMF.

Once the macroeconomic targets are finalized, they should then be discussed with leading economists¹² including the chair and members of the Prime Minister's economic advisory team before being discussed by the Annual Plan Coordination Committee and finally approved by the National Economic Council (NEC). Unfortunately, the macroeconomic framework is never discussed seriously at either body's meetings with line ministries, and the provincial governments are interested only in proposed projects or resources for ongoing projects. The debates in Parliament on the budget also rarely touch on the macroeconomic framework.

The second part of the budget exercise, i.e., the preparation of the current and development budget of the line ministries and autonomous departments are supposed to be based on a results-based management exercise. Each ministry is to set out clear strategic objectives and outcomes together with outputs and activities to achieve the objectives. The total resources made available to each ministry must be justified according to the objectives outlined. Interestingly, there are no clear indicators of success and no real review of what has been achieved in the preceding year as part of this exercise and needs to be incorporated.

The BSP exercise is a two-way process under the concerned federal secretary with the resources available and objectives defined by the top management, and activities to achieve them worked out by line departments and bodies. The proposals are then presented to the Priority Committee, which is headed jointly by the secretaries of finance and planning. In reality, it is usually chaired by the additional finance (budget) secretary, leading in many cases to bad blood between the finance and planning ministries.

The BSP exercise by each ministry as well as by the Macroeconomic Working Group is carried out under an overall three-year rolling plan with expenditure ceilings provided by the Ministry of Finance. These ceilings are based on a financial programming framework that analyzes alternative macroeconomic scenarios to ensure overall consistency as well as a medium-term fiscal framework that draws on the former. These exercises are conducted by the

¹² Two to three nonofficial leading macroeconomists are stipulated to be part of the macroeconomic team but this is rarely done.

Ministry of Finance and are somewhat arbitrary with targets being modified each year depending on performance in the preceding year and projections for the next year.

The important point to grasp is that there are systems in place that could lead to a fairly robust macroeconomic framework and realistic budgetary exercise. Unfortunately, little attention is given to each ministry's plans and ultimately it boils down to a firefight on projects and resources. What is worse is that, in most years, due to some emergency or other, budget cuts are made and the tedious and prolonged exercise undertaken becomes irrelevant before it has even started. Financial cuts are then made somewhat arbitrarily, for which some criteria are put in place, but again these are rarely followed.

Mention should also be made here of the PRSP and Millennium Development Goals (MDGs). There has really been no attempt to incorporate the objectives and targets set under either in the BSP exercise. A unit of the Finance Ministry undertakes an ex-poste exercise every six months to gauge if allocations have been made in line with the PRSP. Since this monitoring exercise is based on allocations to about 18 heads of expenditure (including education, health, and social protection), the amount allocated under each head and corresponding progress or lack thereof is then reported. The minimum targeted expenditure under these 18 heads is well below what would be needed to achieve the MDGs (less than 10 per cent of GDP), which shows how seriously we take the PRSP or MDG targets in the first place. It is no surprise that, except for the target of halving poverty by 2015, Pakistan is well behind achieving most other targets set by this stipulated date.

Economic reforms to increase productivity and international competitiveness

Pakistan's growth trajectory may be cyclical but its fundamental problems are structural. By not making key decisions and renegeing on promised reforms under different IMF programs, these problems have persisted as a binding constraint on moving toward sustainable growth.

Economic reforms can be divided into those that allow the state to provide basic essential services by generating sufficient revenues, those that make the economy more competitive by opening it to increased domestic and international

competition, and above all, those reforms that create an environment conducive to attracting private investment and new entrepreneurs who must serve as the main driver of economic growth.

The basic rationale for these reforms is that, due to interventions primarily by the government, certain sectors and individuals or companies within these sectors are earning unjustified “rents”, which they would not if they were not afforded this protection, and which prevents possible competitors from entering these activities. Such protection leads to inefficiencies and costs to the economy and is also detrimental to the welfare of consumers who are then forced to pay higher prices for products.

Essentially, the structure of the economy that emerged in the first two to three decades following Pakistan’s independence was built up—as indeed was the case for most developing countries—under a highly protected import substitution strategy to encourage industrialization, which resulted in a transfer of resources from the dominant agriculture sector in favor of industry. The “new orthodoxy” that emerged in the 1980s challenged this import substitution-led growth strategy, arguing that it resulted in an inefficient industrial structure and an inefficient economy. Instead, it made a case for dismantling protective barriers and drastically reducing the role of the state and state-owned enterprises in economic development.

Subsequently the new orthodoxy was represented by the so-called “Washington Consensus”, which broadly became the overarching framework for economic development by international financial institutions, primarily the IMF, the World Bank, and regional banks including the Asian Development Bank. Its basic premises were private sector, market-driven growth, deregulation, and privatization.

In Pakistan, the private sector market-driven growth strategy has gained recognition since the 1990s, and subsequent political and military governments have broadly adhered to its fundamentals. The challenge, however, has been that the old structure created strong vested interests and protected an economic elite—dismantling it and putting in place the new, more competitive, and efficient structure has been a somewhat rough ride.

One of the areas of contention in moving to a more open and less protected economy is the old argument for building up an industrial base, and this remains

the justification for continued protection of selected industries in engineering and certain other fields. This regime is complicated by a statutory and regulatory order (SRO) system, enforced partly by the Engineering Development Board, which also somewhat arbitrarily provides protection to specific industries. In recent years, the protective regime appears to have expanded in scope.

This issue of an optimal level of protection and the phased drawing down of existing and arbitrary trade barriers must be one that the new government decides and for which it plans a clear-cut industrial policy. This exercise could also take into account the implications of removing the negative list and granting most-favored nation status to India.

The current economic paradigm emphasizes not sectors of growth but factors of growth by investing in people, since knowledge has replaced physical capital as the major driver of growth. In the early development literature, industry was seen as synonymous with economic development; this was the historical path that earlier industrialized economies had followed. It was argued that only manufacturing could generate sustained productivity growth through increasing returns to scale and new products through innovation and new technologies (Kaldor, 1966). There was also strong evidence that the terms of trade in global markets had historically favored industry against agricultural products.

Much of this has changed. Economies of scale are no longer found only in industry but also in other sectors, especially through the use of information technology and other technical advances including in agriculture and services. In recent years, the terms of trade have favored commodities and food grains rather than manufacturing. Even if a case could be made for fostering new industries and providing initial protection, there is very little justification for continued protection well over the stipulated period. At some stage, an infant industry must learn to stand on its own feet.

While the optimal level of protection to manufacturing and the speed and sequencing of tariff reforms remains controversial, this should in no way detract from important and much needed economic reforms. The underlying framework for these reforms must move in a number of critical areas, remove unnecessary and distortionary government interference, and improve the quality of economic governance. However, while accepting

many of the premises of private sector market-led growth, it is necessary to take reforms dictated by our economic situation and overall vision of development than by blindly following an economic ideology derived from the Washington Consensus.

This is the path adopted by most successful developing countries, including the East Asian ‘tigers’, China, and India. The underlying goal must be economic reforms for structural change that recognize the important role that market forces, both domestic and global, play in driving reforms, and their limitations. Pakistan must learn from the global economic meltdown, which resulted from an unfettered reliance solely on market forces and the belief that they would be self-correcting.

Implementing economic reforms

Within the government, which body should take the lead to ensure implementation and monitor progress? At present, this is the responsibility of the Finance Ministry and its Economic Reforms Unit, which is headed by a joint secretary. Such an institutional arrangement is clearly inadequate. The finance minister, however, much as he or she may be committed to reforms, simply does not have the time to follow up on the nitty-gritty that the reform process entails. Individual ministries whose task is ultimately to implement the reforms in many cases are the biggest hurdles because these reforms will reduce their discretionary powers. They are certainly not going to be the driver of the reform process.

There is little point in setting up a new ministry or division charged solely with the reform process. A good option would be to set up a subcommittee of the Economic Coordination Committee (ECC) headed by the deputy chairperson of the Planning Commission. The committee should then bring in representatives of the provincial governments and the private sector. The deputy chairperson should report on its progress at every other meeting of the ECC, which is headed by the finance minister. In turn, the finance minister should report to the Cabinet—presided over by the Prime Minister—every month on the progress made on the reform agenda.

The real remaining challenge will be to embed the key economic reforms in the working of the line ministries and departments. It may be useful to learn from India’s experience where economic reforms were carried out effectively—

economic advisers who were strongly committed to economic reforms were assigned to key ministries. In many cases, they were also experienced and well-trained economists.

Ultimately, the success of the economic reform program will rest on the finance minister, who should be a political heavyweight or have the full confidence and backing of the Prime Minister. This was the case of Manmohan Singh—a technocrat rather than politician—as finance minister, who had the strong backing of the then Prime Minister Narasimha Rao.

Lack of a consistent medium-term development framework, 2008–13

Under the democratic government, the Cabinet approved three medium-term frameworks. The first was the Nine-Point Program adopted by the Cabinet; the second was the Outline of the Tenth Five-Year Plan (2010–15) titled “Investing in People” prepared by the Planning Commission and approved by the NEC in June 2009; and the third was the Framework for Economic Growth prepared by the Planning Commission and approved by the NEC in June 2011.

That the same government could pass three medium-term frameworks and plans during the course of its five-year term must be a record of some sort, reflecting the frequent changes in its top economic team. The fact is that there was little ownership by the government of these documents, which is reflected in the virtual absence of any serious debate or discussion on them in the Cabinet, the NEC, or in Parliament. The lack of continuity in the economic team also means that there was no real ownership of the strategy—a situation made worse by the fact that the economy was buffeted by so many uncertainties and crises that it was difficult to use the medium-term frameworks as a guide to policymaking.

The announcement of their manifestos by the major political parties before the election will hopefully be translated into a consistent medium-term strategy to be followed by the elected government during its tenure.

The role of the higher judiciary in economic decision-making and management

In the recent years of the growth cycle, and especially after the restoration of the higher judiciary in early 2009, there has been a significant increase in public

interest litigation, which has questioned the rationale and transparency of economic decisions taken by the government.

Elaborating on its position on economic management issues in its judgments, the superior court has recognized the executive's authority in economic management. However, it has argued that, if an economic decision is made in a manner contrary to the procedures and regulations in force and is clearly against the ultimate welfare and good of the people, then the court has the right to question it and rule against it.¹³

This subject needs much more analysis and research, but a few general points can be made here. The first is the issue of price fixing. Here, the higher judiciary appears to have learnt, as has the executive over the years, that fixing the prices of consumer goods is almost impossible to put into practice. This lesson clearly emerged from attempts to fix the price of sugar in the early years of the democratic government. In areas where prices can be fixed and enforced (e.g., electricity and CNG), the judiciary has questioned the rationale for imposing new or increasing existing levies and taxes, and increasing prices. Here, the government has been given ample opportunity to justify its reasons and the courts have taken note of these in their final decisions. Perhaps one issue here is relying only on government representatives to explain the rationale for increasing prices and not asking professional economists and experts.

On admitting litigation where contracts have been awarded without following rules and procedures in a clearly nontransparent manner and with clear mala fide intentions, the courts are fully justified in questioning these decisions. In so doing, they are exposing both corruption in the government in power and the complicity of the higher bureaucracy in these decisions, which they should have opposed. Giving in to political pressure and not doing their basic homework to examine the merits and demerits of alternative policy options—as appears to be the case in their decision to set up rental power plants, for instance—cannot be justified as recent judgments of the court clearly bring out.

It must, however, be said that by enlarging its jurisdiction to examine economic issues under the overall rubric of protecting citizens' welfare, the superior judiciary needs to carefully consider where and when it should

¹³ See the Supreme Court's judgment in the rental power plant case (Supreme Court of Pakistan, 2012).

intervene as almost all economic decision-making has an impact—direct or indirect—on people’s welfare.

Conclusion

By concentrating on the economic growth cycle of the last 13 years—a period spanning both military and democratic rule—this chapter has focused on key issues of economic management and poor economic decision-making that are responsible for many of the economic ills that Pakistan still faces. In analyzing economic forces that are not fully captured by the official statistics, we have provided a more realistic appraisal of economic developments in this period that may help explain the economy’s dynamism and resilience even through an economic downturn.

It is important to emphasize that a critical analysis of Pakistan’s experience with the IMF and the lessons drawn from it should in no way absolve national policymakers and economic managers who must shoulder the major blame for Pakistan’s economic performance and current economic plight. Many of the important decisions that we have examined and overall economic management over this period clearly exemplify this conclusion.

Economic decision-making involves a number of key players: from those who exercise political power to economic managers and policymakers in key decision-making positions to international agencies such as the IMF and the World Bank and the foreign governments from whom large loans have been obtained. A basic conclusion of this chapter is that there is room for sound economic decision-making and that many of the mistakes that were made could have been avoided. Additionally, the current structure embodies procedures and systems, which, if robustly followed, could lead to far better economic management and improve economic performance.

Of course, the real challenge in many cases is to convince those who ultimately exercise political power of the need to make difficult decisions that may in the short run entail a public backlash as they cut into real incomes and purchasing power. Here too, if economic managers can make a convincing case and show that the medium- and long-term consequences would be favorable, it could go a long way in encouraging sensible economic

decisions. Economic management is ultimately a combination of political will and finesse displayed by competent economic managers in carrying through important economic decisions.

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A Country and an Economy in Transition

Shahid Javed Burki*

Introduction

The main thrust of this chapter is that, in 2013, Pakistan is finally in a position to move forward and set its economy not only on the path to recovery, but also on a trajectory that will ensure high levels of sustainable growth. This could happen since some of structural problems that have dogged the political system since its creation seem to be nearing resolution. Since there is a close connection between political and economic developments, this advance in the former will have positive meaning for the latter. Pakistan may well be on its way to developing a new way of managing its affairs—meaning the way in which the political system is run, how the economy is managed, and how social interactions take place among different segments of the population. With the adoption of

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an appropriate set of public policies, it may also be possible to pull the economy out of the deep slump into which it has fallen and achieve a much higher rate of gross domestic product (GDP) growth.

This way of thinking about the future seems much too optimistic for a time that brings grim news every day—of an economy that is not able to move out of the slow growth groove in which it has been stuck since 2007; of national bankruptcy believed to be just around the corner; and of a country increasingly isolated in a world that is busy reorganizing itself. The GDP growth rate has been on a declining trend since the 1965 war with India. For the last six years, the average rate of growth has been just slightly more than 3 per cent a year—only one percentage point above the estimated yearly increase in population.

An unsettled economy and one in which many people fail to respect the rule of law creates costs that are borne largely by the poorer segments of the population. This makes the situation unsustainable in the sense that the people affected by all this uncertainty—and that means the majority of the population—will begin to search for a new order that might possibly overcome the surrounding chaos. That people buffeted from many sides find themselves increasingly alienated and begin to search for some resolution to bring order to their lives is not a new finding. The search may at times also include resorting to violence, not against other people or segments of society but against the state.

This conclusion was reached some decades ago by several social scientists. Huntington (1968) has focused precisely on the kind of situation that Pakistan faces today.¹ His conclusion is that a large, alienated population will destabilize the system in which they live, hoping that change will better their lives. Hirschman's (2004) equally influential treatise on "exit, voice, and loyalty" deals with a similar situation, and analyzes the three options that people unhappy with their situation can choose from. Both, in other words, conclude that societies under immense stress must make a serious effort to transit to an order that equitably dispenses the fruits of economic advance; only then will it become durable. Is such a change taking place in Pakistan? Has the Pakistani citizenry concluded that it needs to play a role in determining how it wants to be governed?

¹ Samuel P. Huntington, with whom the author worked as a research associate in 1970/71, followed the trends in Pakistan in the late 1960s and the early 1970s to develop his thesis (see Huntington, 1968).

At this time, Pakistan faces five immediate problems in the economic arena: (i) the longest downturn in its history, (ii) serious macroeconomic imbalances, (iii) a large but poorly trained human resource base that could be an asset if properly developed or a burden if ignored, (iv) the absence of consensus on how to move the economy onto a plane of higher and sustainable GDP growth, and (v) an appropriate role for the state and how it can work with the private sector to move the economy forward.

Policymakers must address these inter-related issues simultaneously. Growth needs to become the basis of a new development paradigm. At the same time, large macroeconomic imbalances must be eliminated. Progress on one front will improve the prospects on the other four. Restoring macroeconomic stability will improve the investment climate for both foreign and domestic investors. The increased confidence and recovery in growth will lay the basis both for expanded revenues and exports. However, a growth strategy must have public support without which it will be hard to implement. This will necessarily involve some sacrifices by the relatively well-to-do in society so that those who have been left behind can begin to benefit from the process of growth. This challenge, properly and immediately met, will put the country on a constructive path, first aimed at economic survival and then at reviving the highly stressed economy.

Economic and social challenges

The chapter begins by focusing on the deteriorating external finance situation, followed by the government's persistent reliance on fiscal deficits to manage its affairs. It then assesses whether the country can be rescued by an external player or players from the brink of bankruptcy. This approach—what in finance is called “moral hazard”—has worked in the past but might not produce satisfactory results this time around.

External flows and investment

The type of external payments crisis toward which the country seemed to be inexorably heading in the spring of 2013 has become a regular feature of the Pakistani economy. On a number of occasions—in 1996, 1999, and 2008 for instance—Pakistan was able to re-emerge from a situation of near-default and bankruptcy with the help of bilateral donors and international financial and

development institutions. In 1996, China came to the country's help with a deposit of USD 500 million paid into Pakistan's account at the Federal Reserve Bank in New York.² In 1999 and 2008, the International Monetary Fund (IMF), backed on both occasions by the World Bank, helped Pakistan to avoid defaulting on external obligations.

Such help is not likely to be forthcoming in the near future. The motive for providing assistance in past crises was both economic and political. For instance, in 2008, the IMF wanted to help the country consolidate the new political order that the civilian leadership was developing. It was understood in Washington by the IMF, the World Bank, and the US government that a financial crisis would hinder political progress. As discussed below, this had happened on numerous occasions in the past.

When approached informally in December 2012 by the outgoing Pakistan People's Party (PPP)-led government in Islamabad, the IMF made it clear that it was prepared to assist if there was clear political support from most segments of the political establishment for implementing what it called "prior actions". This was an understandable exercise of caution on the IMF's part since, on numerous occasions, Islamabad was unable to complete the program it had signed with the institution.

The constraint to the flow of foreign capital comes at a time of declining domestic resource generation, which has further reduced the already low rate of investment. Given the resource situation, it does not seem possible that Pakistan can lift the economy out of the continuing slump. The current economic downturn has already affected the country in several different ways, and the negative consequences are likely to become even more pronounced. With a relatively low GDP growth rate, there will likely be a palpable increase in the rate of unemployment, which will only add to the strain on Pakistan's political and social structures.

The country has now come to rely heavily on "workers' remittances", which crossed USD 13 billion in 2011/12 and are likely to reach USD 15 billion in the current financial year. This flow is equivalent to about 7 per cent of GDP and accounts for about one half of the current rate of GDP growth. In other words,

² The author, as the de facto finance minister in the caretaker administration that oversaw the elections of 1997, negotiated this deal with Beijing.

Pakistan is in the process of making another transition—from dependence on external development assistance to finance a significant part of the needed investment to greater reliance on tapping the incomes of its own citizens. Given that these citizens do not, however, live within the country's borders, the country has come to depend on people of Pakistani origin who live and work outside the country. Nonetheless, the flow of remittances as shown by experience is volatile, and excessive dependence on it is not prudent. The country needs another transition: to raising resources for investment primarily from within its own borders. This will require the show of political will that was in short supply during the last five years.

Before leaving the subject of economics and taking up those that also affect citizens' lives, it is important to point out some other factors that have resulted in deep economic malaise. Three such manifestations are of considerable importance: (i) the absence of a well thought-out strategy for the revival of growth; (ii) in-your-face populism; and (iii) a tolerance for corruption and malpractices. It is interesting to note how easily populism slips and slides into widespread corruption as if policies directed to aid the poor are license to collect rents to benefit oneself and one's family, friends, and political associates. By all accounts, the last five years of democratic rule (2008–13) saw Pakistan at its most corrupt while the quality of governance remained extremely poor. All this raises the obvious question: Will the new political order established in 2013 succeed in addressing these problems? The answer to this is: only time will tell.

Socioeconomic challenges

During the tenure of the coalition government led by the PPP from 2008 to 2013, Pakistan had to deal with a variety of problems. The most significant of these from the perspective of economic stability and development—and also the most costly—was the rise of extremism, which has taken several forms. Groups operating from the “no-man's land” belts bordering Afghanistan continued to defy the state's authority and challenge US and NATO operations in Afghanistan, using sanctuaries they have created in Pakistan's lawless tribal belt. Their activity brought America's decade-long war in Afghanistan into Pakistan by way of attacks by “drones”.

Extremism also took the forms of sectarianism and violence against religious minorities. There were attacks by Sunni extremists on the Shia communities in

the cities of Quetta and Karachi. Sunni–Shia conflict was not the only communal violence the country experienced. In March 2013, Sunni extremists resorted to large-scale arson aimed at a particularly poor Christian community living in the heart of Lahore, Punjab’s capital and after Karachi, Pakistan’s second largest city.

The rise of extremism was not the only development that set back the economy. Very serious floods, severe power shortages, acute natural gas shortages, weakening exports on account of the continuing slowdown in the main markets for the country’s merchandise, and a weak foreign exchange position combined to deal a serious blow to investor confidence.

In this context, data published by the UK-based Wealth and Wellbeing Legatum Institute is a useful indication of Pakistan’s current socioeconomic situation. The data is presented in terms of a “prosperity index” according to which eight indices are used to rank 192 countries to determine their relative position in the world. As shown in Table 4.1, Pakistan’s position is the strongest when measured in terms of “entrepreneurship and opportunity”; not surprisingly, it is the weakest in terms of “safety and security”.

Table 4.1: Pakistan’s position on the Legatum prosperity index

Index	Position*
Economy	115
Health	112
Entrepreneurship and opportunity	103
Governance	115
Education	121
Safety and security	139
Personal freedom	132
Social capital	137

Note: * Total number of countries = 192.

Source: Legatum prosperity index, 2012.

Another way of understanding Pakistan’s relative position is to work out the ratios of various measures for the country with respect to world averages

(see Table 4.2). Pakistan accounts for 2 per cent of the world's population. This share will increase since the country's birth and fertility rates are 24 per cent and 21 per cent higher, respectively, than the global average. Life expectancy at 94 per cent of the global average compares relatively well with the rest of the world. The country's GDP per capita is only 18 per cent of the global average. What is surprising is the country's relatively sound situation with respect to the various satisfaction indices—the degree of overall satisfaction is close to the world average. For female participation in the national legislature, Pakistan scores 13 per cent above the world average.

Table 4.2: Pakistan's socioeconomic performance in the global context

Measure	Pakistan	Global average	Ratio
Birth rate in 1,000	27.3	22.0	1.240
Fertility rate (births per woman)	3.4	2.8	1.210
GDP (per capita) (PPP)	2,687.6	14,774.7	0.181
Internet access at home	6.7	34.2	0.195
Job satisfaction as revealed by surveys	73.0	73.2	0.990
Life satisfaction as revealed by surveys	5.3	5.5	0.960
Life expectancy (years)	65.2	69.6	0.940
Population (million)	173.6	6,800.0	0.020
People's treatment by the state level of satisfaction	90.0	85.1	1.050
Female representation in parliament (percentage)	22.2	19.5	1.130

Source: Legatum prosperity index, 2012.

The main conclusion to be drawn from this comparative analysis is that the country needs to do more to increase the economy's rate of growth, improve those indicators that contribute to lowering the fertility rate, and adopt measures to improve security and public safety.

The “positives” in the democratic transition

Notwithstanding the negative developments discussed above, there have been some positive moves, most of them in the political arena. There cannot be a serious discussion of Pakistan’s economic future without an equally serious probe into the way its political order is evolving. This is especially true given that, after much trial and error, the country appears to be on the way to developing a new and durable political order.

The political system has evolved since March 2007 in a way to open it up to the citizenry. This is why it is necessary to date the political transition of the last few years to an earlier date (rather than to February 2008 when General Pervez Musharraf agreed to hold general elections)—namely, the chain of events that caused the country’s fourth military government to unravel. The way in which the Musharraf government slowly collapsed provides some assurance that the country will not see another military interlude.

Constitutional changes initiated by the 18th Amendment prescribed the procedure for appointing the head of the National Accountability Bureau. Through the subsequent 19th and 20th amendments, detailed procedures for the appointment of high court and Supreme Court judges were laid down, and arrangements for putting in place a caretaker government to oversee elections prescribed.

These constitutional developments and changes were an indication that, at one level, the political establishment recognized that a serious constraint needed to be imposed on the way it managed the political process. On the other hand, the establishment itself, which held the reins of power, continued to exceed the limits allowed them by the rules of business. This was particularly the case with senior-level appointments. For instance, in two cases, the ever-vigilant Supreme Court took upon itself the responsibility for correcting what it believed was the exercise of unrestrained executive authority. It took serious note of the way the government had handled the appointment of senior officials of Pakistan International Airlines, the executive director representing Pakistan on the board of the World Bank, and the chairperson of the Federal Board of Revenue.

Another area of transition is federal-provincial relations, which are still evolving after the adoption of the 18th Amendment. A number of federal responsibilities have now been devolved to the provinces. The 7th National

Finance Commission Award, which preceded the adoption of the amendment, significantly increased the provinces' financial situation. The provinces, however, having become used to handholding by the federal government, have made little effort to improve their resource base on their own.

Nonetheless, these changes should move the country toward a durable political structure, which should ensure democracy and stability. The stage has been set for providing the present political leadership the means to effectively cope with the huge problems of large macroeconomic imbalances, slow growth, and poor governance. These loom large. The government will be well served to prepare a credible strategy that addresses all three interlinked issues: stabilization, reviving growth, and improving governance.

A new development paradigm

This section proposes a two-step approach to economic revival. The first should be taken in the immediate term following the recently held elections in May 2013. The second should be implemented after the needed analytical work has been done and the appropriate political ground has been prepared to cover the long term.

In the immediate, three aspects need to be focused on: (i) improving the quality of governance by developing a system of accountability; (ii) increasing the supply of electricity by tackling the problem of “circular debt” that has kept independent power producers (IPPs) from fully utilizing their installed capacity; and (iii) privatizing loss-making enterprises, in particular those that provide essential public services. The longer-term growth strategy should be built on the “positives” in Pakistan's current economic situation.

The suggested approach is “new” in that it differs from previous growth strategies, in which development planning, whenever it was undertaken with some seriousness, was concerned mostly with allocating public resources between different sectors and for projects within the various sectors. The new development paradigm offered here also differs from the Planning Commission's framework for economic growth, which suggests that the government's efforts should focus on a number of areas that were neglected in the past (see Pakistan, Planning Commission, 2011a, 2011b).

The first step is to launch a national discourse on the development approach suggested here to gain broad acceptance of its various constituents. As discussed earlier, political and economic developments interact with one another—undertaking one while ignoring the other produces tension that ultimately kills the effort being made. This has happened repeatedly in Pakistan’s history. Even though the government that took office in 2008 and governed for five years achieved some success in constructing a new political order, it did not make a serious effort to set the economy on a growth trajectory.

Second, as already indicated, this chapter divides its proposed strategy into two parts: the immediate and the medium term. The immediate covers a period of one year, starting on 1 July 2013. The medium term is defined as a period of three years, starting on 30 June 2014 and ending three years later on 30 June 2017. This way, it is possible to clearly separate what needs to be done immediately. The aim of the proposed measures is to revive the economy by increasing investor confidence, slowing down and eventually stopping capital flight, and creating a new understanding with the private sector on the respective roles of the state and private enterprise. The immediate effort also aims to fill in the many institutional holes that currently exist in the economic system.

Third, given the enormous changes introduced by the passage of the 18th, 19th, and 20th amendments to the Constitution in the system of governance, our strategy provides for active roles for the provinces in the development of the national economy. The provincial efforts should take cognizance of their different inheritances and also the differences that exist in their capacity to undertake serious economic work. At this time, the fact that three of the four provinces are seriously troubled by various insurgencies also needs to be factored into the development strategy. Punjab is the exception.

Fourth, the medium-term strategy should focus on what the chapter has described as the “positives”. This strategy identifies and then discusses six such economic attributes, beginning with two of Pakistan’s economic inheritances that were largely ignored in previous development efforts—agriculture and skill-based small and medium industries. The strategy gives considerable importance to international trade and, in that context, the potential in the growing trade between India and Pakistan. Another positive is Pakistan’s location, which could turn the country into an important corridor for international commerce.

The proposed strategy also treats Pakistan's large, growing, and young population as a positive, focusing on the demographic window of opportunity that has opened up and will remain open for several decades. However, this population will become an asset and not a burden only if it is properly educated and trained. The large number of highly trained and skilled women graduating from various institutions in the country is another positive, especially so since thousands have now become successful entrepreneurs in several modern sectors of the economy.

Finally, Pakistan's large diaspora scattered over three continents is another positive. It is already making a key contribution by sending large amounts of money to the country as remittances. This particular type of foreign capital flow has helped the country remain afloat when several other types of flows have become highly constrained. However, the diaspora could play a number of other roles provided the stage is set by the development of certain necessary financial institutions.

Fifth, by focusing on the positives that have been identified, economic growth could become more "inclusive". Widening income and regional disparities have become a source of great concern in recent years, not only in Pakistan but in a number of other emerging markets as well. The disparity is most glaring in districts in southern Punjab that have been left behind (see Institute of Public Policy, 2012) for which the neglect of agriculture is partly to blame. Incorporating the positives will help to bring in some segments of society and some regions in the country as dynamic components of a growing economy.

Sixth, the strategy suggests a compact with the private sector, which will give it an important role in moving the economy forward faster. The idea is not to pull back the state and leave a great deal of space for private enterprise; instead, both sectors—the government and private entrepreneurship—need to work in tandem and perform their respective roles.

Focusing on the immediate

This section looks at three key areas in the near term: governance, the role of the private sector, and the crisis-hit energy sector.

Improving governance

The Pakistani state—meaning the numerous institutions that support the working of the government and guide the public’s interaction with it—has been weakened over time. This has been the result of many factors, most notably the political rollercoaster ride Pakistan has been on ever since it became an independent state in 1947. With frequent changes in the political order, the state’s institutional structure did not have the time to develop.

In a real sense, improving governance must be the key element of a growth strategy. If the quality of governance had not deteriorated as much as it did in the last several years, if the strength of public institutions had not been eroded over time, and had adequate resources been mobilized through taxation to provide basic public services—especially law and order and education—the growth challenge would have been less severe.

Without necessarily increasing the role of the state, governance can be improved significantly by erecting a firewall between the executive authority and its accountability mechanisms, and strengthening deterrents to prevent the abuse of power and breaking of the law. Effective steps need to be taken to decentralize authority to the local government level, initially at least for the provision of social services. The country needs to make serious efforts to reform the civil service and restore the independence of public institutions by ensuring that posts are awarded on merit and adequately remunerated. It should also encourage the development of civil society institutions at all levels of government.

Pakistan needs to draw lessons from countries such as Bangladesh where the state’s weaknesses were compensated for by the development of various institutions in the private space. This trend is already in evidence but could be bolstered. Charitable organizations doing impressive work in the education sector, for example, could become the basis for a new approach to increasing literacy and improving the skill base of the population. Microfinance is another area where, with the active involvement of the private sector, Pakistan has outperformed even Bangladesh where this form of lending was institutionalized. It is worth noting that women have been particularly active in developing this part of finance.

The role of the private sector

The Pakistani state's relations with the private sector have been through several iterations. This may be a good time to dispel the ambiguity and define a relationship in which both—the state and private entrepreneurs—will have an enduring confidence. The government could work with the private sector to add to the amount of resources that need to be committed to developing the economy and improving public welfare. Our specific suggestions³ can be summarized as follows:

- Issue a policy statement prepared in consultation with the private sector clearly defining the respective roles of the state and the private sector.
- Develop policy frameworks for the private sector's involvement in education, health, and vocational training.
- Thoroughly examine the regulatory landscape with the aim of weeding out those regulations that have lost their relevance. Some of them, such as those pertaining to agricultural processing and marketing, are redundant and in place only because they have created rent-seeking for certain vested interests.
- Formulate a program for the privatization of some of the economic assets that remain under public sector control. These include Pakistan International Airlines, the National Shipping Corporation, National Logistics Cell, and Pakistan Steel Mills. Private use of the railway system, launched recently, could also be expanded. The funds generated by these sales should be put in a new fund to be called the Future Generations Fund.

The energy sector

It is clear from the way the sector has developed that the problems it now faces are the product of poor and inconsistent public policy that has failed to reflect the country's comparative advantage in energy generation sources.

³ These suggestions draw on the Planning Commission's task force report on private sector development (see Pakistan, Planning Commission, 2010). The author headed the task force, which included representatives of the private sector and eminent economists. See also Pakistan, Planning Commission (2011a).

At this time, the sector faces three problems. To begin with, there is the problem of “circular debt”—a consequence of the type of contracts that were negotiated with IPPs to solve the crisis the country faced in the 1990s. The private entrepreneurs who entered the sector were given several guarantees, the most important of which was the commitment to purchase the power they produced at a pre-agreed price. These “take-or-pay” contracts shifted the financial burden to the Water and Power Development Authority (WAPDA) and, by default, to the government. Since the government lacked the political will to levy appropriate tariffs on the end-users, timely payments were not made to the IPPs. The circular debt became “circular” when the IPPs failed to make payments to their plants’ fuel suppliers.

The second problem concerns the sector’s organizational structure. For several decades, generation, transmission, and power distribution were the responsibilities of one public sector entity, i.e., WAPDA. Then, advised by the World Bank, the sector was split into several quasi-autonomous institutions. This was done to prepare some parts of the sector—distribution in particular—for privatization. That has not happened while the advantages available because of aggregation were lost. This advice was in line with the thinking of the time, i.e., a strong belief in the private sector’s ability to do both economic and social good. That blind faith in the working of the private sector no longer exists.

The third problem relates to the sources used to generate power, which do not appropriately reflect Pakistan’s endowments. The country should have relied far more on hydropower and coal-based thermal power than imported oil, which accounts for 35.1 per cent of total supply. Hydel power accounts for another 33.6 per cent. The share of natural gas—a dwindling resource—is 27.3 per cent, while that of nuclear power is 6 per cent. Coal accounts for a minuscule amount—only 0.1 per cent.

To solve both the short-term and long-term problems faced by the energy sector, the ownership of all thermal plants operating in the public sector could be shifted to an entity that can sell part of its share to the private sector. This entity would own 4,900 MW of installed capacity, and should also issue bonds backed by its assets to liquidate the accumulated circular debt. The private sector should be invited to participate in the development of renewable sources of energy, in particular wind and solar energy. This has already begun, with a private group planning to set up a wind-power-generating plant.

Under the 18th Amendment, the provinces have the authority to invest in the development of the energy sector. This could be encouraged by the assurance that the power supply to them from the national grid would not be reduced if they were to generate significant amounts of their own supply. A market for trading power should also be developed in which the provinces could buy and sell electricity to each other.

Determinants of sustained long-term growth

This section looks at steps that can be taken to strengthen agriculture and water resource management, exports, and small and medium enterprises; and to develop human resources, including women and the diaspora.

Strengthening agriculture and water resource management

Pakistan's agriculture, despite its large potential, continues to underperform. Agricultural growth, which averaged nearly 4 per cent per annum over the 40-year period from 1960 to 2000, slowed down to around 2.5 per cent in 2011/12. This occurred notwithstanding a buoyant livestock sector and sharply rising level of milk production. The availability of water (mostly surface irrigation), which trebled between 1960 and 1990, is no longer increasing. Nor has there been any major breakthrough in the primary crop yields, which remain low.

The reasons that both productivity and output have remained low are well known, but no systematic attempt has been made to incorporate them into public policy. The areas that need the state's immediate attention are (i) increasing efficiency in the use of water, (ii) improving the use of modern technologies and basing them on Pakistan's circumstances, (iii) changing the system of incentives to develop a cropping pattern that conforms to the country's comparative advantage, (iv) modernizing agricultural marketing, and (v) increasing agricultural exports to food-deficit as well as high-income countries in the neighborhood.

Without immediate attention given to the proper use of water, Pakistan will face a serious problem in the not-too-distant future. Water availability has declined from about 5,000 cubic meters (cm) per capita in the early 1950s to less than 1,500 cm in 2010. According to 2008 data from the Food and Agriculture Organization, Pakistan is ranked last in a list of 26 Asian countries in terms of water availability. The country is expected to become "water-scarce"—defined

as an annual availability of below 1,000 cm—by 2035, though some experts project that this could happen as soon as 2020 (Asia Society, 2009).

Much of the decline is because of global warming. Few areas in the world are suffering as much from climate change as the Himalayas, which are estimated to be experiencing a thinning of the glacier cover by as much as a meter a year. A recent report by the International Food Policy Research Institute (2012) has reached a number of worrying conclusions based on productivity declines for most major South Asian crops. It projects that wheat yields could decline by as much as one half in the next quarter century.

Where there is water, there is corruption. This is evident both in rural and urban areas. In the countryside, powerful politicians who are also large landowners have no desire to push for a real overhaul of farming practices. In the large cities—in Karachi in particular—“water mafias” charge exorbitant amounts to supply water to parched communities. Most of the water they bring by truck is stolen from the pipes in the extensive public system. Those responsible for managing the public water supply infrastructure are paid by the mafia to look the other way.

Even more than most countries at its stage of development, Pakistan uses most of its available water for agriculture. History has a lot to do with current patterns of water use. An estimated 90 per cent of the available water is used on farms, leaving only 10 per cent for other purposes. Consequently, “anywhere from around 40 to 55 million Pakistanis—about a quarter to a third of the country’s total population—do not have access to safe drinking water” (Kuglelman & Hathaway, 2009).

The solutions to the water problem are as well known as the problem itself. The two important ones are worth recalling. The first is to properly price water to reflect its scarcity; the second, to better manage the vast irrigation system to reduce wastage. The two solutions should be taken together: the amount of resources generated from increased water charges could be earmarked for system maintenance. While “earmarking” is not favored by economists, it helps to create constituencies for raising additional incomes from taxation.

The proper pricing of water will also create an incentive structure that will affect the pattern of cropping and bring in new water-saving technologies. Cheap water has meant that Pakistan has allowed extensive cultivation of high

water-intensive crops such as sugarcane. These need to be replaced by crops that use less water. A changed water-pricing structure should also create incentives for the farming community to start using technologies such as drip irrigation. According to Adrien Couton, a water expert who works for an NGO with experience in Pakistan,

Drip irrigation has particularly attractive characteristics. It generates massive increase in the efficiency of water use (the increase in yield as compared to conventional irrigation methods is from 20 to 100 per cent while saving in water range from 40 to 70 per cent). It offers much more granularity than typical infrastructure intervention since, no heavy capital investments are involved, and investments can be easily spread geographically and over time. Drip irrigation also delivers immediate benefits. Finally the system is to educate the end users about the immediacy of the water issue and the urgent need for more water efficiency (Couton, 2009).

Pakistan needs to invest more in improving the technological base of the agricultural sector. The country inherited a fairly well-developed system that combined agriculture education, research, and extension. Not much was done after independence to keep the system current and expand its scope, which is one reason that agricultural productivity has fallen so far behind that of India. This is another area where a partnership with the private sector could help. The government should invite the private sector—especially that part now involved in processing and marketing agricultural products—to join hands with the government in setting up institutions devoted to research and extension.

Export-led growth

Unlike other major developing countries that have increased their share in world manufactured exports from 7 per cent to 22 per cent over 1980–2010, Pakistan's share has improved only marginally from 0.12 per cent to 0.16 per cent, and is now probably lower than it was in 1970.

The ratio of the total export of goods and services to GDP underlines Pakistan's failure to orient its economy toward exports as the engine of global growth. There are several reasons why Pakistan has not succeeded in the

export field. First, the country's governments did not factor in international commerce as part of their development strategies. Second, Pakistan has the least diversified manufactured exports among the major developing countries because policymakers have focused excessively on its principal manufactured exports—textiles and clothing—and propped up this sector artificially for a long period by setting the domestic price of cotton well below the international price. Third, because of slow growth in productivity, insufficient investments in moving up the value chain in textiles and clothing, and lack of sufficient diversification in promising areas such as other manufactures and high valued-added agricultural products, Pakistan's export competitiveness has suffered. Finally, political tension with its large neighbor India, which should be the country's natural trading partner, has limited cross-border trade. Pakistan has also not availed fully the potential of its close relationship with China to promote exports, with which it has a large trade deficit.

The gravity model of trade suggests that Pakistan should trade more with the large countries in its immediate neighborhood—China and India. Islamabad has signed a free trade agreement with Beijing, which has led to a large increase in bilateral trade, but Pakistan now has a large negative balance with China. To correct this, public policy should aim to develop supply chains that will link up with China's large industrial sector. These chains should take advantage of the entrepreneurship that exists in the small and medium engineering sector.

The same approach should be followed to develop trade with India. The recent thawing in relations between the two South Asian nations should add significantly to their growth, particularly in Pakistan's case. Burki (2011) estimates that, if India-Pakistan trade reverts to the share it had in total trade in the late 1940s and using the established elasticities, Pakistan's rate of GDP growth could increase by 2.4 percentage points over a decade and a half (see Chapter 6 of this volume for more detail).

Small and medium enterprises

Small and medium industrial enterprises are another area with high potential that public policy has neglected. Whenever public policymakers have turned their attention to industrialization as a driver of growth, they have tended to focus on large-scale industries. That notwithstanding, Pakistan has a long-established tradition of producing consumer manufactures as well as parts and

components for larger products. Some clusters have developed in several parts of the country that specialize in different products: sports and leather goods in Sialkot, electrical appliances in the Gujranwala–Gujarat corridor, armaments in the vicinity of Peshawar, and ceramics in Hyderabad.

Some of the newer developments are couture houses in major cities such as Karachi and Lahore that design, produce, and market their products. The automobile vending industry has also developed to facilitate the production of cars and trucks. Government policy has encouraged this industry by requiring automobile manufacturers to comply with what was called the “deletion” policy—the policy to force manufacturers to progressively use domestically produced components in finished products.

The private sector’s role in human resource development

By now, it is fully recognized that Pakistan has neglected the development of its large human resources. Most indicators point to human underdevelopment. This may be an appropriate time for some out-of-the-box thinking. In this context, a more aggressive public–private partnership in the areas of education and health is needed, giving special attention to having women make a larger contribution to the development of the economy.

A recent *Financial Times* article draws the world’s attention to the role the private sector is playing in delivering a variety of services to the poorer segments of the population: “At the grassroots, Pakistan is in perpetual motion, with ceaseless activity as people find affordable solutions to their basic needs. These largely hidden forces of resilience offer the best hope for the country’s future. In Pakistan, the state may be fragile but society is far stronger than many think” (Leadbeater, 2012). The article also points out the important role of private charity in helping the poor, which was evident at the time two floods hit the country in 2010 and 2011.

The private sector has done extremely well in the sphere of education. Low-cost private sector schools, charging perhaps USD 2 a week, are booming in slums and villages. Many such schools work in the homes of families whose female members have received a decent education and are prepared to put it to use to earn a living. A number of charitable organizations are active in building and managing schools in the country’s poorest areas. Each large organization

follows its own business plan. To take one example, the Karachi-based Citizens Foundation has built 900 high-quality schools in the country's poorest areas. The buildings that house these schools are modern and well designed. This is done to create community pride in the school, which is often located in a slum area. The teaching staff is entirely female, many of them graduates of the schools established by the charity. There are other models that work equally well. In other words, while the demand for education has outpaced the state's financial and organizational capacity to meet such basic needs as education, the private sector has shown it is capable of filling the void. The state should take advantage of this.

As a practical matter, the state should come up with a program for inviting the private sector to participate in the development of the neglected sectors of education and health. To begin with, the provinces should be encouraged to privatize some of the educational facilities in the public sector that are, at best, providing an indifferent education. Some of the state universities could be sold to the private sector on the condition that the new owners and operators follow the curricula developed by the state in collaboration with educationists from the private sector. For poor households to access private universities, the state could finance a subsidized student loan program through the banking sector. Several countries in Latin America—most notably Mexico, assisted by the World Bank—have successfully tried a similar approach. The same approach could be followed in the health sector with the provincial governments selling some district hospitals to private operators.

Empowering women

There are a number of sectors in modern parts of the economy where women now make up a significant part of the workforce. These include traditional areas, such as teaching and medicine, in which educated women have been active for decades. However, more recently, as the number of highly skilled women has increased, they have begun to take positions in sectors such as banking, communications, law, and politics. They also now make up a significant proportion of the workforce in companies engaged in information technology (IT). Some IT experts estimate that tens of thousands of women are engaged in this sector in what they call “cottage businesses”: women with good computer skills work from their homes

undertaking small contractual work for family members or friends who are living and working abroad. Some estimates suggest that more than USD 1 billion worth of work is carried out in these informal establishments. These are, by and large, one-person shops that receive payments through informal transactions. However, it is the entry of women in the entrepreneurial field where the real revolution is occurring.

Helping women to become active participants in developing and modernizing the economy has to be an important part of the long-term growth strategy. Women's assigned roles serve as drags on the economy. They affect the rate of growth in output, keeping it lower than would be if women were to participate more actively in the labor force. Economists have not factored into their analyses the role that Pakistan's women can play in developing their country if their participation in the workforce was to increase and if their productivity was up-scaled through better education. If women figure in economic writings on Pakistan at all, it is usually to highlight how far behind they have been left in social development and how this could serve as a drag on economic growth.

There is also not enough attention paid to the fact that the real economic role of women is underestimated, particularly in terms of their participation in the workforce. Most of the work they do in their homes or the time they spend looking after household livestock is either not reported or not fully counted. In writings on Pakistan, both the negative and positive consequences of the lack of progress in improving women's wellbeing have not been fully investigated.

The role of the Pakistani diaspora

Finally, a growth strategy should factor in the role the Pakistani expatriate community can play in the development of what was once their homeland. Migrations have been important in shaping Pakistan, in particular the country's economy. Millions of people have crossed the country's borders and settled in various parts of Pakistan, affecting their lives as well as those of the host population. Millions have also left the country and gone abroad, creating large communities of Pakistanis in three geographic areas.

There are large Pakistani diasporas in Europe, the Middle East, and North America; two others are in the process of being formed in Southeast Asia and Australia. While the exact number of Pakistanis living abroad is not known, there are perhaps some 8 million people of Pakistani origin who now live outside the country. This is equivalent to 4.2 per cent of the Pakistani population, making it one of the larger diasporas in the world. There are 25 million Indians in the various diasporas they form across the globe. The number is large but the proportion, at just over 2 per cent of India's population, is less than half that of Pakistan.

The outward movement of Pakistanis started with mostly unskilled workers going to Britain to work in the country's textile mills. Once Britain began to recover from the ravages of the Second World War, it did not have enough labor of its own to bring back to life the textile mills that had been closed down so that their workers could join the armed forces. The next large diaspora to be formed was in the Middle East in response to the opportunities created there in the 1970s and 1980s. Then, following the increase in the price of oil, a construction boom started in the oil-exporting countries—Pakistan was one of the main contributors to their needed labor force. The third large diaspora was formed in the US when the country, faced with a severe shortage of certain skills, allowed immigrants to enter the stressed labor market. Doctors, in particular, were in great demand. The North American Pakistani diaspora is different from the other two in that it comprises people with high skill levels. The average per capita income of this group is some 10 to 15 per cent higher than the American and Canadian averages.

These three diasporas probably have a combined annual income of USD 100 billion or about half Pakistan's GDP. They now remit about USD 15 billion or about 15 per cent of their total income, most of which is by way of charitable contributions or help provided to family members needing financial support. Additional amounts should become available if the government in Pakistan could create an investor-friendly environment. Doubling this amount over a period of five to eight years should be possible as the diaspora's asset base continues to expand. Using investments such as venture capital funds and private equity funds could channel finance into areas in which the expatriate community has considerable expertise. This additional flow could add 1 to 1.5 percentage points to the rate of GDP growth over the medium to long term.

Conclusion

This chapter is premised on the notion that Pakistan is finally in a position to move forward, not only in terms of reviving its economy but also in terms of setting it on a trajectory that will ensure high levels of sustainable growth. For growth to become the basis of a new development paradigm, policymakers must address the country's social and economic issues simultaneously while working to eliminate its large macroeconomic imbalances. This implies that Pakistan must make the transition from a country dependent on external financing to raising domestic resources for investment.

From the perspective of economic stability and development, perhaps the most important sociopolitical constraint to growth has been the rise of extremism. When compounded by severe power shortages, weakening exports, and a weak foreign exchange position, these factors have dealt with a serious blow to investor confidence. While concerted political will is required to overcome these constraints, recent constitutional developments and the transition in federal–provincial relations to greater autonomy for the latter is a promising step in that direction.

This chapter has proposed a two-step approach to economic revival. The first tackles three key aspects of the growth paradigm in the immediate term: (i) improving the quality of governance by developing a system of accountability; (ii) increasing the supply of electricity by tackling the problem of “circular debt”; and (iii) privatizing loss-making enterprises, in particular those that provide essential public services.

The longer-term growth strategy builds on the “positives” in Pakistan's current economic situation. The first step is to improve water resource management in the agriculture sector and invest more in improving its technological base. Second, Pakistan should trade more with its larger neighbors, especially China and India, to move toward export-led growth. Third, the government needs to bolster the SME sector as a potential driver of growth. Fourth, the state should encourage the private sector to participate in the development of neglected sectors such as education and health. Fifth, the role of women as active participants in developing and modernizing the economy must be acknowledged and strengthened. Finally, this growth strategy should factor in the role of the Pakistani expatriate community in the country's development by creating a more investor-friendly environment.

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Tackling the Energy Crisis

Afia Malik*

Introduction¹

This chapter aims to discuss the crisis of the power sector in Pakistan and, more importantly, to suggest strategies and possible solutions in response. A sufficient energy supply is indispensable for all economic activity and for ensuring sustainable economic growth and development. Regrettably, Pakistan's power sector is beset by a crisis with the demand–supply gap growing continuously to unmanageable proportions. The electric power deficit has crossed the 5,000 MW level many times during 2011, 2012, and 2013; in June 2012, the shortfall surpassed 8,000 MW.

The main reason for this growing gap is not only the rising demand and high system losses, but also the declining generation capacity. Several factors are responsible for the latter: seasonal reductions in the availability of hydropower, shrinking indigenous gas resources, the country's heavy reliance on imported fuel oil for power generation, and forced power outages due to capacity degradation or scheduled outages for the maintenance of existing power plants. The unavailability of oil—given the economy's mounting circular

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debt as the government fails to adjust energy prices to reflect supply cost—has only accentuated the energy crisis. This has, in turn, severely affected economic growth: according to one estimate, power shortages have resulted in an annual loss of about 4 per cent of gross domestic product (GDP) (Kugelman, 2013).

The poor economic management of the power sector in Pakistan has created serious problems for fiscal managers, given the limited available budgetary resources and the need to put aside a substantial portion of revenues in subsidies given to the power sector. As much as 7.6 per cent of total revenues were used up in providing subsidies to the power sector in 2007/08. By 2010/11, this share had jumped to almost 18 per cent due to a one-off payment of PRs 312.8 billion and PRs 78.2 against previous years' unpaid power sector subsidies and commodity operations, respectively.²

The Pakistan People's Party (PPP) government, which assumed power in 2008, pledged not just to reduce power outages but, in the earlier years of its term, to eliminate them. The government initiated significant reforms, including tariff increases, to manage the crippling impact of the power sector crisis. Unfortunately, these reforms were not just inadequate, but the wrong priorities were set and many of the reforms were abandoned for lack of focus, perseverance, and, most importantly, political will.

The chapter is organized as follows: after an overview of the electricity sector in Section 2, Section 3 discusses the beginnings of the power sector crisis in Pakistan. Section 4 analyzes the challenges faced by the energy sector. Section 5 discusses various options to tackle these challenges and secure energy supplies in the short, medium, and long run. The final section lists the main conclusions.

The electricity sector: Demand and supply analysis

Over the past decade, supply has failed to keep up with demand. From 2000/01 to 2012/13, consumption grew by almost 40 per cent, while supply, i.e., generation, increased by only 29 per cent. However, the percentage increase in the total installed power generation capacity in this period was only 25 per cent.

In 2012/13, the total installed power generation capacity was estimated to be 23,663 MW. Out of this, 16,000 MW was thermal (67.6 per cent),

² In 2012/13, the share of power subsidies in total revenues fell to 12 per cent.

6,826 MW was hydroelectric (28.8 per cent), and 787 MW was nuclear (3.2 per cent). Under the PPP regime (2008–13), installed capacity grew at the rate of almost 3.2 per cent, which is relatively high compared to 2 per cent under the previous government’s tenure (2000/01 to 2006/07). This addition to installed capacity during occurred not only as a result of captive power plants (set up by business enterprises to meet their unmet demand, increasing their capacity from 239 MW to 324 MW), but also by independent power producers (IPPs) (increasing from 6,035 MW to 8,575 MW), which were commissioned under the previous regime. In addition, a second nuclear power plant with a capacity of 325 MW was added to the system at CHASNUPP, with the IPPs’ hydropower share increasing from 111 MW to 214 MW.

Table 5.1: Power sector performance: Some technical indicators

Year	Total installed capacity (MW)	Total generation (GWh)	Consumption (GWh)	Peak power deficit/surplus	
				PEPCO system (MW)	KESC system (MW)
2000/01	17,689	70,132	48,584	465	–
2001/02	17,798	72,405	50,622	435	–
2002/03	19,257	75,682	52,655	–86	–
2003/04	19,522	80,731	57,491	236	–
2004/05	19,550	84,710	61,328	194	–
2005/06	19,561	92,892	67,607	–1,247	–
2006/07	19,692	97,814	72,040	–1,846	–66
2007/08	20,232	97,369	72,770	–4,396	–178
2008/09	20,556	94,647	69,659	–4,215	–59
2009/10	21,614	99,766	73,561	–5,716	–169
2010/11	23,327	100,582	73,806	–5,328	–328
2011/12	23,538	98,664	73,085	–6,325	–193

KESC = Karachi Electric Supply Corporation, PEPCO = Pakistan Electric Power Company.

Source: National Electric Power Regulatory Authority (*State of industry report* for various years) and National Transmission and Despatch Company (*Power system statistics* for various years).

On the generation side, however, the situation has been quite alarming. The 29 per cent increase in actual generation from 2000/01 to 2012/13 can be attributed to the growth in generation from 2000/01 to 2006/07 by almost 6 per cent because of better utilization of the available capacity. However, from 2007/08 to 2012/13, the growth in generation was only 0.31 per cent. The main reasons for this depressing performance include the unavailability of fuel, weather-related water shortages, and the aging of thermal power plants in the public sector. In 2010/11, for instance, total electricity generation fell by 5 per cent from the previous year as generation from thermal sources declined by 18 per cent and 11 per cent, respectively, due to the lack of gas and furnace oil supplies³ (State Bank of Pakistan, 2011).

The roots of the power crisis

The country started with a power generation capacity of 60 MW at the time of its independence in 1947. In the first ten years, by the end of the 1950s, this had increased to 100 MW. In the 1960s, after the establishment of the Water and Power Development Authority (WAPDA), power infrastructure development gained momentum and by the end of the decade, generation capacity was almost 1,234 MW. In the 1970s and 1980s, it rose sharply and reached a level of 9,651 MW in 1993/94.

The overall performance of WAPDA and the Karachi Electric Supply Corporation (KESC), the two leading public sector utilities at the time, remained satisfactory till the mid-1980s. Heavy financial losses due to unwarranted political interference, the corrupt management of limited capital resources, overstaffing and bureaucratic delays in handling routine matters in these public utilities, inappropriate and costly investments, poor-quality services, high system losses, and the poor collection of bills from customers all negatively affected the industry's financial health (Malik, Mahmood, & Ahmed, 2009).

In addition, severe constraints to the availability of capital did not allow the increase in supply of electricity to keep pace with demand during that period

³ The supply deficit of natural gas to KESC and a number of IPPs affected generation during the winter of 2010/11, while financial problems hindered the import of furnace oil, thus disturbing power generation at the beginning of summer.

(the mid-1980s to early 1990s), which grew consistently at 9–10 per cent per annum. On the demand side, there was a weak link between electricity price and demand, which resulted in poor demand management. As a result, the early 1990s witnessed an excessive shortage of electricity, especially for industrial and commercial consumers.⁴

The sector's overall operational inefficiency created a need for restructuring. Thus, under pressure from international financial institutions (the International Monetary Fund, World Bank, and Asian Development Bank), the government started a reform process in the sector. The power policy of 1994 helped to overcome load shedding in the country. It also resulted in surplus power since the actual load growth was far smaller than projected and the projects were contracted beyond what was required.

However, the policy's major drawback was that it attracted only thermal power projects, resulting in a larger share of thermal power in the overall generation mix. The share of hydropower in the national electricity supply mix fell—its contribution to the total electricity generation mix decreased from 60 per cent in 1962/63 to less than 30 per cent in 2012/13.⁵ Although the policy encouraged private sector participation, the generation mix has not been managed sensibly. IPPs entered the market, increasing the generation capacity but predominantly through furnace oil. This trend has continued over the past decade as additional incentives were provided to the power sector under the 2002 policy.

Until 2002, this policy worked reasonably well because oil prices in the international market remained low, ranging between USD 10 and USD 25 per barrel. After the US invasion of Iraq in 2003, however, the international price of oil started rising and so did the cost of generation through thermal power plants (Khan, 2012). In 2012, almost 55 per cent of the country's thermal plants were operating on furnace oil, while the remaining plants required natural gas to generate electricity. Consequently, the generation cost of electricity is now

⁴ Load shedding of up to 30 per cent of peak demand (National Electric Power Regulatory Authority, 2001).

⁵ Even in 1990/91, the share of hydropower in the total generation mix was 45 per cent. After IPPs were introduced into the system, the share of hydropower declined drastically since there was no substantial addition to its potential after the initiation of power sector reforms in the mid-1990s.

exposed to fluctuations in global oil prices since the dependence on imported furnace oil has increased over time (State Bank of Pakistan, 2011).

The second significant reason for the current crisis in the power sector has been the rising demand for power. After a moderate growth rate of around 4 per cent per annum in the second half of the 1990s, growth in the demand for electricity during the first seven years of the 2000s was around 7 per cent. Electricity demand grew by 3 to 4 per cent annually up to 2003/04, increasing sharply in subsequent years and reaching 10 per cent in 2007/08. Growth in demand, however, requires substantial investment to maintain the continuity of supply, which in this case did not happen. According to one estimate, every 1 per cent of GDP growth in Pakistan requires an increase of 1.25 per cent in electricity supply. Thus, GDP growth of 7 per cent (as in 2002–07) would have required an increase of 8.8 per cent (Merril Lynch, 2007; cited in United States Agency for International Development, 2007). However, in that period the installed capacity grew at a rate of only 2 per cent, despite 6 per cent growth in electricity supply.

Additionally, the presence of surplus power in the first half of the decade made the government complacent rather than inclined to take serious policy initiatives. Not only was the new capacity slow to grow, power plants were as slow in being upgraded—a task that could have been accomplished at one third of the cost of expansion. The power sector's share in public sector development programs fell to less than 3 per cent of GDP during this decade, although it used to be higher (Pasha, 2010). Moreover, the public sector was not allowed to add any new capacity (thermal), meaning that there were no capacity additions in this decade.⁶

Another important issue that had a negative impact on the electricity supply chain was the lack of timely and essential maintenance of existing plants, specifically in the public sector. This neglect on the part of the authorities significantly reduced the efficiency of existing plants. The capacity of state-owned thermal generation plants has since fallen regularly due to lack of proper maintenance.⁷ There was no significant investment in the 2000s in the existing generation companies (GENCOs), affecting the operational performance of

⁶ In 1987, a one-page notification barred WAPDA from initiating thermal generation.

⁷ The government allows IPPs to charge PRs 0.45 per unit as operation and maintenance charges, while GENCOs are allowed to charge only PRs 0.08 per unit (Ali, 2012).

their power plants and their ability to supply power to the grid. As a result, of the old plants' total installed capacity (522 MW)—in GENCOs commissioned in the 1960s or early 1970s—the available capacity fell to 256 MW (National Electric Power Regulatory Authority [NEPRA], 2011).

Thus, the power sector in Pakistan has not only failed to add to the generation capacity, it has also been unable to use the existing power plants to their full potential. Table 5.2 shows that the fuel cost per unit is substantially high in the public sector (GENCOs). In 2000/01, the fuel cost was lowest for GENCOs, but since 2007/08, it has been highest compared to the private sector, indicating the inefficiency of power plants used in public sector GENCOs.⁸

Table 5.2: Fuel cost in public and private utilities (paisas/kWh)

Year	GENCOs	KESC	IPPs
2000/01	177.33	221.75	184.10
2003/04	193.29	213.45	178.08
2004/05	214.87	248.38	187.13
2005/06	293.93	320.28	235.31
2006/07	366.31	350.10	288.88
2007/08	468.01	347.99	264.73
2011/12	1,060.38	727.78	795.16

Source: Hydrocarbon Development Institute of Pakistan (*Pakistan energy yearbook* for various years).

Clearly, greater investment is required in response to a continuous increase in electricity demand, directly linked to economic growth. The starting point for this should be correctly priced power consumption. The basic consideration for investment decisions by the private sector in any country is the price of electricity that generates sufficient profits to supply power in a cost-effective manner. Unfortunately, appropriate tariff reforms were not introduced in Pakistan in this period (2000–07). The notified electricity tariffs were below cost-recovery level.

⁸ GENCOs' present ability to produce power is almost 20 per cent less than their installed capacity, mainly due to the aging factor and use of furnace oil (WAPDA, 2007).

The previous military government did not allow electricity prices to rise in line with the steep increase in international oil prices⁹ for political reasons. In fact, tariffs were frozen between 2003 and 2007 at a very low level. The cost of electricity generation rose (as discussed above, due to the rising price of oil in the international market) but, unfortunately, the notified tariffs were not sufficient to cover the higher cost. The high commercial and technical losses suffered by distribution companies (DISCOs) also added to the cost of service. It is interesting to note that system losses (including transmission and distribution [T&D] losses, and auxiliary consumption) were also very high in the same period that the country had surplus electricity.¹⁰ This indicates the low level of managerial focus in utilities on operational efficiency when there was surplus production.

Since there was a huge gap between the cost of service and the government-notified uniform tariff across all DISCOs, the government had to provide a tariff differential subsidy (the difference between the applied tariff and the determined tariff) to power companies to bridge the gap. However, it did not compensate the latter accordingly against the provision of increasingly subsidized electricity at the consumer end. This left the power companies unable to make payments to the oil companies; the oil companies, in turn, were left unable to import the oil needed for thermal power plants. By 2006, this spiral of below-cost tariffs had resulted in the problem of circular debt (see Section 4.1).

Present challenges

At present, the power sector in Pakistan faces a number of very serious issues, which need to be resolved for the sector to progress. This section analyzes these issues in detail.

Circular debt

The problem of circular debt, which emerged in 2006, was aggravated in 2010, causing power outages to increase to alarming levels. The failure of the

⁹ The price of imported furnace oil, which represents about a third of the fuel mix for power generation, increased by 76 per cent from 2003/04 to 2007/08. Similarly, global gas prices also rose considerably in that period.

¹⁰ More than 25 per cent—the average for the whole country.

Pakistan Electric Power Company (PEPCO) and KESC to clear their dues to fuel suppliers and IPPs was a result of their (DISCOs') inefficiency in collecting revenues, T&D losses, and below-cost power tariffs. As a consequence, most thermal power plants were forced to operate at a very low 'capacity factor', thus causing a massive increase in power load-shedding. The country lost between 2,000 and 2,500 MW of potential thermal power generated by private power companies that remained off-grid due to the nonavailability of fuel supply, coupled with the lack of funds brought about by swelling dues (Asian Development Bank [ADB], 2010; Bhutta, 2011). This debt issue has had serious consequences for downstream energy sector companies.

Since the problem arose, the amount of circular debt has continued to fluctuate between PRs 100 billion and over PRs 400 billion, owing to reductions in recovery and the failure to retrieve fines from power thieves. Till April 2011, the net circular debt was PRs 258.5 billion, compared to PRs 103.9 billion in April 2009, indicating an increase of almost 147 per cent. Only 86.5 per cent was recovered in the fiscal year 2010/11 compared to 104.3 per cent in 2009/10. In May 2012, the overall circular debt amount stood at more than PRs 420 billion; in the budget presented for 2014/15, the amount was PRs 500 billion.

The PPP government attempted to address the issue of circular debt but on an ad hoc basis by pumping in money up to fivefold (PRs 1,122 billion) to rescue the system from total collapse, but this was not successful in clearing the total debt stock. The government failed to work out a mechanism to permanently curtail the accumulation of debt and was not strict with defaulters.¹¹ Instead, the continual injection of money meant that it would borrow billions of rupees from commercial banks through various instruments to make partial payments against the debt to reduce it to a manageable limit. Since the default amount was usually larger than the government's capacity to pay at a given time, circular debt has continued to build up.¹²

¹¹ Extremely low collection compared to what DISCOs require has increased the amount of receivables by almost PRs 100 billion from PRs 285.846 billion in 2010/11 to PRs 411.013 billion in 2012/13.

¹² In 2011/12, despite fiscal constraints, the government paid PRs 391 billion for the unpaid tariff differential subsidy of previous years.

Pricing policy

One of the main factors to have aggravated the circular debt problem is the inability of DISCOs to pass on the cost of electricity to consumers. Given that 68 per cent of our electricity generation is thermal-based—where 99.8 per cent relied on imported oil and gas¹³—the impact of almost frozen tariffs (from 2003/04 to 2006/07) was so large that the increase in tariffs in subsequent years could not make up for the cost price deficit. Even after 2007, government-notified tariffs remained below those determined by NEPRA (on the basis of cost) (Table 5.3)—i.e., too low to cover the average costs of the power companies. As a result, the companies started to incur losses that eventually reached unmanageable levels. In 2011/12, the gap between NEPRA-determined tariffs and government-notified tariffs crossed PRs 3 per unit (Table 5.3), which has added to the subsidy responsibilities of the government.

Table 5.3: Average electricity tariffs (PRs/kWh)

Tariff effective	NEPRA-determined	Government-notified	Gap
24 February 2007	5.14	4.25	0.89
1 March 2008	5.60	4.78	0.82
5 September 2008	8.42	5.58	2.84
25 February 2009	8.42	5.63	2.79
1 October 2009	8.42	5.96	2.46
1 January 2010	10.09	6.67	3.39
2010/11	9.58	7.78	1.80
2011/12	11.89	8.72	3.17

Source: National Electric Power Regulatory Authority (2010, 2012) and Trimble, Yoshida, and Saqib (2011).

¹³ Domestic gas resources are being depleted and, therefore, reliance on imported oil is increasing.

The current mechanism for determining tariffs operates on the basis of the minimum cost of generation.¹⁴ Further, the presence of a tariff differential subsidy serves as a disincentive to DISCOs, which continue their inefficient practices. To avoid provoking a political reaction in the smaller provinces, the government tends to follow the uniform tariff principle despite the fact that some DISCOs incur line losses above 30 per cent. If different DISCOs were charged different tariffs, profitable DISCOs would be in a position to buy more power for their consumers.

Further, the major drawback of tariff differential subsidies is that they are not appropriately targeted. Poor customers (small users) have benefited the least from this subsidy. This is because the majority of rural customers are lifeline customers (extremely small users) and experience load shedding for up to 20 hours, but the allocation of the tariff differential subsidy to them is only 0.42 per cent of the total. More than 60 per cent of the subsidy is allocated to consumers of more than 100 kWh (Friends of Democratic Pakistan [FODP], 2010).

The PPP government (2008–13) deserves some credit for taking the hard decision to regularly revise power tariffs in line with international oil prices on a quarterly basis to recover the cost of power despite political compulsions and severe criticism. Yet, and importantly, this increase was insufficient as the government continued to pay subsidies to cover the cost. Moreover, to accommodate the changes in oil prices more frequently, it decided that monthly fuel adjustments should be passed on to the DISCOs. Meanwhile, NEPRA was to determine consumer-end tariffs on a quarterly basis.

A significant increase in tariffs took place between 2010 and 2013.¹⁵ One change to the tariff structure included the imposition of a general sales tax (GST) on the consumption of more than 100 units of electricity. Another significant step was to eliminate cross-subsidies to a certain extent from commercial and industrial consumers to agricultural and domestic consumers, as the domestic

¹⁴ The government issues consumer-end tariffs where the minimum consumer-end tariff for a particular consumer category among eight DISCOs is adopted for application across the board to all DISCOs. NEPRA determines consumer-end tariffs for each DISCO on the basis of its consumer mix, losses, and operational cost. The tariff so determined is different for each DISCO because of its peculiar conditions.

¹⁵ From March 2010 to September 2011, a 125 per cent increase in the power tariff, in addition to the transfer of fuel costs to consumers every month.

tariff was greater than the industrial tariff. This was important because domestic customers consume more than 45 per cent of electricity. Additionally, the tariff structure generally became more progressive—at higher levels of consumption, it was more expensive. For domestic consumers, the price of electricity was now greater than the cost of supply in the two highest slabs. However, this did not significantly reduce the fiscal burden since only a low volume (4 per cent) is consumed in the higher slabs (Trimble et al., 2011).

The International Monetary Fund has demanded an end to the subsidy to the power sector to make it financially viable. However, this is only a partial solution—it is argued that merely increasing the power tariff has not worked and will not work unless the inefficiencies in the power system are removed.

Transmission and distribution losses

Consumer-end tariffs are highly sensitive to losses in T&D systems. With every percentage increase in losses, the tariff increases exponentially as the cost of production goes up. The situation of huge power losses from T&D networks and auxiliary consumption over the years has not improved, even deteriorating in the early half of the 2000s (Table 5.4).

Of the total T&D losses, distribution losses account for almost 68 per cent while the remaining are transmission losses. Of the 68 per cent of distribution losses, a significant portion occurs through electricity theft. During 1985/86 to 1994/95, the units of electricity supplied that were also billed grew at a rate of 9.8 per cent; during 2007/08 to 2009/10, the units billed increased at a rate of less than 2 per cent—this difference indicates the inability to curtail power theft.

Except for IESCO, LESCO, GEPCO, and FESCO, the other DISCOs (MEPCO, PESCO, HESCO, QESCO, and KESC with a combined 30 per cent consumption of the total) have extremely high losses, ranging from 18 to 36 per cent. The major portion of these losses is due to theft. Over the years, there has been no progress in minimizing power theft or overcoming technical constraints. Companies with high system losses also suffer from low recoveries of the billed amount. For instance, in 2012/13, PESCO's losses were almost 36 per cent and its recovery 85 per cent; SEPCO with losses of almost 39 per cent recovered only 53 per cent of the billed amount; and

IESCO, LESCO, GEPCO, FESCO, and MEPCO recovered between 92 and 99 per cent.¹⁶ These inefficiencies in the DISCOs have not only affected their financial position but also led to an additional unjustified cost to those consumers who pay their bills regularly or to the government in the form of a tariff differential subsidy.

Table 5.4: T&D losses in DISCOs (%)

Company	2006/07	2007/08	2008/09	2009/10	2010/11	2012/13*
IESCO	12.17	10.29	10.51	9.81	9.75	9.52
LESCO	12.71	12.85	13.23	13.78	13.22	13.51
GEPCO	11.63	11.14	10.72	10.98	11.96	11.22
FESCO	11.19	11.20	10.59	10.48	11.25	10.90
MEPCO	19.28	18.49	18.37	18.94	18.29	17.91
PESCO	35.74	36.06	37.40	36.91	37.25	35.98
HESCO	36.90	35.86	34.75	34.79	28.58	27.73
QESCO	21.37	20.79	20.12	20.68	20.40	20.56
SEPCO**	–	–	–	–	39.76	39.14
KESC	34.20	34.10	38.46	37.33	34.84	30.85

Note: * Barring KESC, there is a negligible difference in the figures for 2011/12 and 2012/13.
 ** SEPCO data was included in HESCO prior to 2010/11.

IESCO = Islamabad Electric Supply Distribution Company, LESCO = Lahore Electric Supply Distribution Company, GEPCO = Gujranwala Electric Supply Distribution Company, FESCO = Faisalabad Electric Supply Distribution Company, MEPCO = Multan Electric Supply Distribution Company, PESCO = Peshawar Electric Supply Distribution Company, HESCO = Hyderabad Electric Supply Distribution Company, QESCO = Quetta Electric Supply Distribution Company, SEPCO = Sukkur Electric Power Company, KESC = Karachi Electric Supply Corporation.

Source: National Electric Power Regulatory Authority (2010–13).

The difference of roughly around PRs 2/kWh between the NEPRA-approved average tariff and the average tariff charged to consumers is

¹⁶ According to an unofficial estimate, the government failed to collect PRs 495 billion in electricity bills between July 2011 and May 2012, taking the recovery ratio to 47 per cent—one of the lowest ever in the country’s history.

because of system losses. Whenever power companies face problems, the federal government extends financial help out of the national budget or by increasing tariffs, resulting in more inefficiencies and system losses. Given that a 1 per cent system loss translates into PRs 6.5 billion, all DISCOs (excluding KESC) are losing roughly PRs 140 billion a year through system losses alone despite the increase in consumer tariffs.

An uneconomical fuel mix

Of the total installed generating capacity, about a third is currently accounted for by hydropower and two-thirds is thermal-based (nuclear power has a minor share). Over the last three decades, a sluggish approach toward building large dams together with the 1994 Power Policy (that attracted only thermal power plants) has caused the share of hydropower in the national electricity supply mix to fall. This has increased the overall cost of generation in Pakistan. Although the country has the potential to produce more than 40,000 MW of hydropower, the installed capacity is only 6,826 MW or roughly 16 per cent of the total potential. Moreover, this amount is only available provided the hydro-generating units work to their full potential.

At present, almost a third of the country's total imports comprise oil. Of the total oil consumption of over 20 million tonnes, furnace oil consumption stands at about 10 million tonnes. Currently, the price of furnace oil has increased to PRs 75,000 per tonne and the cost of electricity based on furnace oil plants has crossed PRs 15 per unit. Almost 5,000 MW of oil-based power projects are currently in the pipeline, which, combined with existing oil-based projects will place an unrealistic burden on the national economy.

The shift from hydropower to thermal power implies that the country now depends on imports to meet its energy requirements,¹⁷ thus placing considerable strain on the economy by raising the external account deficit and worsening the country's balance of payments (Trimble et al., 2011). Moreover, the increased dependence on imported fuels, such as oil, has greatly undermined the government's efforts to overcome its corporate debt.

¹⁷ With limited oil production and low refining capacity, the import of crude oil and oil products accounted for 83 per cent of oil supplies in 2009/10.

The share of electricity generation based on natural gas is decreasing drastically given the country's depleted gas resources.¹⁸ Gas tends to be reserved for domestic consumers and industry; its availability for power generation is minimal. Power generation based on natural gas costs PRs 4.24 per kWh (in 2011/12), which is much lower than the generation cost of using furnace oil (PRs 15.94 per kWh) or high-speed diesel (PRs 18.89/kWh) (Table 5.5). To generate electricity using gas would require that new gas reserves be discovered, but no serious efforts have been made to this end.

Table 5.5: Average cost of units delivered to DISCOs, 2011/12

Source	GWh	Share (%)	Cost (PRs million)	Cost (PRs/kWh)
Hydropower	28,643	31.93	4,660	0.16
Coal	66	0.07	206	3.12
High-speed diesel	1,474	1.64	27,848	18.89
Residual furnace oil	30,662	34.18	488,617	15.94
Gas	23,431	26.12	99,340	4.24
Nuclear	4,413	4.92	4,978	1.13
Imported	296	0.33	2,662	8.99
Mixed	730	0.81	9,331	12.78
Wind	6	0.01	51	9.12

Source: National Electric Power Regulatory Authority (State of industry report for 2012).

Efforts to find alternatives, such as the import of liquefied natural gas (LNG) have remained slow. The idea of LNG imports was first envisioned in the National Energy Plan 2005, which focused on importing LNG for short- and medium-term needs and on transnational gas pipelines, such as the Pakistan-Iran and Turkmenistan-Afghanistan-Pakistan-India (TAPI) lines for long-term needs. The Oil and Gas Regulatory Authority (OGRA), however, has rejected the LNG option in its recommendations to the Economic Coordination Committee on the grounds that it will cost four times as much. As far as the Pakistan-Iran gas pipeline is concerned, there are apprehensions

¹⁸ Gas reserves are being fast depleted because of the extremely inefficient pipeline system subject to theft in the Third World (*The Express Tribune*, 9 December 2012).

(see, for example, Ahmad, 2010) that the 21.5 million cubic meters of gas it is to carry will only cover the existing gas shortage rather than providing gas for new power generation projects.

Coal is the cheapest source of fuel used in thermal production (PRs 3.12 per kWh in 2011/12). At the same time, it is the source least used to generate electricity and its use is declining, given the lack of adequate maintenance. Like water, the country has enormous coal reserves, with an estimated 185 billion tonnes in Thar. It is estimated that, by using only 2 per cent of these reserves, Pakistan could generate around 20,000 MW of electricity for almost 40 years (Ghani, 2009).¹⁹

Limited capacity addition

Despite attempts to add to the installed capacity, many planned hydropower projects (in the public sector as well as in the private sector) have been delayed. The main reason for the significant delay in most cases is the absence of any coherent and comprehensive energy policy: development planning in the hydropower sector by the federal government was essentially left to WAPDA for the public sector and to the Private Power and Infrastructure Board for the private sector after the 2002 Power Policy. Although both organizations work under the same ministry, there is no link between their respective priorities, resulting in a lack of complementary development plans.

Most of these hydropower projects are planned on the Indus River, where the sharing of water resources has been a major source of contention among the provinces.²⁰ The availability of sufficient financial resources is another major hurdle in the completion of both public and private sector hydropower projects. Commercial banks are involved in the IPP market, and the shortage

¹⁹ A number of projects based on Thar coal resources were identified in the power plan for 2010/11. All these are in the private sector except for one coal gasification project (100 MW) in the public sector.

²⁰ The provincial (Khyber Pakhtunkhwa) government took the position that the Power Policy 2002 was beyond the powers of the Constitution and, hence, any letter of interest issued under the policy had no legal value. As a result, regulatory approval for two major private sector hydropower projects has been delayed until the legal issues are resolved (for details, see FODP, 2010)

of liquidity has restricted their capacity to finance large hydropower projects. International project financing has also fallen due to the recent global financial crisis. Political and economic instability has discouraged commercial lenders from entering large project finance agreements (FODP, 2010). The Diamer-Bhasha Dam (4,500 MW), inaugurated in October 2011, was to be completed in eight years, but the truth is that its completion depends on the availability of the required financial resources.

Seven new IPPs were inducted into the system in 2010/11 under the 2002 Power Policy²¹ with a capacity addition of 1,604 MW to the national grid system, although none of them has a capacity of more than 300 MW each. The Chashma nuclear power plant II, started in 2005, added to the nuclear installed capacity. The PPP government's most well-known and controversial step, however, was to include rental power plants (RPPs) in the power system as a quick-fix solution. Despite criticism from different quarters, it approved the induction of 14 rental projects (most of them oil-based) with a capacity of up to 2,250 MW²² to ensure an end to the power deficit. The objection raised to the rental power program concerned its financial viability given its below-par efficiency²³ and high tariff structure.²⁴

In September 2009, the government through the Ministry of Finance asked ADB to carry out a third-party audit of the power sector, including RPPs. ADB also declared these plants to be expensive and ineffective.²⁵ In the end, the

²¹ This provided extra tax incentives as well as assurances to investors, such as protection from political force majeure, payment of compensation in case of termination due to government default, tariff adjustments for variations in currency exchange rates and fuel prices, ensuring the conversion of Pakistani rupees, and the remittance of foreign exchange for project-related payments, etc.

²² Out of 2,250 MW, only 453 MW from RPPs came on-stream by 2010/11.

²³ The project efficiency committed to by the RPP sponsors was only 32–35 per cent but the government would be legally bound to make payments for 90 per cent capacity utilization (Kiani, 2010).

²⁴ According to one independent estimate, 2,250 MW of rental power would have incurred a net deficit of PRs 135 billion for the country, given the furnace oil price of PRs 26,000/tonne, and offered a tariff to RPPs of US cent 13.5/kWh (claimed by the minister at the time) (for details, see Asif, 2011). One can imagine the real loss to the economy as the current price of furnace oil is PRs 64,000/tonne.

²⁵ In terms of reducing the electricity shortfall.

proposed 14-RPP program had no significant impact on reducing load shedding in 2009/10 and onward because none of the RPPs became functional before 31 December 2009.²⁶

The effectiveness of RPPs depends on the sufficient availability of fuel—something that has not happened in the last few years. Even the existing thermal power generation (both in the public and private sectors) has not been fully utilized due to the shortage of gas or unavailability of furnace oil because of the circular debt problem. In these circumstances, it seems absurd on the part of policymakers to have opted for expensive RPPs, which were entirely thermal-based.

The electronic and print media also raised serious reservations about behind-the-scenes nepotism and corruption, for instance, in the RPP deals (Asif, 2011). In March 2012, the Supreme Court finally cancelled the RPP contracts²⁷ and ordered civil and criminal action in accordance with the law against all responsible persons.

Energy conservation

Pakistan's total energy savings potential is estimated to be 11.16 MTOE. Savings from energy efficiency could reach 18 per cent of the total energy consumed, corresponding to a 51 per cent reduction in net oil imports. Pakistan is highly energy-intensive as a consequence of large energy losses, wastage throughout the supply chain, and insufficient investment in replacing obsolete infrastructure (FODP, 2010). The 23 per cent in T&D losses has a significant impact on the cost of electricity and contributes to power shortages. Therefore, it is essential that, apart from setting up new power generation plants, the conservation of energy be given serious attention.

²⁶ ADB also pointed out to the government that the contracts with the RPPs lacked a sound clause in case of nonperformance (by the RPPs).

²⁷ The Supreme Court took serious notice of all the observations (as mentioned above) against RPPs and why government functionaries had opted for this expensive and inefficient option when other cheaper and more effective choices were available.

Tackling the energy crisis

Short- and medium-term measures

First, and most importantly, the available capacity needs to be used more effectively to conserve energy. There is a savings margin of over 20 per cent in electricity consumption across all sectors. Unfortunately, steps to improve energy efficiency and to initiate loss reduction programs with the least incremental cost are not prioritized as new supply-side initiatives.²⁸ Moreover, the national legislative framework for energy conservation by domestic and commercial consumers remains weak. A further saving of 10 to 15 per cent could be achieved by introducing the second and third levels of energy conservation practices (for details, see Asif, 2011).

Second, there are thermal power plants in both the public and private sectors with substantial capacity that is producing far below capacity because of their inability to purchase fuel to run the plants. To fully utilize the available capacity, it is essential that the fiscal management of the energy sector be improved as a priority.²⁹ This requires engaging professionals on the basis of their experience and qualifications rather than political affiliation (discussed in detail in the subsequent suggestions). Moreover, maintaining existing plants, specifically in the public sector, is less expensive and less time-consuming than setting up RPPs and will improve the former's efficiency and capacity quite significantly. The government must identify inefficient power plants and then invest in them to improve their efficiency. The number of plants in GENCOs could be upgraded/renovated to produce around 3,000–4,000 MW of electricity more quickly and cheaply (Asif, 2011).

Third, the politics of pricing is such that it is difficult to ask people to pay more for a product that is undersupplied. Therefore, instead of further increasing the price, line and theft losses—which are as high as 37 per cent in certain areas—should be brought down to a level comparable to other countries. This will automatically bring down the cost of producing electricity. This is neither

²⁸ The energy saved by the proposed compact fluorescent lamp program, for example, would have reduced electricity demand by over 1,280 MW countrywide and by 1,133 MW in the PEPCO system (ADB, 2010).

²⁹ The government has injected five times the money but the problem of circular debt persists.

very difficult nor expensive and only requires determination on the government's part to ensure improvement in the operational performance of the DISCOs. The government should update the system gradually and make every effort to reduce the system's losses. Power theft can be easily controlled if there is the will to do so (in the short term), while technical losses can also be improved gradually through appropriate investment (in the medium term). When the inefficiencies in the system are removed and the due amount recovered from defaulters, the problem of circular debt will be resolved automatically in the medium if not short term.

The government must restructure the whole system of bill collection (perhaps through incentives in the form of easy installments or through tough decisions, such as disconnections, depending on the situation) to recover outstanding bills from all defaulters—whether in the public sector or from private consumers, provincial or federal governments, or the military³⁰—as quickly as possible to effectively resolve financial issues. Roughly 1,500–2,000 MW of additional capacity can be made available by reducing T&D losses, which, ideally, should be in the range of 6–7 per cent.

The implementation of the above three recommendations depends on strengthening the governance and regulation of the energy sector. Therefore, our fourth suggestion is that the process of restructuring be re-examined in the light of ground realities. A new wave of power sector reforms is badly needed in the medium term, but what must be understood is that successful power sector reforms depend on a wider group of reforms—not only power sector reforms but also judicial reforms that will empower regulators³¹ to make reliable and justifiable decisions, and financial reforms that will allow power generators to pay the real cost of capital and that are subject to hard budget constraints (Victor & Heller, 2007).

The strategic plan for restructuring the country's power sector, which was developed in 1992 and formally implemented in 1994/95, has not been successful. Although more than 15 years have passed, it has failed to achieve

³⁰ It is a misconception that the public sector is the main defaulter in payments due to DISCOs; payments due from the private sector exceed those of the public sector.

³¹ However, the judiciary should avoid unnecessarily interfering in pricing decisions if they are made on justifiable grounds.

its objectives of improving operational or financial efficiency. The status of the power sector in terms of technical, economic, and financial efficiency has deteriorated. Institutional weaknesses and governance issues, which used to be the main hurdle in the sector's development, persist.

Though unbundled to a certain level, the power system as an outcome of first-generation reforms has once again become centralized under PEPCO, which continues to hold sway in financial management, power purchase and sales, and the appointment of senior management over the operating companies (GENCOs and DISCOs). These companies lack the technical and managerial skills to operate independently, and their structure on the basis of corporate governance principles has not been established in the true sense (FODP, 2010).

Apart from their inferior operational performance, DISCOs are not aware of their role and need for good governance as corporate entities. Despite being corporate entities, their attitude is still that of a public sector organization. Not only are they overstaffed, their power purchase contracts are not in place, and defaults and delays are considered routine. They remain unable to recover dues from the public sector and provincial government departments due to a bureaucratic style of governance, causing high losses in the distribution system. This may be because they are staffed by the same workforce and professionals as the previous public entity or have inherited its behavior and are unwilling to change.

As DISCOs, they were expected to introduce efficiency into the system and quality to the service, but they have failed to do so and now seek support from the government. The single-buyer model³² accompanied by the delay in payment of subsidies by the government and the lack of discipline in these DISCOs have forced them to default; significant arrears in payments to the GENCOs have resulted in the upsurge of the circular debt problem. The resolution of circular debt depends on the self-sustainability of the DISCOs, for which the state's role may need to be gradually phased out.

Low production and lack of any effort to reduce theft from line losses are both due to institutional weakness. Therefore, the thrust of any policy change or

³² Under the single-buyer model, no direct contractual links exist between GENCOs and DISCOs. Generators sell electricity at regulated prices, which is supplied to DISCOs at pooled average power purchase prices.

reform process should be on institutional issues to tackle efficiency, affordability, cost minimization, losses, and theft. Unless all DISCOs are made accountable for all their decisions and finances, it will not be possible to make the power sector efficient because inefficient DISCOs—such as Quetta, Hyderabad, and Peshawar—are indirectly subsidized by profit-making DISCOs—such as Lahore, Islamabad, and Faisalabad.³³ Therefore, a complete corporate structure for all DISCOs with a professional and honest management, and tariffs for each DISCO based on its efficiency, is crucial if the sector is to progress.

Fifth, following on from the previous suggestion, there is a need to overcome the institutional and organizational weaknesses of the energy sector as a whole, which no government has so far done. Generally speaking, vested interests in these governments have stalled the due level of competence and commitment that are prerequisites for its progress. They have not only lacked the capacity to foresee emerging challenges but also failed to respond efficiently. Energy offices are considered the most lucrative and desirable slots in any cabinet³⁴ (Asif, 2011).

As a result of these problems, tariffs, investment, and the appointment of senior management and staff have largely been politicized. Lack of expertise in financial and commercial skills is a serious impediment to accountability, quick decision-making, and commercial orientation. It is generally believed that policymakers have caused enormous damage to this sector either by approving and sanctioning public investment in inappropriate projects or by endangering essential projects for their personal interests, which include corruption, political motives, or other agendas. The sector has always remained in the limelight because of financial corruption, whether in IPP programs, the privatization of KESC, the curtailment of the 1,000 MW thermal power project that was supposed to have started in 2005 (see Asif, 2011), or the initiation of RPPs. The unnecessary involvement of politicians, therefore, needs to be curtailed.

³³ The government has delayed the announcement of separate tariffs for all corporate DISCOs despite separate determinations made by NEPRA—a tough decision to implement politically. It has found it difficult to defend higher tariffs in Balochistan, Sindh, and Khyber Pakhtunkhwa, where DISCOs are making losses.

³⁴ Whether it is the post of minister, the chief executive of a power company, or chairperson of NEPRA—all are appointed under political influence and not on the basis of professional expertise and merit.

Sixth, an effective institutional framework is needed to ensure sustained and efficient output growth and to avoid unnecessary delays in decision-making. Cumbersome bureaucratic procedures and administrative inefficiency cause enormous delays in decision-making in Pakistan and also discourage the private sector. Having multiple agencies involved in the energy sector in general and in the power sector in particular is a certain recipe for delays as well as lack of coordination because it becomes necessary to acquire the overall commitment or approval for any required changes. For example, delays in the transfer of responsibilities from the government to the private sector or to the power regulator means ministers and civil servants giving up responsibilities they have exercised for many years.³⁵

For the success of reforms, a committed government must engage with all stakeholders to gain public support and provide some form of compensation to those who are unhappy with the change in the state of affairs. For effective decision-making, integrated energy planning and policy formulation can be a viable option since it would allow the restructuring of policy institutions to check the unnecessary fragmentation that has occurred over the years (Allahdad, 2012). A single energy ministry responsible for all energy offices is a possible solution. It would then be responsible for the development and implementation of integrated policies, plans, and strategies for the energy sector based on good governance and operational efficiency (FODP, 2010).

Seventh, there is a need for a strong regulatory environment. NEPRA's weak administrative governance takes the form of a lack of autonomy, resulting in its overall institutional inability to carry out the desired functions effectively. In addition, NEPRA lacks the professional expertise³⁶ to supervise and control the power sector and establish a rational and equitable pricing regime (Malik, 2007).

NEPRA is often blamed for most of the problems in the power sector, including load shedding, system losses, and high tariffs. It has been unsuccessful in developing and pursuing a regulatory framework to guarantee reliable, efficient, and affordable electricity to consumers. NEPRA is mandated to attract investment in the power sector but, except for thermal

³⁵ For example, the delay in determining separate tariffs for all DISCOs.

³⁶ The chairperson and members of NEPRA are appointed not on the basis of their competence and merit, but under political influence.

power plants, no significant addition has been made to projects generating electricity from renewable sources (see Kiani, 2011a). Its role has so far been limited to determining tariffs and issuing licenses, that too, under the influence of the government. Moreover, its weak capacity to formulate market rules has delayed the implementation process and formation of the independent Central Power Purchasing Agency.

The lack of uniform regulation in the energy sector as a whole creates distortions between the gas and electricity sectors. Inconsistent regulation between NEPRA and OGRA sends confused signals to investors and creates disharmony in pricing strategies between gas and electricity (FODP, 2010). This issue can be resolved either with the formation of a single regulatory authority or through regular coordination between NEPRA and OGRA.

The most serious challenge, that of circular debt, can be resolved very easily if the appropriate steps (as mentioned above) are taken. All these measures, including the improved corporate and operational governance of power sector companies, the elimination of inefficiencies in the system, and cost-effective pricing (not dependent on government subsidies) are important for the sustainability of the sector and can be easily achieved in the short to medium term.

Long-term measures

In the last ten years or so, any additions made to installed capacity have been mostly thermal, and these too have relied on an expensive fuel option. From an economic point of view, it is very important that the full cost of generation be passed on to the consumer. At the same time, however, it is equally important to keep the cost of generation low. The dependence on imported oil and gas should be minimized, given the fluctuating prices of the former and the latter's depleted resources. This is not possible in the short term. Therefore, in the long term, the focus should only be on indigenous resources such as coal, hydropower, and other renewables.

All the hydropower projects under construction should be completed in time to enhance cheap electricity generation capacity. The emphasis should be on exploiting more hydropower resources, not only in public sector but also in the private sector. The government needs to concentrate on those issues—for

instance, the availability of credit and a comprehensive hydropower policy—that have discouraged the private sector from becoming involved in hydropower projects. Similarly, coal gasification projects should be seriously pursued.³⁷ These could effectively contribute to meeting Pakistan’s ever-increasing demand for electricity in a cost-effective way.

The mistake of relying on an expensive fuel option to add to installed capacity—an outcome of the 1994 Power Policy—needs to be corrected. The country has ended up with a subsidy of roughly PRs 3 per unit. The key to good governance is the realization that every citizen is entitled to equitable dividends out of any system. This will only be possible when all efforts are made to minimize the cost of generation.

That Pakistan relies on expensive fuels for thermal generation reflects not only the lack of incentive to minimize costs, but also a lack of vision on the part of our decision makers who have failed to explore cheaper options. As a result, no power project has been set up in the last ten years or so. In our planning strategies for the last ten years, the utilization of indigenous resources has always been at the forefront, but unfortunately these plans have not been implemented. Until we stop relying on oil- and gas-based thermal power generation and focus on cheaper sources of producing electricity, the financial problems of the power sector will not be resolved.

Conclusion

The power sector in Pakistan is affected by a number of institutional and organizational weaknesses: inefficient generation and distribution systems, dependence on expensive fuels, nonoptimal tariffs, financial mismanagement, and high levels of corruption and incompetence. The resolution of circular debt requires that an efficient administrative system be put in place—one capable of ensuring that the problem will not recur once resolved. All power companies should be made accountable for all their decisions and finances to improve the system in the medium term. A sound business environment—free of administrative and institutional hurdles—is equally necessary to

³⁷ The present government (elected in May 2013) seems to be serious about pursuing coal-based power projects.

encourage private investment in the power sector, including in the development and production of indigenous resources. There is also a need to eliminate untargeted energy subsidies and to implement electricity pricing on a full-cost recovery. This will help restore the financial sustainability of the energy sector.

It is generally believed that the present crisis is a self-imposed problem ensuing from years of bad management, lack of proper vision, and poor policies. The stark truth is that Pakistan's policymakers have always focused on short-term goals, followed inconsistent and disorganized financial strategies, and repeatedly made the wrong choices. It is high time that we learnt from experience.

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6

Exports

Lessons from the Past and the Way Forward

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Introduction

The idea that trade is important for economic growth dates back to the nineteenth century when classical economists such as Adam Smith, David Ricardo, and John Stuart Mill advocated the favorable effects of international trade on output. Since then, a rich body of theoretical and empirical literature has evolved with regard to the role of trade in growth and development. Initially, postwar development economists viewed trade as a negative factor in developing countries' industrialization objectives, and from the 1950s through the early 1970s most newly independent countries adopted an import-substitution industrialization (ISI) strategy. By the mid-1970s, however, there was growing disenchantment among development economists concerning ISI in favor of the export-led growth strategy that several East Asian countries had successfully adopted. Subsequently, this was formalized in what is referred to as the "Washington

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consensus”: generally described as an outward-oriented development (OOD) strategy, it has since been adopted by most developing countries.

According to proponents of the OOD strategy, outward orientation can promote economic growth through three main channels. The first is trade, which enables firms (at the micro-level) and countries (at the macro-level) to gain through specialization and economies of scale. This is because increased competition results in the least efficient producers being driven out of the market while the most efficient producers expand their market share, thus raising aggregate productivity through the reallocation of resources (Tyler, 1981; Melitz, 2003). The second is exports, which serve as the primary source of foreign exchange needed to purchase imported inputs such as raw material and machinery and, more broadly, to help ease the balance-of-payments constraint (Faridi, 2012). The third channel involves trade as an important source of knowledge and technology transfer with the potential to encourage innovative activity—such as research and development, and the introduction of new products and processes—by increasing the returns on innovation as exporters have access to a larger market than nonexporters.

Pakistan was one of the most successful countries in implementing the ISI strategy during the 1960s. Although it has slowly moved away from ISI since the late 1970s, there has never been any domestic ownership of the OOD strategy. Thus, while the anti-export bias may have weakened over time, it remains substantial. India, which had followed the ISI strategy for a long time, began to change in the 1980s, while Bangladesh, after continuing for a few years with policies inherited from Pakistan, also started moving toward an OOD strategy in the 1980s. This is evident in that the extent of global integration, measured by the trade-to-GDP ratio, increased by 25–40 per cent in Bangladesh and India between 1980 and 2000. In contrast, there was no change in Pakistan’s trade-to-GDP ratio even though its average tariff rates declined significantly over this period (Dollar, Hallward-Driemeier, & Mengistae, 2006).

Pakistan’s share of world exports has remained more or less stagnant over the past three decades, pointing to the country’s inability to expand exports faster than world trade (see Table 6.1). On the other hand, its South Asian neighbors and the East Asian countries have shown a tremendous increase in export shares. Malaysia and Thailand entered their rapid export growth

phase in the 1980s and 1990s, while Bangladesh and India started theirs in the 1990s, which continue to date.

Table 6.1: Country-wise share of world exports (1980–2012)

Country	1980	1990	2000	2010	2012
Bangladesh	0.04	0.05	0.09	0.13	0.15
India	0.43	0.57	0.70	1.55	1.72
Pakistan	0.15	0.18	0.15	0.15	0.15
Malaysia	0.74	0.94	1.61	1.40	1.35
Thailand	0.37	0.74	1.13	1.37	1.36

Source: Authors' calculations based on data from UN Comtrade.

India has managed to increase its export share almost fourfold and Bangladesh by more than three times since 1980. As a result, Pakistan's exports, which were more than a third of India's and almost four times that of Bangladesh in 1980, are now less than one tenth of India's and about the same as Bangladesh. The latter has achieved this tremendous export growth on the back of its garments sector, and today Bangladesh exports garments worth over USD 20 billion, which is more than four times the value of Pakistan's garment exports.

Pakistan has experienced several periods of high GDP growth, but given that its income elasticity for imports is almost twice as high as that for exports, growth accelerations have invariably been followed by balance-of-payments crises and periods of stagnation. Thus, solving the problem of poor export performance is key to breaking the stop-go cycle in which Pakistan has been stuck for more than 30 years. This is particularly important today when the country is passing through a prolonged period of economic stagnation—after a spurt of growth in the mid-2000s that was brought to an end by a balance-of-payments crisis.

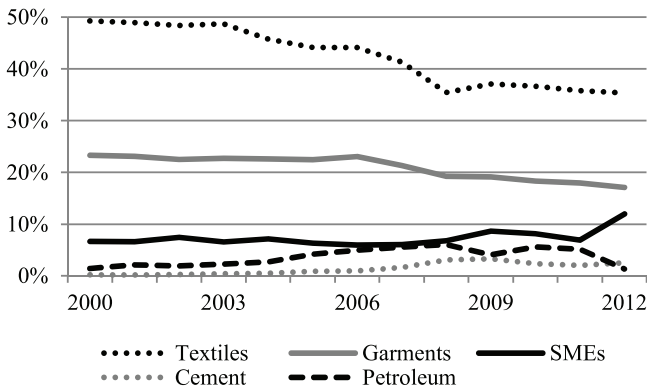
The aim of this chapter is to use Pakistan's post-2000 experience to identify potential drivers that could boost its export performance in the medium term and to suggest measures that may help achieve that potential. We define an export driver as a product (or product group) that has the potential for output expansion (i.e., for which domestic production conditions are favorable) and in which Pakistan has a demonstrated competitiveness. Sections 2 and 3 analyze

Pakistan's manufacturing and agricultural exports, respectively, with the aim of identifying potential drivers that could boost the country's exports substantially in the medium term. Section 4 provides a brief discussion of the foreign exchange earnings potential of exporting information technology (IT) and entertainment services. Section 5 identifies elements that cut across sectors and could boost overall export performance. Section 6 concludes the chapter.

Manufacturing

Manufactures account for about 80 per cent of Pakistan's total exports with the top five manufactured exports contributing over 70 per cent of total exports. In 2000, the combined share of the top five manufactured exports was over 80 per cent, but this has since declined primarily because of a fall in the share of textiles and garments (T&G) (Figure 6.1). The T&G sector has dominated the country's manufactured exports since the 1960s, but in the last decade the share of T&G exports has fallen from about 73 per cent of total exports in 2000 to around 53 per cent in 2012. The share of other exports in the top five—small and medium enterprise (SME) manufactures,¹ cement, and petroleum—all registered an increase during this period.

Figure 6.1: Manufacturing export performance (share in total exports)



Source: Authors' calculations based on data from UN comtrade (SITC Rev. 3).

¹ See Section 2.3 for details of what SME exports constitute.

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To determine which exports might have a significant impact on overall export performance in the medium term, we need to identify drivers from among the existing major exports. This section, therefore, looks at the top five manufactured exports in 2010. Of these, petroleum exports are primarily a result of a mismatch between refinery output mix and domestic demand, and Pakistan does not have any comparative advantage in this industry. Thus, petroleum exports cannot serve as an export driver in the medium term.

Cement exports grew rapidly post-2001, initially because of the excess capacity in Pakistan and a massive increase in demand from Afghanistan associated with the aid-financed postwar rebuilding process. Growth in cement exports peaked in 2008, following which there has been hardly any increase. The cost of transport is an important factor in cement exports, which means that Pakistan's market is limited largely to its neighbors to which cement can be transported over land. It is likely that the demand in Afghanistan will decline following the withdrawal of international forces in 2014, while exports to India will remain hostage to the volatile state of political relations between the two countries. In addition, cement is an energy-intensive industry and there are major concerns about its impact on the environment. For these reasons, cement is likely to be an unsuitable choice as an export driver.

In the manufacturing sector, therefore, this leaves only T&G and SME exports as potential export drivers in the medium term. These are discussed below, along with some recommendations for realizing this potential.

Driver 1: Textiles and garments

In 2012, cotton yarn, cotton fabric, household textiles (towels, bed linen, etc.) and garments constituted 19, 22, 28, and 31² per cent, respectively, of T&G exports. Although their share of total exports has fallen substantially in recent years, T&G still contribute over half of Pakistan's exports. Overall export growth cannot, therefore, be accelerated in the medium term without higher growth in T&G exports.

² All the numbers in this section were calculated by the authors based on data from UN comtrade (SITC Rev. 3).

Textiles

Pakistan is the fourth largest producer of cotton in the world and this has been both a blessing and a curse. Cotton textiles have dominated the manufacturing sector since the 1960s. In the first few decades, the cotton spinning and weaving industry played a key role in boosting exports, employment, and investment in the manufacturing sector. However, over time, it has become an effective obstacle to the development of the downstream industry because it has successfully restricted the import of yarn and fabric, particularly of manmade fibers (MMF). There are several schemes in place to allow exporters to import materials duty-free under bond or to claim refunds on duties paid, but none of them really work. Since products made using MMF or a cotton-MMF mixture account for a major share of world trade in fabrics, household textiles, and garments, T&G exporters in Pakistan are able to compete only in a small portion of the total market.

As cotton moves up the T&G value chain, USD 1 of fiber is converted into USD 2 of yarn, which in turn can be processed into USD 4–6 of fabric and household textiles or USD 12 (and more) of garments. In addition, the employment generated at each stage is a multiple of that in the previous one. According to one textiles businessperson,³ converting 50,000 kg of cotton fiber into yarn and yarn into fabric requires 400 person-days at each stage, while converting fabric into garments requires 1,600 person-days. This highlights the importance of the garments industry not only for exports but also for employment generation. Therefore, the key to accelerating growth in T&G exports (as well as creating jobs for the rapidly expanding labor force) is to move up the value chain.

Although Pakistan is the world's second largest exporter of cotton yarn, little value is added at the spinning stage, particularly for the low- and medium-count yarns that the country exports. In 2012, its share of world exports of cotton yarn, cotton fabric, household textiles, and garments was 14.4, 8.9, 6.1, and 1.0 per cent, respectively. The downward movement on the value chain in the last decade is evident from the fact that, in 2003, these four subsectors accounted for 10.4, 6.2, 9.4, and 1.1 per cent, respectively, of world exports. Pakistan's share of world

³ Interview with Mr Shaukat Ellahi Shaikh, the managing director of Nagina Cotton Mills Ltd (Nabi and Hamid, 2013). Since Mr Shaikh primarily manufactures and exports cotton yarn, we assume he is not biased in favor of the downstream industries.

Exports

exports of higher value-added T&G products (household textiles and garments) has declined while that of lower value-added cotton yarn and fabric has increased substantially. At the same time, Pakistan has concentrated increasingly on cotton textiles, as can be seen from its declining world export share of MMF yarn and fabric (2.1 per cent in 2003 and 0.1 per cent in 2012).

The existing incentive structure in Pakistan appears to favor products at the lower end of the value chain. Thus, an export strategy that aims to push textile exports up the value chain needs to proactively provide incentives for higher-value textiles, e.g., by imposing a small export duty on low-count yarn and eliminating all barriers to the import of MMF fibers, yarns, and fabrics.

The first would encourage the spinning industry to produce higher-count yarn and reduce the cost of yarn (almost 50 per cent of the cost) for producers of household textiles and garments. This would, on the one hand, encourage the production of higher-count yarn and fabric and, on the other, boost the competitiveness and exports of all Pakistan's high value-added T&G products.

The second (discussed in more detail in Section 2.1.2 below) would allow household textiles and garments to compete for a larger portion of the world market. However, the textile mill owner-bureaucrat nexus in Pakistan is very strong and is unlikely to allow a more liberal trade policy with regard to the import of MMF fibers, yarns, and fabrics. Similarly, spinning mill owners will never allow a small export duty on yarn and are currently demanding that a 5 per cent protective duty be imposed on the import of cotton yarn from India.

Garments

The fallout from 9/11, in terms of travel restrictions by the US on Pakistan and heightened security concerns, coincided with the transition phase of the end of the Multi-Fiber Arrangement (MFA) and quota regime in 2005. Major international brands and retail chains, particularly in the US, in planning for the post-2005 period aimed to reduce their reliance on Pakistan as a major source country for garments. This was particularly true in the case of knitted garments (primarily T-shirts) and there were widespread closures in the knitwear sector in Pakistan between 2007 and 2010.

Pakistan's garments exports are concentrated in only a few products, which are largely dictated by the availability of locally produced raw materials, i.e., medium-count cotton yarn and fabrics. Ten product categories (at the HS four-digit level) account for over 70 per cent of the world garments trade (see Table 6.2). Of these, Pakistan has a substantial presence (over 2 per cent of world exports in that product category) in only three product categories. These account for 18 per cent of the world garments trade and within these, Pakistan exports primarily men's fleece hooded jackets, socks and other hosiery, and men's denim jeans.

Table 6.2: Pakistan garment exports by major products (2012)

Product	HS code	World (\$ mn)	World (% share)	Pakistan (\$ mn)	Pakistan (% share)
<i>Knitted</i>					
Men's suits, jackets, trousers...	6103	14,161	3.66	294	2.07
Women's suits, dresses, trousers...	6104	38,017	9.83	128	0.34
T-shirts, singlets, vests...	6109	33,102	8.56	291	0.88
Jerseys, pullovers...	6110	43,766	11.31	99	0.23
Pantyhose, tights, socks...	6115	12,607	3.26	260	2.06
Men's shirts...	6105	7,419	1.92	543	7.32
Gloves, mittens...	6116	3,724	0.96	111	2.98
Total knitted exports	61	195,118	50.43	2,006	0.52
<i>Woven</i>					
Men's overcoats...	6201	11,757	3.04	3	0.02
Women's overcoats...	6202	13,269	3.43	2	0.02
Men's suits, jackets, trousers	6203	41,592	10.75	921	2.21
Women's suits, dresses, trousers...	6204	52,515	13.57	591	1.13
Men's shirts...	6205	14,402	3.72	15	0.10
Total woven exports	62	191,817	49.57	1,694	0.44
Total knitted and woven exports		386,934	100	3,701	0.96

Source: Authors' calculations based on data from UN Comtrade (SITC Rev. 3).

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Of the remaining seven product categories, three include women's clothing and account for 27 per cent of the world garments trade. Pakistan has a significant presence (over 1 per cent of world exports of that product category) in only one category—women's denim jeans. The country exports hardly any other women's clothing because this generally requires fine or MMF yarns and fabrics, which are not produced in Pakistan. There are two other items—men's knitted shirts and gloves/mittens—in which Pakistan has a substantial world presence, but their share of the world garments trade is less than 3 per cent. Pakistan's garment exports are thus concentrated in five or six areas: socks, denim jeans, fleece hooded jackets, sweatshirts, T-shirts, and vests, which account for over two-thirds of the country's garment exports.

Pakistan's negative image overseas, its difficult internal security situation, and a product range that is limited to medium and heavy cotton products has meant that the country was unable to benefit from the phasing out of the MFA in 2005 and the resulting increase in the world garments trade. Pakistan's garment exports increased from USD 2.4 billion (knitwear USD 1.3 billion and woven apparel USD 1.1 billion) in 2003 to only USD 3.7 billion (knitwear USD 2.0 billion and woven apparel USD 1.7 billion) in 2012. Meanwhile, Bangladesh increased its exports of garments almost fourfold, from USD 5 billion in 2003 to USD 19 billion in 2011.

However, another opportunity is now emerging. In 2012, China's garment exports were almost USD 160 billion and its market share of world garment exports was 39 per cent. With rapidly rising wages, China is now transitioning from the export of low-end, labor-intensive manufactures to higher value-added products. It is likely, therefore, that its market share will decline in the foreseeable future. Pakistan could be one of the countries to pick up a part of this share.⁴

As a result of the rising wages, Chinese firms are looking to relocate production. Just as East Asia benefited from the relocation of industry from Japan and Bangladesh from Korea, Pakistan should aim to benefit from the relocation of industry from China, especially given its special political relationship with the latter.

⁴ Pakistan's current share of the world market is less than 1 per cent and thus a small gain in its world market share would translate into a large increase in its garment exports.

In addition, the European Union, which accounts for about half the world's imports of garments, has given Pakistan GSP-plus status from 2014. This should not only boost garment exports by domestic producers, but also make Pakistan an attractive location for foreign textiles and manufacturers.

There is some indication that this may already be happening: an increasing number of articles in business publications indicate that Chinese investors are in the market looking to acquire local textile firms. In January 2014, the Shandong Ruyi Technology Group, one of China's major textile groups, acquired majority shares in Masood Textile Mills, Faisalabad—the largest, vertically integrated knitwear manufacturer in Pakistan with a turnover exceeding USD 200 million in 2012.

The strategy for seizing this opportunity has to address the factors that are currently a drag on Pakistan's garments industry. These include the country's critical energy shortages, the security and law and order situation that prevents foreign buyers or their technical staff from visiting Pakistan, and trade policy and customs procedures that discourage garments manufacturers from using imported materials such as fine-quality/MMF yarns and fabrics, dyes, and clothing accessories. As pointed out earlier, an incentive structure that encourages value addition and generates employment is also necessary.

The Punjab government has started to address some of the issues that fall under its purview. To provide a secure environment, uninterrupted power supply, and common facilities such as clean water, effluent waste treatment, and skills training, the Punjab government is setting up the Quaid-e-Azam Apparel Park near Lahore and the Ruyi Masood Textile Park near Faisalabad, the two cities where Punjab's largest T&G clusters are located. However, there has been no progress on liberalizing trade policy, which remains subservient to the federal government's revenue needs and the rent-seeking goals of the bureaucracy and big business.

Driver 2: Traditional and emerging small and medium enterprise (SME) exports

SME products are diverse and include miscellaneous manufactured articles (primarily sports goods and jewelry), scientific equipment (primarily surgical instruments), metal manufactures (cutlery, household utensils, etc.), furniture, general industrial machinery and parts (primarily pumps and fans), electrical

machinery (primarily batteries and household refrigerators/freezers), and telecommunications equipment. Pakistan has a long history of exporting some of these products—sports goods, surgical instruments, and cutlery, in particular—while others, such as jewelry, furniture, and light engineering products (fans, pumps, batteries, refrigerators, etc.) are beginning to have an impact (Table 6.3).

Table 6.3: Traditional and emerging SME exports

SITC code	Product	2000 (\$ mn)	2012 (\$ mn)	Average annual growth rate
89	Misc manufactured items	408.6	2,122.8	18.3
894	Sports	282.5	341.4	2.4
897	Jewelry	23.8	1,629.2	79.8
87	Professional and scientific instruments	135.6	315.9	8.1
872	Surgical instruments	125.3	307.3	8.7
69	Metal manufactures	37.9	224.1	17.0
696	Cutlery	26.8	82.6	11.2
82	Furniture	5.8	92.1	66.5
74	General industrial machinery	9.4	75.7	20.6
77	Electrical machinery	11.4	64.0	18.2
76	Telecom equipment	5.2	55.2	66.2
	Total SME exports	613.9	2,949.9	

Source: Authors' calculations based on data from UN Comtrade (SITC Rev. 3).

These product groups have a large and expanding world market and there is considerable potential for increasing Pakistani exports in these areas. In addition, SMEs are generally highly labor-intensive and their growth would generate substantial employment. These SME product groups are, therefore, ideal export drivers in the medium to long run.

Among traditional items, while exports of sports goods have grown slowly, there is still substantial untapped potential for expansion in these industries. For instance, in 2012, Pakistan contributed only USD 341 million to a global sports goods market of 90 billion dollars. The sports goods industry clustered in and around Sialkot is now

moving toward the production of sportswear and sports-related equipment such as gloves, protective guards, and pads for internationally renowned brands such as Adidas, Nike, Micassa, Puma, Mitre, Select, Umbro, Lotto, Diadora and Decathlon.⁵

There is, therefore, immense potential for growth on the extensive margin by complementing the export of sports goods with that of sportswear and sports-related equipment. Government policy should be geared toward facilitating this ongoing move in the sports goods industry. In this regard, access to imported raw materials at world prices is critical because the industry widely uses specialized materials such as graphite or carbon fiber, synthetic leather, plastics, resins, and “breathable” MMF yarns/fabrics, none of which are made locally.

In the case of surgical instruments and cutlery, Pakistan is currently operating at the low end of the market with enormous untapped potential for moving up the value chain. For surgical instruments in particular, production is largely concentrated in the low price range due to the high cost of good-quality raw materials, which have to be imported. While the existing system allows exporters to obtain raw materials at duty-free prices, it does not operate very well and is, in any case, designed for large manufacturers. Small producers, who buy most of their materials from local wholesalers, cannot benefit from the system.

Nontraditional items are also growing rapidly but their problems are similar to those faced by SMEs producing sports goods, surgical instruments, and cutlery as discussed above. Thus, to promote SME exports, government policies should be geared toward (i) eliminating trade barriers to allow the easy import of all kinds of raw materials and (ii) promoting the development of common facilities such as for heat treatment, materials testing, certification, and skills training.

A strategy for promoting manufacturing exports

Given Pakistan’s weak policy implementation, poor governance capacity, and tight fiscal situation, any strategy that is to have a chance of succeeding must (i) be simple and build on existing structures, (ii) focus on easing binding

⁵ Adidas Brazuca, the official match ball of the 2014 FIFA World Cup, was made by Forward Sports of Sialkot, Pakistan.

constraints, and (iii) not require substantial financial resources from the budget. Additionally, an effective strategy to boost manufacturing exports should not only make imported raw materials easily available to exporters, but also focus on (i) promoting industrial clusters; (ii) improving access to finance; (iii) providing a supportive environment for innovation, particularly for improvements in production processes, design, and quality standards; and (iv) facilitating regional trade.⁶ In this section, we discuss why we have identified these as key interventions for accelerating growth in manufactured exports.

Promoting industrial clusters

Industrial clusters are defined as a collection of related companies located in the same region, which leads to the development of a pool of skilled labor related to that industry, spillovers, and the availability of needed raw material and intermediate goods (Krugman, 1991). According to Porter (1990), underlying the phenomenon of clustering are mechanisms that facilitate the interchange and flow of information between firms even while they maintain their rivalry. There is empirical evidence to suggest that firms in clusters benefit from such externalities and are likely to grow faster than firms located outside (see, for example, Naudé & Rossouw, 2010, Aitken, Hanson, & Harrison, 1997; Fujita, Krugman, & Venables, 2001).

Manufacturing firms in industrial clusters are also more likely to innovate than firms located outside. For Pakistan, Ahmed and Mahmud (2011) find that, in a sample of approximately 400 manufacturing firms spread across seven industries (foods, garments, textiles, leather and leather products, machinery and equipment, chemicals, and electronics), the presence of a firm in a cluster increases its probability of introducing a new product or process by 11.2 percentage points. When the authors augment their analysis with ‘firm size-cluster’ interaction terms, they find that medium (large) firms in a cluster are 24.2 (38.7) percentage points more likely to innovate compared to firms of the same size *not* located in a cluster.

Industrial clusters also help small firms enter export markets. Firms that want to start exporting face significant costs associated with the search for

⁶ Burki et al. (2011) undertake an industry-wise analysis of 13 key SME sectors in the country and provide detailed policy recommendations for each sector.

suitable markets and international contacts. This involves accumulating detailed knowledge on consumer preferences to tailor products to local tastes, developing distribution channels, and at times expanding or upgrading existing plant and equipment. A firm will only choose to incur such 'sunk costs' if the perceived benefits of exporting outweigh these costs. In situations where sunk costs are too high, especially due to difficulties in accessing knowledge, they will act as a deterrent. Clustering can help reduce such costs for individual firms because of the spillovers that exist within clusters and the possibility of pooling resources when incurring certain sunk costs.

The geographic concentration of exporters may also promote the development of specialized transportation infrastructure, such as storage facilities, dry ports, and long-distance trucking operations, or it may improve access to information about goods that are in demand and market players in the importing countries (Aitken et al., 1997). Location advantages in terms of backward links, such as the existence of raw material and intermediate goods suppliers, and the availability of labor with specialized skills, can also reduce the cost of exporting. Thus, the existence of spillovers within a cluster will increase member firms' propensity to export. The city of Sialkot (where there are probably more exporters of manufactures than in any other city in the country, including Karachi and Lahore) is a testament to the effectiveness of such forces.

A number of large SME clusters have developed in Pakistan such as the engineering, pharmaceutical, and T&G clusters around Karachi, the textiles cluster around Faisalabad, the garments and automobile parts cluster around Lahore, and the light engineering, sports goods, and garments cluster in the Sialkot, Gujrat, and Gujranwala triangle (Ahmed, Mahmud, Hamid, & Rahim, 2010). There is thus considerable potential for industrial policy to promote exports by focusing on existing industrial clusters.

Such a policy should hinge on (i) developing specialized skills appropriate to the cluster through public investment in the relevant technical and vocational education; (ii) promoting local research and development by supporting partnerships between firms and research institutions/universities;⁷ (iii) according preferential treatment in the provision of infrastructure, particularly power and gas; and (iv) establishing

⁷ For more detailed measures, see Ahmed et al. (2010).

common facilities (such as for effluent treatment, skills training, testing, and certification) through a public-private partnership where the government provides seed capital or other incentives and private entities that specialize in the provision of such facilities manage the initiative itself.

Improving access to finance

There is a positive link between financial development and exports (see, for example, Beck, 2002; Svaleryd & Vlachos, 2005; Do & Levchenko, 2007). This is because entering foreign markets is costly since it entails additional costs as discussed above. Thus, credit-constrained firms will find it more difficult to export than firms that have access to finance, and only those firms will become exporters that are able to overcome their liquidity constraints. For a sample of manufacturing firms in Italy, Minetti and Zhu (2011) find that the “probability of exporting is 39 per cent lower for credit-rationed firms than for nonrationed firms and that rationing reduces foreign sales by more than 38 per cent.”

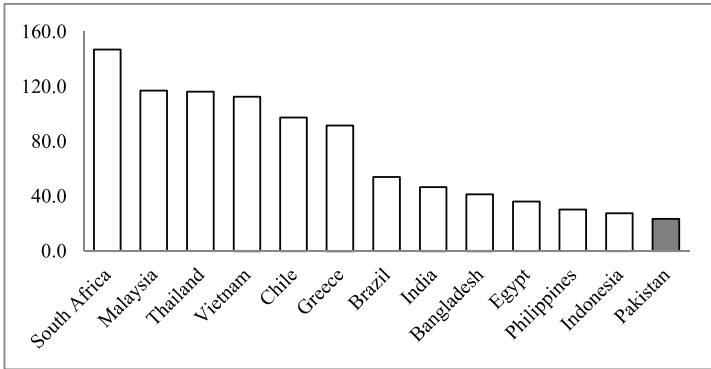
According to the second round of the Investment Climate Assessment Survey for Pakistan held in 2006/07 (see World Bank, 2009), there is a link between financial access and exports in Pakistan’s manufacturing sector. Financial access is three times greater among the study’s sample of exporters than among nonexporters. Splitting the sample into firms with and without financial access shows that the probability of exporting is lower for firms without financial access than for those with financial access: 50 per cent of the firms with financial access were exporters compared to only 18 per cent of the credit-rationed firms.

Pakistan’s financial markets are underdeveloped relative to those of other developing countries (Figures 6.2 and 6.3) because “the terms of loans are much shorter, average loan sizes are larger, and bank requirements for collaterals against loans are higher” (World Bank, 2009). As a result, access to finance is a major problem for firms, particularly for SMEs in Pakistan. Ahmed and Hamid (2011) find that, other things being equal, SMEs are 12.2 per cent and 7.4 per cent less likely to have access to external finance than large firms. The situation tends to worsen as credit markets tighten, as is evident from the fact that SMEs’ share of total bank lending is estimated to have declined between 2004 and 2007 (World Bank, 2009). Credit availability for the private sector has tightened even further since then and it seems

likely that SMEs have, in the last few years, been almost entirely excluded from bank credit.

While there is substantial financial penetration in large cities such as Lahore and Karachi, access to finance has not spread uniformly across the country.⁸ Ahmed and Hamid (2011) find that firms located in smaller cities (such as Sheikhpura, Sukkur, and Hyderabad) have a lower probability of financial access relative to firms located in metropolitan cities (such as Karachi and Lahore) or those in export clusters (such as Sialkot). Consequently, emerging export industries, which necessarily incur additional costs when entering export markets and are not located either in large cities or export clusters, are likely to be affected the most by financial constraints. Thus, innovative policies are needed to increase financial access for SMEs by introducing appropriate financial products and encouraging banks to move from collateral-based to returns-based lending.

Figure 6.2: Financial depth*

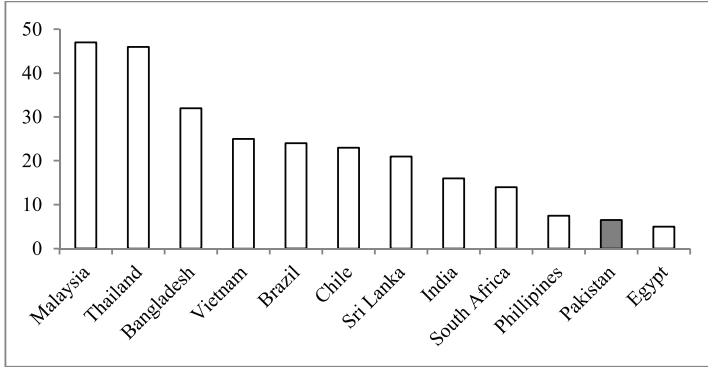


Note: * Domestic credit to the private sector (as a percentage of GDP).

Source: Authors' calculations based on data from the World Development Indicators database (World Bank, 2012b).

⁸ Financial access was measured by (i) the number of bank branches in a city to capture the financial development of the city in which the firm is located and (ii) the percentage of firms that had access to external finance in that category of firm size to capture the 'willingness' of banks to provide credit.

Figure 6.3: Bank credit as a share of working capital (%)



Source: World Bank (2009).

Providing a supportive environment for innovation

There is consensus in the literature that a firm's trade status is linked to innovative activity (defined as the introduction of a new product or process or both). However, the direction of causality between the two has not been established. Ahmed and Mahmud (2011) find that, while export status did not determine innovative activity for a sample of manufacturing firms in Pakistan, there was a significant increase in the number of firms that started exporting post-innovative activity. Their study also shows that financial access is a significant determinant of innovation in firms and, as discussed earlier, a firm's presence in a cluster has numerous benefits, including increased innovative activity.

The East Asian economies have exhibited tremendous export-led growth on the back of a successful transition from low- to high-end technological production. What matters for growth is not just the scale of production but also the ability of countries to innovate. The important question is how to promote innovation. According to INSEAD's global innovation index for 2011, Pakistan is ranked 123rd out of 125 countries on the innovation input

sub-index,⁹ which captures the environment for innovation. However, on the innovation output sub-index,¹⁰ which measures actual achievement in innovation, Pakistan is ranked 67th. As a result, it is ranked fourth on the innovation efficiency index.¹¹ These numbers show well both Pakistan's tragedy and resilience: its environment is among the worst in the world but its people are among the most innovative.

Thus, to promote innovation, Pakistan has to improve its input environment. To this end, it needs to invest in the development of human capital, particularly in science and engineering, and industrial research infrastructure. The not-for-profit and private higher education sector has grown rapidly in the last decade or two. However, most institutions are apt to focus on business management at the postgraduate level and business and the social sciences at the undergraduate level. The government should give private sector universities incentives to move into science and engineering education while providing additional resources to existing public sector engineering universities.¹² In addition, it should set up a fund for industrial research that aims to promote links between industry and universities. As discussed earlier, the development of industrial clusters and improved financial access for firms will promote innovation in the manufacturing sector.

Facilitating regional trade

Pakistan's regional trade has expanded rapidly in the last decade, and overland trade with Afghanistan has been its fastest-growing component. Trade with Afghanistan has boosted SME exports, particularly in the light engineering industry. For example, in 2010/11, Afghanistan accounted for 33 and 17 per cent of Pakistan's global exports of metal manufactures and machinery

⁹ The sub-index comprises five pillars: institutions, human capital and research, infrastructure, market sophistication, and business sophistication.

¹⁰ The sub-index comprises two pillars: scientific outputs and creative outputs.

¹¹ This is calculated as the ratio of the two sub-indexes and shows how well economies leverage their enabling environments to stimulate results in innovation.

¹² Funding for public universities is through the Higher Education Commission. Currently, there does not seem to be any policy targeting additional resources to science and engineering education.

and transport equipment, respectively (Hamid & Hayat, 2012). Similarly, in 2010/11, Bangladesh accounted for 52, 45, and 45 per cent of Pakistan's global exports of textiles and leather machinery, heating and cooling equipment, and motorcycles and bicycles, respectively (Hamid & Hayat, 2012). These exports could play an important role in increasing the export of such products in the future because "it is always difficult to develop new export products, but once export capacity, production experience, and domestic supply chains are developed for a particular product, it is much easier to export that product to other markets" (Hamid & Hayat, 2012)

Trade with India, particularly overland trade, would boost manufactured exports in two ways. First, the opening up of the large Indian market, where conditions and tastes are similar, would provide much greater export opportunities than in Afghanistan or Bangladesh. Second, India's engineering exports have expanded rapidly and its industry is becoming increasingly integrated with global supply chains, from which Pakistani industry is largely isolated. Overland trade with India would help link Pakistan's light engineering industry to the Indian supply chain and through that to the global supply chains.

To illustrate this, let us take the example of the automobile industry. In 2009/10, domestic sales in India were 1.9 million vehicles, while almost 0.5 million motor vehicles and 1.3 million motorcycles and auto-rickshaws were exported. Automobile industry exports were worth USD 4.3 billion (Banerji, 2012). According to Banerji, the automobile components industry had a compound annual growth rate of 16 per cent for the period 2004–10; by 2020, "passenger car sales in India are set to touch nine million, with [the] auto-component industry set to grow to USD 113 billion" and "exports of auto parts are expected to touch USD 40–45 billion." Some of India's major global automobile manufacturers, such as General Motors and Ford, also source original equipment manufacturer parts from the country, while other companies, such as Suzuki, Hyundai, and Volkswagen, operate only in the local market. The Indian automobile market (including exports), therefore, offers immense growth potential for automobile component manufacturers in Pakistan. The same is true for white goods, surgical instruments, and other industries in Pakistan's light engineering sector.

In terms of policy measures, Hamid and Hayat (2012) argue that, “given the growth prospects of most of the neighboring governments, one can expect that the potential for Pakistan’s exports will continue to expand. It is up to Pakistan to adopt appropriate policies to take advantage of this potential. This will require a change in the mindset of the policymakers—an ‘economy-first’ approach is needed.” With regard to Pakistan–India trade, the Pakistan Business Council’s (2011) panel on regional trade concludes that

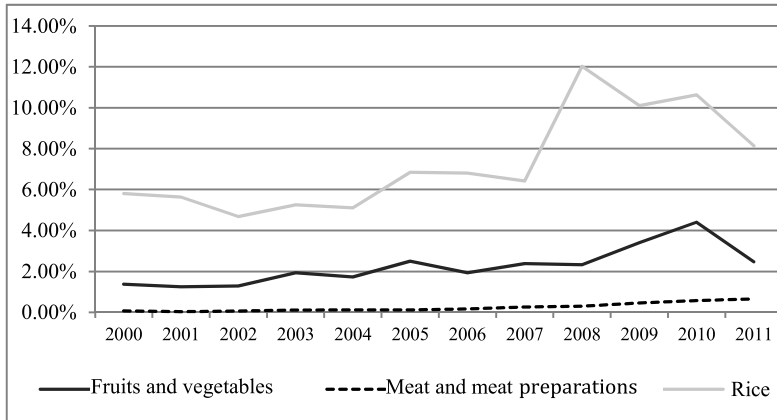
SMEs in garments, footwear, food processing, auto parts, metal products, and IT have considerable potential to benefit from liberalized bilateral trade if they can identify market niches in India by acquiring specialized local knowledge, participating in trade fairs and cutting business deals. This requires both easy travel as well as access to commercial bank branches to facilitate quick cross border transactions.

Thus, the potential of regional trade to promote exports and growth in Pakistan is considerable, but benefiting from it will require Pakistan to make political decisions such as working toward peace in Afghanistan or granting India most-favored-nation (MFN) status, implementing the agreement to relax the visa regime and allowing Indian banks to start operations in Pakistan (while permitting Pakistani banks to open branches in India). There has been slow progress in most of these areas and it will likely be some time before a fundamental change occurs.

Agriculture

The agriculture sector provides employment to half the country’s labor force and accounts for a significant share of its exports. Rice exports have been increasing and are second only to T&G exports in terms of value. High-value nontraditional agricultural exports such as meat, fruit, and vegetables have also grown: their combined share rose to 3.1 per cent of total exports in 2012 (Figure 6.4). Rice and high-value products are, therefore, potential export drivers for Pakistan’s agriculture sector in the medium term. Cotton is also a possible export driver, given its large unexploited potential in terms of increase in yield through BT cottonseed. All three drivers are discussed in turn below.

**Figure 6.4: Agricultural export performance
(commodity share in total exports)**



Source: Authors' calculations based on data from UN comtrade (SITC Rev. 3).

Driver 1: Rice

Pakistan is the world's fourth largest rice exporter with exports increasing from USD 0.5 billion in 2000 to USD 1.9 billion in 2012—rice accounted for 7.7 per cent of Pakistan's total exports in 2012 (United Nations Statistics Division, 2014). The increase in value of rice exports in the last decade was the result of a twofold increase in both the export price and the quantity exported. The world demand and price outlook for rice in the medium term is strong and Pakistan should benefit from this. However, the country's rice yield is well below those of the rest of the world and, as the possibility of expanding on the extensive margin is more or less exhausted, it is necessary to focus on improving yield to realize the crop's full potential as a driver of export growth.

Additionally, Pakistan receives far lower prices for Basmati rice than India. To obtain premium prices, the country needs to facilitate investment in DNA testing and certification facilities, which should be done through public–private partnerships to attract international expertise and investment. There is also potential for tapping niche high-value markets such as for Japonica rice, which has been grown successfully in Swat, and parboiled rice, which requires greater investment in rice milling and

processing. The potential for expanding rice exports is, therefore, considerable, but realizing it will require a set of policies aimed at enhancing export unit values and rice yield—areas in which Pakistan does not have a good track record.

Driver 2: (BT) Cotton

Pakistan enjoyed a record cotton crop in 2012, largely due to the use of BT cottonseed, which is based on smuggled seed varieties developed by Monsanto in India. Farmers in Pakistan started using BT cottonseed in 2002 and now most of the area under cotton is sown with BT seed. However, since this seed is based on cotton varieties developed for conditions in India and is marketed without any formal approval or regulation of quality standards, the yield is far below its potential. In 2010, an initiative by the Punjab government aimed to reach an agreement with Monsanto to develop and market certified BT cottonseed suited to the country's agro-climatic conditions (soil, pests, water availability, etc.). However, since Pakistan has no law protecting the intellectual property rights (IPR) of seed breeders and the government was not willing to compensate Monsanto for the nonauthorized reproduction and sale of the seed varieties it would develop, the agreement was never signed.¹³

Unfortunately, Pakistan continues to waste its enormous potential for increasing cotton production. A major cotton exporter for 50 years after independence, it has been unable to significantly improve its yield per hectare since 2000 and has now become a net importer of cotton. In contrast, India was able to double its cotton output between 2000 and 2005 following the introduction of BT cottonseed. It achieved this by doubling the yield per hectare while the area under cotton remained almost unchanged. Today, India is one of the largest exporters of cotton fiber and yarn in the world.

If farmers in Pakistan had access to BT cottonseed that had been developed for local conditions and met minimum quality (germination) standards, cotton production could increase by at least 50 per cent in five years. This, in turn, would increase cotton exports by over USD 3 billion per annum at current prices and if converted into T&G products, would increase total exports by a multiple of this amount.

¹³ A similar initiative by the Punjab government in the late 1990s was abandoned following the military coup in 1999.

Driver 3: High-value nontraditional agricultural exports

Pakistan's fruit and vegetable exports have grown slowly, their share of total exports increasing to 2.24 per cent in 2012. The Competitiveness Support Fund (2007) cites issues with the production, harvesting, and transportation of produce, observing that growth could otherwise have been much faster. While the quality and variety of fruit and vegetables in Pakistan is good, exports suffer due to high post-harvest losses, a short shelf-life, and lack of quality certification. In this group, *kinoo* (a hybrid citrus) exports have increased rapidly in the last ten years or so, following the introduction of a waxing technology that dramatically enhanced its shelf-life. Recent efforts to improve the post-harvest processing and handling of mangoes for export to Europe and the US are also beginning to have an impact.

Exports of meat and meat preparations, another high-value product, increased from a negligible USD 7 million in 2000 (0.08 per cent of total exports) to USD 210 million in 2012 (0.9 per cent of total exports). Over 50 per cent of these go to the United Arab Emirates and Saudi Arabia alone, and the top five destinations are all in the Middle East. To promote the export of meat and meat preparations, the Punjab government has also taken a number of initiatives, such as setting up a Lahore-based meat-processing complex with Iranian collaboration and establishing the Punjab Halal Development Agency—a *halal* development and certification body.

These emerging high-value product groups have considerable potential. Improving trade relations with India, particularly if overland trade is freed up, should accelerate the growth of fruit and vegetable exports, while developing the necessary processing infrastructure and certification facilities could result in the rapid growth of fruit exports to OECD markets and halal meat exports to the Middle East and Southeast Asia (Malaysia and Indonesia).

A strategy for promoting agricultural exports

We have argued that there is considerable potential for accelerating the growth of agricultural exports and that this would require sustaining the growth momentum in rice, revitalizing cotton production, and developing a marketing (i.e., post-harvest processing, certification, and transportation) infrastructure for the export of higher value-added products such as fruits, vegetables, and meat. The government has a critical role to play in developing a high-quality seed market, establishing grading and quality standards and the associated testing and certification facilities, and in

facilitating investment in the necessary transportation and handling infrastructure. These are discussed in this section.

High-quality seed. Pakistan appears to be stuck in a low-level equilibrium in the production of its major crops, wheat, rice, cotton, and sugarcane. An important factor in this is the failure to develop a market for production and sale of high-quality seed, a key reason for which is the lack of legislation protecting IPR (a bill for the Plant Breeder's Rights Act has been lying with the National Assembly since 2010). As a result, research in the development of new seeds is confined to the public sector, which has become increasingly ineffective. The example of Monsanto's refusal to develop and market BT cottonseed in Pakistan for this reason was discussed earlier.

The success in the production of maize in Punjab illustrates both the missed opportunities in other crops and a potential model for developing a modern seed market. Hybrid maize seed, which cannot be reproduced in farmers' fields and is, therefore, not dependent on an IPR regime, was initially marketed in Punjab by Pioneer (owned by Dupont) and is now also marketed by Monsanto. Since 2000, the area under maize has increased by almost 15 per cent while yields have more than doubled from 1,741 to 3,944 kg/hectare (Pakistan, Ministry of Finance, 2012). Maize is the only crop in which yields in Pakistani Punjab are higher than in Indian Punjab.

The private sector faces significant costs in developing new seeds and the infrastructure to market them; without IPR protection, there will be gross underinvestment in this sector. The benefits accruing to Pakistan from the use of high-quality seed are so large that the government must move quickly to pass an IPR protection law for the seed industry and should even consider subsidizing the development of a modern seed industry through incentives to the private sector and international seed companies.

Product markets. Market failure in domestic agriculture markets is an important factor in slowing down the growth of high-value crops. This is reflected in the large wedge between farm-gate prices and the retail prices of fruits and vegetables. One of the reasons for this is that agricultural marketing in Punjab (and other provinces) is governed by an almost-century

old agricultural markets act¹⁴ that perpetuates the role of traditional “*arthis*”: for generations, they have been members of the district and local market committees that monopolize the trade of agricultural produce in their areas.

This has resulted in multiple layers of intermediaries between the farmer and the consumer, which are not only responsible for the large price wedge but also responsible for the very high wastage rate in perishable products. This law makes it difficult for a modern marketing system, which usually consists of only two intermediaries (the wholesaler and the distributor/retailer), to develop. It also greatly dilutes the impact of changes in market prices on production decisions and the incentive to invest in improving production methods. Thus, for the high-value agriculture sector to develop in Pakistan, it is essential that Punjab (and the other provinces) should reform its agricultural markets regulatory framework.

International supermarket chains (such as Metro and Hyperstar) in the country can also play a role in developing the domestic supply chain, introducing quality standards, and providing international market access. Supermarkets are better connected and more aware of best international practices; they also have incentive to invest in or facilitate investment in upgrading market infrastructure. (See Hamid, 2008, for a more detailed discussion of the likely impact of international supermarket chains on marketing and the export of high-value agricultural commodities.)

Standards, testing, and certification. The lack of a market infrastructure for meeting quality and phytosanitary standards has impeded the growth of high-value agricultural exports, especially to developed countries. Creating such an infrastructure requires measures both on the demand and supply sides. As discussed above, reforms in agriculture marketing regulations and the growth of international and local supermarket chains will promote demand for these facilities. On the supply side, the government needs to step in to facilitate investment in testing and certification facilities by international firms through partnerships or franchise arrangements with domestic firms involved in the agriculture sector.

¹⁴ The Punjab Agricultural Produce Markets Act 1939 is the basis of the laws and regulations that govern the operation of agricultural markets in Punjab. While this act has been amended several times, its basic structure remains more or less unchanged.

IT and entertainment services¹⁵

The export of IT services has played a key role in the Indian economy's high growth performance over the last two decades. The development of the IT sector not only helped the country ease its balance-of-payments constraint but also boosted investment and growth in other sectors of the economy. In recent years, the expansion of knowledge-based service exports in the fields of entertainment and health tourism has contributed increasingly to India's foreign exchange earnings and employment generation. With the right policies in place, these sectors are capable of contributing similarly to economic growth in Pakistan.

Pakistan's earnings from the export of computer and IT services in 2010/11 were USD 215 million with another USD 18 million generated by call centers (State Bank of Pakistan, 2012). This can be compared to India's software exports of approximately USD 61 billion in 2010/11 (Reserve Bank of India, n.d.). However, Pakistan's official figures, which are based on payments received for IT-enabled services through the banking system, understate the actual IT export earnings.

India has adopted the World Trade Organization's (WTO) methodology for calculating exports of IT services, which takes into account not only the payments for services shipped abroad, but also the incomes of Indian companies and IT professionals based abroad. Using the WTO methodology, the Pakistan Software Export Board (2013) estimates that the country's global IT sales revenues were about USD 1.6 billion. This implies that the ratio between Pakistan and India's global IT exports is about 1:38 rather than 1:250, as implied by the official statistics. Given that the ratio of IT professionals between the two countries is 1:25—there are an estimated 110,000 IT professionals in Pakistan compared with 2.8 million in India (Pakistan Software Export Board, 2013; Reserve Bank of India, n.d.)—the figure of USD 1.6 billion for Pakistan's global IT exports seems more reasonable, although it is still well below the potential.

Pakistan is considered among the leaders of second-tier countries in the global information and communications technology industry (Pakistan Software Export Board, 2013). It is more or less similarly endowed in terms of human resources, culture, and language skills as India and could also, therefore, become a major outsourcing center for IT services.

¹⁵ This section draws on Hamid (2008).

Exports

A key reason that Pakistan has not been able to realize the foreign exchange earnings potential of the IT industry is that, post-2001, businesses in developed countries, particularly in the US, have been reluctant to outsource IT services to Pakistan. This is due primarily to Pakistan's negative international image, the perceived country risk arising from its poor security situation, and the US State Department's travel advisories. According to a pioneer of the industry and one of its largest software exporters, Pakistan could very easily earn over USD 1 billion from exporting IT-enabled services (by the State Bank of Pakistan's definition) if there were no US travel advisory for the country.¹⁶

Another potential growth area is the emerging infotainment industry, particularly in the fields of mobile applications, gaming, and animation. According to one knowledgeable commentator,

Pakistan's mobile, gaming, and animation scene is increasingly a hotbed of a new generation of exciting entrepreneurs who are in the process making an impression on the rest of the world. These entrepreneurs include Babar Ahmed, whose Mindstorm Studios created Cricket Revolution™—the first PC game produced by a Pakistani gaming outfit to sell in retail stores internationally—and recently launched the official game of the ICC World Cup 2011; Brothers Rizwan and Irfan Virk, who [together with their MIT colleague Mitch Liu] set up Gameview Studios which created the successful Tap franchise that was acquired in 2010 by the Japanese social gaming giant DeNA; and Hasan Rizvi, whose Pepper. PK developed two top-ranking paid BlackBerry applications at BlackBerry's AppWorld store (Pakistan Software Export Board, 2013).

According to another commentator,

[While] the Philippines and Korea are highly preferred countries in animation sector ... India and Pakistan are growing massively in Asia... Although India is more forward in animation industry [it is] also more expensive than Pakistan ... Animation industry in

¹⁶ Interview with Aezaz Hussain, chairperson of Systems Limited, on 6 May 2013.

Pakistan may seem [to] be a new expected hotspot of discussion and exploration ... Pakistan has full potential of fetching precious forex [foreign exchange] of USD 1 billion every year through promotion of Animation Industry [*sic*] (Azeem, 2012).

Exports by the traditional entertainment industry were less than USD 3 million in 2010/11 (State Bank of Pakistan, 2012). However, the potential for expanding these earnings has also grown rapidly in recent years. Pakistan has undergone a media revolution in the last 10 years: in 2010, there were 85 private satellite television channels (Pakistan Electronic Media Regulatory Authority, 2010) including 25 news channels, 23 entertainment channels, 7 music channels, and dozens of other assorted channels (Tirmizi, 2013). At the moment, many Pakistani channels are aired on cable television in Europe and North America and recently Zee Entertainment Enterprises, one of the India's biggest media firms, has launched Zindagi TV, which will make some of Pakistan's best serials available to households all over India (Boone & Jain, 2014). Almost all the entertainment programs being produced are also available on YouTube. The issue is how to convert this large international viewership into earnings for the industry and the country.

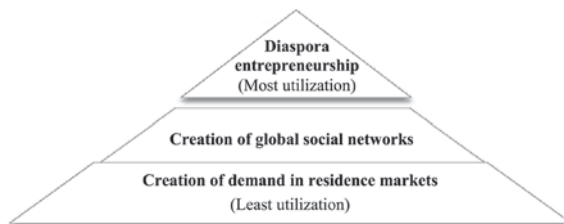
Crosscutting boosters

Leveraging the diaspora

The Pakistani diaspora offers considerable potential for expanding exports from Pakistan to their countries of residence. According to one estimate, the Pakistani diaspora across the world may be as large as 10 million people (Pakistan, Planning Commission, 2011). In 2012, the country received USD 14 billion in the form of remittances by Pakistanis living/working abroad (International Monetary Fund, 2012). These are only the remittances that were received through official banking channels and it is estimated that remittances through unofficial channels may be an additional 50 to 100 per cent (Amjad et al., 2012). Members of the diaspora thus already contribute significantly to the Pakistan economy and can also help increase trade between Pakistan and their country of residence in three ways (see also Figure 6.5):

- Pakistanis residing abroad create demand for Pakistani goods and services.¹⁷ In the UK, for example, there is rising demand for Pakistani foods (fruits, particularly citrus and mangoes, packed foods, and spices, such as Shan food masala) as well as for high-end consumer goods such as furniture and clothing (local brands such as Bareeze and Junaid Jamshed). This increase in demand is driven by the presence of a Pakistani diaspora in the UK (direct effect) and, to an extent, through the influence of Pakistani culture and cuisine on local culinary habits and tastes (indirect effect).
- Members of the diaspora enjoy wider access to and greater knowledge of both their country of residence and Pakistan. These connections can be useful in creating opportunities for trade, outsourcing, and partnerships. Moreover, exporters can use the diaspora's context-specific knowledge to tap into new markets or identify high-growth products in existing markets. Thus, they serve as important agents of facilitation for increasing market presence in their residence countries as well as identifying profitable niches in those markets.
- In the context of a country's export industry, diaspora-led investment in Pakistan can have a twofold impact.¹⁸ It increases the number of players in the market and brings with it foreign knowledge, technology, and information. These, in turn, can fuel innovative activity among local producers.

Figure 6.5: Benefits of engaging with the Pakistani diaspora (in ascending order)



¹⁷ For example, a substantial market for Pakistani mangoes has developed in the UK through the Pakistani diaspora settled there. Initially, these mangoes were available only in small grocery shops in areas of Pakistani concentration, but with their availability came growing popularity, and now they are available even in mainstream supermarkets.

¹⁸ A more general impact of diaspora entrepreneurship is the creation of jobs in the overall economy.

Various diasporas have had an enormous impact on their countries' development in the past, the best known examples being through trade in the case of China and IT outsourcing in the case of India. Encouraging the Pakistani diaspora to play such a role needs a proactive strategy that should target Pakistani-origin top executives of companies abroad as well as business owners in resident countries for the purpose of mobilizing direct investment into Pakistan or facilitating the export of Pakistani products to the diaspora's countries of residence. Diaspora business forums, which help identify and address problems encountered by diaspora businesses in investing in Pakistan and which support exhibitions and events in their countries to showcase Pakistani products, could be an effective instrument for such a strategy.

Improving the business environment for trade

A country's investment climate is an important determinant of international integration. For a sample of eight developing countries (including Pakistan),¹⁹ Dollar et al. (2006) find that the proportion of exporters is higher in countries where the number of bottlenecks is low versus countries where it is high.²⁰ The study also estimates that, if Karachi had the same investment climate as Shanghai, the number of exporting firms in the former would more than double. It takes firms in Karachi four times as long to clear customs (15.8 days) compared to firms in Guangzhou (3.9 days) and Shanghai (4.4 days) (Dollar et al., 2006).

According to the World Economic Forum (2012), Pakistan ranks 109th on quality of infrastructure—well below India (86) and Sri Lanka (48) (see Figure 6.6).²¹ In addition, in Pakistan there is a strong anti-trade bias as firms bear a much higher burden of customs procedures and trade barriers than firms in other countries.

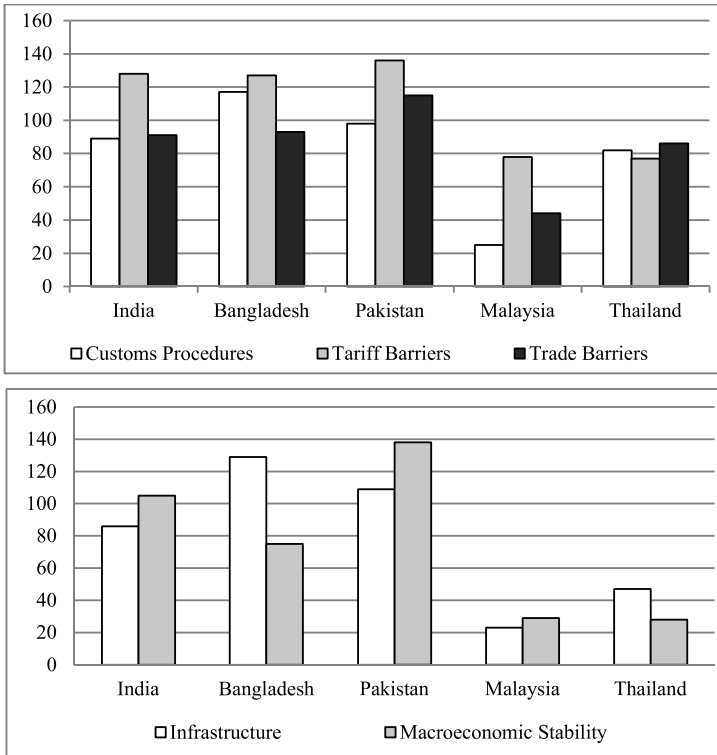
¹⁹ The other countries studied include India, Bangladesh, China, Nicaragua, Brazil, Peru, and Honduras.

²⁰ Four specific bottlenecks are considered: (i) the number of days it takes to clear customs, (ii) losses due to power outages, (iii) the inefficiency of the government in providing public utilities, and (iv) limited access to financial services. Pakistan emerges as one of the least investment-friendly countries.

²¹ These are country rankings based on individual pillars of the global competitiveness index and have been taken from the Global Competitiveness Report for 2011/12. Countries have been ranked from 1 to 133; the higher the rank, the lower a country's performance and vice versa.

Thus, to be more competitive, Pakistan must improve its infrastructure and regulatory framework for trade.

**Figure 6.6: Ranking by various dimensions of the business environment:
A cross-country comparison**



Source: World Economic Forum (2012).

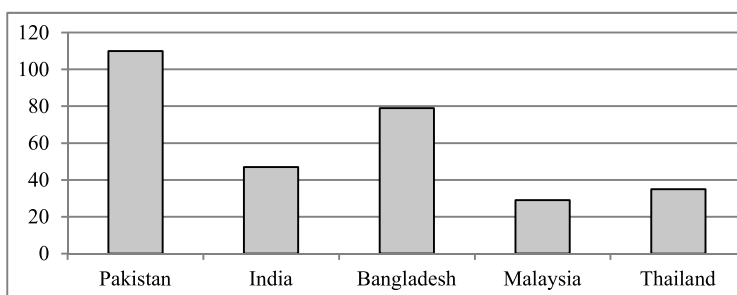
In terms of infrastructure, the most important is the energy sector, which has emerged as a severe bottleneck and a threat to the economy’s competitiveness. Pakistan’s rank on the quality of electrical supply is 126—better than Bangladesh (135) but worse than India (112).²² According to the World Bank (2009), the greatest

²² The data used in this report refers to 2010/11 and the current position is very likely much worse than two years ago.

financial losses faced by Pakistani firms are due to power outages. Moreover, the losses due to power outages are far greater for Pakistani firms than for firms in comparator countries such as Thailand, India, and Turkey. While it is important to resolve the energy problem, eliminating power shortages may take some time. For the time being, therefore, industrial clusters, particularly export-oriented ones such as for garments, sports goods, and surgical instruments, should be given priority in the allocation of power and natural gas.

As regards the trade business environment, of which the logistics performance index (LPI) is a good overall indicator, Pakistan ranks 110th out of a total of 150 countries (Figure 6.7).²³ Disaggregating the country's performance along individual dimensions gives an even more dismal picture: Pakistan ranks the lowest on all the dimensions cited above relative to comparator countries in South and East Asia (Table 6.4). The gaps in performance between Pakistan and comparator countries such as India are very large in areas such as customs, logistics competence, and timeliness. Customs procedures and trade deregulation have been the focus of numerous World Bank reports and structural adjustment loans, but they have had barely any impact.

Figure 6.7: Country rankings on the LPI, 2012



Source: World Bank (2012a).

²³ This index ranks countries on the basis of the quality and efficiency of various dimensions of trade logistics prevalent in a country. These include customs, international shipments, logistics competence, tracking and tracing, and timeliness. A high rank on the overall index as well as on individual dimensions denotes low performance on the index and vice versa.

It is, therefore, hard to make any recommendations in this regard except that, without progress in the area of customs procedures, particularly for the import of materials by export industries, diversifying exports or moving up the value chain will be difficult. Significant improvements in logistics competence can only take place if the logistics industry is developed on modern lines. This, in turn, requires measures such as ending the special treatment of the National Logistics Corporation and fixing the tax system, which favors haulage and trucking operations outside the formal corporate structure and restricts tariff concessions to industrial importers and duty refunds to direct exporters.

Table 6.4: Dimensions of the LPI: Pakistan and comparator countries

LPI dimension	Pakistan	India	Bangladesh	Malaysia	Thailand
Customs	134	52	90	36	39
International shipments	66	46	61	13	30
Logistics competence	120	40	96	31	39
Tracking and tracing	93	52	92	41	37
Timeliness	110	56	70	37	48

Source: World Bank (2012a).

Conclusion

Pakistan's export performance paints a dismal picture: the country has failed to improve its world share and appears to be stuck in producing and exporting products at the low end of value chain. It is necessary for Pakistan to not only increase its export volumes but also move up the value chain in terms of products exported. To this end, this chapter has identified potential export drivers and proposed focusing on a limited number of product groups to deliver a sharp acceleration in export growth.

In the medium term, these drivers are garments and other value-added textiles, SME manufactures, rice, cotton and high-value agricultural products such as fruit, vegetables, and meat. Policy measures to accelerate exports have been suggested at the sectoral level as well for each export driver. To leverage this growth, we

have proposed (i) engaging with the Pakistani diaspora to develop export markets, attract investment, and expand human capital; (ii) prioritizing the export sector for infrastructure allocation; and (iii) improving the country's trade regulatory and administrative environment, particularly the opaque custom tariff structure and cumbersome procedures.

In the past, the case for promoting exports has largely focused on its implications for the balance of payments. While this is obviously important, large-scale employment generation is equally important for sustainable rapid growth. Fortunately, the export drivers identified above are all labor-intensive and, therefore, expanding their production will also yield a large employment bonus. This could help actualize the demographic dividend that the ongoing demographic transition has made possible and initiate a virtuous circle of export growth leading to employment generation, poverty reduction, rising savings and investment rates, and still higher economic growth.

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The Future Path of Tax Reforms in Pakistan

Hafiz A. Pasha* and Aisha Ghaus-Pasha**

Introduction

Pakistan's taxation system has come under intense scrutiny in recent years. The country's low and declining revenue yield has been attributed to wide-ranging concessions and exemptions, large-scale tax evasion, and a slack and corrupt tax administration. This has led to the perception of a virtual breakdown of tax compliance in the country.

Improving the tax effort has now become the lynchpin of any future economic reform process. Experience shows that this will require political determination to overcome the resistance from powerful vested interests. In addition, tax collecting agencies such as the Federal Board of Revenue (FBR), will need to undergo fundamental improvements to successfully implement the required changes in tax policy.

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The objective of this chapter is to describe Pakistan's taxation system both at the federal and provincial levels, followed by an in-depth diagnosis of the factors contributing to the exceptionally low tax-to-GDP ratio. We also assess the level of tax rates, the magnitude of tax expenditures (revenue losses due to concessions and exemptions in the tax code), and the extent of tax evasion.

Based on this diagnosis, we identify the key elements of a reform package in the areas of tax policy and administration. This set of reforms will promote transparency of the tax system, improve the progressivity of the tax burden, and remove distortions in the allocation of resources in the economy. Importantly, the various measures proposed will help in significantly raising the tax-to GDP ratio.

The taxation system

Allocation of fiscal powers

The major taxes that can be levied at the federal level are given in Part I of the Federal Legislative List (FLL) in the Constitution of Pakistan. As shown in Table 7.1, this includes customs duties (including export duties), excise duties, taxes on income and corporations, sales tax, capital value tax, taxes on natural resources, capacity taxes, and terminal taxes on goods and passengers carried by different modes of transport. With the exception of capacity taxes, all these taxes are currently levied.

The provincial governments have been given fiscal powers based on the exclusion of some parts of the federal tax bases. Agricultural income tax and property-related taxes have been declared provincial subjects. Following the 18th Amendment, the sales tax on services has been brought exclusively within the provincial domain. Further, all residual taxation powers are vested with subnational governments. This justifies the provincial governments' imposition of taxes such as stamp duty, motor vehicle tax, and entertainment tax. Additionally, Article 163 of the Constitution enables these governments to levy a tax on persons engaged in professions, trades, and callings.

Table 7.1: Fiscal powers of the federal government as per the Constitution ^a

Item (FLL-1)	Included	Excluded ^b
43	Customs duties, incl. export duties	–
44 c	Excise duties, including duties on salt	Duties on alcoholic liquors, opium, and other narcotics
47	Taxes on income	Agricultural income
48	Taxes on corporations	–
49	Taxes on the sale and purchase of goods imported, exported, produced, manufactured, or consumed	Sales tax on services
50	Taxes on the capital value of assets	Taxes on property
51	Taxes on mineral oil, natural gas, and minerals used to generate nuclear energy	–
52	Taxes and duties on the production capacity of any plant, machinery, undertaking, establishment or installation	–
53	Terminal taxes on goods and passengers carried by rail, sea, or air; taxes on their fares and freights	–

Note: a = following the 18th Amendment, b = fall in the domain of fiscal powers of provincial governments, c = items no. 45 and 46 have been excluded (no. 45 included duties with respect to succession to property, no. 46 included estate duty with respect to property).

Source: Constitution of Pakistan (as updated up to the 20th Amendment).

Federal taxes

The salient features of each federal tax are described below.

Income tax. This is levied under the provisions of the Income Tax Ordinance 2001. The legislation indicates the types of income liable to taxation, tax rates, types of tax exemptions, credits, deductions, and allowances. Revenues from income tax accrue in the form of voluntary payments (along with the filing of returns), collection on demand (following assessment), and deductions at source (in the form of withholding and presumptive taxes). A universal self-assessment scheme is in operation with returns being subject to a stratified random audit. Currently, deductions at source are the major source of revenue with a share of 57 per cent, followed by voluntary payments, which contribute 32 per cent to revenues.

There are two types of withholding/presumptive taxes. The first includes taxes collected at the point of accrual of different types of income, such as salaries, export proceeds, dividends, and interest income. The second presumptive taxes are collected on income proxies such as electricity and telephone bills, sale of automobiles, and air travel. The major deductions at source are on income from services and payments for contracts, imports, and salaries with shares of 25, 20, and 14 per cent, respectively.

Sales tax. This is levied under the Sales Tax Act 1990 and covers only goods. It has the features of a value-added tax (VAT) with provisions for the tax invoicing of inputs and zero-rating of exports. The act describes the registration process, filing of returns, offences, and penalties. It contains seven schedules, of which the sixth schedule gives the list of exemptions.

Customs duties. The Customs Act 1969 enables the collection of customs duties. Duties on imports are specified in the First Schedule at the 8-digit level of the Harmonized System. Pakistan's duty structure is cascaded by the level of value added, with the lowest tariffs on primary raw materials and the highest on finished goods. There are some tariff peaks on luxury items such as automobiles and there is a list of banned items such as liquor.

Exemptions and concessions are granted under different statutory rules and orders (SROs); some of the major SROs include the following:

No.	Description
565(I)/2006	Exemption from customs duty on the import of raw materials, subcomponents, components, subassembly, and assembly for the manufacture of specified goods (mostly automobiles)
575(1)2006	Exemption from customs duty on machinery and equipment
567(1)/2006	Exemption from customs duty on the import of specified goods (nonsurvey-based)

In addition, there are SROs covering free trade and regional trade agreements.

Excise duties. Federal excise duty is levied under the Federal Excise Act 2005. Some goods, such as cigarettes, are subject to supervised clearance under this act. The First Schedule lists excisable goods and the rates of duty, which are either specific or ad valorem. Following the broad-basing of the sales tax, the coverage of excise duties has been substantially curtailed.

Provincial taxes

The key features of the major provincial taxes are described below.

Sales tax on services. This was introduced simultaneously by the four provinces with the enactment of the Sales Tax Ordinance 2000. The tax has been integrated with the federal GST (VAT), as though it were leviable under Sections 3, 3A, or 3AA of the Federal Sales Tax Act 2000; all the provisions related to payment, registration, audit, enforcement, and penalties are the same. Initially, its coverage was extended at the standard rate of 16 per cent to hotels, clubs, and caterers; advertisements on television and radio; courier services; telecommunication services; stockbrokers; and miscellaneous services provided at ports. The responsibility for collecting this tax was assigned to the FBR's Inland Revenue Service, and revenues distributed among the provinces on the basis of population shares.

In 2011, the Sindh government introduced its own variant of the tax. It proposed creating its own capacity to collect the tax by establishing the Sindh Revenue Board. The tax no longer retains the features of a VAT and has effectively been transformed into a single-stage sales tax. Recently, the government of Punjab established the Punjab Revenue Authority.

Stamp duty. This was promulgated over a century ago, not as a fiscal statute but as a mechanism for authenticating a large number of instruments through the use of adhesive stamps. These stamps are classified as either judicial or nonjudicial. For example, the stamp duty on the value of a property sold is 2 per cent.

Land revenue. This was originally promulgated under the Land Revenue Act 1887, and is essentially a land tax payable by owners of agricultural land. It is collected through the elaborate tax machinery of the provincial boards of revenue, which also maintain and update land records. Prior to 1947, land revenue was one of the main sources of revenue for the provincial governments.

Motor vehicles tax. This is levied under the Motor Vehicles Taxation Act 1958. Different lump-sum tax rates are specified for different types of vehicles, to be paid either once or annually. Persons with motor vehicles are obliged to make a declaration, pay the tax, and receive a license. The tax is collected by the provincial excise and taxation departments, and is intended to cover the costs of road operation and maintenance within the provinces. As such, the tax rises exponentially for larger vehicles. Motor vehicles tax rates vary among the provinces.

Urban immovable property tax. Introduced in 1958, the government levies this tax in urban areas that have been declared “rating areas”. The tax is charged on the assessed rental value (ARV) of buildings and lands in a rating area at the rate of 20 per cent. It is collected by the provincial excise and taxation departments on the basis of a formula for assessing the rental value contained in the valuation tables. Revenues from this tax are shared with local governments to the extent of 85 per cent, after deducting 5 per cent as the cost of collection. Properties that are owner-occupied and have an ARV of less than PRs 1,080 or are located on an area smaller than 5 *marlas* (125 square yards) are exempt.

Table 7.2: Share of revenues from different taxes (PRs billion)

Tax	2007/08	Share (%)	2011/12	Share (%)
Federal	1,045.4	96.30	1,969.6	94.86
Direct taxes	387.9	35.72	731.9	35.26
Indirect taxes	622.5	57.33	1,153.7	55.58
Excise duty	86.5	7.97	126.2	6.08
Sales tax	385.5	35.50	809.3	38.98
Customs duty	150.5	13.86	218.2	10.52
Surcharge/levy	35.2	3.24	83.4	4.02
Petroleum levy	14.5	1.33	60.4	2.91
Gas development surcharge	20.7	1.91	23.0	1.11
Provincial	40.2	3.70	106.7	5.14
Stamp duty	11.3	1.04	16.5	0.79
Motor vehicle tax	7.8	0.72	11.1	0.53
Property tax	4.1	0.38	7.8	0.38
Others ^a	17.0	1.57	71.3	3.43
Total	1,085.8	100.0	2,075.7	100.0

Note: a = including land revenue, agricultural income tax, electricity duty, etc., and from 2011/12 onward, sales tax on services.

Source: Fiscal operation, Pakistan, Ministry of Finance.

The five taxes above account for more than 90 per cent of the provincial governments’ tax revenues. The overall composition of tax revenues is given in

Table 7.2. Federal taxes account for the bulk of revenues, with a share approaching 95 per cent in 2011/12. The largest federal tax is the sales tax, which generates 39 per cent of total tax revenues, followed by income tax at 35 per cent. Customs duties and excise duties contribute 10 per cent and 6 per cent, respectively.

The share of provincial taxes is very small at only 5 per cent, which is low in relation to countries like India where the share of state taxes is over 35 per cent. The sales tax on services has emerged as the largest provincial tax, followed by stamp duties.

Tax administration

The FBR is the federal government's tax collecting agency. It comprises three types of members—line, functional, and support—under the chairperson. Line members are department heads who are directly responsible for tax collection, i.e., Customs, Inland Revenue (South), and Inland Revenue (North). The latter two departments are responsible for collecting income tax, sales tax, and federal excise duty.

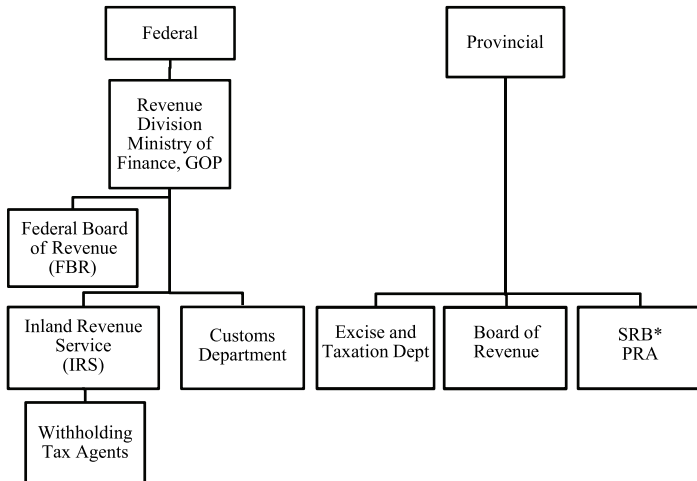
Five functional members are responsible for inland revenue policy, taxpayer audits, legal issues, facilitation, and taxpayer education and enforcement, respectively. The support functions fall under members for administration, human resource management, strategic planning and statistics, and accounting and training. Withholding tax agents include employers, government departments/ministries, banks, telecommunication companies, electricity and gas distribution companies, airlines, and provincial taxation departments.

The provincial tax administrations comprise multiple agencies (Figure 7.1). The excise and taxation departments are responsible for collecting taxes from urban jurisdictions, such as property tax and motor vehicles tax. The provincial boards of revenue operate largely in rural areas and collect land revenue, agricultural income tax, and stamp duties. Following the 18th Amendment, the government of Sindh has established the Sindh Revenue Board primarily to levy and collect the sales tax on services. The government of Punjab has followed suit with the Punjab Revenue Authority.

At the federal level, the FBR's costs of collection are estimated to be 0.6 per cent of the revenues that accrue to it, with 0.5 per cent in the case of

the Inland Revenue Service and 2 per cent for the Customs Department. The provincial costs of collection are equivalent to 3 per cent of own-revenues, which is low by international standards.

Figure 7.1: Structure of tax administration in Pakistan



Note: SRB = Sindh Revenue Board, PRA = Punjab Revenue Authority.

Tax-to-GDP ratio

The overall tax-to-GDP ratio, inclusive of federal and provincial taxes, surcharges, and levies, was 10 per cent in 2011/12 (Table 7.3). During the last decade, the tax-to-GDP ratio has shown a declining tendency, falling from a peak of 11.5 per cent in 2002/03. During this period, FBR revenues declined by about 0.5 per cent of GDP. The major part of the overall fall was due to surcharges/levy on gas and petroleum, oil, and lubricant (POL) products, respectively.

A positive development has been the rise in the direct taxes-to-GDP ratio from 3.0 to 3.6 per cent, which has contributed to a more balanced and progressive tax system. Indirect taxes have fallen significantly from 6.9 to 6.1 per cent of GDP, between 2000/01 and 2011/12.

Table 7.3 also shows the structure of tax revenues. Pakistan appears to rely heavily on indirect taxes, especially on taxes on goods and services. This also suggests that the major focus of tax reforms in the country will have to be on further enhancing the share of direct taxes.

**Table 7.3: Tax-to-GDP ratio of Pakistan, 2000/01–2011/12
(percentage of GDP)**

Year	Direct taxes	Indirect taxes	Surcharge/levy	Total taxes	FBR's revenue	Share of direct taxes
2000/01	2.99	6.89	0.73	10.61	9.42	28.18
2001/02	3.20	6.41	1.23	10.83	9.11	29.54
2002/03	3.17	6.94	1.41	11.53	9.57	27.49
2003/04	2.92	6.84	1.09	10.84	9.25	26.94
2004/05	2.72	7.01	0.41	10.14	9.05	26.82
2005/06	2.82	7.06	0.67	10.54	9.36	26.75
2006/07	3.85	6.41	0.74	11.00	9.76	35.00
2007/08	3.79	6.47	0.34	10.60	9.83	35.75
2008/09	3.46	6.00	0.99	10.44	9.08	33.14
2009/10	3.66	5.83	0.90	10.39	9.05	35.23
2010/11	3.31	5.64	0.63	9.58	8.60	34.55
2011/12	3.58	6.06	0.40	10.04	9.12	35.65

Source: Pakistan, Ministry of Finance.

Table 7.4 shows that Pakistan has the lowest tax-to-GDP ratio among 13 selected developing countries. The centrally collected tax-to-GDP ratio of India and Pakistan is more or less, the same, but the contribution of subnational taxes is substantially larger in India. The average tax-to-GDP ratio of the 13 countries is 14 per cent compared to less than 10 per cent for Pakistan. This is the first (crude) estimate of the “tax gap” in Pakistan.

Table 7.4: Comparison of tax-to-GDP ratio and taxation structure in selected countries

Country	Year	Tax-to-GDP ratio (%) ^a	Percentage share of taxes on		
			Profits, income	Goods and services	International trade
Bangladesh	2011	10.0	26.7	36.9	36.6
Brazil	2010	15.3	43.4	52.9	3.7
China	2009	10.5	28.2	67.5	4.2
India	2010	9.7	56.5	28.1	15.4
Indonesia	2010	10.9	53.7	43.4	2.9
Malaysia	2010	13.8	77.7	19.5	2.8
Pakistan	2011	9.3	34.6	52.7	12.7
Philippines	2011	12.3	47.6	30.3	22.1
South Africa	2010	26.0	56.5	39.5	4.0
Sri Lanka	2011	12.4	21.8	56.4	21.8
Thailand	2011	17.6	46.4	48.2	5.4
Turkey	2010	20.6	31.4	67.0	1.6
Egypt	2010	14.1	48.5	42.3	9.2
Avg. (13 countries)	2009–11	14.0	43.6	45.0	11.4

Note: a = federal/central taxes only.

Source: World Development Indicators, World Bank.

Next, we examine the factors that have contributed to Pakistan’s low tax-to-GDP ratio by isolating the “base” and “rate” effects on the change in the tax-to-GDP ratio. The “base” effect arises when the relevant tax base rises faster/slower than GDP, while the “rate effect” comes into play when the effective tax rate on the tax base rises/falls. The methodology used to identify the two effects is given in the Appendix.

The analysis spans the period 2007/08 to 2010/11 (see Table 7.5). The main reason for the significant fall in the FBR’s tax-to-GDP ratio (by over 1.2 per cent of GDP) is the large negative base effect. The two primary tax bases in the economy, large-scale manufacturing and imports, grew little

during these years. The former has largely remained static while imports showed a growth rate of only 1 per cent in terms of dollars.

Table 7.5: Base and rate effects on the change in tax-to-GDP ratio, 2007/08 to 2010/11 (%)

Tax	Base effect	Rate effect	Change in tax-to-GDP ratio
Direct taxes	-0.03	-0.50	-0.48
General sales tax	-0.56	0.30	-0.26
Customs duties	-0.28	-0.15	-0.43
Excise duties	-0.12	0.06	-0.06
Total	-0.99	-0.24	-1.23

Note: a = only federal taxes.

Source: Authors' calculations.

The Social Policy and Development Centre (2008), however, concludes the opposite where the base and rate effects are concerned. Between 1999/2000 and 2006/07, the tax-to-GDP ratio rose by 0.7 per cent with a large positive base effect of 3.0 per cent of GDP; this was largely neutralized by a sizeable negative rate effect of 2.3 per cent of GDP. The large-scale manufacturing sector grew by over 11 per cent and imports expanded rapidly at the rate of 15.7 per cent per annum. In fact, the economy should have witnessed major “fiscal drag”¹ during this period of fast growth, but the revenue gains were largely frittered away by the policy to reduce tax rates.

Tax rates

Tax rates were brought down sharply by the military government. The maximum income tax rate on individuals and associations of persons (AOPs) was scaled down from 35 to 25 per cent in the Finance Bill of 2006/07. Tax rates were reduced substantially for small companies (from 45 to 25 per cent) and for banking companies (from 50 to 35 per cent), in a staggered manner.

¹ “Fiscal drag” occurs when fast economic growth leads to an increase in the tax-to-GDP ratio.

The maximum import tariff was brought down from 45 to 25 per cent by 2002/03, along with a cascading down of the overall tariff structure as part of the process of trade liberalization. This simultaneously affected revenues from sales tax at the import stage and from the presumptive income tax on imports. The rate of excise duty on cigarettes was also reduced. Overall, it appears that the Musharraf government essentially followed a supply side strategy of bringing down tax rates to boost the economy. The tax bases did expand but not enough to enable a major jump in revenues.

The subsequent democratically elected government had to reverse this policy somewhat in the face of a declining tax-to-GDP ratio. A minimum income tax was introduced, while the maximum tariff on imports was raised once again to 35 per cent and brought down to 30 per cent in the Finance Bill of 2012/13. The standard sales tax rate was raised from 15 to 17 per cent, and only recently reduced to 16 per cent. An across-the-board special excise duty of 2 per cent was introduced on imports and domestic manufacturing, but withdrawn in 2012/13 in the lead-up to the elections.

Following these changes in the tax policy, how do Pakistan's tax rates now fare in international comparisons? Table 7.6 shows that the corporate tax rate on large companies is relatively high at 35 per cent as opposed to the average of 27 per cent in the 13 selected countries. However, the maximum individual income tax rate appears to be relatively low at 25 per cent, while the standard sales tax rate is on the higher side. These conclusions suggest the future direction of changes in tax rates.

Table 7.6: Comparison of tax rates in selected countries (%)

Country	Corporate tax rate (large companies)	Individual income tax (max. rate)	VAT/GST rate
Bangladesh	45	25	15
Brazil	34	27.5	17–25
China	25	45	17
India	13	33	5.5–14.5
Indonesia	25	30	10
Malaysia	25	26	–

Table 7.6 (continued)

Table 7.6 (continued)

Pakistan	35	25	16
Philippines	30	32	7–12
South Africa	28	40	14
Sri Lanka	35	35	12
Thailand	20	37	7
Turkey	20	35	18
Egypt	20	20	10–25
Average	27	32	12–16

Note: a = federal/central taxes only.

Source: http://en.wikipedia.org/wiki/List_of_countries_by_tax_rates

Tax exemptions and concessions

Along with the reduction in statutory tax rates, the Musharraf government granted wide-ranging exemptions and concessions that contributed further to the reduction in the “effective” tax rates. These included the following measures:

- Abolition of the wealth tax
- Exemption granted on capital gains from shares
- Zero-rating of the domestic sales of major export sectors, such as textiles
- Exemption from sales tax granted to agricultural inputs, such as fertilizers and pesticides
- Exemption from sales tax granted to plant and machinery
- Promulgation of a large number of SROs for exemption from or concession in import duties.

Presumably, these measures were taken to gain the support of powerful interest groups.

According to Bari (2012), the one exemption that was granted to capital gains from shares led to a huge cumulative revenue loss of over PRs 1,000 billion between 2003/04 and 2006/07, at a time when the stock market was booming

and the share price index had jumped up by 280 per cent. This massive tax break led to the emergence of a new class of big capitalists in the country, who had invested heavily in the stock exchange.

This brings us to a very basic question: How far has Pakistan's tax-to-GDP ratio been eroded by exemptions and concessions? This requires estimating tax expenditures, defined by Atshuler and Dietz (2008) as "revenue losses attributed to tax laws which provide for a special exclusion, exemption, deduction, tax credit, preferential rate of tax or a deferral of tax liability". The word "special" refers to tax breaks that are not commonly observed in tax systems internationally.

The *Pakistan economic survey* for 2011/12 gives an official estimate of PRs 186 billion as the value of tax expenditures incurred under federal taxes, which is equivalent to 0.9 per cent of GDP (Pakistan, Ministry of Finance, 2012). The largest share is that of customs duties (49 per cent) followed by income tax (38 per cent). This compares with an estimate of 5.1 per cent of GDP as India's total tax expenditure, with the largest share (54 per cent) accounted for by customs duties. The corresponding estimates by Mortaza and Begum (2006) for Bangladesh are 2.5 per cent of GDP, with 90 per cent accounted for by indirect taxes. As such, tax expenditures appear to be lower in Pakistan.

In the following subsections, we provide, for the first time, a comprehensive estimation of tax expenditures in Pakistan, inclusive of both federal and provincial taxes. Presented in Table 7.7, these estimates are almost three times the official estimates, at PRs 550 billion in 2010/11, which is equivalent to 3 per cent of GDP. A detailed description of the tax expenditures is given below.

Table 7.7: Major tax expenditures in Pakistan

Tax/head	Tax expenditure (PRs billion)	Percentage share
Federal	466	83
Direct taxes	164	30

Table 7.7 (continued)

Table 7.7 (continued)

Exemptions	46	
Deductions/allowances	88	
Concessionary tax rates	30	
General sales tax on goods	91	16
Exemptions	70	
Zero rating	21	
General sales tax on services	64	12
Exemptions	64	
Custom duties	136	25
Exemptions	44	
SROs	80	
FTAs	12	
Excise duty	11	–
Exemption on luxury goods	11	
Provincial	95	17
Agricultural income tax	50	
Urban immovable property tax	30	
Capital gains tax	15	
Total	561	100
As percentage of revenues	34	
As percentage of GDP	3	

Source: Authors' calculations.

Federal taxes

The main federal taxes levied are described below.

- **Income tax.** The major tax expenditures in 2010/11 included an accelerated depreciation allowance at 50 per cent² in the first year

² The normal depreciation rate is 8–10 per cent.

(PRs 55 billion),³ a capital gains exemption on shares (PRs 22 billion), a 30-year tax holiday⁴ for independent power producers (PRs 12 billion), tax deductions on loan provisioning by commercial banks (PRs 9 billion), an exemption on profit from Behbood savings certificates (PRs 9 billion), tax deductions on charitable contributions (PRs 2 billion), a concessionary presumptive income tax on the export of goods (PRs 16 billion), the exemption of export income from services (PRs 1 billion), and others⁵ (PRs 28 billion).

- **Sales tax on goods.** This includes exemptions on goods (PRs 64 billion) including agricultural inputs, machinery, processed foods, pharmaceuticals, etc.; and the zero-rating of domestic sales of export-oriented sectors such as textiles and leather (PRs 21 billion) (Social Policy and Development Centre, 2010).
- **Sales tax on services.** This includes exemptions on services (PRs 70 billion) (Ghaus-Pasha, 2011), including those listed in the First Schedule but not in the Second Schedule of the Sales Tax on Services Act.
- **Customs duty.** This includes zero duties on POL products, fertilizer, and cotton (PRs 44 billion); exemptions in SROs, especially SRO 567(I)/2006, 565(1)/2006, and 575(1)/2006 (PRs 80 billion); and preferential rates of duty in trade agreements, especially with China (PRs 12 billion).
- **Excise duty.** This refers to exemptions on luxury goods such as air-conditioners, freezers, large automobiles, televisions, perfumes, and cosmetics (PRs 11 billion).

Provincial taxes

The main provincial taxes levied include:

- **Agricultural income tax.** Low presumptive rates of taxation (Institute of Public Policy [IPP], 2010) (PRs 50 billion).

³ The magnitude of tax expenditures is given in parentheses.

⁴ The normal tax holiday period is five years.

⁵ Including tax deductibility of payments to Workers' Welfare Fund and Workers' Participation Fund, tax credit for provident funds, exemption on income from trusts, concessionary rates of sales tax, and lower income tax rates for suppliers and teachers.

- **Urban immoveable property tax.** Low presumptive rates of gross annual rental values, preferential treatment of owner-occupied properties, and lack of extension of rating areas (PRs 30 billion).
- **Capital gains tax.** Exemption on properties (PRs 15 billion).

Analysis of tax expenditures

Some important conclusions emerge from this analysis of tax expenditures:

- Tax exemptions and concessions in direct taxes (income, capital gains, and property taxes) account for a tax expenditure of almost PRs 260 billion, equivalent to 46 per cent of the total. There is, therefore, empirical evidence to support the perception that tax breaks in Pakistan disproportionately benefit the rich and powerful, including the feudal class, the textile lobby, trading community, property owners, and investors in shares.
- The structure of customs duties has been perverted by the large number of SROs and exemptions granted to industries such as automobiles, fertilizers, and textiles. The duty structure needs to be rationalized by adhering to the principle of standard statutory rates to enable proper cascading by the level of value added.
- In the case of the sales tax, the strategy must consist primarily of broadening the tax base, especially by bringing those services into the tax net that have grown rapidly and are consumed chiefly by the upper-income groups.

Incidence of taxes

It is useful to derive explicitly the implications of features of the tax system in terms of who bears the burden of taxes in Pakistan. Wahid and Wallace (2010) have derived these for the year 2007/08 as part of a study commissioned by the FBR. The pattern of incidence is given in Table 7.8, according to which the burden appears to be mildly progressive, despite the numerous tax expenditures on the richer segments of society.

Table 7.8: Incidence of taxes in Pakistan, 2007/08

Decile	Taxes paid as percentage of income		
	Direct taxes	Indirect taxes	Total taxes
1	2.01	6.42	8.43
2	2.20	6.17	8.37
3	2.18	6.08	8.26
4	2.30	6.20	8.50
5	2.35	6.59	8.94
6	2.38	6.73	9.11
7	2.50	6.26	8.76
8	2.91	6.82	9.73
9	3.35	6.28	9.63
10	6.38	6.74	13.12

Source: Wahid and Wallace (2010).

However, there is reason to believe that the tax burden has become less progressive since 2007/08. First, the incidence of indirect taxes on the lower income deciles has increased because of the change in the contribution of different commodities to revenues. In particular, the share of revenues collected from POL products has risen from 19 per cent in 2007/08 to over 32 per cent by 2011/12. The bulk of revenues accrue from HSD oil, which is used primarily for public transportation.

Second, the incidence of withholding taxes, especially on imports, contracts, electricity, and telephones, is likely to be more regressive than allowed for in the methodology used by Wahid and Wallace (2010). In fact, Kemal (2008) demonstrates that the overall incidence of taxes was regressive in 1999/2000. More recently, Qadir (2011) has calculated the burden of indirect taxes by quintile in 2008/09. The results indicate that the incidence is substantially more regressive than indicated by the FBR study.

Tax evasion

Tax evasion is commonly perceived as being rampant in Pakistan. The two statistics frequently cited to highlight this are, first, that only one in 100 persons

in the country pays income tax, and second, that more than 60 per cent of parliamentarians do not file their tax returns. However, it needs to be recognized that Pakistan has an elaborate withholding tax regime that has played a major role in curbing evasion. It is estimated that, as a result of these deductions, the actual number of taxpayers is substantially larger than perceived. This is because:

- payments are made on over 100 million mobile/line phones on bills/prepaid cards,
- almost 17.7 million bank accounts contribute to income tax via the fixed tax (at 10 per cent) on interest income, and
- over 306,800 industrial units and over 2.9 million commercial enterprises pay income tax in the form of withholding tax on electricity bills.

The income tax net is, thus, wider than perceived due to the presence of a large number of deductions at source. The problem is that the payments are usually small and the element of progressivity has not been built into the withholding/presumptive tax regime.

Additionally, there is too much emphasis on personal income tax evasion. It is likely that more revenues could be generated by focusing on corporate tax evasion. The numbers are striking: out of the 52,800 or so companies registered with the Securities Exchange Commission of Pakistan, less than a third file returns, and out of those who do, only a fifth actually declare taxable profits. The State Bank of Pakistan (2008) estimates the additional revenues that could be generated if tax evasion was curbed to be 2.5 per cent of GDP while Junaid (2011) calculates the share to be 3 per cent of GDP.

Tax reforms

Based on the above analysis, we now identify the package of reforms required in tax policy and administration to achieve a major jump in the tax-to-GDP ratio. The primary focus is on direct taxes, not only to increase the yield but also to make the tax system more progressive.

Tax policy

The major steps required are explained below.

Direct taxes

Effective agricultural income taxation. As per the Agricultural Income Tax Act enacted by the provincial governments in 1947, the present structure comprises either a fixed presumptive tax (with an exemption limit) per acre or a progressive rate structure on actual agricultural income (with scope for substantial deductions). The presumptive tax rates vary from only PRs 150 to PRs 250 per acre, which is less than 1 per cent of the net income per acre. These rates need to be raised substantially. Simultaneously, the penalty for failing to file a return should be raised from the present maximum amount of PRs 1,000 to 100 per cent of the assessed tax, following the detection of nonfiling.

Development of personal income tax. This is considered a prerequisite for signaling greater equity in the tax system, and could help raise taxpayer compliance generally.

Taxation of assets. As indicated earlier, a wealth tax was levied on individuals up to 2000. It was an indicator of equity in the tax system and wealth returns also provided collateral evidence of income. This tax should be reintroduced; alternatively, a minimum assets tax could be levied at 1 per cent of global net assets, as the minimum income tax payable.

Minimum tax on turnover. As mentioned above, a very small percentage of companies actually pay corporate income tax. Although a minimum tax on turnover was introduced in the Finance Bill of 2009/10, it was withdrawn in the Finance Bill of 2012/13. There is a strong case for reintroducing this tax with the usual carry-forward provisions to curb corporate tax evasion.

Withdrawal of tax expenditures. As is the case in India, transparency and the proper accounting of tax expenditures should be introduced as part of the information provided when the budget is presented to Parliament. This will enable public debate on which exemptions and concessions are justified.

Direct taxes. Initially, the following tax expenditures need to be effectively targeted:

- capital gains (short- and long-term) on shares and property
- tax holidays beyond five years
- reduction in the first-year depreciation allowance

- tax deduction on loan provisioning by banks (to be allowed only for priority sectors such as small and medium enterprises, agriculture, and exports).

Rationalization of tax rates. The divergence in tax rates between individuals, and small and large companies needs to be eliminated. The corporate tax rate on large companies (especially those that are publicly quoted) could be brought down gradually to 30 per cent. Simultaneously, the maximum tax rate on individuals and AOPs/small companies could be raised to 30 per cent. This would encourage the process of corporatization in the economy and imply a more progressive personal income tax structure.

Moving from schedular to comprehensive income taxation. Currently, most forms of unearned income are taxed at source as separate blocks of income at a fixed and final rate of 10 per cent. As highlighted earlier, this has reduced progressivity. These fixed taxes should be converted into withholding taxes in the case of income from bank deposits, savings schemes, dividends, and interest on securities and prize bonds. This will also enable persons whose total income is below the exemption limit to claim refunds.

Fixed taxes are also levied on income proxies. In the case of contractors, suppliers, service providers, and importers, we propose a scheme whereby the current fixed rate is raised for taxpayers who want to make this their final payment, and a lower rate for those who prefer to make a withholding tax payment and include the income derived in their returns. This could promote the process of documentation in the economy.

Development of property tax. This will involve extending rating areas, levying a higher tax on commercial properties, and reassessing gross annual rental values.

Incentives for filing returns. Numerous incentives could be offered to taxpayers (AOPs and small companies) who have regularly filed their returns over a period of two years with no under-declaration or short payment. These incentives could include the following:

- some preference in contracts for suppliers to government departments;
- a guaranteed refund within the stipulated time;
- access to a bank loan up to a certain limit;

- provision for the carry-forward of losses;
- partial or full exemption from withholding taxes, contributing thereby to an improved cash flow position;
- preferential treatment in obtaining access to public services such as passport issuance and electricity or gas supply; and
- tax credit.

These incentives could induce a significantly higher number of tax returns.

Indirect Taxes

Proposals to reform indirect taxes include the following:

Introduction of a broad-based integrated VAT. The passage of the VAT bill of 2010 should be reconsidered. Recent developments such as the establishment of separate tax machinery to collect the sales tax on services by the provincial governments of Sindh and Punjab have made the task of integration more difficult and have complicated the process of input-tax invoicing services in manufacturing and manufactured goods in services. A system for recording tax invoices issued across provincial boundaries and of credits/refunds between governments needs to be introduced.

Broad basing has considerable scope, especially in the area of services. For example, the services tax in India is levied on 125 services and generates 1 per cent of the country's GDP. In Pakistan, major services that are not covered by the sales tax on services include credit cards, security, consultancy, accountancy, legal, airport, and air travel agent services. Such services are consumed mostly by corporate entities or upper-income groups. The standard rate could be brought down to 12.5 per cent once again, following the broad basing.

Rationalization of customs duties. The statutory tariff rates (by nature of the good in terms of value added) must be adhered to with essentially three slabs of 5 per cent, 15 per cent, and 25 per cent, respectively. Simultaneously, most SROs, except those pertaining to trade agreements, should be withdrawn.

Additionally, to eliminate the problem of under-invoicing, a system of minimum import prices could be introduced for some commodities, with the

provision that these prices be periodically revised. This system was in operation in Pakistan in the 1990s and does not violate World Trade Organization rules, if used selectively.

Tax administration

FBR. Radical changes are required to make the FBR more effective in implementing reforms in tax policy and collecting more revenues. The following measures need to be undertaken on a priority basis:

- Converting the FBR into an autonomous revenue authority
- Strengthening the Revenue Division of the federal Ministry of Finance to formulate tax policy
- Requiring tax officials to file asset declarations periodically
- Strengthening the tax ombudsman and vesting him/her with judicial powers
- Strengthening the FBR internally in the areas of audit and intelligence
- Developing a data warehouse linked particularly to withholding tax payments
- Streamlining the process of payment of refunds
- Augmenting the quality of human resources
- Publishing an annual tax directory of payments by taxpayers.

Provincial tax administration. The following proposals need to be considered:

- Reducing the multiplicity of taxes by abolishing taxes such as the cotton fee, entertainment tax, and tax on property transfers that generate low yields
- Avoiding overlapping taxes, for example, on property by “piggy-backing” on federal taxes
- Merging the Excise and Taxation Department with the Revenue Board/ Authority, following the process of screening officials

- Making intensive efforts to streamline business processes and to introduce information and communications technology, especially to enable taxpayers to e-file their returns or make payments
- Appointing a provincial tax ombudsman, also vested with judicial powers
- Augmenting the quality of human resources
- Publishing a tax directory of payments of agricultural income tax and urban immovable property tax.

Clearly, this agenda of reforms is an ambitious one, but it has become necessary in the presence of a low and falling tax-to-GDP ratio and the incipient breakdown of Pakistan's tax culture. However, it will require strong political will and the capacity building of the implementing institutions. If the proposed reforms are put in place within the next two years, they could yield a conservative estimate of almost PRs 500 billion—equivalent to an additional amount over 2 per cent of GDP (see Table 7.9).

Table 7.9: Revenue yield from tax reforms (with a tax base of 2012/13*)

Direct taxes	Revenue yield* (PRs billion)
Effective agricultural income taxation	60
Taxation of assets	50
Minimum tax on turnover of companies	22
Withdrawal of tax expenditures	130
Total	262
Indirect taxes	
Introduction of a broad-based integrated VAT	140
Withdrawal of SROs in customs duties	96
Total	236
Overall total	498
Percentage of GDP	500

Note: * = 20 per cent above the estimates given in Table 7.7.

Source: Authors' estimates.

Conclusion

Pakistan's low and declining tax-to-GDP ratio has been attributed to the major tax bases' lack of buoyancy, low personal income tax rates, wide-ranging exemptions/concessions, and widespread tax evasion, leading to large revenue losses. There are also serious perceptions of inequity and corruption in the tax system, which have gravely affected tax compliance such that the tax culture in the country stands in danger of breaking down.

This chapter has, accordingly, proposed a structural and radical reforms agenda both in the areas of tax policy and administration. These reforms will go a long way in making the tax structure more progressive, reducing tax evasion, and raising the revenue yield in the next two years by over 2 per cent of GDP.

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Appendix

The methodology for decomposing the change in the FBR's tax-to-GDP ratio into "base" and "rate" effects respectively is described below.

We designate the following:

T = actual tax revenue

t = effective tax rate

b = tax base

Y = GDP

That is, T = tB

The tax bases for different taxes are as follows:

Tax	Tax base
Direct taxes	Nonagricultural GDP
Sales tax	Imports + large-scale manufacturing + banking and insurance + telecommunications
Customs duties	Imports
Excise duties	Large-scale manufacturing

Subscripts 0 and 1 designate the base and terminal years, respectively.

The change in the tax-to-GDP ratio is given by

$$\begin{aligned} \frac{T_1}{Y_1} - \frac{T_0}{Y_0} &= \frac{t_1 B_1}{Y_1} - \frac{t_0 B_0}{Y_0} \\ &= \frac{t_1 B_1}{Y_1} - \frac{t_1 B_0}{Y_0} + \frac{t_1 B_0}{Y_0} - \frac{t_0 B_0}{Y_0} \end{aligned}$$

That is,

$$\frac{T_1}{Y_1} - \frac{T_0}{Y_0} = t_1 \left[\underbrace{\frac{B_1}{Y_1} - \frac{B_0}{Y_0}}_{\text{base effect}} \right] + \frac{B_0}{Y_0} \left[\underbrace{t_1 - t_0}_{\text{rate effect}} \right] \quad (1)$$

Equation (1) gives the expressions for the base and rate effects, respectively.

Pakistan's Indus Basin Water Strategy

Past, Present, and Future

Shahid Amjad Chaudhry*

Introduction

Pakistan's Indus Basin Irrigation System (IBIS) is the strong heart of the country's economy. Its creation is a tribute to the British irrigation engineers who created the original system (1847–1947) that Pakistan inherited in 1947, and to the Pakistani irrigation engineers and institutions (particularly the Water and Power Development Authority [WAPDA] and the provincial irrigation departments) who have spent the last 60 years adding new dams and barrages, building new link and branch canals, and modernizing and maintaining the world's most complex and extensive irrigation system.

From the 1950s onward, the IBIS has also been the product of the generosity and intellectual input of a host of international experts and international institutions, particularly the World Bank. This chapter starts with a review of what has been accomplished to put the IBIS into perspective and illustrate the magnitude of the effort put into building the present system. The chapter's aim is to sketch the task ahead and develop a coherent national strategy for the preservation of the IBIS for the future.

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The Indus basin: The first decade 1947–57

The Revelle Report commissioned by President Kennedy following a request from President Ayub Khan in 1961 provides a fascinating look at Pakistan in this period. It paints a West Pakistan of 43 million people, malnourished and desperately poor with an average income of less than 20 cents/day, and an average life span of less than 45 years, with a 10 per cent rate of literacy—“industrious, frugal, progressive ... their watchword: ‘our sons will have it better’” (US Department of the Interior, Panel on Waterlogging and Salinity in West Pakistan, 1964, p. 35).

Pakistan at this time was overwhelmingly rural. There was a magnificent canal irrigation system based on the River Indus and its five tributaries (the Jhelum, Chenab, Ravi, Sutlej, and Beas), but it was plagued by its seasonal nature and lack of surface storage (nearly half the flows went to sea unused in the summer, with less than 2 feet/acre left for the irrigated land). Thirty per cent of the cultivated land of 35 million acres was affected by waterlogging and salinity. Most of all, the report said: “In West Pakistan we have the wasteful paradox of a great and modern irrigation system pouring its waters onto lands cultivated as they were in the days of Abraham, Isaac and Jacob” (US Department of the Interior, Panel on Waterlogging and Salinity in West Pakistan, 1964, p. 65).

The report also presented estimates of irrigation requirements in West Pakistan for various crops: wheat 16”/acre, cotton 28–37”/acre, sugarcane 64–80”/acre, and rice 35”/acre (US Department of the Interior, Panel on Waterlogging and Salinity in West Pakistan, 1964, p. 213). The irrigation system during the 1950s (largely inherited pre-1947) consisted of 10 barrages (Thal, Jinnah, Taunsa, Guddu, Sukkur, Kotri, Trimmu, Dipalpur, Suleimanke, Islam, and Panjnad) and 35,000 miles of canals. Indus Basin inflow was 167 million acre feet (MAF) (average 1921–46 and 1952–57) of which 32.7 MAF (average 1921–46) was from the Ravi (6.4 MAF), and Sutlej/Beas (26.3 MAF) (p. 69). India had started depriving Pakistan of water from the three eastern rivers, i.e., the Ravi, Sutlej, and Beas from March 1948. This led Pakistan to negotiate and sign the Indus Water Accord (IWA) in 1960, with India giving Pakistan the rights to the Indus, Jhelum, and Chenab, and India the rights to the Ravi, Sutlej, and Beas in perpetuity (Kazi, 1999, pp. 164–169).

Indus basin replacement works (1960–80) and salinity control (1960–2000)

Indus basin works (1960–80)

Subsequent to the Indus Waters Treaty negotiated with India with the help of the World Bank, a massive irrigation river link canal water scheme comprising two large storages, several barrages, and a number of major link canals was undertaken by the newly created WAPDA (under a World Bank umbrella) to transfer 20 MAF of water from the Indus and Jhelum to the Ravi and Sutlej irrigation commands within Pakistan to substitute for the 30 MAF given to India (the Beas merges with the Sutlej in India) (Liefertinck, Sadove, & Creyke, 1968, annex map). Two major dams were constructed—one at Mangla (6 MAF) on the Jhelum, and the second at Tarbela (9 MAF) on the Indus—to provide water to the new link canals in the lean winter (*kharif*) season.

Thus, by 1980, Pakistan had two major dams (Mangla and Tarbela), one medium barrage-cum-dam at Chashma (0.8 MAF), 19 barrages, 12 link canals, 43 canal commands covering 90,000 *chaks* through about 40,000 miles of branch canals, main canals, and distributaries; and watercourses, field channels, and field ditches running approximately another 1 million miles (Ahmed, 1999, pp. 73–76). The total replacement cost of the infrastructure is currently estimated at more than USD 60 billion (World Bank, 2005, p. 58), and of these, the two major dams (Tarbela and Mangla), a syphon-cum-barrage (Mailsi), five barrages (Chashma, Rasul, Qadirabad, Marala, and Sidnai), and eight major link canals were built under the Indus Basin Replacement Works (Ahmed, 1999, pp. 73–76). A large number of existing canals and their associated irrigation infrastructure were also remodeled to accommodate the increased requirements of the replacement system.

The World Bank's assistance was invaluable, both on the technical and financial side, as was its role as guarantor of the Indus Basin Water Treaty and its assumption of responsibility for the completion of the replacement works. The role of WAPDA in designing and executing the program was as important. This combination, together with Pakistani and international funding, enabled the entire Indus Basin Replacement Works to be completed by the early 1970s.

Salinity control (1960–2000)

While covering the entire agriculture sector, the Revelle Report (1964) also focused on salinity control, this having been President Ayub Khan's original request to President Kennedy during the former's visit to the US in 1961. At the time of independence (1947), Pakistan's Indus Basin was already affected by waterlogging and salinity because the massive irrigation canal system had been established on a flat plain with no natural drainage. By the end of the 1950s, almost 30 per cent of the entire Indus Basin command was badly affected while another 30 per cent had high water tables and indicated the adverse effect of salinity.

The Revelle Report was bold in its recommendations. It recommended covering 70–80 per cent of the Indus Basin irrigated land or 25 to 30 million acres of the total cultivated area of 35 million acres by dividing it into 25 to 30 project areas of roughly 40 miles square (1,600 square miles) or approximately 1 million acres, with each new project starting every year after a two-year preparatory period and extending over two decades (Liefstinck et al., 1968, pp. 130–131). The projects were to focus on the provision of large public sector tubewells to lower the water table and, as an additional benefit, to provide more irrigation water. As a result of the White House study, the World Bank in collaboration with the Government of Pakistan and at the urging of the US government financed a large number of salinity control projects over the course of 40 years (from the 1960s to the end of the 1990s), costing more than USD 1 billion.

This effort started with the Salinity Control and Reclamation Programs (SCARPs) of the 1960s, which focused on vertical drainage through large capacity public sector tubewells and vertical drains. These projects were executed by WAPDA over three decades and covered all major salinity-affected areas, proving a great success. However, by the 1970s, it was evident that the private sector had started using Pakistan-made small private tubewells essentially for groundwater extraction but with the same ground-table-lowering effect; as a result, the SCARPs had become largely superfluous (World Bank, 2005, pp. 94–99). However, by this time, 16,700 large capacity public tubewells had been installed: a substantial number still exist today and provide 7.81 MAF of water to the system (Pakistan Bureau of Statistics, 2009a, p. 64).

The Government of Pakistan and the World Bank then shifted their strategy and focused on overall drainage management throughout the Indus Basin including through tile drainage. An innovative salinity drainage project, the Left Bank Outfall Drain (LBOD), was also executed in this period in Sindh to transfer saline water directly to the sea on the left bank of the Indus River. A small Right Bank Outfall Drain Project (RBOD I) was also undertaken to channel saline water from upper Sindh and Balochistan to the Indus River near Manchar Lake in Sindh, but due to general opposition in Sindh to adding saline water to the Indus River, ended up terminating at Manchar Lake with severely adverse consequences for the lake.

This problem is now being resolved through RBOD II (discussed later). Today, as a result of these World Bank financed projects and more than 0.8 million private tubewells providing more than half of Pakistan's total water requirements (Qureshi, McCornick, Qadir, & Aslam, 2008, p. 2) (or about 50 MAF), Pakistan's salinity problem is confined to about 5 million acres of irrigated areas of which 30 per cent lies in the Punjab and the balance in Sindh. In addition, another 2.44 million acres is waterlogged (p. 3). This is a vast improvement from the 1950s when salinity had rendered 10–12 million acres of land unusable and was, to some extent, estimated to affect a total of about 25–30 million acres by the Revelle Report (1964).

Indus Basin Irrigation System (IBIS) investments in 2000–10

Irrigation investments 2000–10

The last decade has seen the initiation and completion of a number of important projects relating to the Indus Basin, financed in large part by the Government of Pakistan itself. These include: (i) the Mangla Dam Raising Project 2003–10 (raising the Mangla Dam 30 feet and thereby adding an additional 2.9 MAF to its existing capacity of 6 MAF at an original cost of PRs 63 billion); (ii) the Greater Thal Canal Project in Punjab 2002–10 (creating a new culturable command area [CCA] of 1.5 million acres at a cost of PRs 30 billion); (iii) the Kachhi Canal Project for Balochistan, covering Dera Bugti, Naseerabad, and Jhal Magsi 2002–12 (creating a new CCA of 0.71 million acres at a cost of PRs 31 billion); and (iv) the Raineer Canal Project for Sindh, covering Ghotki,

Khairpur, and Sukkur 2002–12 (creating a new CCA of 0.41 million acres at a cost of PRs 19 billion) (WAPDA, 2004). In addition, a major effort was made for the first time in Pakistan to rehabilitate the Indus water irrigation system by starting the Irrigation System Rehabilitation Project in Sindh in 2002 at a cost of PRs 12 billion (Pakistan, Planning Commission, 2002, p. 306). This project is nearly complete.

All these projects were financed almost entirely by the Government of Pakistan and executed exclusively by WAPDA, except for the Sindh Irrigation Rehabilitation Project, which is being executed by the Sindh government and marks for the first time a separation between Government of Pakistan and World Bank projects. As far as the water sector has been concerned in this period, the World Bank has focused almost entirely on institutional development (World Bank, 2005, p. 113–115). Except for a barrage rehabilitation project, World Bank irrigation-related projects were only for “institutional development” and represented a continuation of its boycott of irrigation infrastructure investment in Pakistan from 1997 onward and its policy decision to focus on institutional issues and, in the longer term, seek the privatization of Pakistan’s irrigation sector.

This was similar to its earlier decision not to lend for energy development since 1987 and focus on the privatization of the energy sector. In 1987, the World Bank also stopped the government through legal covenants from building thermal power plants in the public sector, which is largely responsible for the energy crisis facing Pakistan today. However, there are reports that the World Bank may finance new public sector hydroelectric projects and continue the rehabilitation of barrages.

Salinity control investment 2000–10

On the salinity drainage control front, a large second RBOD project in Sindh was undertaken to channel away saline water from Sindh and Balochistan that was previously being disposed of into Manchar Lake (discussed earlier). This project (RBOD II) aims at extending RBOD I from near Manchar to the Arabian Sea, together with additional saline water collected along its length. It is intended both to revive Manchar Lake and also to remove saline water along the entire right bank of the Indus in Sindh. With a capacity of 4,000 cusecs, the project was started in 2002 at a total cost of PRs 10 billion and is nearing completion (Pakistan, Planning Commission, 2002, p. 306). This project was

financed entirely by the Government of Pakistan and is being executed by the Sindh government.

The recent situation of the Indus Basin Irrigation System (IBIS) (2008–10)

Today, the IBIS is relatively stable as a result of investments in the Indus Basin replacement works, additional storages built at Mangla and Tarbela, and the large-scale reduction and, in many areas, elimination of waterlogging and salinity earlier through SCARPs and subsequently through private sector tubewells. Private sector tubewells and SCARP tubewells add an additional 50 MAF to the system (mostly in the Punjab) and lower the water table, thereby reducing salinity in substantial part in Punjab and to some extent in Sindh. Saline water is also removed by the LBOD and RBOD in Sindh. Table 8.1 below summarizes the current situation with regard to surface water use and availability. The situation with regard to waterlogging and salinity and surface water use is discussed later.

Table 8.1: IBIS canal withdrawals

Area	Average 1952–57 ^a		Drought year 2001/02 ^b		5-year avg. 2001/02–2004/5 ^b		2007/08 ^b		Interprovincial accord (1990), Indus Basin ^c	
	MAF	%	MAF	%	MAF	%	MAF	%	MAF	%
KP	2.8	4	4.6	6	4.6	5	5.1	5	8.78	7
Punjab	40.4	55	40.4	51	46.6	52	55.4	53	55.94	48
Sindh and Balochistan	30.4	41	34.6	43	38.8	43	44.0	42	52.63	45
Of which Balochistan									3.87	3
Total	73.6		79.6		90.0		104.5		117.35	
Downstream Kotri	68.6		1.9		5.1		15.8		To be determined	

Sources: a = US Department of the Interior Panel on Waterlogging and Salinity in West Pakistan (1964, p. 69); b = Pakistan Bureau of Statistics (2009b, p. 67); c = Indus Water Accord 1990/91 in World Bank (2005, p. 20). The accord protects Punjab on the basis of historical use (1977–82) in case of shortages below 117.35 (MAF).

In addition to the need for water storage to provide a regular supply of water downstream Kotri to preserve the Indus delta, the seasonality of the Indus system rivers' flows (with more than 80 per cent of the water flowing in the kharif season [largely June–August] also requires the storage of summer flows so that an adequate winter crop is cultivable. As Table 8.2 indicates, in good river flow years, virtually the entire existing storage capacity at Mangla and Tarbela (13.5 MAF in 1998/99, about 12 MAF in 2007/08) can be used, while in drought years, about 40–50 per cent of the storage capacity can be used to carry water into the next crop.

Table 8.2: Seasonality in the Indus river system

Flows	1998/99		2001/02		2007/08	
	MAF	%	MAF	%	MAF	%
Actual flows, western rivers ^a						
Kharif	124.97	84	79.88	82	105.89	84
Rabi	24.56	16	17.29	18	20.19	16
Subtotal	149.53		97.17		126.08	
Actual flows, eastern rivers	12.26		1.38		1.25	
Canal withdrawals						
Kharif	72.79	66	58.11	73	74.45	71
Rabi	37.91	34	21.50	27	30.08	29
Subtotal	110.70		79.61		104.53	
Downstream Kotri	35.15		1.93		15.80	

Note: a = actual flows at rim stations (Indus at Tarbela, Jhelum at Mangla, Chenab at Marala, for western rivers only).

Source: Pakistan Bureau of Statistics (2009b, pp. 66–67).

Current situation of salinity

The waterlogging and salinity problems of the Indus System irrigation areas stem from its geography. The Indus Plain is essentially flat, rising gradually at a rate of about 1 foot per mile from the sea in the south to the Kalar Kahar

Range in the north near Islamabad. Lahore, at a height of 700 feet, is 700 miles from Karachi. Generally, level ground not only allows canal irrigation but it also means that salts will leach into the soil from the Indus rivers' water that contains salts brought down from the mountains where the rivers originate. In addition, both southern Punjab and Sindh were originally deserts and the present alluvial surfaces of these lands were created by river floods which themselves contained salts (US Department of the Interior, Panel on Waterlogging and Salinity in West Pakistan, 1964, p. 56). Thus, both the irrigation waters and the soils themselves contain salts, and when the water table rises to about 10 feet underground, the capillary action of the soil forces the salt-impregnated underground water to the root zone of the crops, damaging plant growth and even killing the plant.

As mentioned earlier, at the time of the Revelle Report (1964), while only about 30 per cent of the Indus Basin was affected by waterlogging and salinity, another 30 per cent had water at least 10 feet near the surface. The Revelle Report had anticipated that the salinity problem would ultimately affect almost 70–80 per cent of the Indus Basin, hence the report's ambitious basin-wide proposed projects. Revelle's SCARPs and their subsequent successors—private tubewells—have largely reversed the problem, and today, while there is still a salinity problem because of the nature of the irrigation system and now subsequently through secondary tubewell water-induced salinity, it appears to be more containable.

Presently, it is estimated that about 5.4 million acres (of the total of 48.7 million acres under cultivation in the Indus Basin) or about 11 per cent is affected by primary or secondary salinization (Qureshi et al., 2008, p. 3). A third of the affected area is in Punjab and the remaining in Sindh. In Punjab, salinity is due to both canal water and tubewell irrigation, but the major problem now is secondary or tubewell-related salinity. In Sindh, the problem is overwhelmingly canal-water-related salinity since the water aquifer is largely saline and tubewell use is relatively limited.

Table 8.3 summarizes the situation with regard to Indus Basin salt balances. A noteworthy feature is that, in aggregate, the Indus Basin's salt balances retained in the root zone appear to be in balance and may be marginally decreasing (World Bank, 2005, p. 48). In addition in Sindh, the LBOD has been remarkably successful and, together with the new RBOD, may actually allow successful management of salt levels in the area.

Table 8.3: Indus basin salt balances

	Estimates of salt ^a (mg/L)			Estimates of salt ^b (million tonnes)
	Indus Basin (1) + (2)	Punjab (1)	Sindh (2)	Indus Basin
1. Total annual addition, net*	52.2	38.3	13.9	68
Net Indus River system	24.0	13.6	10.4	19
From tubewells	28.2	24.7	3.5	49
2. Total annual disposal, net*	52.2	38.3	13.9	68
Retained in soil (root zone)	50.0	36.1	13.9	57 (-3)
Evaporation ponds	2.2	2.2		
LBOD directly to sea				4.0
3. Indus water to sea	9.0			10.0
4. Total salt/annum	61.2			78.0

Note: * = excluding 9 mg/L annual salt flow washed out to sea (Qureshi et al., 2008) or 10 million tonnes of annual salt flow washed out to sea (World Bank, 2005).

Sources: a = Qureshi et al. (2008, p. 4), b = World Bank (2005, p. 48).

Current situation of groundwater

The increasing use of groundwater extracted through small private tubewells has changed the nature of the IBIS. Encouraged initially by the example of the massive number of SCARP-imported tubewells which, as the Revelle Report (1964) had anticipated, added dozens of MAF to the irrigation system, Pakistan's private farmers used local electricians to fabricate small tubewells running on both electrical and diesel power. This in large part freed farmers from the water shortage experienced in the *rabi* (summer) season and enabled them to balance the system at times of canal closure. In addition, it enabled them to plant more water-intensive crops such as rice in the kharif season by using tubewells to augment the already plentiful supply of irrigation water during this period (a

time when water tables are already high because of monsoon rains). Finally, and most importantly, it enabled Pakistani farmers to counter the approximately 3–5-year drought cycle of the Indus River system (discussed later in this chapter).

There were costs to underground water both in terms of additional salinity (discussed earlier) and the decline in water table levels. However, the overuse of groundwater was mitigated at least to some extent because (unlike in India) electricity and diesel for tubewells was not subsidized. Qureshi, McCornick, Sarwar, and Sharma (2009) point out that the average cost of tubewell water is about 30 times that of canal water or roughly USD 5.5/hectare/year for canal water compared to USD 167/hectare/year for tubewells. However, as Table 8.4 below shows, groundwater extracted through tubewells amounted to about 50 MAF in 2007/08 of which about 40 MAF was from private tubewells, 7.8 MAF from SCARPs, and 1.73 MAF from public tubewells. As a result, aquifers are being slowly depleted in Pakistan’s Indus Basin (although not as dramatically as in Indian Punjab; this is discussed later).

Table 8.4: Pakistan’s overall water availability, 2007/08 (MAF)

2007/08	Surface water		Groundwater			(1+2+3+4) Total water availability
	At canal head	(1) At farm gate	(2) Private tubewells	(3) SCARP tubewells	(4) Public tubewells	
Khariif	70.78	61.12	19.70	3.90	0.86	85.58
Rabi	27.94	31.40	20.68	3.91	0.87	56.86
Total	98.72	92.52	40.38	7.81	1.73	142.44

Source: Pakistan Statistical Yearbook 2009, p. 64.

Currently, 80 per cent of Punjab’s aquifer recharge is from the irrigation system (World Bank, 2005, p. 15). The balance is largely from monsoon rainfall and return flow from groundwater. It is estimated that the groundwater level has dropped to inaccessible depths in 5 per cent of Punjab (a sign of groundwater depletion) and this is expected to decline to 15 per cent in the next decade (Qureshi et al., 2009, p. 7). This implies that, at current rates, Pakistani Punjab’s aquifers will be completely depleted in 50–100 years. Groundwater prospects are discussed in detail later.

An Indus Basin Irrigation System (IBIS) strategy for the coming decades: The supply side

Any analysis of a future IBIS strategy must necessarily begin with the supply side since absolute initial constraints—the flows of the Indus system's three western rivers—limit the total availability of surface water in Pakistan. Secondary constraints relate to the absolute size of groundwater aquifers where more than 80 per cent of the recharge is by the same western rivers. Within these constraints, there is annual flexibility in the surface water system determined by storage capacity in dams and multiyear flexibility in the groundwater system with the aquifers acting as huge underground dams. However, before discussing these supply-side constraints and mitigation measures, it is important to examine the IWA with India and its future prospects.

Prospects of the Indus Water Accord (IWA) 1960

As discussed earlier, the total flow of the entire Indus water system (the Indus plus its tributaries) is about 180 MAF, which was divided by the IWA by giving the Indus, Jhelum, and Chenab (150 MAF) to Pakistan and the Ravi, Sutlej, and Beas (30 MAF) to India. However, the IWA gave certain rights to India over the western rivers including limited agricultural use (70,000 acres from the Indus, 400,000 acres from the Jhelum, and 225,000 acres from the Chenab—a total of 695,000 acres). The IWA also gave India the right to construct runoff river hydroelectric plants with limited pondage and dead storage (“The Indus Waters Treaty”, 1960, annexes C and D). As legally written and if properly enforced, Pakistan would lose only a maximum of 3 to 4 MAF from its western rivers, which would be in conformity with the IWA.

However, in practice, major problems are beginning to emerge as a result of the construction of new hydro-projects by India. The first of these, Baglihar, completed in 2009 was questioned by Pakistan in that it had live-gated storage. This was challenged by Pakistan before the World Bank (the guarantor of the IWA); the World Bank with the agreement of both India and Pakistan appointed a “neutral expert” as laid down in the IWA. Unfortunately the neutral expert “reinterpreted” the treaty to allow limited live storage to allow the flushing out of silt, and this permission allowed India to cause immense damage to Pakistan by completing and filling the Baglihar Dam on the Chenab during the rabi season in 2009/10 when Pakistan received almost no water from the Chenab (Briscoe, 2010, p. 6).

John Briscoe, the World Bank's irrigation advisor at the time and the person responsible for selecting the neutral expert, stated recently that, "if Baglihar was the only dam being constructed on the Chenab and Jhelum, this would be a limited problem. But following Baglihar is a veritable caravan of Indian Projects—Kishanganga, Sawalkat, Pukuldul, Bursar, Dal Huste, Gyspa ... The cumulative live storage will be large, giving India an unquestionable capacity to have major impact on timing of flows into Pakistan" (Briscoe, 2010).

This situation is further complicated by the fact that the Indian Punjab's much-vaunted "agricultural miracle" is running out of groundwater. A recent authoritative academic study on the province's groundwater points out that Indian Punjab's agriculture is overwhelmingly dependant on groundwater that is being rapidly depleted. The study states:

The total surface availability at different head works is about 1.80 hectare meter (Mha-m) per annum (Government of Punjab 2005). Out of this 0.35 Mha-m per annum is lost during conveyance and only 1.45 Mha-m is available at the outlet that irrigates about 1.0 Mha land. The total sustainable availability of groundwater is 1.68 Mha-m annum. The current crop production pattern dominated by paddy wheat crop rotation requires 4.37 Mha-m of irrigation water per annum, against the total supply of 3.13 Mha-m per annum from both surface and annual recharge of groundwater resources, leading to a net deficit of 1.24 Mha-m (Government of Punjab 2005). Consequently the deficit is being met by over exploitation of the groundwater resources. This has played havoc with the groundwater resources of the state (Jeevendas, Singh, & Kumar, 2008, p. 195).

In a concept note on water security in Indian Punjab, the Columbia Water Center (2010) states: "In 1985 less than 5 per cent of tubewells were sustainable. By 2005 that number had increased to over 60 per cent. If these trends of aquifer depletion continue, it is estimated that Punjab's groundwater will be entirely exhausted in 15–20 years."

India is developing the capacity to violate the IWA and needs Pakistan's waters as shown above. It is, therefore, imperative that the Office of the Commissioner Indus Water Accord within the Pakistan government's Ministry of Water and Power be strengthened and a dialogue with India undertaken to ensure that the

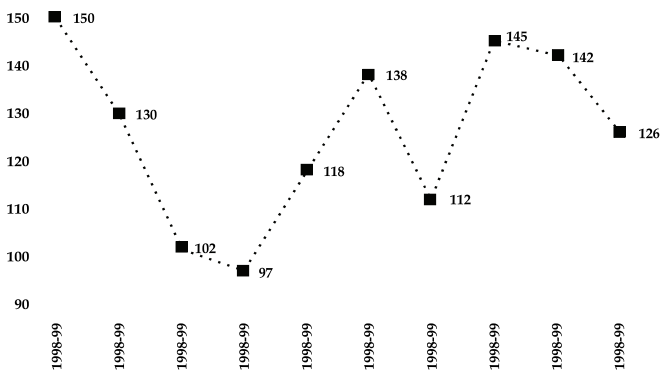
latter does not violate the IWA in letter or spirit. In the meantime, Pakistan should anticipate at a minimum that India will use to the full its allowable water use on the western rivers according to the IWA.

This will mean a minimum withdrawal of about 5 MAF of water in both flood, normal, and drought years. Thus, if 1998 is considered a flood year with 111 MAF of canal withdrawals, 2007/08 is considered a normal year with 105 MAF withdrawals, and 2001/02 is considered a drought year with 80 MAF of withdrawals, this use of water by India under the IWA would mean a reduction in the Indus system's canal water availability of western rivers' waters to 105 MAF annually in flood years, about 100 MAF in normal years, and about 75 MAF in drought years.

Indus river seasonality, drought and climate change: the requirement for new storage dams on the Indus

As shown earlier in this chapter, the Indus River system exhibits seasonality through the year with 80 per cent of its flows occurring in the kharif season when the glaciers melt in the summer in Kashmir (in the Western Himalayas). This necessitates having live storage capabilities. A further complicating factor that also requires live storage for mitigation is that the Indus River also seems to have a “3- to 5-year flood and drought cycle” as Figure 8.1 below indicates.

Figure 8.1: Western rivers: Inflow at rim stations (MAF)



Source: Pakistan Statistical Year Book 2009, p. 66.

In addition to the “flood-followed-by-drought cycle” illustrated above, Pakistan faces the prospects of climate change. Current forecasts (despite their uncertain nature) show the Western Himalayan glaciers melting in the next 50 years, which will mean initially massive river flows followed by meltdown and consequent 30 to 40 per cent decreases in river flows. This climate change will be accompanied by increased rainfall, which will accentuate the flooding problems of the rivers in the first 50 years and subsequently mitigate low river flows in the next 50 years (World Bank, 2005, p. 25). This is a daunting prospect and needs to be managed.

Overall, the implications of the latter three IBIS supply-side situations (the kharif–rabi imbalance, the multiyear imbalance, and the climate change imbalance) all require the construction of additional storage on the Indus River. Excluding climate change, requirements for normal Indus River imbalances can be determined on the basis of “yield curves.” Liefertinck et al. (1968) have calculated a yield curve for storage capacity on the Indus shown in Table 8.5 below. This seems to indicate that Pakistan optimally requires about 22 MAF of storage on the Indus while the present storage capacity is about 8 MAF at Tarbela and an additional 6 MAF if Bhasha is constructed as planned. Thus, an additional storage facility or two after Bhasha will be required on the Indus to deal with the present situation. The climate change requirement for storage on the Indus will have to be determined after further analysis.

The Asian Development Bank has indicated that it will support the construction of Bhasha on which preconstruction activities (roads, colonies, etc.) have been started by WAPDA, and which will cost about USD 8 billion over the period 2010–16. The World Bank is still shying away from investing further in Pakistan’s water resource development as indicated earlier, but has recently shown interest in a hydro-electric project at Dasu (downstream Bhasha, upstream Tarbela). The storage capacity at Dasu has not yet been established and it is not yet clear whether this is an optimal second large new storage dam site.

Table 8.5: Storage yield curves for the Indus river

Storage MAF	10	15	20	25	30.0
Additional yield in MAF/year	10	15	20	22	22.5

Source: Author’s estimates based on yield curve for the Indus given in Liefertinck et al. (1968).

However, if a second storage on the Indus is constructed with a further capacity of 6 MAF, this (together with Bhasha) should add another 12 MAF of usable canal head availability to the Indus River system in flood and normal years, and about 6 MAF of additional capacity to the system in drought years. Again, applying the same numbers for Indus River system availability and use by India according to the IWA, Pakistan after constructing this additional storage of 12 MAF will have available usable canal head availability of about 117 MAF per annum in flood years, 112 MAF in normal years, and about 87 MAF in drought years.

Yield curves for the Jhelum River are not available. However, with its average flows of 15–23 MAF/annum (compared to the Indus's average flows of 70–100 MAF/annum), it currently has about 9 MAF of storage capacity as a result of the recent raising of the Mangla dam by an additional 30 feet, which increased its storage capacity by 2.9 MAF to the 6 MAF of storage capacity already existing. This capacity now appears adequate for managing current Jhelum River inter-year and multiyear imbalances. However, additional capacity may have to be added to meet the requirements of climate change. Similarly, while yield curves are not available for the Chenab River and there are no mountainous natural storage sites on the plains where the Chenab enters Pakistan, climate change requirements may require in-line and off-line storage in the future (on/off the rivers and canals).

Groundwater supply-side prospects

As discussed earlier, Pakistan's groundwater aquifers are diminishing—although not at the furious pace of those of Indian Punjab. It is imperative that Pakistan's groundwater aquifers be stabilized (i.e., tubewell withdrawals be equivalent to aquifer recharging by irrigation water leaching, rainfall, etc.) Table 8.6 presents some estimates (dated almost 10 years), which show that IBIS aquifers were generally in balance during normal years, with about 9 MAF/annum of depletion in drought years with this depletion being confined entirely to Punjab.

This situation must inevitably have worsened in the last decade. Qureshi et al. (2009) estimate that groundwater was inaccessible through small tubewells (operable at less than 20 m water depth) in 5 per cent of Punjab in 2000 and that this figure was expected to increase to 15 per cent in the next

decade. Given this situation, it is clear that Pakistan, and particularly Punjab, cannot count on any further increase in groundwater extraction. Regulatory controls have been legislated but it has not proved possible to enforce them. Energy pricing policies with no real subsidy on agricultural tubewells, and the fact that 85 per cent of tubewells run on market-price diesel, has naturally dampened tubewell demand as compared to Indian Punjab where electricity for tubewells is free.

Table 8.6: IBIS aquifer balances 2001/02 (MAF)

	Punjab normal	Punjab drought	Sindh normal	KP normal	IBIS normal	IBIS drought
Aquifer balance	0	-8.6	0	-0.4	-0.4	-9.0
Tubewell abstractions	-30.8	-33.6	-3.5	-1.8	-36.1	-38.9
Base flow to rivers/ subsurfaces	-2.5	-0.4	-1.2	-1.4	-5.1	-3.0
Evapo- transportation losses	-1.6	-0.8	-13.8	-0.2	-15.6	-14.8
Recharge from irrigation system	20.6	15.5	15.4	1.9	37.9	32.8
Recharge from rivers	3.2	0.8	0.3	0.1	3.6	1.2
Return flow from groundwater	4.6	5.1	0.8	0.1	5.5	6.0
Recharge from rainfall	6.5	4.8	2.0	0.9	9.4	7.7

Source: Qureshi and Hirashima (2007).

Pakistan will need to watch its aquifers carefully and take corrective measures if tubewell extraction soars above current levels. On the supply side, however, it needs to be recognized that additions to water supply for irrigation from groundwater in the IBIS is not practicable and even minor subsidies, if any, on agriculture tubewell electricity should be withdrawn as soon as possible.

Increasing water supply by reducing irrigation water transmission losses

IBIS surface water transmission losses are substantial—25 per cent or a normal 25 MAF in the canal system alone (Ahmed, 1999, p. 79). There is another substantial loss in watercourse transmissions and further losses in field application. However, as Table 8.6 indicates, the IBIS depends in normal years on about 38 MAF of groundwater recharge from the irrigation system. The only savings that are possible are in saline water areas. In Punjab, poor water quality is found in 23 per cent of the area and this number rises to 78 per cent for Sindh (Qureshi et al., 2009). The lining of canals in saline groundwater areas in Sindh and the saline areas of Punjab is likely to make about 5 MAF of additional irrigation water available in Sindh and another 5 MAF in Punjab.

WAPDA's chairperson has stated that WAPDA is studying the possibility of lining the Rohri, Dadu, and rice canals in Sindh, and that if this is undertaken, it would allow an additional 492,000 acres of land to be brought under irrigation in Sindh (Durrani, 2010, p. 15). Another area of savings lies in the lining and rehabilitation of water channels. The Planning Commission estimates that 90,000 watercourses (out of a total of 135,000 countrywide) could be improved by lining and rehabilitation, thereby saving about 6 MAF (Pakistan, Planning Commission, 2001, pp. 283–288). Total cumulative Indus water system farm-gate availability, after adding these water transmission loss savings and savings from additional surface storage and abstracting from Indian IWA uses is, therefore, likely to be almost 133 MAF in flood years, 128 MAF in normal years, and 103 MAF in drought years.

Indus Basin Irrigation System (IBIS) demand management prospects

Future requirements of agriculture crops

Pakistan is already a great agricultural country producing about 24 million tonnes of wheat, 7 million tonnes of rice, 3.6 million tonnes of maize, 50 million tonnes of sugarcane, 12 million tonnes of vegetables, and 7 million tonnes of fruit in 2008/09, in addition to an assortment of other crops (Pakistan Bureau of Statistics, 2009a, p. xi). The country's cultivated area extended over 52 million acres in 2008/09 (of which 90 per cent is part of the IBIS) and crop production

was fairly mechanized with all plowing done by tractors and a sizeable percentage of wheat and rice crops mechanically harvested. Pakistan itself produced about 65,000 tractors per annum (Pakistan Bureau of Statistics, 2009b, p. 2, 64). However, yields are low by international standards and particularly in comparison with Indian Punjab. Thus, recent wheat yields are estimated by the World Bank to be 7 tons/ha or 130 mds/acre in Imperial Valley, USA, 3.8 tonnes/ha or 62 mds/acre in Bhakra, India, and 1.8 tonnes/ha or 31 mds/acre in Punjab, Pakistan.

The conclusion drawn by the World Bank is that “attention will have to shift from productivity per unit of land to productivity per unit of water” (2005, p. 30). This is an interesting distinction but not very useful in practice since yield per acre may be significantly different because of the use of high-yielding varieties of seed, higher use of fertilizers, etc., while still using the same quantities of water. Data from a recent study that examines irrigation water use in Haryana (India) and Punjab (Pakistan) has estimated water use for wheat in Haryana at 2,200 m³/hectare and in Punjab at 2,500 m³/hectare, while for paddy the estimated water use is 18,900 m³/hectare for Haryana and 16,000 m³/hectare for Punjab (Table 8.7) (Erenstein, 2009, p. 1803). Specifically, Pakistan’s Punjab uses water 12 per cent less efficiently than India for wheat production and is 18 per cent more efficient in water use for rice production using the traditional definition of water use per acre. However, both Indian Haryana and Indian Punjab’s wheat and rice productivity is higher than that of Pakistani Punjab.

Table 8.7: Comparison of Haryana, India, and Punjab, Pakistan (per hectare)

Productivity	Haryana India	Punjab Pakistan
<i>Wheat</i>		
Total nutrients ([kg N+P2O5+K2O]) ha-1	246.0	174.0
Estimated irrigation water use (‘000 m ³ ha-1)	2.2	2.5
Grain yield (ton ha-1)	4.2	3.2
<i>Rice</i>		
Total nutrients ([kg N+P2O5+K2O]) ha-1	209.0	139.0
Estimated irrigation water use (‘000 m ³ ha-1)	18.9	16.0
Paddy yield (ton ha-1)	4.6	3.6

Source: Erenstein (2009, p. 1803).

The particularly striking difference in average crop productivity between Indian Punjab and Pakistani Punjab is sometimes argued in part to be due to the availability of free electricity for tubewells, which, it is estimated, saves the Indian Punjab farmer about USD 162/hectare/year for solely tubewell-irrigated land compared to solely canal-irrigated land (Qureshi et al., 2009), or about PRs 7,000/acre/year for each combined crop-cycle of wheat plus rice. This saving, it is argued, is used by Indian Punjab's farmers to purchase additional fertilizer, pesticides, mechanical land-leveling, mechanical planting, and mechanical harvesting, which helps double their yield compared to that in Pakistani Punjab. This may well be the case. In addition, the Indian Punjab farmer may also have access to cheaper fertilizer, more advanced seeds, and a guaranteed and efficient procurement system.

It is important to learn from Indian Punjab's experience in increasing yields. This includes using better land and crop management practices. It has also been estimated that the single most important factor in the efficient use of water in Pakistani Punjab may be land-leveling—resulting in savings of as much as 20–30 per cent compared to unlevelled land (Ahmad, Turrall, Masih, Giordano, & Masood, 2007). Finally, Pakistan should seriously consider shifting away from water-intensive crops such as rice to alternative efficient water-use crops such as vegetable oils (sunflowers, soya bean), maize, and more cotton.

A future IBIS strategy for meeting addition crop/food requirements over the next decades will therefore require the following: (i) doubling or tripling yields by improving land practices and greater use of hybrid seeds, fertilizers and pesticides; (ii) using water, both surface and groundwater, resources more efficiently, preferably by reducing average surface water requirements for crops through land leveling, and reducing, if possible, groundwater use. A shift in kharif away from rice to more efficient crops is also required. Total water use in terms of canal withdrawals for crop production should be “frozen” at present “normal year” uses, i.e., about 105 MAF and groundwater withdrawals in IBIS should also be “frozen” at present levels of about 50 MAF.

Environmental use of Indus Basin Irrigation System (IBIS) waters

A source of contention since the IWA has been the fact that, in drought years, there is almost no water downstream of Kotri, causing immense damage to

the Indus delta. To get agreement on the 1990 Inter-Provincial Accord, this issue was deliberately left unaddressed to be determined later by “expert studies.” Subsequently, studies were commissioned which came up with the following findings:

- Downstream Kotri requirements and recommended associated environmental flows from the Indus were estimated at 3.60 MAF in dry or average years with 25 MAF additional every five years in times of flood, or alternatively, 8.60 MAF as an average for all years to be provided from the overall share (Montgomery Watson Harza, 2005, p. 56).
- The recommended environmental flow allocation for the Indus, Chenab, Ravi, Sutlej, and Jhelum to maintain a minimum water depth of 0.5 to 1 m were 8.25 MAF to be provided from the overall share.
- The recommended environmental flows allocation for Punjab’s lakes, water bodies, and riverine areas were 6.22 MAF to be provided from Punjab’s share.
- The recommended environmental flows allocation for Sindh’s lakes, water bodies, and riverine areas were 2.53 MAF to be provided from Sindh’s share (Pakistan, Federal Flood Commission, 2005, pp. 1–8).

Table 8.8 summarizes the expert consultants’ recommendations. The recommendations for the use of net additional water from IBIS storage augmentation (12 MAF), lining of canals (10 MAF), and improvement of watercourses (6 MAF), or a total of 28 MAF for the next few decades flow, almost naturally from the above. In flood years: (i) the equivalent of additional water to be made available from the new storage at Bhasha on the Indus plus a large portion of the flood should be used to meet downstream Kotri requirements; (ii) part of the additional flood water plus equivalent additional water to the second storage dam on the Indus (Dasu) should be used to meet the environmental requirements of the Indus, Jhelum, Chenab, Ravi, and Sutlej; (iii) the equivalent of the additional waters to be saved from the lining of canals and watercourses in Punjab and Sindh together with part of the floodwaters should be used for reviving the wetlands of Punjab and Sindh.

Table 8.8: IBIS environmental flow requirements

Source	Dry year			Average year			Every 5 years (flood year)		
	Total	Rabi	Kharif	Total	Rabi	Kharif	Total	Rabi	Kharif
Downstream Kotri ^a (alt. 1)				8.60	1.80	6.80			
(alt. 2)	(3.60+)	(1.80)	(1.80+)	(3.60+)	(1.80)	(1.8+)	(25.0)	(0.0)	(25.0)
Indus, Jhelum, Chenab, Ravi, Sutlej ^b				8.25	2.25	6.00			
Punjab inland water bodies ^b				6.22	1.82	4.40			
Sindh inland water bodies ^b				2.53	0.43	2.10			
Total av. year requirement ^b				25.60	6.30	19.30			

Source: a = Montgomery Watson Harza (2005, p. 57), b = Pakistan, Federal Flood Commission (2005, p. 1).

In normal years, half the additional water from additional storage and lining of canals in saltwater areas and watercourse rehabilitation should be used for irrigation flows, and the other half for environmental flows (particularly downstream Kotri). In drought years, three quarters of this additional water should be used to augment irrigation water supplies and the remaining amount for environmental flows (again, with special attention to downstream Kotri).

It is not clear whether Pakistan is politically and economically ready to make such an environmental commitment to its IBIS waters. Yet this will have to be done, whether by this or subsequent generations, for Pakistan needs to make its rivers, wetlands, and delta alive again so that Pakistan can revert to being the land of the “Five Rivers” with inland navigation (ultimately) from the Indus delta to the banks of all the five rivers as was historically the case.

Efficiency in the use of Indus Basin Irrigation System (IBIS) and groundwater

If additional water to be made available from the IBIS is recommended for use in substantial part to meet drought and environmental requirements, then the question arises as to how Pakistan will expand its irrigated areas, particularly

in northern Punjab (Thal), southern Punjab (Bahawalpur/ Cholistan), Sindh (eastern and western banks), and Balochistan. The sensible answer would be to put a restriction on adding any new command areas to the IBIS. Such a restriction is likely to be unenforceable. Therefore, the many important technologies currently available to preserve water, including precision land-leveling, zero tillage, bed and furrow planting, and drip irrigation together with the adoption of high-yielding varieties of genetically modified crops (particularly in maize and cotton) will be useful both in saving water and expanding irrigated areas.

The only note of caution that needs to be made is that the current drive by international institutions (particularly the World Bank) to reform the institutional arrangements surrounding the IBIS system is well intentioned but should be handled with sense. The newly created provincial irrigation department authorities proposed by the World Bank is a good idea especially if it enables these replacements of provincial irrigation departments to retain irrigation revenues (currently these go directly to the provincial government accounts) to be used to rehabilitate the provincial irrigation systems.

The creation of farmers' organizations (which now covers 20 per cent of the irrigation areas in the IBIS) also proposed by the World Bank to monitor water supplies from the distributaries (the sequence is rivers to branch canals to main canals to distributaries) to the khalas (watercourses) which each command about 500 acres is also a welcome initiative and has led to improved supplies to tail-enders and some controls over water theft. Farmers also need to pay more for their canal waters to control waste in water use and also to maintain and augment the IBIS. They should also not be charged if they do not use their assigned water entitlements. However, the current elaborate system of irrigation entitlements throughout the IBIS (i.e., 20 minutes/acre/week for field crops, double for fruit orchards) through a defined capacity and regulated outlet that is uniformly administered should not be touched at any cost since this is the bedrock of the system.

No attempt should be made to charge the "full opportunity cost of water" or privatize the system, as is the current long-term thrust of the World Bank's recommendations. However, cost recovery for adequate maintenance of the irrigation system by the provincial governments is essential and "abiana" or water rates need to be increased to cover these requirements. Large-scale capital investments in the irrigation system will have to be financed

by the federal government although it is tempting to think of some cost recovery from investments in the federal government (WAPDA)-owned and operated storages.

Conclusions on a future Indus Basin Irrigation System (IBIS) strategy

The analysis presented above indicates that Pakistan has come a long way in its development of the IBIS. The first two decades, 1950–70, were occupied by the urgent need to “re-plumb” the entire system by connecting the western river to the eastern rivers to meet the consequences of Pakistan’s requirements under the IWA. The next two decades (1970–90) with an overlap between 1965 and 1970 were used primarily to stem the menace of waterlogging and salinity. The decade 1990–2000 was the “lost decade”—it focused on institutional issues, which are important but which were used as a means to stop major investments by the public sector in the IBIS. The last decade (2000–10) is the first where Pakistan has been able to build and modernize the IBIS and several decades of further enhancement of the system are expected to follow.

As the system is modernized, however, it is imperative that Pakistan focus on: (i) creating additional surface storage to offset both intra-year variations in the Indus River system and its three- to five-year flood and drought cycle; (ii) surface water preservation particularly by lining canals in saline areas and watercourse improvement; (iii) groundwater conservation and salinity control by discouraging excessive tubewell use; (iv) encouraging general efficiency of irrigation water use through improved land management techniques including land-leveling and also by changing the kharif cropping pattern away from water-intensive rice to sunflower, soya, maize, and more cotton; (v) yield enhancement through improved farming practices, adopting hybrid seeds, and increased fertilizer and pesticide use; and (vi) fully meeting the environmental concerns of the Indus delta, river systems, and wetlands.

This, together with a clear vision that the IBIS will be publically owned and operated but with sensible institutional reform (including the increased price of canal waters) which would increase water use efficiency without destabilizing the entire system of existing irrigation entitlements, is the recommended strategy for the future.

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Economic Governance and Institutional Reforms

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Theoretical and empirical insights

There is now wide consensus that good governance must lead to broad-based, inclusive economic growth and social development. It must enable the state, civil society, and the private sector to enhance the wellbeing of a large segment of the population. Economic policies, however sound or benign, cannot disperse their gains widely unless the institutions intermediating these policies are strong, efficient, and effective.

The World Bank (1992) defines governance as the manner in which public officials and institutions acquire and exercise the authority to shape public policy and provide public goods and services. Institutions establish formal and informal rules that determine whether the public sector acts in its own interests or on behalf of all citizens. Corruption is one outcome of poor governance: the abuse of public office for private gain. The World Bank's (2012a) Governance and Anticorruption Strategy of 2012 surmises that governance is about what the state can do and how it does it—what the state can do is determined by its capacity, legitimacy, and authority.

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The Asian Development Bank (1997) considers the essence of governance to be sound development management. The key dimensions of governance in this context are public sector management, accountability, the legal framework for development, and information and transparency. The Overseas Development Institute (2006) identifies historical context, previous regime, sociocultural context, economic system, and international environment as the main determinants of governance and development. The six core principles identified by Hyden, Court, and Mease (2004) that relate to good governance are (i) participation, (ii) fairness, (iii) decency, (iv) accountability, (v) transparency, and (vi) efficiency.

Governance assumed importance in the 1980s when developing countries began to feel the adverse effects of the state's extension to functions beyond its capacity. The earlier concept of "modernization" that was propagated in the 1950s and 1960s was synonymous with state-led development. It was argued that, where market institutions and local entrepreneurs were weak, only state-owned enterprises were capable of investing in and expanding the economy. The import substitution-industrialization strategy provided the intellectual underpinning to this argument, and state intervention in the choice of industries and production technologies, the level of employment, and determination of inputs, output, and prices became widely accepted policy instruments. Protection against imports insulated state-owned enterprises from the competitive pressures of the market and generated substantial revenues for the governments of poor countries through high tariffs. This "inward-looking" strategy was pursued vigorously by many countries in Asia, Latin America, and Africa during the 1950s, 1960s, and 1970s.

Empirical academic research evaluating the experience of these countries during this period presented persuasive evidence that this "statist" model had done more harm than good. "Government failure" rather than "market failure" was found to be a more pervasive phenomenon in the developing world. It was argued that public bureaucracies were driven by their own narrow and parochial interests rather than by the larger goals of development. The "soft state" syndrome articulated by Myrdal (1968) for Asia debunked the myth of a neutral, competent, and legitimate state capable of enforcing policy or managing the enterprise to maximize the collective good of society.

By the end of the 1970s, a serious debt crisis in Latin America, dictatorial regimes' mismanagement of the African economies, and economic stagnation in India—a pioneer in practicing the “statist” model—had forced economists to rethink the larger role of the state. Meanwhile, the success of newly industrializing countries such as the Republic of Korea, Taiwan, Singapore, and Hong Kong demonstrated that opening up the economy to the rest of the world and an “outward” export-oriented strategy could bring about rapid, sustained, and shared growth for the majority of people.

Although the state played a proactive role in these countries and intervened selectively, it avoided the mistakes made by proponents of the “statist” model, which entailed the government’s widespread involvement through political leaders and the bureaucracy in its pursuit to control the “commanding heights” of the economy. The “heavy and overextended state” model was gradually replaced by an approach where the state acted more as a strategist, guide, facilitator, provider of infrastructure, and promoter of human development, facilitating market competition among the private sector rather than occupying directly the economic space of production, exchange, and distribution of goods and services. The domestic private sector was allowed to compete with industrial export markets while protection was avoided. Wade (1990) characterizes the experience of the East Asian economies under the rubric of “governed market” rather than either a free market or command economy.

The governance structure in East Asia that led to these impressive outcomes was characterized by a public bureaucracy that was, by and large, meritocratic, performance-oriented, and free from political interference. While keeping strong contact with social groups crucial to development, these bureaucracies had sufficient authority to maintain a distance from social pressures. Rodrik (1997) shows convincingly that the bureaucratic quality explains much of the difference between the most and least successful East Asian economies.

It also became obvious that high rates of economic growth can take place without benefiting large segments of the population—with negative consequences for social cohesion and political unity. Therefore, the two characteristics of a successful and desirable development model, i.e., inclusive growth and sustained growth, will spread the benefits of high economic growth among a vast majority of the population over an extended period of time. Governance is the glue that binds these two characteristics with economic growth

to produce sustained and inclusive development. If we accept this definition of development, we must consider how such an outcome can be achieved.

This question can be addressed by exploring the ways in which governance and institutions interact. Good governance requires checks and balances in a country's institutional infrastructure, such that politicians and bureaucrats have the flexibility to pursue the common good, while restraining arbitrary action and corruption. According to Acemoglu and Johnson (2003), good institutions ensure two desirable outcomes: (i) that there is relatively equal access to economic opportunity (a level playing field), and (ii) those who provide labor or capital are appropriately rewarded and their property rights protected.

The risk is that the state's monopoly on coercion, coupled with access to information not available to the public, creates opportunities for public officials to promote their own interests or those of friends or allies, at the expense of the common interest. The possibilities for rent seeking and corruption are considerable. This tension between the potential that institutions offer as instruments of good governance and the incentives for state functionaries leading and working in these institutions to hijack them for their narrow self-interest is the major challenge that developing countries face.

A variety of institutional mechanisms can provide the checks and balances necessary that will lead to good governance and reduce corruption. To be enduring and credible, these mechanisms need to be anchored in core state institutions. Power can be divided horizontally among the judiciary, legislative, and executive, and vertically among the central, provincial, and local authorities. This balancing act between the different power structures ultimately determines the governance outcomes for a particular country. If there is collusion among these countervailing forces, the result is disastrous.

Pakistan's experience

Against this background of theoretical and empirical evidence, we now review Pakistan's experience with respect to governance. Recapitulating a brief history of governance in Pakistan provides the context in which reforms will be rooted. Next, the rationale for these reforms is spelled out. Finally, we ask what can be done to improve governance and strengthen institutions in Pakistan to promote the welfare of the majority.

History of governance in Pakistan

Pakistan inherited a well-functioning judiciary, civil service, and military structure but relatively weak legislative oversight at the time of independence. Over time, the domination of the civil service and military over the affairs of the state disrupted the evolution of the democratic political process and further weakened the state's legislative organ. The judicial arm, with a few exceptions, plodded along, sanctifying the dominant role of the military and civil service.

The institutions inherited from the British rule more or less suited the needs of the rulers at the time. Following independence, these requirements expanded in scope and content while the expectations of the public and their elected representatives grew. These inherited institutions failed to adapt to meet the new challenges of development and social change, and to respond to the heightened expectations and aspirations of free people. The “business-as-usual” mode of functioning, and the approach and attitudes of incumbents holding top and middle positions in the bureaucracy and operating these institutions did not endear them either to political leaders or to the public.

Several commissions and committees were formed over the first 25 years after independence to reform the administrative structure and civil services. Some changes were introduced during Ayub Khan's regime in the 1960s to improve the efficiency of the secretariats, but the tendency toward centralized control and personalized decision-making worsened in this period. The reluctance to grant provincial autonomy to East Pakistan—the country's most populous province—so remote physically from the hub of decision making, i.e., Islamabad, led to serious political backlash and the eventual breakup of the country into two independent nations.

Pakistan continued to suffer from what has been termed “confused federalism”, in which weak local and provincial bodies are unable to match the ability of the central government to mobilize resources and provide services. Whether it is health or education, highways or agriculture, the federal government has much larger programs under implementation than the provincial or local governments. Although the money is spent in the provinces or districts, their inability to identify, design, approve, and implement these projects caused resentment among the provincial governments.

In 1973, a populist government headed by Z. A. Bhutto took the first step in breaking the steel frame of the civil services by taking away the constitutional guarantee of job security. He also demolished the exclusive and privileged role of the Civil Service of Pakistan within the overall structure of the public service.

The next 25 years witnessed a significant decline in the quality of new civil service recruits as the implicit tradeoff between job security and low compensation ceased to operate, and the expanding private sector, including multinational corporations, offered more attractive career opportunities. The erosion of real wages in the public sector over time also led to low morale, demotivation, and inefficiency, and encouraged civil servants at all levels to resort to corrupt practices. The abuse of discretionary powers, bureaucratic obstruction, and delaying tactics adopted by government functionaries were all part of the maneuvering to extract rents to supplement their pay.

In real terms, the compensation paid to higher civil servants had declined by 2004 to only one half of the 1994 package. The lower wages meant that the civil service no longer attracted the most talented young men and women. Some civil service incumbents, in their instinct for self-preservation, fell prey to the machinations of the political regimes in power and many started to identify with one political party or the other.

They also benefited from the culture of patronage practiced by politicians. During the 1990s, the replacement of one political party by the other in the corridors of power was followed by changes in the top bureaucracy. This growing tendency toward informal political affiliation to tenaciously hold on to key jobs was also responsible for the end of an impartial, neutral, and competent civil service responsive to the needs of the common person. Frequent takeovers by military regimes and the consequential screening of hundreds of civil servants made the civil service subservient to the military rulers, eroded the authority of traditional institutions of governance, and led to loss of initiative among the higher bureaucracy.

The 2001 devolution plan dealt another major blow to the Civil Service of Pakistan when the posts of commissioner, deputy commissioner, and assistant commissioner were abolished, and the reins of the district administration were transferred to elected *nazims* (mayors). For ordinary citizens, the government was tangibly embodied in these civil servants, whom they approached on a daily

basis. The substitution of civil servants by elected heads of the administration upset the checks and balances implicit in the previous administrative set-up, and concentrated too much discretionary power in the hands of indirectly elected individuals.

The police assumed greater clout as a coercive force. Opportunities for collusion between nazims and the police multiplied and, in many instances, alienated the common citizen and diluted the impartiality of the administration at a grassroots level. The sanctity of private property rights was threatened in several cases where nazims had ordered unauthorized changes to be made to rural land records in collusion with revenue department functionaries to benefit themselves and their cronies. The district administration, which was the pivot for most citizens, therefore, lost its impartiality and neutrality.

Pakistan's main problem in maintaining macroeconomic stability, sustaining economic growth, and delivering public services to the poor is weak governance and the gradual but perceptible decline in institutional capacity. The elitist nature of the state and society, and both the conflict and collusion among the country's various power structures can explain this phenomenon (see Husain, 1999).

Acemoglu and Robinson's (2011) recent study on extractive institutions as compared to inclusive ones corroborates this observation. The military governments that took power at various times were forced to make serious compromises to establish their legitimacy. The elected leadership, when their turn came to assume power, not only lacked the vision to help the divergent forces in society coalesce, but also promoted individual self-interest rather than collective public interest. Along with the decline in civil servants' competence, this led to the gradual erosion of public institutions' capabilities. The state's authority to govern its territory effectively was, therefore, badly impaired.

Improved economic governance was not pursued faithfully in Pakistan; its implementation would have spanned several decades while the elected and military governments that took power have had short time horizons. The elected governments, in their quest to win the next election, and the military governments, in their attempt to gain legitimacy became involved in ad-hoc and, at times, populist measures without addressing the root cause, i.e., building institutional capacity to deliver improved living standards for the majority of the population and setting up a viable governance structure. Decision-making

according to the whims and caprices of individuals in power, therefore, displaced informed and well thought-out institutionalized processes.

Chronic political instability and frequent changes in political regimes have also had disastrous consequences for economic governance in Pakistan. During the 1990s, there were too many changes marked by too much chaos. Invariably, incoming governments abruptly abandoned, discontinued, or slowed down the implementation of policies, projects, and programs inherited from the previous regime. Given that institutions take a long time to nurture, the implementation of projects is spread over many years, and the impact of policies is considerably lagged, this premature abandonment caused more harm than good. Starting all over again and before the benefits had begun to accrue, the government was either overthrown or had to step down before completing its tenure. The incoming government would begin the cycle afresh.

In 2001, the Musharraf government introduced a local government system with the objective of decentralizing authority, delegating power, and deconcentrating decision-making. Although the system had some weakness (as outlined earlier) that could have been rectified, the new government that took office in 2008 completely abandoned the system, creating a vacuum. The resumption of powers by the provincial governments has once again made ordinary citizens' lives miserable since they cannot access services at the grassroots level or have their problems resolved. The situation is quite the opposite in India, as aptly summed up by Shourie (2010):

In India, there is a consensus in practice so that whenever a group is in office, wherever it is in office, it attempts to do the same sorts of things. But when it is in opposition, where it is in opposition, it strains to block the same measures. We have the Communists in West Bengal garnering credit for implementing reforms in the State that they are blocking at the Centre.

What has been the effect of this unending cycle of politically motivated, poor economic governance on the majority of the population? A sense of deprivation and the denial of basic economic rights create cynicism, negativism, and frustration. The credibility of governments in power—any government—is completely eroded. Distrust of “the government” becomes so widespread and its credibility so low that unsubstantiated rumors, mudslinging, and suspicion about their motives assume a momentum of their own.

In the last six to seven years, the media, taking advantage of this widespread lack of government credibility, has assumed the role of the opposition party and accentuated the negativism. Markets, on the other hand, function on sentiment. If market participants have confidence in the government and its institutions, the overall result is stability in the markets, but if there is lack of credibility, an air of uncertainty, and a crisis of confidence, markets are apt to become nervous and volatile. However sound a government's policies may be, in circumstances of low credibility and mistrust, private investment is hampered and the economy suffers. Credibility is a fragile thing, and once lost takes a long time to re-establish.

A society with a positive attitude gives enterprises far greater freedom to compete than a society that perceives businesses as unethical or in cahoots with the government for their personal gains. Patronage and cronyism in the form of licenses, tariff concessions, and tax exemptions for a select few, the sale of public assets to rulers' favorites, and appointments to key public offices not on merit but on the basis of loyalty, affiliation, and friendship sharpen the negative sentiment. This is why, for instance, the program to privatize public enterprises—economically desirable and badly needed—has almost been abandoned ever since the perception, right or wrong, gained currency that Pakistan Steel Mills was being sold for too low a price to cronies of the government.

Alesina's survey of the literature (1997) suggests that, when we compare the values of political-institutional variables for the ten slowest and the ten fastest growing economies in the study's sample, the slowest countries tend to be more ethnically fractionalized and more politically unstable. They also tend to have much poorer indicators for the rule of law and institutional quality, a much higher black market premium, and greater income inequality. Alesina, Özler, Roubini, and Swagel (1996) find that political instability, government fragility (the frequency of government changes and coup d'états), and sociopolitical instability (political assassinations, riots, and revolutions) have a negative effect on growth. Pakistan fits this model quite well, given that episodes of frequent changes in government and socioeconomic instability have been associated with low growth and macroeconomic turbulence.

Rationale for reforms

It must be conceded at the outset that the time horizon for the consummation and impact of the proposed reforms is long-term, i.e., the next 10 to 20

years, and not immediate- or short-term. The rationale for this plan should, therefore, be viewed in the context of a long-term vision for Pakistan, the external environment in which it operates as a country, lessons learnt from other successful developing countries, diagnostic studies including public opinion polls on government performance in Pakistan, and the public's growing expectations overall.

Long-term vision and external environment

The New Economic Growth Framework prepared by the Planning Commission (2011) envisages Pakistan as a developed, industrialized, just, and prosperous nation by the end of the next 20–25 years. This vision is to be achieved through rapid and sustainable development in a resource-constrained economy by deploying knowledge inputs. The framework proposes that the transition for achieving this objective be managed by intelligently and efficiently exploiting globalization through competitiveness, and that Pakistan should, therefore, opt to become an active participant in the globalized economy for goods, labor, capital, technology, and services.

This option has serious consequences for the future of governance in the country. The imperative of integrating Pakistan in the larger global economy places certain essential demands on the country, one of which is that state structures and the instruments of government are redesigned to use knowledge and technology inputs to create opportunities for increased productivity and competitiveness within the constraints imposed by dwindling resources. Among the world's 180 nations which are Pakistan's competitors for market share in an expanding global economy, only those will survive that remain agile and can adapt to changing demand patterns, supply value chains, and technological upgrades. The main actors in a country that, together, impinge on its competitiveness and productivity are the state, market, and civil society. Their respective roles and interrelationships have to be, therefore, redefined and recalibrated.

Structural economic reforms to improve Pakistan's prospects for competing in the globalized economy require stable, functioning, competent, and responsive institutions for implementation. Unfortunately, at present, the country is caught in a difficult logjam. While economic reforms create displacements in the transition period, strong working institutions provide the resources and armory to withstand these shocks, thus minimizing the costs of adjustment and maximizing the

benefits to the poor and marginalized. The urgency of building strong institutions to implement these structural reforms is, therefore, quite obvious.

Following this logical sequence, the state's various organs—the executive, judiciary, and legislature—need to be assessed and evaluated to determine whether they are capable of meeting this new challenge or if they need to be revamped to develop new response capacities.

Lessons from other developing countries

The role and limitations of governments in various types of developing countries have been analyzed at great length. The majority view is that governments should do what they are capable of doing better than in the past. A strong and effective government is needed rather than weak and expansive government. An all-encompassing government is too cumbersome and centralized with overlapping and competing interests, making it inefficient and unresponsive to the emerging needs of the public. Civil servants are poorly trained, sub-optimally utilized, unmotivated, and indifferent. Development economists have argued that effective government in developing countries was not only necessary due to abundant market failures, but also possibly even sufficient to achieve economic development.

A number of developing countries have successfully reformed their governments and tackled market failures as well as achieved rapid economic development. How have they managed to transform expansive governments into effective, well-focused, well-functioning, and result-oriented ones? Interpreting the success of East Asian countries, such as the newly industrializing countries, Asian countries, and China is a matter for serious debate. Neoclassical economists attribute their success to market-friendly, private sector-led growth and openness to trade, with their governments providing macroeconomic stability, security of person and property, and infrastructure services, while promoting research and development, and investing in education, health, science, and technical training. Others such as Wade (1990) and Amsden (1989) argue that an interventionist state that steered a proactive industrial policy and picked its winners was largely responsible for these countries' success.

By now, there is some consensus that, if labels and ideologies are set aside, the evidence suggests that relatively successful countries have tended to promote competition and avoid monopolies or oligopolies; ensured a level

playing field and the entry of newcomers in the market; made privatized firms face competition; exercised regulatory vigilance (but eliminated inefficient and outdated regulations); opened up the economy to international trade; provided the way for judicial independence; provided dispute resolution mechanisms and enforced contracts; promoted transparency; and observed the rule of law. In short, their governments have provided an enabling environment for private businesses in which to carry out the production, distribution, and trade of goods and services without indulging directly in these activities.

The other piece of empirical evidence that is beginning to gain wide acceptance is that decentralization and greater devolution of power, authority, and resources to lower tiers of government also makes a difference through better allocation and the more efficient utilization of resources. Devolution also helps in moving toward a relatively more egalitarian outcome in the provision of basic public goods services.

Another effective way to promote human development and deliver social services to poor segments of the population is through the wider participation of the private sector, communities, and civil society organizations. Participation, besides being considered a means to further human capabilities *à la Sen*, is also a way of choosing the right kind of projects and ensuring that development funds are used more judiciously. Many countries successfully use private–public partnerships and public–nongovernment organization (NGO) or civil society organization partnerships to provide infrastructure, education, health, and other social services. These partnerships not only supplement limited public resources and counter governance issues through monitoring, evaluation, and corrective actions, but they also enable local communities to participate in decision-making through their organizations. The reduced efficiency of public sector expenditure can also be corrected through such partnerships.

Changes in the Pakistani scene

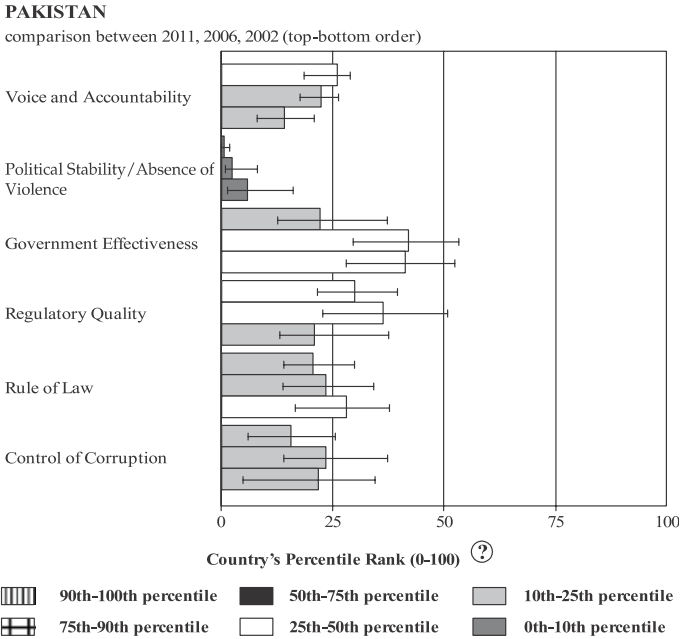
In addition to historical reasons, the changes that have taken place in Pakistan over the last several years and that are also likely to affect the functioning of the government in the future, clearly point to the need for reform. There are at least seven new developments that warrant serious consideration.

First, it is becoming increasingly apparent that the benefits of economic growth have not been distributed equitably among lower-income groups, backward

districts, rural areas, and women. Although the government has used the channels of devolution and targeted poverty interventions to spread these benefits, the results have been less than satisfactory. Almost all studies point out that governance institutions, i.e., the governmental machinery at the federal, provincial, and local level, have become largely dysfunctional due to protracted neglect.

Almost all comparative country rankings, whether originating from the World Bank’s governance indicators, the World Economic Forum’s Global Competitiveness Report, or other think-tanks and institutions have consistently rated Pakistan fairly low in terms of public sector management, institutions, and governance. The World Bank has been compiling governance indicators for its member countries for the last 15 years. These include (i) voice and accountability, (ii) political stability, (iii) government effectiveness, (iv) regulatory burden, (v) rule of law, and (vi) corruption. The World Bank’s (2012b) governance indicators for Pakistan are reproduced in Figure 9.1.

Figure 9.1: Pakistan’s ranking in governance indicators



Source: Kaufmann, Kraay, and Mastruzzi (2010).

Along with its low human development indicators, this weak institutional dimension makes the task of poverty reduction, income distribution, and delivery of public services considerably difficult. The impact of good economic policies on the lower strata of Pakistan's society, particularly those who are illiterate and not well connected, is thus muted. The widespread hue and cry about the absence of the trickle-down effect of good economic policies is a manifestation of the country's dysfunctional public sector governance. Government institutions have to be strengthened to meet this challenge.

Second, the government's responsibilities in the field of owning, managing, and operating public enterprises and corporations have undergone a significant change both in thinking as well as action over the last 16 years. A large number of government-owned corporations, businesses, industrial units, banks and financial institutions, and service providers have either been privatized or ought to be privatized. This will reduce the burden on the administrative apparatus at all levels of the government. Shedding these activities also has serious implications for the oversight function of ministries/departments in the post-privatization period.

Third, the devolution of administrative, operational, and financial powers to the provincial governments has introduced a completely new element to the governance structure that will require suitable modifications in other tiers of the government. The federal government has already transferred all the functions in the Constitution's concurrent list to the provincial governments. The actual and projected increase in financial resources to the provinces under the National Finance Commission awards has significantly expanded the fiscal space available to them for directly carrying out essential public services. However, the devolution remains incomplete because the next logical step of reallocating administrative resources and strengthening the local government's capacity has not yet been taken; moreover, it has met fierce resistance from provincial ministers and legislators. The unfortunate past association of local government systems with military regimes has given rise to much apprehension, especially in the multi-ethnic provinces of Sindh and Balochistan.

Fourth, the unbundling of the policy, regulatory, and operational responsibilities under these functions remains incomplete, uneven, and mixed across the ministries and needs to be firmly rooted. Addressing the lack of competence and adequate knowledge of regulatory functions will require

the development of expertise in this field as well as in policy formulation, implementation, and evaluation. The experience with the regulatory agencies has not been very encouraging and has led to unproductive confrontation between the ministries and regulators. The thrust has been on grabbing power rather than finding solutions to the problems faced by the industry or consumers.

Fifth, some limited success has been achieved by fostering private–public partnerships in infrastructure, education, and health, but these partnerships can only be nurtured if the government departments and ministries concerned have adequate skills to design concession agreements, build-operate-transfer (BOT) or contractual arrangements, monitoring and evaluation tools, and legal recourse to enforce the obligations and stipulations agreed to by their private sector partners. Similarly, NGOs and community organizations such as the Rural Support Program have been actively engaged in public service delivery in the education, health, and water supply. The government departments and ministries concerned need to be reconfigured to develop their capacity to design and operate such partnerships.

Sixth, there is a great deal of uncertainty and anxiety among members of the civil services concerning their career prospects. Specialists serving in ex-cadre jobs such as scientists, engineers, medical doctors, and accountants, are demoralized because they have limited opportunities for career progression. They also feel that they are not treated at par with cadre service officers in matters of promotion and advancement.

Seventh, the switchover from manual to automated processes and the government's commitment to move toward e-government will require an assessment of the skill mix and training requirements of existing and future civil servants throughout the hierarchy. E-government will itself flatten the hierarchical texture and expose redundancies in the system. At the same time, it will involve the need for basic computer literacy at all levels and grades, digital archiving, storage, and document retrieval. Consequently, only a few clerical and subordinate staff positions can be utilized in the government's future organization.

Expectations-delivery gap

South Asia's recent political history clearly points to the failure of successive governments to meet the expectations of the majority of their population. This

trend has become even more acute in the last decade or so with the advent and spread of the electronic media. Although all the countries in the region have performed well and attained respectable rates of economic growth, every incumbent government has been voted out of power at the time of election. The benefits of growth may have filtered down but their speed and distribution have not satisfied the electorate.

The information and communication technology (ICT) revolution that has touched even remote areas in these countries has tended to exaggerate the disparities and led to higher expectations from the government. On one hand, the capacity of government institutions responsible for the delivery of public goods and services has been rapidly eroded, while the large variety of goods and services available and advertised by the electronic media has whetted the appetite of the poor. These low-income groups believe that the means through which they can acquire these goods and services for themselves and their children is via public sector employment, education and training, and government transfers.

In practice, the allocation of public goods, services, employment, and subsidies is rationed by access to government functionaries or the payment of bribes. Since these groups have neither the access nor the money to pay bribes, they suffer from a relative sense of deprivation while observing the influential and well-to-do segments of the population preempt and enjoy the benefits of government jobs, contracts, permits, and land, etc. Large untaxed incomes also accrue to the same privileged groups and individuals. The resentment of this poor and unconnected population is conveyed through the only instrument they possess, i.e., their vote at the time of an election. This gap between expectations and delivery is also one of Pakistan's biggest challenges.

Popular perceptions expressed in public opinion polls, media commentaries, academic forums, and the observations of politicians and civil society actors all convey, with a few honorable exceptions, a negative image of civil servants in Pakistan and a high level of dissatisfaction with the functioning of ministries and other government bodies at different tiers of the government. These perceptions are in contrast to civil servants' views, who see themselves as poorly paid, highly demoralized, and under immense stress. They feel they have been unfairly treated by their political masters and are unappreciated by the public. Empirical studies and casual observations show that the root cause of this disillusionment can be traced to the structural, procedural, and

motivational deficiencies in the overall system of governance. Any attempts to treat the symptoms in an isolated manner without coming to grips with the root causes will be counterproductive. A proposed reform package should be comprehensive with a clear blueprint but the introduction of each set of reforms could be phased and sequenced.

Nowhere is this gap more glaring than in the government's failure to protect the lives and property of its citizens. Acts of terrorism, violence, and extremism have become so commonplace over the last several years that the writ of the state does not appear to exist any longer. State functionaries are either reluctant or incapable of taking a serious action against perpetrators and arrests and apprehensions are rare. Known perpetrators are seldom convicted by the courts because eye-witnesses are liable to retract their statements for fear of retribution by those accused. Investigators and judges avoid getting involved in such cases. Under these circumstances, the cost of crime is virtually zero while the gains are enormous and almost guaranteed.

In light of this changing landscape, the role and functions of the government need to be redefined. The government has to: (i) provide external and internal security for its people, (ii) collect taxes, (iii) manage public finances, (iv) conduct foreign affairs, (v) maintain a stable macroeconomic environment including a sound financial system, (vi) make available basic infrastructure facilities, (vii) develop an education and training system capable of supplying skilled human resources, (viii) encourage and undertake research and development, and (ix) ensure an enabling regulatory framework for private sector and community participation in development. The plan for future restructuring should, therefore, be guided by these functions.

Proposed reform agenda

The governance reform agenda for the future should, therefore, be designed to restructure and revitalize government institutions to deliver the core functions of the state, i.e., the provision of basic services—education, health, water and sanitation, and security—to common citizens effectively and efficiently, and to promote inclusive markets through which all citizens have an equal opportunity to participate in the economy. The restructuring should lower transaction costs and provide access without friction by curtailing the arbitrary exercise of discretionary powers; reducing over-taxation; minimizing corruption, cronyism,

and collusion; and ensuring public order and security of life and property. The proposed reforms should take place along the lines discussed below.

Fostering the private sector

To achieve sustained economic growth, a competitive private sector has to be nurtured and relied on. A major area of reforms in Pakistan should, therefore, be the creation of space for the growth of new entrants in the private sector by removing state-created constraints to their entry and operation. Despite the pursuit of liberalization, deregulation, de-licensing, and disinvestment policies over the last 20 years, the overbearing burden of government interventions in the business lifecycle looms large. New businesses still face dire problems in acquiring, titling, pricing, transferring, and possessing land; obtaining no-objection certificates from various agencies; acquiring water and gas connections, sewerage facilities, a reliable electricity supply, and access roads; and securing finances for greenfield projects or new enterprises using emerging technologies. The considerable powers of petty inspectors from various departments/agencies can either make or break a business.

The growing trend toward the “informalization” of the economy, particularly by small and medium enterprises, is testimony to the still-dominant nature of the government. Over 96 per cent of the establishments reported in the economic census for 2005 fall in this category. The attitude of middle and lower government functionaries in the provinces and districts toward private business remains ambivalent—they may be inclined to harass a business to extract pecuniary and nonpecuniary benefits for themselves or simply remain distrustful, hostile, or hesitant toward private entrepreneurs. The involvement of multiple agencies, the need for too many clearances, and avoidable delays at every level raise transaction costs for new entrants. Unless the government facilitates firm entry and exit, competitive forces will remain at bay and the collusive and monopolistic practices of large businesses will continue to hurt consumers and common citizens.

Federal and provincial restructuring

Federal-provincial interaction in formulating national policy matters has no formal anchor after the 18th Amendment. The National Council of Ministers,

consisting of federal and provincial ministers working under the aegis of the Council for Common Interests should formulate national policies for the transferred subjects. The federal government should remain responsible for international relations and interprovincial coordination in these subjects.

In view of the fresh challenges that face the country, we propose that the following new ministries be set up within the revised structure by merging some existing ministries and replacing others: ministries for energy, technology development, regulatory affairs, human resource development, social protection, infrastructure development, and special and underdeveloped areas. The existing autonomous bodies and attached departments, corporations, companies, councils, institutes, and subordinate offices at the federal government level should either be retained, regrouped, merged, privatized, wound up, liquidated, or where appropriate, transferred to the provinces.

Civil service reforms

A lingering legacy that has contributed to the sub-optimal utilization of civil servants and demoralized the majority among them has to do with the existence of superior and nonsuperior services. The concept of the superior services should be discarded so that all services at the national, federal, and provincial levels are considered equal. Their terms and conditions in matters of recruitment, promotion, career progression, and compensation should be similar. Specialists and professionals working in ex-cadre positions should be brought at par with the cadre services in terms of promotion and career advancement.

To provide equality of opportunity to all deserving civil servants, a National Executive Service (NES) and Provincial Executive Services (PES) should be constituted to staff all federal and provincial secretarial positions. Under this reform, any Grade 19 (or equivalent) officer serving the government at the federal or provincial level or autonomous body level and other eligible professionals will be allowed to sit the competitive examination held by the federal or provincial Public Service Commission. Those who qualify will be selected for the NES. To redress the grievances of the smaller provinces concerning their lack of representation at higher decision-making levels, provincial and regional quotas will be introduced for entry to the NES. The NES will comprise two streams—general and economic—thus promoting some limited specialization among civil servants.

Given that most government interaction with ordinary citizens takes place at the district level and that the present stock of functionaries are ill-trained, poorly paid, unhelpful, and discourteous individuals with arbitrary powers, a new set-up is required at the district level. A District Service should be constituted for each district government. All employees serving in Grades 1–16 will become part of the District Service and serve in districts of their choice throughout their careers. Direct recruitment to Grades 11 and above will be made on merit through the provincial Public Service Commission. The District Service will consist of two cadres—generalist and technical. This will minimize political pressure for transfers and postings since two-thirds of the 2 million employees working in the provinces will remain under their respective district governments.

Training in technical and soft skills will be made mandatory for all members of the District Services. The district governments will need to be strengthened by establishing administrative linkages between union councils, town committees/tehsil councils, and district governments. The office of executive magistrate will need to be revived. In case the system of district nazims is revived, which ought to be, law and order, disaster management, and land record management should be removed from the nazims' purview and transferred to the deputy commissioners. The office of deputy commissioner should be transformed into that of a district chief operating officer with an enlarged scope of duties. The devolution of development activities, projects, programs, and departments was working satisfactorily and should have remained with the district governments.

All-Pakistan services should consist of the proposed NES, a Pakistan Administrative Service (presently the District Management Group), and the Police Service of Pakistan. The federal services should comprise the Pakistan Foreign Service, Pakistan Audit and Accounts Service, and Pakistan Taxation Service. Direct recruitment to other existing services through the Central Superior Services examination should be discontinued in a phased manner. The proposed provincial services will include the PES, Provincial Management Service, Provincial Technical Services, and Provincial Judicial Service. All direct recruitment to positions at Grade 17 and above will be merit-based with due representation for regional and women's quotas. Recruitment in all cases will be made only by the federal and provincial Public Service Commissions through an open, transparent, competitive examination and interview process.

One of the main weaknesses of the present system is that civil servants who enter the service at a young age are not compelled to upgrade their skills or knowledge. Career advancement is divorced from skill and knowledge acquisition and application. Promotion and placement policies should be aimed at rewarding those who perform well and demonstrate potential for shouldering higher responsibilities. The promotion policy should lay down criteria for each level including the weight given to the performance evaluation report (PER), training and skills acquisition, rotation of assignments, diversity of experience, and complexity of jobs. Training for all civil servants at all levels—cadre or ex-cadre—should be mandatory and linked explicitly to promotion to the next grade. For this purpose, the existing training institutions should be made autonomous and provided the requisite human and professional training for engineers, scientists, accountants, health experts, educators, and economists, while new institutions could be established to fill any gaps.

A fair and equitable compensation system cannot work well unless it is accompanied by an objective performance appraisal system. The current system of annual confidential reports has outlived its utility and should be replaced by an open PER system in which goals and targets are agreed on at the beginning of the year, key performance indicators to measure achievements are established, and an open discussion is held between the appraisee and supervisor to identify further development needs.

A mid-year review should be held to assess progress and provide feedback, and an annual evaluation held jointly through a discussion between the appraisee and his/her supervisor. The appraisee can then sign the report or appeal to the supervisor next in line against his/her immediate supervisor's findings if need be. This way, the PER will be used mostly as a tool for the development of the individual to meet the needs of the organization. The system should focus on poor or underperformers in particular to facilitate them in achieving better performance outcomes.

About 100 key public sector institutions in the country such as Pakistan International Airlines, the Water and Power Development Authority, Pakistan State Oil, the Oil and Gas Development Company, and Pakistan Railways have a critical impact on economic and social outcomes. There have been serious questions about the appointment of these organizations' chief executives. Even when competent individuals have been appointed, their detractors or other

aspirants have carried out malicious media campaigns and virtually paralyzed the chief executive from making effective decisions.

To overcome this tendency, the governance structure has to be made more transparent and merit-based so that the right candidate is chosen as chief executive of an organization through a well laid-out process. A special selection board should screen and interview all candidates and prepare a shortlist for consideration by the Prime Minister. This process will minimize arbitrary use of discretionary powers in appointments, attract capable candidates for these key jobs, and discourage the trend of making frivolous charges against the selected candidates.

Corruption among the majority of civil servants cannot be curbed by moral persuasion but instead by providing them with adequate compensation packages. The present compensation structure under which officers are grossly underpaid in relation to their comparators and do not earn a decent living wage has given rise to poor morale and a sense of professional apathy. None of the reforms proposed above will succeed unless the compensation package offered to the officer cadre is substantially upgraded.

To keep the government's wage bill within the limits of the fiscal deficit, we propose imposing a freeze on fresh recruitment to lower grades, except for teachers, health workers, and police officers. Although this is likely to prove a politically difficult decision, it should also be remembered that high fiscal deficits result in high rates of inflation that undermine popular support for the political party in power. After all, government employment accounts for less than 6 per cent of total employment in the country, and makeshift employment in the public sector will not satisfy voters.

Information and communication technology

The world is moving swiftly toward ICT, which benefits the lives of common citizens. E-government tools and developments in digital technology offer promising prospects for improving government efficiency, reducing transaction costs, making ordinary citizens' lives more convenient, introducing transparency and reducing discretionary powers and corruption, and tracking performance and output. Despite the potentially powerful impact of e-government, it has met with fierce resistance and contrived delays in adoption. A modest beginning

has been made in an ad hoc manner but the process still lacks a concerted effort steered by the top leadership in the federal and provincial governments.

Without serious attention from the country's leadership, the pace will remain uneven, the impact will be marginal, and the opportunities foregone will be tremendous. Training current government employees in e-filing, messaging, document sharing and retrieval, reporting, and archiving will smooth the transition from a paper-based environment. The transparency achieved through e-government will also help curb corruption and the exercise of arbitrary discretionary powers by government functionaries.

Government rules and regulations

Another public grievance is the uneven and discriminatory application of government rules, regulations, and instructions. The limited number of lower functionaries familiar with these rules—of which most other people are unaware—tend to exploit their power by hoarding this knowledge for their own benefit. Multiple rules exist on the same subject where no systematic exercise has been undertaken to remove them. All such instances of multiple rules, regulations, instructions, and circulars in manuals should be removed, updated, and compiled in the form of a concise and accurate manual. The establishment and finance manuals deserve priority attention. After being updated and revised, these manuals should then be uploaded to the Government of Pakistan's websites so that they are accessible to the public.

One reason for the inefficient disposal of government business is the concentration of powers in the hands of the finance and law ministries, the Establishment Division, and Planning Commission. The Ministry of Finance had agreed to replace the outdated concept of a financial advisory organization with a chief financial and accounts officer in each ministry directly answerable to the principal accounting officer, who is the secretary of the division. The full powers for reappropriation within the approved budget should be delegated to the secretary of the division, who can further delegate some financial powers to the head of executive departments or other officers in the ministry.

Ministries/divisions should bear full responsibility and accountability for their actions, achievements, and failures, and thus exercise their power to deploy financial and human resources in the most effective manner possible. The line

ministries should be fully empowered to spend their budgetary allocations subject to the rules of the Public Procurement Regulatory Authority, with internal controls and audits duly carried out and the support ministries ensuring that the rules and procedures are complied with.

Education, health, the police, and land administration

In addition to these medium- and long-term reforms in governance structure, processes, and policies, four areas that affect people's daily lives the most—education, health, the police, and land administration—should also be reformed as discussed below.

Governance reforms in education are badly needed to uplift the state of literacy in Pakistan. These reforms should begin with a clear division of responsibilities between the federal, provincial, and district governments in service delivery. The federal government should focus on higher education financing, regulations and standards, and curricula, while the provincial governments are responsible for college, technical, and vocational education. The district governments should have exclusive power to manage and operate primary and secondary education up to matriculation level. Examination reforms should be carried out to bring the standards of various boards up to par. The management and teaching cadres should be separated and career paths for the two cadres should not discriminate against teachers.

A district education board should be established in each district to bring about better coordination and ensure uniform standards for public, private, and not-for-profit schools. Each board should consist of eminent, reputable persons with the district education officer as its secretary. The board will be assisted by a school management committee empowered to oversee the school's functioning. Head teachers will have more administrative authority in running schools and disciplining teachers, while arranging periodic school inspections.

The management and teaching cadres should be separated, and career paths for the two cadres should not discriminate against teachers. Endowments funds at the provincial government level should be augmented every year out of the budget to fund talented students to pursue their education at the country's best institutions. Student vouchers or stipends should be available for meritorious children from poor families to attend private schools of their choice. Private–

public partnerships in the form of “adopt-a-school” programs should be encouraged and given incentives. Female teachers should be employed in primary schools as far as possible to promote girls’ enrollment.

Most of the problems in healthcare delivery arise not from financial constraints but due to poor management practices. The health management cadre should, therefore, be separated from teaching and service providers in each province and the federal government. Only those with the necessary aptitude should be recruited as health managers and trained at the national and provincial health academies. District, teaching, and other specialized hospitals should have their own independent board of directors and be given autonomy in administrative, financial, legal, and human resource matters. Health human resources and development, particularly in the nursing and paramedical professions, require urgent attention to improve their quality and volume. The health regulatory framework should be made more effective and also set up at the provincial level.

There is near-consensus that law and order and security problems have worsened in recent years due to the inefficiency, corruption, and politicization of the police force. The original Police Order 2002 was compromised by amendments that weakened the functioning and accountability of the police. Legislative amendments and revised disciplinary rules are needed to allow police officers to perform their duties in accordance with the Police Order and to remove their discretionary powers. The reversal to the earlier Police Act after 2008 has only aggravated the situation by highly politicizing the police. The police force should not fall under the purview of the Civil Servants Act (except those belonging to the Police Service of Pakistan) since it impedes internal accountability.

Disciplinary rules should be framed under the Police Order. Provincial police offices should be organized along functional lines and their powers delegated according to the Police Order. Police stations should be merged, upgraded, and headed by directly recruited Grade 17 officers with full responsibility for watch and ward, investigation, and operations. The police force’s training, allowances, mobility, logistics support, board and lodging, medical facilities, and welfare fall short of their requirements and create demoralization; these should be reviewed and strengthened. The traffic police in all large cities should be reorganized to operate on the lines of the motorway police.

Land records as maintained by *patwaris* are the largest source of disputes and litigation in the country. Attempts to create a digital database of land records have remained half-hearted except in Punjab where some progress has been made. Land revenue assessment and collection, adjudication, and dispute resolution should remain the responsibility of the district governments but the maintenance and update of land records should be removed from their purview and placed directly under the Board of Revenue. *Patwaris* should be replaced by revenue assistants at BS 11 and above and recruited through the provincial Public Service Commissions. The Colonization of Government Lands Act 1912 should be revised to ensure better and more transparent allocation and utilization of state land.

Accountability of government bodies

Another area that needs to be addressed is the absence of effective accountability for results. There is both too much and too little accountability of those involved in public affairs in Pakistan. On one hand, the plethora of laws and institutions such as anti-corruption bureaus, the National Accountability Bureau (NAB), auditor general's reports, public accounts committees of the legislature, parliamentary oversight, judicial activism, and the ombudsman system have created an atmosphere of fear and inertia, and hindered decision-making among civil servants. On the other hand, instances of rampant corruption, malpractices, nepotism and favoritism, and waste and inefficiency are common folklore in the country's administrative culture.

An over-emphasis on ritualistic compliance with procedures, rules, and form has taken the place of substantive concern with results and outcomes for welfare and justice. The NAB should be an independent body reporting directly to the Prime Minister, and chaired by a candidate selected jointly by the Prime Minister and leader of the opposition on the basis of competence, integrity, and independence. The investigation and prosecution of white-collar financial crimes and corruption should be entrusted to the NAB. Accountability courts should be staffed by honest and impartial judges. The provincial anti-corruption establishments should also be reorganized on the lines of NAB.

Introducing transparency by simplifying, codifying, and upgrading rules and regulations and disseminating them widely through e-governance tools such as a dynamic website, information kiosks, and online access to government

functionaries would help enforce internal accountability standards. At the same time, this would make it easier for citizens to carry out hassle-free transactions. Strong pressure from organized civil society advocacy groups in specific sectors or action by the media, political parties, the private sector, and think-tanks can also compel government departments and ministries to become more accountable for the results they produce.

The governance agenda outlined above should not be considered a technocratic exercise; it is essentially a political one that takes into account the existing power relationships in which the polity is rooted. Balancing the diverse interests of the various stakeholders concerned will involve many politically tough choices, which cannot be made by technocrats.

The sustainability of these reforms requires broad consultation, consensus building, and communication to articulate a long-term vision. People must see beyond the immediate horizon and buy into future changes. Concerns, criticism, and skepticism should be addressed. The scope, phasing, timing, implementation strategies, and mitigation measures involving those who will lose as a result of the reforms should be widely discussed and debated. If things do not proceed the way they were conceptualized, corrective action should be taken in the light of the feedback received. Citizens' charters, surveys and report cards, panels, and focus groups should be used as instruments to collect regular feedback on the impact of reforms on different segments of society.

If implemented earnestly, these recommendations will generate a much-needed sense of confidence among ordinary citizens in the country, relieve undue pressure on politicians to chase officers from various departments, and yield dividends to the political parties in power in the federal and provincial governments.

Conclusion

Our survey of Pakistan's governance structure and institutional infrastructure amply confirms the validity of the theoretical literature and empirical evidence on governance in developing countries. The elitist capture of the state, excessive centralization of power both by elected and military rulers, chronic political instability, politicization of the civil services, and, until recently, collusion between the power structures—the politicians, the army, and the judiciary—have reinforced the tendency toward institutional decay and huge governance deficits.

Conflict between these power structures is not rooted in a benign balancing act for the collective good of society, but in the assertion of authority by different actors advancing their own parochial interests. Unlike other societies, the cost that Pakistan is paying for poor governance and institutional decay is relatively high and poses an existential threat to the country.

This agenda for reforms draws on Pakistan's experience, lessons drawn from other successful examples of developing countries, the changing nature of Pakistan's sociopolitical landscape, best practices, and characteristics peculiar to the country's situation. It forms a logical sequence to the 18th Amendment to the Constitution and the recent National Finance Commission award. It is now essential to realize that the value chain can be completed only by taking this reform agenda to culmination over the next five years.

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Benefiting from Foreign Direct Investment

Khalil Hamdani*

Introduction

It is commonly held that foreign direct investment (FDI) has played an insignificant role in Pakistan's economic development.¹ Certainly, the aggregate data supports this view: FDI inflows have accounted for less than 1 per cent of gross domestic product (GDP) in most of Pakistan's 60-plus years, and less than 4 per cent in the peak year of 2007 when the country ranked among the 10 largest recipients of FDI in Asia.² At the same time, FDI has been more important in Pakistan than in India: annual inflows have been larger in most years from 1947 to 1993, and even now, while our larger neighbor receives four times more inflows, the share of FDI in capital formation is three times as large in Pakistan. Such comparison, while superficial, suggests the relevance of FDI.

This chapter considers the role that FDI can play in moving the economy forward by improving its technological base and placing production on a more dynamic growth path, as other countries have done with great success. It begins

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¹ See, for example, A. H. Khan (1997). Even advocates of market-led growth, such as Papanek (1991), have neglected the role of FDI.

² The top ten Asian recipients of FDI were China, Hong Kong, Singapore, India, Thailand, Malaysia, Taiwan, Indonesia, Vietnam, and Pakistan (see United Nations Conference on Trade and Development [UNCTAD], 2008, p. 48).

with a brief history to remind readers that Pakistan's economy has always been open to foreign investment, even in the heyday of nationalization. Next, it looks at the particular type of investment and technological profile that has evolved: weighty, but largely insular, statist, and low on competitiveness. Finally, the chapter assesses the potential for a more ambitious industrial trajectory: private-sector-led, fueled by FDI, and supported by policies and institutions that encourage technological deepening.

The course of Foreign Direct Investment (FDI) in Pakistan

Foreign companies have operated in Pakistan since even before independence. Standard Chartered Bank claims a heritage of over 140 years, to operations set up in Karachi in 1863. Shell Petroleum dates its operations back to 1903 and Imperial Tobacco to 1905. Siemens opened an office in Lahore in 1922 and Imperial Chemical Industries (ICI) set up a soda ash manufacturing facility in Khewra in 1944.

Pakistan's formative years were a particularly dynamic period. Economic growth was driven by private investment. The government's policy of import substitution provided a profitable environment for Muslim migrant families from pre-Partition India with capital to invest and set up their businesses anew.³ Many were motivated by patriotic zeal. A vibrant domestic private sector, in turn, attracted foreign participation.

FDI was initially permitted in manufacturing, and large investments had to be in the form of joint stock companies with local equity participation.⁴ One of the first foreign investments in the new country was a vegetable oil factory built by Lever Brothers in Rahimyar Khan in 1948; today, Unilever is the largest consumer goods manufacturer. In pharmaceuticals, Glaxo Laboratories was incorporated in 1948 and is today, as GlaxoSmithKline, the largest in the industry.

Although annual FDI inflows were less than 6 per cent of total private industrial investment, FDI was crucial for the success of import substitution and infant industry policies in the post-independence period. There were a

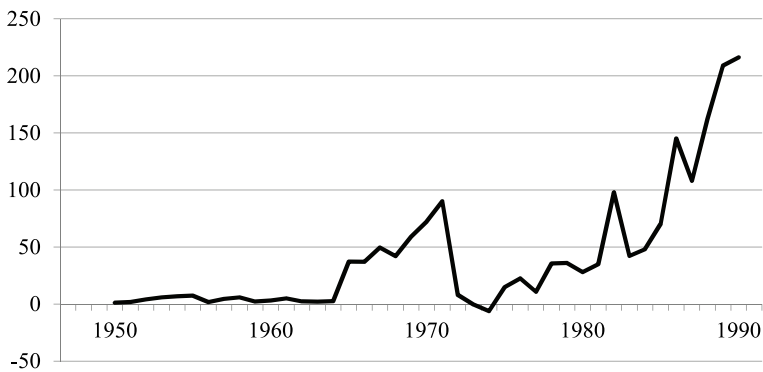
³ The import substitution experience has been widely debated; for a thoughtful review, see Noman (1991).

⁴ These restrictions were relaxed in 1976 and removed in 1997.

number of joint ventures or licensing, franchising, and distribution arrangements between startup Pakistani firms and foreign companies. Some were launched with the World Bank lending, such as the 1968 joint venture between the Dawood Group and Hercules Chemicals to manufacture fertilizer. An indicator of the welcoming attitude toward foreign investment was the bilateral investment treaty signed between Pakistan and Germany in 1959—the very first in the world.⁵

FDI inflows increased at an average annual rate of 10 per cent between 1965 and 1969 (see Figure 10.1), contributing to investment and facilitating technology transfer. During these years, manufacturing grew at 9 per cent, and total factor productivity (TFP) is estimated to have increased at 4.3 per cent (Kemal, Din, & Qadir, 2002). The relatively good performance in the country's formative years reflects not only the infancy of manufacturing and the low initial level of the technological base, but also a dynamic period of technology acquisition, application, and learning through equity and nonequity ties between domestic and foreign companies.⁶

Figure 10.1: FDI inflows in the early years (USD million)



Source: State Bank of Pakistan.

⁵ There are, today, more than 2,800 such treaties among 181 countries (see UNCTAD, 2012, p. 84).

⁶ The International Monetary Fund (2002) attributes the strong economic growth performance in the 1960s to factor accumulation rather than TFP; physical capital stock (which embodied technology) expanded at an annual average rate of 13.1 per cent in 1961–71.

This golden era of Pakistan industry lasted 25 years. A feature of the 1947–1972 expansion was the rapid rise of family businesses into industrial conglomerates,⁷ favored with privileged access to financial credit and foreign exchange for the import of industrial inputs (Amjad, 1982).⁸ These conglomerates might have propelled Pakistan into becoming a newly industrialized country, but this was not to be.

Pakistan's resort to nationalization in the 1970s was not uncommon at the time.⁹ The duration was brief (1972–77) but the impact was widespread and long lasting. A great many different units were seized.¹⁰ The focus was mainly on domestic companies, although some FDI was affected. The American Life Insurance Company (ALICO), for instance, with an investment of more than USD 36 million, was nationalized in 1972. Although nationalization was reversed as early as 1977 in the agro-processing industry, it was slow to unwind in other industries. Banking was not denationalized until 1991. To this day, a number of enterprises remain slated for denationalization for reasons not unique to Pakistan.¹¹

The main effect of nationalization on foreign investment was the lapse of nonequity arrangements and the shelving of investment proposals. Moreover, when private investment subsided, so did foreign investment: FDI inflows fell to zero in 1973, became negative in 1974, and did not recover for a full decade, until 1982 (see Figure 10.1). The Foreign Private Investment (Promotion and Protection) Act of 1976 was enacted to protect

⁷ Mahbub ul Haq, chief economist of the Planning Commission, noted in April 1968 that Pakistan's industry was owned largely by just 22 families. Equally, it could also have been noted that agriculture was concentrated among relatively few landowning families. Ownership of large farms (of more than 15 hectares of land) is concentrated among 1 per cent of all households (see Anwar, Qureshi, & Ali, 2004).

⁸ Subsidized credit and inputs were also provided in agriculture (see M. H. Khan, 1983, table 6).

⁹ Industry was also nationalized in India (banking, coal, and petroleum) and Sri Lanka (mining, petroleum, and plantations) during this period.

¹⁰ The largest 31 manufacturing firms (in cement, engineering, electrical goods, iron and steel, metals, motor vehicles, petrochemicals, and utilities) and 13 insurance companies were nationalized in 1972 (see Junejo, 1996, chapter 16, pp. 79–80).

¹¹ The experience of India is similar (see Srinivasan, 2002).

foreign investments from nationalization and expropriation, (ii) guarantee capital repatriation and the remittance of profits and dividends, and (iii) encourage investment in capital goods industries. These assurances, however, had little effect on FDI inflows.

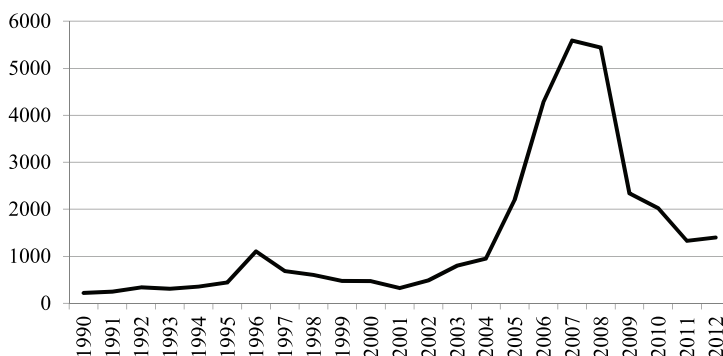
Public enterprise and public investment dominated Pakistan's industry for the next three decades (1972–2002). Although aggregate investment never quite attained its earlier levels, this period was not without expansion and growth. An unanticipated windfall after 1976 was the substantial inflow of overseas workers' remittances (see also Chapter 11 of this volume). This sustained consumption and invigorated private investment in, for example, the food industry and transport sector.

In the public sector, too, there were a variety of technology-intensive joint ventures between Pakistan's parastatals (public enterprises) and foreign companies. FDI inflows, attracted both to the private and public sectors, increased at an average annual rate of 22 per cent in the 1980s (see Figure 10.1), while manufacturing grew at 8.1 per cent, and TFP is estimated to have increased at 5.4 per cent (Kemal et al., 2002). It was an altogether remarkable recovery after the 1970s, though the worst decade was yet to come.

The Achilles' heel of public enterprise was the inability to generate sufficient earnings for reinvestment. A few publicly owned or managed enterprises flourished into conglomerates but the totality of public enterprises and nationalized banks required government support of some USD 1.7 billion annually, which proved unsustainable. The investment slowdown in the 1990s had a serious impact on growth and productivity. FDI inflows grew at an average annual rate of only 8 per cent in the 1990s in spite of policy reforms and generous incentives.

A major pickup came in 1995/96 when FDI inflows doubled in a year and exceeded USD 1 billion for the first time (see Figure 10.2). The bulk of new investments were made by some two dozen independent power producers (IPPs) lured by an overly generous incentive scheme that allowed them to acquire fuel to generate power on favorable terms and also guaranteed the purchase of the power produced at a pre-set, dollar-indexed tariff structure for 15–30 years (see Khan & Kim, 1999).

Figure 10.2: FDI inflows in recent years (USD million)



Source: UNCTAD FDI/TNC database.

The incentive scheme quickly proved unsustainable for the public sector: Pakistan State Oil (PSO) had difficulty supplying the fuel to the power producers and the Water and Power Development Authority and other utilities had difficulty purchasing the power generated. This meant significant foreign exchange outflows in excess of USD 1 billion per year well into the next decade. Trouble maintaining the set payment schedule disrupted production and built up so-called “circular debt” between the state utilities, IPPs, and PSO.¹² The larger legacy is continuing power shortages, which have adversely affected all industry.

It took another ten years before annual FDI inflows topped USD 1 billion again, in 2005—this time driven mainly by privatization in banking and telecommunications. Banking attracted FDI from the Arab states (Bahrain, Kuwait, Oman, and the UAE) and other countries (Malaysia, the Netherlands, the UK, the US, and Switzerland). These investments infused the industry with fresh capital and managerial know-how, and provided competition in the shape of new entrants such as Faysal Bank, Bank Alfalah, and Meezan Bank (Islamic banking).¹³

¹² The amount of circular debt reached PRs 382.5 billion or USD 4 billion in July 2012 (see State Bank of Pakistan, 2013, chapter 1, Box 1.1).

¹³ For a study on the improved performance of privatized banks, see Khan and Kamal (2006).

In telecommunications, Motorola (US) started the first cellular mobile service with Mobilink in 1994, which was subsequently acquired by Orascom (Egypt) in 2001. The privatization of the Pakistan Telecommunication Company Limited (PTCL) in 1991 bore fruit in 2006, with an investment by Etisalat (UAE) to acquire a 26 per cent equity share valued at USD 2.6 billion.¹⁴ China Mobile established its first overseas subsidiary, Zong, in 2008 with investment commitments of USD 1.7 billion. While these and similar investments have generated dividend payments and profit remittances overseas, the significant improvement in the availability, quality, and cost of communication services is also visible throughout the country.

The composition and sources of Foreign Direct Investment (FDI)

As a consequence of the power and privatization policies, the composition of FDI has shifted from manufacturing to services. Manufacturing was predominant in the early years—receiving 75 per cent of the FDI inflows in 1980—but from 1995 onward, the services sector has attracted significant FDI. By 2008, the share of manufacturing in the stock of FDI had fallen to 31 per cent, while the share of services had risen to 58 per cent. Three industries—utilities, financial services, and telecommunications—therefore, account for nearly half the entire FDI stock.

The extractive industries (mining and quarrying) have received a small but steady amount of FDI over the years and account for 10 per cent of the FDI stock. At present, they are foreign investors' main attraction: their share in FDI inflows rose from 13 per cent in 2008 to 34 per cent in 2010. The government is aggressively awarding concessions for oil and gas exploration. A dozen foreign companies have invested in the country, including BP and Premier Oil (UK), ENI (Italy), BHP Billiton (Australia), OMV (Austria), Petronas (Malaysia), and Petrobras (Brazil), which specifically plans to explore offshore. There were also investments from Canada, China, Hungary, Switzerland, and the UAE.

Pakistan has attracted FDI from a variety of sources, traditionally from the UK and US, followed by Switzerland, Japan, the Netherlands, and Germany. Newer sources are from Asia, Latin America, and the Middle East, with the

¹⁴ Some USD 800 million is pending in the resolution of legal and property issues.

UAE being the single largest investor during 2006–08. A third of the inward FDI stock in 2008 originated from developing countries and was diversified in a range of industries, including telecommunications, financial services, cement, textiles, construction, real estate, logistics, airlines, and oil and gas. FDI from developed countries is relatively more concentrated in manufacturing, while that from developing countries is relatively more so in services.

Pakistan also has FDI in other countries: the stock of outward FDI in 2008 was some USD 2 billion. Two-thirds (67 per cent) is located in developing countries, mostly in trade and financial services (96 per cent), and the largest destinations are the UAE (20 per cent), the UK (7 per cent), and Bangladesh (6 per cent). Pakistani investments in the latter have risen in recent years and Bangladesh is now the second most popular destination, accounting for 12 per cent of Pakistan's outward FDI in 2011.

Overall, FDI inflows averaged USD 4 billion annually during 2005–09—a level commensurate with the size of Pakistan's population (175 million) and its economy. During this period, FDI comprised 15 per cent of gross fixed capital formation compared with an average for developing countries of 12 per cent. Pakistan ranked briefly among the top ten FDI recipients in Asia.

FDI flows to Pakistan have since receded by more than half to well below USD 2 billion per year. While current levels are still respectable in the present context of the global downturn and domestic instability, Pakistan can, and should, do better.

Foreign Direct Investment (FDI) and technology

It is common to value FDI for its contribution to capital inflows but its importance lies more in its accompanying benefits. In addition to the financial capital that supplements savings and adds to investment, jobs, and economic growth, FDI brings technology, skills, technical know-how, and access to inter-industry trade and foreign markets.

As already discussed, Pakistan has been reasonably successful in attracting FDI. In more recent years, its stock of inward FDI increased at an average annual rate of 12.5 per cent between 1990 and 2009, rising from USD 1.9 billion and reaching USD 18 billion. This marks a reasonably good performance, comparable

to that of a number of developing countries that have opened up in an expansive period of worldwide FDI growth.¹⁵

Pakistan has attracted resource-seeking and, mainly, market-seeking FDI in a wide range of industries, initially in marketing as well as manufacturing and more recently in services. These investments were often undertaken with local partners; at first, some were marketing arrangements and others involved simple manufacturing. Over time, however, marketing expanded to production, and manufacturing expanded into new product lines and more complex assembly operations. In this way, FDI has facilitated the transfer of technology necessary for industrial development.

The Foreign Direct Investment (FDI)-technology-manufacturing nexus

The link between FDI and technology is visible in the manufacturing sector's growth trends. Several studies on TFP in Pakistan typically observe a cyclical pattern in growth rates.¹⁶ Kemal et al. (2002), for example, show that manufacturing grew at 6.4 per cent during 1965–2000 but varied between periods, while the physical capital stock in manufacturing grew at a steady rate at around 2 per cent, implying higher (or lower) output growth with about the same input of capital at higher (or lower) levels of productivity.¹⁷ Therefore, TFP in manufacturing followed the pattern of manufacturing, which also paralleled the trend in FDI inflows (see Figure 10.3). The broad pattern, as previously discussed, is one of:

- A dynamic 1960s, with high rates of manufacturing expansion, FDI inflow, technology acquisition, and productivity growth (all from an admittedly low base).
- A regressive 1970s, disrupted by nationalization: negative growth in FDI and slower manufacturing activity.
- A revived 1980s, with resurgent economic activity, significant FDI, and technological learning in the public and private sectors.

¹⁵ For additional background, see Hamdani (2011).

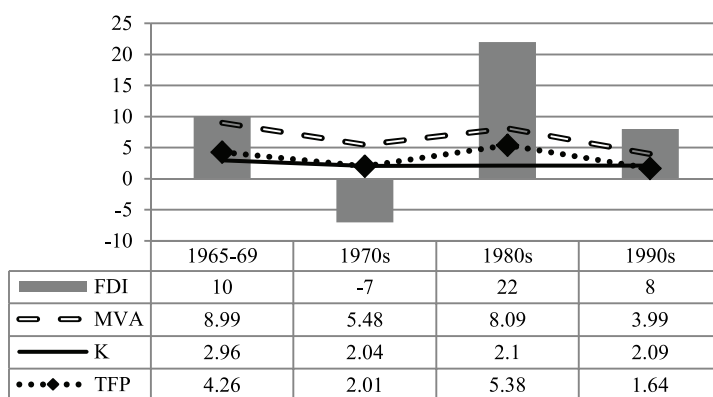
¹⁶ In addition to Kemal et al. (2002), see H. A. Pasha, Pasha, and Hyder (2002); International Monetary Fund (2002); Sabir and Ahmed (2003); Mahmood and Siddiqui (2000); and S. U. Khan (2006), among others.

¹⁷ Kemal et al. (2002) also control for other factor inputs, namely labor which grew at 0.9 per cent during 1965–2000.

- A weak 1990s, with declining public sector investment, FDI mainly in services (power), and a relatively sluggish manufacturing sector.

Overall, the trends suggest that FDI contributed to technology transfer and growth in TFP. S. U. Khan (2006) shows TFP, during 1960–2003, to be inversely related to the budget deficit and positively related to government consumption, private credit, domestic investment, and FDI.

Figure 10.3: Growth of the manufacturing sector (per cent)



Source: Growth rates of manufacturing, capital (K), and total factor productivity (TFP) as presented in Kemal et al. (2002). FDI growth rates are for aggregate inflows and based on data from the State Bank of Pakistan.

The link between FDI and technology is also visible in its industrial concentration. About a third of the entire FDI stock in Pakistan in 2008 was concentrated in manufacturing, which, when disaggregated by technology category according to the standard industrial classification,¹⁸ shows the following:

- 44 per cent of the FDI in manufacturing involved resource-based manufacturing (food, beverages, tobacco, sugar, paper, rubber, cement, and petroleum refining).

¹⁸ United Nations Industrial Development Organization [UNIDO] (2009, Annex II). The technology classification is rough: some segments in each category may involve more (or less) sophisticated skills and complex production. The same classification underpins Table 10.1.

- 4 per cent was in low-technology manufacturing (textiles, leather, ceramics, and metal products).
- 52 per cent was in medium- and high-technology industries (chemicals, basic metals, pharmaceuticals, cosmetics, fertilizers, machinery, electrical goods, electronics, and transport equipment).

In the first and last of the categories above, for resource-based and medium- and high-technology industries, managerial efficiency and technology absorption contributed to TFP gains for most years during 1998–2007 (Raheman, Afza, Qayyum, & Bodla, 2008). Overall, FDI appears to have deepened the technology base of manufacturing production.

FDI has also deepened the technology base in key services industries. In telecommunications, the economy leapfrogged from sparse, dysfunctional landlines to mobile telephony almost overnight, with 120 million subscriptions by 2012 and a million new connections a month. In finance, new technologies and managerial practice have modernized banking, reducing costs and nonperforming loans, improving customer service, and extending lending to small enterprises and other inadequately reached segments (Husain, 2005). In port management, transport costs and delays have lessened. In trade, there has been a diffusion of new methods of inventory control, supply chain management, packaging and product development, and advertisement targeting a growing urban middle class. Domestic firms have participated in the growth and spread of these services.

However, FDI has been mainly market seeking and so its benefits of technology transfer have not flowed directly into the export industries. Ahmad et al. (2003) examine the causal relationships among FDI, manufacturing, and exports over 1972–2001 and observe that causality runs from FDI to manufacturing but not from FDI to exports.¹⁹ Weiss and Lall (2004) also observe that, during 1990–2001, technological upgrading in manufacturing was slow but occurred in domestic production rather than in exports. Raheman et al. (2008) find that low technology absorption contributed to a decline in TFP in the textiles sector (a major exporter) during 1998–2007.

¹⁹ For other studies showing how FDI has had a positive impact on growth, see Shabbir and Mahmood (1992); Atique, Ahmad, and Azhar (2004); Mohey-ud-din (2007); and Rahman and Salahuddin (2010).

A general failure of the foreign manufacturing affiliates operating in Pakistan in all industries has been their reluctance to develop an export-oriented approach, even within the global network of their parent companies. This, in part, is attributable to the protected markets within which they have operated—the downside of the earlier trade and industrial policies that worked so well to attract FDI.²⁰

The dispersal of technology through Foreign Direct Investment (FDI): The benefits and constraints

The relationship between FDI and technology begins with the acquisition of technology (through capital goods and licensing) and the transfer of skills and know-how to the local workforce (through the use of technology in production). Technology transfer through FDI enhances labor productivity. Based on a 1981 sample of 25 of Pakistan's large-scale manufacturing industries, Mahmood and Hussain (1991) observe that foreign affiliates have higher labor productivity than domestic firms (of equal capital size and producing similar products). Din, Ghani, and Mahmood (2009) also note that foreign affiliates demonstrate better export performance than local firms.²¹

FDI also diffuses technology through the economy—to competitors, consumers (e.g., mobile phones), and suppliers. An example of the latter is Nestlé Milkpak's provision of technical assistance to farmers to increase animal feed stock, improve milking techniques, prevent livestock disease, and develop the cattle breed. Such improvements benefit all dairy producers and, as a result, milk production per animal (cattle/buffalo) in Pakistan is the highest in the Subcontinent.

Other benefits include the expansion of the intermediate capital goods industry: the stainless steel milk transport tanks that used to be imported are now manufactured in Pakistan through a joint venture between a Dutch company and a local manufacturer. Burki and Khan (2007) provide evidence that dairy farmers receive higher prices for their milk supplies and earn higher income; concomitantly, girls' school enrolment is higher in milk-producing districts.

²⁰ For a discussion on trade policy, see Hasan (2008).

²¹ Rehman and Wizarat (2010) find that there is significant potential for learning-by-doing in Pakistan's large-scale manufacturing sector.

The nutritional benefits for consumers are better-quality milk and other food products, as well as bottled water.

Two caveats are in order given Pakistan's limited success in reaping the benefits of FDI-driven technology dispersal. First, when technology transfer occurs outside a parent–affiliate FDI relationship as a joint venture or technical collaboration between domestic enterprises and foreign companies, greater effort is needed to develop technological capabilities. Without such effort—to move from simply using turnkey technology to learning how that technology works—the domestic enterprise remains reliant on further acquisitions for technological upgrading. In such cases, additional investments are necessary to keep up with technological progress, and a slowing down of investment means falling back technologically and consequent uncompetitiveness.²² This appears to have been the fate of many of Pakistan's public enterprises when public investment decelerated in the 1990s.

The second caveat is that the share of FDI in the country's total investment has been small—2 per cent in 1980 and 6 per cent in 2000—and so its potential contribution to improving the economy's technological base has also been small.²³ Pakistan's weak human capital base is reflected in its low levels of research and development (R&D) expenditure and personnel (Rahman et al., 2005, table 3.5) and the low intensity of technical skill creation. Moreover, technical education has few linkages with industry and there are few institutions to diffuse technical knowledge (Rahman et al., 2005). It is, therefore, not surprising that the benefits from FDI inflows and technology transfers have not permeated the economy.²⁴

One consequence is that Pakistan has a smaller manufacturing base with far less technological content than the average developing country (see Table 10.1). The manufacturing sector grew at 6.8 per cent during 2000–10,

²² There is an extensive literature on technological learning: see, for instance, Lall (1997); UNCTAD (1996); Lall and Urata (2003); and UNIDO (2005).

²³ Even in 1995/96, when FDI surged in the power industry, its share in total investment was only 14 per cent.

²⁴ The food and transport equipment industries have had some positive spillovers, as previously mentioned, but there are few backward linkages in the chemical and pharmaceutical industries.

which was average for developing countries (6.9 per cent). However, the share of manufacturing in GDP was just 19 per cent in 2009 and only 25 per cent involved medium- or high-technology production. In comparison, the share of manufacturing in GDP for developing countries as a whole was 22 per cent, 43 per cent of which consisted of medium- or high-technology manufactures. Also, while Pakistan exports relatively more manufactures than the average developing country, its manufactured exports involve relatively less medium or high technology—only 11 per cent as opposed to 56 per cent for all developing countries.²⁵

Table 10.1: Technological content of manufactures (per cent)

Year	Pakistan		Developing countries	
	1990	2000	2009	2009
Manufacturing value added to GDP	15.5	13.8	18.8	21.8
Of which medium- or high-technology	31.9	29.7	24.6	43.0
Manufactured exports in total exports	88.8	87.0	83.3	79.2
Of which medium- or high-technology	8.1	11.0	11.3	55.8

Source: UNIDO (2005, 2009, 2011).

Such comparison suggests that Pakistan is reasonably well industrialized relative to other developing countries, but that its technological base is weak, particularly for engaging in world trade. A ranking of Pakistan's industrial-technological profile places it as a distant follower to the high performers of East Asia (UNIDO, 2005, table 10.1). Pakistan should be trading twice as much as it does currently, given its economic size.²⁶ The technological sophistication of its exports and the intensity of factor use should also be improving faster and in pace with other countries (Waglé, 2011).

²⁵ The findings of Weiss and Lall (2004) are similar.

²⁶ Waglé (2011) finds that Pakistan's trade-to-GDP ratio is half its "predicted" ratio of 62 per cent when trade shares are estimated in a linear cross-country regression using 2010/11 data for 159 countries and controlling for income, market size, and distance from world markets.

Policies and prospects

As Section 2 shows, FDI in Pakistan has been largely indifferent to the ownership of the host enterprise, whether public or private. However, the country's experience also shows that FDI inflows have risen and subsided with domestic investment (usually through joint ventures and technological collaboration); and that the country's public enterprises have generally not been able to sustain high levels of investment. Looking to the future, it is clear that the economy has reached a size, complexity, and degree of openness where it must be driven largely by the private sector with public institutions providing a supportive role.

The role of the government

The government's role in industry has evolved over the years: at various times, it has been a player, a coach, and a referee. Looking to the future, the government needs to be less of a player—Pakistan's public enterprises need to be autonomous and self-sufficient or privatized—and more of a referee to ensure that markets run efficiently, laws are well administered, and policies are implemented. Moreover, the government needs to be a different type of coach—providing protection and subsidies to domestic enterprises is inferior to providing support to improve efficiency and help build up their technological infrastructure; providing incentives to foreign companies is inferior to providing a stable economic environment and world-class infrastructure. In these several ways, a range of policies and priorities need to be rethought.

It is particularly desirable that the government divest its assets in the financial sector. Pakistan's early experience and that of other countries underscores the importance of fostering a dynamic relationship between finance and industry, rooted in the private sector with public institutions ensuring appropriate regulatory compliance and fiduciary oversight. More generally, a revival of privatization—revamped and made more transparent²⁷—would significantly improve FDI prospects, as it did in 2005–07.

²⁷ During 1991–2008, 167 enterprises were privatized but the process was set back in 2006 when the Supreme Court, citing irregularities, annulled the divestment of Pakistan Steel Mills.

While support to industry is desirable, industrial policy should focus on developing technological capabilities and export competitiveness. The era of import protection and export subsidies has run its course, but there is much else that the government can do to improve conditions for production and investment.

Various studies have suggested that manufacturing efficiency is low.²⁸ A major constraint to efficiency is the high cost and poor quality of infrastructure, particularly in power, transport, and communications. The functioning of institutions—administrative, financial, and judicial—affects transaction costs and industrial efficiency. Kemal (2007) notes that Pakistan ranks low, relative to other countries, on most indicators of market efficiency. There has been some improvement in recent years, notably in the ease of doing business, but further efforts are needed, particularly to alleviate the unsatisfactory power situation.

The government could also do more to build technological capabilities. Weiss and Lall (2004) note that Pakistan's performance in skill creation has worsened since the mid-1980s and is below that of other South Asian countries. They observe that per capita R&D expenditure is low, enterprise-financed R&D is insignificant, and that Pakistan lags behind its neighbors in R&D capacity (e.g., in the per capita number of scientists, technicians, scientific and technical journals, and royalty and technical fees). To begin to rectify these shortfalls, the government should accord higher budgetary priority to the social sectors (basic education and health) and invest more in higher education.

Human resource policy and training programs should promote linkages between industry and technical education, which includes some 57 technical colleges and over 700 vocational technical institutions. Public R&D should support industrial clusters in partnership with industry associations and market leaders. The key point is for government to facilitate technological interaction and cooperation between industry, the public sector, and learning institutions nationally and internationally. Rahman et al. (2005) have proposed an ambitious

²⁸ See, for example, Mahmood and Siddiqui (2000); Burki and Khan (2005); Mahmood, Ghani, and Din (2006); Din, Ghani, and Mahmood (2007); Kemal (2007); Raheman et al. (2008); and others.

agenda for technology development that deserves serious consideration by policymakers.²⁹

An overall context of a private sector-led economy supported by policies and institutions that encourage technological upgrading provides a fertile basis for attracting and benefiting from FDI. Given Pakistan's economic size, its natural resource endowments and the experience of other comparator countries, there is every reason to expect annual FDI inflows of at least USD 10 billion, or twice the highest levels attained in the past. The official target is more modest—to attract USD 5.5 billion in FDI inflows per year.³⁰ Nevertheless, even that goal appears ambitious in the current circumstances of a protracted global downturn and domestic instability: FDI inflows have declined by 70 per cent since 2008. Arresting this decline and putting it on an upward trajectory will not be easy.

In the immediate future, Pakistan can expect to continue to receive FDI in extractive industries (which tend to be impervious to the investment climate), and also from the more resilient economies of developing Asia. Market-seeking investment is also likely, particularly in urban areas.³¹ However, these inflows are offset by an overall fall in reinvested earnings. Thus, the immediate prospects of reversing the current decline of inward FDI hinge on the government's efforts to retain investors' confidence. These include potential as well as existing investors, a number of who have been operating in Pakistan for many years. They also include domestic investors, whose actions shape the perceptions of new investors.

²⁹ The Rahman et al. (2005) report was commissioned by the Higher Education Commission, COMSTECH, and the Pakistan Institute of Development Economics, in consultation with experts and the private sector.

³⁰ The Investment Policy 2013, prepared by the Board of Investment, was approved by the federal Cabinet on 13 March 2013. It aims to increase annual FDI inflows by 40 per cent in 2013 to USD 2 billion, and then onward and upward to USD 2.5 billion in 2014, USD 2.7 billion in 2015, USD 3.25 billion in 2016, and USD 4 billion in 2017.

³¹ A feature of the current global crisis is the increased market-seeking activity of multinationals in emerging economies (so as to sustain revenue growth through worldwide sales). Examples in Pakistan include the expansion of Coca-Cola (through its affiliate in Turkey), Yamaha motorcycle assembly, Metro Cash & Carry (Germany), and similar greenfield investments from Saudi Arabia and the UAE in retail and wholesale trade, hotels, and shopping complexes.

FDI strategy, therefore, should be shaped around the country's ample natural resource endowment and its considerable market potential, with threefold efforts to (i) retain investors' confidence; (ii) target new investors; and (iii) work with existing investors, both foreign and domestic.

Retaining investor confidence

Pakistan has a fully open and progressive foreign investment policy regime as good as that of any developing country, and an incentive structure more generous than most. It also compares well on the ease of doing business, although in recent years (2009–11), the country has slipped nine positions in the global ranking, and within the Subcontinent has dropped from first to third place.³² A major foreign investor concern is political risk, and Pakistan is ranked among the five riskiest investment destinations (World Bank Group, 2009).

However, risk can be mitigated by investor confidence. A 2009 business perception survey by the Pakistan Overseas Investors' Chamber of Commerce and Industry shows that more than three quarters of its 124 respondents were willing to invest in 2010/11. Similarly, a 2010 survey by the American Business Council of Pakistan showed that 71 per cent of its participating firms had investment plans in the next 12 months, and that 41 per cent of them planned to invest USD 250,000 or more. Nevertheless, in both surveys, investors raised similar concerns: law and order, political uncertainty, energy deficiency, the high cost of operations, and infrastructure bottlenecks. In the American survey, 79 per cent were pessimistic about short-term prospects but, more importantly, 86 per cent were optimistic about long-term prospects.

American investors have reason to be positive: earnings on their equity in Pakistan amounted to 33 per cent in 2009. This return is better than in other countries that have received more investment (see Table 10.2). However, incomes appear to fluctuate from one year to the next in Pakistan: earnings on equity were only 7 per cent in 2008. A more stable and predictable business environment would align expectations closer to the higher end of actual rates of return and attract large investment inflows as in other comparator countries.

³² Pakistan scores low on starting a business, acquiring electricity, and paying taxes (see World Bank Group, 2011).

Table 10.2: Income on US direct investment, 2009

Host country	Income/FDI (%)
China	13.6
India	12.3
Indonesia	21.6
Malaysia	20.7
Pakistan	33.1
Thailand	19.0

Source: US Department of Commerce, Bureau of Economic Analysis, Survey of Current Business Online, US Direct Investment Abroad Tables (September 2011), table 14.

It is, therefore, important to solicit the industry perspective in any discussion of measures to move the economy from the short to the long term. Some business groups, such as the Pakistan Business Council, have position papers on fostering economic growth. The channels for public–private dialogue should be utilized fully to engage business involvement and support for future policies, thereby sustaining investor confidence.

Targeting new investors

Pakistan has been successful in diversifying its sources of FDI and attracting investment from developing countries. The most recent data suggests that their share has increased further,³³ indicative perhaps of continuing growth in Asia and also of the greater affinity that Asian investors may have with the country's investment environment. Efforts to target FDI toward the textiles industry have attracted FDI from the UAE, and the government is also seeking investors from China and other countries with the Special Economic Zones Act 2012. The Haier Group of China has made an initial investment of USD 35 million (in a joint venture with the Ruba General Trading Company) to manufacture household appliances, including for export, in a 63-acre zone in Lahore that will enclose a plant and workers' colony.

³³ The share of developing countries in the stock of FDI increased from 33 per cent in 2008 to 46 per cent in 2009, while that of developed countries declined from 65 per cent to 53 per cent. The changes also reflect reinvestment.

Such proactive FDI promotion efforts are desirable, though it should be noted that Pakistan already has some 82 industrial zones and the majority perform below capacity (Asian Development Bank, 2001). Additionally, incentive schemes should be time-bound and not too generous. A revival of privatization would ignite huge investor interest.

Working with existing investors

FDI involves long-term commitment to a host location, ideally to expand output, upgrade production, and increase market presence, which frequently justifies reinvesting short-term profits for longer-term gains. When opportunities sour or become uncertain, a greater portion of profits and dividends are repatriated to the parent company, and sometimes investors—“voting with their feet”—disinvest and relocate.

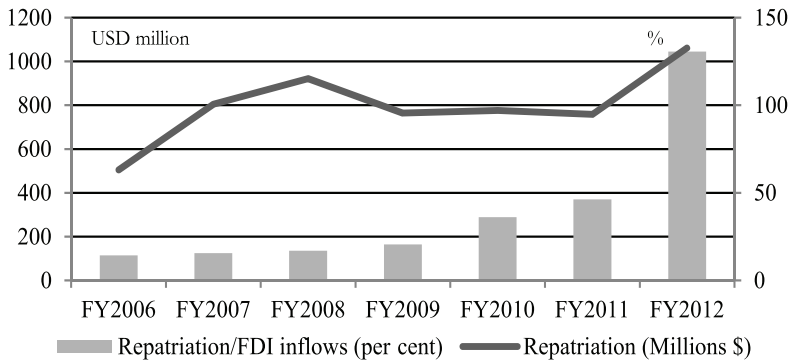
Sizeable investments, such as those in telecommunications in 2004–08, generate commensurate profits that can be retained and reinvested or repatriated. The good news is that companies are making profits;³⁴ the bad news is that these profits are being repatriated rather than reinvested. Repatriations out of Pakistan have increased in recent years (see Figure 10.4); in 2011/12 (FY2012), foreign investors repatriated USD 1.1 billion in profits and dividends. In some industries, such as textiles, firms are in the process of relocating to Bangladesh (attracted by the prospect of access to continuous, uninterrupted power supply and other promised benefits). In such circumstances, it is important for the government to work with existing investors (foreign and domestic) to encourage and facilitate greater reinvestments.

The experience of other countries should be emulated, particularly policies and programs to support the creation of local supply chains and linkages with domestic firms; R&D projects with universities, science institutes, and technology centers; and the development of export markets. There are many examples, including in Pakistan, of public-private partnerships for building infrastructure

³⁴ As noted by Rashid Amjad in Chapter 3 of this volume, companies appear to be doing well with increasing retail sales of consumer goods and food products, and corporate profits growing some 15 per cent annually in recent years. For earlier years, Lorie and Iqbal (2005) note that the increase in the after-tax profits of the 700 companies listed on the Karachi Stock Exchange in 2001–03 amounted to more than 1 per cent of GDP.

and industrial clusters, giving effect to corporate social responsibility—for training workers and disseminating technical advice to farmers—as well as support services and finance for small and medium enterprises.

Figure 10.4: Repatriation of profits and dividends



Source: State Bank of Pakistan. Data given for fiscal years (e.g., FY2012 = July 2011–June 2012).

Pakistan’s private sector has responded generously in helping earthquake and flood victims, and would likely join “win-win” partnerships to accelerate economic growth and deepen industrialization. Their current healthy profits provide the basis, and the prospect of future profits the incentive, to do so. The country’s public institutions should intensify its efforts to work with the private sector to enlarge opportunities and overcome business bottlenecks in the current difficult environment.

Conclusion

FDI can contribute significantly to moving Pakistan’s economy forward. The country’s FDI strategy and policies correctly emphasize the importance of a modern investment framework and regulatory regime, and a conducive, business-friendly environment. There is also a case for special economic zones and time-bound fiscal incentives. However, these efforts must be pursued within a resolute attack on the basic malaise gripping the economy—the energy crisis, the security situation, and the immobilized privatization program.

At the same time, there is a longer-term challenge. Although capital inflows can alleviate the external resource constraint and bolster the balance of payments, the real benefits of FDI are longer-term, involving second-order economic impacts that improve the technological base, diversify the export structure, and place production on a more dynamic growth path. These positive spillovers gestate slowly but can be nurtured by a supportive public policy.

Successful examples abound in other countries. Yet, Pakistan has been slow to devise such 'second-generation' FDI promotion policies that capture the synergy between investment and trade, and production and technology. Malaysia and other Asian 'tigers' have been able to deploy such policies to attract FDI and extract from it substantial technological and other economic benefits. Pakistan's failure to do so has handicapped its industrial development.

Pakistan must not only arrest the dramatic decline in FDI inflows of recent years, but also seek to benefit from future inflows with greater drive and ingenuity. Other countries are doing so with success and there is every reason to think that it can do the same in a relatively short span within the current decade.

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An Analysis of the Remittances Market in Pakistan

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Introduction

Remittances to developing countries sent through official channels were estimated at USD 406 billion in 2012 (World Bank, 2012). This represents a growth of 6.5 per cent over 2011 and is projected to rise by 8 per cent in 2013 and 10 per cent in 2014. Current remittance flows are over three times the amount of official development assistance (World Bank, 2012). In Pakistan, remittances through official channels have grown from just around USD 1.5 billion in 1997/98 to slightly over USD 13 billion in 2011/12 (State Bank of Pakistan, n.d.; see also Table 11.1). In the first six months (July–December 2012), they were slightly over USD 7 billion—an increase of 12 per cent over the corresponding period in the previous year (July–December 2011).

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An earlier study (Amjad, Arif, & Irfan, 2012) analyzes the possible reasons for this manifold increase and in its preliminary findings suggests that the increase is primarily due to (i) a shift from unofficial (and unrecorded) channels (*hawala*) to official channels; (ii) an increase in the number of migrants abroad; and (iii) a rise in migrants' skill levels, resulting in higher wages and incomes abroad. The study also makes the important observation that the inflow of remittances is not just from Pakistani workers abroad but from the larger Pakistani diaspora, many of whom may have acquired nationality of their country of residence.¹ The study also infers that official remittance flows also reflect shifts in the diaspora's savings and assets to their home country.

Amjad et al. (2012) also attempt a rough estimate of the volume of remittances coming through both official and unofficial channels. This is based on estimates of the size of the Pakistani diaspora, as reported by different sources, as well as the average volume of remittances sent, based on recent survey data. The range of these estimates suggests that total remittances could be as high as 180 per cent of official recorded remittances. Using an alternative methodology based on a range of estimates of the size to unofficial remittances and household survey data on amounts received through unofficial channels (Pakistan Social and Living Standards Measurement Survey for 2007/08), Amjad et al. (2012) guesstimate that total remittances could be even higher than the 180 per cent suggested by the "high-scenario" estimate of total remittances.

The importance of remittances to the Pakistan economy needs to be put into perspective. At around 55 per cent of the total export of goods and services (around USD 26 billion in 2011/12) and corresponding imports (USD 40 billion), official remittance flows provide critically needed support to the country's precarious current account balance. These flows also inject

¹ The US State Department defines diasporas as migrant groups that share the following features: (i) dispersion, whether voluntary or involuntary, across sociocultural boundaries and at least one political border; (ii) a collective memory and myth about their homeland; (iii) a commitment to keeping the homeland alive through symbolic and direct action; (iv) the presence of the issue of return, although not necessarily a commitment to do so; and (v) a consciousness and associated identity expressed through diaspora community media, the creation of diaspora associations or organizations, and online participation (International Monetary Fund, 2011).

additional aggregate demand into the economy (at around 5.5 per cent of GDP), which not only spurs economic growth but, based on earlier evidence, also favorably impacts employment and poverty (see Amjad, 2012). In addition, Amjad (2010) argues that remittances that come through official channels have a much greater multiplier income impact on the economy than those through hawala or unofficial channels because the latter in most cases represent transactions within the sending and receiving countries with little ‘real’ additional income and foreign exchange accruing to the labor sending country.²

For these important reasons, there is a pressing need to put in place policies that would facilitate the maximum possible amount out of total remittances to flow through official channels. Identifying the key factors and policies that could help realize this objective is the study’s main purpose. The analytical framework adopted builds on the one developed in the earlier study (Amjad et al., 2012) and also draws on a more recent study that analyzes the remittance market in India (Afram, 2012).

The remittances market in Pakistan³

The remittance market for sending foreign exchange into Pakistan using remittance transfers both by overseas workers and the rest of the Pakistani

² Afram (2012, p. 43) provide a useful description of how this informal *hawala* or *hundi* market works: “A typical hawala transaction consists of a remitter, a recipient, and two intermediaries, that is, *hawaladars*. When transferring the funds to the home country, the migrant-remitter makes payment to an intermediary hawaladar in the remitting country. The hawaladar then contacts their partner service provider in the recipient country who then arranges for the payment in local currency to the beneficiary. The beneficiary is required to present a pre-agreed identification document or code. When this transaction is conducted, the agent in the remitting country is indebted to the agent in the recipient country. Their transactions are settled through similar transactions going in the opposite direction, cash payments, or bank account transfers. In some cases, their positions also can be transferred to other intermediaries.”

³ We use a broader framework to define the remittance market in Pakistan than that used by Afram (2012) in that he defines it as representing the formal financial institution and regulatory framework for the transfer of remittances, while we examine the entire remittances process and cover both the official and unofficial or unrecorded flow of remittances.

diaspora, as well as by other agents for both legal and illegal transfers, can be broken down into the following:

- Remitters from overseas who demand Pakistani rupees in exchange for a foreign currency to be paid in Pakistan through official or unofficial channels.
- The remittance market within Pakistan that transfers both officially recorded remittances through banking and other recognized channels under an overall regulatory framework supervised by the State Bank of Pakistan (SBP), as well as unofficial remittances through domestic networks linked with foreign networks abroad.

Receivers of remittances—mainly households and families—that are sent through official or unofficial channels, who use these remittances for their own needs or to upkeep or purchase new assets for the remitter.

Any attempt to divert the flow of remittances from unofficial to official channels requires an analysis of each of the above three segments of the remittance market to determine why remitters prefer one channel to the other. Clearly, given information and data constraints, it is only possible to analyze the proximate causes of these choices. We attempt this as follows:

- We identify and analyze the factors responsible for the very large increase in official remittances from 1997/98 to 2011/12 by enlarging the scope of Amjad et al. (2012) and examining in more detail inflows from individual countries and regions.
- We examine recent household survey data to identify the extent to which remittance transfers are made through official rather than unofficial sources, identify the characteristics of households that prefer one channel to the other and their reasons for this, and use these findings to understand better the working of the informal hawala/hundi remittance market.

Based on the above analysis, we suggest practical measures that could lead to a more efficient and better functioning remittance market in Pakistan that also encourages the flow of remittances through official rather than unofficial channels.

Explaining the increase in flow of official remittances: 1997/98 to 2011/12

Kock and Sun (2011) analyze the factors responsible for the rapid increase in official remittances to Pakistan over the period 1997–2008. Their methodology departs from most previous studies that have used aggregate data, in that they model remittance behavior at a more micro-level and focus on per capita remittances instead of aggregated remittances or the growth of remittances. Their argument is that remittances need to be explained essentially by individual behavior since the amount remitted is “determined by the economic fortunes of the remitter and the recipient, among other variables” (p. 13).

Kock and Sun’s (2011) model uses average remittances per worker and four sets of explanatory variable: (i) job skill index, (ii) investment return, (iii) a proxy for recipients’ economic conditions in Pakistan, and (iv) a proxy for the real value of remittances. The regression estimation is based on a panel of 15 countries with bilateral remittance flows to Pakistan, using data from 1997 to 2008. Their results show that, besides the rapid increase in the out-migration of workers, immigrants’ skill level, investment return in the host country and in Pakistan, exchange rates (real and nominal), and Pakistan’s economic conditions all play a strong role in explaining remittances. Somewhat surprisingly, they find that changes in domestic economic fortunes (represented by the output of major agricultural crops as a proxy) were pro-cyclical although they do not detail the reasons for this.

A major weakness of Kock and Sun’s (2011) study is that their model does not take into account increases or decreases in official remittance flows caused by shocks or interventions that lead overseas workers and the broader Pakistani diaspora to shift their mode of sending remittances from one channel to another. These shocks or interventions can result in (i) a temporary increase or decrease in official flows, and (ii) a shift in the trend level of remittance flows. These shifts in the level or growth of remittances cannot, therefore, be explained solely by the factors that Kock and Sun (2011) identify.

We identify six major shocks or interventions that could explain both significant fluctuations and an upward shift in the official remittances flow

during 1997/98 to 2011/12. These are:

- The freezing of foreign exchange accounts following the nuclear test carried out by Pakistan in May 1998, which was a major blow to the confidence of nonresident Pakistanis.
- The 9/11 attacks on the US caused anxiety among the Pakistani diaspora leading them to transfer part of their savings/assets to Pakistan especially from the US, as a fallback in case living in the US or other Western countries became unbearable or unsafe.
- Following 9/11, the US authorities' and other financial institutions and countries increased surveillance of the Pakistani diaspora's incomes and transfer of money abroad, especially through nonofficial channels.
- Anti-money laundering measures adopted by Pakistan in 2002 post-9/11, which included the registration of money exchange companies for a considerable fee (between PRs 100 million and PRs 200 million), forcing smaller companies to merge with larger companies to be able to pay the registration fee.
- The collapse of the real estate boom in Dubai in 2009, in which both Pakistanis living there and in Pakistan had heavily invested, which led to a large number of Pakistani professionals and workers returning to their home country.
- The Pakistan Remittances Initiative (PRI) launched jointly by the Ministry of Finance, the SBP, and the Ministry of Overseas Pakistanis in early 2009 to encourage remittances through formal channels, including incentives for Pakistani banks to increase such flows.

The impact of shocks and interventions on the flow of official remittances

Let us now examine the evidence based on Table 11.1. Following the nuclear test in May 1998 and subsequent freezing of foreign currency accounts in Pakistan, we see an immediate decline in total official remittances from almost USD 1.5 billion in 1997/98 to USD 1.06 billion in 1999/2000, which continues till 2001/02. The decline occurs across all countries, and we can assume that a large part of it was then remitted through unofficial channels.

Following 9/11 in September 2001, total official remittance flows double from USD 1.09 billion in 2000/01 to USD 2.4 billion in 2001/02, especially in the case of flows from the US—from USD 134.8 million to USD 779 million. This amount from the US rises further to USD 1.2 billion in 2002/03, after which it remains around the same till 2005/06. The jump in official remittances from Dubai and Abu Dhabi follows broadly a similar pattern.

This increase in remittances in the case of the US appears strongly to represent a shift in the transfer of remittances from unofficial to official channels as well as the transfer of savings and assets by the Pakistani diaspora in the US back to Pakistan. As confidence among the Pakistani diaspora in the US is gradually restored, these official remittance flows begin to even out.

Table 11.1: Official remittances from countries of origin

Country/region	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
Total	1,489.55	1,060.19	983.73	1,086.57	2,389.05
Saudi Arabia	474.76	318.49	309.85	304.43	376.34
UAE	207.70	125.09	147.75	190.04	469.41
Dubai	(101.01)	(70.57)	(87.04)	(129.69)	(331.47)
Abu Dhabi	(75.53)	(38.07)	(47.30)	(48.11)	(103.72)
Other GCC countries	160.85	197.28	224.32	198.75	224.29
US	166.29	81.95	79.96	134.81	778.98
UK	98.83	73.59	73.27	81.39	151.93
Other EU countries	35.87	26.48	24.06	21.50	28.80
Other countries	66.38	34.03	35.28	67.71	256.24
Encashment FEBCs	251.87	184.64	70.24	64.98	48.26
	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Total	4,236.85	3,871.58	4,168.79	4,600.12	5,493.65
Saudi Arabia	580.76	565.29	627.19	750.44	1,023.56
UAE	837.87	597.48	712.61	716.30	866.49
Dubai	(581.09)	(447.49)	(532.93)	(540.24)	(635.60)
Abu Dhabi	(212.37)	(114.92)	(152.51)	(147.89)	(200.40)
Other GCC countries	474.02	451.54	512.14	596.46	757.33
US	1,237.52	1,225.09	1,294.08	1,242.49	1,459.64
UK	273.83	333.94	371.86	438.65	430.04
Other EU countries	53.53	74.51	101.51	119.62	149.00
Other countries	658.05	497.14	417.25	573.31	642.11
Encashment FEBCs	46.12	45.42	16.25	12.09	2.68

Table 11.1 (continued)

An Analysis of the Remittances Market in Pakistan

Table 11.1 (continued)

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Total	6,451.24	7,810.95	8,905.90	11,200.97	13,186.58
Saudi Arabia	1,251.32	1,559.56	1,917.66	2,670.07	3,687.00
UAE	1,090.30	1,688.59	2,038.52	2,597.74	2,848.86
Dubai	(761.24)	(970.42)	(851.54)	(1,201.15)	(1,411.26)
Abu Dhabi	(298.80)	(669.40)	(1,130.33)	(1,328.82)	(1,367.62)
Other GCC countries	983.39	1,202.65	1,237.86	1,306.18	1,495.00
US	1,762.03	1,735.87	1,771.19	2,068.67	2,334.47
UK	458.87	605.59	876.38	1,199.67	1,521.10
Other EU countries	176.64	247.66	252.21	354.76	364.79
Other countries	530.39	609.00	577.37	653.26	562.14
Encashment FEBCs	2.40	0.48	1.02	0.07	13,186.58

Note: EU = European Union, FEBC = foreign exchange bearer certificates, FY = financial year, GCC = Gulf Cooperation Council.

Source: State Bank of Pakistan (n.d.).

There is an initial fall in official remittances from Dubai following the crash of the building boom and financial crisis in 2008/09—from USD 970 million in 2008/09 to USD 851 million in 2009/10. This is, however, followed by a sharp increase the next year to USD 1.2 billion and a further increase to USD 1.4 billion in 2011/12. In the case of Abu Dhabi, there is no initial fall but a sharp continuous increase from 2009/10.

After the initial decline, the subsequent increase in remittances from Dubai reflected to some extent returning migrants' accumulated savings. The large increase, especially in subsequent years, however, was most probably due to panic selling of real estate by Pakistanis living in Pakistan who had invested in Dubai and were now bringing back into Pakistan what was left of their investments.

To what extent has the PRI increased flows since its launch in early 2009? A careful look at flows from individual countries shows that the increase in official remittances was most marked in the case of the UK, where it increased from USD 605 million in 2008/09 to USD 1.5 billion in 2011/12. Following this initiative, there is also a significant increase in Saudi Arabia and the United Arab Emirates (UAE), where aggressive marketing by Pakistani banks taking advantage of the PRI's financial incentives helped to divert remittances toward official channels.

More specifically, the PRI initiated the following steps to increase the flow of remittances through official channels (“Pakistan remittances”, 2013):

- Preparing and implementing a national strategy on remittances.
- Playing a catalytic role in mobilizing and energizing the financial sector in Pakistan resulting in its playing a major role in attracting remittances through formal channels. The initiatives taken by the PRI included bringing in new players (commercial banks, microfinance banks, exchange companies, the Pakistan Post) and increasing competition between them to provide more efficient services and introducing new innovative products and services to facilitate transfers at lower costs and in minimal time.
- Creating separate efficient remittance payment highways with a manifold increase in developing formal links with financial institutions abroad (from less than 20 to over 400) and adding as many as 10,000 physical locations in Pakistan for receiving remittances through banks, exchange companies and post offices since the establishment of the PRI.
- Establishing formal links with the increased number of financial institutions abroad allowed these institutions to offer Pakistanis the initiatives being offered by the State Bank of Pakistan to encourage transfers through formal channels mainly the reimbursement of the cost of transfers (6 Saudi riyals on a transfer of 100 Saudi riyals), which was not possible earlier.
- Reducing the remittance delivery time with remittances being received instantly or at least very quickly in contrast to a lag of many days earlier. The beneficiaries can also claim compensation (65 paisa per PRs 1,000 daily) for the delayed period from the concerned bank.
- Serving as a focal point for overseas Pakistanis through round-the-clock call centers with toll-free lines.

The impact of an increase in Pakistani emigrants and rise in skill levels on official remittance flows

While the preceding analysis helps establish that the flows in remittances post-9/11 have clearly been impacted by shifts in remittances from unofficial to

official channels, we need to separate this impact from the rise in remittances resulting from an increase in the number of Pakistanis working abroad and, as Kock and Sun (2011) argue, an increase in their skill levels.

Kock and Sun (2011) use official data on Pakistani workers leaving for abroad for employment by their country of destination and then aggregate these figures to estimate the total numbers working abroad. They use the same data to classify these workers by their level of skill. It should be pointed out that these flows do not take into account the number of returning migrants from these countries and, therefore, do not reflect net migration to these countries. To overcome this problem, we use estimates of the stock of Pakistanis abroad, as given by official sources, but it is important to keep in mind that these estimates also include students from Pakistan as well as family members who may not be working.

Table 11.2 provides estimates of the Pakistani diaspora abroad, which gives us an approximate idea of the recent increase in stock. These estimates are for all countries as well as for Saudi Arabia, the UAE, the US, and the UK, which together account for almost three fourths of all Pakistanis abroad and for the same share of total remittances.

Table 11.2: Stock of overseas Pakistanis/Pakistani diaspora (millions)

Country	2004a	2010b	2012c
All countries	4.0	6.3	6.7
Saudi Arabia	1.1	1.5	1.7
UAE	0.5	1.0	1.2
US	0.6	0.9	0.9
UK	0.8	1.2	1.2

Sources: (a) Pakistan, Planning Commission (2005). (b) Data supplied by the Ministry of Foreign Affairs, Islamabad, at the authors' request. (c) Khan (2012, February 15).

If we examine the data in Tables 11.2 and 11.3, it is clear that, for the years post-2004, there has been a significant increase in the numbers of Pakistani diaspora; when these figures are adjusted for the number among them working, the number of workers abroad also rises. These figures are in line with the very significant increase in flow of overseas migrants between 2007 and 2012 (see Table A11.1 in the appendix). Remittances per head have also increased sharply since 2004 (Table 11.3).

Table 11.3: Official remittances per Pakistani diaspora/per working Pakistani (USD)

Country	2004	2010	2012
All countries	1,049	1,777	1,968
Adjusted	(1,614)	(2,733)	(3,027)
Saudi Arabia	570	1,780	2,168
Adjusted	(713)	(2,225)	(2,710)
UAE	1,425	2,038	2,374
Adjusted	(1,781)	(2,547)	(2,967)
US	1,425	2,038	2,374
Adjusted	(2,850)	(4,076)	(4,748)
UK	465	1,188	1,267
Adjusted	(930)	(2,376)	(2,534)

Note: Adjusted for number working out of total stock: 0.65 for all countries, 0.8 for Saudi Arabia and the UAE, and 0.5 for the US and UK.

Source: Tables 11.1 and 11.2.

Kock and Sun (2011) point out that there has been an increase in the number of skilled as compared to unskilled workers going abroad. As Figure 11.1 shows, the share of skilled/semi-skilled workers increased from around 40 per cent in 2007 to just over 55 per cent in 2011/12. However, the official figures do not show an increase in the number of highly qualified and highly skilled emigrants (Figure 11.1). Indeed, there is a sharp fall in 2009, which, after a recovery in 2010, falls again in 2011/12 and rises in 2012. Contrary to this, the press has frequently reported that a large number of professionals (doctors, engineers, scientists, bankers, IT experts, chartered accountants, teachers, etc.) have been going abroad in recent years to work not only in the US and EU, but also in Saudi Arabia, the UAE, Qatar, Bahrain, Kuwait, the UK, Canada, Australia, Malaysia, South Africa, and Japan.

Countries in the EU include Germany, France, Spain, Italy, Ireland, and Norway (“Changing profile of overseas Pakistanis”, 2011). Clearly, the official figures fail to capture these outflows, perhaps because such categories of workers might not have officially registered themselves as going abroad to work.

Figure 11.1: Percentage distribution of overseas Pakistanis by occupation, 2001–12



Note: The highly qualified and highly skilled are grouped together, and the skilled and semi skilled are grouped together.

Source: Bureau of Emigration and Overseas Employment, Pakistan.

The figures in Table 11.4 are, however, revealing as they clearly show that the increase in remittances between 2004 and 2012 cannot be explained solely by the increase in number of workers abroad or by an increase in their skill level because the differences between their growths are just too wide to support such a contention. For example, for all countries of the 230 per cent increase in remittances, only 70 per cent can be explained by the increase in number of workers. Even if we take into account a significant increase in the share of professionals and higher skills by 2012 and the corresponding increase in their share of remittances—even to the extent of it doubling—this would still leave a large unexplained gap.

Table 11.4: Percentage increase in number of workers/remittances, 2004–12

Country	Increase in number of workers	Increase in amount of remittances
All countries	70	230
Saudi Arabia	55	487
UAE	140	300
US	50	80
UK	50	308

Source: Tables 11.1 and 11.2 (the latter adjusted for labor force participation rate: 0.65 for all countries, 0.8 for Saudi Arabia and the UAE, and 0.5 for the US and UK).

As Table 11.4 also shows, this difference is especially pronounced for Saudi Arabia and the UK and to a slightly lesser extent for the UAE. For the US, this shift caused by 9/11 may have worked itself through by 2004 but probably brings out the continuing transfer of assets and savings to Pakistan. These findings reinforce our earlier finding that the increase in remittances is not just for the reasons pointed out by Kock and Sun (2011); rather, it also represents a significant shift from informal to formal channels for sending remittances.

Factors responsible for the higher number of professionals and better-skilled workers going abroad: Reaping the demographic dividend?

Pakistan is currently passing through a demographic transition (Nayab, 2006), which has resulted in a “youth bulge” and an increase in the working-age population as a share of the total population. To reap the “demographic dividend” of this change, the economy needs to create productive and remunerative employment for young workforce entrants.

Unfortunately, after a short-lived growth spurt during 2002/03 to 2005/06, the economy has been mired in stagflation, growing at around 3 per cent, while it would require a growth rate of 7 to 8 per cent to productively employ new entrants into the labor market. Inflation has remained in double digits and only started to come down during the second half of 2012. It must also be kept in mind that Pakistan has increased substantially its investment in higher education over the last ten years, increasing enrollment almost fourfold to about 1.2 million in 2011/12 (Pakistan, Ministry of Finance, 2012).

With the economy slowing down, there is increasing evidence that young professionals and skilled workers are leaving for employment abroad. Three factors have spurred this demand: (i) increased demand for labor in Saudi Arabia, Abu Dhabi, and the Gulf Cooperation Council (GCC) countries, which were not affected by the financial collapse in Dubai; (ii) new job opportunities in Europe (especially in Italy, Spain, and Norway), possibly due to its fast-aging population; (iii) job opportunities in the US and UK which, despite the economic slowdown, remain attractive job markets for professionals and higher-skilled workers, for whom demand has continued to grow at the expense of unskilled workers; and (iv) the emergence of Australia as an attractive job marker for Pakistani professionals.

Is Pakistan, therefore, reaping the demographic dividend through the migration of professionals and higher-skilled workers? Amjad (2013) draws attention to this possibility, but it is clearly an area that needs further investigation.

Illegal transfers and remittances

Official remittance flows are also associated in the public perception with the transfer of illegally gotten gains, which are transferred back to Pakistan through remittances and, thus, legalized since the latter's sources are not questioned. These flows include:

- The so-called 'whitening' of 'black' money⁴ generated in Pakistan, which is then converted into US dollars or other foreign currency through domestic moneychangers, sent abroad, and then sent back as remittances through existing or fictitious Pakistanis living abroad.
- The receipt of kickbacks and commissions on deals with international companies in contracts awarded to them in Pakistan, which are then transferred back in part or whole as remittances.
- The under-invoicing of imports of machinery and goods and services to avoid full payment of import duties, after which the nonpaid amount of the cost of the import is sent back through a domestic moneychanger in foreign currency leading to an outflow of resources from Pakistan.
- Illegal earnings through the drug trade (or other related activities) that are transferred back to Pakistan in the form of official remittances and thus legalized.

Amjad et al. (2012) rightly argue that, as far as the 'whitening' of 'black' money is concerned, such transactions would not result in a net addition to the total size of official remittance flows. This is because converting domestic currency into a foreign currency would need buyers of the local currency. These transactions, if made through remittances, would require a Pakistani working abroad or a member of the larger Pakistani diaspora to 'demand' these rupees and then send them back as remittances. Since he or she would

⁴ This covers all kinds of bribes and undeclared income for avoiding taxes.

only do so if already planning to transfer money to Pakistan, when such a remittance is sent it does not add to the total amount of remittances flowing into Pakistan.

On the other hand, the transfer of part of or all illegal foreign exchange earnings—from kickbacks, the drug trade, and other sources—as remittances does lead to an increase in official remittances. However, the transfer of such illegal earnings, including non-taxed earnings by Pakistanis abroad, might not occur through the official remittance channel for fear of being detected; hence, those making such transfers prefer the use of the unofficial hawala route.

Has the amount of illegal transfers increased in recent years? One example is the real estate collapse in Dubai in 2009, in which many Pakistanis had invested both their legal and illegal earnings. It would appear that a part of these assets, or what was left of them after the crash, was transferred back to Pakistan as official remittances. This would explain the increase in 2009 and 2010 of official remittances into Pakistan at the time when the number of migrants working in Dubai was falling. Clearly, however, a significant part of this amount may also have come through illegal channels.

Similarly, anecdotal evidence suggests that some of the illegally gotten wealth in Afghanistan by the Afghan political elite is transferred into Pakistan through the channel of official remittances, mainly to buy businesses, real estate, and property in Pakistan. It is difficult, however, to gauge the amount of these flows, which again appears to be mainly channeled through Dubai.

How large, then, are these illegal flows being remitted through official channels and how much through illegal channels? While it is extremely difficult, if not impossible, to quantify them, one needs to be somewhat cautious in inferring that illegal flows account for a significant part of the rapid growth in official remittances in the past decade. For one, official remittance flows have increased not only in Pakistan but also in Bangladesh, the Philippines, and India (see Figure A11.1 in the appendix). Indeed, it would be a strange coincidence that the worldwide growth in official remittances has been due substantially to increases in the transfer of illegally earned funds abroad. Again, we therefore caution against a generally held view that official remittance increases are in any way significantly related to an increase in illegal flows, though clearly a part of these flows represents such activities.

An important conclusion that we would like to draw from our analysis in this part of the study is that the remittance market is complex and highly segmented by region and by countries. Therefore, policy measures and direct initiatives and interventions should, in large measure, target countries and regions if the flow of official remittances is to be encouraged and increased.

Households receiving remittances: Why do they prefer official or unofficial channels of transfer?

What factors underlie the demand for unofficial or hundi transactions and how can these be influenced? Understanding the practices, procedures, and regulatory structures of the international value transfer system with particular focus on third-party settlement is, therefore, immensely important. Similarly, understanding the behavior of overseas migrants and their families toward the use of banking or nonbanking channels to transfer money home is important to attract more money through official channels. So, an important question is whether migrants, who send remittances home through hundi, are socioeconomically different from those who use the banking channel to transfer money.

Investigating the behavior of migrants and their families in using unofficial or official channels to transfer money requires a dataset that has some basic information about migrants using one channel or the other for these transfers. For this purpose, we use micro-data from two household surveys carried out in 2009 and 2010. The first, the Household Survey of Overseas Migrants and Remittances (HSOMR) carried out in 2009, comprises a small sample of 548 households—randomly selected from nine districts of the country—each of which had a member employed in Saudi Arabia at the time of the survey. The second is the Pakistan Institute of Development Economics' (PIDE) panel survey conducted in 2010 in 16 districts—the Pakistan Panel Household Survey (PPHS), with a sample size of more than 4,000 households. Both surveys collected information on overseas migrants' personal characteristics, their earnings while abroad, remittances transferred home, channels used to transfer money, and their reasons for using these channels, particularly for not using the banking channel.

To supplement the PIDE household survey-based information, some in-depth interviews were also carried out in the district of Gujrat among families

that had a member working abroad at the time. The aim of these interviews was to identify the factors that underlie the use of hundi to transfer money. Thus, the study uses both qualitative and quantitative information to understand whether users of hundi are different from users of the banking channel.

Based on the literature on overseas migrants' remittance-sending behavior, we attempt to examine the relationship between the methods used to transfer money and four characteristics of migrants and their families: (i) migrants' place of origin or their families' place of residence in Pakistan (urban or rural), (ii) migrants' education level, (iii) their skill level, and (iv) the duration of their stay abroad.

The basic hypotheses tested are whether:

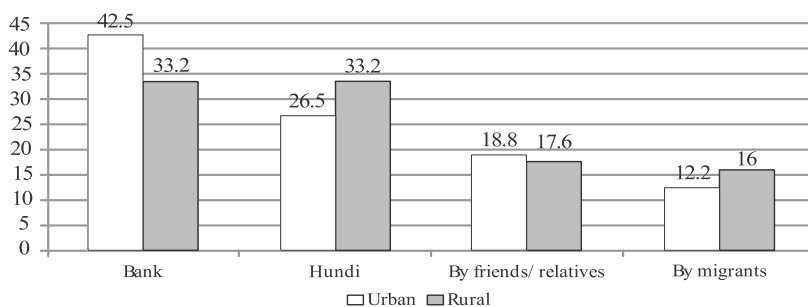
- urban migrants use the banking channel to transfer money more than their rural counterparts;
- migrants' education level has a positive association with the use of the banking channel;
- because of its strong correlation with education, skilled and professional workers use the formal channel to transfer remittances more than unskilled workers; and
- the longer the duration of their stay abroad, workers are likely to be positively associated with the use of the formal or banking channel for money transfer because of increased awareness about the benefits of using it.

We apply bivariate and multivariate techniques to analyze the datasets mentioned above. Take first the case of overseas migrants' rural-urban origin. The majority of Pakistani migrants came from a rural background and their families live in these areas, thus money is transferred there on a large scale. Using data from the Household Income Expenditure Survey, Irfan (2011) finds that "the distribution of remittances underwent a shift wherein the share of rural areas in total remittances increased from 49 per cent in 1996–97 to 72.4 per cent in 2007–08." So, the question is whether the practice of rural migrants in terms of using channels to transfer money from abroad is different from that of their urban counterparts. Banking facilities in Pakistan are better in urban centers than in rural communities, and urban migrants are also likely

to be more educated than rural migrants, making it more possible that urban-origin workers will remit money home through the banking channel.

Figure 11.2 does indicate that urban families have received more money from abroad through banking sources (43 per cent) than rural families (33 per cent). This difference may be statistically significant,⁵ but more importantly, the use of the banking channel in urban areas to transfer money is very low (43 per cent), let alone in rural areas.

Figure 11.2: Methods used to transfer money from abroad by rural and urban origin of migrants (per cent)



Source: Arif (2009).

In the PPHS 2010, migrant families were asked why they did not use the banking channel. Table 11.5 shows the responses of urban and rural migrant families, and helps us better understand migrants' remittance-sending behavior. In the survey's questionnaire, some of the possible reasons suggested for not using the banking channel included the high transaction cost involved, the nonavailability of a bank, the long distance to the nearest bank, the long waiting times involved, and uncooperative behavior of bank staff.

However, as Table 11.5 shows, neither rural nor urban respondents cited the nonavailability of a bank or/and the distance to the nearest bank as reasons for not using the banking channel. In fact, approximately two-thirds of the rural families surveyed could not give reasons for not using the banking channel.

⁵ In fact, it is significant and we examine this later in this section.

However, about a quarter of the rural sample said that it took a long time to withdraw money from the nearest bank. The situation of urban households is not much different: the high transaction cost involved is given as the main reason (Table 11.5). Nonetheless, according to the survey data, there is no major difference in transaction costs between banking and hundi channels (see Table A11.2 in the appendix). The reported distance to nearby banks in Table A11.2 also cannot be considered for long, given the availability of better transport sources.

Based on the qualitative work carried out in Gujrat and the survey data used (PPHS 2010 and HSOMR 2009), we find that migrants and their families appear hesitant to use the banking channel. Migrants account for this hesitation, saying that “the banking procedure is difficult for us. We get money through hundi at our doorstep.” There seems to be a strong perception barrier to using the banking channel.

Table 11.5: Percentage distribution of households who received remittances through hundi and reasons for not using a bank

Reasons	Overall	Urban	Rural
High transaction cost	9.78	40.00	3.90
Long time required	20.65	-	24.68
Security	1.09	-	1.30
Family finds it difficult	7.61	13.33	6.49
No bank available	-	-	-
Bank too far away	-	-	-
Bank staff does not cooperate	3.26	13.33	1.30
Others	57.61	33.33	62.34
Total	100.00	100.00	100.00
N	92.00	15.00	77.00

Source: Pakistan Panel Household Survey (2010).

The in-depth interviews also reveal that migrants abroad with households, particularly in the Middle East, live in groups and usually have an informal group leader who manages the transfer of money through informal sources. Further, this type of common living arrangement creates a network among

the migrants, which enables them to send money home through a mutual friend visiting Pakistan. Thus, opening new bank branches in high-migration rural or urban areas, as is generally believed, may not be the only solution to channeling more remittances through banks.

Table 11.6 presents data on migrants' education levels and the methods used to transfer money during the year preceding the PPHS 2010. The table also categorizes the use of formal or informal sources of money transfer by migrants' skill levels, i.e., as skilled workers and unskilled workers. The skilled category includes professionals and clerical workers. There is no linear relationship between migrants' level of educational attainment and their use of the banking channel to transfer money, although migrants with a college or higher level of education are more likely than other categories to use this source. Despite this difference, it is important to note that about a third of migrants with a college or higher level of education did not report using the banking channel. There is no marked difference between skilled and unskilled workers in their use of hundi, although it is modestly higher in the latter's case.

Table 11.6: Migrants' level of educational attainment and the methods used for money transfer

Education/occupation	Bank	Hundi	Others
Up to 5	45.28	47.17	7.55
6–10	28.57	63.27	8.16
10 or above	68.75	25.00	6.25
Skilled workers	34.72	58.33	6.94
Unskilled workers	42.27	50.52	7.22

Source: Pakistan Panel Household Survey (2010).

The relationship between the methods used to transfer money and migrant workers' duration of stay abroad is also not as expected. Table 11.7 indicates a negative association between migrants' period of stay abroad and their use of the banking channel. Longer stays abroad appear to enable workers to find informal ways of sending money home. It is not easy to explain why, but there could be several reasons. For example, long-stay migrants' preference for informal channels may be associated with their legal status

abroad. Illegal workers are more likely to use the nonbanking channel than legal workers. It can also be argued, however, that illegal workers are likely to be new migrants rather long-stay workers. Nonetheless, studies carried out in the 1980s tend to characterize illegal workers as ‘over-stayers’—those who stayed abroad without following the legal procedure.

Table 11.7: Migrants’ duration of stay abroad and methods used to transfer money (per cent)

Duration of stay abroad	Bank	Hundi	Others
Up to 3 years	63.38	22.54	14.08
4–6 years	12.90	83.87	3.23
7–10 years	22.22	77.78	0.00
11 years or more	30.23	65.12	4.65

Source: Pakistan Panel Household Survey (2010).

Estimating effects of socio-economic factors on means of money transfer

To determine the independent effect of the socioeconomic factors given above on methods used to transfer money, we also carry out a multivariate analysis, applying a logistic regression to the PPHS 2010 micro-data. The unit of analysis is a household with a member working abroad. If the household received money during the last year through a banking source, it is assigned a value of 1 and 0 otherwise. The dependent variables include migrants’ age, household size, duration of stay abroad, migrants’ education level, skill level, land ownership, and region (rural or urban).

The results of this analysis are presented in Table 11.8, and our findings are not very different from what has already been discussed. Rather, they give a better message. For example, while a college or higher level of education does not emerge as statistically significant, migrants with a middle or matriculate level of education are even less likely than those with a lower level of education to use the banking channel to transfer money. Skill level does not show a significant correlation with the use of formal sources, while the duration of stay abroad has a negative association with the use of the banking channel. Two demographic variables, household size and migrants’ age, have a significant association with the use of formal sources of money

transfer. The larger a household, the less likely it is to receive remittances through the banking channel. Age also has a negative association with its use, but the positive and significant association of the age term with the use of formal sources indicates a curvilinear relationship.

Table 11.8: Effects of demographic and socioeconomic factors on methods used to transfer money from abroad (logistic regression model)

Correlates	Coefficient	Standard error
Age of migrant (years)	-0.214*	0.100
Age-squared of migrant	0.002*	0.001
Years spent abroad (of migrant)	-0.059**	0.031
Education level of migrant (up to primary as ref.)		
6–10	-0.894*	0.449
Intermediate or above	0.120	0.770
Skilled worker (yes = 1)	-0.408	0.447
Household size (number of members)	-0.114**	0.059
Region (urban = 1)	1.603*	0.552
Land (acres)	0.310*	0.109
Constant	7.304*	2.931
LR chi2	47.76	
Log likelihood	-73.806	
Pseudo-R2	0.2445	
N	147	

Note: * denotes significance at 5 per cent, ** denotes significance at 10 per cent.

Source: Authors' estimates based on Pakistan Panel Household Survey (2010) micro-data.

Finally, what are the policy implications? These are outlined in the last part of this chapter but a major finding of this analysis is that migrants who use hundi to send home remittances are not systematically different in socioeconomic terms from those who use the banking channel for this purpose. It is thus difficult to identify the migrants with certain characteristics who might be identified as a target group for using the banking channel.

In interpreting these results, however, two important caveats should be kept in mind, The analysis presented in this section is based on a relatively small household survey and that a deeper investigation requires a relatively larger survey which the study recommends.

The second is that the survey was conducted just a year after the launch of the PRI and that the extent to which the increased services offered in subsequent years (i.e., post-2010) by the PRI had on emigrants' behavior needs further investigation. Our view is that it should have led to an increase in the perception and practice of overseas Pakistanis in sending their remittances through official channels.

Conclusions and policy recommendations: Setting up an efficient, transparent, and well-functioning remittances market in Pakistan

The Pakistan economy and a significant proportion of its population depend on the flows of remittances from overseas workers and the broader Pakistani diaspora. At over USD 14 billion in official remittances expected in 2012/13—which is just over half the projected total export value of goods and services and corresponding imports of around USD 40 billion—they provide critical support to a precarious current account situation. Remittances to households also have a favorable impact on poverty reduction and job creation. Also accounting for around 5.5 per cent of GDP, remittances inject much needed additional aggregate demand into an economy that has been mired in stagflation over the last five years.

Given the important role that remittances play, a major objective of policymaking is to ensure that remittances flow through official channels since this would maximize the development benefits to the economy. The main purpose of this study was to identify factors that would facilitate the transfer of remittances through official channels. To do so, we have analyzed the remittances market and its major players both outside and within Pakistan to identify factors that drive remittances to be sent through official or unofficial channels.

An important contribution of this study is its analysis of remittances within an overall framework of a remittances market that encompasses both formal and informal players. This helps us better understand its functioning dynamics and identify factors that might explain the growth of remittances as well as forces that influence its flows through official and unofficial channels.

We build on the earlier study by Amjad et al. (2012) and critically examine the results of Kock and Sun (2011) who attempt to explain the growth of remittances during the period 1997–2008. Our study covers the period between 1997/98 and 2011/12.

The main conclusions of the study are as follows:

In explaining the manifold increase in official remittances since 2001/02, it is just as important to examine the economic shocks and policy interventions that may have impacted these flows as it is to look at the increase in number of overseas workers leaving Pakistan in this period, their skill composition, and economic conditions within and outside Pakistan.

The major shocks and policy interventions that we have identified are:

- The freezing of foreign exchange accounts in the aftermath of Pakistan's nuclear test in May 1998.
- The 9/11 attacks on the US, which created a sense of insecurity among the Pakistani diaspora and caused US authorities and banking and other financial institutions to scrutinize the flow of remittances far more closely.
- The collapse of the real estate boom in 2009 in Dubai and the accompanying financial crisis, which led to a number of Pakistani professionals and workers leaving Dubai, while Pakistanis who had invested in Dubai pulled out their investments or what was left of them back into Pakistan.
- The PRI, launched jointly by the Ministry of Finance, State Bank of Pakistan, and the Ministry of Overseas Pakistanis, and the initiatives taken and incentives offered to Pakistani banks to increase the official flow of remittances, which has clearly contributed to its growth since 2009.

An important finding of this study is that the remittances market is complex and geographically segmented; identifying the major factors that resulted in increases in official remittances requires examining each segment of this market to draw appropriate conclusions and policy measures and initiatives, rather than studying them at the aggregate level. The segments identified are:

- The remittances market originating from (i) Saudi Arabia, (ii) Abu Dhabi, and (iii) Dubai.
- The remittances market originating from the US.
- The remittances market originating from the UK.

Since these three segments and subsegments account for over 70 per cent of official remittances, analyzing each in depth provides important insights into their functioning and contribution to the large increase in official remittances. These main findings are:

- The remittances market originating from Dubai is the most complex as it serves as a major global hub of the hundi network and is closely integrated with remittance inflows from the US and the UK. The official flows of remittances from Dubai mask investments by Pakistanis living in Pakistan as well as illegal earnings channeled back into Pakistan. The real net extent of these two flows is difficult to gauge but in examining movements and increases in flows, they appear to be significant.
- The remittances market in Saudi Arabia and Abu Dhabi, once the post-9/11 impact on the flow of official remittances works through, reflects both an increase in the number of migrant workers from Pakistan as development activities financed by rising oil prices were expanded, as well as aggressive marketing by Pakistani banks with PRI support.
- The US remittances market is where, besides Pakistani overseas professional workers, a significant part of the Pakistani diaspora resides, and its movements reflect both income transfers as well as the transfer of savings and assets to Pakistan. Since different factors influence the two flows, these need to be analyzed separately.
- The PRI's initiatives launched since early 2009 appear to have yielded sound results especially in tapping remittances flowing earlier through unofficial channels from the UK and Saudi Arabia as well as in identifying new countries as sources of remittances. In the case of the UK market, this was done by diverting flows from UK financial institutions to Pakistani banks since the former appeared to transfer funds that were not reflected in official flows.

A striking and important finding of the study, based on recent household surveys for 2009 and 2010, is that households receive almost 40 per cent of their remittances through unofficial channels. Even more striking is the finding that, whether migrants are better educated or the receiving households live in rural or urban areas, makes no great difference to which channel they use. In interpreting these results, however, two caveats must be kept in mind: first, that the results are

based on a relatively small household survey; and second, that it is very possible that these results may change as the PRI became more effective post-2010.

Based on its analysis of the factors that have led to an increase in remittances—as well as diversion from unofficial to official channels—including as a result of very recent PRI incentives, the study concludes the following:

- At less than USD 1 billion, the official flow of remittances in 1999–2000, following the freezing of foreign currency accounts in Pakistan after the nuclear tests, can be taken as its lowest point in terms of the share of flows through official channels. Based on estimates by earlier studies, these could be taken to constitute around 20 per cent of total flows.
- Post 9/11, given the heightened scrutiny and continuing economic boom in the West as well as increased economic activity in the Middle East, official remittances increased sharply. The combined effect of these factors was that, by 2005/06, the share of flows through official channels could have gone up to 60 per cent of total remittances.
- The continuing increase in remittances after 2005/06, despite the global financial meltdown and real estate collapse in Dubai in 2009, can be explained by (i) the increased activity in Saudi Arabia and Abu Dhabi; (ii) the significant increase in outflow of Pakistan professionals to the US, the UK, and Europe; and (iii) the PRI. These factors, we believe, could have increased further official remittances to around 70 per cent or at least maintained them at around 60 per cent of the total.
- Our tentative conclusion is, therefore, to scale down our estimates of the flow of remittances through unofficial channels to nearer 30–35 per cent compared to the much higher estimate (up to 80 per cent) in Amjad et al. (2012). It must be emphasized again that these estimates are inferred from global, regional, and national developments and interaction with “knowledgeable sources” rather than hard evidence and should be treated accordingly.

Finally, the study suggests two further areas of research. The first concerns the role of foreign exchange companies in the remittances market in Pakistan. The second entails undertaking a more comprehensive survey of families receiving remittances in Pakistan. Both these studies would assist not only in identifying measures needed to increase remittances through formal channels but also in better documentation of the Pakistan economy.

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Appendix

Table A11.1: Outflow of overseas Pakistanis by occupational category
(numbers)

Year	Highly qualified	Highly skilled	Skilled	Semi-skilled	Unskilled	Total
2001	3,155	10,846	64,098	2,768	47,062	127,929
2002	2,618	14,778	74,968	3,236	51,822	147,422
2003	2,719	22,152	101,713	4,601	82,854	214,039
2004	3,291	15,557	77,033	3,840	74,103	173,824
2005	3,737	15,467	57,793	2,675	62,463	142,135
2006	5,708	16,332	71,898	3,375	85,878	183,191
2007	8,178	20,975	110,938	3,243	143,699	287,033
2008	9,713	33,173	177,791	4,209	205,428	430,314
2009	4,954	3,260	182,657	2,465	210,192	403,528
2010	7,081	31,650	165,726	5,181	153,266	362,904
2011	6,974	3,018	171,672	73,247	201,982	456,893
2012	6,861	3,035	191,354	74,071	195,011	470,332

Source: Bureau of Emigration and Overseas Employment, Pakistan.

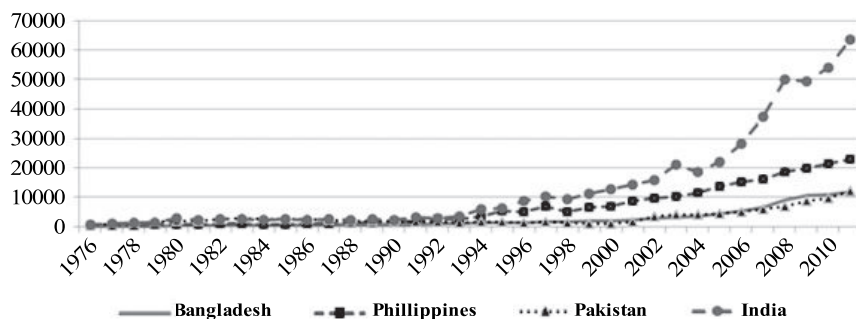
Table A11.2: Percentage distribution of overseas Pakistanis by occupational category, 2001–12

Year	Highly qualified/ skilled	Skilled and semi-skilled	Unskilled
2001	10.94	52.27	36.79
2002	11.80	53.05	35.15
2003	11.62	49.67	38.71
2004	10.84	46.53	42.63
2005	13.51	42.54	43.95
2006	12.03	41.09	46.88
2007	10.16	39.78	50.06
2008	9.97	42.29	47.74
2009	2.04	45.88	52.09
2010	10.67	47.09	42.23
2011	2.19	53.61	44.21
2012	2.10	56.43	41.46

Note: The highly qualified and highly skilled were grouped together, and the skilled and semi-skilled were grouped together.

Source: Bureau of Emigration and Overseas Employment, Pakistan.

Figure A11.1: Trends in remittances in four selected countries (USD million)



Source: Remittances data, Development Prospects Group, World Bank (2011).

Table A11.3: Cost, distance, and time spent on dealing with banks and the hundi system

	Total sample	Province				Region		
		Punjab	Sindh	KP	Baloch-istan	AJK	Urban	Rural
<i>Bank</i>								
Time involved in each transaction (days)	4.44	4.16	5.68	2.80	2.00	8.38	4.64	4.19
Av. cost of each transaction (PRs)	696.85	1,049.02	533.18	30.61	325.3	183.33	690.38	704.72
Distance to bank from home (km)	5.22	5.47	2.91	8.54	3.06	7.82	3.20	7.71
Av. time spent drawing money from bank (hours)	4.20	3.19	3.07	10.98	2.05	2.00	5.79	2.30
Friendly behavior of bank staff (yes = 1)	92.80	99.50	90.10	100.00	60.00	62.50	93.80	91.60
<i>Hundi</i>								
Time involved in collecting money (days)	1.76	2.56	1.15	1.34	1.67	1.29	1.91	1.69
Av. cost of each transaction (PRs)	702.48	1,927.85	396.5	10.89	767.33	17.00	582.17	769.32

Source: Household Survey of Overseas Migrants and Remittances (2009).

The Prospects for Indo-Pakistan Trade

Hafiz A. Pasha* and Muhammad Imran**

Introduction

Trade between India and Pakistan has been fundamentally influenced by factors that are not purely economic. At the time of Partition in 1947, both economies were heavily interdependent, with the share of the Indian market in Pakistan's exports at close to one-fourth, and over half of Pakistan's imports coming from India. Thereafter, bilateral trade has had a chequered history. Trade virtually ceased after the wars of 1965 and 1971.

Some positive steps have been taken since 1995, when India announced its decision to grant most favored nation (MFN) status to Pakistan, and the latter established a positive list with respect to imports from India. The signing of the South Asian Free Trade Agreement (SAFTA) in 2004 was a major step forward in the eventual establishment of a customs union in the region. Recently, Pakistan announced its potentially landmark decision to grant MFN status to India by the end of 2012. In the interim period, a restricted positive list has transitioned to a

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negative list, which opens up a large percentage of tariff lines for imports from India. Further, the two countries have agreed to simplify customs procedures and facilitate the process of goods certification. India has also announced that it welcomes investment by resident Pakistanis and companies.

Clearly, the environment for bilateral trade has greatly improved. This augurs well for future growth in trade between the two countries, which are making an effort to move away from the old view of “peace first, trade later” to “trade now, peace later.” It is hoped that the expansion of trade will create stronger constituencies for peace in both countries.

The objective of this chapter is to explore the possibilities of Indo–Pakistan trade in the new environment. Section 1 describes the current level and pattern of bilateral trade. Section 2 identifies some basic issues in the context of trade development between the two countries. Section 3 quantifies the degree of trade complementarity between the Indian and Pakistani economies. Section 4 describes the levels of import tariffs in the two countries and their potential impact on the volume of trade. Section 5 assesses the existing nontariff barriers (NTBs), especially with regard to each other, and identifies the particular restrictions that need to be removed for trade to flourish. Section 6 evaluates the prospects for Indo–Pakistan trade, following the India’s granting of MFN status and Pakistan’s reciprocal gestures in the form of relaxing certain NTBs.

Trade between India and Pakistan

Both India and Pakistan have become substantially more open economies over the last four decades. The combined share of global imports and exports in India’s GDP was less than 7 per cent in 1970, but had risen to almost 32 per cent by 2010. In Pakistan’s case, the corresponding share has increased from 12 per cent to 34 per cent. Both countries have clearly realized the gains from global trade and how this can contribute to faster economic growth.

This increase in their degree of global openness is not, however, reflected in the trade between the two countries. As shown in Table 12.1, Pakistan’s exports to India are of a small magnitude—only 1 per cent (as compared to over one-fourth at the time of Partition) of global exports and an insignificant portion of Indian imports. India’s exports to Pakistan constitute only about 1 per cent of its total exports and about 5 per cent of the latter’s global imports

(as compared to over half at the time of Partition). Clearly, any potential gains from trade have been sacrificed due to strained political relations.

Table 12.1: Trade between Pakistan and India, 2000/01–2010/11

Pakistani exports to India			
Year	Exports (USD million)	As percentage of exports	As percentage of Indian imports
2000/01	56	0.8	0.1
2006/07	344	2.6	0.1
2009/10	268	1.9	0.1
2010/11	264	1.0	0.1

Indian exports to Pakistan			
Year	Exports (USD million)	As percentage of exports	As percentage of Pakistani imports
2000/01	238	0.4	2.7
2006/07	1,236	1.1	5.1
2009/10	1,226	0.9	4.2
2010/11	1,734	0.9	4.9

Source: State Bank of Pakistan.

Indian exports to Pakistan have been restricted by the latter's positive list. Only 27 per cent of the tariff lines are open for imports from India (Table 12.2). The restriction is particularly severe in the case of product groups such as prepared foods, footwear and personal articles, textiles, ceramic and glass products, and vehicles and transport equipment. An estimated 77 per cent of India's major exports (above USD 500 million) have been excluded from access to the Pakistani market. However, despite limited access, Indian exports have shown significant growth during the last decade, rising from USD 238 million in 2000/01 to USD 1,734 million in 2010/11. At the same time, while Pakistan enjoys MFN status with respect to India, its exports are not only very small, but they have also shown a declining trend since 2006/07.

Table 12.2: Positive list of items for import from India

Section of HC	Description	Total tariff lines	Lines in positive list	Percentage of tariff lines
I	Live animals, animal products	248	33	13.3
II	Vegetables and products	311	157	50.5
III	Animal, vegetable fats/oils	53	2	3.8
IV	Prepared foodstuffs	228	11	4.8
V	Mineral products	195	74	37.9
VI	Chemicals or allied industries	1,149	574	50.0
VII	Plastics and articles	300	93	31.0
VIII	Hides and skins, leather goods	92	45	48.9
IX	Wood and articles	106	52	49.1
X	Paper and paper board	182	37	20.3
XI	Textiles and articles	929	104	11.2
XII	Footwear and personal articles	59	2	3.4
XIII	Ceramic and glass products	189	28	14.8
XIV	Jewelry, etc.	55	5	9.1
XV	Metals and articles	744	156	21.0
XVI	Machinery	1,193	353	29.6
XVII	Vehicles and transport equipment	245	15	6.1
XVIII	Optical and precision instruments	269	103	38.3
XIX	Arms and ammunition	52	—	—
XX	Miscellaneous	186	5	2.7
XXI	Works of art	72	1	1.4
	Total	6,857	1,870	27.3

HC = Harmonized code.

Note: The percentage of tariff lines may not necessarily correspond to the percentage of imports.

Source: Pakistan, Ministry of Commerce (2012).

Tables 12.3 and 12.4 show the two countries' trade composition. As Table 12.3 indicates, two relatively large Indian exports to Pakistan were cotton (USD 372 million) and sugar (USD 69 million) in 2010/11—the year in which

Pakistan was hit by devastating floods that badly affected standing crops. This is a classic example of how shortages can be met by a neighboring country, albeit at commercial terms. Other significant imports from India include soyabean oil cake, vegetables, chemicals, artificial staple fiber, and tea. It is interesting that the share of agricultural exports to Pakistan is almost 30 per cent. This is in contrast to the pattern of trade at the time of Partition when India exported mostly manufactured consumer goods and imported agricultural items, such as cotton and wheat.

Table 12.3: Pakistan's major imports from India, 2010/11 and 2011/12

HS code	Item description	July–May (USD million)	
		2010/11	2011/12
	(> USD 50 million)		
0702	Tomatoes, fresh or chilled	41	68
0713	Leguminous vegetables	40	52
1701	Sugar	69	0
2304	Soya bean oilcake	122	202
2902	Cyclic hydrocarbons	166	191
5201	Cotton	372	75
	(> USD 20 million – ≤ 50 million)		
0902	Tea	26	36
1209	Seeds for fruits	20	17
2933	Heterocyclic compounds	25	29
3204	Synthetic organic coloring matter	23	26
3817	Mixed alkyl benzenes	17	24
3901	Polymers of ethylene	3	20
3902	Polymers of propylene	23	35
5504	Artificial staple fiber	11	35
7202	Ferro alloys	25	18
7311	Containers for compressed gas	24	11
	Subtotal	982	839
Total		1,367	1,144
	Percentage of subtotal	72	73

Source: State Bank of Pakistan.

Pakistan's major exports to India are dates, cement, textiles, and certain chemicals. The export volumes are relatively small, as shown in Table 12.4. As opposed to its substantial imports of cotton from India in 2010/11, Pakistan exported cotton (USD 60 million) to India in 2011/12. There is also evidence of some intra-industry trade in sectors such as chemicals. A further promising sign is the emergence of some new exports to India, such as leather, woven cotton fabrics, and medical and surgical instruments, which are among Pakistan's major global exports.

Table 12.4: Pakistan's major exports to India, 2010/11 and 2011/12

HS code	Item description	July–May (USD million)	
		2010/11	2011/12
	(> USD 10 million)		
0804	Dates	44	48
1006	Rice	13	1
2520	Gypsum	1	11
2523	Cement	39	33
2707	Oils from coal tar	14	0
2710	Oils from petrol	15	11
2917	Polycarboxylic acid	12	16
5201	Cotton	0	60
5205	Cotton yarn	9	11
5209	Woven cotton fabrics	8	10
	(> USD 5 million – ≤ 10 million)		
2903	Halogenated derivatives	8	7
4107	Leather	8	7
5103	Waste from wool	7	4
6305	Sacks/bags of textile material	5	5
9018	Medical and surgical instruments	5	5
Subtotal		203	230
Total		268	311
Percentage of subtotal		76	74

Source: State Bank of Pakistan.

Given its relatively large, growing volume of imports from India, and small, declining volume of exports to India, Pakistan has a relatively large trade deficit with respect to India, estimated at over USD 900 million in 2011/12. This has fueled arguments on the part of opponents of trade liberalization that further opening up will lead to a flood of Indian imports¹ to the detriment of Pakistani industry. It must, however, be recognized that, to the extent that imports from India represent “trade diversion” at lower prices—especially with lower transport costs—from other sources, then while the trade balance with respect to India may deteriorate, the global balance of trade could improve.

Key issues

The current level, pattern, and balance of trade between India and Pakistan raise a number of key issues. First, why have Pakistani exports performed poorly in India, despite the former’s MFN status? There are a number of possible reasons for the low and declining volume of exports to India.

- The trade complementarity between Pakistani exports and Indian imports may be low. In other words, Pakistan is not producing and exporting many of the goods that India imports globally. Therefore, there is low scope for diversion of Indian imports to Pakistan.
- The regime of import tariffs and para-tariffs in India could be providing more effective protection to sectors in which Pakistan might potentially have a relative comparative advantage, for example, in some agricultural items and textiles.
- India has a restrictive trade regime relative to other developing countries in terms of the range and intensity of NTBs. Additionally, it might be applying some of these barriers more rigorously to Pakistan, effectively raising costs for Pakistani exporters and precluding their access to the large Indian market.

¹ The same concern was voiced when the Free Trade Agreement (FTA) was signed. However, although Chinese exports have reached USD 4.5 billion, many Pakistani industries have withstood the FTA well.

As opposed to this, despite the limited positive list, Indian exports to Pakistan have done fairly well and shown rapid growth. This could be for the reasons below.

- Given the two countries' relative level of development, especially in terms of the extent of diversification of the industrial base, there is a high level of trade complementarity between Indian exports and Pakistani imports. Consequently, following Pakistan's granting of MFN status to India, imports could rise substantially, especially due to diversion from more expensive sources.
- Pakistan has a relatively more liberal trade regime. Generally, it has managed its protection policy for different economic activities primarily through import tariffs (and SROs); the presence of NTBs is limited. This has encouraged market penetration by Indian exporters.

Beyond the granting of MFN status to India, the final phase of trade liberalization in South Asia under SAFTA is expected to reach completion by 31 December 2012. At this stage, items in all tariff lines (except those on each member country's sensitive list) will see import tariffs being reduced to 5 per cent or less.² The question is the extent to which this will further improve access for Indian exports to Pakistan. Is there even the possibility of some "trade creation" whereby Indian products begin to displace Pakistani products, and not just Pakistan's imports from other countries? Simultaneously, will lower Indian import tariffs provide greater opportunities to Pakistan exports?

It needs to be emphasized that, in the short to medium term, the prospects of raising Pakistani exports, both globally and specifically, to India, are limited by severe supply-side constraints. These include record levels of power load-shedding, and gas and water shortages, which have restricted the extent of capacity utilization. Simultaneously, private investment in Pakistan is at an all-time low.

The subsequent sections attempt to answer the questions raised above. First, we quantify the extent of trade complementarity between the two countries. This is followed by a comparison of their tariff regimes and incidence of NTBs. Based on these analyses, we assess the prospects for Indo–Pakistan post-31 December 2012, following the granting of MFN status to India and completion of the trade liberalization process under SAFTA.

² Pakistan has already notified vide SRO 558(1)/2004 the schedule of reduction of customs duties under SAFTA on different items by 31 December 2012.

The extent of trade complementarity

We develop the following index of trade complementarity between two countries:

$$TCI_{jk} = 1 - \frac{1}{2} \sum |m_{ik} - x_{ij}|, \quad 0 \leq TCI \leq 1$$

where TCI = trade complementarity index between countries j and k , m_{ik} = the share of the i th commodity in the total imports of country k , and x_{ij} = the share of the i th commodity in the total exports of country j . The higher the magnitude of TCI, the greater will be the trade complementarity between the two countries.

The TCI has been estimated at the 4-digit HC level of India and Pakistan. The resulting magnitudes are as follows:

- TCI between Indian exports and Pakistani imports = 0.420
- TCI between Pakistani exports and Indian imports = 0.082

Therefore, there is clear evidence that India is in a position to potentially export more items to Pakistan than the reverse. This is a major factor explaining the substantially larger volume of exports from India to Pakistan, even in the presence of the positive list. Table 12.5 lists significant Indian exports (above USD 250 million) that are also significant imports for Pakistan (above USD 100 million) for 2010/11. It shows that ten major Indian exports on Pakistan's positive list had a potential export value of USD 3.7 billion in the latter country. Actual exports in 2010/11 were worth USD 1.1 billion, implying that India's share in these exports was almost 30 per cent. This share could increase further after the tariff reductions by Pakistan under SAFTA.

Following its transition to full MFN status and reduction in tariffs under SAFTA, a further market of over USD 11 billion potentially opens up for India in Pakistan, consisting primarily of the trade diversion of previously banned imports. If the market share in the old positive list rises to, say, 50 per cent while that for new items reaches 30 per cent in the medium term, Indian exports could rise to over USD 5 billion.

Table 12.5: Simultaneously significant Indian exports and Pakistani imports, 2010/11 (at 4-digit HC level)

No.	Code	Description	Volume of global		Pakistan's imports from India
			Indian exports	Pakistani imports	
Included in positive list*			(USD million)		
1	0902	<i>Tea</i>	708	311	24
2	1701	<i>Sugar</i>	1,196	691	335
3	2304	Soya bean oil cake	2,057	142	51
4	2902	Cyclic hydrocarbons	1,594	467	185
5	2933	<i>Heterocyclic compounds</i>	600	113	11
6	3204	<i>Synthetic coloring matter</i>	1,249	162	7
7	3808	<i>Insecticides, etc.</i>	1,140	195	25
8	3902	Polymers of polypropylene	771	435	17
9	4011	<i>New rubber tyres</i>	1,029	144	42
10	5201	Cotton, not carded or combed	2,866	1,031	406
Total			13,210	3,691	1,103
Not included in positive list					
11	2711	Petroleum products	41,076	8,261	
12	3004	<i>Medicaments n.e.s.</i>	5,637	194	
13	5402	Synthetic filament yarn	774	392	
14	7208	<i>Flat rolled products of steel</i>	862	267	
15	7210	”	1,384	283	
16	8471	<i>Automatic data processing machines</i>	285	103	
17	8502	<i>Electrical generating sets</i>	342	289	
18	8517	<i>Electric apparatus for telephony</i>	3,329	518	
19	8703	<i>Motor vehicles for transporting persons</i>	4,211	477	
20	8704	<i>Motor vehicles for transporting goods</i>	619	142	
21	8708	<i>Parts and accessories for motor vehicles</i>	2,189	120	

Table 12.5 (continued)

Table 12.5 (continued)

22	8711	<i>Motorcycles</i>	856	100
23	9018	Medical, surgical, and dental instruments	414	125
Total			61,978	11,271

* *Note* that not all items at the 8-digit level are part of the positive list. Items in italics are on Pakistan's sensitive list.

Sources: India, Ministry of Commerce and Industry (2012) (figures in last column); State Bank of Pakistan.

There are two other possibilities. The first is the diversion of informal trade—currently routed through the UAE, Singapore, and Iran or smuggled across the border—to formal channels after most items become importable from India. The volume of informal trade was estimated by the Sustainable Development Policy Institute (2007) at USD 500 million, and has by now probably increased to USD 1 billion. The second prospect is that of some “trade creation” with India, especially in products where tariffs are high (currently at 20 to 30 per cent), which do not feature on the sensitive list, and which consequently experience a significant reduction in the tariff rate. Estimating the magnitude of trade creation requires detailed micro-studies of different sectors, which is the subject of further research.

Within the limited trade complementarity of Pakistani exports and Indian imports, we identify trade prospects following the relaxation of some NTBs (discussed in a subsequent section) and reduction in tariffs by India under SAFTA. Table 12.6 gives a list of potentially larger exports to India.

Major Pakistani exports that could be further diverted to the Indian market (in view of lower transport costs) include dates, cotton, primary polyester, woven cotton and silk fabrics, jewelry, and sports articles. The quantum of total trade diversion is estimated at USD 1.8 billion (Table 12.6). If about 50 per cent diversion takes place, exports could reach USD 900 million, as compared to USD 350 million currently. The prospect of such diversion—and possibly some trade creation—would improve if India were to relax some of its NTBs and if present impediments to trade were removed. Moreover, the competitive position of Pakistani exports to India would be enhanced if the SAFTA tariff reductions were implemented.

Table 12.6: Simultaneously significant* Pakistani exports and Indian imports*, 2010/11 (at 4-digit HC level)

No.	Code	Description	Volume of global		Potential diversion to India**
			Pakistani exports X_i	Indian imports M_i	
(USD million)					
1	0804	<i>Dates, figs, etc.</i>	100	180	100
2	1001	Wheat	310	133	133
3	2523	Cement	496	77	77
4	3004	<i>Medicaments n.e.s.</i>	56	764	56
5	3907	Polyesters, primary	265	1,024	265
6	4102	Leather	79	60	60
7	5007	<i>Woven fabrics of silk</i>	50	129	50
8	5201	<i>Cotton, not carded or combed</i>	519	56	56
9	5208	Woven cotton fabrics	519	159	159
10	5209	Woven cotton fabrics	936	60	60
11	5407	<i>Woven fabrics of synthetic yarn</i>	59	107	59
12	6006	Other knitted fabrics	67	112	67
13	6403	<i>Footwear</i>	72	56	56
14	7113	Articles of jewelry	158	338	158
15	9018	Surgical instruments	295	1,028	295
16	9506	Sports articles	342	118	118
Total			4,323	4,401	1,769

* At least USD 50 million each.

** Corresponding to $\min[X_i, M_i]$ for the i th product.

Items in italics are on India's sensitive list.

Source: India, Ministry of Commerce and Industry (2012); State Bank of Pakistan.

Tariff policies

The low trade complementarity between Pakistani exports and India exists primarily because Pakistan does not have a diversified exports base and its two product groups—agricultural items and textiles—account for 60 per cent of its total exports. These are also major exports of India with a share of

17 per cent. Of course, if free trade were to take place, a degree of specialization could develop, depending on relative comparative advantage. Pakistan could then find “niche” markets in India for a range of products from the two sectors.

The possibility of intra-industry trade has been largely precluded by the tariff policies pursued by India and support provided in the form of relatively large subsidies, especially to agriculture. Table 12.7 compares the level and pattern of import tariffs in the two countries, demonstrating that customs duties on agricultural products are significantly higher in India. For example, in cereals, and fruits and vegetables, India’s average tariff on imports is 30–32 per cent as compared to 18–19 per cent in Pakistan. As opposed to this, Pakistan generally offers its domestic industry more protection.

Duty rates on textiles and clothing also appear to be lower in India than in Pakistan. This is the case for ad valorem duties, but India operates a dual tariff structure in these product groups with an ad valorem or specific duty, whichever is higher. Generally, the specific duties appear to be far higher and, in some cases, exceed 100 per cent, especially on value-added textiles (see Table 12.8). These rates are even higher than India’s tariff bindings with the World Trade Organization (WTO) in some cases. Pakistan, however, operates a normal ad valorem duty structure in clothing and textiles.

Table 12.7: MFN-applied tariffs by product group in India and Pakistan*

Product group	India	Pakistan
Animal products	33.1	14.6
Dairy products	33.7	30.0
Fruit, vegetables, plants	30.4	18.2
Coffee, tea	56.3	12.8
Cereals and preparations	32.2	18.8
Oilseeds, fats, and oils	18.3	8.8
Sugars and confectionery	34.4	17.2
Beverages and tobacco	70.8	52.5
Cotton	12.0	7.0
Other agricultural products	21.7	6.7
Fish and fish products	29.8	10.6
Minerals and metals	7.5	12.4

Table 12.7 (continued)

Table 12.7 (continued)

Petroleum	3.8	10.7
Chemicals	7.9	9.6
Wood, paper, etc.	9.1	15.5
Textiles	14.7	16.7
Clothing	13.4	24.8
Leather, footwear, etc.	10.2	14.9
Nonelectrical machinery	7.3	9.3
Electrical machinery	7.2	14.7
Transport equipment	20.7	24.7
Manufactures, n.e.s.	8.9	13.1

* For latest year for which information is available.

Source: World Trade Organization, country tariff profiles.

Table 12.8: Distribution of effective ad valorem tariffs on textiles in India

Range (%)	Rate (%)	Percentage
0 to 10	35	15.7
Above 10 to 25	83	37.2
Above 25 to 50	61	27.4
Above 50 to 100	31	13.9
Above 100	13	5.8
	223	100.0

Source: Authors' estimates.

India also operates an elaborate subsidy regime in agriculture. Subsidies on agricultural inputs such as fertilizer, power, water, tractors, and seeds, exceed 5 per cent of GDP (Institute of Public Policy, 2012). The corresponding magnitude for Pakistan is 1 per cent of GDP. It must, of course, be recognized that the agricultural subsidies are WTO-compliant, but their high level in India has served to make domestic production artificially competitive in relation to imports.

Overall, India's tariff and subsidy regimes for agricultural products and tariffs on textiles and clothing have effectively restricted imports. For Pakistan,

the consequence has been limited access of its traditional exports to the Indian market. It is worth noting that these two product groups also feature prominently in SAFTA's sensitive list. As such, the process of trade liberalization is unlikely to provide a significant new opening to Pakistani exporters.

As a special concession, India has recently offered Bangladesh duty-free access to a range of textile products, including readymade garments. This is presumably justified on the grounds that Bangladesh is a least-developed country member and merits special treatment. However, in the negotiations prior to granting India MFN status, Pakistan should seek the withdrawal of the specific duties on textiles and clothing and application only of the ad valorem duties.

Nontariff barriers

The perception in Pakistan is that India operates a generally restrictive trade regime in the form of a wide range of NTBs, some of which are applied more strictly on Pakistani consignments. The following sections list the two countries' NTBs.

Nontariff barriers (NTBs) in India

According to the WTO (2011), India operates the following key NTBs.

- Sanitary and phytosanitary (SPS) measures are harmonized with international standards and cover mostly food items.
- The import licensing and permit regimes are complex, varying according to product or user.
- There are a large number of notifications specifying mainly sampling and testing procedures as well as labeling and packaging requirements for food products, pharmaceuticals, textiles, etc.
- Quarantine is imposed on animals and plants.
- Some goods can only be imported through specified ports and/or by particular agencies.

- Pre-shipment inspection is mandatory for some goods such as metal scrap, textiles, etc.
- India actively uses antidumping duties and countervailing measures.

Nontariff barriers (NTBs) in Pakistan

Compared to those listed above, Pakistan operates fewer, less rigorous NTBs, listed below.

- Pakistan's main trade policy instrument is the tariff regime (including SROs) rather than NTBs.
- Pakistan's SPS legislation is outdated and not effectively applied.
- Imports of products such as pharmaceuticals, agricultural products, and engineering goods require clearance by the relevant ministry/agency.
- Import restrictions are applied for health, safety, security, religious, and environmental reasons.
- State trading agencies (such as the TCP) play a dominant role in the import of agricultural inputs and products.
- Pakistan seldom resorts to antidumping and countervailing measures.

The World Bank (2012) has developed an overall trade restrictiveness index (OTRI), which calculates the equivalent uniform tariff of a country's tariff schedule and NTBs that would maintain the overall import level. NTBs covered by the index include price control measures, quantity restrictions, monopolistic practices, SPS and technical regulations, and agricultural support.

Table 12.9 presents the OTRI for a sample of Asian countries. India has the highest OTRI, not only among countries in South Asia but also in relation to the sample of countries in the rest of Asia. The impact of NTBs on the magnitude of the OTRI also appears to be relatively high in India's case. A comparison with Pakistan clearly reveals that NTBs play a far less dominant role than in India. This point needs to be stressed in ongoing negotiations with India.

Table 12.9: OTRI in a sample of Asian countries

Country	OTRI	Percentage increase in OTRI due to NTBs
<i>South Asia</i>		
Bangladesh	23.8	0.8
India	46.7	24.5
Nepal	16.1	0.0
Pakistan	22.2	5.1
Sri Lanka	9.9	0.0
<i>East Asia</i>		
China	21.2	9.9
Malaysia	39.7	30.0
Philippines	34.5	30.5
Thailand	22.8	8.1
<i>Rest of Asia</i>		
Turkey	15.1	2.7

Source: World Bank (2012).

Specific impediments to trade between India and Pakistan include the following:

- Severe visa restrictions by both countries make it difficult for businesspersons from one country to develop contacts/markets in the other.
- Restrictions on the choice of routes that can be used to transport goods constrain trade. For example, Pakistan limits the use of the Atari–Wagah border overland route to 137 goods from India.
- There is limited capacity for transport on overland routes, especially the availability of wagons from Pakistan Railway. In addition, there are no testing or quarantine facilities at the check-post at Atari–Wagah. There is no e-filing system in operation at the border customs, leading to significant delays, frequently for security reasons.

- In some cases, the testing and certification required under SPS measures and technical barriers to trade take considerable time in India.
- Banking channels remain underdeveloped in the absence of bank branches in one country of banks in the other. This has created problems in honoring letters of credit. Payments through the Asian Clearing Union are also subject to long delays.

These impediments appear to have had a major impact on the volume of trade between the two countries. Fortunately, some steps have recently been taken to improve the situation. The countries have reached a bilateral agreement to expedite customs clearance on accepting each other's certification of goods. There are ongoing discussions on a visa protocol to facilitate longer, more frequent by businesspersons. Overall, it is clear that NTBs are generally more restrictive in India, especially on agricultural items. There are also a number of specific impediments to bilateral trade, which, if removed, could significantly enhance the volume of trade.

Prospects for Indo–Pakistan trade

The chapter has demonstrated that granting MFN status to India, rationalizing tariffs on Pakistani products by India, and mutual efforts to remove specific impediments to trade could substantially enhance the volume of trade between the two countries. A number of other studies have already reached this conclusion, including those by Batra (2004), Nabi and Nasim (2001), the State Bank of Pakistan (2006), Sayeed (2005), Kemal, Abbas, and Qadir (2002), Hussain (2011), and Taneja (2007). Such studies have adopted different approaches to demonstrate that the potential volume of trade could be a multiple of its present level.

Following the granting of MFN status, there is considerable scope for the diversion of imports by Pakistan to India, especially in product groups such as chemicals, pharmaceuticals, iron and steel, electrical appliances, plant and machinery, motor vehicles, and transport equipment. The gains to Pakistan would be in the form of lower prices (especially due to India's proximity and the resulting lower transport costs). The State Bank of Pakistan (2006) estimates that the diversion of trade to India could confer savings in the import bill of over USD 1 billion.

There is also the likelihood of some “trade creation” following the implementation of SAFTA, especially in items that are currently not imported but could witness the entry of Indian products as the result of a sizeable fall in the rate of customs duty from 20–30 per cent to 5 per cent. In addition, informal imports through various channels from India could shift to official imports. Overall, in the medium term, it is estimated that imports from India could rise to almost USD 7 billion to 8 billion, especially if there is significant trade creation. This would more-than-quadruple the present level of imports. If this happens, India could become one of Pakistan’s largest trading partners in Asia, along with China and the Middle East countries.

On the export side for Pakistan, the prospects appear somewhat more limited. The outcome depends on the extent to which India eases both general and Pakistan-specific barriers to trade, and rationalizes tariffs, especially on textiles. The reduction of duties under SAFTA may not be of great benefit because its sensitive list protects agriculture and textiles. Indian duties on manufactured goods, except textiles and clothing, are relatively low and, consequently, the extent of tariff reduction under SAFTA will not be so pronounced. Overall, Pakistan would do well if it were able to increase its exports to India to USD 1 billion from the present level of about USD 350 million in the next few years. This would nearly treble its exports to India.

It needs to be emphasized that there are threats to realizing this quantum jump in bilateral trade. First, industries in Pakistan that have traditionally enjoyed high levels of effective protection will lobby for the negative list, including their products, to be retained beyond 31 December 2012 on the grounds that they fear “serious injury” due to the opening of trade following full trade normalization with India. While Pakistan adheres to its commitment to grant MFN status, it may be necessary to enhance the institutional capacity of the Ministry of Commerce and National Tariff Commission to investigate complaints of serious injury and take appropriate safeguard measures, if necessary, permissible under the WTO and SAFTA.

Second, there are likely to be elements in India which are opposed to granting any concessions to Pakistan in negotiations on the future bilateral trading regime. This may include not only right-wing political forces, but also, potentially, certain industries such as textiles and clothing.

Third, the prospects of an increase in Pakistan's trade deficit with respect to India will fuel arguments on the part of right-wing elements and industrial lobbies in the country that the process of liberalization has been to India's advantage and that Pakistan has lost the major leverage it had with regard to resolution of the longstanding Kashmir problem. It will be necessary to convey the message that, while the trade deficit with respect to India may worsen, the global balance of trade will simultaneously improve due to cheaper imports from India. A powerful way of establishing this point may be to demonstrate the large consumer welfare gains that could accrue in a range of products, including certain basic food items, medicines, personal care items, electrical goods, and transport equipment (especially for public transport).

Finally, the recent improvement in the trading environment between the two countries can only be sustained if both pursue a policy of reciprocity and mutual cooperation, and if political relations are not strained and security concerns not heightened. It is possible that the expansion of trade between the two countries will facilitate the process of composite dialogue and confer a large peace dividend in the not-so-distant future.

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Beyond the Poverty Line

A Multidimensional Analysis of Poverty in Pakistan

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Introduction

The issue of poverty is both simple and complex: at one level, the implicit or explicit objective of most economic policymakers in developing countries is to reduce the levels of poverty in a country; at another level, the tools that should be used are constantly open to debate. The debate in almost all developing countries concerns the correct policy mix between those that target economic growth, which have the potential to reduce poverty as overall income levels rise, and those policies that target poverty directly, such as social safety nets or income transfers.

There is little question that long-term growth reduces poverty, but in a country such as Pakistan, where growth is sporadic at best, the question that arises is what can be done to reduce poverty for those who will not benefit from growth for years or even decades. If we add to this the fact that

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development has been devolved to the provinces in Pakistan after the 18th Constitutional Amendment, the future of poverty alleviation initiatives is quite simple: Either we explicitly acknowledge that the state is only concerned with economic growth and wait for growth to reduce poverty—while pursuing intermittent and idiosyncratic poverty interventions that assist the poor but do little to move them out of poverty—or we clearly focus the limited resources of the state on explicitly targeted poverty interventions.

The purpose of this chapter is not to evaluate poverty reduction initiatives in Pakistan or to predict what will happen to poverty in the country over the next decade. Rather, we want to see what has been happening to poverty over the last decade by looking at poverty in unique ways: First, we look at what has been happening to poverty if we expand the definition of poverty to include not just income but also other basic necessities such as health and education. After this, we decompose poverty into two distinct categories in Pakistan: poverty as a result of the circumstances into which one is born (such as where one was born or the education of one's parents) as opposed to poverty as a result of one's own efforts (such as the level of education one obtains). The principle objective of our analysis is move the debate in Pakistan beyond the “poverty line” as defined in income terms and toward a more comprehensive discussion of what really makes people “poor” and the best ways of targeting poverty in Pakistan. We believe that, in an environment characterized by constrained resources and intermittent poverty reduction interventions, the only way one can make an active difference to the level of poverty is to clearly identify which areas to focus on.

The chapter is structured as follows: Section 2 discusses some of the literature on poverty in Pakistan as well as the more recent literature on poverty measurement. In Section 3, we look at a wider view of poverty, which includes health and education, and then at poverty trends from this wider perspective. In Section 4, we decompose poverty in that which can be explained by circumstances and that which can be explained by effort. We then see what happens to poverty if we were to equalize the circumstances in which people were born. Finally, we present some conclusions from our analysis.

Measuring poverty and the literature on poverty in Pakistan

Trends in poverty and inequality in Pakistan

On average, poverty has decreased in Pakistan over the last decade or so, after having risen in the 1990s. The proportion of people living below the international poverty line, i.e., on less than USD 1.25 a day, went from 58.5 per cent in 1990 to 36 per cent in 2001/02, finally falling to 22.6 per cent in 2004/05 (World Bank, 2008, 2009). According to the national poverty line, poverty rose steadily from 17.32 per cent in 1987/88 to 25 per cent in 1993/94, dipping to 21.6 per cent in 1996/97 before rising sharply to 30.6 per cent in 1998/99, and finally peaking at 34.5 per cent in 2000/01. After that, significant declines occurred, culminating in a poverty headcount of 22.3 per cent in 2005/06—almost identical to the poverty rate seen in 1990/91. Households are vulnerable to shocks, such as the food price crisis in the latter part of the last decade, economic slowdowns, political turmoil, and other disruptions that can reverse gains in poverty alleviation, moving vulnerable households back into poverty.

Khan (2011) and Anwar (2009) reach similar conclusions about the overall fall in poverty when looking at other dimensions of wellbeing besides income per capita. Khan (2011) finds that multidimensional poverty fell by five percentage points between 1998 and 2008 to 38 per cent. However, it was not a steady decline as steep increases in poverty occurred both in 2001/02 and 2005/06. At the end of the period studied, poverty continued to be higher in rural than urban areas, but the gap had narrowed. Naveed and Islam (2011) also consider multidimensional poverty in Pakistan, noting that the most common deprivations faced by households (in order of importance) are due to child mortality, lack of land ownership, and children not enrolled in school.

Anwar (2009) uses household data over the 2000–05 period to look at trends in consumption and other measures of wellbeing across income deciles, finding that inequality falls in terms of “opportunities” as measured by literacy, school enrollment rates (at all levels), child immunization, pre- and postnatal care utilization, access to electricity, and access to modern water and sanitation. However, he notes that income inequality likely increased over the period since the richest two deciles increased their share of consumption.

There are also seasonal aspects to the relationship between income and household wellbeing, particularly in rural areas. The vulnerability of low-wealth households can be more acute during certain times of the year, particularly in rural areas. Behrman, Foster, and Rosenzweig (1997) point out, in their analysis on rural households' joint or linked production-consumption decisions in Pakistan, that food consumption is sensitive to wage income for low-wealth families (<1.5 acres) in the planting (lean) season, mainly due to the high prices of food and credit. However, in a plentiful harvest season, households' consumption decisions are mostly invariant to income shocks. The authors measure a small positive productivity effect (in terms of additional output at harvest) of additional calorie consumption at the planting stage.

Shocks such as those to food prices can lead to large increases in poverty, though these are usually transient. Ivanic, Martin, and Zaman (2012) find that the spike in food prices in late 2010 that caused wheat prices to double and led to 65–75 per cent increases in sugar, maize, and soybean and palm oils, led to a net increase in poverty of 44 million people around the world. Further, they estimate that the poverty headcount in Pakistan increased by two full percentage points (the second largest increase in the sample) due primarily to the fact that the steep rise in global wheat prices was largely passed on in the form of higher local prices.

The World Bank (2011) also studies the effect of increasing food prices (particularly wheat) between 2006 and 2010, finding that households would have needed 27 per cent more income between 2006 and June 2008 to maintain household utility levels in the presence of the price increases (increasing further over the course of the year), and that caloric availability fell by around 8 per cent at the height of the food price crisis in 2008. The study finds that households sold assets to absorb the shock of higher food prices, and that those that owned land were somewhat protected.

Chaudhry and Chaudhry (2008) calculate the elasticity of the poverty gap (depth of poverty) with respect to food prices as 2.1 per cent and 0.44 per cent with respect to energy. Kurosaki (2006) also focuses on the effects of risk and shocks on poverty when decomposing poverty into chronic and transient components. He finds in Khyber Pakhtunkhwa (KP) that during 1996–99, more than half the population was always poor, 13 per cent were usually poor, and 16 per cent were occasionally poor. Earlier research by Alderman (1996) on the IFPRI panel from the late 1980s

of rural households in Pakistan demonstrates that, even though households engage in precautionary saving, they experience a reduction in per capita consumption and sell assets when faced with multiple shocks.

Measurement of poverty

The simplest and historically most commonly used indices to measure poverty include the poverty headcount, the poverty gap, and the squared poverty gap. These indices are known as the Foster-Greer-Thorbecke (FGT) measures of poverty. However, in recent years, newer measures of poverty have been developed to capture dimensions of poverty that are not contained in the FGT indices, such as poverty across time or different dimensions of poverty. These include measures that capture the detrimental impact of income fluctuations (see Kurosaki, 2006) or measures that capture multiple dimensions of wellbeing (such as Alkire & Foster, 2011) in the spirit of Sen's capabilities approach. Alkire and Foster (2011) first calculate deprivation on individual dimensions, such as consumption, health, education, or empowerment, after which the number of dimensions for which a person is deprived can be summed.

As we have seen, there is increasing recognition among development economists that poverty is more than simply the shortfall of income or consumption below a certain threshold, but rather the deprivation of households along multiple dimensions. In fact, the relationship between consumption levels and deprivation can be weak, as noted by Naveed and Islam (2010) in their analysis of selected districts in Punjab and KP.¹ According to their analysis, the official poverty line has missed a large share of those who would be considered among the multidimensional poor. Measuring poverty by the official poverty line, only around 18 per cent would be considered poor in these two provinces, but the share of households deprived in either five or six dimensions is 36 or 25 per cent, respectively.

¹ The dimensions of deprivation (and cutoff) considered were education (less than primary completed, child not enrolled), health and nutrition (an underweight woman in household, one death under age 5), housing (mud house), electrification, safe drinking water, (no covered sources), sanitation (lack of proper toilet), assets (none), livelihood (household head unemployed or in elementary occupation), child status (not enrolled in school), cooking fuel (dirty fuel used: wood, dung, or coal), land ownership (< 2 acres agricultural or some nonagricultural land), and consumption (less than the official poverty line).

Similarly, McLeod (2006) finds for a larger group of countries including Pakistan that calculations of poverty through household expenditure surveys do not correlate highly with capabilities; rather, national account estimates of consumption growth are better predictors of improvements in wellbeing.

Kurosaki (2006) notes that one of the unattractive features of the FGT squared poverty gap measure is that it does not capture that income fluctuations have more serious welfare implications the greater the depth of poverty. Further, he finds that decompositions of poverty into chronic and transient components using the FGT squared poverty gap is not robust to changes in the poverty line, while the Clark-Watts measure which incorporates constant relative risk aversion, performs significantly better.

Incorporating education and health into poverty measures

In this section, we analyze unidimensional and multidimensional measures of poverty using household-level data on income, health, and education in Pakistan. The reason for this is that poverty is a multidimensional concept in that certain segments of the population may be simultaneously deprived in numerous dimensions but their poverty can be underestimated if one looks only at their income. Similarly, certain segments of the population may be better off when assessed across various dimensions of deprivation as compared to a simple analysis of their income.

For the purposes of this analysis, we focus on three dimensions of poverty: income, education, and health. As is the standard practice (see Labar & Bresson, 2011), when looking at educational deprivation, we have restricted our sample to individuals above the age of 20. To measure each type of deprivation, we use the following data for 2004, 2008, and 2010 from the Pakistan Social and Living Standards Measurement Survey: for income deprivation, we use household per capita income, obtained by dividing the total household income by n^a , where n is the number of household members and a is an equivalence factor. For education, we use the number of years of education obtained by the household member. For health, we use a combination of indicators, including household sources of water and household sanitary conditions.

The income-based poverty line we use is USD 1.08 per day in 2004 and USD 1.25 per day in 2008 and 2010. For education-based poverty, we take

a person to be below the poverty line if he/she has not completed primary education; for health-based poverty, we take a person to be below the poverty line if he/she does not have a clean source of drinking water.

First, we look at unidimensional comparisons of poverty over time. Here, we look at the poverty trend using each of these indicators across gender, provinces, and rural/urban divides. We then apply unidimensional stochastic dominance tests to gauge what has been happening to poverty, using these indicators separately.

Following this, we look at multidimensional poverty using all the indicators. Following Alkire and Foster, we use both the intersection and union approaches to poverty identification. The intersection approach implies that a person is considered poor if they are deprived in all dimensions of poverty, namely income, health, and education. In the union approach, a person is considered poor if they are deprived in at least one dimension of poverty. As for the unidimensional analysis, we initially look at the trend in multidimensional poverty across gender, provinces, and between rural and urban areas.

Analysis of unidimensional poverty in Pakistan over time

The unidimensional poverty analysis checks to see if poverty has fallen when one looks at the three indicators of deprivation, income, health, and education, separately over time. We start with a look at the statistics on poverty levels, using each of these three indicators over time, and then carry out a stochastic dominance analysis to see if poverty has fallen significantly over the last decade in Pakistan.

Looking at poverty from the perspective of income, Table 13.1 shows the overall percentage of people below the poverty line for the years 2004, 2008, and 2010. What the numbers show is that there is a significant decline in the number of people below the poverty line between 2004 and 2008 from approximately 20 to 16 per cent. From 2008 to 2010, the percentage of people below the poverty line rises to approximately 16.5 per cent but this number is not statistically different from the corresponding number from the 2008 data, which implies that the percentage is approximately the same between 2008 and 2010.

Table 13.1: Percentage of population below the income-based poverty line for the entire population

	2004	2008	2010
Below poverty line	20.8	16.2	17.5
Above poverty line	79.2	83.8	82.5
Total	100.0	100.0	100.0

Source: Authors' calculations.

Table 13.2 shows what has happened in the rural and urban areas in terms of income-measured poverty: Between 2004 and 2008, there is a significant decrease in the percentage of the urban population living below the poverty line, from approximately 11.5 to 9.2 per cent. After this fall, the level of urban poverty stays approximately the same from 2008 to 2010. A greater fall occurs in rural poverty from 2004 to 2008, with the percentage of the rural population living below the poverty line falling from approximately 25 to 19 per cent. The level of rural poverty rises between 2008 and 2010 from approximately 19 to 20 per cent, but this increase is again not statistically significant.

Table 13.2: Percentage of population below the income-based poverty line for the entire population: Rural vs. urban breakdown

	2004		2008		2010	
	Urban	Rural	Urban	Rural	Urban	Rural
Below poverty line	11.84	25.8	9.48	19.82	10.09	21.44
Above poverty line	88.16	74.12	90.52	80.18	89.91	78.56
Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: Authors' calculations.

Finally Table 13.3 shows the breakdown of income-based poverty across the provinces. Again, there is a significant decrease in the percentage of people living below the poverty line in all four provinces between 2004 and 2008, with the greatest decrease occurring in KP where the percentage of people living below the poverty line falls from 34 to 22 per cent. In Punjab, Sindh, and Balochistan, this trend of falling poverty continues between 2008 and 2010,

but what is striking is that the percentage of people living below the poverty line rises significantly in KP between 2008 and 2010 from 22 to 26 per cent.

Table 13.3: Percentage of population below the income-based poverty line for the entire population: Provincial breakdown

2004				
	Punjab	Sindh	KP	Balochistan
Below poverty line	20.00	16.02	34.66	12.22
Above poverty line	79.99	83.97	65.33	79.19
Total	100.00	100.00	100.00	100.00
2008				
	Punjab	Sindh	KP	Balochistan
Below poverty line	16.46	14.27	22.42	11.79
Above poverty line	83.53	85.72	77.57	88.20
Total	100.00	100.00	100.00	100.00
2010				
	Punjab	Sindh	KP	Balochistan
Below poverty line	18.8	12.9	28.7	14.1
Above poverty line	83.2	87.1	71.2	85.9
Total	100.00	100.00	100.00	100.00

Source: Authors' calculations.

Moving on to the second indicator of poverty, i.e., education, we focus on the percentage of people without primary education. Because individuals below a certain age may either still be in the process of obtaining education or still have the opportunity to complete their primary education, we have concentrated on individuals above the age of 20. The overall breakdown of people above the age of 20 who have not completed their primary education is shown in Table 13.4. As the numbers illustrate, there was a significant decrease in the number of people above the age of 20 without primary education between 2004 and 2008, from approximately 59 to 55.5 per cent, but there is no statistically significant decrease in this number between 2008 and 2010.

Table 13.4: Breakdown of population above the age of 20 who have not completed their primary education (%)

Only for ages 20 and above	2004	2008	2010
Education below primary	59.1	55.4	54.9
Education above primary	40.9	44.6	45.1
Total	100.0	100.0	100.0

Source: Authors' calculations.

Similarly, Table 13.5 shows that there is a significant fall in the number of men and women above the age of 20 without primary education from 2008 to 2010, with the percentage of men without primary education falling by almost four percentage points from 44.6 to 40.6 per cent and the percentage of women without primary education falling from 73.9 to 70.5 per cent. Again, there are no significant changes in these numbers between 2008 and 2010.

Table 13.5: Breakdown by gender of population above the age of 20 who have not completed their primary education

Only for ages 20 and above	2004		2008		2010	
	Male	Female	Male	Female	Male	Female
Education below primary	44.67	73.88	40.62	70.52	40.45	69.28
Education above primary	55.33	26.12	59.38	29.48	59.55	30.72
Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: Authors' calculations.

Tables 13.6 and 13.7 show the breakdown of people above the age of 20 without primary education in rural and urban areas and across provinces between the years 2004 and 2010. The three important points to note are: first, the significant decreases in the percentage of people without primary education between 2004 and 2008 (with a fall from 40.4 to 37.3 per cent in the percentage of adults without primary education in urban areas and a corresponding fall from 70.4 to 66 per cent in the percentage of adults without primary education in rural areas); second, the disparity in the percentage of adults without education when comparing rural and urban areas and the provinces of KP and Balochistan versus

the provinces of Punjab and Sindh (with the former having a significantly higher percentage of adults without primary education than the latter); third, the lack of any significant change in all these percentages between 2008 and 2010.

Table 13.6: Rural/urban breakdown of population above the age of 20 who have not completed their primary education

Only for ages 20 and above	2004			2008			2010		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Education below primary	40.44	70.42	59.10	37.35	65.98	55.37	36.60	65.79	54.88
Education above primary	59.56	29.58	40.90	62.65	34.02	44.63	63.40	34.21	45.12
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Authors' calculations.

Table 13.7: Province-wise breakdown of population above the age of 20 who have not completed their primary education

Only for ages 20 and above	2004			
	Punjab	Sindh	KP	Balochistan
Education below primary	53.39	56.40	66.77	73.40
Education above primary	46.61	43.60	33.23	26.60
Total	100.00	100.00	100.00	100.00
	2008			
	Punjab	Sindh	KP	Balochistan
Education below primary	48.70	52.32	62.53	70.59
Education above primary	51.30	47.68	37.47	29.41
Total	100.00	100.00	100.00	100.00
	2010			
	Punjab	Sindh	KP	Balochistan
Education below primary	47.95	52.26	61.61	72.66
Education above primary	52.05	47.74	38.39	27.34
Total	100.00	100.00	100.00	100.00

Source: Authors' calculations.

The final dimension of poverty that we focus on is health, as measured by the source of drinking water available to individuals. As discussed above, we have characterized the sources of drinking water into categories above and below the poverty line. The overall picture for the years 2004 to 2010 is given in Table 13.8. Here, we see an interesting reversal in the trend observed for the other indicators of poverty: from 2004 to 2008, the percentage of people below the poverty line as measured by their source of drinking water increased from approximately 11 to 15 per cent, and this higher level was also observed in 2010.

Table 13.8: Breakdown of population by access to drinking water (%)

	2004	2008	2010
Source of drinking water below poverty cut-off	10.9	15.1	14.6
Source of drinking water above poverty cut-off	89.1	84.9	85.4
Total	100.0	100.0	100.0

Source: Authors' calculations.

Tables 13.9 and 13.10 show where this increase in poverty has occurred: Table 13.9 shows the breakdown between rural and urban poverty in terms of sources of drinking water and the numbers show a significant increase in the poverty rate (or, in other words, a significant deterioration in the sources of drinking water) in rural areas with an increase from 16 to 22 per cent of the rural population falling below the poverty line in terms of sources of drinking water, while the percentage of people with poor sources of drinking water in the urban areas is significantly lower at around 1.5 per cent.

Table 13.9: Rural–urban breakdown of population by access to drinking water

	2004			2008			2010		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Source of drinking water below poverty cut-off	1.52	16.23	10.91	1.48	22.30	15.07	1.27	21.85	14.63
Source of drinking water above poverty cut-off	98.48	83.77	89.09	98.52	77.70	84.93	98.73	78.15	85.37
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Authors' calculations.

Table 13.10 shows the provincial breakdown of people below the poverty line in terms of sources of drinking water; the numbers are striking because of the significantly lower levels of poverty in Punjab and Sindh compared to KP and Balochistan. Table 13.10 also shows where the greatest increase in poverty, as measured by the sources of drinking water, has occurred in Balochistan, with the number increasing significantly from 31 to 49 per cent of the population being classified as poor in terms of their sources of drinking water. Finally, Tables 13.9 and 13.10 show that, like income-based and health-based poverty, there has been no significant change in poverty as measured by sources of drinking water between the years 2008 and 2010.

Table 13.10: Province-wise breakdown of population by access to drinking water

	2004			
	Punjab	Sindh	KP	Balochistan
Source of drinking water below poverty cut-off	1.14	6.41	24.06	31.89
Source of drinking water above poverty cut-off	98.86	93.59	75.94	68.11
Total	100.00	100.00	100.00	100.00
	2008			
	Punjab	Sindh	KP	Balochistan
Source of drinking water below poverty cut-off	1.41	7.95	24.07	49.21
Source of drinking water above poverty cut-off	98.59	92.05	75.93	50.79
Total	100.00	100.00	100.00	100.00
	2010			
	Punjab	Sindh	KP	Balochistan
Source of drinking water below poverty cut-off	1.83	7.83	21.77	49.92
Source of drinking water above poverty cut-off	98.17	92.17	78.23	50.08
Total	100.00	100.00	100.00	100.00

Source: Authors' calculations.

Thus, the numbers show that income-based poverty and education-based poverty declined between 2008 and 2010 while poverty measured by sources of drinking water increased between these years. Additionally, the numbers for all three poverty indicators show no significant changes between 2008 and 2010.

The obvious question that arises is whether these changes over time are significant for poverty when measured in terms of income as well as when measured in terms of education and health. Unidimensional stochastic dominance tests for each poverty measure (results not provided here) show that income-based and education-based poverty fell significantly between 2004 and 2008, while health-based poverty did not change significantly (even though the results imply that it actually rose, these results were not significant). Moreover, even though the results show an increase in all three poverty measures between 2008 and 2010, none of these are statistically significant, implying that there was no significant change in poverty between 2008 and 2010. A comparison of these different types of poverty measures between 2004 and 2010 yields the same results as those between 2004 and 2008: income- and education-based poverty decreased but the health-based poverty measure did not show a significant change over this period.

The rural/urban breakdowns of these unidimensional poverty measures (results not provided) show that between 2004 and 2008, all three measures of poverty indicate that urban poverty fell significantly, whereas only income- and education-based poverty fell in rural areas. What is interesting is that there was no significant change in income-based poverty in either rural or urban areas between 2008 and 2010, but there was a significant decline in education- and health-based poverty in urban areas between 2008 and 2010, which was not matched by any significant changes in education- and health-based rural poverty. Over the longer period 2004–08, urban poverty declined using all three measures of poverty, while only income- and education-based poverty declined in the rural areas during this period.

The province-wise breakdowns of unidimensional poverty (results not provided) also yield interesting results: first, while income-based poverty fell in all the provinces between 2004 and 2008, education-based poverty fell in three of the four provinces (the outlier being Balochistan) and health-based poverty only fell in Punjab and KP. The second interesting observation is that, while there was no significant change in income-based

poverty for all three provinces between 2008 and 2010, the only province that experienced a decline in education- and health-based poverty was Sindh. Finally, the statistics show that only KP did not experience a net decline in income-based poverty over the longer period 2004–10, while Balochistan was the only province that did not experience a net fall in education-based poverty during this period. Over the longer period, it seems that only Punjab experienced a significant decline in health-based poverty levels.

Analysis of multidimensional poverty

This section looks at multidimensional poverty, using a combination of income, health, and education indicators, and then performing tridimensional dominance tests (using these indicators) to see if multidimensional poverty has fallen over time in Pakistan.

Our approach uses the “intersection” of the various poverty measures to measure the poverty rate. By this we mean that we consider an individual to be above the poverty line if they fall below the poverty cutoff in at least one of the indicators while they are considered to be above the poverty line if all three of their indicators, lie above the poverty cutoff. So, an individual is considered to be above the poverty line if they are considered not poor in terms of income, health, and education; if any of these indicators lie below the poverty cutoff, they are considered poor.

Though we acknowledge that this is a far more stringent criterion for being above the poverty line than most commonly used measures, our rationale is that it allows us to build a more comprehensive picture of the state of poverty in Pakistan. So, if 70 per cent of the population lies below the poverty line according to this multidimensional measure, it does not imply that the figures we obtained for poverty above are incorrect; rather, it implies that, from the point of view of development, 70 per cent of the population is still deprived in at least one dimension of poverty.²

² We could also use the “union” approach in which an individual is considered poor if they lie below the poverty cutoff in all three dimensions of poverty. However, there are two problems with this approach: first, it might underestimate poverty; and second, the number of observations in our sample that meet this criterion is severely limited.

Table 13.11 shows the percentage of the overall population that is poor in terms of at least one criterion. Here, we see that, according to our multidimensional view of poverty, almost 73 per cent of the overall population is considered to be deprived in at least one of our key criteria (income, health, and education). This number falls to approximately 70 per cent in 2008 after which it remains constant in 2010.

Table 13.11: Percentage breakdown of overall population below the multidimensional poverty line (income, education, and health)

	2004	2008	2010
Above cut-off in all three indicators	27.4	30.2	30.5
Below cut-off (poor) in at least one indicator	72.6	69.8	69.5
Total	100.0	100.0	100.0

Source: Authors' calculations.

Table 13.12 shows the rural/urban breakdown of multidimensional poverty, indicating the stark difference between multidimensional poverty in the urban and rural areas: Urban multidimensional poverty is almost 25 per cent lower than rural multidimensional poverty (56 per cent as opposed to 82 per cent), and though there is a slight fall in both poverty levels between 2004 and 2008 (after which it stays relatively constant), the wide gap between urban and rural multidimensional poverty persists.

Table 13.12: Rural/urban breakdown of overall population below the multidimensional poverty line (income, education, and health)

	2004			2008			2010		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Above cut-off in all three indicators	43.99	18.01	27.39	47.48	20.99	30.18	48.48	20.78	30.49
Below cut-off (poor) in at least one indicator	56.01	81.99	72.61	52.52	79.01	69.82	51.52	79.22	69.51
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Authors' calculations.

Table 13.13 shows the provincial breakdown of multidimensional poverty. What is striking is the large gap between the level of multidimensional poverty in Punjab and Sindh versus that in KP and Balochistan. So, while multidimensional poverty falls in Punjab, Sindh, and KP between 2004 and 2010 (with the most significant falls taking place in Punjab and Sindh), there is no significant decrease in multidimensional poverty in Balochistan over this period.

Table 13.13: Province-wise breakdown of overall population below the multidimensional poverty line (income, education, and health)

	2004			
	Punjab	Sindh	KP	Balochistan
Above cut-off in all three indicators	33.38	29.77	18.33	16.76
Below cut-off (poor) in at least one indicator	66.62	70.23	81.67	83.24
Total	100.00	100.00	100.00	100.00
	2008			
	Punjab	Sindh	KP	Balochistan
Above cut-off in all three indicators	37.78	33.15	22.91	15.22
Below cut-off (poor) in at least one indicator	62.22	66.85	77.09	84.78
Total	100.00	100.00	100.00	100.00
	2010			
	Punjab	Sindh	KPK	Balochistan
Above cut-off in all three indicators	46.46	42.31	28.30	17.60
Below cut-off (poor) in at least one indicator	53.54	57.69	71.70	82.40
Total	100.00	100.00	100.00	100.00

Source: Authors' calculations.

Separating circumstances from effort in income determination

A critical but often ignored question in the discussion on poverty is the impact of opportunities available to individuals on their poverty status. Obviously, there is a significant difference between the economic opportunities available at birth to individuals in Pakistan and the same amount of effort may be enough to

take one individual out of poverty but insufficient in another's case. Roemer (1998), who formalized this idea, suggested decomposing economic outcomes such as income into circumstances and effort. By circumstances, we mean those exogenous factors that a person has no control over, such as gender, family background, or place of birth; by effort, we mean those factors that are affected by the choices made by individuals (or families), such as education or occupation.

In this way, economic outcomes such as income, and therefore poverty, are jointly determined by factors that are beyond the control of individuals and factors that a person can control through his/her choices. This is a powerful idea because not only can one say that a person's income lies below the poverty line, but one can also associate this income with observed circumstances beyond the control of individuals. In other words, we divide the determinants of income in Pakistan into factors determined by the circumstances into which an individual was born, and factors that are determined in his/her own life.

The small budgets and limited capacity that developing countries such as Pakistan have to work with limit their ability to equalize economic outcomes for individuals. For these reasons, in addition to notions of redistributive justice, a policy that aims to equalize opportunities is an attractive approach because it combines the idea of personal responsibility (that outcomes should vary with effort) with the recognition that many individuals are born into disadvantaged circumstances through no fault of their own.

Drawing on the concept of effort versus circumstances delineated by Roemer (1998), Bourguignon, Ferreira, and Menendez (2007) use data from Brazil on men's hourly earnings and determine that between 10 and 37 per cent of the earning inequality for men aged 26 to 60 could be eliminated if they faced equal circumstances, which included race, place of birth, parents' education, and father's occupation. In their exercise, income is determined by three major factors: circumstances, effort, and unobserved individual characteristics (such as intrinsic ability and motivation). Circumstances are fully exogenous to income. However, they allow individual effort, including education, occupation, and migration, to be determined in part by circumstances. The motivation for this, in the case of education for instance, is that the value that parents place on education may depend in part on the

family's socioeconomic status, thus influencing the amount of education attained by their offspring, regardless of ability or intrinsic motivation.

This analysis is intuitively appealing, but it requires very specific data on circumstances such as place of birth and parents' education levels, as well as data on effort, such as education level and occupation. Though much of the latter information is available in household-level datasets in Pakistan, the former is not available in virtually any dataset. Thus, we take a unique approach to this problem: Using the PSLM data for 2010/11, we restrict our sample to working men aged 20 to 30 who are living with their fathers. This helps minimize the sample selection issue that would arise if men living with their fathers differed fundamentally from those who had left, in ways that were not exogenous to income.

For example, sample selection bias could occur if men who are more intrinsically motivated are more likely to move away from their parents and earn higher incomes. Since the majority of men in the 20–30-years-old age bracket will not yet have moved from their natal household, we feel that taking this subsample will minimize the sample selection bias. Given the different circumstance and effort variables that we consider, we lose additional observations due to missing data. We use the characteristics of the fathers in the households and separate the impact on income of the circumstances into which these men were born from that of their efforts.

Persistence of income and educational attainment over generations

However, before studying the joint effects of circumstance and effort variables, it is useful to take a step back and look at the persistence of key economic characteristics across generations. These are referred to as Galtonian regressions and take the form

$$\ln(Y_t) = \alpha + \beta \ln(Y_{t-1}) + \varepsilon_t \quad (1)$$

where Y_t refers to the attainment of the current generation, in this case income or education, and Y_{t-1} refers to the attainment of the previous generation. The coefficients β in each case indicate the persistence across generations and therefore $1 - \beta$ allows us to measure intergenerational mobility. The greater the elasticity β , the greater is the persistence of inequality across generations; an elasticity of 1 would indicate that incomes are perfectly correlated between generations of the same family.

Table 13.14 reports the results of these Galtonian regressions of intergenerational persistence of income and educational attainment. For each of the regressions, we run the Galtonian regression on two samples; in the first, we use the largest sample available for men aged 20 to 30, and in the second we use a smaller sample that is comparable with that used in the upcoming regressions to compute the effects of unequal opportunity on income.

Table 13.14: Galtonian regressions of intergenerational persistence: Income and education

	(1a)	(1b)	(2a)	(2b)	(3a)	(3b)
	Ln(yearly total income)	Ln(yearly total income)	Ln(1 + education) (in years)	Ln(1 + education) (in years)	Ln(1 + education) (in years)	Ln(1 + education) (in years)
Ln (father's annual total income)	0.40 (23.5)	0.36 (15.1)				
Ln (1 + father's education) (in years)			0.09 (10.4)	0.1 (3.6)		
Ln (1 + mother's education) (in years)					0.31 (34.2)	0.5 (16.7)
Sample	All men aged 20-30 living with their fathers	Same sample as in full regressions (below)	All men aged 20-30 living with their fathers	Comparable to sample used in full regressions (below)	All men aged 20-30 living with their fathers	Comparable to sample used in full regressions (below)
Number of observations	2844	1493	14741	1204	13753	1137

Source: Authors' calculations.

The results of Table 13.14 tell us that the income of men aged 20 to 30 has an elasticity of approximately 0.4 with respect to their fathers' income. That is, on average, a young man's income tends to be 4 per cent higher if his father's income is 10 per cent higher. When it comes to education, the attainment of men aged 20 to 30 is much more highly correlated with that of their mothers

(elasticity 0.3–0.5) compared to their fathers (elasticity of 0.1). A young man's education tends to be more significantly affected by the level of education of his mother compared to that of his father.

On the whole, the results imply that parents' income and education are significant in determining if young men lie above or below the poverty line.

The effect of effort and circumstances on income

In this analysis, following Bourguignon et al. (2007), we analyze separately the factors that affect a person's income level into those factors that a person faces at birth and has no control over, or "circumstances", and those that are determined during the life of a person, or "effort". We then analyze how the equalization of circumstances can reduce the inequality of outcomes. In determining these, two critical points emerge: first, we can assess which factors should be targeted in the effort to reduce poverty in Pakistan; second, we can see that, in an environment of limited resources, what would be the impact on inequality of trying to simply reduce the unequal circumstances into which people are born instead of generally targeting the poor equally throughout Pakistan.

In our estimations, the circumstances that we consider are the average educational attainment of the man's parents (AEP), the father's total annual income from all sources (FY), occupation dummies for the father (FOD), the household's wealth index (W), and regional dummies for place of residence (RD). The regression equation for the total effect of circumstances on income is:

$$\ln(w_i) = \alpha_0 + \alpha_1 AEP_i + \alpha_2 \ln(FY_i) + \alpha_3 FOD_i + \alpha_4 W_i + \alpha_4 RD_i + \varepsilon_i \quad (2)$$

where w is the yearly total income from all sources for men aged 20 to 30.

These results show that average parental educational attainment and household wealth has no real impact on earnings. However, the father's income and occupational status have impacts that are both large and statistically significant. More specifically, the children of sharecroppers have the lowest incomes, while the children of farmers who own their land have slightly higher incomes. Interestingly, people with parents who are wage-paid employees tend to have higher incomes than the children of farmers, while the highest incomes are those of children with parents who are self-employed or are employers. So, if one wanted to target poverty reduction funds, one should aim to focus on areas with significant populations of landless agricultural workers.

The results also show that the region of residence plays an important role. Men living in the urban areas of northern Punjab have the highest incomes, followed by those in Karachi. With the exception of KP, men in urban areas generally have higher incomes than their rural counterparts. Thus, in terms of targeting, central Punjab, southern Punjab, and northern Punjab are areas in which income levels tend to be the lowest after controlling for all other factors.

If, instead, we want to compute the direct effect of circumstances, in other words controlling for individual efforts, we start with the following expression:

$$\ln(w_i) = C_i\alpha + E_i\beta + u_i \quad (3)$$

The circumstance variables, C , are as above. The effort variables, E , chosen by the individual male aged 20 to 30 are education (ED) and the decision to work in the agricultural sector (AG). The regression specification we use to estimate the direct effect of circumstances C , controlling for efforts is:

$$\ln(w_i) = b_0 + b_1 AEP_i + b_2 \ln(FY_i) + b_3 FOD_i + b_4 W_i + b_5 RD_i + b_6 ED_i + b_7 ED_i^2 + b_8 AG_i + u_i \quad (4)$$

The estimation results for equation 4 (not provided here) show that the individual's own education has the expected positive and nonlinear relationship with earnings; an additional year of education increases annual total income by about 3.9 per cent, emphasizing the important role of education in reducing poverty.

The father's income and occupational status have important effects on earnings. The elasticity of own income with respect to the father's income is 31 per cent. Compared to men whose fathers are sharecroppers, those with fathers with higher occupational status also earn more, with the increase in wage rising with the occupational status. Men with fathers who are owner-cultivators, wage earners, or have their own business earn 20, 38, and 46 per cent more than those whose fathers are sharecroppers. The region of residence is also important, with the highest incomes earned by those in northern urban Punjab and Karachi. Thus, the circumstances into which people in Pakistan are born have a significant impact on their future income levels.

Following Bourguignon et al. (2007), we compare the actual earnings distribution with the theoretical distribution generated by equalizing circumstances and controlling for individual efforts using an inequality measure,

I. In other words, we measure income inequality by equalizing the circumstances into which every person in the sample was born. Indices of inequality for the distribution of actual earnings, as well as the hypothetical earnings distributions computed with equalized circumstances and the residual inequality are summarized in Table 13.15.

In our results, equalizing all circumstances reduces the Theil index from 0.5 to 0.46—a fall of about 8.2 per cent—when using the regressed sample of 1,493 observations. If we expand the sample to include observations for which effort variables are missing, the reduction in inequality is 7 per cent as measured by the Theil index. Thus, differing circumstances at birth lead to significant differences in income, and equating circumstances across Pakistan could have a significant impact on poverty reduction.

Table 13.15: Decomposition of inequality measures due to unequal opportunities

	Gini	Theil	Residual inequality after equalizing circumstances (share) GINI	Residual inequality after equalizing circumstances (share) THEIL	Number of observations
<i>Regressed sample, 1,493 obs.</i>					
Actual income distribution	0.479	0.501	Na	Na	1,493
Equalizing all circumstances	0.454	0.460	0.052	0.082	1,493
Equalizing family circumstances (only)	0.460	0.464	0.040	0.074	1,493
Equalizing all circumstances, conditional on effort	0.454	0.460	0.052	0.082	1,493

Table 13.15 (continued)

Table 13.15 (continued)

Equalizing family circumstances (only), conditional on effort	0.459	0.464	0.042	0.074	1,493
<i>Expanded sample, 2,148 obs.</i>					
Actual income distribution	0.469	0.471	Na	Na	2,148
Equalizing all circumstances	0.449	0.438	0.043	0.070	2,148
Equalizing family circumstances (only)	0.450	0.436	0.041	0.074	2,148

Source: Authors' calculations.

Conclusion

This chapter's analysis is significantly different from typical analyses of poverty. We have looked at poverty as a multidimensional phenomenon and found that there are more significant differences between the rural and urban areas and between provinces if one expands the definition of poverty to include income levels, health indicators, and educational attainment.

Urban multidimensional poverty is almost 25 per cent lower than rural multidimensional poverty and though there is a slight fall in both poverty levels between 2004 and 2008, the gap between urban and rural multidimensional poverty persists. Additionally, the provincial breakdown of multidimensional poverty shows a large gap between the level of multidimensional poverty in Punjab and Sindh versus that in KP and Balochistan. While multidimensional poverty falls in Punjab, Sindh, and KP between 2004 and 2010, there is no significant decrease in multidimensional poverty in Balochistan over this period.

We also adopt a new approach to looking at the factors that affect income levels in Pakistan. By dividing the factors that affect income into the circumstances into which people are born (and which they have no control over) and those that people can influence through their own efforts, we are able to gauge if targeting poverty reduction initiatives can have a significant impact on income levels.

We find that factors such as education have a significant impact on determining a person's income. Thus, an obvious way to reduce poverty would be to promote education in the least developed areas. A more interesting result is that the circumstances into which people are born have a significant impact on whether they will have low incomes or not; put another way, controlling for all the usual factors such as education, just being the child of a less educated father or sharecropper significantly reduces the levels of income a person will have and increases the chances that he/she will fall below the poverty line. We also find a significant decrease in income inequality if we equalize the circumstances under which people are born.

This final result is critical because normal policy reduction initiatives have a household-level focus: they are less concerned about targeting regions or communities and more concerned about targeting the lowest-income households. Our results imply that, in a situation where resources are constrained, there can be significant reductions in income inequality if one focuses on equalizing the circumstances under which people are born. This may mean that one should not have to target households with the lowest incomes, but rather target areas that have the most significant persistence of low incomes.

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Can the New Intergovernmental Structure Work in Pakistan? Learning from China

Ehtisham Ahmad*

Introduction

The 18th Amendment to the 1973 Constitution of Pakistan disentangles overlapping spending responsibilities between the federation and provinces in a wide range of functions, devolving them to the latter. The legislation was also a reaction to relatively poor service delivery and living standards that had fallen continuously behind those in other countries in South Asia, and, indeed, are now lower than sub-Saharan Africa in most respects.

The Musharraf government had used this argument for its own decentralization effort—delegating power to the districts and bypassing the political centers of power in the provinces. The 18th Amendment reasserts the provinces' power and the associated political centers of power. It is designed to weaken the center, and correspondingly make it less attractive for the military to assume power by moving against an elected Prime Minister, as it has done periodically in Pakistan's history.

But will this major reform work effectively and ensure higher living standards for all people in all the provinces? To what extent is the need for a national identity important in ensuring that the decentralization does not cause the federation to

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unravel or the overall delivery of public services to deteriorate and lead to greater exclusion of the poor? These are important issues and could well determine the fate of the 18th Amendment as well as social stability in Pakistan.

Section 2 outlines developments in theory linking governance and the decentralization process. The links between the two are critical.¹ The main question is whether decentralized service provision can better provide for the poorer sections of society by utilizing information that may be available at the local level in tailoring services to local preferences and making access easier. How are these responsibilities financed? Does the process impede closer economic integration between the federating provinces? This chapter argues that positive approaches to intergovernmental reforms, as exemplified by the People's Republic of China, are perhaps more important for countries such as Pakistan that face significant structural challenges.

Section 3 focuses on the 7th National Finance Commission (NFC) Award and key elements of the 18th Amendment. Their components are examined in relation to the main criteria for good governance, utilizing positive approaches to institutional and multilevel governance reforms. The section argues that the failure of tax reforms poses serious difficulties both for the NFC and the stability of assignments arising from the 18th Amendment. These accentuate the danger of Pakistan becoming a "failed state", highlighted by commentators prior to the NFC award or the 18th Amendment (see Haque, 2009).

To prevent dire consequences arising from the NFC award and the 18th Amendment in the presence of failed tax reforms and opaque governance, Section 4 outlines an agenda for urgent action that revisits archaic and inefficient revenue assignments dating back to the Government of India Act 1935. The chapter concludes with some proposals that might be considered in the context of the next NFC award, and possibilities for another constitutional amendment on the revenue side to parallel that on the spending side. Joint action on tax policy and assignments, as well as the complete overhaul of the country's tax administration framework are needed.

¹ See Burki and Perry (2000). See also Shah (2010), who draws attention to the very important lessons that can be drawn from the Chinese experience.

Normative or positive approaches to federalism and decentralization?²

This section sets the stage by reviewing the normative and positive approaches to decentralization, and examining theory and evidence, including the example of China. It also draws some lessons regarding preconditions for good governance in a decentralized framework, and links these to the Pakistan context.

Developments in theory

The post-Second World War normative literature on fiscal decentralization has been much influenced by the experience of the US, and the work inter alia of Musgrave (1959) and Olson (1969). These were based on the assumption that governments are benevolent. This reflected the views of Montesquieu, and of Hamilton and Madison in the Federalist Papers, that a government should be small and its functions separated, with the center responsible for issues that affect all lower levels of government, such as defense and monetary policy. The assumption has been, particularly on the part of some bilateral and multilateral agencies, that decentralization leads to more efficient service delivery, higher growth, and poverty reduction.

Experiences outside the US, particularly in the European Union (EU) and especially in developing countries, have led critics to question the normative approach, spawning a surge in the “political economy” literature (see surveys in Ahmad & Brosio, 2006; Oates, 2008; Lockwood, 2009). This reflects an earlier debate associated with De Tocqueville and John Stuart Mill, which focused on the actual workings of government and an evaluation of the pros and cons of “decentralized” operations. The main difference is that the assumption of “benevolent” government is dropped, and that incentives facing politicians and bureaucrats become important as does the role of institutions and information flows.

Bardhan and Mookherjee (2000) write about the possibility of “capture” by vested interests (see also Ahmad & Brosio, 2011). Besley and Case (1995) introduce the concept of “yardstick competition” in which voters evaluate the performance of their local government in relation to the results achieved in

² This section draws on Ahmad (2010a) and Ahmad and Brosio (2006).

neighboring jurisdictions. Given increasing mobility and information flows, the yardstick competition idea has recently been extended to relate to countries, as citizens in one country examine what results are achieved in other countries with which they are familiar (Salmon, 2010; Besely & Case, 1995).

The building blocks of both the normative and positive traditions are similar—spending and taxation assignments, design of transfers, debt management, and information flows and instruments for implementation. However, the sequencing and mix of these instruments can vary, as discussed below.

Decentralization trends

The impetus to decentralize has differed in many cases. In Latin America, the shift from one-party or military rule has led to a resurgence of interest in decentralization as a means of consolidating political gains, whereas China—a large, one-party, unitary state—has actually been quite decentralized. The cross-country push to decentralize, supported by international agencies, is in line with the normative approach to decentralization on the grounds that it would lead to better service delivery and poverty reduction. However, the evidence on this is at best mixed (see Ahmad, Brosio, & Tanzi, 2008, for a discussion on the evidence in OECD countries). Table 14.1 gives some trends from Ahmad and Brosio (2009).

As in Pakistan, many Latin American countries have experienced some movement toward decentralization over the last two decades, often as a reaction to periods of one-party or military rule. This has been more marked on the spending side than on the revenue side. With respect to the latter, the trend has taken the opposite direction: countries have established more or less centralized systems for implementing value-added tax (VAT)—sometimes with the help of international agencies and particularly the International Monetary Fund (IMF)—often replacing myriad subnational taxes at the state and local levels.

Despite the rhetoric, the approach on the spending side—particularly in the Latin American countries—has entailed mixed and overlapping responsibilities that have not been adequately addressed. This partly reflects the centralized tendencies of the past together with a paternalistic approach, including by donors who do not trust subnational governments to make the right choices for their citizens in their area of competence (including education and social policy in general), or who feel that the lower levels lack the capability to manage their affairs effectively.

Table 14.1: Main traits of recent intergovernmental reforms in selected countries

Country	Main characteristics of intergovernmental relations	Comments
Australia	Federal system	Center administers VAT on behalf of states; reforms introduced in early 2000s.
Belgium	Federalization based on linguistic divisions	Transformed from unitary to federal state
Bolivia	Three-layered unitary system	Municipalities' powers considerably increased. Election of governors of departments, some demanding substantial but asymmetrical powers—associated with natural resources.
Brazil	Federal system based on three layers of government	National reform and coordination of VAT is an urgent priority, although proposals for reform since the late 1990s have not been acted on.
Canada	Federal system	Asymmetric federation (special treatment for Quebec)
China	Highly decentralized system within a unitary constitution; operates like a quasi-federation	Taxing power recentralized (1994)
Colombia	Three-layered unitary system	Extensive devolution of resources to provinces (departments); movement toward a quasi-federation.
Denmark	Unitary system with strong municipal governments	Recentralization of higher education and health since 2006
France	Regional system	Regulatory, fiscal, and political decentralization initiated
Germany	Federal system with extended concurrent responsibilities	Reforms to the federal structure initiated in a wide-ranging set of issues, but little change effected as a result of two commissions.
Indonesia	Unitary state	Extensive decentralization of spending powers to district-level administrations after the fall of the Suharto administration, accompanied by a new revenue-sharing arrangement.

Table 14.1 (continued)

Can the New Intergovernmental Structure Work in Pakistan?

Table 14.1 (continued)

Country	Main characteristics of intergovernmental relations	Comments
Italy	Unitary, with asymmetric arrangements	Fiscal, regulatory, and political decentralization initiated with a new constitution
Mexico	Federal system with high political and low fiscal decentralization	Fiscal and regulatory decentralization since late 1980s, with basic education (1992) and healthcare (1996) devolved to states, although revenues have been effectively centralized since early 1980s.
Pakistan	Federal constitution with interludes of military rule	Deconcentration to districts in the early 2000s by Musharraf. Overlapping responsibilities on the spending side unwound with the 18 th Amendment—most spending powers fully assigned to provinces. Relatively little subnational reliance on own-source revenues.
Peru	Unitary state—moving toward a quasi-federation?	Election of governors of regions—sharing of natural resource revenues. Overlapping responsibilities with relatively limited spending or revenue devolution.
Poland	Unitary	Political and fiscal decentralization with emphasis on the local level
South Africa	Post-Apartheid constitution introduced a quasi-federal system	Devolution of extensive responsibilities for education and health to provinces
Spain	Regional, quasi-federal system	Transition toward a federal system. Fiscal equalization with own-source revenues at subnational level. Asymmetric assignments for some regions.
Switzerland	Federal system	Equalization transfers from federation to cantons
UK	Regional	Introduction of regional government in Scotland and Wales

Source: Ahmad and Brosio (2009).

The evidence on the effects of decentralization regarding improvements in service delivery in the OECD countries is mixed (see Ahmad et al., 2008). The

evidence for developing countries is not much more conclusive (see Ahmad & Brosio, 2009). The links between decentralization and preference matching and with growth are often examined together. The studies confirm that any relationship, if it can be established, is at best weak and tenuous.

Perhaps the greatest lacuna in the decentralization processes of developing countries is their lack of attention to adequate own-source revenues at the subnational level. This may be due to the normative approaches that suggest focusing first on the spending side, especially at the intermediate tier of government/states/provinces/departments.

Political economy in action: China

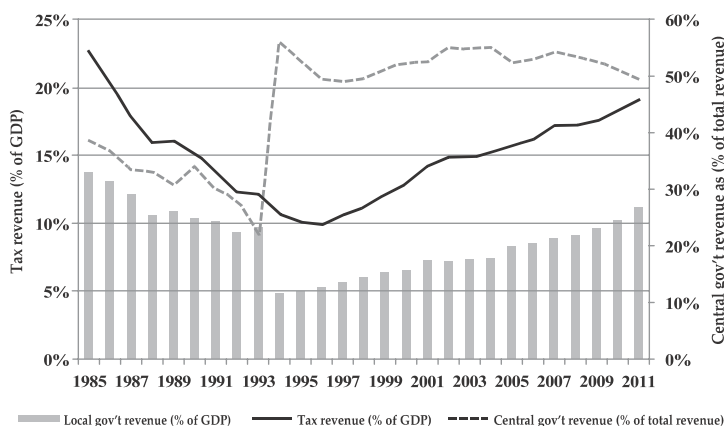
In the 1990s Chinese context of murky spending responsibilities—where state-owned enterprises (SOEs) at different levels of government carried out a lot of social spending—in a legal unitary state with no central tax collection other than customs, the center had very limited ability to levy taxes. Economic reforms in the 1980s had moved from a system of 100 per cent profits taxation targeting largely SOEs (collected by local governments on behalf of the center) to a more moderate level of taxation. However, this caused the tax-to-GDP ratio to fall from more than 22 per cent to about 12 per cent by 1993; more alarmingly, the central government's share of collection fell from just under 60 per cent in the early 1980s to under 30 per cent by 1993. This severely constrained the center from pursuing macroeconomic and redistributive policy goals.

The debate at the time was whether the normative model of federal reforms should be followed, i.e., to clarify spending responsibilities and then adjust tax assignments accordingly—the “big bang” model also being used in Russia. Alternative approaches supported the Chinese administration's view that it would be preferable to bolster central finances by establishing a state administration of taxation (for the first time in Chinese history) responsible for collecting modern taxes, particularly VAT (see Ahmad, Gao, & Tanzi, 1995). This view was accepted by the leadership, which was keen to avoid the difficulties that were apparent by then in Russia, following the collapse of the Soviet Union—another example of international yardstick competition.

The new tax-sharing system with a central administration operated from 1994, and spending assignments were to be addressed over time as the SOEs

were gradually reformed.³ The VAT reforms in particular were spectacularly successful, raising the central government’s share immediately and helping to bring the tax-to-GDP ratio up toward 20 per cent of GDP (see Figure 14.1). The interests of the local governments in the tax reforms were protected by a “stop-loss” provision that ensured that all local governments would get the amounts they had received in 1993 and the new system would be phased in. All local governments shared incrementally as the new taxes were implemented (rich regions benefitted concomitantly). Political economy concerns were protected by an equalization system together with a Chinese innovation—“revenue returns”.

Figure 14.1: China: Total tax revenue, local government revenue, and central government share of total revenue, 1985–2011



Source: Ahmad, Rydge, and Stern (2013).

A new equalization transfer system was established similar to the most advanced in the world (Ahmad et al., 1994; Ahmad, 1997, 2013) but its operations were phased in over time. In the short run, a “revenue returned” system was constituted that “returned” resources to the regions generating them (over and above) the revenue-sharing arrangement. While this was

³ See also Ahmad, Li, and Richardson (2002); Ahmad, Lee, and Kennedy (1993); Ahmad et al., (1995); Ahmad, Craig, and Mihaljek (1994); Ahmad, Craig, and Searle (1994); Ahmad (1997); Lou (1997); and Ahmad, Bixi, Fortuna, Lockwood, and Singh (2003).

criticized as increasing inequality, in reality it was an essential component of “protecting” overall growth and investment. With the freeing up of the labor market (there were now 150 million migrants working in the coastal areas), it was essential to ensure full employment and reduce poverty (Lou, 1997). This is again an example of a pragmatic “positive” action to meet the specific circumstances of a country in rapid transition, for which the normative models are of limited utility.

Reforms of the budget, treasury, and reporting systems were also set in motion in the late 1990s in a sequence of measures to prepare for the operations of a modern economy. A second phase of the reforms is now needed to clarify spending responsibilities at the lower levels of government, and also to examine own-source revenues and debt in a way that optimizes land and local resource use.

The Chinese reforms of 1993/94 are an excellent example of the positive approach to intergovernmental issues in action, and the importance of a new tax administration as well as a nondistortive tax, such as VAT. There was no concern that VAT would either affect the poor or hurt investment or growth. In fact, the form of VAT that was in operation for the first 15 years after implementation was the “investment” type that does not provide credits or refunds for capital purchases. This did not, however, seem to affect either investment or growth, which were spectacularly high during this period. The move to a more normal consumption-type VAT was initiated only recently as the need for efficiency became more pressing and the scope for raising revenues efficiently to around 25 per cent of GDP became more difficult.

Preconditions for good governance

Overall strategy for sustainability

Normative approaches to fiscal federalism emphasize the sequencing in which “finance follows function.” There is considerable validity in this proposition, especially when marginal changes are envisaged. This “recommendation” is designed to avoid an unsustainable expansion in overall spending and with a view

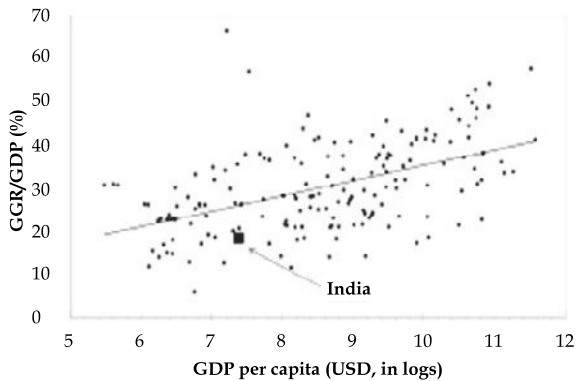
to maintaining macroeconomic stability. It is also an argument that countries should begin decentralization reforms by starting with a devolution process on the spending side first, followed by the reassignment of revenues.

The problems occur when finance does not follow function or when it encourages access to irresponsible financing mechanisms, such as borrowing without controls or accountability, or running up arrears. In such cases, a macroeconomic crisis is likely because local governments have every incentive to borrow and pass the buck to others. It is usually the central government that has to pick up the pieces, as in Latin America in the 1990s. In other countries, such as Nigeria, the absence of adequate local own-source revenues has meant that there was no incentive for local governments to pay teachers under the devolution stipulated by the new constitution, and the functions had to be moved up to a higher level.

Additionally, under certain political economy circumstances, as in China in the early 1990s, it may make sense to start with the revenue side first to ensure that there are adequate overall revenues to match the spending needs of general government, i.e., of the central and subcentral governments and associated public sector undertakings. The 1994 reforms that facilitated substantially decentralized spending over the following two decades were predicated on an effort to consolidate central revenues, including through VAT, accompanied by automatic redistribution mechanisms such as revenue sharing, equalization, and revenue returns, all of which served different purposes. Thus, a careful redesign of the transfer system is critical if a major structural reform on the revenue side is to be attempted in a multilevel or federal country.

It is generally accepted that, to meet the Millennium Development Goals (MDGs), a tax-to-GDP ratio of around 18 per cent is necessary for all levels of government or general government (Ahmad, 2013). India and China have worked very hard to increase their tax-to-GDP ratios to around 20 per cent of GDP, but given their substantive investment needs in education and physical infrastructure, and for a more environmentally friendly growth strategy, a tax-to-GDP ratio in the range of 25 per cent is more likely required (see estimate for India in Figure 14.2; IMF, 2013).

Figure 14.2: General government revenue and GDP per capita, 2012



Note: The figure excludes oil exporters and microstates.

Source: International Monetary Fund (2013).

Pakistan’s tax-to-GDP ratio was 14.5 per cent in the early 1980s, and had declined to 10 per cent by 2008 at the onset of the macroeconomic crisis that led to a mega-loan from the IMF. This was predicated on fixing the tax system, especially the moth-eaten general sales tax (GST) replete with exemptions and “holes” for 65-year-old infant industries (to use a turn of phrase popularized by a prominent Pakistani economist, Dr Nadeem Ul Haque) and for friends and relatives of those in power. The tax reforms failed, leading to the suspension of the IMF program in 2011.

As the tax-to-GDP ratio slid below 9 per cent in 2009, Haque (2009) correctly pointed to the dangers of Pakistan becoming a failed state. This level of tax effort barely finances debt servicing and defense, and leaves precious little for public services or investment at any level of government. Under these circumstances, a major structural shift involving a significant decentralization of spending to the provincial governments—unbundling the parallel responsibilities of government—is of little more consequence than shifting deck chairs on the Titanic.

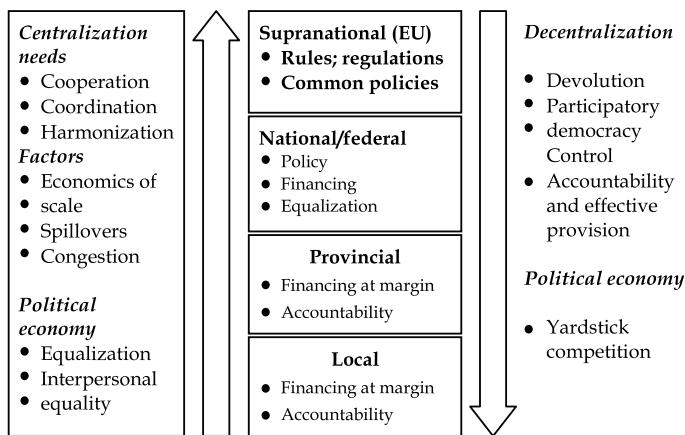
Spending assignments

A useful typology of spending responsibilities showing how different countries approach these issues is given in Figure 14.3. It addresses the subsidiarity

principle, which states that assignments should be devolved to the lowest level capable of effectively providing them. This is a general principle of the EU's legal framework, constraining the supranational level from legislation to areas where action at the national, regional, or local levels is insufficient (see "Consolidated Version of the Treaty", 2002).

The concept has both legal and political ramifications. The focus is on scale as well as effects, including externalities, on other jurisdictions; this has given rise to actionable cases where there is a legal connotation, as in the EU.⁴ In political terms, the concept of subsidiarity is often taken beyond the multilevel government connotation to include the boundaries between the private sector and the role of the state (at any level). The assumption, especially by conservative commentators in the US, is that the private sector should be encouraged to provide public services as far as possible because this is expected to be more efficient than public provision.

Figure 14.3: Modified subsidiarity principles



Source: Adapted from Dafflon (2006).

Figure 14.3 shows the differing trends regarding the centralization/decentralization debate in different countries or regions. Arguments for the

⁴ An interesting example is the European Court of Justice's rejection of a case brought by the German government against the EU Directive on Deposit Guarantee Schemes (Case C-233/94).

decentralization of functions are based largely on accountability and effective provision, given the subsidiarity principles. However, it is not enough to legislate the assignments—the lower levels have to have the capability as well as the incentive to provide services. Both are linked closely to the financing issue as well as incentives for effective provision. Thus, the argument that local governments lack “capacity” is not strictly binding if they have the financial resources to hire skilled workers.

An important hypothesis governing accountability comes through the electoral process when voters are able to assess the performance of their “elected” rulers in relation to standards in neighboring jurisdictions (see Salmon 1987, 2006; Besley & Case, 1995).⁵ Again, the incentives are critical and voters are more likely to be responsive if, at the margin, local governments rely on own-source revenues over which they control rates or bases.⁶

Offsetting the decentralization trends are concerns that limit subsidiarity—mainly externalities such as spillovers (including those with environmental considerations), congestion, and economies of scale. Moreover, decentralization, especially of resource bases, can exacerbate inequalities across regions and limit the extent of interpersonal redistribution that might be feasible. In all cases, the federal, central, or supranational agencies have a role to play in coordinating and harmonizing essential policies.

The US and certain other federations maintain a unified economic space facilitated by a “commerce clause.” In the EU, the common external tariff and harmonization of country-level VATs (see the EU Sixth Directive) ensure a common economic space to minimize harmful competition. Thus, a combination of legal and regulatory frameworks is essential to ensure equal treatment and opportunity. Again, for this to work efficiently, full information is needed on who spends what and on the buildup of assets and liabilities; as the recent EU experience illustrates, inadequate attention to the standardized flow of information could jeopardize a common economic space.

⁵ A recent extension by Salmon posits that cross-country comparisons may be even more important for voters.

⁶ See Ambrosiano and Bordignon (2006) for a discussion on the general issues, and Gadenne (2012) for an interesting assessment based on the case of Rio de Janeiro.

Full information on transactions, including the uses and flow of funds

A key element in accountable governance is timely information on the sources and uses of funds at all levels of government. This is critical for establishing benchmarks against which the performance of governments—federal, provincial, and district—should be evaluated. Typically, it involves using the IMF’s (2001) government financial statistics (GFS) manual standards for economic classification (wages, social contributions, interest, operations and maintenance, etc.), and the UN’s Classification of Functions of Government (COFOG) for education, health, and other functions. This should provide an indication of what revenues were generated, what was budgeted, and what was spent. In principle, this information for Pakistan should have been generated by the Project to Improve Financial Reporting and Auditing (PIFRA) project, which has been implemented over ten years at a cost exceeding USD 100 million (under a World Bank loan).

Most governments provide economic and functional data for each level of administration to the IMF’s GFS yearbook. Pakistan’s GFS page for the most recent yearbook only covers information on the budgetary central government. Given that most spending is at the subnational level or is carried out by agencies associated with the central government, the data in the GFS yearbook is less than useless for policy purposes. With declining outcomes in education and healthcare—where Pakistan is now falling behind sub-Saharan Africa—and donors’ focus on the social sectors, the absence of readily available information⁷ in these critical areas is a serious problem. This ensures that the electorates of the districts and provinces, indeed of the country as a whole, are comparatively uninformed about relative spending by the public sector in areas of key policy importance.

In addition to the financial information on public spending that forms the basis for evaluating governments at election time, it is important to have information on the outcomes of spending by the public sector. Again, this is a critical element in the operation of “yardstick competition” and in the operation of the electoral process to discipline governments.

⁷ For example, on the websites of the Ministry of Finance, the Federal Bureau of Statistics, or the State Bank of Pakistan.

The cash-basis of the budget process in Pakistan also poses problems: it permits “game-play” by the respective governments in terms of pushing liabilities into the future and bringing forward credits, e.g., the securitization of revenues or asset sales that inflate short-term revenues. A typical mechanism for hiding liabilities is to shift them on to SOEs. Astonishingly, in the early 1990s, the IMF agreed to ignore the liabilities being generated in the SOEs (see Ahmad & Mohammed, 2013). This would not be appropriate under the IMF’s (2001) GFS manual framework and may have contributed to the buildup of circular debt in the country.

Public-private-partnerships (PPPs) are an increasingly convenient vehicle for “kicking the can of responsibility” down the road. This is true of developing and developed countries alike and contributed significantly to the fiscal problem in the EU. It has led to tighter accounting rules, especially the recognition of “public” liabilities in PPPs. Consequently, the accounting rules regarding PPPs were also tightened, leading to a need for provisioning to prevent mechanisms to circumvent liabilities.

For full accountability, it is not sufficient to be able to track and report on budgeted amounts, eventually also focusing on the results of the spending. Equally important is tracking government cash. Typically, countries maintain treasury single accounts (TSAs) into which all public funds flow and from which all spending is authorized. Although in certain cases, commercial bank accounts may be needed to facilitate payments or receive revenues, these should not contain balances. These zero-balance accounts are linked with the TSA for overnight deposit of revenues or the reimbursement of authorized payments.

At the time the government was considering an IMF program in spring 2008, Finance Minister Dar asked for the government balance sheet to be drawn up. This indicated government balances of around USD 10 billion in commercial bank accounts at low or zero interest. Although the IMF’s 2008 program had a provision for the establishment of a TSA, this has not happened—both military and political governments are disinclined to be subject to the discipline and transparency of a TSA. As for the banks, they are quite happy to lend the same money back to the government as the deficit increases and is financed by bank borrowing.

With this opaque system, it is hard to impose accountability at any level of government. There is no information on what should be spent, is actually spent,

or what is happening to public funds. Yardstick competition is impossible with a poor governance structure. As important as the tax reform has been in China, the establishment of a GFS 2001-compliant budget framework, and of TSAs at the central and provincial levels, has been equally important in instituting an effective system of decentralized investment and governance.

Own-source revenues, transfers, and access to credit

A critical part of the story of accountable governance at the subnational level concerns “own-source” revenues. This relates to the ability of a lower-level government to raise revenues by varying the rate of a reasonable tax base. Thus, in North America, state and local governments are able to set the rates of state or local income taxes using the federal tax base. This ensures that additional revenues can be generated in case of need. There need not be a state or local tax administration, and the federal tax administration could be used to do the “heavy lifting” in relation to IT, cross-referencing information, and audits. It can be thought of as a “piggy back” or co-occupancy of a tax base, in case there are parallel administrations.

Note that shared revenues are not strictly own-source revenues and are closer to transfers, since subnational governments can do little to influence the rate or base and are merely recipients of the revenues. Additionally, taxes administered by the central tax administration can be considered own-source if the local government is able to vary the rate. Analogously, if it is difficult to vary the rate of a subnational tax base (such as the GST on services), that tax base is not an effective “own-source” revenue.

Without an effective own-source revenue handle, it is not possible to hold a subnational government responsible for its debt or buildup of liabilities (Ambrosiano & Bordignon, 2006). This would weaken hard budget constraints, if any, and reduce local accountability. One of the biggest macroeconomic problems in Latin America during the 1990s was countries’ uncontrolled subnational borrowing, often from their own banks. Following the Brazilian lead in the late 1990s, many countries have constituted fiscal responsibility legislation at the subnational level. This too can, however, be oversold—such legislation is only as good as the systems to monitor and report on the buildup of liabilities. Moreover, hard budget constraints are critical and require, in turn, effective own-source revenues.

Even if a country has an assigned own-source revenue handle, lower levels of government may have little incentive to use it if they have access to badly designed transfers or credit for which the liability can be shifted to others. Thus, if central transfers are a function of actual deficits at lower levels (called “fiscal dentistry” in India; see Rao, 1998), they will have no incentive to use own-source revenues or spend efficiently.

It is, thus, clear from theory and practice that good governance at the subnational level is a complex set of policy measures where interaction matters in terms of generating appropriate incentives for accountability. It is likely that isolated reforms, such as for spending assignments in isolation, may not work as anticipated and might even make matters worse.

Challenges for Pakistan: Stalled reform agenda

Although Pakistan has always been a federal country, extensive periods of military rule have led to perceptions of dominance by the center, despite attempts to “decentralize”. In the 1960s, Field Marshal Ayub Khan’s administration experimented with a system of “basic democracies”—setting up an electoral college at the local level that also formed the basis of development activities in their regions. This effort at political “deconcentration” was abolished under the 1973 Constitution, which restored the rights and functions of the provinces—the main subnational unit of governance under the Government of India Act 1935 (the basis for both India and Pakistan’s constitutions after independence).

General Musharraf’s administration also promoted a form of so-called “decentralization” in the post-9/11 period. While it was ostensibly a mechanism to move services closer to the people and elected local officials, there was little attempt to adjust spending assignments or financing arrangements. Although the process was clearly an attempt to bypass the established political parties and power centers in the provinces, bilateral donors and multilateral banks rushed to support the process along with the Federal Board of Revenue (FBR)’s institutional reforms and government financial information systems at all levels of government. Each of these reforms had failed or was in significant difficulty by the time Musharraf left office in 2008 (see Ahmad & Mohammed, 2013).

The impetus for the 18th Amendment was primarily a reaction against a decade of military rule. It also came at a period of economic distress, after food and oil

price shocks had severely affected the stability of an economy that had relied on capital inflows to generate growth and neglected domestic resource mobilization. The government's approach to the IMF in 2008 was predicated on tax reforms—principally fixing the holes in the GST. At the same time, the NFC met to work on the 2010–14 award, keeping in view the provinces' deplorable levels of spending on the social sectors, principally education and healthcare. The Finance Division's Poverty Reduction Strategy Paper (PRSP) envisaged significant progress toward meeting the MDGs, for which additional resources were to have been allocated to the provinces. This section argues that all three sets of reforms were closely intertwined, and that the failure of the tax reforms has seriously jeopardized both the NFC award and the 18th Amendment.

Tax reforms

The reform of the tax administration has been recognized as a priority since the early 1980s and the report of the Tax Reforms Commission headed by Qamar-ul Islam, which had called the then Central Board of Revenue a hotbed of corruption and rent seeking. A GST was introduced in 1990 under an IMF-supported program (but brought in through the back door, when the entire sales tax act was replaced as part of the finance bill). It was administered very arbitrarily, with the tax administration treating it like a production excise (Ahmad, 2010b), setting reference prices and continuing to give exemptions and preferences through a system of administrative orders (SROs) that provided ample opportunity for the rent-seeking and corrupt practices to continue. The ability to give preferences and exemptions and reward specific groups, while threatening to punish others without reference to Parliament, provided convenient handles to politicians of successive weak administrations to make friends and influence people.

At the end of the 1990s, a committee led by former World Bank official Shahid Husain recommended the creation of an integrated revenue administration, using the modern principles of self-assessment, an arm's-length functional administration with minimal contact with taxpayers, and consequently limited opportunities for rent seeking. This was supported by a large World Bank loan to create the new FBR on the Argentine Revenue Authority model.

By the spring of 2008, the World Bank had classified the project as “unsatisfactory”. A functional organization structure had not been created and an IT system was prepared in-house that largely automated the old procedures.

Additionally, key productive structures had been removed from the GST net with domestic zero-rating, largely to offset delays in refunds and ease pressure on these sectors from an overvalued exchange rate in a manner that would not attract the World Trade Organization's attention. To appear "investor-friendly", the audit system had been effectively abandoned in 2004/05. It is no wonder that the GST failed to raise revenues, as had been expected under the strategy to replace tariffs by the GST (the plan had been to replicate the Singapore strategy that had very effectively used this method). An attempt to revive the project under the IMF's 2008 program also failed, as discussed below.

By 2009, the GST's efficiency in Pakistan had fallen to around 0.26 (as measured by the C-efficiency ratio; see Ahmad, 2010b, for more details), and collection had declined to 3.1 per cent of GDP from 3.9 per cent in the 1990s (see Table 14.2). If Pakistan were to achieve the C-efficiency of Sri Lanka (from around 2004 at the height of the civil war), it would more than double the collection or reach around 7 per cent of GDP with a 15 per cent rate. It is worth noting that the taxation of goods and services in China generates around 9 per cent of GDP (Ahmad, Rydger, & Stern, 2013).

Table 14.2: GST productivity—declining and low in comparison with competitors

Country		Standard rate	Revenue/ GDP	Productivity
Pakistan	(1990s)	15		0.39
Pakistan	(2005)	15	3.4	0.30
Pakistan	(2009)	16	3.1	0.26
Sri Lanka		15	6.7	0.47
Philippines		12	4.3	0.45
Turkey		18	7.1	0.48
Lebanon		10	5.1	0.50
Jordan		16	10.1	0.62
Korea		10	6.7	0.67
Singapore		5	1.8	0.63
New Zealand		12.5	8.9	0.93

Source: International Monetary Fund, various country papers.

The stabilization program

The economic crisis of 2007/08 led to a significant rise in the budget deficit and overall debts—leading to a hemorrhaging of record high reserves. A government stabilization plan in September 2008 was based on raising the tax-to-GDP ratio by five percentage points, and its key element was the reform of the VAT that formed the basis of the submission to the IMF. The argument was that the government needed roughly two years to revive and implement the Shahid Husain plan to restructure the FBR, and that the IMF monies would be a “bridging loan” while this reform took effect.⁸

The revised VAT law was meant to remove distortions in the GST—especially the domestic zero-rating and exemptions that were largely designed to benefit special interest groups and, *pari passu*, consumers of luxury textiles and oriental carpets. The other main objective had been to create the basis for an arm’s-length tax administration based on self-assessment and effective audit, minimizing the problems of direct contact between the tax administration and taxpayers and also the difficulties with the issue of refunds, which had created considerable rent seeking. A critical additional objective was to remove the tax administration’s ability to confer benefits on the chosen few through the notorious SRO system; the new law required any such change to be submitted to Parliament and that the FBR would be stripped of this power.

The “streamlined” VAT law would also have replaced multiple rates (from 17 to 26 per cent) and the cascading associated with reference prices by a single rate and considerable simplicity, including the elimination of SROs, but it was badly sold to the public and the Parliament. This was partly due to opposition from the vested interest groups that had benefitted from the holes in the GST, and partly due to the tax administration’s reluctance to relinquish its “rent-seeking powers” and the loss of the SRO handles. Although the Senate passed a corrupted version of the VAT bill (retaining some draconian powers for the FBR), there was enough

⁸ The former head of the Argentine Revenue Authority was hired by the World Bank to prepare a plan to enable a reformed VAT to be implemented in a reformed FBR by summer 2010—the key date under the IMF program (Silvani, Biber, Crandall, Grant, Reos, and Seymour, 2008). By 2011, this effort had been abandoned. The original USD 135 million loan was not fully drawn. The World Bank now plans to revive the project with a USD 300 million loan. The problems lay in the incentive structures facing officials and politicians and not the financing constraints.

opposition to the bill in the lower house to stall it on the absurd grounds that it would “crush the poor”, without empirical or analytical support. In reality, the poor would have been largely unaffected by the GST, but will surely be crushed by the resort to deficit financing and borrowing from the banking system.

To “rescue the IMF program”, the government proposed Plan B in March 2011 to remove the main “exemptions” under the GST, but without the full overhaul of the law. This was to remove by administrative order the SROs that had led to the exemptions. This option faced no legal difficulty. It would not have raised much additional revenue and may even have led to less revenue in the short run, but it would clearly indicate that the authorities intended to tackle vested interests seriously. The reform lasted less than a fortnight as the vested interests coalesced, and the proposals were replaced with a far worse situation with the SRO283, issued on 1 April 2011.

SRO283 provided all sorts of exemptions and lower rates on all manner of final and intermediate goods—184 items in all—and recreated the “cascading” that is the antithesis of a GST. Finally, item 185 stipulated that any other exemptions that might be needed in the future would be included without having to issue an additional SRO—this is SRO making ad absurdum. More problematic is that the FBR has effectively abandoned the logic of the arm’s-length administration that was the basis of the Shahid Husain proposal. Indeed, the use of third-party information from the National Database and Registration Authority (NADRA) is being accessed and selectively used. Without adequate safeguards, there will be enhanced scope for reinvigorated rent-seeking in an administration reliant on the SRO culture. It is extremely dangerous to leave tax making powers in the hands of an unaccountable tax administration, and it negates the basis of a parliamentary system.

The SRO powers also reduce the trust of the federating provinces in the FBR since they effectively reduce the overall revenues that should accrue to the provinces through the divisible pool. This is also the subject matter of the NFC, which is addressed next.

The 7th National Finance Commission (NFC) award

The provinces have long been responsible for the bulk of spending on health and education. Given long-standing budgetary constraints, however, this spending has

fallen far short of what is considered necessary to meet minimum standards, let alone the MDGs—indeed, outcomes in both sectors have fallen behind all other South Asian countries. Total spending on health and education in 2007/08 was 5.4 per cent of GDP, which the PRSP aimed to increase to 6.8 per cent of GDP by 2011 (Pakistan, Finance Division, 2010, p. 331). The main vehicle for this was an increase in the provinces' share of the divisible pool, given that they did not have adequate own-revenue sources.

The calculation made by the finance minister at the time was that, with the proposed tax reforms, an increasing total pie would leave sufficient resources in the hands of the center even as the provincial share was increased from under 47 per cent in 2008/09 to 56 per cent in 2010/11 and 57.5 per cent thereafter. The logic was understandable, even as Pasha, Pasha, and Imran (2010) warned that the projections might be optimistic.

As it happens, the collapse of the 2008 tax reform proposals, taken by the government to the Friends of Democratic Pakistan and then to the IMF, proved to be calamitous for the NFC award. First, it opened up a gap almost immediately between the provinces' expected and actual revenue-sharing transfers—from 1.3 per cent of GDP in 2010/11 to 2.9 per cent by 2013 (Table 14.3). This gap is in relation to the spending assignments that were in place in 2009, and does not factor in the 18th Amendment (which is discussed in the next section).

The second difficulty was that the failure of the tax reforms left far too little in the hands of the federal government. Thus, for 2010/11, the share of the divisible pool in the hands of the federation was around 4 per cent of GDP. Debt servicing alone was 5.6 per cent of GDP in the same year (IMF, 2011).

It had been clear that the reforms promised under the 2008 IMF program involved an integrated GST, building on the Musharraf government's arrangement to ensure a common administration but removing the exemptions and zero-ratings that had been introduced by the previous regime. At the time the NFC award was being finalized, a Ministry of Finance team had worked on drafting a revised GST/VAT law that was to be presented to Parliament by end of December 2009. Yet the NFC award finalized in December 2009 reiterated that the GST on services was a provincial subject and that collection could also be provincial. Although

there was an attempt to paper over the gaping cracks and ensure that the FBR would continue to administer those services that entered inter-industry transactions, affecting cross-provincial ones—especially banking and insurance, telecommunications, and trade-related services—the proposals did not stick and the whole structure collapsed.

Table 14.3: NFC projections 2010–14 (percentage of GDP)

Item	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Divisible pool (actuals)	3.8	4.8				
Total provincial resources	4.56	6.2				
Federal tax collections projected by NFC	10	11	12	13	14	15
NFC provincial shares expected		6.16	6.90	7.48	8.05	8.63
Tax collections (actual) 2010/11		8.7	8.5	8.5	9.0	10.1
Revised NFC divisible pool		4.87	4.89	4.89	5.18	5.81
Provincial funding gap		-1.29	-2.01	-2.59	-2.88	-2.82
Education and health (PRSP II)		6.79				

Source: Government of Pakistan (2010); and author's own calculations.

The failure of the tax reforms implies that there is no conceivable way of reaching the 15 per cent of GDP target for the overall tax-to-GDP ratio by 2014/15; the budget strategy paper issued in 2012 brought the target down to 10.1 per cent of GDP. This is catastrophic for the federal government since the increasing cost of borrowing alone will far exceed the federation's share of the post-7th NFC divisible pool. This can only hasten the collapse of the federal government forecast by Haque (2009).

Unfortunately, the situation in the provinces is no better. As mentioned above, a shrinking resource pie relative to expectations puts the pre-18th Amendment goals out of reach, e.g., as enunciated in the PRSP-II (see

Pakistan, Finance Division, 2010). The 18th Amendment merely adds to the unfunded mandates, which can only lead to further erosion in public services and gaps vis-à-vis the MDGs.

The 18th amendment

The devolution process that has begun with the 18th Amendment presents a great opportunity to change the way that public policy is formulated in Pakistan, and hopefully to make it more responsive to the needs and desires of the population. However, if the tax reforms do not succeed, given the vociferous opposition by the vested interests that have benefitted from exemptions and zero rating,⁹ the entire devolution process will run into trouble, as has the current NFC award. This seriously risks the implosion of the existing intergovernmental fiscal system.

Shah (2012) provides a very comprehensive assessment of the benefits and challenges arising from the 18th Amendment. The chapter focuses here on the issue of unfunded mandates, which could lead to an implosion of public institutions and services, as well as the very real dangers posed by increasing barriers to interprovincial trade. Both are extremely damaging to the concept of an integrated federation, and each is considered in turn.

Unfunded mandates

The unfunded mandates have been exacerbated by the new responsibilities added to the pre-18th Amendment spending assignments in relation to the assigned own-revenue bases and shared revenues and transfers. As discussed above, the provinces and local governments lacked the necessary resources, prior to the 18th Amendment, to effectively provide for their responsibilities at that time. Without the tax reforms, the NFC award is just a mirage in the desert.

⁹ This has been couched in “populist” terms as affecting the interests of the poor—in fact, a properly functioning tax system would reduce the government’s borrowing requirements and the current inflationary pressures. It is also unlikely that relative prices would change adversely for the poor with the removal of these extraordinary benefits for the pampered sectors and a downward revision and consolidation of the GST’s rate restructure.

Subsidiarity and spending assignments

The 18th Amendment eliminated the Constitution's concurrent lists, giving provinces sole powers in a number of areas, including health and education. The speed at which the spending functions were devolved meant that inadequate attention was given to the role of "subsidiarity", the role of regulations, and the coordination of functions with associated externalities, such as primary healthcare, university education, climate change and environment, and natural disasters.

Almost immediately, the provinces discovered that they could not finance the very heavy expenditures that had been incurred by the Higher Education Commission, and made a reference to the Council of Common Interests to return the function to the federation. Unfortunately, financing for the function was no longer available, and the federation attempted to move the function under a line ministry rather than an independent commission, as had been the case prior to the 18th Amendment. Some commentators suspect that this might have been linked to the Higher Education Commission's refusal to certify the questionable educational credentials or degrees of a large number of lawmakers (of all major parties).

In other areas too, such as preventive healthcare and pharmaceutical standards, once a function with widespread externalities is dismantled and handed over to subnational governments, it is likely that there will be conflicting or confusing standards that could increase the likelihood of epidemics. If the provinces cannot handle the function, it is exceedingly difficult to reestablish the previous institutional arrangements at the national level, not to mention that the federation now has to borrow to meet its current expenditures and is caught in a debt trap.

The 18th Amendment unwound the steps taken by the Musharraf government to constitute a third tier of government, passing virtually all powers to the provinces and leaving it to provincial assemblies to decide whether or not to devolve further. This reaction to a desirable reform by the military government (made, albeit, for the wrong reasons) is understandable, but not well thought out. The functions and operations of the third level of government should be clearly delineated, as well as the role of the federation in keeping with the subsidiarity principles outlined above.

In addition, more work is needed to improve effective service delivery at the district or local levels, and to counter the possible inadequacy of local incentives in providing for the most vulnerable, e.g., the aged without extended family support, single women, and minorities. It is likely that the local or provincial government has less interest in providing services or protection to minorities, such as the Hazaras in Balochistan, who are nonetheless full citizens of the country and entitled to the same privileges and safety as any inhabitant of Islamabad or the exclusive neighborhoods of Karachi or Lahore. This could lead to significant miscarriages of justice and equity in the future; indeed, it is happening with alarming frequency—reminiscent of North, Wallis, and Weingast’s (2009) warning of failure in the context of limited access states.

The expectations raised by the 1973 Constitution bear no relation to what can be financed. It guarantees:

- “Compulsory and free” education till secondary level [#37(b)]
- “Access to technical and higher education for all on merit” [#37c]
- The “basic necessities of life, such as food, clothing, housing, education and medical relief for all such citizens, as are permanently or temporarily unable to earn their livelihood on account of infirmity, sickness or unemployment” [#38d].

The social benefits for the unemployed or incapacitated are very Bismarckian. The guarantees are very clear, with no additional targeting or score cards that are open to “capture” or “clientelism.” These are constitutional basic rights and actionable in court, but to finance these rights, a revenue-to-GDP ratio commensurate with the more advanced developing countries, such as Chile or Brazil, is needed—i.e., 25 per cent or more. This is also the goal that China is pursuing. However, it appears almost completely out of reach under the present configuration of policy and administration in Pakistan.

Barriers to trade and integration

On the spending side, as pointed out by Shah (2012), the absence of a national standard setting capability might be a severe constraint to establishing a common integrated market. On the revenue side, the sales tax on services, if applied at one of the few ports by the respective province without providing credit to purchasers

in other provinces, could become an effective import duty on cross-provincial trade. This is a potential conflict with the commerce clause in the Constitution.

Revenue reassignments

A fundamental problem lies in the absence of effective own-source revenues at the provincial or local levels. As seen in the Latin American and East Asian cases, this is the Achilles' heel of the devolution process in many countries, leading to a loss of accountability and responsibility for local service delivery. A share in the divisible pool or the unstable assignment of the GST on services does not count as effective own-source revenues.

In keeping with the Government of India Act 1935, Pakistan's current constitution maintains the concept of split revenue bases, both for sales as well as incomes. This has opened up vast avenues for tax avoidance and evasion—such as the abuse of the agricultural income exemption. Moreover, with the rent seeking in the FBR, there is little confidence in its ability to keep the provinces' interests in mind in performing its functions.

The 18th Amendment reiterates the right of the provinces to administer the GST on services, if they so desire—the revenues belong to them in any case. This makes it very difficult for a provincial government to vary the rate structures without making their GST almost impossible to implement for fear of it degenerating into an instrument for “provincial tax wars” or impediments to trade. There is also a danger with credit invoices issued by one province to be honored by others or the federation—this would be akin to the “invoice sightseeing” that has become a serious problem in Brazil, and would magnify the “flying” invoices that are already a serious problem with zero-rating in Pakistan's case (and that is with a single administration).

The split base of the GST relating to goods and services is unique to the Subcontinent, and has its origins in the Government of India Act 1935 that assigned the sales tax on goods to the states/provinces. After independence, the goods part was taken over by the federal government in Pakistan, and the more difficult element on services was left to the jurisdiction of the provinces, reiterated in the 1973 Constitution. As there was no GST or VAT at that time, the complexity of this assignment was not realized. Thus, Pakistan finds itself in a unique position as being the only country in the world

trying to implement a GST on services at the subnational level, without the administrative machinery to do so. Even if it had the administrative machinery, this would be a herculean task.

A cooperative solution would have been to permit the FBR to function on behalf of the federation and the provinces (as had been initiated by the Musharraf administration) to collect an integrated GST for the federation and all the provinces, close loopholes, and deliver a larger pie to the provinces directly as well as through the common divisible pool. After all, this was the basis of the NFC award. However, one province rejected this arrangement, given the severe trust deficit associated with the FBR. A complex alternative mechanism was proposed to work around this difficulty, with the current FBR effectively operating the crediting and refund mechanisms associated with the GST—the only agency capable of doing so. But, as discussed above, vested interests opposed fixing the loopholes in the GST and there is very little confidence in the current FBR's ability to operate on an arm's-length basis.

By now it is clear that the current system underpinning the 18th Amendment is not sustainable. A more stable solution is needed that provides the provinces with significant tax handles that also generate greater accountability for subnational spending. Marginal changes to tax rates will not do. Also, as the post-NFC discussion on the GST illustrates, agreements are not easy to reach and are unstable. Ideally, a new arrangement should be sought and another constitutional arrangement on the revenue side introduced to preserve the thrust of the 18th Amendment and positive elements on the spending side. Both policy options and new administrative arrangements need to be examined—this is a significant research agenda that should also involve the next NFC award.

It is not possible to initiate sensible reforms in the tax policy agenda without an arm's-length tax administration that has the trust of the federating units. Similarly, such an administration cannot be conceived without overhauling the tax policy framework and the associated assignments to different levels of government. This is as complex a task as the 18th Amendment, but should be more carefully designed before being rushed through Parliament. However, there is nothing like an economic crisis to concentrate minds and create the political will to carry out serious reforms, so if there is the opportunity, it should be taken. Some of the lines of reform can be gleaned from the successes in China and the difficulties faced in other federations such as Brazil and India, who are also stuck with inefficient

split bases and find it hard to overcome the vested interests that coalesce around the benefits conferred.

Policy options

A fundamental principle guiding the tax policy agenda should be that the major tax bases should be consolidated, and that both the provinces and districts should be assigned tax handles that allow flexibility to set rates at the margin. This flexibility is the crux of own-source revenues and the foundation for accountability in both revenue generation and spending.

At the national level, the major tax bases could be consolidated along the following lines:

- *Income taxes.* All sources of income are income and should be treated equally to avoid distortions, tax shelters, and handles for rent seeking and corruption. This implies that the following:
 - *Personal income tax.* All sources of income should be included in the tax base, including agriculture, property, and foreign source income. The provinces and districts should be allowed to “piggyback” on the full base; this will give them more revenues than at present and does not require separate administrations, just the setting of rates.
 - *Corporate income tax (CIT).* The holes and preferences should be closed, and the rate reduced to 25 per cent, as in China and many other countries. A gross assets tax should be constituted in the short run to plug the gaps, and this should be creditable against CIT liability. The CIT could continue to go into the divisible pool.
 - *GST.* This should be treated as an integrated tax and administered as an arm’s-length agency. It should have a single rate and no exemptions other than on unprocessed food. The sharing arrangements could include the following:
 - *Fully entering the divisible pool.* This would allow 57.5 per cent of the hopefully better-performing GST to go to the provinces, thereby fulfilling the objectives of the 7th NFC award.
 - *Australian model.* In Australia, the VAT is centrally collected but 100 per cent is returned to the states through an equalization system

run by the Commonwealth Grants Commission on which the states are equally represented. This option closes both horizontal and vertical gaps and is compatible with maintaining incentives for subnational efficiency. If this model is chosen, the divisible pool could be scrapped since the personal income tax piggyback (and similar arrangements for the CIT as in the US) would provide for own-source revenues.

- *Sharing arrangements.* This is the Chinese model, which gives rich provinces an opportunity to share in the country's growing revenue generation. However, it needs to be accompanied by an equalization framework to provide incentives for the poorer provinces that do not generate revenues, given the lower volume of transactions.
- *Carbon tax.* This should replace the petroleum levy, as originally designed, and should also be shared with the provinces (see Ahmad & Stern, 2009).
- *Excises.* Some excises could be established at the national level and feed into the divisible pool. Others could be purely provincial, provided they do not affect interprovincial commerce.
- *Property taxes.* These should be assigned to the districts/municipal governments as far as rate setting is concerned, although the provinces could be responsible for the cadaster, land register, and valuation.
- *User charges and tolls.* These should be largely local, although the old octroi should not be resurrected.

The above options provide provinces with both additional revenues as well as own-source tax handles, without the need for separate administrations. In the Pakistan context, however, it would be necessary to establish an arm's-length tax administration that was acceptable to the provinces.

Administration

The trust deficit vis-à-vis the FBR/Central Board of Revenue has only grown since the warnings of the Qamar-ul Islam Commission in the 1980s. The failed attempt to implement the Shahid Husain report under the World Bank's USD 135 million Tax Administration Reforms Project (TARP) highlights the incentive problems inherent in the current structure. The World Bank's proposal

to throw more money at the problem through the USD 300 million TARP II is likely to meet the same fate since neither the authorities nor the donors recognize the incentive incompatibility of the existing arrangement, and the political economy difficulties in making the current model work.

TARP and the rescue of TARP in 2009 could not reform the existing FBR to make it operate on an arm's-length basis. With its ability to use NADRA data, the FBR has become truly intrusive and quite dangerous given that rent-seeking opportunities have been magnified out of all proportion. An FBR that can issue SROs at will, overriding tax laws without reference to Parliament and in the absence of any consultation with the provinces whose revenue shares are compromised, is a nonstarter for the sort of tax administration that needs to underpin a new intergovernmental framework in Pakistan.

It may be necessary to start on the tax administration afresh, with a completely new staff (as was the case in Peru in the early 1990s). The entity may need to be detached from the Ministry of Finance, with its own responsible and accountable minister (as in China), and placed under a board with representation from the provinces. As the Peruvian example shows, a new administration can be constructed quite quickly as long as the roles and modus operandi are clear from the outset.

Given the implosion of public services and growing failures to keep minorities and other citizens secure, the intergovernmental and governance framework needs to be subject to urgent review and action. There is much to learn from China. Significant additional work is needed to recalibrate spending responsibilities and, particularly, to completely redesign the tax assignments and administration for the 18th Amendment to work effectively without unraveling the federation.

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