

PAKISTAN @ 100

SHAPING THE
FUTURE

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Pakistan@100: Shaping The Future

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PREFACE

Pakistan's founder, Muhammad Ali Jinnah, envisioned a prosperous future for Pakistan, achieved by men and women working together for the well-being of its people, especially the poor.

As Pakistan looks forward to the future, it also reflects on its past. Over the past seven decades, Pakistan has seen two distinct phases of socio-economic development. The first four decades saw strong growth and rapid development, with Pakistan posting the highest growth rates in South Asia in its first 20 years after independence. It was recognized by the international community as an example of rapid economic progress. Post-1980s, progress has slowed amid rising security challenges. The country has suffered from the effects of geopolitical regional tensions following three cross-border wars. Periods of faster growth have soon been superseded by downturns. Despite this mixed growth performance, poverty has continued to decline at a rapid pace, falling from 64 percent to 24 percent in the past two decades.

Pakistan's economic challenges have been accompanied by a rapid demographic transition since its founding. The population rose six-fold to nearly 210 million people today. Two thirds of Pakistanis are below 30. This young population presents both an opportunity and a challenge. It provides the economy with millions of creative and energetic youth who could boost growth and prosperity. But it also means that there is an abundance of labor in search of jobs. If the economy is not able to generate those jobs it would lead to frustration. Pakistan's high birthrate, the highest among neighboring countries, also threatens to overwhelm education and health services that are already overstretched.

Pakistan became a World Bank member in 1950 and we have enjoyed a productive partnership that has included significant investments in infrastructure, health and education. We recognize the challenges facing Pakistan, not least from geopolitical tensions, and will continue to be part of Pakistan's journey to a more prosperous future. We will work with Pakistan to invest more and equitably in its people, build quality institutions, transform its economy, sustain its environment, and leverage its location to connect more with neighbors and the world beyond.

As part of this partnership, the Pakistan@100 report provides evidence-based ideas and global experiences on how Pakistan can provide a better future for its youth. It examines what it would take for more Pakistanis to become prosperous, with better education, higher paying quality jobs, and healthier, smaller families at the nation's centenary in 2047. It urges the country's leaders to invest more in Pakistan's talented and hardworking people. The report also suggests ways in which the country can unleash an economic transformation similar to the structural transformations we saw in East Asia in the 1980s and 1990s. Many countries in the past facing Pakistan's challenges of today embarked on similar journeys and now they play an important role in the global economy. Pakistan can do the same by taking tough reform decisions early and sustaining them through the next three decades.

Pakistan@100: Shaping the Future is a platform for dialogue on how to fulfill the vision of its founders for a prosperous Pakistan. It is dedicated to the country's youth in the hope that they will reap the benefits of change outlined in this report and aspire for a better future. I share the report's conclusion: with decisive action and determination, Pakistan can achieve Jinnah's vision of becoming prosperous – and the future starts now.

Kristalina Georgieva
Chief Executive Officer, World Bank

GLOSSARY

Abiana	Irrigation Water Tariff
AI	Artificial Intelligence
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association Of Southeast Asian Nations
BISP	Benazir Income Support Programme
CIS	Climate Information Services
CPEC	China-Pakistan Economic Corridor
CPPA-G	Central Power Purchasing Agency-Guarantee
DHS	Pakistan Demographic And Health Survey
DRF	Disaster Risk Financing
DRM	Disaster Risk Management
EPAs	Environmental Protection Agencies
EPI	Environmental Performance Index
FATA	Federally Administered Tribal Areas
FDI	Foreign Direct Investment
FY	Fiscal Year
GCI	Global Competitiveness Index
GEI	Global Entrepreneurship Index
GHGs	Greenhouse Gas Emissions
GST	Goods And Services Tax
HOI	Human Opportunity Index
ICT	Information And Communication Technology
IMF	International Monetary Fund
KP	Khyber Pakhtunkhwa
LFP	Labor Force Participation
MICS	Multiple Indicator Cluster Survey
MTDF	Multi Donor Trust Fund
MW	Mega Watts
NADRA	National Database & Registration Authority
NAFTA	North American Free Trade Agreement
NDM	National Disaster Management
NEQS	National Environmental Quality Standards
NFC	National Finance Commission
NPL	Non-Performing Loan
O&M	Operations And Maintenance
OECD	Organization For Economic Cooperation And Development
PEPA	Pakistan Environmental Protection Act
PDMAs	Provincial Disaster Management Authorities
PKR	Pakistani Rupee
PM	Particulate Matter
PMO	Prime Minister's Office
PNWP	Pakistan National Water Policy

PSC	Private Sector Credit
PSLM	Pakistan Social And Living Standards Measurement
PSX	Pakistan Stock Exchange
PTCL	Pakistan Telecommunication Company Limited
R&D	Research And Development
RDs	Regulatory Duties
SAARC	South Asian Association For Regional Cooperation
SBP	State Bank Of Pakistan
SDC	Skills Development Council
SEZs	Special Economic Zones
SMEs	Small And Medium-Sized Enterprises
SMEDA	Small And Medium Enterprise Development Agency
SMS	Short Message Service
SOE	State-Owned Enterprise
TFP	Total Factor Productivity
TVET	Technical And Vocational Education And Training
WASH	Water Supply And Sanitation
WDI	World Development Indicators
WDR	World Development Report
WEF	World Economic Forum
WGIs	World Governance Indicators

PAKISTAN @ 100

In 4 Infographics

INVEST IN HUMAN CAPITAL

Supporting Pakistan's people & growth

REFORM FOCUS 1 FERTILITY

Impact



Improved maternal and child healthcare



Greater female labor force participation



Lower dependency ratios → higher savings

Immediate Steps: Encourage Demand & Access for Family Planning Services

- ✓ **Informed Parenthood:** Implement programs to support informed parenthood, provide education on reproductive health & child development
- ✓ **Focus on Women:** Develop provincial safety net programs that aim to empower women, increase spending on female education & health

REFORM FOCUS 2 EARLY CHILDHOOD DEVELOPMENT

Impact



Improved education outcomes



Higher adult wages



Increased labor productivity

Immediate Steps: Reduce Child Malnutrition

- ✓ **Integrated Programs:** Develop & implement integrated health & nutrition programs for the first 1000 days (covering child birth, immunizations & malnutrition amongst others)
- ✓ **Incentives:** Provide conditional cash transfer programs to the poor & vulnerable

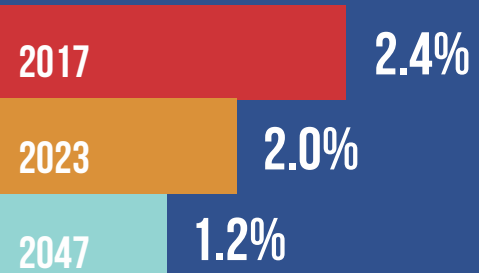


Pakistan's fertility rate is **highest** amongst neighboring countries at **3.7**

Upper Middle-Income Countries Average: **1.8**



TARGET Population Growth Rate (%) by 1.2% points

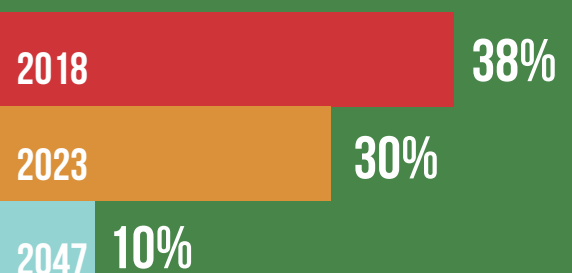


The stunting rate in children under 5 in Pakistan is **very high** at **38%**

Upper Middle-Income Countries Average: **7%**



TARGET Prevalence of Stunting (% of children <5) by 28% points



TRANSFORM PAKISTAN'S ECONOMY

Boosting capital & labor productivity

REFORM FOCUS 3 BUSINESS ENVIRONMENT

Create *opportunities* for:



Greater private investment



Improved firm productivity



Attracting Foreign Direct Investment



Investors in Pakistan go through 10 procedures to start a business

East Asia & Pacific Average: 6.8



Doing Business Ranking by 111 places

2019

136

2023

50

2047

25

Immediate Steps: Improved regulatory environment

- ✓ Simplify: Reduce regulatory procedures, eliminate duplications
- ✓ Automate: Paperless online approvals, web-based regulatory governance

REFORM FOCUS 4 TRADE OPENNESS

Provide *incentives* for:



Increased competition



Transfer of technology



Accessing larger markets



Pakistan's trade is only 26% of GDP

Upper Middle-Income Countries Average: 47%



Regional Merchandise Trade (US\$ Billion) by 3 times

2017

\$18 BN

2023

\$25 BN

2047

\$58 BN

Immediate Steps: Increased Trade Openness

- ✓ Trade Liberalization: Reduce tariff & non-tariff barriers to trade, facilitate access to duty exemption schemes, improve trade logistics
- ✓ Regional Integration: Normalize relations with India

INVEST MORE

Supporting investment to accumulate physical capital

REFORM FOCUS 5 TAX REVENUES

Impact



Finance public investments → attract private investment



Minimize government borrowing from banks

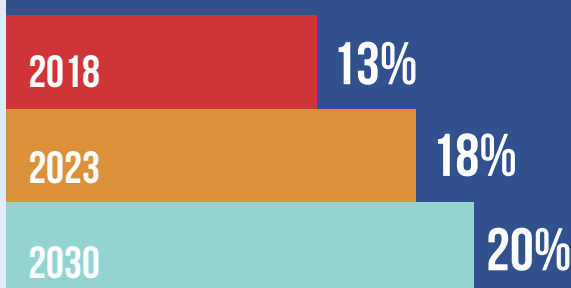


Pakistan's tax revenue is only 13% of GDP

Upper Middle-Income Countries Average: 21%



TARGET Tax Revenues (% of GDP) by 7% points



Immediate Steps: Domestic Revenue Mobilization

- ✓ Broaden Tax Net: Include agriculture, reduce exemptions, revise property valuations
- ✓ Enforce Compliance: Use data to identify non-filers, track & trace in high-risk sectors, risk-based audits
- ✓ Incentivize Compliance: Introduce a harmonized GST, accelerated appeals & refunds, reduce withholding schemes
- ✓ Cross-Cutting: Strengthen FBR & center-province coordination

PROTECT THE ENVIRONMENT

Sustaining growth through natural resource management

REFORM FOCUS 6 WATER MANAGEMENT

Impact



Higher water productivity



Increase water availability



Pakistan's water productivity is very low at \$1 per cubic meter

East Asia and Pacific Average: \$17



TARGET Water productivity (\$/m³) by \$11/m³



Immediate Steps: Towards Water Pricing

- ✓ Monitoring: Improve water measurement & accounting
- ✓ Institutions: Strengthen institutional capacity to map water use & enforce pricing reforms
- ✓ Pricing: In the long-term, encourage water saving through improved abiana rates, recover 100% O&M costs

IMPROVE GOVERNANCE

Providing an enabling environment for growth & reforms

Good governance depends on accountability & transparency



How can transparency support water reform?

Highlights inequality in water use & access to the wider public



Could improved accountability trigger water reform?

Accountability allows majority of farmers currently harmed by water use & access to demand reforms

Example:

Reforms to water pricing are key to enhancing efficiency of water use



But land owners use their political influence to oppose these reforms

REFORM FOCUS 7 TRANSPARENCY

Immediate steps

- ✓ **Public Financial Management:** Right to Financial Information Act; timely disclosure of budget documents: publish audited financial statements of State-Owned Enterprises
- ✓ **Service Delivery:** Establishment of service delivery standards, monitoring of service quality, publication of performance metrics
- ✓ **Leverage Technology:** E-Procurement, SMS-based feedback on service delivery

REFORM FOCUS 8 ACCOUNTABILITY

Immediate steps

- ✓ **Strengthen Local Governments:** Establish elected Local Government Authorities, devolve administrative autonomy, finances & expenditure responsibilities
- ✓ **Improve Public Sector Management:** Modernize HR management systems, build skills, generate & efficiently utilize information

EXECUTIVE SUMMARY



Pakistan has several difficult decisions to make. Despite a challenging start and a complex political history, Pakistan's economy grew fast in its earlier years, improving the lives of its citizens. Pakistan was considered an example of successful development in its first 30 years. This has since changed, and Pakistan is struggling to keep pace with the growth and transformation of its peers. Improvements in development outcomes have become slow and uneven. Pakistan@100 seeks to identify the main changes that will be necessary if Pakistan is to become a strong upper middle-income country by the time it turns 100 years old in 2047. The decisions over the next decade will determine Pakistan's future. Will Pakistan rise to the challenges ahead and transform its economy? Or will Pakistan continue with the mixed record of reform implementation, failing to address the key constraints to growth, while another generation of Pakistanis sees limited welfare improvements? This overview report together with the seven policy notes that were prepared in parallel provides a vision of the type of economy that Pakistan could have by 2047. The report illustrates the type of changes that are possible, and it discusses a limited number of priority reforms that will be necessary to address the most pressing constraints to accelerating and sustaining growth.

1. A 2047 VISION FOR PAKISTAN

Investing more in people including women

Imagine a Pakistan in which its large number of young people has been turned into a demographic dividend by creating millions of quality jobs. Imagine a Pakistan in which stunting and malnutrition have become a distant problem of the past. Imagine a Pakistan in which all citizens, but especially women, have the chance and the skills to join the labor force. Imagine a Pakistan in which all girls and women make their own decisions on pregnancy, work and age to get married. Imagine a Pakistan in which women regularly compete with or outperform men for the best jobs as doctors, scientists, policymakers and civil servants. Imagine a Pakistan in which a child, from any background, from any area in any province, has the same potential to become a doctor or an Information Technology (IT) specialist as a child from a wealthy household in an urban area.

Investments in family planning, maternal health and early childhood development are the foundation of human capital accumulation. Women's empowerment is a key component of efforts to increase human capital in Pakistan. Today, Pakistan's population is almost 208 million and growing. This is Pakistan's greatest asset, but it needs to invest more and better in this asset. Pakistan is experiencing a youth bulge, with the number of individuals entering the labor market expanding faster than the total population. This can be turned into a demographic dividend if the country is able to absorb these young workers into the labor force by creating sufficient quality jobs and ensuring that people—both men and women—have the opportunity to participate in the labor force. On the other hand, to meet the demands of the labor market, more investment in human capital is needed. In this context, human capital is the knowledge, skills and health that people accumulate throughout their lives, enabling them to realize their full potential as productive members of society. Pakistan's situation today suggests that it will not be able to generate a demographic dividend. Persistently high fertility rates, far higher than in peer countries, would prevent the type of

declining dependency rates that are needed. Lower fertility is associated with improved maternal and child health, and greater female labor force participation. If women are able to make their own decisions they are likely to have less children, work more outside the home and invest more resources in their children's education – women's empowerment is therefore a key component of efforts to improve Pakistan's human capital. In addition, Pakistan continues to have one of the highest stunting rates in the world, affecting future learning and labor market success. Many children do not attend school, and many of those that attend are not being taught the necessary skills to succeed in today's economy, even less so in a global economy that will increasingly reward knowledge.

An innovation driven economy

Imagine a Pakistan in which businesses thrive and compete, and costs are low, attracting significant Foreign Direct Investment (FDI) and the very latest technologies, turning Pakistan into a competitive and innovative economic powerhouse. Imagine a Pakistan in which some firms have become world-leading innovators in niche markets. Imagine a Pakistan with a skilled labor force, including universal high-quality secondary education. Imagine a Pakistan in which its cities are home to state-of-the-art research centers and universities that lead the world in their own fields of expertise, for example water management and pollution mitigation.

The future Pakistan will be one that has succeeded in overcoming the barriers to structural transformation that have been stifling its development in previous decades. Pakistan will have unleashed a period of rapid economic transformation by improving the business environment and providing first class infrastructure and education. Competition will be nurtured, supported by the adoption of the newest technologies through growing FDI and openness to trade and ideas, in turn creating a virtuous cycle of more competition and a more competitive economy. This could ultimately lead to Pakistan being at the technology frontier in niche markets. As things stand today, Pakistan's economy has not changed much in the past 30 to 40 years. The share of agriculture in the economy has not declined much since the early 1990s. Pakistan's business environment continues to be relatively weak, as reflected in Pakistan's ranking in several international benchmarking exercises assessing the ease of doing business or the economy's competitiveness. Incumbent businesses continue to be sheltered from domestic and international competition, through regulations and protectionist trade policies. Necessary public services and infrastructure (energy, transport, education) are inadequate, affecting the economy's competitiveness.

Pakistan's cities have become vibrant commercial hubs and centers of excellence

Imagine a Pakistan celebrating its centenary at a time when the country's major port and trading hub, Karachi, is able to compete with the likes of Dubai, Shanghai or Singapore in the region. Imagine all the major cities in Pakistan connected by fast road networks and high-speed rail links, boosting trade and cutting logistics costs between the country's major commercial and political hubs. Imagine the major cities of Pakistan being clean and green, and providing better services and public amenities, with houses close to parks, schools, libraries and sports facilities, free of crime, all providing for an urban experience able to attract talent from abroad. And imagine a Pakistan in which cities are beacons of tolerance and openness, supporting and providing momentum to Pakistan's economic transformation.

Pakistan's major cities can play a greater role in driving structural transformation and growth. The future Pakistan could have cities with world-class municipal services that contribute to productivity growth. Pakistan is already rapidly urbanizing. Cities produce over half of the country's value added and by some accounts around 60 percent of the population lives in urban areas. Today, Pakistan's cities are not supporting the economy's transformation as well as they could. Congestion costs (traffic, pollution, price increases, crime) can at times outweigh the benefits of agglomeration, negatively affecting productivity and growth. Pakistan has one of the worst air qualities in the world. Importers take 20 times longer to clear customs in Karachi than in Organization for Economic Cooperation and Development (OECD) countries. A number of constraints have prevented cities from playing their role, including institutional fragmentation between different government levels, weak finances at the municipal level, poorly working land markets and limited provision of municipal infrastructure and services. The transformation of cities into engines of growth has begun, but much needs to change for cities to be able to play the leading role they have played in other countries, being able to compete internationally in attracting investment and talent.

Becoming a regional trade hub

Imagine a Pakistan that is a major regional trading hub, acting as a logistics corridor connecting the two economic powerhouses on its doorstep, India and China. Imagine a Pakistan open to global markets and integrated in global value chains, tripling its regional trade. Imagine Lahore and New Delhi connected by a state-of-the-art high-speed rail link, allowing people to travel between the cities in less than 3 hours, instead of the 18-20 hours it can take today. Indeed, imagining a deep and mutually beneficial relationship between Pakistan and India is of paramount importance to Pakistan's further growth, prosperity and security, especially given that India could become one of the largest economies in the world by the middle of the century.

If it is to achieve this vision by its centenary, Pakistan will need to fully embrace the benefits of more open trade and regional integration. Today, Pakistan's economy is relatively closed to global and regional markets, limiting its ability to benefit from its pivotal geographical situation. Average tariffs and tariff escalation are relatively high, and it is not well integrated in global value chains, limiting access to newest technologies and the opportunity to use increased competition and specialization for structural transformation. Trade with India, an economy with over 1 billion people and which may be one of the world's largest economies by mid-century, is negligible. Regional tensions affect domestic policy choices, with an increasing share of limited public resources being used for defense. Increasing regional integration within South Asia could expand Pakistan's economy by 30 percent by 2047. Stronger regional relations can support Pakistan's economic transformation and security objectives, increasing its leverage to resolve disputes with its neighbors and freeing resources for public investment in economic and human development. Previous efforts to normalize relations in the region have had mixed results and Pakistan cannot reduce tensions in the region on its own—other countries would also need to play their part.

Resilient institutions generating sustained growth

Imagine a Pakistan in which public schools and health centers rival the best private schools and hospitals. Imagine a Pakistan in which all government levels are united in providing the best attention and services to the private sector, to ensure it grows and provides employment for all people. Imagine a corruption-free Pakistan in which people can monitor in real time that public resources are being put to the best use. Imagine a Pakistan in which digital technologies support the voice of citizens to hold their politicians accountable. Imagine a Pakistan in which civil servants in all areas, teachers, nurses, police and other frontline staff are all well qualified and highly skilled, and where career progression is based on performance and merit.

Establishing a governance environment that supports growth and allows for successful implementation of economic, social and environmental reforms requires a political system that aligns the incentives of policymakers with the interests of voters. Today, very often vested interests undermine political leaders' accountability to citizens, and governance is deemed as a challenge, even when compared to its neighbors (Pakistan performs below its regional peers on most governance indicators). As a result, Pakistan has initiated many promising reforms, only for them to be shelved, poorly implemented, or subsequently undermined. This is partly because the system allows for some elites to influence policy formulation and implementation. In addition, politicians' capacity to manage the public sector is constrained by ineffective human resource management systems. Incomplete devolution by provincial governments to local governments means that a key mechanism for holding political leaders accountable has not been fully developed, undermining the operation of local governments, limiting their responsibilities and the public's ability to hold them accountable.

2. THE WAY FORWARD FOR 2047

Pakistan's average economic growth rate has been declining over the past 30 to 40 years, with periods of accelerating growth usually followed by a crisis. Growth has declined because the country is not investing enough in either physical or human capital, and because misguided economic policies mean that limited resources are not used in the most productive way. The state has often been undermined by rent-seeking behavior and a complex security situation, particularly over the past 40 years. Well-connected industries and firms are often protected from foreign and domestic competition in a variety of ways, limiting the positive impact that increased competition has on productivity. Productivity is also affected by weak public services provision—whether it be energy, livable cities, a healthy and educated population, or security. Frequent macroeconomic crises affect the country's growth trajectory. This report identifies the key choices that Pakistan will need to make if it is to be able to invest more, and invest more efficiently, in both human and physical capital, and allow markets to allocate resources to where they are put to the most productive use.

The origin of Pakistan's frequent and recurring macroeconomic crises is structural, not cyclical, and avoiding future crises requires appropriate medium-term responses. Much analysis of Pakistan's growth places an emphasis on the short-term challenges that Pakistan needs to overcome, often with a focus on the latest or the next cycle of macroeconomic instability. Pakistan@100 seeks to focus on policy changes

that can address the country's medium-term challenges, while also bearing in mind that macroeconomic imbalances often press the brakes in Pakistan's development trajectory. Pakistan's macroeconomic challenges are not cyclical, insofar as they are not caused by the business cycle, or a domestic or external shock. Pakistan's macroeconomic challenges are structural: a revenue system that is unable to meet the government's financing needs and consumption-led growth that relies on external flows (remittances, aid) for its sustainability and is therefore very vulnerable to changes in flows. Failure to address these structural, medium-term challenges, while stabilizing the macroeconomic imbalances, just means that the next crisis is another 4 to 5 years away. The proverbial can is constantly being kicked down the Pakistani road.

There are four elements to a growth strategy for Pakistan, namely (i) accumulation, (ii) allocation, (iii) sustainability, and (iv) governance. That is: (i) accumulation of physical and human capital, which will require both increasing public and private investment; (ii) allocation of resources to their most productive use, through structural transformation and openness to trade and investment; (iii) environmental and social sustainability, to ensure that the unsustainable use of finite resources does not constrain growth in the future, and that everybody can benefit from and contribute to growth; and (iv) a governance environment that supports growth and the successful implementation of necessary reforms. Pakistan has had no shortage of technical assistance to inform policies or support for reforms from the international community. But many of the necessary policies have not been thoroughly implemented, or they have been reversed. A governance environment that supports making tough policy choices and then following through with those choices will be crucial if Pakistan is to follow the type of transformative path being suggested.

The set of reforms needed to transform Pakistan is large and varied and as such it needs to be prioritized into a more manageable set of immediate interventions, taking into account capacity and financing constraints. This report discusses in some detail reforms to accelerate and sustain growth. By necessity, to cover all the relevant topics, such a discussion will be broad-based. An incoming administration, dealing with a macroeconomic crisis and with limited policy space, may be overwhelmed by the vast set of reforms necessary to transform Pakistan. The next few paragraphs take potential capacity and policy space constraints into account, suggesting a limited set of reforms that should be prioritized for immediate implementation.

A prioritized set of interventions that addresses the binding constraints to growth, can have a significant and sustainable impact on growth. This report identifies reforms that address identified constraints to accelerating and sustaining growth over the medium term. The following few paragraphs highlight a more limited number of interventions that should be prioritized to kick-start Pakistan's transformation, with a focus on increasing investment rates and productivity growth (summarized in Table 1). Higher government revenues will contribute to increasing investment rates, directly, by increasing public investment, and indirectly, by reducing the likelihood of macroeconomic crises and reducing crowding out of private sector borrowing. Higher revenues will also create the necessary fiscal space to address other constraints to growth such as weak human capital. An improved business environment and a more open economy to both regional and global trade and investment will unshackle the private sector and contribute to quickly accelerate productivity growth. Some measures may only contribute to growth in the medium term, but inaction today will have an irreversible and prolonged impact. Pakistan's youth bulge can be turned into a demographic dividend, providing an additional boost to growth in the medium term, if dependency rates decline and people have the necessary skills. Lowering fertility and investing in early childhood development, which is the basis for future learning and skills development, are key to ensure that Pakistan's large population becomes an engine for growth. Finally, improving water management, using water more efficiently in the agriculture sector but also releasing water for other sectors in the economy, will be necessary for the sustainability of growth.

Investments for human capital accumulation. A first priority for Pakistan is to make the best use of its greatest asset, its people. The three immediate interventions for human capital investments are: (i)

programs to reduce fertility; (ii) improving spending patterns to use existing resources more efficiently; and (iii) early childhood development programs. Lower fertility is associated with improved development outcomes for both mothers and children. Declines in fertility are also associated with increased savings and ability to invest, as well as greater female labor force participation. The public sector is today spending less than half what other emerging economies are spending on health and education, reflected in slow and uneven progress in improving development outcomes. While spending levels ultimately need to increase, much can be done within the existing envelope by improving spending efficiency. Equipping young people with the necessary human capital will require interventions in education at all levels, increasing enrolment rates, focusing on improving quality as well as second-chance interventions for the stock of the labor force who missed out on education opportunities. Today, Pakistan is suffering from one of the highest stunting ratios in the region and the world, with long-lasting and irreversible consequences for people's ability to learn and lead a productive life. Early childhood interventions focusing on health and malnutrition can reduce stunting.

Immediate Priorities: Human Capital Accumulation

The three immediate priorities for human capital investments are: (i) to reduce fertility, implement comprehensive awareness programs to encourage informed decisions on parenthood. This should go beyond services and information for birth control, but also prepare young people for parenthood by including information on reproductive health, young women's health, and child development through health, nutrition and stimulation; (ii) increase public investment in human capital, first by using existing resources more efficiently, and as fiscal space widens, by allocating an additional share of resources to human capital investments; and (iii) focusing on early childhood development, with targeted programs that support children during the crucial first 1,000 days of the life cycle. Early childhood development programs should include immunizations, deworming and malnutrition treatment. This set of priority interventions will need to be combined with others, including targeted interventions for disadvantaged households or programs to skill young people.

Increasing fiscal space through taxation. With just 1.5 million registered taxpayers, the tax base needs to be expanded, while also reducing exemptions, preferential treatments to some sectors, and outdated property valuation tables. A broadening of the tax net should include the agriculture sector, which accounts for over 20 percent of Gross Domestic Product (GDP) but generates a meager 0.22 percent of total direct tax revenue. The tax system is also riddled with legal loopholes that facilitate tax evasion and need to be rectified. There are multiple taxes and jurisdictional overlaps between the federal government and provinces, which increase compliance and administrative costs, and provide opportunities for rent-seeking. Increased fiscal space will also reduce the likelihood of macroeconomic crises, often the result of fiscal imbalances, and reduce the government's borrowing needs, freeing up resources for private sector investment. Domestic revenue mobilization efforts will need to be combined with reforms in the financial sector to deepen financial intermediation and facilitate access to finance by Small and Medium-Sized Enterprises (SMEs).

Immediate Priorities: Taxation (Physical Capital Accumulation)

Taxation reform is a top priority given that many of the reforms needed to promote growth will require greater fiscal space to fund them. Taxation reform should focus on tax administration, making it taxpayer-friendly, more efficient and better able to leverage modern technology to enforce compliance (identification of non-filers, track-and-trace in high-risk sectors, risk-based audits). The tax code should be simplified, supporting federal-provincial harmonization and integration. This should be facilitated by the establishment of a high-level constitutional body through the Council of Common Interest, with clear accountability to resolve tax-related issues across the country.

Leverage competitive forces to transform Pakistan's economy. The two main interventions to support Pakistan's structural transformation are the adoption of a more open trade and investment regime and an improvement of the business environment. Pakistan's economy has not changed as much as most of its peers during the past 30 to 40 years, partly because the private sector has not been subject to the competitive pressures that result in a reallocation of resources to more productive uses. Incumbent firms are often protected from competition through regulations and barriers to entry, as well as protectionist trade policies. A more open trade regime would increase competitive forces at home and facilitate access to the latest technologies. Greater integration within the South Asia region would expand market opportunities for Pakistani firms and facilitate integration in regional and global value chains. To achieve and sustain a conducive environment for private investment and innovation-driven growth, Pakistan should prioritize the strengthening of its investment climate. Structural transformation will benefit from parallel sectoral reforms to improve access to and reliability of electricity as well as efforts to create more efficient and productive cities. As Pakistan climbs the technology ladder, targeted interventions to support the adoption and generation of frontier technologies will be needed, but this is a second generation reform that will only be effective in a more competitive and open environment.

Immediate Priorities: Structural Transformation

The following interventions should be the initial focus for structural transformation: (i) improving the business environment through regulatory and legal reforms that reduce the procedures, risks, costs and time associated with investing and doing business, at both federal and provincial levels. Transparency should be improved through a comprehensive inventory of all the licenses and permits that apply to firms in each province or sector. Regulatory compliance should be eased through single-window online portals; (ii) liberalizing trade and investment, which includes the establishment of a simple, transparent tariff structure with reduced tariffs, and with clear and transparent rules governing the use of discretionary provisions. Trade logistics should be supported through procedural facilitation and infrastructure improvements as needed, the extension of the automated border management system to all regulatory agencies as well as the adoption of a risk-based compliance management strategy for border controls. Regional integration will require improved relations with all neighbors, currently the main constraint to closer regional integration. Relations can be improved gradually, through the China-Pakistan Economic Corridor (CPEC) and first focusing on making greater use of existing collaboration avenues like the joint chambers of commerce.

Improved water management represents Pakistan's main sustainability concern. Today, over 90 percent of water goes to the agriculture sector. Eighty percent of water goes to a small number of crops (rice, wheat, sugarcane and cotton) that generates less than 5 percent of GDP. Water use is inefficient, primarily because of low water prices and poor management of the irrigation network. Going forward, water will need to be used more efficiently, to increase productivity in the agriculture sector, release water for other uses and increase resilience to climate change. This entails moving toward irrigation rates that promote water saving and efficient use. Additional water storage may be needed, but only hydropower can probably justify major new water storage investments (Young et al, 2019). Parallel efforts to better manage air and water pollution, improve productivity in agriculture, better prepare the country for climate change and reduce disaster risks will all contribute to improved sustainability. Social sustainability will require a more inclusive growth process, through an intergovernmental transfer system that addresses regional disparities, legislation that reduces gender-based and other types of discrimination, and programs that improve the access of the most disadvantaged to public services and economic opportunities.

Immediate Priorities: Environmental Sustainability

Pakistan needs to strengthen institutional capacity and information and monitoring systems, which can then be used to better manage and price resources appropriately. The priority reforms are: (i) improve water measurement and accounting to manage water supply, improve water resource planning and improved flood risk assessment and forecasting; (ii) modernize existing irrigation networks to reduce water-logging and salinity, updating water allocation processes and increasing its transparency and equity; and (iii) adopting effective abiana rates that, covering Operations and Maintenance (O&M) costs and the externalities associated with extraction of groundwater, help incentivize more efficient water use. Improvements are also required in assessing areas for abiana rates, differential tariffs reflecting services provided and the efficiency of tariff collection.

Improve transparency and accountability to create a conducive governance environment. Creating a governance environment that is conducive to reforms requires realigning the incentives of political leaders and public officials with the needs of citizens. This includes increased transparency – transparent and accessible information on politicians' track-records of reform and service delivery, and increased accountability – the provision of levers for citizens to sanction public officials and political leaders when policy and service delivery do not meet their expectations. Accountability will also be supported by furthering the devolution process, as it allows local leaders to tailor service delivery to local needs, and facilitates monitoring and sanctioning by voters based on service delivery performance. Currently, local governments are deprived of the authority to direct service delivery, undermining accountability, as it deprives voters of the ability to closely monitor the leaders responsible for providing public services.

Immediate Priorities: Governance

Increased transparency and accountability will improve governance and Pakistan's ability to implement the necessary reforms. To enhance transparency, the government should ensure timely disclosure of all budget documentation and publicize audited information from state-owned enterprises (SOEs). Information technologies should be leveraged to enhance transparency, e.g. through e-procurement that can increase competition, achieve cost-savings and reduce corruption. Mechanisms to strengthen the voice of citizens to hold the state and politicians accountable will enhance accountability, through greater clarity of roles and responsibilities of service providers, a comprehensive monitoring of service quality and avenues for citizens to provide feedback on and sanction service providers. Technology holds significant potential in facilitating these steps, as evidenced by initiatives at the provincial level. Continued devolution to local governments will require the establishment of elected local government authorities (LGAs) and devolving administrative autonomy and financial responsibilities to LGAs. Effective policy responses to Pakistan's development challenges will also require improved coordination between different government levels.

To accelerate and sustain growth over the next 30 years, Pakistan needs to invest more and let market forces allocate production factors. Countries that have embarked on profound and often difficult reform processes have had a clear goal to guide the reforms. In India's case reform efforts in the early 1990s were guided by the need to get rid of the License Raj: the need to dismantle an extensive system of industrial licensing and opening to trade and investment (Basu and Pattanaik, 1997). In China's case reform efforts from the late 1970s onwards were focused on the need to transform from a rural, agricultural society to an urban, industrial one and from a command economy to a market based one (World Bank and DRC, 2013). In Pakistan's case, reforms efforts should be guided by the need to increase investment levels, both in physical and human capital, as well as efforts to allow market forces to allocate labor and capital to its most productive use. Successful reforms will significantly increase investment levels and productivity for Pakistan to become a stable and confident upper middle-income country by 2047.

Table 1: Prioritized Set of Interventions to Accelerate and Sustain Growth

Growth Strategy Elements	Baseline	Goal	Immediate Reforms
Accumulation – Human Capital	Population growth: 2.4% (2017)	Population growth below 1.2% (2047)	Reduce fertility rates through the implementation of comprehensive awareness programs to encourage informed decisions on parenthood, including information on birth control, reproductive health, young women's health, and child development through health, nutrition and stimulation.
	Stunting (2018): 37.6%	Stunting (2030): 22.5%	Implement early childhood development programs including immunizations, deworming, malnutrition treatment, and early stimulation.
	Public spending on education (2%) and health (<1%)	Public spending on education (5%) and health (2%)	Improve efficiency of public spending, and as fiscal space increases, increase spending on health and education.
Accumulation – Physical Capital	Tax revenues/GDP: 13% (2018)	Tax revenues/GDP: 20% (2030)	Improve (i) tax administration, making it taxpayer-friendly, more efficient and better able to leverage modern technology, and (ii) tax policy through simplification and ensuring federal-provincial harmonization and integration.
Allocation	Doing Business ranking: 136 (2019)	Doing Business ranking: 50 (2023)	Introduce regulatory reforms, leveling the playing field for all firms by reducing red tape, and the scope for excessive discretion and arbitrariness.
	Regional trade (2015): US\$18.5 billion	Regional trade (2030): US\$58 billion	Adopt a simple, transparent tariff structure with reduced tariffs and clear and transparent rules governing the use of discretionary provisions. Support greater integration efforts within the South Asia region.
Sustainability	Water productivity in agriculture: US\$1.00/m ³ (2017)	Water productivity in agriculture: US\$11.00/m ³ (2047)	As a first step, strengthen institutions, regulatory frameworks and information systems (monitoring, measuring) for water management. Move toward irrigation rates that promote water saving and efficient use. Eliminate environmentally damaging subsidies.
Governance	WEF Transparency of government policymaking index: 3.6 (2016)	WEF Transparency of government policymaking index: 4.8 (2030)	Provide transparent and accessible information on politicians' track-records of reform and service delivery to citizens. Improve transparency of budget documentation.
	WGI Voice and accountability index: -0.69 (2016)	WGI Voice and accountability index: -0.16 (2030)	Complete the devolution of responsibilities and resources to local governments. Streamline Information and Communication Technology (ICT) initiatives to provide avenues for citizens to hold service providers accountable. Provide levers for citizens to sanction public officials and political leaders when policy and service delivery do not meet their expectations.



CHAPTER 1

Introduction - Pakistan's Growth in the Past, and it's Potential

Introduction

Looking ahead to Pakistan's centenary in 2047, this is an opportunity to draw lessons from its past and focus on its long-term development opportunities. Pakistan has made significant progress since its creation. However, recurring boom-bust cycles, decelerating growth, and problems with the sustainability and inclusiveness of growth have limited the country's potential. In the past, a broad range of promising reforms were designed to tackle Pakistan's development challenges, but the track record of implementing difficult reforms has been mixed and attention often had to focus on seemingly more imminent crises. As 2018 came to a close, the cycle seemed to be repeating itself, with a new administration having to focus efforts on avoiding a macroeconomic crisis instead of the business of longer-term development.

The origins of the frequent macroeconomic crises in Pakistan are structural in nature, not cyclical, and require an appropriate policy response. There are a number of reasons for Pakistan's economic crisis in 2018: low revenue collection combined with rigid expenditures and an institutional set-up that has made the adoption of prudent fiscal policies challenging; an uncompetitive economy that has resulted in a steady decline of Pakistan's share of exports in world markets; and governance structures that have facilitated poor economic policies. While several steps to restore and maintain economic stability are urgently needed, sustaining stability and avoiding recurring boom-bust cycles will also require focusing on medium-term structural reforms. This means that Pakistan does not have the luxury of focusing solely on short-term economic stability, as ignoring the crucial medium-term reforms would only pave the way for the next economic crisis.

This report aims to move the focus beyond short-term challenges and onto Pakistan's long-term development. This involves recalling what the challenges to long-term growth are, which reforms are suitable to overcome them and—most crucially—understanding why such reforms have often not been implemented successfully in the past. The aim of Pakistan@100 is to contribute to a citizen-centric discussion on the reforms and the political environment needed to address structural shortcomings. This means that Pakistan@100 is more than just a report, including close engagements with local researchers and citizens, continuous engagement with various stakeholders and knowledge exchange with many parts of Pakistan's society. This overview report acts as a reference document to continue the discussion on Pakistan's future and contribute to a conducive reform environment.

The upside potential from a structural reform agenda is significant: Pakistan has the potential to increase its per capita income almost fivefold and achieve upper middle-income status by its centenary in 2047. Pakistan is gifted with a young and growing labor force, significant amounts of arable land, and geographic proximity to some of the largest and fastest growing economies on the planet. Leveraging this potential while substantially curbing population growth would allow Pakistan to accelerate and sustain growth to achieve upper middle-income status when it turns 100 years old in 2047. This would raise annual per capita income almost fivefold and lift millions of people out of poverty.

However, moving toward upper middle-income status requires a deep-rooted economic transformation. The economic transformation necessary to achieve upper middle-income status entails a boost to capital investment and significant improvements to the health and education of all Pakistanis. Moving toward an upper middle-income future also encompasses structural transformation that moves people from farms and low-value added services to highly productive, innovative and well-managed firms.

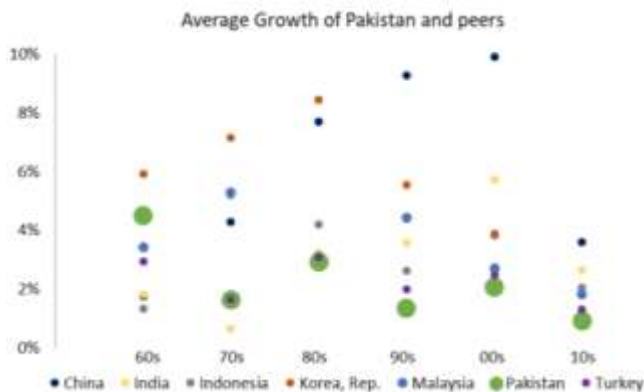
Conversely, if the current status quo continues, namely that growth remains at current levels and population growth does not slow, in 30 years Pakistan will have income levels very close to what they are today, and yet another generation will have missed the opportunity to benefit from Pakistan's potential.

How Has Pakistan Grown in the Past?

After a period of rapid economic progress in its early years, political instability, dwindling foreign inflows and a deteriorating security situation have slowed the rate of growth in Pakistan since the 1990s. In the first 20 years after independence in 1947, Pakistan had the highest growth rate in South Asia. But the nationalization of all major manufacturing industries and banking by Z.A. Bhutto in the 1970s caused a significant growth slowdown and loss of investor confidence. Bhutto's successor, M. Zia-ul-Haq, abandoned the process of nationalization in the 1980s but did little to reverse the damage done in the previous decade. Nonetheless, the economy performed better in this period partly as a result of increased foreign assistance. However, by the 1990s Pakistan had become the slowest growing country in the region (Figure 1), as growth suffered under political instability, a deteriorating security situation and reduced foreign assistance, all exacerbated by the imposition of sanctions following the country's nuclear tests in 1998 (Husain, 2010). In the 2000s, Pakistan was once again under a military regime and the increase in foreign aid due to Pakistan's participation in the post 9/11 coalition helped boost economic growth. But the worsening security situation and growing political instability in the late 2000s once again led to the slowing down of growth in the country. The complex security situation, particularly over the past 40 years, as well as widespread rent-seeking behavior have undermined the state's strength to implement reforms.

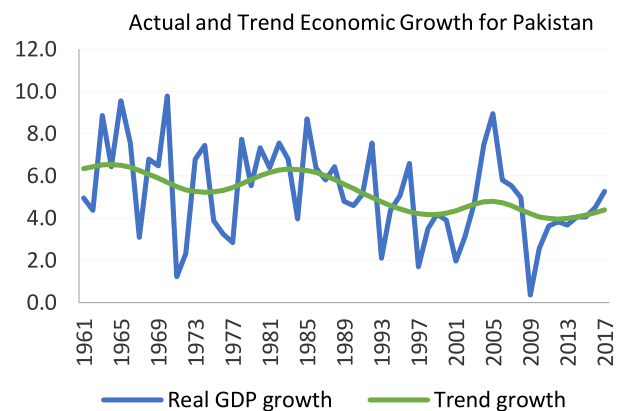
Pakistan has a history of slow growth and too frequent boom-bust cycles. As noted above, Pakistan has seen repeated boom-bust cycles, most frequently coinciding with periods of abundant foreign assistance or its withdrawal. Episodes of high growth were never sustained and always reversed within a few years (Figure 2). In recent years, growth has slowed further and dropped from an average of 6.1 percent per year throughout the 1980s to 4.1 percent on average since 2011. Pakistan's relatively slow and volatile growth, coupled with population growth rates of 2.4 percent over the past 20 years, implies that per capita growth rates have been below 2 percent on average since 2010.

Figure 1: Pakistan's peers have been growing faster for the past 40 years



Source: World Development Indicators.

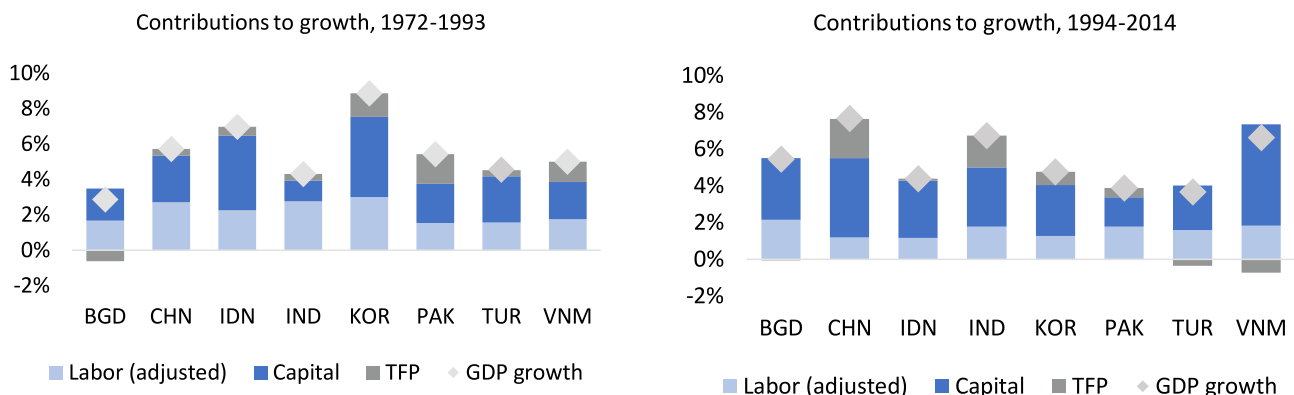
Figure 2: Pakistan's growth potential has been on a declining trend for the past 40 years



Source: PBS and World Bank staff calculations.

Evidence shows that the slow accumulation of physical capital and slow productivity growth have held back economic growth in recent years. A growth accounting exercise can be used to identify what is contributing to Pakistan's growth and the role of productivity. Pakistan's productivity growth fell by one-third between the 1980s and the 2000s, leading to a decline in labor productivity, from a growth rate of 4.0 percent in the 1980s to 0.8 percent in the 2000s. Among its regional peers, Pakistani labor is the least productive and this gap has increased over the past two decades (Figure 3). The contribution of capital accumulation to growth has decreased over time. This deceleration is the result of a steady decline in investment (as a ratio of GDP) from an average of 20 percent in the 1980s to about 15 percent since 2011. Accelerating Pakistan's growth will require increased investment in both physical and human capital, while maintaining the country's stock of natural capital, such as clean air and natural resources, and an improvement in productivity.

Figure 3: The contribution of Total Factor Productivity (TFP) and capital to growth in Pakistan has declined over time, in contrast to what has happened in peer countries



Source: WDI and World Bank staff calculations.

What Are the Drivers of a Growth Transformation?

Putting Pakistan on a path to upper middle-income status requires significant increases in investment and productivity growth. To better understand the magnitude of the changes necessary for Pakistan to move toward upper middle-income status, a dynamic growth framework (Hevia and Loayza, 2011) is used to simulate how reforms that improve factor accumulation and Total Factor Productivity (TFP) affect growth. Simulation results drawn from the framework suggest that Pakistan can gradually accelerate growth and reach upper middle-income status by its centenary under three key assumptions: First, this can be achieved if Pakistan were to gradually increase investment from 15 to 25 percent of GDP. An investment rate of 25 percent is still below the regional average, with India, Bangladesh and Sri Lanka all investing above 25 percent of GDP. Second, accelerating growth requires enhancing TFP growth from 1 to 2 percent per year. Third, achieving upper middle-income status requires a gradual deceleration of population growth rates, from currently above 2 percent to around 1 percent by 2045, consistent with population growth rates in other South Asian countries that currently lie around 1.1 percent. The assumed gradual deceleration in population growth is broadly consistent with projections used by the United Nations and other researchers (Population Council, 2013; UNFPA, 2016) (see the Pakistan@100 policy note 'Growth and Investment' for further details). These assumptions suggest a challenging, but not impossible, pathway toward the target of upper middle-income status (Figure 4).

Box 1: Description of the dynamic growth framework

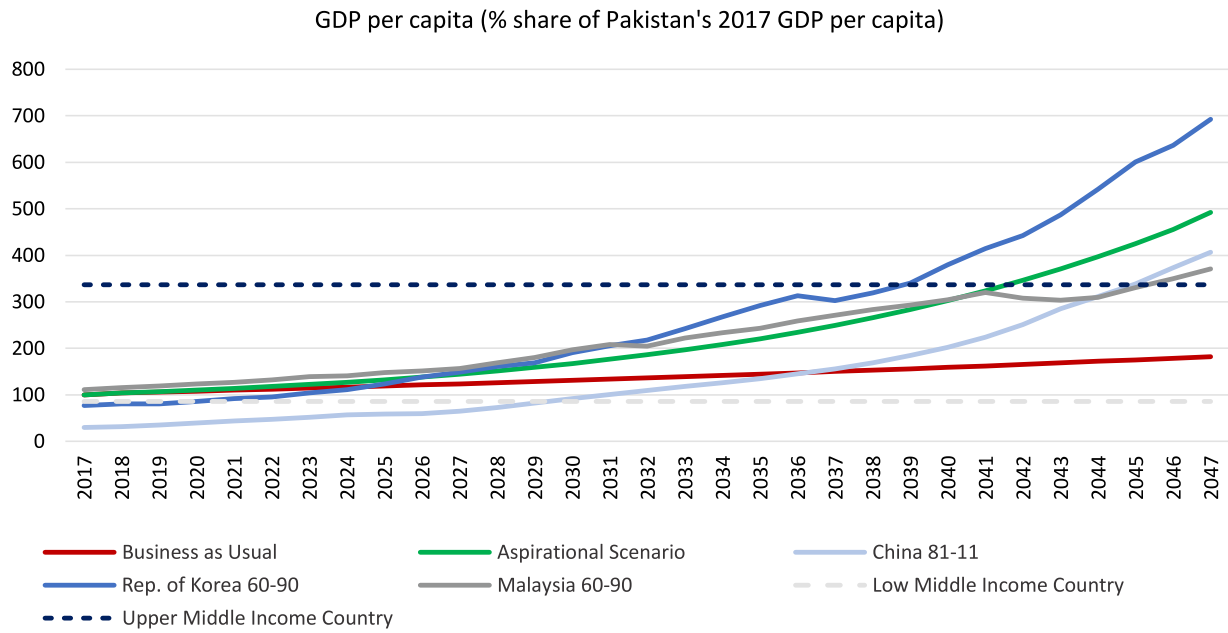
The necessary preconditions for Pakistan to gradually accelerate growth and reach upper middle-income status by 2047 are derived from a dynamic growth framework developed by Hevia and Loayza (2011). The framework assumes that growth is driven by a combination of three factors:

- i. **Accumulation of Physical Capital:** Investment, as the driver of physical capital accumulation, is financed through savings or foreign capital inflows. The model assumes a constant foreign debt-to-GDP ratio and a solvency condition that requires that the net present value of foreign liabilities can be financed by net exports. These conditions pin down a sustainable value of the current account deficit that, together with savings, determines investment.
- ii. **Increases in the Stock of Effective Labor:** Effective labor is determined by the size of the labor force and the years of schooling that the labor force received.
- iii. **Total Factor Productivity Growth:** TFP growth is exogenous to the model and represents factors such as technological progress that enhances the efficiency with which the effective stock of labor and the physical capital stock are used.

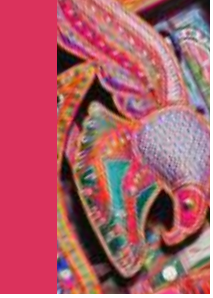
Combining these three drivers of growth allows the model to simulate a set of long-run growth outcomes based on the evolution of three factors: investment as a function of the savings rate, the foreign debt-to-GDP ratio and capital rates, productivity and workforce growth, as well as increases in educational attainment.

Accelerating and sustaining growth over a 30-year period is ambitious, particularly given Pakistan's most recent track record. But it is possible: other countries have achieved similar economic transformations. The suggested increase in income levels within a generation is an ambitious goal that will be challenging to attain. However, other countries have experienced similar income increases. Figure 4 shows the Rep. of Korea's growth acceleration between 1960 and 1996, from an income level comparable to Pakistan's today to upper middle-income status in just over 20 years. Similarly, Figure 4 also shows that China managed the transition from low-income to upper middle-income status in just 11 years, starting from a per capita income in 1981 that was less than half of Pakistan's today and increasing income about 14-fold by 2011. Other countries have followed similar paths, including Malaysia, which in 1960 had income levels comparable to Pakistan today and has increased GDP per capita more than threefold subsequently. Initial conditions (growth and investment rates, education levels, and population growth) in all of these countries were similar to Pakistan's today. Even if the growth transformation that Pakistan is able to generate falls short of the experience of these high achievers, reforms that accelerate and sustain growth over a long period of time, avoiding the frequent boom-and-bust cycles, will significantly improve the lives of millions of Pakistanis and put the country on a different development trajectory.

Figure 4: The path of high and sustained growth that Pakistan can aspire to has been traveled by other countries in the past



Source: World Development Indicators and World Bank staff calculations.



CHAPTER 2

How Can a Growth Transformation be Achieved?

A growth transformation requires a two-pronged strategy: on the one hand a focus on the reforms that will enable Pakistan to accumulate capital and allocate it more effectively, and on the other hand an overall improvement in governance that enables the implementation of a difficult set of reforms. Many reforms to increase investment and to support structural transformation have been attempted in the past, with mixed results. Reform implementation has often failed because of a weak governance environment that failed to provide the necessary political support for the implementation of difficult reforms. Improved governance will therefore be key in the form of increased transparency and accountability, a more effective institutional set-up and sufficient capacity. This report seeks to contribute to debates on both the reforms that will be necessary for a growth transformation and on the enabling governance environment.

Key Elements of a Growth Strategy

To trigger successful growth transitions, a country requires targeted policies that enhance the accumulation and allocation of human and physical capital, as well as sustainability. Reforms that improve accumulation, allocation, and sustainability jointly enhance a country's factor endowments and productivity, and thus support sustainable and accelerated growth:

1. **Accumulation:** Strong, enduring growth requires policies that encourage high rates of investment to accumulate human and physical capital, for example through investment in schools or infrastructure. China's growth was driven primarily by factor accumulation, supported by policies to encourage household savings and public investments in infrastructure, and the education and health sectors.
2. **Allocation:** Policies that aim to improve the allocation of physical capital and labor enhance productivity through structural transformation and opening the economy. For example, the Rep. of Korea in the 1960s reformed its economic policy toward an outward-oriented strategy, emphasizing trade and the promotion of commercialization of agriculture. This is widely credited with jump-starting growth, which was accompanied by a sharp reduction in the share of agriculture in GDP.
3. **Sustainability:** Policies that target environmental and social sustainability ensure that high growth can be sustained over an extended period. This involves preventing growth that depletes the natural resource base. For instance, as part of its 11th Five-Year Plan, China has significantly increased investments in green sectors, especially energy efficiency and renewable energy, to reduce the country's energy consumption and sustain growth in the long run. Sustaining growth is also about ensuring inclusive growth that allows all members of society to realize their economic potential. Malaysia's "New Economic Policy" that coincided with the country's growth acceleration emphasized equity and national unity, and has resulted in declining income and wealth inequality since the mid-1970s while maintaining high per capita GDP growth rates.

The right policies to accelerate and sustain growth differ widely across countries. Pakistan@100 is about identifying the policies that will work for Pakistan. To achieve upper middle-income status by its

centenary, Pakistan must reverse its slowdown in investment and sustainably enhance its productivity. Pakistan@100 discusses options for Pakistan's path toward achieving this long-term development vision, focusing on selected areas that matter for accelerating and sustaining growth, and identifying policies that target the key bottlenecks to growth. This report will thus provide detailed analysis to suggest the reforms and policies that are needed to increase human and physical capital, and enhance productivity through the more efficient allocation of capital and labor, while also contributing to social and environmental sustainability.

The focus areas in Pakistan@100 were selected after wide consultations with stakeholders at the inception phase, and corroborated by a thorough analysis of existing literature on growth in Pakistan.

Any exercise that attempts to identify growth-enhancing reforms faces a trade-off between analytical depth and topical breadth. Pakistan@100 focuses on a limited number of issues to allow for a more detailed and in-depth discussion. To that end, seven policy notes were prepared, namely: (i) 'Growth and Investment'; (ii) 'Human Capital'; (iii) 'Structural Transformation'; (iv) 'Building a Case for Regional Connectivity'; (v) 'Environmental Sustainability'; (vi) 'From Poverty to Equity'; and (vii) 'Nurturing People, Policies, and Institutions for Economic Development in Pakistan'. An additional note on gender, 'Women's Voice and Agency', was also prepared to inform this work. These focus areas are in line with previous work on growth in Pakistan:

- *Increasing human and physical capital accumulation* has been identified by the World Bank's Country Economic Memorandum for Pakistan (World Bank, 2013c) as a priority to support growth. Similarly, Qayyum et al. (2008) perform a growth diagnostic and highlight that returns to investment are low, which constrains investment rates.
- The need to *enhance productivity through more efficient allocation of capital and labor, and improved regional connectivity* is reflected in the Framework for Growth (2010), developed by the government of Pakistan, which focuses on the misallocation of resources resulting from policy distortions, limited competition, and barriers to entry, as well as a lack of openness to regional trade as impediments to growth. Similarly, Amjad and Burki (2015) highlight the need for greater regional connectivity and export-led growth in Pakistan, while the medium-term growth strategy developed for Khyber Pakhtunkhwa (2015) focuses on regional trade and connectivity as emerging growth drivers, among others, for the province.
- Pakistan's Vision 2025 (2014) emphasizes the importance of *ensuring environmental sustainability and social equity*, and is built on pillars that focus on inclusive growth. Similarly, the provincial growth strategies for Punjab (2015) and Khyber Pakhtunkhwa (2015) both focus on inclusion and human capital development through investment in health and education.

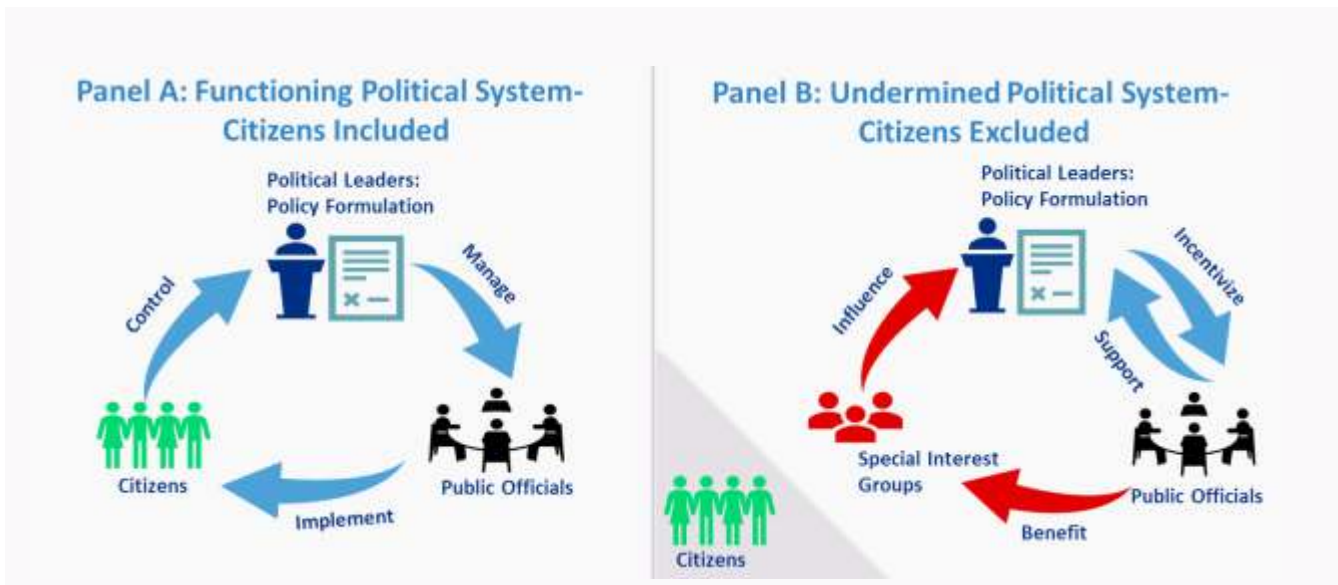
Securing an Enabling Governance Environment

Transformational growth requires an enabling governance environment in which the incentives between political leaders, public officials and citizens are aligned. Good governance will be crucial in implementing the reforms needed to transform Pakistan. In a governance environment that is conducive to reform, citizens hold policymakers accountable to ensure that policies are consistent with their demands. Accountability requires that citizens can select political leaders who represent their interests, and sanction those who fail to deliver the public services and reforms citizens expect. Political leaders are, however, not only tasked with *formulating* policy, but also with managing and monitoring public officials to ensure the effective *implementation* of reforms. Thus, in a functioning political system, incentives are aligned toward

providing public goods, as public officials target effective implementation to avoid being sanctioned by politicians, and political leaders represent citizens' interests to remain in office. This can be presented as a triangular relationship between political leaders, public officials and citizens (Figure 5).

Capture by powerful elites and 'clientelism' means that the triangular relationship that defines a functioning political system fails, undermining a country's ability to implement crucial reforms. Government failure occurs when leaders are selected based on their provision of private goods to select special interest groups, rather than their ability to provide public goods. Such situations can, for instance, arise when the high costs of running electoral campaigns require candidates to seek financial support from influential supporters and thus limit political competition. In such circumstances, candidates and politicians are responsive to interest groups and not to the public, which affects policy formulation and implementation. Such government failures can take many forms, but two are particularly prevalent. First, capture occurs when small groups can define policies according to their interest. Second, clientelism arises when political leaders exchange material goods for political support. In both cases, leaders have no political incentives to formulate and work toward the implementation of policies in the public interest.

Figure 5: How special interest groups can undermine political systems



There is a growing sentiment that Pakistan's political economy is not conducive to reforms. Over the past decades, crucial reforms with seemingly broad support have nonetheless stalled. For example, reforms in the agriculture and water sectors, and to the tax and SOE systems, have been attempted but not successfully implemented:

1. **Agriculture:** The government of Pakistan has traditionally intervened in agricultural input and output markets through subsidies and procurement prices. In the 1990s, the National Agricultural Policy was passed to reverse this practice and liberalize agricultural markets. However, reforms fell short of eliminating major sources of distortion, especially price floors for wheat, sugarcane and fertilizer subsidies, which continue to distort cropping choices, create entry barriers and constrain competition. Spielman et al. (2016) and Lieven (2011) argue that members of the landowning class have resisted the implementation of reforms, as they benefit from the status quo.

2. **Water:** Pakistan uses 95 percent of its water resources for irrigation (Pakistan National Water Policy 2018). Irrigation water tariffs are subsidized and occur on a flat-fee basis per acre of land, so that prices paid are not only low but also independent of the quantity of water used. Various reforms and agricultural strategies, including the 2018 National Water Policy and the government of Pakistan's medium-term economic policy program for 2005-10 (MTDF 2005-10, 2005), recommended introducing appropriate pricing mechanisms to achieve cost recovery and sustainability. Pakistan's latest National Water Policy was only passed in 2018 and to date no major reform of the irrigation water-pricing system has been implemented. Large landowners both benefit disproportionately from the low water rates and have political connections that ensure their continued preferential access (Planning Commission, 2010).
3. **Tax Reform:** Pakistan collects less than 13 percent of GDP in tax revenue, which is comparatively low. Including the agricultural sector in the tax net, which accounts for over 20 percent of GDP but had initially been excluded from taxation, is a potentially promising measure to increase revenue collection. However, although provinces passed legislation to collect agricultural income tax in Fiscal Year (FY) 1996/97, actual collection remains insignificant—revenue from agriculture only accounts for 0.22 percent of total direct tax revenue—partially because full implementation would hurt politically connected landowning elites (Lieven, 2011; Nasim, 2012).
4. **State-Owned Enterprises:** SOEs impose a significant fiscal cost. In FY2015/16, subsidies, loans and grants to federal SOEs accounted for 32.7 percent of the budget deficit and 1.5 percent of GDP. In the past three decades, the main policy to address this has been privatization, but several attempts have resulted in more limited divestments than targeted. Most recently, an over-ambitious privatization program launched in 2013 targeted more than 60 SOEs but only resulted in five transactions in the period 2013-15, and none thereafter. Despite successful privatization attempts in the telecommunications and financial sectors in the past, SOE reform has come to a standstill, as employment issues and vested interests oppose the necessary reforms.

Past reforms did not stall because Pakistan lacks implementation capacity. Pakistan has successfully undertaken difficult reforms in the past. For instance, the financial sector underwent reforms in the early 1990s that helped the country overcome the challenge of low performance and poor asset quality that had characterized the state-owned-bank-dominated sector. The reforms included the privatization of financial institutions, liberalization of interest rates, and a stop to credit controls and mandatory lending. Privatization and liberalization led to significant entry and diversification: the banking sector is now 85 percent privately-owned and performing well, with relatively low non-performing loan (NPL) levels. Similarly, successful reforms were undertaken in the previously state-controlled media sector (Yusuf and Schoemaker, 2013). The sector's liberalization in 2002 led to a dramatic increase in media outlets, from just three television channels in 2000 to 90 satellite television channels in 2017. This allowed the media to emerge as an important player in the country's politics and gave marginalized parties the opportunity to communicate with the electorate, which improved political participation. The transformation of the National Database & Registration Authority (NADRA) from a manual thumbprint recording office to an innovative citizen-centric Information and Communication Technology (ICT) application and service provider is another successful example. NADRA is already helping the government administer smart card programs for disaster relief and financial inclusion schemes. The above suggests that with the necessary political will Pakistan does have the capacity to implement complex reforms (Dailami, 2015).

Reform efforts in Pakistan have often failed because they challenge an existing equilibrium of power. While most attempted economic reforms aim at supporting growth by enhancing economic efficiency, they also typically have redistributive effects. These occur by, for example, ensuring equal access to water resources, leveling the playing field in the agricultural sector, or collecting taxes to fund public services. By doing so, they

adversely affect the interests of select groups that benefit from the status quo. These vested interests can work toward protecting their own benefits and preventing reforms (Kaplan, 2013; Husain, 2018), compromising the triangular relationship between citizens, policymakers and public officials that characterizes a functioning political system.

The capture of policy formulation occurs through two channels. First, groups that benefit from the status quo are politically connected and have established effective lobbies, which allows them to influence reforms for their own benefit. For example, Ahmad (2010) argues that the textile industry has worked against a reform of Pakistan's Goods and Services Tax (GST) system to maintain a zero-rating of textile products. Similarly, the sugarcane lobby is politically connected and has influenced policy to maintain subsidies for the sector (PIDE, 2018). Second, beneficiary groups enter the political process directly, thus blurring the lines between political leaders and private interests. For example, the share of industrialists with a parliamentary mandate has doubled over the past 30 years (Daniyal and Bakhtian, 2012). There is also evidence that such direct political representation can be achieved by gathering support from voters in exchange for transfer payments. This has, for example, been documented for landowners who gather political support from their tenants, thus allowing them to compete for office and undermine reforms that reduce their access to agricultural rents (Beg, 2017).

In many instances, policy implementation has failed because public officials have entered clientelism relationship with political leaders. Such clientelism relationships are manifested in diverse areas such as health and education.

1. **Health:** Absenteeism of doctors and health workers is linked to the political incentives of their supervisors: doctors are more likely to be absent in less-contested constituencies and in cases where their political supervisor is affiliated with the central party in power (Callen et al., 2014; Gulzar, 2014).
2. **Education:** Public schoolteachers form a politically influential group in Pakistan, as their role in facilitating and administering elections makes them part of the political system (Andrabi et al., 2008). In addition, there is evidence that recruitment of public school teachers can be based on patronage rather than merit, with some teacher posts being 'sold' in exchange for cash or support (Hasnain, 2008). These political connections undermine political leaders' authority to monitor and sanction teachers, which is manifested in worse performance of public school teachers than private school teachers, even though public school teachers are often better educated and better paid than private school teachers (Andrabi et al., 2008; Andrabi et al., 2017).

A lack of political competition has deprived voters of their ability to sanction political leaders for these failures. Even in the presence of elite capture and clientelism, voters can leverage the power of elections to voice their dissatisfaction with service delivery and reforms. However, there are constraints to this accountability mechanism. First, a lack of electoral competition, caused by the high costs of establishing party structures and mobilizing support, has given rise to dynastic politics, limiting voters' ability to sanction political leaders (Cheema, Javid and Naseer, 2015). Second, an unfinished devolution agenda has thus far prevented potential gains to accountability from moving decision-making power over service delivery closer to the people. Thus, the examples discussed here and in the rest of the report, as well as research by some of Pakistan's most reputed intellectuals, suggest that the triangular relationship linking citizens, policymakers and public officials is constrained in important ways.

The equilibrium of power currently in place in Pakistan does not only redistribute rents from the public to elites, but has profound impacts on growth, productivity and citizens' welfare. The failure to implement effective reforms in select sectors affects growth by preventing factor accumulation and productivity growth. The poor track record of public schoolteachers means that one of Pakistan's key

assets—its young population—is accumulating less human capital than it could. Likewise, doctor absenteeism can lead to worse health outcomes, which directly impacts labor productivity. Examples of misallocation because of stalled reforms are equally manifold. For example, the absence of effective water-pricing mechanisms has led to an inefficient allocation of irrigation water across Pakistan, as downstream farmers receive less than one-third of the water than farmers at the head of canals (Transparency International, 2008). At the same time, enormous quantities of water are wasted through irrigation, leading Pakistan to have one of the lowest levels of water efficiency in the world.

Pakistan@100 is about mapping out reforms to accelerate growth, but these cannot generate a growth dividend unless the political economy surrounding reforms is also addressed. Generating a governance environment that is conducive to reforms requires realigning the incentives of political leaders and public officials with citizens. Providing transparent and accessible information on the leaders' track-records of reform and service delivery to citizens is a key step in this process. For example, providing report cards on children's school performance has significantly improved learning outcomes in Pakistan, as it informs parents' choice of school, and thus holds providers accountable (Andrabi et al., 2017).

Improving transparency alone is not sufficient, as citizens also need tools to hold their leaders accountable. Schooling report cards were effective in improving learning because the ability to choose between different private and public schools gives parents a lever to hold providers accountable. In circumstances where such levers do not exist, transparency is less successful. For example, providing public information on doctor absenteeism is ineffective in uncontested constituencies, i.e., in situations where citizens do not have a choice between political leaders, and who in turn have no incentive to hold service providers accountable (Callen et al., 2014). Thus, improving Pakistan's political economy of reform requires increased transparency, and the provision of levers for citizens to sanction public officials and political leaders when policy and service delivery do not meet their expectations.¹

Increasing transparency and restarting efforts to devolve decision-making to the local level offer a promising pathway toward improving the political economy of service delivery. Fully implemented devolution would contribute to economic transformation and progress, as it allows local leaders to tailor service delivery to local needs and facilitates monitoring and sanctioning by voters based on service delivery performance. However, recently passed local government acts in Pakistan's provinces have done little to devolve power to the local governments (with Khyber Pakhtunkhwa being an exception). This has undermined the full operation of local governments, depriving them of the authority to direct service delivery and assess local needs. Crucially, this has also undermined accountability, as it deprives voters of the ability to closely monitor the leaders responsible for providing public services. Reestablishing the chain of accountability by completing the devolution agenda, while increasing transparency and political competition, could be instrumental in increasing Pakistan's prosperity on its centenary.

¹ Increased citizen participation is not the only way to hold leaders accountable. For instance, some authors argue that a strong and independent bureaucracy can counter vested interests and ensure reform implementation.



CHAPTER 3 | Accumulation

Accumulation of human and physical capital is necessary for accelerating and sustaining high growth.

Countries that sustained high economic growth for extended periods put substantial efforts into raising public and private investment rates by increasing domestic savings, creating an enabling environment for FDI and deepening their human capital to improve health and education outcomes for their populations (Growth Commission Report, 2008). For Pakistan to sustainably accelerate growth, it must do the same and sustainably increase investment levels.

This chapter discusses factors that have constrained the accumulation of human and physical capital in Pakistan and recommends policies that would help Pakistan to overcome these constraints.

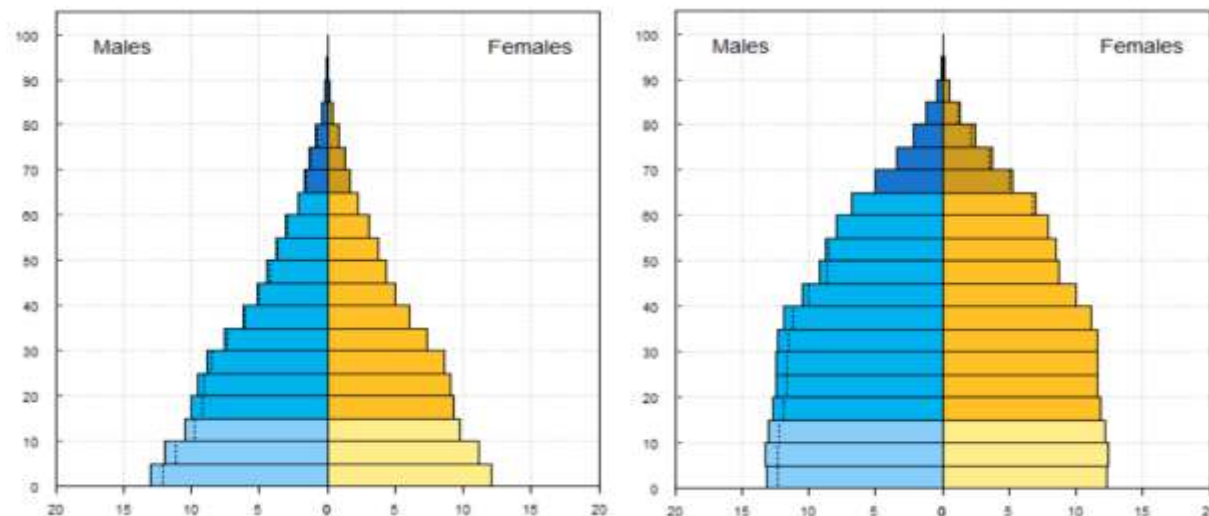
Pakistan has historically had low levels of investment in human and physical capital. This chapter is divided into two parts. The first part discusses human capital investment and the second focuses on physical capital investment in Pakistan. The chapter concludes with recommendations for addressing the challenges identified.

PART 1: HUMAN CAPITAL

Pakistan's large and growing population of almost 208 million is its main asset. Pakistan is experiencing a youth bulge with the number of individuals entering the labor market over the upcoming years expanding at a faster rate than the total population. Given this abundant labor supply, investment in human capital and its utilization is critical to stimulating growth. Pakistan's youth bulge can be turned into a demographic dividend if the economy is able to absorb the substantial number of young workers entering the labor force by creating sufficient quality jobs, and ensuring that individuals of working age—both men and women—participate in the labor force and are equipped with the right skills. Increasing female labor force participation could give growth a significant boost, which will require significant investment in human capital, with particular attention to closing existing gender gaps.

Human capital enhancement requires investment in each stage of the life cycle. Human capital accumulation is a dynamic process that begins before birth through investments in maternal health and nutrition, continuing through early childhood development, and further through schooling and labor market experiences. The well-known expression “skills beget skills” captures the continuum of human capital investment. Investing in skills and labor—the most important assets of the poor—to enable the accumulation of more skills, whether through improved nutrition, stimulation at home, formal education or labor market experiences, and utilizing human capital in an efficient way is the most sustainable way to help individuals benefit from and contribute to the economy's growth.

Figure 6: Population by 5-year age groups in 2017(left) and 2050(right)



Source: UN World Population Prospects 2017 revision

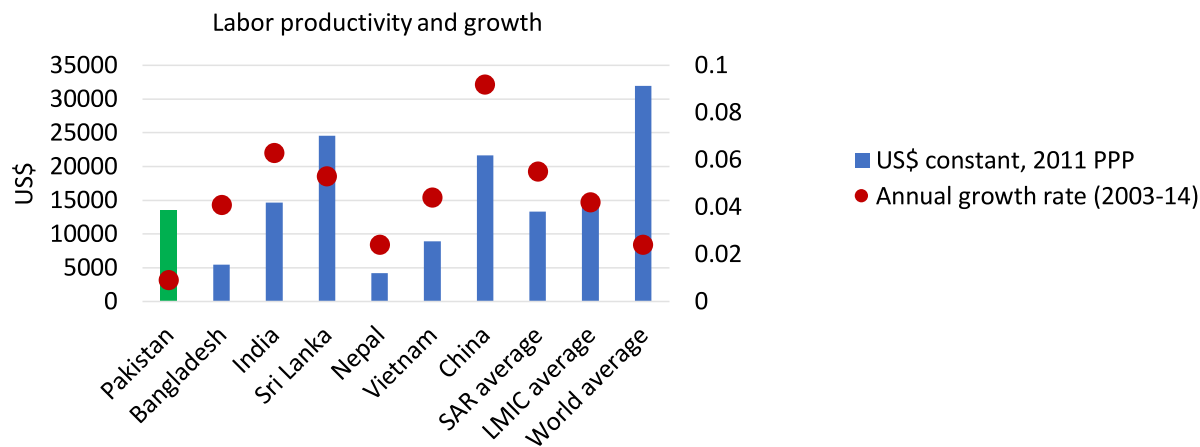
Pakistan is currently experiencing a growing working-age population and a declining dependency ratio—demographic changes that tend to be favorable for growth. Between 2004 and 2015 the country's working-age population grew by 2.4 percent a year, whereas the total population growth rate over the same period was about 2.1 percent a year, with a declining dependency ratio. Moreover, the labor force grew more rapidly (by an average of 2.9 percent a year) than the working-age population, indicating a favorable condition in the labor market.²

Despite these favorable transitions, Pakistan is not fully benefiting from them due to underutilization of human capital. The growth rates of non-agricultural employment and paid employment are only 1 and 4 percentage points greater than that of employment growth. This suggests slow job creation in the non-agricultural sector and in paid employment, which typically are job-creating sectors in dynamic economies. For instance, in Bangladesh, where the ratio between the working and non-working age population is also growing, the labor market shows far more rapid growth in non-agricultural, wage employment than in total employment. In addition, real wage growth among paid employees in Pakistan grew only by 1.5 percent per year, which suggests only modest improvement in the quality of jobs or labor productivity.

Pakistan's labor productivity needs faster growth to improve the country's competitiveness. Labor productivity measured as GDP per person employed implies that Pakistan's labor productivity is stagnant, with its growth rate being the lowest in the region and far below the average of lower middle-income countries (Figure 7), affecting competitiveness. This contrasts with comparator economies such as India and China where average annual labor productivity growth rates over 2003-14 were 6.3 and 9.2 percent, respectively.

² PBS estimates of the working-age population and total population between 2004 and 2015 suggest that the total population has been growing faster than the working-age population. This implies that Pakistan is earlier in the demographic transition process than would be suggested by the UN WPP estimates.

Figure 7: Labor productivity and growth over time



Source: World Development Indicators.

Human Capital Diagnostic for Pakistan

Improving human capital accumulation requires a life-cycle approach. The discussion below focuses on four critical pillars of human capital accumulation. Focus on these pillars can help policymakers design and implement key policy measures to boost the country's human capital and labor productivity. The life-cycle approach highlights the importance of early intervention, where the returns to investment are larger at earlier stages of the life cycle. While the pillars are presented separately, it is worth noting that these policy areas are inter-connected given the continuous nature of human capital accumulation.

a. Pillar 1 - Informed Decisions on Parenthood

Lower fertility and better reproductive health are associated with improved maternal and child health, and also greater female labor force participation. Evidence reveals that women who delay, space, or limit childbirth have more opportunities to allocate their time and resources toward investing in each child's health and education, leading to a reduced fertility rate, higher birth weights, lower levels of child mortality, better child nutrition, and improved cognitive development (Barham, 2009). Access to reproductive health services and family planning helps women better control the timing and number of births, which in turn enables women to redirect resources toward schooling, job training, and working outside the home. Moreover, children whose mothers can make their own decisions on the time they spend working and raising children may also be presented with greater opportunities in the future (Joshi, 2012).

Lowering fertility is a precondition for Pakistan to realize its demographic dividend. A demographic dividend occurs when dependency rates decline and this boosts growth, partly through increased savings and investment, and increased female labor participation. As countries develop, they tend to move through the various phases of the demographic transition process. In the first phase, the increase in the number of

children is proportionally larger than the increase in the working age population, leading to a decrease of working age population share. As income and education improves, fertility and mortality rates decline, and there is an increase in the share of working age population. This is the stage of the demographic transition that provides the initial condition for the demographic dividend. Further declines in fertility rates will be necessary, together with simultaneous improvements in educational attainment and labor productivity for Pakistan to benefit from a demographic dividend. (For more details, refer to the Pakistan@100 policy note 'Human Capital'.)

Pakistan continues to have substantially higher fertility rates than its peers, with little progress in reducing them over the past 25 years. While rapid fertility declines were observed in the 1990s, fertility rates have leveled off since the early 2000s. In 2015, women in Pakistan had an average of 3.7 children³, higher than many regional counterparts (Figure 8). Considerable disparity in fertility rates persists across regions—women in urban areas have 3.2 children on average, compared with 4.2 children per woman in rural areas. In the context of Pakistan, where out-of-wedlock childbearing is limited, the fertility rate is determined by a host of factors, including age at first marriage, marriage rate, and total number of children. Women who marry at a young age have a higher number of childbearing years, and hence higher total fertility than women who marry older. A host of other factors also come into play, including lower educational levels and limited understanding of family planning methods, which contribute to higher fertility.

Figure 8: Total fertility rate (births per woman, left axis) and fertility rates (births per 1,000 women, right axis)

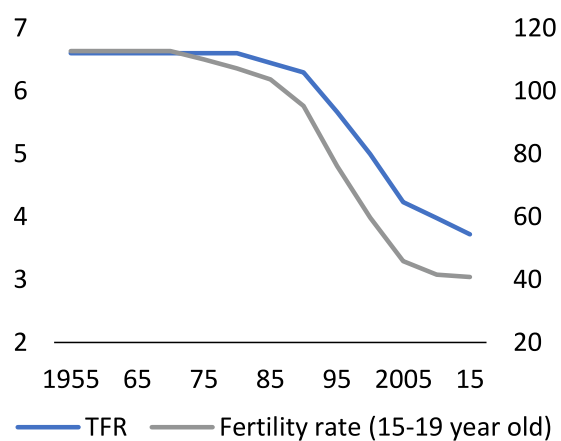
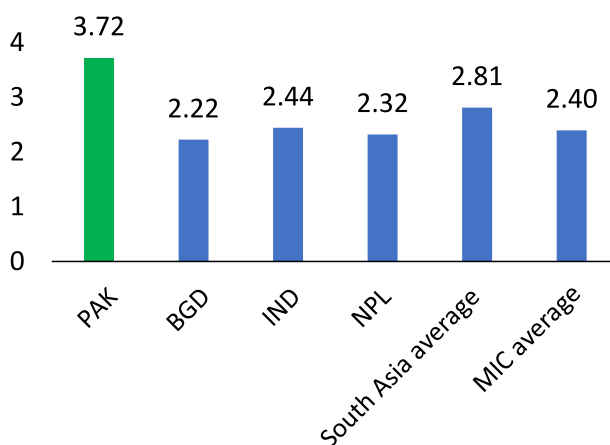


Figure 9: Total fertility rate, by country and region in 2015 (births per woman)



Note: Data from UN WPP 2017 Revision. Source: World Bank staff calculations.

The average age at first marriage and the marriage rate have not changed much for women in Pakistan in recent years. The median age at first marriage rose from 19.1 years in FY07 to 19.6 years in FY13 (DHS, FY13). Although urban women tend to marry slightly later than rural women, about 90 percent of women are married by age 30 in urban and by age 28 in rural areas. Moreover, early marriage is persistent in rural areas, with roughly 46 percent of women being married by age 20, and one-quarter by age 18.

Pakistan's contraceptive prevalence (share of married women using modern contraceptive methods) rose from 16 percent in 1990 to 38 percent in 2006, but declined to 26 percent in 2012 (DHS, FY13). The recently published Pakistan Demographic and Health Survey (DHS) for FY18 shows that the prevalence rate remains at similar level (25 percent). The low rate of contraceptive use is striking, as knowledge of

³ The recently published Pakistan Demographic and Health Survey (DHS) 2017-18 results show that Pakistan's TFR slightly declined to 3.6.

contraception is almost universal in Pakistan (almost 99 percent of women reported being aware of modern contraceptive methods). There are considerable disparities in contraceptive prevalence rates across provinces, indicative of varying socio-cultural constraints, with the rate highest in Punjab (29 percent) and lowest in Balochistan (16 percent).

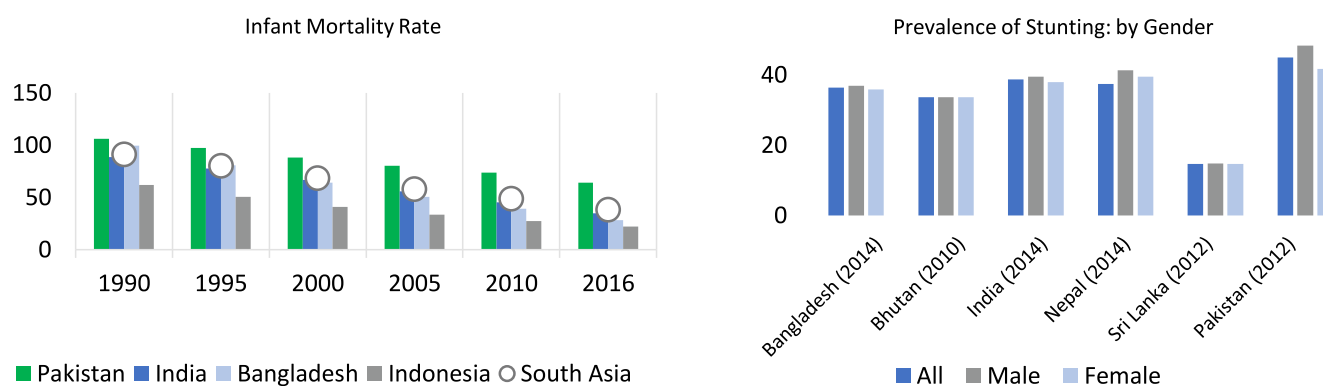
There is a notable difference between desired and actual fertility rates, which may indicate limited gender empowerment. On average, actual fertility rates tend to be greater than those desired, suggesting a failure of birth control. The gap between the two tends to be larger for less educated women living in poorer, rural households. Around 37 percent of episodes of contraceptive use were discontinued within a year of initiation, with 10 percent of women citing side-effects and health concerns as the basis for discontinuation (DHS, FY13). According to DHS for FY18, about 17 percent of currently married women reported an “unmet need” for family planning services, indicating their lack of satisfaction in family planning. The incidence of unmet need for family planning is highest in the lowest wealth quintile (22 percent) and decreases with household wealth.

b. Pillar 2 - Strong Start through Early Childhood Development

The skills developed in early childhood, from birth to primary school entry, form the basis of future learning and labor market success. The process of skill formation is dynamic and builds on itself. Fostering early-life skills facilitates the accumulation of skills over the life cycle, where future skills have intergenerational impacts. These dynamic relationships make early life an important period because it lays the foundation for building skills later in life (Garcia et al., 2017). Early childhood development enhances a child's ability to learn, to work with others, to be tolerant and persistent, and to develop a wide range of other foundational skills for formal learning and interactions in the school years and beyond. Conversely, research demonstrates that the effects of adverse early childhood environments persist over a lifetime.

Pakistan lags peer countries in indicators related to early childhood nutrition and health. There has been a significant reduction in infant mortality rates over time, but compared with other countries the pace is slow and the level remains significantly higher (Figure 10, left). Pakistan has the highest rate of child stunting (height for age) in the region in comparable years (Figure 10, right). The stunting rate in Pakistan has declined from 45 percent in FY 13 to 37.6 percent in FY 18 (DHS FY13, FY18). However, it still shows worse outcomes than other countries like Bangladesh (stunting rate at 31 percent in FY18).

Figure 10: Comparison of infant mortality rates and nutrition outcomes



Source: World Development Indicators

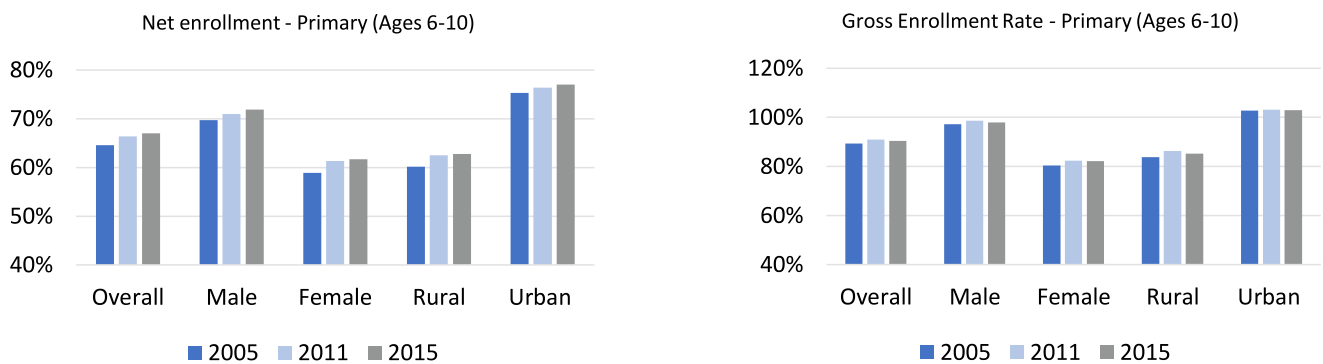
Nutrition outcomes are significantly different across wealth quintiles. This suggests that poor nutrition is most likely correlated with poverty, reflecting poor households' inability to access basic health and nutrition services, as well as their poor conditions with limited water and sanitation services. However, at the same time, it is striking that almost 15 and 20 percent of children are stunted in Punjab and Sindh, respectively, even when mothers have more than secondary education, or the children belong to the highest wealth quintile households (based on MICS 2014). This could reflect a general lack of awareness of diet and nutrition, as well as preferred feeding practices for the first 1,000 days of life.

The lagging outcomes of poorer households can reflect overall environmental factors that impact children's health. There is a huge gap between urban and rural areas with respect to access to basic sanitation services. Despite significant improvement over the past decade from a very low base of 25 percent in 2005, only three-quarters of urban households and less than half of rural households had access in 2015. Similarly, the sewer connection situation also presents a dismal sanitation condition, which can lead to the transmission of diseases caused by inadequate sanitary services, including frequent bouts of diarrhea. While there has been overall progress over time, less than one-quarter of households had septic tanks and sewer connections in 2015. The share of households with latrines and other modern sanitation environment was also less than 10 percent.

c. Pillar 3 - Education and Learning for All

Education levels have been improving over time, but the pace is very slow. The gender and regional gaps in enrolment rates remain significant (Figure 11). In 2010, Article 25A of the Constitution declared education a fundamental right, following which laws were passed in each province that entitle all children aged 5 to 16 to free and compulsory quality education (ASER, 2016). Despite this, progress has remained slow, with the net primary enrolment rate increasing by only 2.4 percentage points from 64.6 to 67.0 percent between 2006 and 2015, whereas the gross primary enrolment rate has stagnated at around 90 percent since 2006.

Figure 11: Net and gross enrolment rates of primary school over time

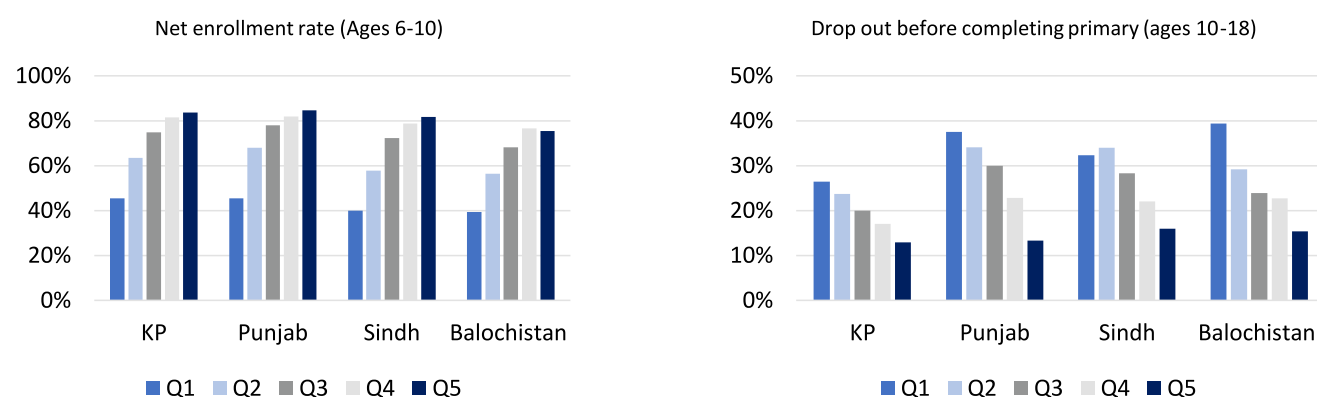


Source: Pakistan Social and Living Standard Measurement (PSLM) 2005, 2011, 2015.

Household incomes have a strong association with children's school enrolment rates, suggesting that demand-side access is a significant determinant of education (Figure 12). The net enrolment rates range between 39 and 46 percent in the lowest wealth quintile, and between 75 and 85 percent in the highest wealth

quintile, across the four provinces. While the outcomes of the top three quintiles (Q3-Q5) show little variations, the outcomes of the bottom two quintiles lag behind, with the severity of the poor and non-poor gap varying by province. With respect to drop-out rates before the completion of primary schooling, the differences across income groups are much more pronounced in Punjab—38 percent of children aged between 10 and 18 drop out in the lowest wealth quintile, compared with 13 percent in the highest wealth quintile.

Figure 12: Schooling outcomes by quintile



Source: Pakistan Social and Living Standard Measurement (PSLM) 2015.

Not only the quantity but also the quality of education is concerning in Pakistan. In rural areas 48 percent of class 5 students and 83 percent of class 3 students could not read a class 2 story in Urdu/Sindhi/Pashto; 54 percent of class 5 students and 85 percent of class 3 students could not read class 2 sentences in English; and 52 percent of class 5 children could not do two-digit division (ASER, 2016).

Lack of progress in these outcomes could also be because rising student numbers are outpacing the supply of schools and teachers. The student-to-teacher ratio has been consistently increasing, with a sharp hike between 2013 and 2014 when it rose from 42.5 to 46.5. The share of trained teachers in primary schools also suggests that Pakistan is lagging behind other countries such as Malaysia and Vietnam. Moreover, teacher absenteeism and the quality of pedagogy are of serious concern, as almost 22 percent of public schoolteachers are absent at any one time and, even when present, they use ineffective teaching methods (Brown, 2017).

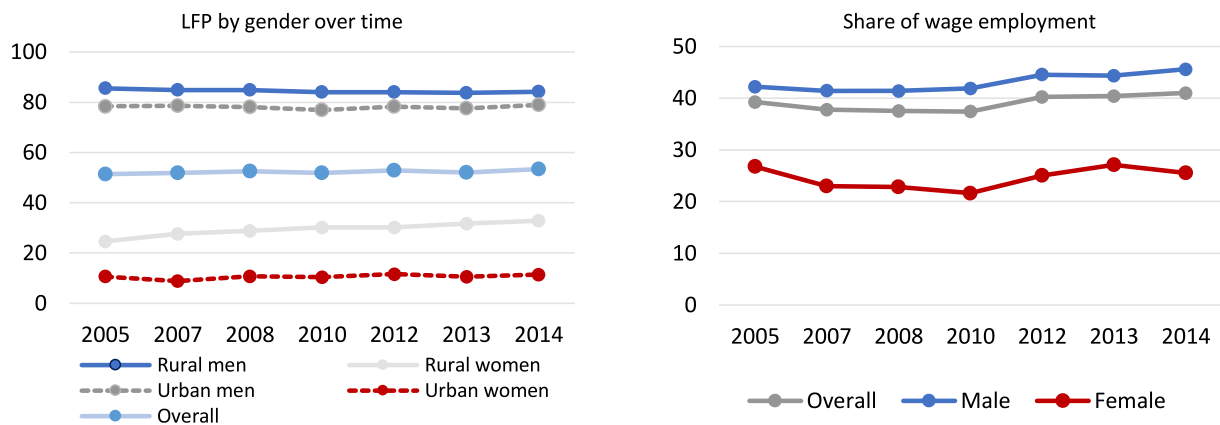
Pakistan is also faced with a serious challenge of out-of-school children, with an estimated 22.6 million children not attending school, 18 million of whom are between 10 and 16 years old (NEMIS, 2017). Balochistan is home to the highest proportion of out-of-school children followed by the Federally Administered Tribal Areas (FATA). An estimated 30 percent of youth are also not in employment, education or training, including a staggering 54 percent of women (World Bank, 2018c). Demand-side socio-cultural barriers and bottlenecks influencing exclusion from school are related to society's attitude to gender roles, with girls facing restrictions on their mobility, and boys experiencing pressure to start contributing to household incomes. Girls are vulnerable to early marriage, causing them to drop out of school. Demand-side economic barriers include the costs of schooling. These include not only direct costs, such as expenditure on school materials, examination fees and transportation, but also the opportunity cost of a child's time (UNICEF, 2013).

d. Pillar 4 - Labor Productivity

To absorb the rapidly expanding labor force, the economy will have to create 2.1 million jobs annually, given the large youth share in Pakistan's demographic structure and expectations of increased female labor force participation. The quality of the jobs created also matters. The informal sector accounts for a large share of the employed population and the agriculture sector continues to employ more than 40 percent of the labor force. Reliance on agriculture for employment is more prominent among women, as more than 70 percent of female workers are engaged in the sector, with most of them working as unpaid family workers. To achieve faster growth rates, the economy will have to create more and better paying skilled jobs.

Key characteristics of Pakistan's labor market include the limited changes over the past few decades. Major labor market outcomes, including overall employment ratio, sector and status of employment, and formality rates, have not changed over the past decade (Figure 13). Female labor force participation (LFP) has modestly improved, largely due to an increase in rural women's labor market activities, but nonetheless remains extremely low. Female LFP rate in urban areas has stagnated at around 10 percent over the past decade. The share of wage employment increased slightly, although the share of wage employment in 2014 for women is lower than that of 2005.

Figure 13: Labor force participation rates



Source: Labor Force Survey (LFS), various years. Bossavie et al. (2018).

In a dynamic economy, as young people obtain better education than their older counterparts, they typically earn an increasing share of wage, non-agricultural employment. However, Pakistan's youth do not appear to experience positive labor market transitions over time. Between 2005 and 2014, both youth and adults experienced less than a 2-percentage-point increase in the share of wage employment (from 40.3 to 42.1 percent for youth; from 38.8 to 40.7 percent for adults). With respect to non-agriculture employment, little progress (or even a regress) is observed, as the non-agriculture employment share decreased from 59.0 to 58.0 percent for youth, and slightly increased from 59.0 to 60.2 percent for adults.

Technical and vocational training can support the skilling of the existing labor force. The education system has not developed the skills needed in the labor market for a large proportion of the population. Pakistan needs to invest also in improving labor productivity of the existing labor force, not only children. Technical and vocational training covers only a small proportion of the labor force. There are 3,581 public and private vocational and technical public and private institutes, with a larger share of private vocational institutes than technical ones (NAVTTTC, 2017). Only 6 percent of young people have acquired technical skills

through the technical and vocational education and training (TVET) system, and only 2.5 percent of youth have received on-the-job training. Being in a TVET institution requires at least a secondary or higher secondary completion certificate, which is still limited to a small segment of the population. Some limited options exist for those unable to go through the education system, such as the Skills Development Council (SDC), a tripartite body with membership of employers, employees and the government. The SDC is reported to have a higher employment placement rate for trainees than for any other training institute, although its role after devolution in the complicated landscape of the TVET system is unclear.

The tertiary education landscape is rapidly expanding in Pakistan. Enrolments in tertiary education increased during the past decades from less than 2.7 percent of the college-age population in 2002 to 10.4 percent in 2015. Overall gender parity in higher education has almost been achieved (53 percent male and 47 percent female). However, large income and regional disparities still exist in access to tertiary education. According to Pakistan Social and Living Standards Measurement (PSLM) data, only 0.4 percent of the poorest quintile participate in tertiary education compared with 17.3 percent in the highest income group.

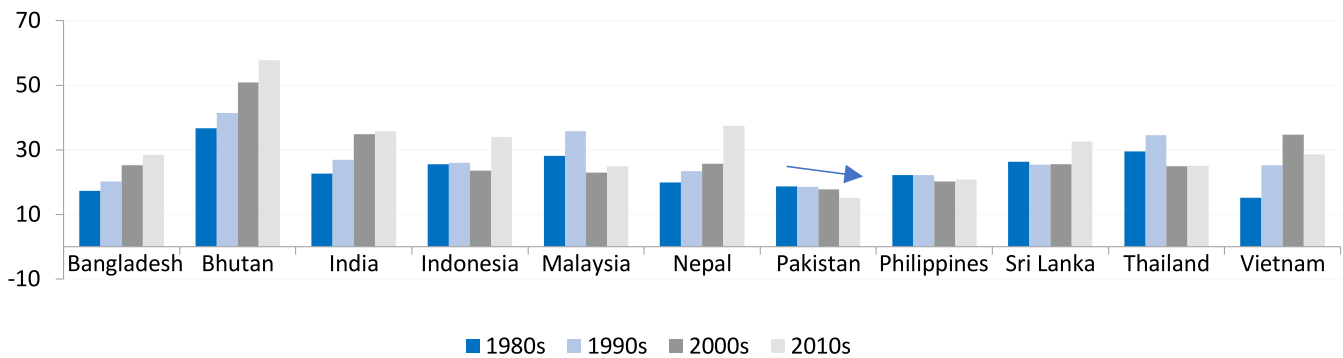
Weak Policy Implementation: A Cross-Cutting Issue

Weak policy implementation has led to limited improvements in human capital. Over time, different governments have highlighted the importance of having quality education and health institutions, and introduced reforms to improve Pakistan's performance in social indicators. However, as discussed above, Pakistan is still lagging in these critical sectors. Chapter 2 presents the elements of a working political system. In the social sectors, reforms are failing at the link connecting public officials to citizens (Figure 5, Chapter 2). Limited capacity, poor management and a lack of accountability at the local level have instilled widespread inertia in the service delivery system, and led to weak policy implementation and consequently few improvements in health, nutrition and education outcomes across Pakistan. With the devolution of service delivery to the provinces, the landscape has changed even more, and there is a need to improve coordination mechanisms and institutional frameworks for better results (see Chapter 5 on 'Governance and Institutions' for a more detailed discussion).

PART 2: PHYSICAL CAPITAL

Increasing investment from 15 to 25 percent of GDP is critical to unlocking Pakistan's growth potential. Physical investment affects output and employment by feeding into an economy's productive capacity, boosting both potential output and employment. It facilitates private sector development and contributes to productivity growth, often through critical investments in infrastructure. Low investment at around 15 percent of GDP poses key constraints for Pakistan's long-term growth prospects, affecting both potential and actual growth. Pakistan's investment-to-GDP ratio is low and has been continuously declining, particularly compared with trends in peer countries (Figure 14). A binding constraint to increasing investment levels is low domestic savings, and so attempts to increase investment will need to look at increasing domestic savings rates.

Figure 14: Investment-to-GDP ratio (percent)



Source: Haver Analytics

Understanding the Constraints to Investment in Pakistan

The following section discusses factors that have contributed to low investment levels in Pakistan.

Factors that have historically constrained investment in Pakistan can be broadly grouped into two main categories, namely financing and low returns to investment. Low domestic savings and shallow financial markets restrict the supply of financing for investment. Low tax revenues and high current expenditures limit fiscal space for public investment. External financing in the form of FDI and domestic investment are constrained by a poor investment climate and a volatile macroeconomic environment.

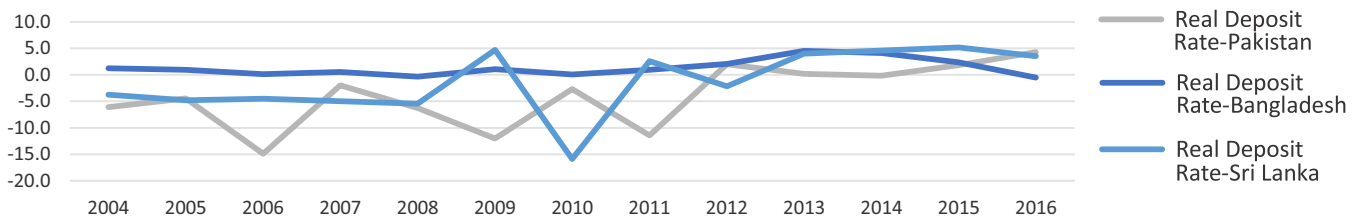
Financing Constraints

Investment is constrained by limited supply of financing. This section discusses: (i) low domestic savings in Pakistan due to a high dependency ratio, limited financial inclusion and macroeconomic instability; (ii) poorly functioning financial markets due to lack of financial deepening and asymmetry of information; (iii) limited fiscal space due to low revenue mobilization and increasing expenditures; and (iv) low FDI.

a. Low Domestic Savings

Domestic savings in Pakistan at 13.8 percent of GDP (FY11-15) are very low. This situation compares unfavorably with those of neighboring countries. Savings as a share of GDP in Bangladesh and Sri Lanka were 29.7 percent and 24.5 percent, respectively, during the same period. Real savings rates during the past decade in these economies, proxied by real deposit rates (Figure 15), suggest that Pakistan's savings rate was not only low but also volatile, which can adversely impact the ability of banks to lend the long-term credit needed for financing investments (Choudhary and Limodio, 2018). It is not surprising, therefore, that nearly all of Pakistan's high-growth periods have coincided with abundant inflows of foreign savings (in the form of external loans, grants and remittances). Accordingly, whenever such inflows dried up, economic growth slid back, as domestic savings and investment were never sufficient to sustain the growth momentum.

Figure 15: Real deposit rates in South Asia*

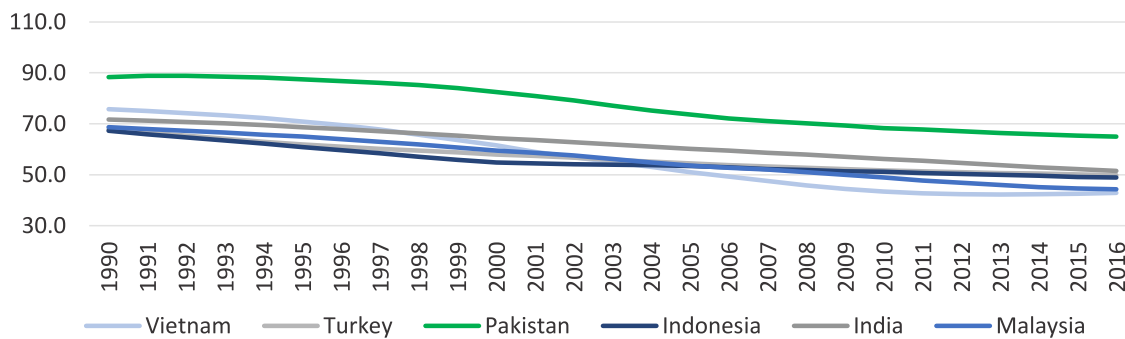


*: Real deposit rates are calculated using rate paid by commercial or similar banks for demand, time, or savings deposits and subtracting inflation as measured by the annual growth rate of the GDP implicit deflator from deposit rates.

Source: World Development Indicators.

High fertility rates have led to a high dependency ratio in Pakistan, which in turn has resulted in lower savings. Persistently high fertility rates in Pakistan have led to a dependency ratio above those of its peers (Figure 16), indicating the higher economic burden borne by the working-age population of Pakistan. Although this ratio has declined over time, Pakistan still has a higher proportion of dependent population than many of its peers. A high dependency ratio has various implications for the economy but has specifically been linked to low savings rates⁴ (IMF, 2005; Thornton, 2001).

Figure 16: Dependency ratios



Source: World Development Indicators.

Limited financial inclusion also adversely affects domestic savings and investments. According to FinDex 2017, only 21 percent of Pakistan's adults have bank accounts, albeit up from just 13 percent in 2014, which puts Pakistan behind most of its peers. The increase in account ownership has not benefited all groups equally. In Pakistan, the gender gap between account ownership is almost 30 percentage points. However, this does not mean that adults in Pakistan do not save at all. As the FinDex report notes, Pakistan is among the few developing economies where 20 percent of adults cited savings as their main source of funds, but only 10 percent reported having saved in a financial institution, with the remainder saving in non-formal ways. This prevents a more effective financial intermediation of savings into investments.

Frequent cycles of macroeconomic instability have discouraged people from saving. Pakistan has a long history of macroeconomic instability, which has resulted in the country availing 21 programs from the International Monetary Fund (IMF) between 1958 and 2013. The negative impact of macroeconomic volatility on savings (through higher inflation) and investment has been well documented (Loayza et al., 2007; Aizenman and Marion, 1999).

⁴ The theoretical framework for this relationship comes from the lifecycle hypothesis that states that individuals smooth their consumption over their life. They save in periods of high income and borrow during periods of low income, resulting in a hump-shaped income-distribution profile (Modigliani and Brumberg, 1954).

b. Poorly Functioning Financial Markets

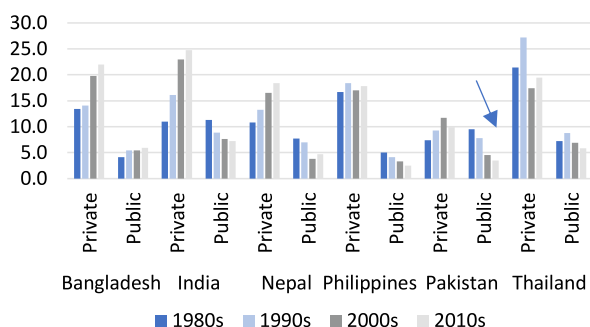
A relatively shallow financial market has been unable to fulfill the long-term investment needs of the private sector. The volatility in Pakistan's macroeconomic environment has impeded the development of a well-functioning financial market. The banking sector's deposit-to-GDP ratio was 37.6 percent at the end of June 2017. Most of these deposits are of shorter maturity, limiting banks' ability to provide longer-term financing. Meanwhile, private corporate debt markets have not developed, as very few companies have been able to issue long-term debt certificates to finance new investments or expansions. Between January 2014 and May 2018 only 11 term finance certificates (amounting to Pakistani Rupee (PKR) 67.5 billion) were listed on the Pakistan Stock Exchange (PSX), with mixed success, limiting long-term financing options.

Asymmetry of information and limited financial literacy inhibit firms' ability to overcome credit constraints. Survey evidence⁵ suggests that despite demand for capital, the inability of firms to provide reliable information makes banks reluctant to lend or only at very high rates. Financial literacy among small firms is limited. Many transactions in the SME sector involve informal and expensive trade credit (where the goods were bought and paid for at a later stage), which substitutes the need for formal credit.

c. Limited Fiscal Space

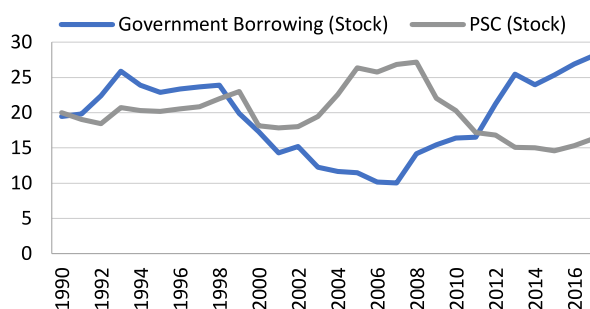
Limited fiscal space, the result of rigid current expenditures and low revenue mobilization, has given rise to low public investment levels. Figure 17 shows that public investment as a share of GDP is relatively low and on a general declining trend in Pakistan. Public investment in key infrastructure is considered important as a policy instrument, as it can crowd in private investment. However, low tax revenues and high current expenditures leave limited space for public investments. Current expenditures exhibit structural rigidities due to high debt-servicing costs, high defense expenditures, and significant subsidies, salaries and wages. Large fiscal deficits (which have been the norm) have been financed through commercial borrowing, which in turn has crowded out the private sector from the credit market during the past decade, and therefore limited private investment (Figure 18).⁶

Figure 17: Public vs private investment as % of GDP



Source: World Development Indicators and World Bank staff calculations.

Figure 18: Government vs. private sector credit (PSC) as % of GDP, indicating crowding out



Source: State Bank of Pakistan (SBP)

⁵ See Pakistan@100 policy note 'Growth and Investment' for details of this survey.

⁶ This is reinforced by Saeed et al. (2006), and Ul Haque and Montiel (1993) who find that the size of development spending and budget deficits can impact interest rates and crowd out private credit.

As a result, public investment has been unable to remove infrastructure bottlenecks. Low public investment in important sectors, such as infrastructure, energy, human capital and transport has affected the country's growth prospects. According to the Investment Climate Analysis prepared by the World Bank in 2009, the quality and availability of infrastructure, particularly energy, are important constraints to growth. Energy shortages have crippled industry over the past decade, while the underlying state of logistics in Pakistan lags that of most peer countries. Efforts to increase investment by relying on external financing need to be managed carefully to ensure debt sustainability and that investments generate the necessary returns. Current efforts to attract large investments into transport and energy generation through CPEC hold significant potential, e.g. by adding significant electricity capacity, but also carry risks that need to be managed carefully.

Repeated efforts to increase tax revenues have been largely unsuccessful. While Pakistan's economy grew in recent years, tax performance stagnated or increased at a slower pace and, in 2017, the tax-to-GDP ratio was 13.0 percent, against an average of about 20 percent for emerging economies but comparable with the performance of other countries in the region (in 2016 the tax-to-GDP ratio in Bangladesh was 8.8 percent, and 12.3 percent in Sri Lanka). Pakistan can improve its tax revenue performance to 15 percent of GDP in the medium term and 22.3 percent in long term (IMF, 2016). However, the narrow tax base, weak policy design, and ad-hoc policy changes have stalled revenue mobilization efforts. Preferential treatment toward certain sectors and tax exemptions have created further inefficiencies in the system. This has occurred despite the creation of numerous commissions, committees, task forces and other bodies to institute tax reforms.⁷

Elite capture and corruption have added to the failure of tax reforms. As discussed in Chapter 2, critical reforms in several sectors including taxation have stalled due to opposition by privileged lobbies and interest groups, as evidenced in the incomplete implementation of GST reform, tax exemptions for the agriculture sector and an abundance of ad-hoc Statutory Regulatory Orders. Consequently, the government has been unable to broaden the tax net, particularly by reaching higher-income groups, increasing instead its reliance on indirect and withholding taxes. Furthermore, exemptions on agricultural incomes have resulted in tax evasion, as incomes from other sectors are falsely reported as agricultural income to receive exemptions (Khan, 2017).

d. Low Foreign Direct Investment

Pakistan's share in overall global investment flows is low and falling. FDI has been declining (Figure 19) and is low compared with other countries. FDI is also highly concentrated in a small number of sectors and countries of origin. In the past 15 years, almost 60 percent of FDI has gone to three sectors: oil and gas exploration, communications, and the financial sector. Such high concentration means that negative developments in these sectors can have a disproportionate impact on overall FDI.⁸ In terms of FDI sources, the United States (US), United Kingdom (UK) and United Arab Emirates (UAE) jointly contribute 60 percent of FDI, making Pakistan vulnerable to economic conditions or changing perceptions in these countries. More recently, much FDI has been coming from China under the CPEC initiative and has thus far been concentrated in energy and infrastructure.

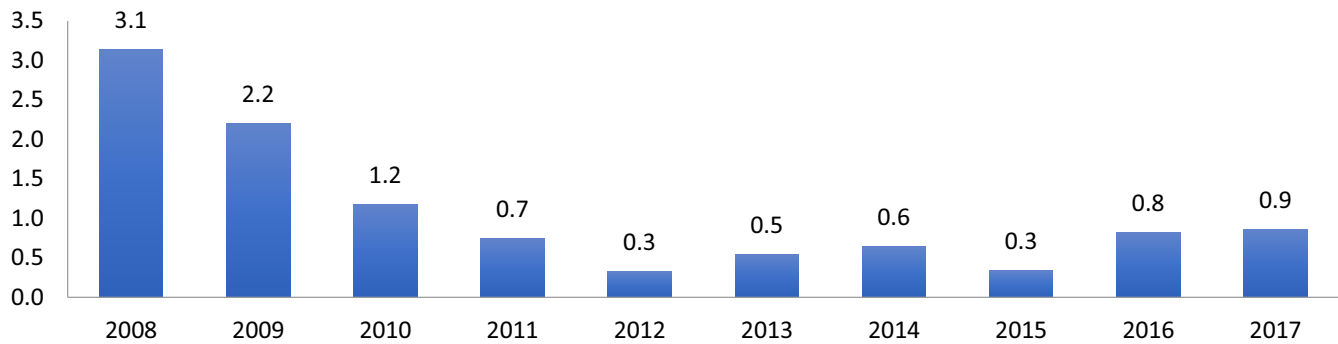
To stimulate productivity growth, Pakistan needs to attract more FDI. FDI can be an important driver for supporting growth of exporting industries, but Pakistan's ability to attract FDI into its export sectors has been inadequate and mostly limited to low-technology sectors. The share of services FDI going to low value-added services increased from 10.7 percent in 2005 to 62.6 percent in 2015, due to a decline in FDI in knowledge-intensive segments. Similarly, the share of manufacturing FDI going to low value-added manufacturing segments increased from 60.5 percent in 2005 to 93.9 percent in 2015. Pakistan needs to attract FDI in

⁷ Pakistan has a strong tradition of appointing commissions and task forces for tax policy and tax administration reform, namely the Task Force on Tax Administration Reform, 2001; the Commission on Tax Reform, 1998; the Pasha Committee, 1994; and the Tax Reforms Committee, 1991 are just a few that were instituted.

⁸ For example, the law and order situation in the exploration areas has deterred FDI in oil and gas exploration, which has dragged down overall FDI in the country.

knowledge-intensive segments. Similarly, the share of manufacturing FDI going to low value-added manufacturing segments increased from 60.5 percent in 2005 to 93.9 percent in 2015. Pakistan needs to attract FDI in knowledge-intensive activities that can in turn have positive spillovers for the domestic economy. Greater integration in global value chains as a result of CPEC and related investments could also contribute to increased investment in higher value-added activities (World Bank, 2018d).

Figure 19: FDI as percentage of GDP



Source: State Bank of Pakistan.

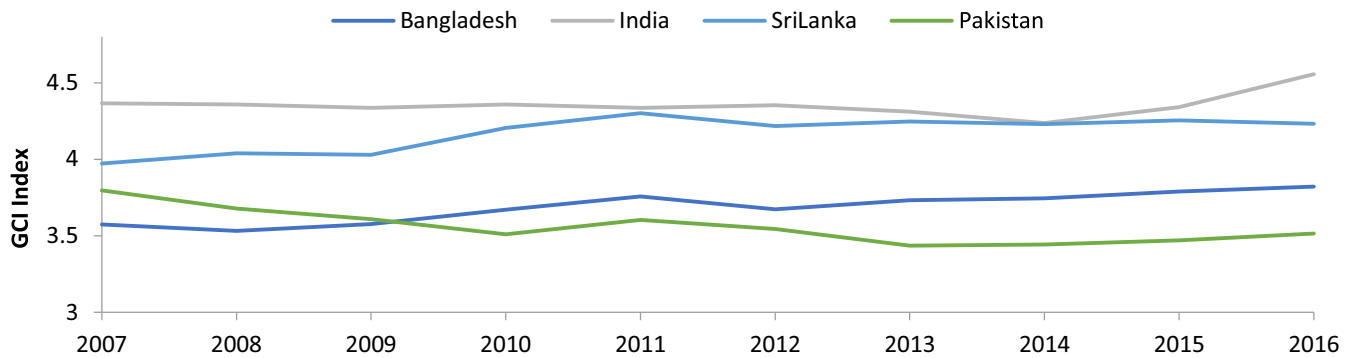
Profitability Constraints

Low returns on investments discourage private investment in Pakistan. Estimates suggest that returns to investments are comparatively low in Pakistan (see the Pakistan@100 policy note 'Investment and Growth' for details). This section focuses on factors that have led to limited profitability of investments in Pakistan, mainly (i) limited competitiveness, (ii) complex tax administration, and (iii) weak entrepreneurship. Underlying most of these issues is a generally weak investment climate, which is discussed in more detail in the next chapter on the allocation of resources.

a. Limited Competitiveness

Pakistan ranks lower than many peer countries in the Global Competitiveness Index (GCI) ranking. The GCI tracks the performance of countries on 12 pillars of competitiveness. Pakistan is ranked markedly lower than India, Sri Lanka and Bangladesh (Figure 20), particularly in pillars related to infrastructure, the macroeconomic environment, efficiency of goods and labor markets, and financial market development. With regards to technological readiness and business sophistication, there are slight improvements in the pillars for innovation, and higher education and training.

Figure 20: Pakistan ranks lower than many peer countries in the Global Competitiveness Index



Source: Global Competitiveness Index

b. Weak Tax Administration

Complex tax administration and poor tax policy design undermine the business environment. Complex tax administration results in some sectors being very lightly taxed (e.g., the real estate sector), which can divert investments from more productive sectors to those with lower tax rates. Paying taxes is consistently identified by the private sector as a key constraint, not only because of the time it takes but also because of widespread perceived corruption at the federal and provincial revenue boards. Tax policies are often designed without taking into account potential adverse effects. A good example of this is the advance income tax through the withholding mechanism on financial transactions, which can be positive in terms of providing incentives for registering as a taxpayer but detrimental with regards to financial deepening by providing a disincentive to engage in the formal financial sector. Tax administration was complicated after the 18th Constitutional Amendment as the lack of coordination between provincial authorities in the case of cross-border supply of services has led to double taxation and a higher burden on businesses.

c. Lack of Entrepreneurship

Pakistan ranks poorly in the Global Entrepreneurship Index (GEI). A 2017 study conducted on the GEI ranks Pakistan 122 out of 137 countries, with an overall score of 15.2, significantly lower than peers such as India, China and Sri Lanka. This suggests a weak capacity of entrepreneurs in Pakistan, which is further constrained by limited human capital, technical know-how, staff training, and technology absorption.

RECOMMENDATIONS

To foster human and physical capital accumulation, a set of four interventions should be prioritized. First, to support human capital, programs to improve population management and allow families to take informed parenting decisions will be crucial. Lowering the fertility rate would have important feedback loops with other human development outcomes, female labor force participation and families' ability to save and invest. Given Pakistan's limited progress in this area, this should be a priority. Second, increased social spending will

be necessary but, given Pakistan's limited fiscal space, a first step would be to improve the efficiency of current spending. Third, a focus on early childhood development will be necessary to reduce malnutrition and stunting rates, which have life-long implications and affect the effectiveness of other human capital investments. Fourth, the priority to increase physical capital investments would be a far reaching domestic revenue mobilization effort. This would allow for increased public investment in crucial public areas that are currently underfunded, and it would also contribute to macroeconomic stability and reduce crowding out of the private sector from credit markets. This section provides an overview of the general direction these reforms could take. The Pakistan@100 policy notes 'Growth and Investment' and 'Human Capital' provide a more detailed discussion of the reforms necessary to allow Pakistan to reach upper middle-income status on its centenary.

i. Human Capital

Human development outcomes in Pakistan suggest the need to urgently increase investments and improve the effectiveness of services delivery so that the country can benefit from its large labor force. Despite progress, many human capital indicators remain weak and the outcomes have been stagnant or even declining in recent years, suggesting that investment has either been insufficient or ineffective in increasing human capital accumulation. Large disparities across provinces, between urban and rural areas, and by gender, among others, have persisted. The question thus arises as to what policies and institutions would best serve to improve the country's human capital.

a. Ensure more and better public financing for human capital

Pakistan needs to significantly increase public spending in education, health and social protection. In 2017, Pakistan's public expenditure on education and health was equal to 2.2 and 0.9 percent of GDP, respectively, noticeably below those of peer countries. This implies that Pakistan underinvests in human capital, leading to lower accumulation than in peer countries. In parallel with increased resources for human capital to levels similar to those in peer countries—5 percent of GDP for education and 2 percent of GDP for health—improvements in how these resources are spent will also be necessary. Given the limited fiscal space and that significantly increasing domestic revenues is a medium-term agenda, the government should first focus on increasing the efficiency of existing investments and prioritizing interventions for managing population growth and reducing stunting. As fiscal space opens and efficiency improvements are exhausted, the government should increase allocations to human capital investments.

b. Initiate awareness programs for family planning and parenthood

Develop comprehensive awareness programs to encourage informed decisions on parenthood. Due to a combination of cultural and social norms, discussions on reproductive health tend to be taboo and are not adequately discussed in the formal education system in Pakistan. This leaves many young people unprepared for the challenges and responsibilities of adult life with respect to responsible parenthood. Measures to increase informed parenthood should not merely include services and information for birth control, but also prepare young people for parenthood. Relevant knowledge, information and practices on reproductive health, young women's health, and child development through health, nutrition and stimulation should be disseminated and learned through formal education, social campaigns and training, and health services.

c. Introduce targeted interventions for those lagging with an emphasis on women

The poor, who face challenges in meeting their immediate needs with limited resources, are often unable to utilize services due to various barriers. The government's capabilities to deliver public services vary widely across regions, and so do the availability and quality of the services. Addressing these challenges requires a more robust service delivery system that helps all Pakistanis accumulate human capital. This will support poorer households to gain access to the services, while ensuring their availability and quality. This should be accompanied by targeted interventions (at both the federal and provincial levels) focusing on low-income populations and female empowerment. While the federal Benazir Income Support Program (BISP) provides basic support, in the context of decentralization there is a need to complement the federal-level efforts at the provincial level to empower women, reduce poverty, and provide resilience and opportunities for poor and vulnerable populations.

Investment in girls' human capital cannot be overemphasized in targeted interventions. In Pakistan, too many girls drop out of school prematurely before they complete their secondary education. Not educating girls is especially costly because of the relationships between education, child marriage and early childbearing, and the risks that they entail for young mothers and their children.

d. Take a holistic approach for human capital investment focusing on the first 1,000 days

In implementing targeted interventions for human capital investment among the poor and vulnerable, the continuum of needs, especially during the first 1,000 days of the life cycle, should be noted. The World Development Report (WDR) 2018 on learning suggests integrated programs for early years.

- Step 1. Family support package: Parental support including planning for family size, maternal education about health and nutrition, and children's early nutrition and stimulation, as well as health, nutrition, and sanitation, particularly to vulnerable families.
- Step 2. Pregnancy package: Pre- and ante-natal care and information on nutrition.
- Step 3. Birth package: Attended and skilled delivery, birth registration, and exclusive breast feeding.
- Step 4. Child health and development package: Immunizations, information on deworming, identification and treatment of acute malnutrition, and other relevant information.
- Step 5. Pre-school package: Introduction of good quality pre-school and early childhood development programs.
- Step 6. Family life education: This module would need to be developed in an appropriate and locally sensitive manner to avoid any taboo issues. The introduction of respectful gender-based interactions in such education modules would be integral to improving women's empowerment and agency for decision-making and labor force participation.

In the Pakistani context, it is worth adding an additional step regarding information-sharing, starting from the school level, about health and hygiene, nutrition and diet (within the local context, keeping in view the high poverty rates). These need to be introduced at every level of education.

e. Skilling youth and the existing labor force to improve labor market opportunities

Equipping young people with the necessary human capital to participate in the labor market requires interventions in the primary, secondary and tertiary education levels. In addition to meeting targets in enrolment and completion rates, the government needs to focus on improving the quality of education. Possible pathways to achieve this include curriculum reform, teacher training and improved governance in the education sector. (For a detailed discussion on governance issues, refer to Chapter 5.) Investments in tertiary education should take the economy's structure and potential into account. Accordingly, investments need to be made in establishing centers of excellence for research and applied sciences to support the priority sectors. Supporting the development of high quality higher-education institutes through proper regulation and regular monitoring is critical in curbing the emergence and growth of low-quality tertiary education institutions. There is a need to further develop student loan schemes that target students from lower-income quintiles and offer them equitable access to quality higher-education institutes (private or public).

While programs focusing on early education are critical for the future workforce, skills development and upgrading opportunities for the existing stock of the labor force who have missed out on the earlier opportunities for human capital are important. Even if the quality of the education system improves today and there is universal enrolment, these individuals will enter the labor force in at least 15 to 20 years' time. Pakistan's economy cannot wait that long. Policymakers need to focus on giving a second chance to the current stock of labor to upgrade their skills, and find better and more productive jobs.

A suite of second-chance interventions for skills development for individuals of diverse needs and abilities can be considered. For instance, for the illiterate population, adult literacy and numeracy programs can be integrated with elements of financial literacy and socio-emotional skills training, which can help individuals in finding and retaining a job, or in starting a micro-enterprise. These programs could be targeted and customized to the specific needs of vulnerable groups, such as rural women from disadvantaged groups. Moreover, interventions to link workers to jobs through information provision and intermediation services should be considered, to improve employment outcomes.

ii. Physical Capital

Mobilize tax revenues to create adequate fiscal space for increasing public investments. Public investment is key for physical capital accumulation, both directly and because it can crowd in private sector investments. To increase public investment, Pakistan will need to increase tax revenues. Increasing it means that the tax administration needs to be made taxpayer-friendly, technologically innovative and modern. A uniform tax code and administrative mechanism should be implemented, such that they support federal-provincial tax harmonization and integration. The tax policy function should be separate from the tax administration function, a reform already being planned, and tax administration would benefit from increased autonomy. The establishment of a high-level constitutional body (e.g., a National Tax Council, such as the GST Council in India) through the Council of Common Interest, with clear accountability to resolve tax-related issues across the country, would facilitate these changes. The Federal Tax Ombudsman was established in 2000, tasked with addressing tax administration complaints, but significant strengthening may be necessary for this office to be able to fulfill its functions. Domestic revenue mobilization is a priority for Pakistan, because it will be crucial in avoiding the recurrent macroeconomic crises that affect the country, and because increased fiscal space will provide the resources needed to increase investments in priority areas such as health, education and infrastructure.

Improve the efficiency of public investment to crowd in private investment. Pakistan's growth is lagging due to both low public and private investment. The fiscal space that will be created through increased revenue mobilization should be used to increase public investment, while also focusing on enhancing efficiency by improving project selection and management processes. Pakistan has embarked on a large infrastructure investment program, CPEC. While CPEC holds great potential, it also entails challenges that highlight the need to improve public investment and fiscal risks management systems to better address emerging challenges.

Deepen financial intermediation to promote savings. Savings provide the basis for the financing of physical capital investment. Demographic changes that lower the high dependency ratio will be necessary to increase savings. A detailed discussion on reforms to reduce population growth can be found in the Pakistan@100 policy note on 'Human Capital'. In parallel to these efforts, reforms in the financial sector can also incentivize increased savings. To meet the longer-term financing needs of the private sector, the development of a private corporate debt market is imperative. Efforts should also be made to diversify saving instruments offered by financial institutions, and to develop municipal and diaspora bonds to finance new projects.

Revive domestic investment activity by alleviating credit constraints. The key constraint to physical capital accumulation faced by SME entrepreneurs is the availability of credit. To reduce credit constraints, policies that encourage commercial banks to engage with SMEs should be implemented. This could, for example, include a continuation of financial reforms that strengthen creditor information systems and expand the pool of acceptable collateral (e.g., through a national collateral registry), or the establishment of specialized SME rating agencies. Policies that aim to improve banking features, such as expanding their operations to include electronic banking, might facilitate capital-deepening and improve access to finance. In addition, a prudent fiscal policy that limits government borrowing from the banking sector will avoid crowding out private sector borrowing.



CHAPTER 4 | Allocation

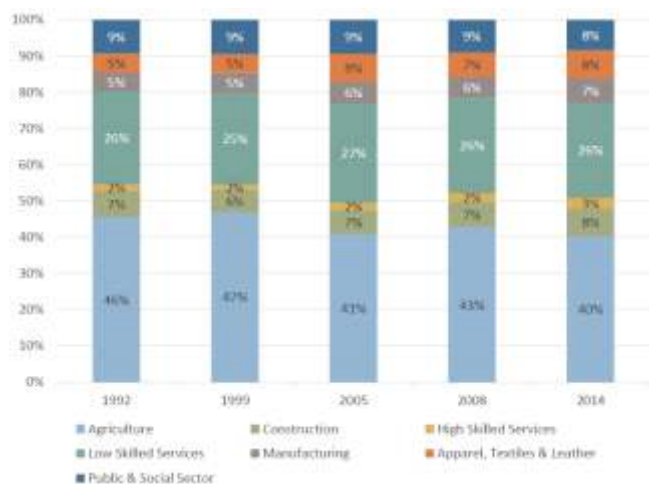
Countries achieve higher productivity through more efficient resource allocation. Nearly 75 percent of the GDP per capita gap between Pakistan and the United States is explained by the gap in TFP. In line with other countries, productivity differences explain, on average, 70 percent of the difference in income levels (Jones, 2015). Misallocation of capital (both human and physical) across sectors, across firms, and within firms, results in productivity differences. Structural transformation is about how resources can be reallocated to more productive use. Reallocation of resources can also happen between the tradeable and non-tradeable sectors, important for Pakistan given the economy's reliance on the domestic sector. For most countries structural transformation has meant the relative decline of agriculture, as resources have moved toward higher-value activities in manufacturing and services, contributing to raising aggregate productivity. The shift from farm to non-farm activities is often facilitated by rising agricultural productivity and the emergence of labor-saving technologies, which frees up resources for other sectors.

This chapter discusses structural transformation in Pakistan and identifies constraints to structural transformation and how these can be addressed. This chapter begins with a discussion on how structural transformation has evolved in Pakistan and then identifies three main constraints that have hindered Pakistan's progress: (i) government failures; (ii) ineffective policies to address market failures; and (iii) the absence of regional integration. This is followed by recommendations and appropriate policy responses for each of the key constraint areas discussed.

Stylized Facts on Structural Transformation

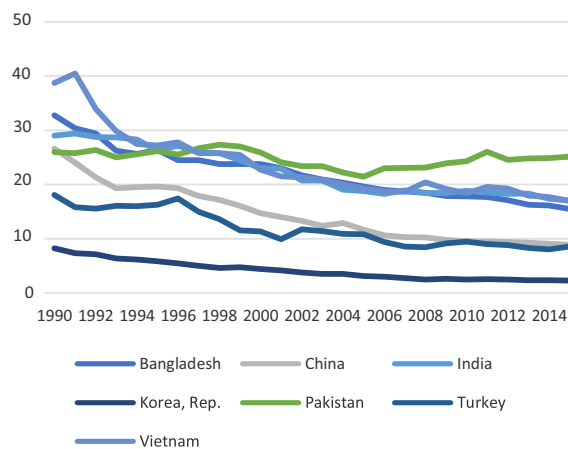
Structural transformation in Pakistan has been slowing and seems to have stalled in recent years. Up to the early 1990s, Pakistan had been following the same path as many countries and its agriculture sector was declining as the country became richer. But this trend has slowed down over the past few decades. The slow decline in agriculture has not been accompanied by an increasing share in manufacturing and, as a result, today the manufacturing sector is small compared with countries at similar income levels (see Box 2 for a discussion on whether the path of focusing on labor-intensive manufacturing for exports is a possibility for Pakistan). Pakistan's services sector is relatively large compared with countries at similar income levels and this divergence has increased substantially in recent years. However, most services sector growth has been in low-skills services (wholesale and retail trade) and public administration. Similar trends are reflected in the sectoral employment shares (Figure 21).

Figure 21: Structural transformation has been relatively slow over the past 20 years



Source: PFLS, World Bank staff calculations.

Figure 22: The size of agriculture in GDP has not declined much, in contrast to peer countries

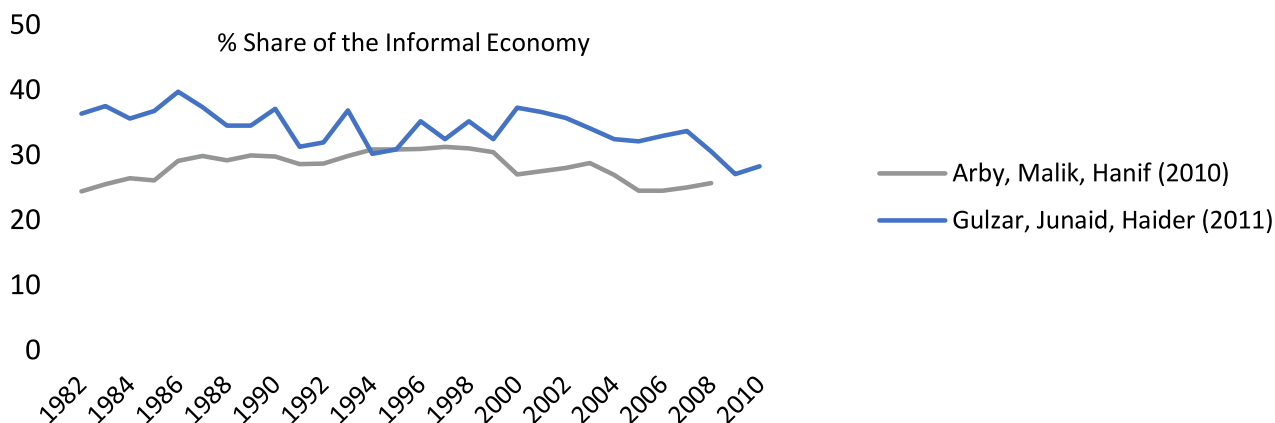


Source: World Development Indicators.

Pakistan's agricultural productivity has not improved much over the past 30 years. The agriculture sector's growth rate has progressively declined. Productivity growth is constrained as the sector is characterized by an inefficient crop mix and the over-use of resources such as water. As a result, growth has been driven by input increases rather than technical change (Malik et al., 2016). The mixed performance of agriculture has slowed structural transformation, as the sector's share of the economy has declined far more slowly than in peer countries (Figure 22).

In addition to a constant agricultural share, Pakistan's economy is characterized by a large informal sector that is retreating only gradually. Estimates for the size of Pakistan's informal economy vary but suggest that between 25 and 35 percent of total economic activity is undocumented and untaxed. The size of the informal economy appears to have remained comparatively constant in recent years. For instance, the average of estimates in two recent studies suggest that the share of the informal economy only declined from 36 to 30 percent between 1982 and 2008 (Gulzar, Junaid and Haider, 2010), or even remained constant at about 25 percent over the same period (Arby, Malik and Hanif, 2010). While a large informal economy is a constraint to structural transformation and growth, evidence from multiple countries suggests that it can also act as a buffer that generates employment when the formal economy contracts (e.g., Loayza and Rigolini, 2006; World Bank, 2014).

Figure 23: The share of the informal economy over time

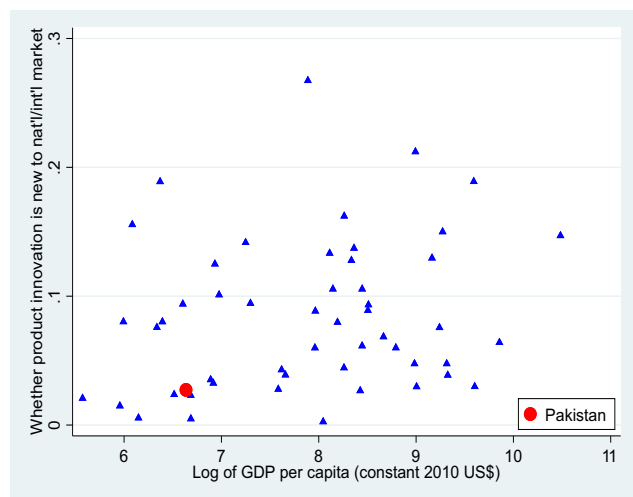


Source: Arby, Malik and Hanif (2010); Gulzar, Junaid and Haider (2011).

There is potential to improve productivity through the reallocation of resources from less to more productive firms. Reallocation between sectors is not the only way that economies transform, and within-sector reallocation—to more productive firms and uses—is often just as important. A high degree of dispersion in productivity levels across firms in the same sector suggests that there is considerable room to improve productivity by facilitating resource reallocation to more productive firms. Comparison of productivity in the garment sector in Pakistan and Bangladesh suggests that the top Pakistani firms make significantly more output with the same inputs than their Bangladeshi counterparts, but there are large productivity differences in Pakistan, lowering average productivity. Comparison of productivity dispersion in Punjab with China, India and the United States shows much larger dispersion in Punjab. This suggests that reallocating resources from unproductive to more productive firms in the same sector has the potential to increase output, and thus economic growth.

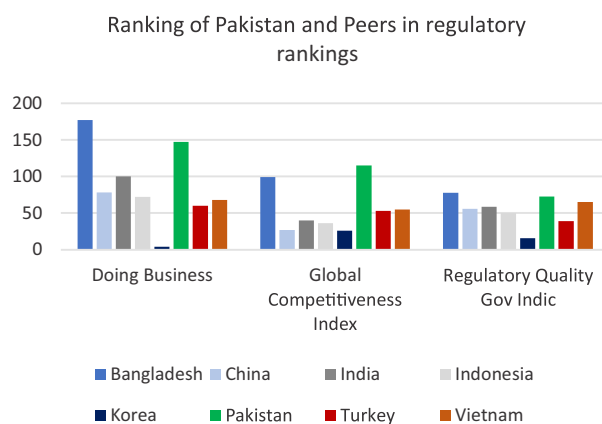
Structural change can also occur through improvements within firms, but the evidence suggests that Pakistani firms do not seem to be innovating much. Besides the allocation of resources to more productive sectors and firms, structural change can also occur through improvements within existing firms. In general, the rate of innovation in most Pakistani firms is relatively low, as reflected in the low percentage of firms that have introduced a new product in the past 3 years (Figure 24). However, there are some notable examples of firm dynamism. The Sialkot leather goods cluster of about 130 firms, mostly small-sized, is the world leader in the production of hand-stitched soccer balls and in recent years has entered new fields such as surgical instruments. In the textile sector, the cluster run by Faisalabad Industrial Estate Development and Management Company has made good progress. In major cities such as Lahore and Karachi, there are emerging ICT clusters involved in business-process outsourcing and software-enabled services.

Figure 24: Pakistani firms are not introducing enough new products relative to income levels



Source: World Bank Enterprise Surveys, 2013-16.

Figure 25: Pakistan is doing worse than most peer countries in a number of regulatory rankings



Source: Doing Business 2018, Global Competitiveness Report 2018 and World Governance Indicators 2016*
*Note: World Governance Indicators rankings have been reversed to align with two other rankings.

Pakistan's rapid urbanization can support efforts to transform the economy. In many countries, cities have become hubs for economic transformation through agglomeration benefits. People and firms benefit from being concentrated in a smaller geographical space, and structural transformation into higher value-added manufacturing and services goes hand in hand with urbanization. Pakistan is the most urbanized large country in South Asia, with 36 percent of the population living in urban areas⁹ and urban centers account for over half of Pakistan's GDP. The pronounced youth bulge, coupled with continuing rural-urban migration, provides a large labor pool. While until the late 1990s much migration was destined for Karachi, the past 20 years have seen significant migration from smaller cities to larger cities in Sindh, Khyber Pakhtunkhwa (KP) and Punjab. Some urban centers are showing emerging signs of functional specialization. For instance, manufacturing, finance and high-tech sectors are mainly concentrated in larger cities whereas construction, mining and agriculture-related sectors are more prevalent in smaller cities. However, Pakistan is not leveraging its cities optimally and transformation seems significantly slower than in other countries with similar urbanization and spatial agglomerations. While the concentration of economic activities in urban areas brings considerable benefits, it can also create congestion costs (traffic, pollution, price increases and crime) that can at times outweigh the benefits of agglomeration, negatively affecting productivity and growth. Whether the agglomeration benefits outweigh the congestion costs will depend on interventions to maximize the benefits, and to manage and mitigate the costs.

Digital development holds great promise as a driver of structural transformation. Increasing digitization, and particularly the proliferation of the internet, supports structural transformation through two channels. First, the internet is creating new types of jobs, work arrangements and opportunities for entrepreneurship, as it cuts search costs and market entry barriers, and makes it easier for workers, employers and customers to find each other, irrespective of their locations. Digitally enabled work can be inclusive, as services including delivery, ride-sharing, or housework tend to employ informal workers in urban and suburban areas of the country, and flexible work arrangements can encourage greater female labor force participation. Second, modern technology can enhance productivity in traditional sectors, and thus trigger structural transformation. In agriculture, for instance, digital technologies can overcome information barriers and open market access for many smallholder farmers, increase technical capacity through new ways of providing extension services, and improve agriculture supply chain management.

⁹ Many analysts (Arif, 2003; Ali, 2013) have argued that there are issues with definition and boundaries of urban areas in official statistics. Using different methodologies, the urban share of the population could be as high as 57 percent (Agglomeration Index).

Pakistan has already derived some of the benefits from digitization, but scope for further growth remains. Demand for access to the internet has increased rapidly, from 6 million internet subscribers in 2013 to an estimated 48 million in 2017 (Pakistan Telecommunication Authority). Pakistan today is already the third-largest country providing workers to global online freelancing platforms, generating an estimated US\$1 billion in export revenue in 2016 (Oxford Internet Institute). Pakistan is also an increasingly attractive “knowledge process outsourcing/business process outsourcing” destination, and the federal and provincial governments in Punjab and KP are actively supporting entrepreneurship through incubation programs. However, broadband and mobile penetration (basic and data/internet-enabled mobile phones) in Pakistan remains relatively low. Relative to its neighbors, the country also ranks low on most of the key enablers of a digital economy: infrastructure, affordability, consumer readiness and content. Crucially, there remains scope for improvement with respect to the inclusiveness of digitally driven growth: improvements to employment have been concentrated among the relatively fewer higher-skilled workers in the country, and the digital divide between men and women in Pakistan is among the highest in the world.

Box 2: Will the path of labor-intensive export industries be available to Pakistan?

Many countries in East Asia took advantage of low labor costs to develop labor-intensive manufacturing export industries. Countries seek to emulate this experience as a way of quickly transforming their economies. With labor costs quickly rising in China, many firms (both Chinese and foreign) may seek to relocate plants to third countries. Pakistan could attract some of those relocating plants. It is relatively close to China, has low labor costs and a large labor force. Many argue that CPEC could also help in this process. But technological advances may mean that many manufacturing jobs will disappear in the medium term, reducing the possibilities of following a transformation path similar to that of East Asian countries in the past.

New technologies are transforming production processes by reducing the importance of low wages in determining competitiveness. These technologies are robotics (particularly artificial intelligence, or AI), digitalization and internet-based systems integration, including sensor-using “smart factories” and 3-D printing. These labor-saving technologies, which are among the most emphasized in the Industry 4.0 literature (Cirera et al., 2017), could significantly shift which locations are attractive for production, thereby challenging established patterns of comparative advantage. While not all these technologies are new, cost innovation, software advances and evolving business formats and consumer preferences are fueling their adoption.

How can a country such as Pakistan position itself given these developments? There is considerable uncertainty about the future. Concerns about the negative impact of technology on jobs have been around for centuries, but so far they have not materialized, although technology can disrupt labor markets by making certain jobs obsolete. Pakistan should position itself taking this uncertainty and the limited knowledge available about future job markets into account. In all likelihood jobs will look very different in the future, many current jobs will disappear and new jobs will emerge—similar to the experience of the past 40 to 50 years. There is increasingly a premium on adaptability, strong cognitive skills and less demand for routine tasks. Given this, Pakistan should invest in its main asset, its labor force, to ensure it has the necessary skills and capabilities to adapt to a more volatile, uncertain, and competitive job environment.

Constraints to Structural Transformation

a. Government failures

A key constraint to structural transformation is the persistence of market distortions, resulting from government failures. Government intervention can introduce market distortions that prevent resources from being allocated to the most productive uses. Opacity and arbitrariness in regulatory policies, subsidies and other market interventions that distort prices can lead to the misallocation of resources across firms, and reduce their incentives to invest. A distortionary tax system provides strong incentives for firms to remain in the informal sector and thus delays structural transformation. Political favoritism generates an uneven playing field that allows unproductive firms to survive longer than if they were in competitive environments. Ineffective governance of key economic sectors, especially the financial and energy sectors, can reduce productivity by depriving firms in other sectors of crucial inputs. Pakistan's economic policies have often been designed by a small elite such that the market is rigged in its favor (Hussain, 1999), leading to inefficient outcomes. This section discusses several areas of government failure that lead to resource misallocations, namely regulatory complexity, credit allocation, SOEs and power sector reform. Agricultural policies can also affect the allocation of resources, and this is discussed in the following chapter.

Regulatory complexity and inconsistency persist in Pakistan. Different rankings that measure regulatory quality or the business environment suggest that Pakistan is lagging behind most of its peers (Figure 25). Overlapping jurisdictions, and multiplying regulatory and tax requirements, make it difficult for firms to conduct business, affecting investment. For example, the regulatory regime in the manufacturing sector is administered by numerous national and sub-national agencies and departments through a wide range of age-old approvals, no objection certificates, permits and licenses. Textile firms pay as many as 12 different taxes, and deal with 47 different departments for various approvals and provisions (PIDE, 2018). Pakistan's regulatory regime suffers from a perception among firms that it is unpredictably and inconsistently implemented, partly because the rules leave room for discretionary actions by government agencies. The costs associated with this regulatory environment affect firms' investment decisions and the sectors they choose to invest in, which can result in resource misallocation.

Regulatory bottlenecks have also hampered ICT sector development and subsequently digital development. The main regulatory constraint to an otherwise competitive telecoms market relates to the issuance of mobile internet licenses. Delays in the issuance of 3G and 4G licenses, which was eventually completed in 2014, had prevented telecom companies from building out and upgrading their networks to carry data services. Going forward, similar delays in the deployment of 5G networks would delay a revolutionary leap in capacity from 4G to 5G that, if affordable, could prepare a robust foundation for a digital economy.

The financial sector is not intermediating savings to the most productive uses, affecting capital accumulation as discussed in Chapter 3. As Pakistan's finance sector falls short on diversification and depth, credit provision is low to begin with. However, in addition, rising government borrowing has crowded out credit to the private sector, so that private businesses receive just 40 percent of bank credit. The available credit to the private sector is heavily tilted toward large firms, with a mere 0.4 percent of bank borrowers accounting for 65 percent of all bank loans (SBP, 2015). SME loans comprise less than 10 percent of all loans in Pakistan compared with 15 to 20 percent in China, Bangladesh and India (Aslam and Sattar, 2017). Political connections bias credit allocation: a small number of influential firms receive a large share of the credit, despite higher default rates, causing annual losses estimated at 1.6 percent of GDP (Khawaja and Mian, 2005). Market failures also affect credit allocation. Reform efforts to address this, such as the Secured Transactions

Act, aimed at mitigating market imperfections related to risk and informational asymmetry for SMEs, have been slow in Pakistan.

Power supply and demand are poorly coordinated in Pakistan's energy system, leading to shortages and surpluses that deprive firms of a key input to production and generate high fiscal costs. In the 1990s, Pakistan was one of the first countries in the region to introduce power sector reforms. This involved unbundling the integrated electricity utility, establishing an independent regulator and involving the private sector in generation. Despite these reforms, the lack of an arm's length relationship between the government and public utilities has negatively impacted their transformation into commercially run and managed companies. Inflexible and long-term power purchase contracts in which most risks are passed on to the government-owned single buyer has reduced the incentives for generators to be efficient and responsive to changing demand conditions. As a result, while some distribution utilities have improved efficiency, others continue to suffer from high system losses and low collections. These utilities are unable to pay for power purchase costs and to make investments in the network, leading to surpluses and shortages, suboptimal allocation and distribution of natural gas, higher generation costs, and congestions in networks. Recent efforts, including the operationalization of the Central Power Purchasing Agency-Guarantee (CPPA-G) to develop a competitive electricity market and amendments to the sector law to liberalize the generation and retail markets, aim to enhance consumers' and firms' access to electricity, but are not yet completed.

Cities have not been able to play their role in supporting structural transformation because of ineffective governance and inefficient use of scarce resources. Government failures in Pakistan inhibit the role of cities to act as centers of growth for three main reasons. First, high and increasing institutional fragmentation with unclear accountability in governance structures reduces efficiency in the planning and delivery of city services. Municipal services are often provided by specialized entities with weak financial sustainability, which has an impact on fiscal sustainability and service delivery. Second, municipalities continue to remain financially weak, with high dependence on provincial transfers and grants. Urban property taxes, which are usually an important revenue source for cities, are collected by the provinces. Other revenue sources under municipal responsibility are not being fully utilized. There are also concerns regarding financial management practices and the efficiency of municipal finances. Third, weak planning practices and inappropriate/uncoordinated land management in the cities are leading to urban sprawl, the creation of slums, and inefficient spatial development. Major investments are generally undertaken through vertical programs, designed and implemented by higher levels of government without involving or consulting local stakeholders or accounting for their needs. This is leading to increasing costs of mobility and provision of municipal infrastructure and services, inefficient spatial development and a decaying environment, resulting in less livable cities.

Suboptimal corporate governance arrangements of SOEs limit the government's ability to regulate SOEs, which can negatively affect private sector development. SOEs are a major instrument used to deliver publicly funded services. Pakistan's federal government owns 197 SOEs, with a combined output of 10 percent of GDP and combined assets valued at 43.4 percent of GDP in FY16. The portfolio includes not only natural monopolies (for example, railways), but also industries that are typically the domain of the private sector. Legal ownership of the SOEs lies with the government of Pakistan, but in practice the line ministries exercise the ownership and oversight functions over the SOEs in their sectors. Line ministries exercise these functions by appointing their own officials to SOEs' Boards of Directors, despite regulatory requirements that mandate the appointment of independent board members. This arrangement gives rise to conflicts of interest between line ministries' policy and regulatory functions, on the one hand, and their interests as de-facto owners of SOEs in their respective sectors on the other hand. This not only adversely affects SOEs' operational performance, but it can also have negative externalities on the private sector, where preferential treatment of SOEs in areas such as credit provision can crowd out private sector opportunities.

Financial support to underperforming SOEs is a major driver of the fiscal deficit and a source of substantial fiscal risks. In FY16, subsidies, loans and grants to support federal SOEs accounted for 32.7 percent of the budget deficit and 1.5 percent of GDP. At the same time, public guarantees for SOEs pose significant fiscal risks, as they accumulate contingent liabilities for the federal government, reaching almost 3 percent of GDP in FY17. This is particularly problematic in the power sector, where shortcomings in the operations of DISCOs and the tariff-setting mechanism are direct and major causes of PKR 1 trillion of public debt. In addition, increasing reliance on fuel imports for power generation exposes Pakistan to significant fuel price and exchange rate volatility. On a net basis, fiscal support to SOEs significantly outweighs the profits that the public sector receives from them. For example, in FY15, the government's receipts from SOE dividends covered only 28.6 percent of subsidies paid to them.

Figure 26: Government financial support to federal SOEs (PKR, billion)

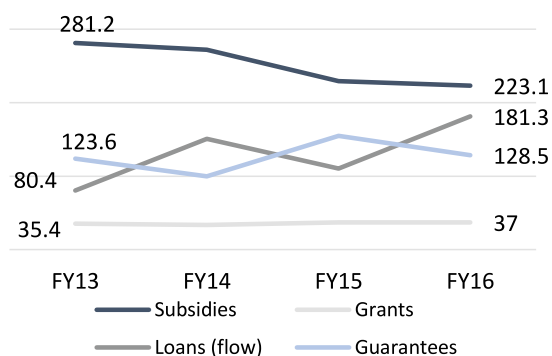
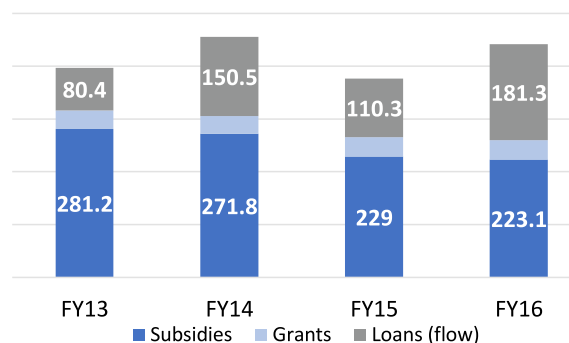


Figure 27: Financing from the federal budget for SOEs (PKR, billion)



Source: MoF, SOEs: Performance Review, FY14, FY15, and FY16.

b. Absence of a coordinated policy response

A second constraint to structural transformation is the absence of effective government interventions to address market failures. Market failures often relate to the existence of positive externalities (such as in training or technology adoption) or coordination failures (such as in the formation of clusters). The experience of successful clusters in Pakistan suggests that even in a constrained overall business environment, policy support can make a difference in addressing market failures. Such a policy response may be necessary to improve coordination or internalize positive externalities. The successes of countries such as Japan, the Rep. of Korea and China show the role that governments can play in addressing market failures. The governments of these countries consistently promoted export growth and upgradation in selected sectors through various incentives, including easier access to credit, technology imports and foreign know-how. At the same time, they coordinated this support with other policies, such as the promotion of university and industry linkages in skills development and Research and Development (R&D) (Chaudhry and Andaman, 2014).

Pakistan has not been able to support industrial clusters through the design of a coordinated policy response. Examples of the lack of a consistent strategy to support the shift to higher value-added products include the textile sector, where firms complain that they do not invest in machinery due to policy uncertainties in the sector (PIDE, 2018). There is also no policy initiative to identify new sectors in which

there is potential for Pakistan to grow and move up the value chain. Early attempts to support industrial sectors included easier access to credit to large industrialists, import duty exemptions for certain industries, and preferential access to foreign exchange for exporters. But this support was not made conditional on performance, unlike in other successful East Asian countries. Partly as a result, Pakistan's industrial base is less competitive than those of other countries in the region. The Sialkot cluster is a well-known exception. Firms in the cluster argue that coordinated policy support contributed to their success, including the creation of a specialized industrial area in the 1960s that offered land to firms at 50 percent of the actual land value, and a scheme to promote non-traditional exports by offering duty rebates on inputs.

Special Economic Zones (SEZs) and industrial estates have failed to leverage agglomeration economies. SEZs and industrial parks can serve to coordinate government efforts by ring-fencing regulatory reforms and easing access to well-serviced industrial land. Both can enable agglomeration economies. However, Pakistan has not had positive experiences with industrial estates to date and this in turn makes firms wary of SEZs. Many industrial estates suffer from mismanagement and a lack of basic services and infrastructure. Unless firms are convinced that SEZs and industrial estates will become fully functional, their effectiveness as a tool for policy coordination will remain limited.

Missing skills and managerial capabilities constrain technology upgrading and innovation. The lack of basic firm capabilities such as skills and managerial capabilities deters technology adoption. In the textile sector, for example, firms highlight the poor quality and relevance of workforce skills as a constraint to productivity, product quality and upgrading (PIDE, 2018). Most firms in Pakistan are poorly managed by international standards (Lemos et al., 2016). The complementarity between basic firms' capabilities and innovation is a key challenge for innovation in countries at Pakistan's development stage (Cirera and Maloney, 2017). The underinvestment in market-relevant technical/vocational skills and in managerial skills are both a kind of market failure that requires a well-coordinated policy response.

Poorly functioning land markets constrain firms from locating efficiently. This in turn limits access and mobility, preventing agglomeration economies from materializing. Land and housing prices have risen considerably over the past two decades, making them unaffordable for low-income residents and smaller businesses. Real estate is also prone to speculative buying and holding, which reduces productive use of available land. Moreover, inefficient title registration is a significant factor impacting the housing market and the ability of firms to expand or relocate, as land cannot be used for collateral and land acquisition is cumbersome. Similarly, the mechanism for registration of property transactions is inefficient, often involving multiple agencies. For instance, more than 17 different agencies are involved in land titling and registration in Karachi.

c. Limited trade and regional integration

Pakistan has failed to reap the benefits of trade and regional integration. Pakistan's trade-to-GDP ratio was close to that of its South Asian neighbors in the early 2000s, but then fell behind as Pakistan failed to fully leverage export trade as an engine of growth. From 2005 to 2017, India's exports of goods and services increased by 216 percent, Bangladesh's by 250 percent, and Vietnam's by 519 percent. In comparison, Pakistan's exports increased by only 50 percent, from US\$19.1 billion to US\$28.7 billion. In addition, access to international markets has helped firms in South Asia to grow and become more productive. There are many channels through which trade has promoted productivity growth: competition, knowledge spillovers, and access to better technology and quality inputs. Bangladesh's garment industry and India's auto industry are some of the well-known success stories. But Pakistani firms have not been able to fully leverage the potential of trade because of trade policy constraints, logistical issues and limited regional integration.

Pakistan has relatively high tariffs and has often used regulatory duties to curb imports. The trade policy liberalization of the 1990s suffered a reversal, and only in the past few years have efforts continued to reduce tariffs, the peak tariff slab being reduced from 30 to 20 percent. But Pakistan still has relatively high tariff and non-tariff barriers to trade and tariffs are three times higher than those in Southeast Asia. More importantly, Pakistan also has one of the highest weighted average tariff rate differentials in the region, with an average tariff difference between consumer goods and raw materials of 10.39 percentage points in 2016, and between intermediate goods and raw materials of 2.21 percentage points. Tariff differentials generate an anti-export bias, as they provide strong incentives for Pakistani firms to sell domestically where they are sheltered from competition. Trade policy has also discouraged foreign firms from considering Pakistan as a destination for efficiency-seeking investments. As a result, Pakistan's exports have remained stagnant, undiversified and unsophisticated.

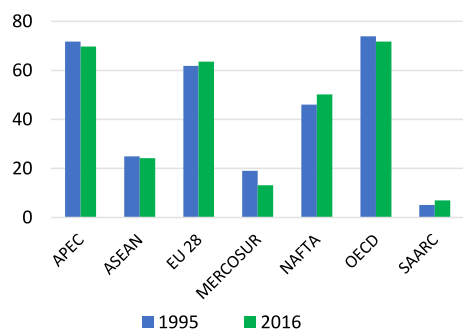
Regulatory duties (RDs) and firm-specific exemptions have been used in Pakistan with the effect that competitive pressures are muted. The number of tariff lines affected by RDs increased from 0.4 percent in 2013 to 12.6 percent in 2017. Despite efforts to withdraw concessions during the past few years, many concessions remain, partly for socially sensitive products. Almost 75 percent of customs duty exemptions are claimed by the largest 100 firms (World Bank, 2016). Sector-specific policies also affect competitiveness; firms in the textile sector complain that a policy of not allowing imports of high-quality yarn has constrained quality improvement in clothing.

Pakistan's inward-oriented trade policies have stalled Pakistan's integration into regional and global value chains. Modern-day production networks rely on the components of final products being able to move quickly and cost efficiently among multiple countries. To facilitate integration into these networks, countries have made efforts to reduce trade costs, which Pakistan has not done. The increased use of ad-hoc tariff exemptions for imported intermediates has benefited mainly a few large firms, but put small and medium exporters, including highly innovative firms, at a disadvantage.

Customs clearance and transportation are the main logistical challenges to trade. In 2015, it took exporters 141 hours and importers 294 hours to clear customs at Karachi, compared with 20 hours and 13 hours, respectively, in the OECD (World Bank, 2016). Despite recent improvements in logistics performance, poor levels of trade facilitation continue to inhibit export competitiveness and trade growth. There is a critical need to improve customs and border management to lower logistical costs, particularly port operations and customs procedures. This needs to be complemented with efforts to improve valuation and under-invoicing issues through the adoption of best valuation practices and data exchange with major trading partners.

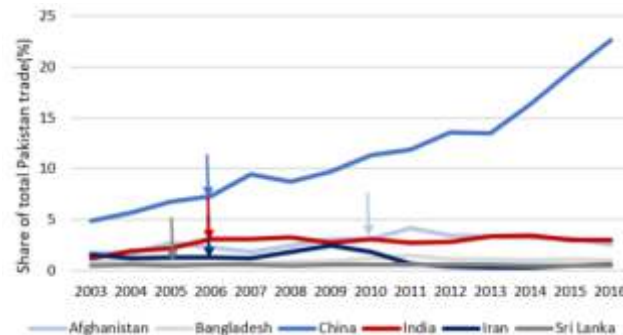
South Asia is the least integrated region in the world, limiting the benefits from regional integration. This affects not only trade, but also investment, movement of people, connectivity and regional value chains. This lack of regional integration is even more apparent if the South Asian Association for Regional Cooperation (SAARC) is compared with more functional regional blocks, such as the Asia-Pacific Economic Cooperation (APEC), the Association of Southeast Asian Nations (ASEAN) and the North American Free Trade Agreement (NAFTA) (Figure 28). Greater integration will require reciprocal liberalization by all countries and, for example, Pakistan faces higher protection from its neighbors India, China and Bangladesh than it does from the European Union (EU), UAE and the United States. Notwithstanding various bilateral trade agreements, Pakistan's trade share with neighbors—with the exception of China—is negligible (Figure 29). Strained regional relations have constrained economic cooperation, preventing Pakistan from leveraging its geostrategic location to become a trade and transit hub, at the intersection of energy-rich Central Asia and the Middle East, and two of the world's fastest growing economies, China and India.

Figure 28: Intraregional trade of SAARC as a share of total trade is relatively low



Source: ITC TradeMap. Accessed January 2018.

Figure 29: Pakistan's trade share with neighbors (except China) is negligible



Source: ITC TradeMap. Accessed January 2018.

Trade with the region could more than triple. Pakistan's share of exports to India is less than 2 percent of its total exports, while India's imports from Pakistan account for less than 0.5 percent of its total imports. Trade with India could increase 18-fold, with exports growing 45 times over their 2015 value and imports growing 15 times over the same period (as suggested by gravity-model analysis in Table 2).¹⁰ In addition, due to the proximity and size of the Indian economy, predicted exports to India are 3.5 times higher than those predicted for China. Overall, liberalization of trade in goods with the region could result in the economy growing by 30 percent by 2047. This does not take into account the potential for increased trade in services, investment or the formalization of informal trade. Transit trade for Afghanistan and Central Asia also holds great promise for Pakistan, particularly now with CPEC-related infrastructure and logistics improvements.

Table 2: Potential trade estimates

Country	Current trade with Pakistan (2015) (US\$)	Predicted trade with Pakistan (US\$)
China	12,953,931,121	18,870,219,582
Afghanistan	2,112,616,630	2,112,616,630*
India	1,981,570,462	35,637,743,064
Bangladesh	760,816,411	760,816,411*
Sri Lanka	332,270,224	332,270,224*
Iran	293,187,399	293,187,399*
Turkmenistan	22,878,000	22,878,000*
Kazakhstan	16,561,000	24,441,417
Tajikistan	4,074,000	4,317,138
Uzbekistan	3,097,000	14,919,881
Kyrgyzstan	914,000	3,809,115
Total regional trade	18,481,916,247	58,077,218,861

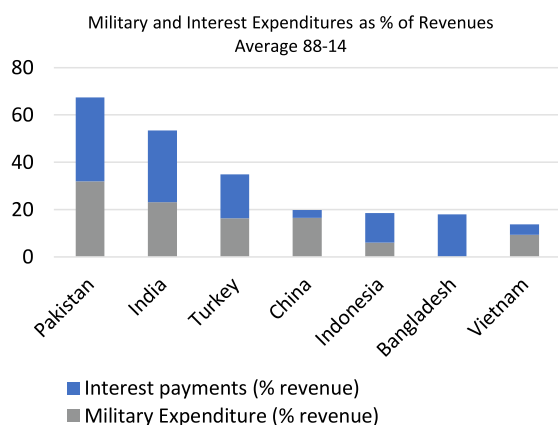
Source: Author's calculations, using Ghemawat's CAGE model.

* For these countries, current trade is already more than predicted trade, so current trade is reported instead of predicted trade.

¹⁰ The analysis informing on potential trade and impact on GDP is described in the accompanying policy note 'Building a Case for Regional Connectivity'.

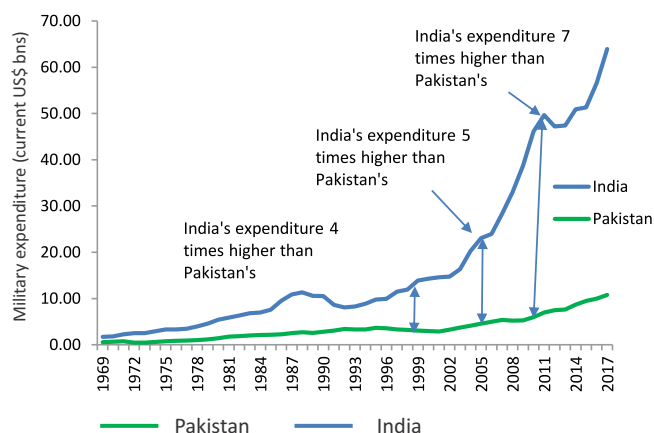
Strained regional relations affect trade, opportunities for regional cooperation and countries' domestic policies. Strained relations have affected trade and investment volumes, but also countries' ability to use regional cooperation to address issues that would benefit from regional coordination, such as security and climate change. The benefits of greater regional integration are broader than the limited discussion on trade in this chapter (see Burki, 2007, for a more detailed estimate of the costs of the tensions with India for Pakistan). Strained relations also affect domestic policies. Pakistan has allocated a large amount of resources to developing and maintaining strong military capabilities. Pakistan's spending on its military detracts from how much it can spend on other development priorities (Figure 30), with fewer resources available to meet its development needs than peer countries. The smaller size of its economy vis-à-vis India (and the growing gap) means that, although as a share of GDP military spending is significantly higher than India's, in absolute terms it is vastly outspent by India (Figure 31).

Figure 30: Pakistan spends almost 70 percent of its revenues on military and interest spending



Source: World Development Indicators.

Figure 31: The differential in military spending between India and Pakistan has increased significantly over the years



Source: World Development Indicators.

Increased regional integration will support structural transformation and a stronger economy. In recent times, global security policy discourse has increasingly emphasized the need to also invest in economic and human development as a way of ensuring security. Today, as Pakistan embarks on its third consecutive term of democratic rule, the institutional imbalance between a powerful military and an underdeveloped political system continues to dominate policies, leading to traditional thinking about regional security. This traditional approach, however, is becoming increasingly unsustainable, as suggested in Figure 31. A strategy that makes full use of Pakistan's geographical position, transforming the country into a trade and transit hub, will result in a stronger economy, able to invest adequately on its physical and human capital. This strategy could in the long term be significantly more successful in contributing to Pakistan's security and territorial integrity. As Pakistan invests in regional connectivity, acts as a transit hub for the neighborhood and develops stronger regional relations, regional integration should increase its leverage to resolve disputes with its neighbors over time.

Governance: A Cross-cutting Issue

Weak governance is a cross-cutting constraint that affects Pakistan's ability to transform its economy.

Most constraints to economic activity reported by Pakistani firms can be traced back to issues related to governance (corruption, electricity, taxation). Good governance is a necessary foundation for consistent, well-designed and well-implemented policies (World Bank, 2017). Weak governance makes it easier for powerful groups with narrow interests, such as politically connected firms, to exert undue influence over policy. Policy capture can take a number of forms, including the design of market regulations to favor connected firms, the location of industrial zones to favor private interests, or the imposition of trade barriers to benefit lobby groups and labor unions.

Policy capture may be behind some of the constraints to structural transformation in Pakistan.

Pakistan is inherently susceptible to policy capture because of a historical concentration of economic power among large industrialists and landowners. In the 1960s, the chief economist of the planning commission, Mahbub ul Haq, claimed that 22 families controlled 66 percent of the industrial wealth and 87 percent of banking and insurance. More recent analysis suggests that elite capture continues to constrain economic policymaking (Husain, 1999; Ul Haque, 2017). Since the 1980s, the share of industrialists in the National Assembly and Parliament has doubled, blurring the barrier between politicians and businessmen. Policy uncertainty and a lack of trust in policy implementation affect firms' reactions to reforms and may affect the effectiveness of otherwise well-designed and implemented policies.

RECOMMENDATIONS

Structural transformation, by allocating capital and labor to more efficient sectors, firms and uses, is a key process through which productivity and hence incomes increase. In the same way that market and government failures affecting structural transformation are not confined to a single sector but widespread in the economy, the set of reforms to address these constraints also affects many sectors in the economy. This chapter discusses the general direction that reforms, which are more narrowly linked to structural transformation, could take to improve productivity and accelerate growth in Pakistan. Among the reforms discussed, two types should be prioritized. First, reforms that improve the regulatory business environment offer an accessible pathway to attracting investment in the near term but remain a continuous process that should be sustained through the medium term. Second, a more open trade and investment regime can improve firms' incentives to innovate and enhance productivity by exposing them to competition and facilitating access to the latest technologies. Other important reforms include investment in managerial and basic labor skills, reforms to SOEs, particularly in the energy sector, and efforts to improve urban development. Government support for technology transfers and extension are likely a more effective policy in the medium term.

For a detailed discussion of suggested reforms please refer to the Pakistan@100 policy notes 'Structural Transformation in Pakistan' and 'Building a Case for Regional Connectivity'. Reforms in the agriculture sector are discussed in the following chapter.

a. Reforms to address government failures that constrain structural transformation

Reforming business regulation. Cumbersome business regulations mean that firms spend valuable resources on navigating the regulatory environment without putting them to productive use, which reduces their productivity. Regulatory reform should level the playing field for all firms by reducing red tape, and the scope for excessive discretion and arbitrariness in enforcement. Pakistan has already embarked on these reforms as part of the 'Doing Business Reform Sprint', which is driven by a high-level committee established by the Prime Minister's Office (PMO). This reform initiative should be deepened and expanded to address the myriad layers of regulations at the federal, provincial and local levels, as well as sector-specific regulations. Potential interventions should aim at reducing the procedures, costs and time associated with investing and doing business in Pakistan, aligning the national investment policy with sectoral policies, streamlining the FDI approval process, and consolidating the multitude of incentive schemes by establishing a one-window operation. The reform agenda could be driven by a 'National Business Climate Reform Unit' attached to the PMO, supported by complementary organizations at the provincial level. For instance, Punjab has a functioning Investment Climate Reforms Unit. The roles, responsibilities and powers of these units should be clarified and formalized through guidelines or new laws, as necessary.

Increasing transparency in the regulatory environment and facilitating compliance. Regulatory reform can be complemented by measures to improve transparency and ease of compliance for firms, starting with a comprehensive inventory of all the licenses and permits that apply to firms in each province or sector. This could be used to prepare and maintain updated, consolidated regulatory repositories that list all requirements and procedures, at both federal and provincial levels. Furthermore, regulatory compliance could be eased through single-window online portals for registration and other compliance activities.

Investing in digital infrastructure. Digital technology has been a key driver of productivity improvements in recent decades. Going forward, 5G mobile networks hold great promise as a booster of digital development in Pakistan. These networks rely on the national fiber optic network owned by the state operator, Pakistan Telecommunication Company Limited (PTCL). The national fiber optic network is the main transmission network and links to the international terrestrial and submarine networks. Improvements in unrestricted access to PTCL's network would benefit the private operators. Similarly, a further network expansion and quality improvements would improve mobile broadband access and could ensure access in under- and unserved areas. Digital development should further come with safeguards including national cyber security and personal data privacy. At the same time, providing an enabling environment for a competitive and open market for telecom and digital players, and digital skills for potential employees, is critical to ensuring the meaningful uptake of digital solutions.

Completing power sector reforms. To improve firms' access to electricity to allow them to operate more productively, existing power sector reforms should be completed and complemented. CPPA-G is still in transition to becoming the market operator and much preparatory work is needed for the wholesale electricity market to be ready by 2020 as scheduled. Moreover, the current National Power Control Center needs to be strengthened to deliver the critical role of a modern system operator to plan reliable and least-cost dispatch to benefit the additional generation capacity, and to enable transparent and non-discriminatory third-party access to networks and wholesale competition. The transmission grid needs significant investments to provide the highway for energy generated to where the demand is. Finally, there is a need to improve the operational performance of public distribution utilities and put in place systems to control technical and commercial losses, so that these entities become credit-worthy to undertake the required investments.

Improve urban planning to benefit from agglomeration economies. The provincial governments need to ensure coordinated urban and regional planning is undertaken across entities, with a coordination mechanism for agencies that cover multiple jurisdictions. Regional planning should also include integrated transportation and land use planning and promote the development of satellite cities and industrial clusters, enabling agglomeration benefits. Moreover, city strategic development plans need to be developed by

municipalities of each city and town through an extensive consultative process with key stakeholders including citizens, private sector, civil society, land-owning agencies etc., as part of a “growth coalition” for the city.

Improving corporate governance and reducing distortions emanating from SOEs. To mitigate the risks emanating from SOEs, Pakistan requires a new SOE policy that defines the purpose of government ownership. The policy needs to set explicit objectives, such as the generation of non-tax revenues, or the provision of public goods and services in areas of market failure. Following this, the government must identify SOEs that should be privatized and ensure completion of the privatization process in a transparent manner. After deciding on the scope of the reformed SOE landscape, it will be crucial to develop a clear, coherent, and modern legal and regulatory framework for the state as the owner and shareholder of SOEs, separating the functions of the state as a regulator and owner of SOEs. This would entail an ownership policy that defines how the state governs its SOEs, thereby laying down clear criteria for subsidizing SOE activities and extending financial support to the SOEs. This also entails designating a central entity to manage the SOE portfolio, tasked with monitoring and reporting on the financial performance, fiscal risks, and regulatory compliance of individual SOEs and the SOE portfolio, as well as developing a performance framework for SOEs in collaboration with their respective line department. Finally, improving corporate governance entails appointing independent management boards for SOEs to separate the government's role, as owner, from its role as policymaker, coordinator and regulator.

Mandate financial reporting and consolidate public support. To ensure transparency, it is key to mandate SOEs to use International Financial Reporting Standards and publicly disclose annual financial statements and external audit reports. Similarly, it is key to make further financial support to SOEs conditional upon improved financial performance based on specific targets that are set in performance agreements. Instead of covering the operational losses of SOEs, government subsidies need to be limited to SOEs that provide public services and be calculated based on outputs (e.g., additional Mega Watts (MW) of power generated) and unit costs. To implement these changes effectively, the government will need to strengthen the mandate of the Ministry of Finance to hold SOEs accountable for their financial performance. The Ministry of Finance will also need to account for contingent liabilities arising from government loans and guarantees for SOE borrowing, which have grown in recent years and pose significant fiscal risks.

b. Reforms to address market failures that constrain structural transformation

Modernize land management to encourage efficient use of land resources. These efforts should include development of a comprehensive framework for land records in urban areas through an automated and streamlined urban land records management system, including one-window facilities for urban land transactions in major cities. To reduce inefficiencies in land use, a unified land-titling system should be introduced. Moreover, land use conversion processes should be streamlined to encourage commercial real estate development. Reforms should be undertaken for more productive use of state land through the release of vacant state-owned land for productive and economic uses in city centers to better exploit the economic and social potential of this scarce asset. Lastly, medium and high-rise multiple ownership housing facilities should be developed to densify urban development, reduce sprawl, promote compact cities and increase the supply of housing, especially rental housing

To support innovation, Pakistan should adopt a phased approach, starting with investments in basic skills and managerial capabilities. Market failures affect the resources that firms are willing to invest in skills (basic skills, managerial capabilities) and acquiring new technologies, thus constraining human capital accumulation, as well as productivity improvements. Most firms in Pakistan are at a stage where the adoption

of basic managerial practices, machinery upgrading and basic process improvement are more relevant than R&D. Government support should therefore focus on programs to improve business management to ensure that technology is accessible, and on strengthening the absorptive capacity of firms to facilitate technology transfer (e.g., through the Small and Medium Enterprise Development Agency, or SMEDA). During the first phase, support should also be provided to investments in education and R&D to create a pool of entrepreneurs and high-skilled workers. Support in achieving quality standards and quality certification will help firms seeking to break into new export markets, particularly for smaller firms. Strengthening the infrastructure for testing and certification will help them avoid the more expensive option of having to seek certification in a third country.

In a second phase, government support could be provided through programs for increased technology adoption and creation. Firms' investments in newer technologies, and their capacity to generate and absorb new technologies—a key driver of productivity increases—is also affected by market failures, lowering their capacity to innovate. As firm and institutional capabilities grow, the mix of innovation policies should also evolve. As more firms and clusters develop the capacity to undertake more advanced innovation, the demand for sophisticated forms of support will increase. Programs could include technology extension support to more advanced clusters, or the setting-up of technology centers to provide a combination of business, managerial and technical advice to SMEs. Knowledge management and transfer initiatives, especially with regards to modern technologies, offer a complementary pathway to facilitating technology adoption. Other forms of support could include grants for industry-research collaboration, and grants for innovative projects to finance prototyping, testing and commercialization activities and technical assistance.

A second phase would also see support for export clusters. Increasing exports through dedicated clusters not only contributes to growth directly, but can also attract FDI and trigger technology transfer and productivity improvements. Supporting export clusters could follow lessons from the experience of East Asian countries. Sectoral development strategies took the form of coordinated support along multiple dimensions: at times providing financial support combined with incentives for technology upgrading through imported capital or collaboration with foreign investors or multinational enterprises. The strategies also coordinated sector-specific incentives for export promotion and upgradation with more general investment in skills development and industry-research collaboration. A cautious approach will be necessary, with emphasis on institutional capacity building, piloting, monitoring and evaluation, and a readiness to close programs if they are not working.

c. Reforms to improve trade policy and enhance regional integration

Trade liberalization. Establish a simple, transparent tariff structure with reduced tariffs, and with clear and transparent rules governing the use of discretionary provisions, including a uniform, less discretionary duty exemption scheme for exporters. Identifying and implementing key regulatory reforms in the services sector could improve Pakistan's international competitiveness in the tradeable services and manufacturing sectors that are increasingly reliant on professional services inputs, such as logistical and financial services.

Trade logistics. Improving trade logistics through procedural facilitation and infrastructural improvement will also be critical. An automated internet-based processing system for border management has already been rolled out. This roll-out should be completed and extended to all relevant regulatory agencies. Assessing and subsequently upgrading the biggest infrastructural bottlenecks at borders, such as inadequate weighbridges and scanners, sheds and warehouses, customs facilitation centers, and quarantine and phytosanitary facilities, should be undertaken. Adopting a more modern risk-based compliance management strategy for border controls will help focus attention on the most high-risk consignments, while expediting

those that do not pose serious issues.

Enhance regional integration: the first phase. The process of unlocking Pakistan's regional promise must start with a consensus across Pakistan's leadership, and between civilian and military leaders, to use constructive regional relations to support economic competitiveness and growth. Several steps can be taken toward greater integration with the region, in addition to the steps described above to liberalize trade and improve logistics. These include using CPEC to improve relations with other countries that could benefit from it, including Iran, Afghanistan and those in Central Asia. To improve relations with India, the two countries could revitalize the Pakistan-India Joint Chamber of Commerce, normalize visa processing, including for business people, and enter into a dialogue on trade liberalization measures.

Enhance regional integration: the second phase. In the medium term, Pakistan could deepen some of the reforms undertaken in the short term, including opening up other border points with India, such as Khokhrapar-Munabao in Sindh and Sialkot in Punjab. Border infrastructure such as warehouses and improved cold-storage facilities would be necessary to facilitate increased trade between the two countries. Railway links to carry both passengers and freight from borders and ports to Pakistan's major cities are needed to reduce transportation costs. On the western border with Afghanistan, similar investments in improved border infrastructure, customs procedures, and road and rail connectivity would expand trade capacity and foster domestic manufacturing growth in Pakistan. Other efforts to increase regional integration as relations with neighbors strengthen might include: inviting multi-country involvement in CPEC (including India); offering India an overland route to Afghanistan in return for gaining access to Central Asia for itself; offer both Karachi and Gwadar ports for use to all neighbors; and work with Iran to develop synergies and complementarities between the Gwadar and Chabahar ports. Pakistan should push for the timely completion of connectivity projects already committed to by all countries in the region.



CHAPTER 5 | Sustainability

There are growing concerns about the sustainability of growth in Pakistan, from rapidly declining water availability to growing inequalities across locations and income groups. Growth is most effective in raising income levels when it is environmentally sustainable, in that it uses resources to support growth today without compromising on growth in the future, and when it is socially sustainable, in that it ensures an inclusive growth pattern that allows all members of society to realize their economic potential for growth and benefit from it in return. Key risks to the sustainable use of resources include air and water pollution, rapidly declining water availability and the impact of disasters on fiscal outcomes. Key constraints to inclusiveness are increased inequality in outcomes and opportunities, and the emergence of inequality traps, as well as social norms that contribute to these outcomes. For Pakistan to sustain growth over the next 30 years, these concerns on environmental and social sustainability need to be addressed. This chapter first discusses briefly the key constraints to environmental and social sustainability, before going on to discuss, in turn, the type of reforms that would contribute toward a more sustainable development path.

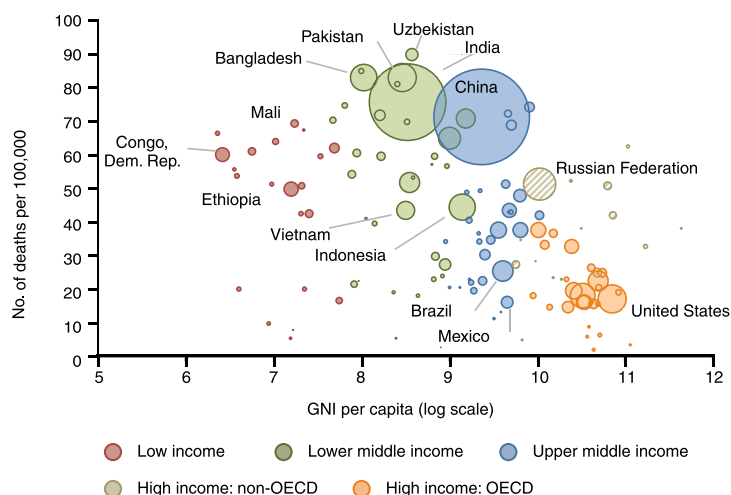
PART 1: ENVIRONMENTAL SUSTAINABILITY

The main environmental sustainability challenges in Pakistan are: (i) managing air and water pollution; (ii) managing land and water sustainably (the agriculture and water nexus); and (iii) building resilience to natural disasters.

a. Air and water quality

The Environmental Performance Index (EPI) by Yale University ranks Pakistan 176 out of 180 countries in terms of air quality. Air quality measures, such as the concentration of fine particulate matter (PM 2.5), suggest that Lahore and Karachi both have worse air than Beijing, and that Pakistan's concentration of PM 2.5 is high compared with many countries at similar income levels (Figure 32). Pakistan's economy is air-pollution intensive. In Pakistan, one unit of PM 2.5 generates US\$18.9 of GDP per capita, while it is associated with US\$145 of GDP per capita in China. Air pollution and greenhouse gas emissions (GHGs) are largely driven by the road transportation sector.

Figure 32: Ambient PM 2.5 death rate versus income



Source: World Bank, Institute for Health and Metrics Evaluation 2016.

Increasing economic activity and rapid urbanization have put pressure on water availability and quality. The worst pollution of drinking water is seen in rapidly urbanizing and industrializing Pakistan. Surface water supplies are increasingly threatened by wastewater pollution. In 2013, only 5 percent of effluents were being collected and treated (World Bank, 2013b). Up to one-quarter of the population may be at risk from arsenic contamination of water. Industrial pollutants often contaminate water systems because treatments that control infectious agents are not effective in removing many toxic chemicals from drinking water. Sources of drinking water may be contaminated because of a lack of regulated municipal wastewater collection systems.

Access to water and sanitation has improved, but the quality remains low. On the EPI, Pakistan ranks 140 out of 180 countries in water and sanitation, with only 36 percent of the population having access to safely managed drinking water. Water utility services are intermittent, because of high leakage levels, limited supply, and insufficient access to power due to limited capacity or a lack of payment, with a large difference in access between urban (96.9 percent) and rural (59.7 percent) areas. Nearly 20 percent of urban areas and 13.6 percent of rural areas have unsanitary drainage flowing directly into the nearby environment, with no sewer, septic tank, or pit (UNICEF/WHO, 2017)¹¹. Inequality in accessing clean water and sanitation is higher in Pakistan than in peer countries.

Low air and water quality have profound impacts on human lives and economic growth. Air pollution, which affects growing urban centers the most, affects health and labor productivity, and detracts from the benefits of agglomeration economies. Air pollution is also linked directly to lower on-the-job productivity of workers (Chang et al., 2016). The inadequate quality of drinking water has increasing health and economic consequences for Pakistan. Poor water supply and sanitation contribute to high levels of childhood stunting undermining human capital. As of 2006, 20 to 40 percent of hospital beds were occupied by patients suffering from water-related diseases, such as typhoid, cholera, dysentery and hepatitis, which were responsible for one-third of deaths (World Bank, 2006). As of 2016, the annual cost of inadequate water, sanitation and hygiene (WASH) in Pakistan was estimated to be US\$2.4 billion in urban areas (0.9 percent of GDP) and US\$5.1 billion in rural areas (1.8 percent of GDP in 2016).

¹¹ These numbers differ from the estimates in the PSLM Survey 2014/15, but UNICEF/WHO numbers are used to ensure comparability across countries.

There is limited monitoring of environmental quality standards. The National Environmental Quality Standards (NEQS) are largely in line with World Health Organization (WHO) standards. However, these are not being properly monitored and evaluated due to institutional difficulties. The provincial environmental protection agencies (EPAs) have not assumed the operations and maintenance (O&M) costs of the air quality monitoring network that was developed by the central government. In mid-2012, the monitoring network suspended its operations because of the EPAs' failure to cover their O&M costs. The regional authorities perform some monitoring of drinking water, but not on an annual basis. Overall, water resource management is compromised by poor water data, analysis and weak processes for water resources planning and allocation.

b. Managing land and water sustainably: The agriculture-water nexus

Water demand is projected to grow by at least 40 percent over the next 30 years. Recent analytical work suggests that demographic and economic growth are the largest drivers of demand increases across all sectors (World Bank, 2018a). In addition, climate change will see further increases in water demand (chiefly from agriculture) in the absence of attention to demand management. While agriculture continues to represent the bulk of demand, much of the demand increase will come from other sectors of the economy. Between 16 and 32 percent of the increase in water demand by 2050 could be attributable to climate change, primarily because of higher water requirements in agriculture.

In the absence of effective demand management, growth in water demand will not be sustainable. Current withdrawal levels are already nearing 60 percent of renewable water supply, making a large increase in water demand unsustainable.¹² Future surges in demand are unlikely to be manageable even through further unsustainable increases in groundwater pumping. The water-thirsty, low-productivity development model of the agriculture sector (see discussion below) is not sustainable. The demand management strategy needs to focus on efficiency improvements that can allow consumption to increase. Importantly, to accommodate growth in other sectors, food security, gains in value addition, and build resilience to ongoing climate change, it is critical for agriculture to improve water management, encourage water productivity and saving, and diversify crops toward higher value-added horticulture.

Agriculture, by far the largest user of water, uses it inefficiently. Agriculture accounts for more than 90 percent of withdrawals and is heavily dependent on irrigation. More than 90 percent of agricultural production is concentrated on irrigated land (Yu et al., 2013). Though agriculture contributes around one-fifth of national GDP, less than half of this is from irrigated cropping and the four major crops (wheat, rice, sugarcane and cotton) that represent nearly 80 percent of all water use generate less than 5 percent of GDP. Over the past 50 years, the agriculture sector's growth rate has declined from an average 4.5 percent a year to 2.5 percent a year, led by a decline in productivity (). Agriculture productivity is characterized by little technical change and instead the intensification of input use (Malik et al., 2016). Water use is wasteful, with governance issues that provide only weak incentives to save water. This results in overall low economic productivity (around US\$1 per cubic meter, one of the lowest in the world) and concerns regarding environmental sustainability (for example, contamination and salinization of groundwater aquifers, which pose the greatest threat to long-term ground water sustainability in Pakistan).

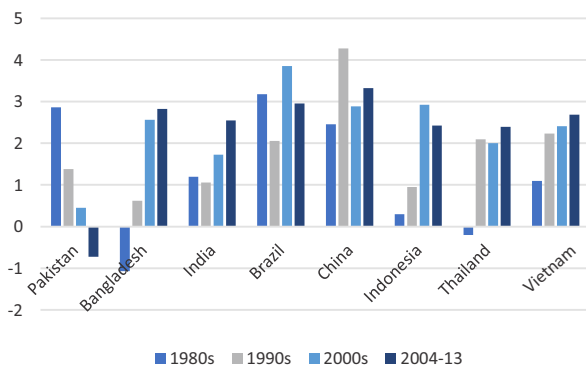
Irrigation water is underpriced and the system badly managed. There is significant potential to improve water productivity in the agriculture sector, achieving higher efficiency and orienting water toward higher-value uses. Irrigation water tariffs (*abiana*) are set too low to cover the O&M costs of canal irrigation management and distribution systems. For example, they only cover 10 to 15 percent in Punjab. In addition, *abiana* are now charged (since FY04) on the basis of a flat rate per hectare, making farmers insensitive to

¹² This figure is adjusted for surface/groundwater double counting, and thus differs from other published estimates.

water saving and efficiency. There are inadequacies in how areas are assessed for water tariffs and abiana collection is uneven, inefficient and inequitable. Irrigation service delivery by the public sector is generally poor, with concerns over the equity and reliability of water distribution. Farmers at the tail end of the canals invariably do not receive their share of water due to the poor physical state of the canals, water theft by farmers upstream and rent-seeking by operators.

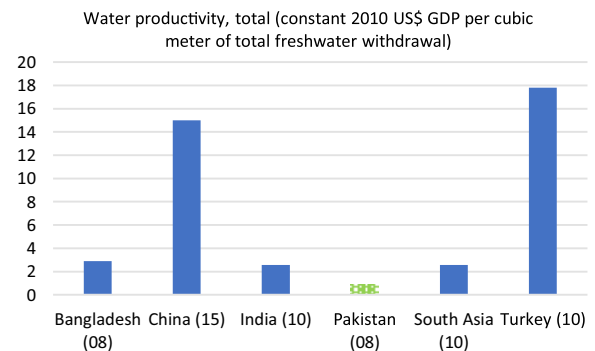
Improved water management will need to be accompanied by improved agricultural policies. Despite reforms in the past, the state continues to intervene in agricultural markets, creating distortions that hold the sector back. The public sector intervenes through administered prices and protective trade policies. The support is concentrated in wheat (through domestic procurement, temporary import/export control, and subsidized sales to select flour mills) and sugarcane (through import tariffs, as well as support prices and export subsidies), while some support remains for dairy products and vegetable oils. In addition, input subsidies (on fertilizers, electricity for water pumping, or implicitly, on canal irrigation water) also influence farmers' decisions. These interventions result in high fiscal costs, distorted cropping decisions and imbalanced input use, with implications for sustainability. The support is highly regressive, with most subsidies and benefits captured by large farmers and firms (Dorosh et al., 2016). For continued economic growth, agriculture must produce more from less, and reforming distortions in the agriculture sector will help move water toward higher-value crops.

Figure 33: Annual growth in agricultural factor productivity (average annual growth rate per decade)



Source: USDA International Agricultural Productivity database.

Figure 34: Pakistan has a much lower water productivity than peer countries or South Asia average



Source: World Development Indicators.
Note: Data point year in brackets.

Institutional and capacity issues have undermined water and environmental management in Pakistan, including weak environmental institutions, low financing, a lack of accountability and transparency, and limited intersectoral coordination. Addressing Pakistan's water security calls for infrastructure development that requires significant financial resources, which are currently well below recommended levels. Devolution has further complicated the institutional set-up, causing coordination, funding and capacity difficulties. For instance, provincial water shares have been formally defined but these have been shown to be economically sub-optimal and there is insufficient clarity on risk-sharing during times of acute scarcity. The biggest challenges are of governance, both irrigation governance and urban water governance, and these are linked to inadequate legal frameworks, incomplete policies and inadequate implementation. Resistance to reform comes from deeply embedded vested interests in the status quo. Poor environmental management is already having a significant impact on productivity and growth by limiting the

benefits of agglomeration economies, as discussed above. A fuller discussion on water management issues can be found in the recently finalized Water Security Diagnostic for Pakistan (Young et al., 2019).

c. Building resilience to natural disasters and climate change

Climate change compounds environmental and development challenges. In the absence of adaptation, climate change will have profound implications for growth in Pakistan, leading to annual GDP losses of up to 1.2 percent by 2050 (Davies et al., 2016), and for poverty reduction, pushing between 5.7 and 21.4 million additional people into poverty by 2050. It is also the biggest longer-term and currently unmitigated external risk to Pakistan's water security and is expected to increase variability in water inflows between and within years. Climate change will affect agriculture adversely, with yields of staple crops projected to decrease by up to 20 percent and livestock production predicted to decline by as much as 30 percent. A key dimension of vulnerability in Pakistan is exposure to hydrological and meteorological hazards, including floods and droughts. Pakistan is ranked seventh on the Global Climate Risk Index and climate change is expected to increase the occurrence and severity of extreme weather events, with high human and economic costs. The rapidly urbanizing cities of Pakistan are particularly vulnerable to extreme heat events owing to socioeconomic characteristics and unplanned development. One example is the 2015 heatwave in Karachi, in which more than 1,200 people died over several days.

Poorer populations tend to be more exposed to disasters, suffering higher relative losses to their assets and livelihoods. Mostly a result of monsoon rains from July through September, Pakistan experiences frequent and severe flooding in the Indus River Basin, where millions live in low-lying areas. In addition to climate-induced disasters, Pakistan is periodically affected by geohazard disasters. Earthquakes occur frequently, with the 2005 earthquake causing more than 70,000 deaths in the north of the country.

The institutional set-up for disaster risk management is challenging. Pakistan improved regulations and institutional capacity for disaster management after the 2005 earthquake, including the National Disaster Management Act 2010. Following the passage of the 18th Constitutional Amendment in 2010, provincial disaster management authorities (PDMAs) have assumed an enlarged mandate and greater implementation responsibility to prepare for and respond to disasters. Several entities in addition to the National Disaster Management Authority are working on disaster risk management (DRM), with overlapping mandates at the federal level, including the Earthquake Reconstruction and Rehabilitation Authority, the Emergency Relief Cell, and the Federal Flood Commission, among others. This multiplicity of institutions at the provincial level includes the PDMAs, the provincial irrigation departments, and the civil defense and rescue services. The heavily decentralized approach to DRM in the provinces and a lack of standardization are key contributors to the challenging environment. In addition, the post-disaster financial responsibilities of provincial governments are not well-defined. Dams can help mitigate some of the risks of floods and draughts, including the extremes resulting from climate change, but they would be economically viable only if combined with hydropower generation.

Securing access to financial resources before a disaster strikes is important. Natural disasters generate significant fiscal risk and create significant budget volatility. The National Disaster Management (NDM) Act 2010 allows for the establishment of disaster management reserve funds at the national and provincial levels. Annual budgetary allocations, mandated in the NDM Act 2010, are made in an ad hoc manner and often used for response activities, and are not channeled toward risk mitigation. A National Disaster Risk Management Fund has been established, while further work is necessary to develop agri-insurance for farmers, to protect them against disasters and climate risks.

PART 2: SOCIAL SUSTAINABILITY

A sustainable development path involves creating an inclusive society, not only in terms of economic welfare but also in terms of the voice and empowerment of all groups (World Bank, 2013a). Social inclusion matters by itself, not only because it allows people to contribute to and benefit from growth, but also because social exclusion is costly. Equity is an enabling factor for growth and social exclusion means that selected groups will not contribute their labor and capital to production processes, which can lead to lower production and productivity (e.g., see De Laat, 2010, for a discussion of the economic impact of Roma exclusion in several European countries). For example, low female labor force participation robs a country of the contribution of half its population. Social exclusion is about the waste of valuable human capital when people are not able to fulfill their potential. Inclusion is therefore important as Pakistan seeks to accelerate and sustain growth over the next 30 years. The key constraints to social inclusion include increasing inequality in outcomes and opportunities, as well as limited mobility. Social norms that discriminate on the basis of gender, religion, ethnicity or sexual orientation contribute to exclusion and increased inequality.

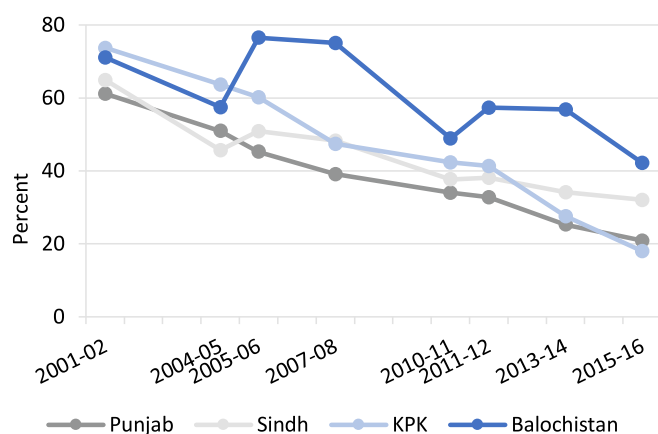
Poverty and Inequality: Historical Trends

Persisting inequality is undermining Pakistan's ability to make the best use of its labor force and sustain growth over a long period of time. Inequalities across and within regions persist, and there are signs that prosperity is not being shared by the poorest segments of the population. More worryingly, the existence of inequality traps—in which exclusion is transmitted across generations—and inequality of opportunities across space and between genders, suggest a deficit of equity in the process of socioeconomic development. If left unattended, this could harm both growth and social stability in the long run.

The relationship between growth and poverty reduction has been different across periods. During the 1960s, economic growth had an ambiguous impact on poverty because of rising poverty and widening inequalities. Policy changes during the 1970s dampened growth, but despite lower growth the perception was that welfare of the poorest improved. In the 1980s, improved economic policies and favorable external factors, such as opportunities for migration in the Middle East, led to an uptick in growth, which averaged 6 percent annually, and a substantial decline in poverty. The trend reversed during the 1990s and poverty remained almost unchanged between 1991 and 1999. The period between 2001 and 2015 was characterized by an uninterrupted and significant decline in poverty, from 64.3 percent in 2001 to 24.3 percent in 2015. Drivers of this reduction include economic growth, an increase in international migration, and the expansion of social protection, along with urbanization and growth of the (informal) off-farm economy.

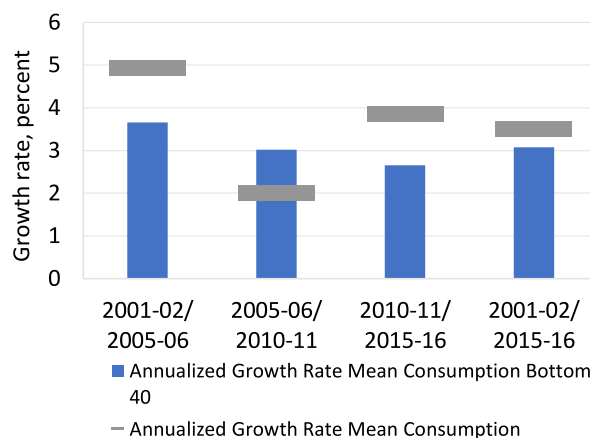
However, the pace of poverty reduction was not uniform throughout Pakistan. Between 2001 and 2015, poverty in urban areas declined at an annualized rate of 9 percent, compared with 6 percent in rural areas. A substantial stagnation in the urban/rural profile was matched by a general trend in poverty convergence at the provincial level (Figure 35). KP and Punjab were particularly successful at continuously reducing poverty between 2001 and 2015. While Sindh halved poverty over the period, progress was slower in Balochistan. The equalizing trend also occurred within provinces, as poorer districts experienced a larger reduction in poverty. Urban-rural inequalities remain prominent also within provinces. With the unique exception of KP, the poverty gap between urban and rural areas increased in all provinces, most notably in Sindh and Balochistan.

Figure 35: Poverty trends, by province



Source: World Bank staff calculations.

Figure 36: Trends in shared prosperity



Source: World Bank staff calculations.

Analyzing shared prosperity trends (measured as the average consumption of the poorest 40 percent) suggests increased inequality. As shown in Figure 36, except for the period between 2005 and 2010, consumption growth was stronger at the higher end of the income distribution. Average consumption growth of the bottom 40 percent decelerated progressively, from 3.7 percent annually between 2001 and 2005, to 3 percent between 2005 and 2010, and to just 2.2 percent between 2010 and 2013. Between 2010 and 2015, not only did consumption of the poorest 40 percent grow less than previously recorded, but it also grew 1 percentage point less than the average of the population, resulting in an increase in inequality. Consumption inequality as measured by the Gini coefficient increased only marginally, from 27.5 in FY02 to 30.3 in FY16. However, this inequality index is calculated using Pakistan's Household Integrated Economic Survey. Similar to many other household surveys, this survey may be missing many households at the upper end of the income distribution, significantly underestimating inequality (see Pakistan@100 policy note 'From Poverty to Equity' for a detailed discussion on this issue).

a. Economic and social mobility

Actual and perceived inequality are amplified in societies that lack socioeconomic mobility. Inequality and intergenerational socioeconomic mobility are closely intertwined. From an intergenerational perspective, when children can aspire to achieve levels of education, jobs and living standards that are materially better than the levels enjoyed by their parents, inequality can begin to decline over time. On the other hand, when the capacity to climb the social ladder is pre-determined by the lottery of birth, inequality persists over time, with negative consequences for equity and dynamic efficiency. A society that lacks mobility is unable to mobilize all available talents, leading to lower and less inclusive growth,

Pakistan has one of the lowest rates of intergenerational mobility in the world. A recent report (World Bank, 2018b) analyzing trends in intergenerational mobility in education across 146 countries indicates that Pakistan ranks among the lowest performing countries in educational mobility.¹³ Another study provides additional evidence of limited mobility¹⁴ and inequality traps in rural Pakistan (Mansuri and Shrestha, 2018). The analysis corroborates the low level of education mobility across generations in Pakistan. A key driver behind this is land inequality: poor households residing in villages where land is less equally distributed are

¹³ Educational mobility is defined as the share of adults that are more educated than their parents.

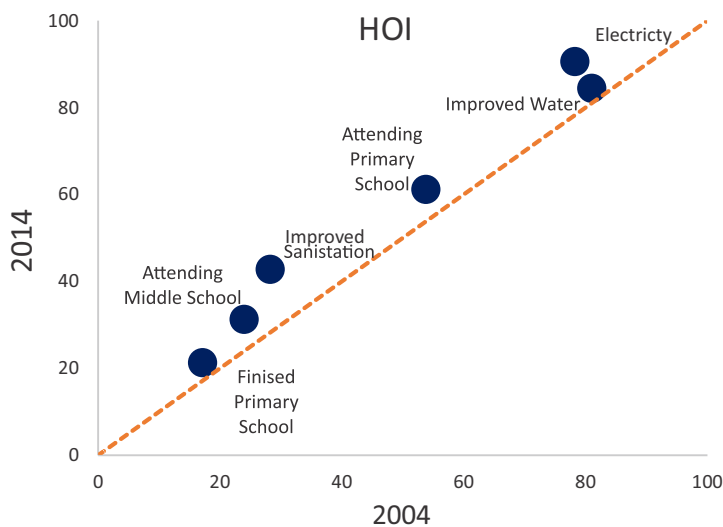
¹⁴ Intragenerational mobility in this study looks at the odds of a poor household escaping poverty, while intergenerational mobility is measured by the extent to which educational attainment and labor market activity of children represents a movement up the economic ladder relative to their parents.

less likely to have escaped poverty over time. Similarly, upward education mobility is significantly lower in villages where land distribution is more concentrated. The accumulation of assets by households differs significantly between those villages with the most equal land distribution and those with the most unequal land distribution, with poorer households being more likely to accumulate livestock in villages with a lower level of land inequality.

b. Inequality of opportunities

Basic opportunities, such as completing primary school on time, or having clean water to drink, appear to be far from universal and are unevenly distributed across Pakistan. Understanding the extent to which circumstances at birth affect opportunities and whether the “opportunity gap” is improving over time is important in promoting justice and avoiding wasted human potential. The Human Opportunity Index (HOI) was developed to capture the extent to which opportunities are evenly distributed within a society (see the Pakistan@100 policy note 'From Poverty to Equity' for a detailed discussion of the HOI). Opportunities for children are defined as access to a set of basic goods and services in education, health and infrastructure that are deemed necessary to realize human potential later in life. As can be seen in Figure 37, access to basic opportunities is far from universal. Analysis suggests that not only access to services, but also the quality of those services is unequally distributed.¹⁵ Equally worrisome, progress over time in the HOI has been marginal. If the overall objective is not only to widen coverage, but also to promote the equality of basic opportunities for children, public policy should be oriented toward directing marginal investments to increase basic opportunities for the most disadvantaged groups.

Figure 37: HOI trends, national level, 2004-14



Source: World Bank staff calculations based on PSLM 2006 and 2014.

¹⁵ The quality of education services is very likely to vary considerably across population subgroups defined by circumstances at birth. Evidence collected under the Learning and Educational Achievement in Punjab Schools (LEAPS) study shows substantial gaps in the quality of education between public and relatively less affordable private schools. Similarly, the quality of basic infrastructure is substantially affected by location.

A household head's education and location are the most important circumstances that determine inequality in access to education and infrastructure services. Differences in where children are born (province and urban/rural location) are more relevant for inequality of opportunities in basic infrastructure, while the education of the household head is the most relevant circumstance for inequality in education opportunities. HOI analysis reinforces evidence of sharp inequalities across provinces. Inequality of opportunities is highest in Sindh and Balochistan. In Punjab and Sindh, the education of the household head is the most significant determinant of access to educational opportunities. In contrast, gender is by far the most important in KP and Balochistan, where social norms penalize girls' education the most.

c. Aspiration gaps and intergenerational transmission of gender inequality

Existing inequalities can lower the aspirations of individuals in disadvantaged groups and contribute to the transmission of disadvantages across generations. Aspirations interact with social hierarchies and norms, reinforcing their impact on outcomes and reproducing them over time. For example, high gender inequality can lead to the waste of human capital through lower aspirations for and from girls, resulting in significant losses in terms of both GDP and wealth.

In Pakistan, the interplay between aspirations and social norms in perpetuating disadvantages over time is particularly evident in the context of gender inequalities. Pakistan ranked 148 out of 149 countries on the World Economic Forum's Global Gender Gap Index in 2018. Female literacy is as low as 48 percent, 25 percentage points lower than male literacy. Female labor force participation, while it almost doubled from 13.3 percent in 1992 to 26.3 percent in 2017, remains one of the lowest, not just in South Asia, but globally. Underlying these statistics is the rigidity of the form of patriarchy that women and men experience in Pakistan. This system provides incentives to devalue women and girls, whose agency is thereby severely limited (Solotaroff and Pande, 2014).

Parents have greater aspirations for their sons than their daughters. Patriarchal social norms create and perpetuate gender inequality, also in aspirations for the future. A recent study (Gine and Mansuri, 2018) compares the aspirations of parents for their sons and daughters in terms of education and employment with the aspirations of these boys and girls. Both mothers and fathers had greater aspirations for their sons (), and this gap was confirmed by the aspirations of boys and girls for themselves (Table 4). Girls aspire to have less education than boys, but nonetheless higher than their parents' expectations. The desire to work is nearly universal among boys, but only half of the girls express a desire to work, in line with their parents' aspirations. Parents' and adolescents' aspirations are closely tied to individual and household characteristics, such as poverty and education. Mothers and fathers with some education desire significantly more education for their children, but they still have higher aspirations for the education of boys.

Table 3: Parents' aspirations for children

	Mothers' aspirations for:		Fathers' aspirations for:	
	Daughters	Sons	Daughters	Sons
Preferred years of education	7.28	10.15	8.51	11.74
Expected age at marriage	21.05	23.70	20.64	23.32
Child will have some say in choice of spouse (%)	13.10	51.30	2.60	40.00
Preferred number of children	4.37	4.75	3.75	4.05
Prefer more male children (%)	20.50	34.50	31.40	35.50
Allowed to work (%)	50.50	97.30	56.40	99.40
Allowed to work for NGO (%)	33.50	89.20	35.80	92.80
Allowed to contest local elections as candidates (%)	29.60	81.90	22.40	67.10

Source: Gine and Mansuri (2018).

Table 4: Adolescents' own aspirations

	Female	Male
Preferred years of education	9.16	10.98
Child's preferred age of marriage	22.17	22.83
Will choose spouse themselves (%)	4.70	20.00
Preferred number of children	3.46	4.25
Prefer more male children (%)	17.00	34.30
Wants to work (before marriage) (%)	51.90	97.90
Wants to work (after marriage) (%)	47.20	97.10
Wants to work for NGO (%)	26.40	84.30
Would like to run forelections (%)	11.30	60.00

Source: Gine and Mansuri (2018).

d. Poverty and conflict in Pakistan

Persistent inequality among and between socioeconomic groups may increase social discontent and, eventually, the propensity of individuals and groups to engage in crime and political violence.¹⁶ Relative deprivation and the exclusion of segments of society from sharing in the benefits of economic progress can fuel discontent and create a fertile ground for conflict to flourish. Between 2001 and 2011, conflict claimed the lives of 35,000 people in Pakistan. According to government estimates, the direct and indirect cost incurred by Pakistan due to incidents of terrorism during the past 16 years amounted to US\$123 billion.¹⁷ Recent research in Pakistan suggests that poverty, inequality, and a weakening social contract between citizens and the state can contribute to radicalization and militancy (Zaidi, 2010; Azam and Aftab, 2009; Malik, 2009). The relationship between deprivation and conflict is complex, as other research suggests, showing a limited correlation between education levels or employment with militancy (Abbas, 2007; Fair, 2007; Fair, 2008; Bullock et al., 2011). The government, in its recently approved National Internal Security Policy, reflects the complexity of the security challenge and envisions a “peaceful, democratic and inclusive

¹⁶ See discussion in Boix, 2003, Boix, 2015 and Fajuzylber et al, 1998.

¹⁷ Pakistan Economic Survey 2016-2017.

society forged by the promotion of the rule of law, inclusive growth, political stability, and respect for diversity.” Increasing regional inequalities, competition for scarce natural resources (most notably water), and the compounding effect of climate change are likely to exert further stress on Pakistani society's resilience to conflict and violence.

RECOMMENDATIONS

Ensuring environmental and social sustainability is key to sustaining growth, as it prevents a depletion of the natural resource base and enhances human capital by ensuring that everyone can participate in and contribute to growth. The priority reform for sustainability is improved water management, particularly in the agriculture sector. Ultimately this will require that water prices reflect their scarcity value and the true costs of delivering this crucial service, but a number of institutional and legal reforms may be necessary first to strengthen the capacity of concerned institutions. This section outlines the general direction that reforms focusing on improving the sustainability of growth should take. For a more detailed discussion of the suggested reforms please refer to the Pakistan@100 policy notes 'Environmental Sustainability' and 'From Poverty to Equity'.

i. Environmental Sustainability

Recommendations to improve environmental sustainability can be grouped in four different areas: (i) improving information (including measurement and monitoring) for decision-making; (ii) investing in water services delivery infrastructure to reduce water losses and pollution; (iii) getting prices right, given that significant externalities are not captured by market mechanisms; and (iv) developing risk-management policies. Improvements to institutional mechanisms related to coordination and decentralization are also important and discussed in detail in Chapter 6.

a. Improving information for decision-making

Improving the measurement and monitoring of air and water quality. A country cannot manage what it does not measure, and improving monitoring is crucial. Pakistan needs to improve its overall environmental monitoring. Monitoring of water and air quality is instrumental for planning, implementation and evaluation, but it is difficult to do at the current low capacity levels. To improve capacity, the authorities will need to invest in equipment, human resources and the institutional set-up. Monitoring will require the coordination of operators, and local and provincial authorities, with oversight by the federal environmental authority. Monitoring would benefit from partnerships with research centers, academic networks and universities, as well as the use of modern technologies.

Improving water measurement and accounting to manage the water supply. This can be done by tracking and improving water productivity, enhancing trust and ensuring equity among water users (be it among provinces or among sectors). Monitoring should go beyond water availability in irrigation canals and surface water bodies, since there are vast domains in Pakistan's water resources, such as the cryosphere or groundwater aquifers, that are still poorly understood and managed. Enhanced hydrometeorological monitoring and use of Earth Observations can provide a better understanding of natural and induced water losses and, together with other traditional models, can guide improved water resource planning, and improved flood risk assessment and forecasting. Groundwater monitoring is urgently needed to manage this resource sustainably, including its quality and pollution levels. In addition, water data need to be openly

shared among all stakeholders to build trust between water users and water managers.

Introducing a risk-management system that helps safeguard farmers from the adverse impacts of weather hazards on crops and livestock. The system would aim to reduce livestock and crop losses in climate vulnerable areas and build the resilience of farmers by providing them with coping mechanisms and strategies to deal with climate shocks. It would include improved Climate Information Services (CIS) that farmers can use to inform their decisions, as well as developing climate indices to trigger early warning and response, or (parametric) insurance.

Pakistan can reduce disaster losses through improved urban planning, incorporating risk considerations into the decision-making process and investing in risk reduction. Risk identification and the integration of risk information in land use and territorial development, urban planning, and the design of public infrastructure, as well as the adoption and monitoring of better building standards, are effective ways of reducing risk. Once disaster risks have been identified, they must be communicated to motivate users of that information to increase resilience to disasters. Pakistan should also raise awareness of risks and risk-mitigation principles, since awareness leads to public demand for risk-resilient policies.

b. Investing in water services delivery

Modernize existing irrigation networks to reduce water-logging and salinity. The low quality of irrigation services across Pakistan restricts improvements in water productivity. There is a need to systematically improve drainage infrastructure, rehabilitate canals and distributaries, and install improved hydraulic control structures with flow monitoring and automation systems. In addition, water allocation processes should be updated to increase transparency and equity, giving farmers greater clarity on their water supply. Given the scale and complexity of surface water irrigation in the Indus River Basin, this modernization and its associated reforms will need to be implemented gradually.

Reform urban water service delivery to meet the growing demand. Urban water service delivery in Pakistan has not kept pace with urbanization and the quality of water in urban areas is rapidly declining. There is a need for major infrastructure investments, particularly in wastewater treatment along with improved operations and maintenance of bulk water delivery systems and sewerage. In the short term, the government should develop and disseminate standards for urban water delivery and link service tariff increases to service quality. Stronger coordination should be established between public land-owning and service-delivery agencies to link service delivery to urban planning. An enabling environment should also be created to involve private sector operators in infrastructure and service provision.

Address the infrastructure and financing gap in rural sanitation services. Rural sanitation services in Pakistan are inadequate and suffer from infrastructure gaps, inadequate financing and an absence of reliable revenue streams to cover O&M costs. There is a need to strengthen the capacity and increase financing of provincial government departments responsible for rural sanitation. Investments are required in infrastructure for sanitation services, including wastewater collection, and basic treatment and disposal at the village level. The government should establish mechanisms to ensure a sustainable revenue base required to cover O&M costs. In addition to infrastructure and finance, however, improving rural sanitation will require increased public awareness and behavior change among rural communities.

c. Pricing environmental costs correctly

Pricing environmental costs correctly so that economic actors internalize those costs. Pakistan needs massive and increased investments for growth, so 'greening' investments is critical. Economic actors respond

to pricing. Regulatory approaches must therefore be complemented by interventions that ensure economic actors internalize environmental costs, including a greener tax regime (e.g., carbon taxes) and the elimination of environment-damaging subsidies (removal of subsidies for fuels consumed by motor vehicles and industries). The legislative gaps of the Pakistan Environmental Protection Act (PEPA) regarding the implementation of environmental taxes should be addressed. The 'polluter pays' principle will need to be sustained through secondary legislation and a mechanism to ensure that polluters are the ones that cover the environmental costs.

Water pricing is an important tool to encourage efficient water use. Currently, the abiana rates do not even cover the O&M costs of the surface irrigation network, let alone the externalities associated with the extraction of groundwater and its environmental impact. Effective abiana rates could help incentivize a more efficient use of water in agricultural systems and contribute to mobilizing sufficient funds to address the underinvestment in the irrigation network (PNWP, 2018). Beyond a service fee, which covers the costs of providing the irrigation service, there could be consumptive use charges to incentivize judicious water use. Increased abiana rates would need to be complemented by other well-designed policies to tackle various market and government failures, including supporting awareness-raising and capacity building, and investing in relevant R&D initiatives, and fostering demand and supply for water-efficient technologies and practices.

Improvements are required in assessing the areas for abiana rates, in setting differential tariffs that reflect the level of services provided, and in the efficiency and completeness of tariff collection. These should include an improvement to the local irrigation departments' abiana assessment procedures, and an improvement in recovery rates. The involvement of water users in irrigation management would help to improve management, although it will be important to ensure that the interests of small farmers are also represented.¹⁸ In the longer term, the introduction of volumetric water pricing should be considered, making use of progress in remote-sensing technologies. This would be a second-generation reform, given the necessary preparatory work and the difficulties in implementation.

Reforming agricultural policies that distort input and output prices. Pakistan continues to support a number of crops through subsidies, trade restrictions and marketing practices. The value of agricultural subsidies is many times larger than the public resources allocated to productive investments for agriculture. Most subsidies are of a regressive nature and cause environmental damage. They are mostly focused on major crops rather than higher value-added agriculture. These policies often serve vested interests, making their reform politically sensitive (good examples include the public wheat procurement program, electricity subsidies for tube wells and low abiana rates). Pakistan needs a new policy orientation with measures that reduce subsidies and protection for certain sectors, while strengthening the provision of public services. The implementation of these reforms is expected to result in significant fiscal savings and social benefits (through lower prices to consumers). These reforms also need to be accompanied by targeted support to poor farmers to help them cope with any adjustment costs.

d. Developing risk-management instruments

Develop Disaster Risk Financing (DRF) mechanisms to help the government cope with the financial impact of disasters. Pakistan needs a comprehensive framework of risk-financing instruments to improve early and comprehensive responses to disasters. A DRF strategy would enable the government to make an informed choice on accessing various sources of funding to respond to disasters, using a mix of financial instruments to protect Pakistan against disasters of different frequency and severity (including reserve funds, risk-transfer mechanisms, contingent credit and cash-transfer mechanisms).

Due to rapid urbanization and unplanned construction, coupled with inadequate management of infrastructure, the vulnerability of the population has grown over past decades. The underlying risk

¹⁸ Research by Jacoby et al. (2018) indicates that water theft increased in channels taken over by local farmer organizations compared with channels that remained bureaucratically managed, leading to substantial wealth redistribution.

needs to be mitigated by strengthening infrastructure and promoting safe construction practices. The government needs to identify a priority list of critical infrastructure that requires retrofitting to reduce structural risk. The current regulatory environment governing the construction sector in Pakistan is opaque and the enforcement mechanisms for urban development control do not address structural safety. There is a need to periodically update the building code and also ensure its enforcement to mitigate structural risk.

ii. Social Sustainability

Prosperity is not being shared equally among the population. A sizeable portion of Pakistan's immense human capital potential is being wasted due to the lack of economic mobility, inequality of opportunities and aspiration gaps. Breaking inequality traps requires stronger efforts to reduce spatial inequalities, and target lagging areas and marginalized segments of the population. Bringing Pakistan along the path to a more inclusive development process requires a comprehensive strategy of interventions aimed at equalizing opportunities and tackling social norms that facilitate social exclusion.

Reducing spatial inequalities will require improving mechanisms that form the basis of intergovernmental transfers—federal/province/district. This could entail making development gaps more explicit in the allocation formula used for the National Finance Commission (NFC) award of federal divisible pool transfers to provinces and improving accountability by providing adequate incentives for performance. Similarly, development gaps and performance could also be formally introduced in the allocation of resources from provinces to districts. Reforms aimed at anchoring resource allocation to local development needs should be complemented by efforts to address capacity and accountability constraints at the local level. The authorities could also tailor modes of service delivery to the specific needs of communities in lagging areas by, for example, combining interventions aimed at addressing quantity and quality constraints on the supply side (building/improving facilities, training teachers or health workers) with others addressing constraints on the demand side (conditional cash transfers, outreach campaigns).

Introduce legislative interventions to strengthen protection against discrimination and gender-based violence. Tackling social inequalities will require challenging existing power structures and social norms on which exclusion and inequalities based on gender, ethnicity, religion, sexual orientation or other group characteristics are grounded and transmitted from one generation to the next. In addition to legislative action, greater participation of women and minority groups in politics and the economy should be promoted through affirmative action. Programs aimed at promoting an equitable and inclusive evolution of social norms, such as school-based programs to strengthen the life skills of adolescent girls, the provision of safe spaces for girls, and access to peer networks could promote more gender-equitable attitudes and support female empowerment. Programs engaging young men and boys through group education sessions, positive role models of masculinity, and mass-media campaigns have also shown encouraging results in reducing partner violence and support for inequitable gender norms.

Policies and programs aimed at fighting poverty and equalizing opportunities should be designed to include the poorest segments of the population. These interventions should go hand in hand with strengthening access and quality of service delivery in lagging areas. Potential interventions include: (i) conditional cash transfers to support school enrolment, maternal health and early childhood nutrition programs; (ii) awareness campaigns to strengthen accountability in service delivery and support human capital investments; and (iii) labor market interventions to support employability and income generation (training on soft skills, training in literacy, placement services, etc.). Social protection programs such as BISP can be built upon for climate-smart targeting, reaching out to vulnerable households and for disaster relief responses. Improved targeting of assistance programs for the poor and vulnerable would also contribute to more effective policies.



CHAPTER 6 | Governance

Governance plays a vital role in enabling and contributing to an economic transformation. On the one hand, governance matters directly for growth by providing an institutional environment that guarantees human and economic rights, and upholds the rule of law, thus enabling the private sector to grow. On the other hand, a conducive governance environment is needed to implement the type of reforms discussed in previous chapters. Indeed, in many instances in Pakistan's history, promising reforms have been initiated only to be shelved, poorly implemented or undermined subsequently. Thus, achieving high and sustainable growth in Pakistan requires going beyond identifying the answer to: “What are the right policies?” to understanding: “What makes the right policies achieve their intended objective?” (World Bank, 2017). This requires thinking about the environment that shapes political leaders' and public officials' interactions with citizens and enables them to implement policies that support growth and prosperity. Governance is hence the indispensable ingredient for accelerating and sustaining growth in Pakistan.

This chapter provides a diagnostic of this central issue and suggests potential pathways toward ensuring that governance enables, not impedes, reform. It starts with a discussion of the different layers of governance in Pakistan, stretching from the central to provincial governments, the bureaucracy and the private sector. It then investigates Pakistan's recent institutional performance, and highlights how this has affected growth, reforms, service delivery and macroeconomic stability. Following this, a governance diagnostic emphasizes constraints to governance at the different layers discussed previously, before concluding with policy recommendations.

What Determines Governance in Pakistan?

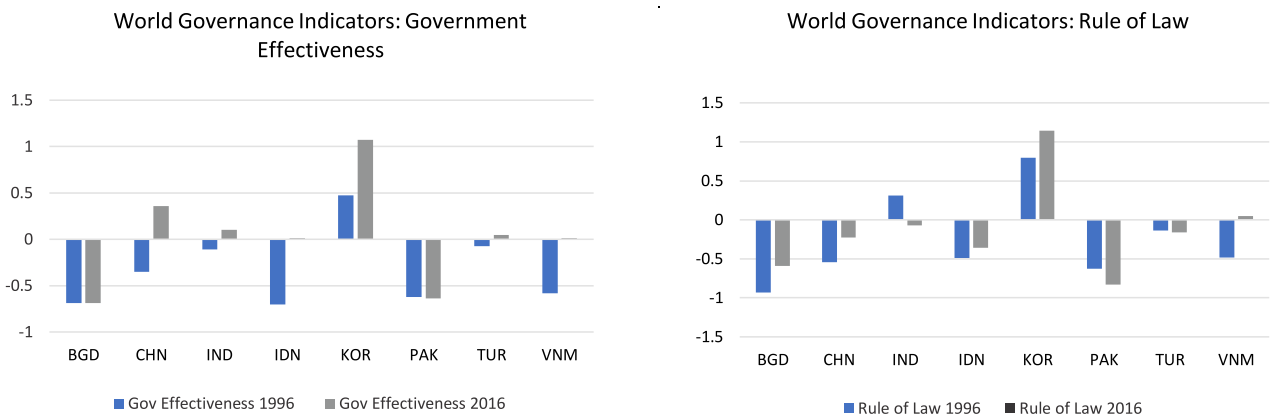
Establishing a governance environment that allows Pakistan to successfully implement the suggested reforms requires aligning the incentives of political leaders with citizens, and ensuring key services are delivered and policies implemented. The 2017 WDR on 'Governance and the Law' highlights that policy formulation is shaped by the balance of power and incentives of different actors in the political arena. These include not only citizens, politicians and public officials, but also elites and special interest groups. Good governance first requires that political leaders and public officials share the interests of citizens. This in turn requires a political system that aligns the incentives of policymakers with voters to ensure the formulation of appropriate policies, and public sector management that monitors and incentivizes bureaucrats and service delivery agents to work toward implementing policies. As highlighted by the WDR, this can fail in a weak governance environment, as it is possible that decision-makers have the right objectives and yet may still be unable to implement the right policies, because doing so would challenge the existing equilibrium of power. Good governance also requires that the public sector has the capacity—in terms of staff numbers, skills, incentives and equipment—to contribute technical expertise to policy formulation, deliver services and implement innovative reforms. Taken together, countries with a strong governance environment in which incentives are aligned and capacity is high tend to be those with strong prospects for economic development and structural transformation.

Thinking about governance in Pakistan requires going beyond the federal level. Pakistan is a federation in which responsibilities for service delivery and revenue collection are shared between the central government and the four provinces. The current federal structure is based on the 18th Constitutional Amendment, which regulates the division of responsibility between the center and the provinces, and was promulgated in 2010, and the 7th NFC Award, which determines the share of collected taxes allocated to the four provinces. Although the existing legislation provides a framework for decentralization, its effective implementation remains incomplete: provinces have thus far (with the exception of KP) not established elected local government authorities and still retain authority over district-level staffing and budgeting, thus reducing further devolution of decision-making power to the local level.

Current Institutional Quality and Consequences

Pakistan's governance environment is weak. Pakistan performs below its regional peers on various governance and institutional indicators. It has the lowest percentile rank among its peer countries on four out of the six indicators in the World Governance Indicators (WGI) database (voice and accountability, political stability, rule of law, and control of corruption) and is outranked by all countries apart from Bangladesh in the remaining two indicators (governance effectiveness and regulatory quality). In contrast to its regional peers, Pakistan has not improved its governance in recent years and the score for both government effectiveness and rule-of-law indicators decreased between 1996 and 2016, whereas no peer country recorded a deterioration of its governance performance (Figure 38).

Figure 38: World Governance Indicators (WGIs) have not improved over time in Pakistan, in contrast to many of its peers



Source: World Governance Indicators.

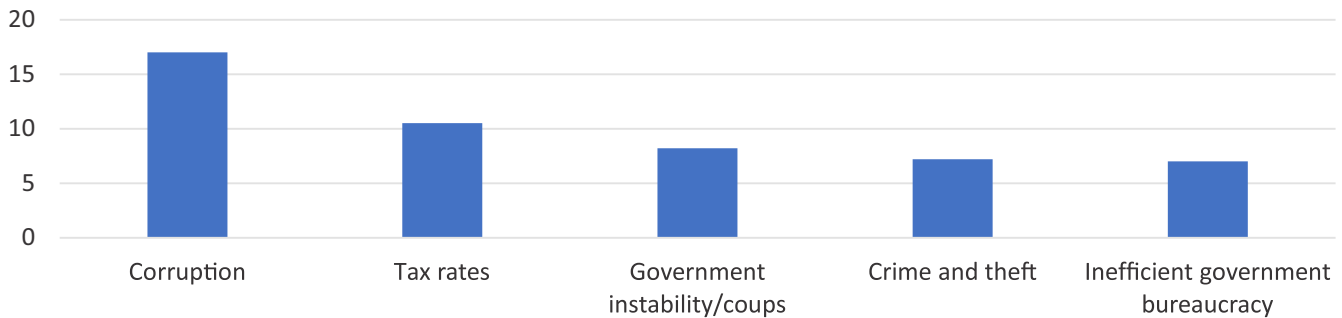
Evidence from across the world shows that a weak institutional environment is a major impediment to growth. A vast body of literature has documented the power of strong and effective institutions in bringing about transformative economic progress (Acemoglu and Robinson, 2012; Rodrik, Subramanian and Trebbi, 2004). Governance affects growth through various channels. Strong institutions enable governments to implement policies that create incentives for private investment and productive economic activity by securing property rights and ensuring that investors can benefit from the returns generated by their assets. Poor governance can undermine service delivery when elites and patronage networks manage to divert resources to themselves. This can, for example, affect growth through reduced provision of basic services

such as health and education, and consequently lower human capital accumulation.

The adverse effects of poor governance for growth are manifested in Pakistan. Governance factors feature prominently among the obstacles to investment in Pakistan documented in the 2018 Global Competitiveness Report: businesses cite corruption, taxes, government instability, crime and theft, and inefficient bureaucracy as major constraints to investing in Pakistan. Weak institutional quality has eroded market efficiency, leading Pakistan to be ranked last among its peers in indicators relating to labor market efficiency and goods market efficiency, and only marginally ahead of Bangladesh regarding financial market development. Furthermore, recent evidence suggests that patronage networks between political leaders and public officials have distorted incentives for service delivery, leading, for example, to inadequate provision of health services and undermining students' learning outcomes in schools (World Bank, 2017; Callen et al., 2014).

Pakistan's weak governance environment is a major constraint to implementing reforms. Evidence from across the world shows that weak governance gives elites the opportunity to successfully oppose institutional reforms that threaten their political power and influence policy formulation, which can lead to the persistence of inefficient and low-quality institutions (Acemoglu and Robinson, 2012; Khalid, 2016; Khalid, 2017). This mechanism has been at play in Pakistan, where a status quo with inefficient policies and institutions persists because it benefits influential elites (Hussain, 2012 and 2018).

Figure 39: Governance-related issues rank at the top of investor complaints on doing business in Pakistan



Source: Global Competitiveness Report 2018.

Poor governance also threatens macroeconomic stability and thus Pakistan's ability to generate sustainable growth. Pakistan's frequent fiscal challenges are partly the result of weak governance. Three factors underlie Pakistan's high debt and deficit levels. First, while tax receipts have increased in recent years (from 10 percent of GDP in FY13 to 13 percent in FY18), a failure to fully implement tax reform and low institutional capacity to collect revenue means that Pakistan continues to suffer from relatively low revenues. Second, the division of responsibility for expenditure on services and macro-fiscal stability between the center and the provinces following the 18th Constitutional Amendment and the 7th NFC Award has resulted in a misalignment of institutional responsibility. This is because the mandate to drive fiscal consolidation rests with the central government, while only provinces have the fiscal space to achieve this fiscal consolidation. Third, ineffective institutional controls and accountability for fiscal expenditure, especially with regards to the enforcement of fiscal responsibility legislation, has contributed to fiscal slippage.

Why Is Governance So Poor in Pakistan?

A conducive governance environment is one in which citizens have access to the information and mechanisms necessary to hold political leaders accountable, and where political leaders have access to the tools, and the right incentives, to effectively manage service delivery. As discussed in Chapter 2, a functioning political system requires a triangular relationship between citizens, political leaders, and those tasked with delivering public services and implementing policy. This means that the origins of weak governance—as documented for Pakistan—can lie on two levels. On the one hand, the link between citizens and policymakers can break, for example because citizens lack access to information about the action of their leaders, or because they are unable to sanction behavior that is against their interest. Thus, transparency about leaders' performance and the accountability of leaders to citizens are key for effective governance (Khemani et al., 2016). On the other hand, governance failure can also occur when political leaders are no longer able to ensure policy implementation and service delivery. In Pakistan, investigating this level requires thinking about the management of the public sector and governance of non-public entities that are tasked with fulfilling service delivery functions. This also includes the private sector, which has increasingly taken over service delivery functions that fall into the public good domain, such as health and education. The next sections investigate each of these facets in turn.

a. Transparency

Pakistan has taken important steps toward improving transparency in service delivery and empowering citizens, but it needs to mainstream initiatives and ensure that existing data are used to hold service providers accountable. Transparency with regards to the actions undertaken by political leaders and public officials is an important element of good governance. Pakistan's provinces have taken some important steps toward improving the monitoring of service delivery and developing new avenues for citizens to provide feedback on service delivery. For example, the District Performance Monitoring Cell in the Chief Secretary's office in KP has greatly improved the quality of service delivery at the local level through ICT-based, real-time monitoring of several key services of relevance to citizens. Completing the existing efforts requires operationalizing such efforts across service delivery functions and ensuring that citizen feedback and performance data become a key metric in evaluating and rewarding service providers.

Pakistan's citizens have only limited access to information on public financial management. While federal and provincial budgets are published annually, supplemental budgets are only disclosed at the end of the fiscal year, and only Sindh publishes in-year budget execution reports. Likewise, there is no provision for recording new commitments, cash management, or internal audits; these functions are not performed, except in some provinces on a pilot basis. While Pakistan declared its intent to join the Open Government Initiative and embrace its commitments on fiscal transparency in 2016, it has yet to submit a National Action Plan for implementation.

b. Accountability of Political Leadership

Elite capture in Pakistan has affected policymaking, as in certain circumstances political leaders lack incentives to formulate policies in response to citizens' demands, or to work toward effective policy implementation. A unique feature of Pakistan's history is that economic, social and security policies gave rise to various elite factions that could sustain economic and political power until today. Husain (1999) argued that there exist at least four influential groups that gained power through historic events and continue

to leverage their influence on the political system for personal gain. This has not changed much in the past 20 years:

1. *Civil Servants*: A powerful class of civil servants emerged from an inherited colonial bureaucratic system, which gained political influence during times of unstable political leadership shortly after independence and has retained this influence until today.
2. *Landowners*: An increasingly unequal distribution of land holdings after the evacuation of Hindus following independence and a failure to reform a land tenure and agricultural system that significantly favored large landholders gave rise to a politically influential landholding class in the agriculture sector.
3. *Industrialists*: An economic boom in the 1950s and protectionist economic policies generated high profits for merchants, who used their economic power to influence policies that facilitated their development into a politically connected industrialist class.
4. *Military*: A security-centric approach to policy following the martial law regime of Ayub Khan during the late 1950s and 1960s gave rise to a powerful military class, which has since expanded its influence on civilian life through the accumulation of assets and businesses.

These elite factions have often leveraged their influence to prevent reforms against their interests and keep things as they are. Elite factions can influence the formulation and implementation of policy. For example, the civil service can directly affect reforms by influencing the ways in which policies are implemented, and indirectly influence the policy formulation process through its interaction with political leaders. Similarly, landowners and industrialists can leverage their influence over tenant farmers and workers to gain political support, and thus enter the policy process (Beg, 2017; Daniyal and Bakhtian, 2012). There is evidence that Pakistan's elites have used this power in the past to undermine reforms that would have reduced their influence. For instance, landowners and industrialists have leveraged their political representation to oppose reforms that would have enhanced tax-revenue collection from agriculture and the private sector (Ahmad, 2010; Khan, 2017). The influential military class favors a security-centric policy framework to maintain its influence and access to state resources (Dwyer, 2016; Haqqani, 2018), which reduces the scope for regional cooperation. While each group affects development differently, they share the common trait of having gained and retained influence throughout Pakistan's history. The shortcomings of Pakistan's institutional framework that have enabled elites to retain power persist today and are precisely those factors that prevent effective reform implementation.

Incomplete devolution that has so far not created independent and elected local governments means that a key mechanism for holding political leaders accountable has not been fully developed. Successive regimes have attempted to shape the nature of local-level governance in Pakistan. Pakistan's military governments have viewed them strategically, relying on them for legitimacy and using them as a countervailing force against provincial- and federal-level politicians who were associated with democratic regimes. Democratic governments, on the other hand, have viewed local-level politicians as a threat to the power of their provincial and federal elected officials (Afzal, 2018). As a result, power has been recentralized at the provincial level (other than in KP to some degree), with provincial governments retaining power of appointment of local officials and provincial supervision over budgets, which constrains fiscal autonomy. This has undermined the full operation of local governments, leaving them without the authority to direct service delivery, assess local needs, or monitor and enforce environmental standards, limiting accountability through better monitoring by voters.

Instability in Pakistan's political system has reduced accountability and skewed leaders' incentives away from long-term reforms. The characteristics of Pakistan's political system have weakened the link between citizens and political leaders that is so crucial to sustain the triangular relationship. First, frequent regime changes from civilian to military governments have highlighted the power of the military to sanction political leaders, competing with the sanctioning power of voters. Second, Pakistan's political system is characterized by an incumbency disadvantage, which means that incumbent politicians have a reduced likelihood of being re-elected. As a result, the direct accountability between citizens and political leaders is undermined, as politicians face the risk of being sanctioned even if they implement citizens' demands, simply because they are incumbents. This shortens leaders' incentives and time horizon, leading them to prioritize short-term projects and making them more likely to engage in extractive behavior.

Campaign financing regulations in Pakistan provide a key channel for elites to gain political influence. Pakistan lacks a transparent and public mechanism to fund political campaigns, and instead requires candidates and parties to privately finance campaigns. As a result, in many instances parties must rely on wealthy patrons to fund their campaigns. This means that it is not just electoral support from citizens that matters for the selection of politicians, but also who provides financial support. To obtain this financial support, parties tailor their programs explicitly or implicitly to the demands of financiers, which in many instances involves safeguarding preferential legislation and slowing down reforms. At the same time, campaign financing regulations provide a barrier to entry for political alternatives, further limiting political competition and reducing political leaders' accountability to citizens.

c. Management of Public Officials and State Capacity

Even if political leaders have the right incentives, policy implementation can fail if public officials are not effectively managed, or do not have the necessary skills. In 2014, Pakistan's federal government and departments had more than 444,000 employees, and public employment figures for Punjab suggest that employment at the provincial level was of a similar magnitude. Ensuring that this labor force has the ability, capacity and the incentives to implement policies, for example through effective human resource management, training and necessary independence from politics, is key.

Human resource management for public officials in Pakistan does not provide high-powered incentives for staff and faces constraints to effective allocation and coordination of responsibilities. Effective human resource management faces four overarching constraints in Pakistan (for a detailed discussion of the constraints, see the Pakistan@100 policy note on governance 'Nurturing People, Policies and Institutions for Economic Development in Pakistan. A Policy Note on Governance and Institutions'). First, most departments in Pakistan do not have dedicated human resource units, and access to centralized and digitized staff records. This has created inefficiencies and a lack of transparency in personnel management as, for example, a lack of information means that matching the skills of staff to business needs is challenging. Second, performance management is not designed to provide high-powered incentives for staff. Instead, performance reviews are rare and incentives reward adherence to the rules rather than good operational performance. Third, promotions are largely based on seniority and informal networks, and do not ensure that those most qualified for leadership end up in senior positions. Fourth, a lack of coordination and collaboration within and across departments hampers effectiveness and results in 'turf' issues. For example, responsibility for anticorruption enforcement is divided between various agencies, leading to a duplication of the work and disputes over competencies that reduce effectiveness in enforcing the law.

The existing recruitment and training practices in Pakistan's civil service neither attract nor build the necessary skills to effectively implement policy. Recruitment to the All-Pakistan Service and the 11

occupational groups of the federal service is through a nationally held competitive examination. The selection examination does not prioritize technical qualification, but rather places a premium on subjects of a generalized nature so that successful candidates do not necessarily excel in public sector management skills. At the same time, there is no structured and targeted training program that works toward tailor-made improvements in technical capacities among various cadres and work streams of the civil services. The skill shortage resulting from the selection and training processes thus reduces civil service effectiveness.

Examples from the preceding sections suggest that in some instances a lack of capacity and coordination has reduced policy effectiveness. A lack of information and institutional mechanisms can limit state capacity, even if the public officials have the right incentives and skills. The preceding sections have highlighted this, including in, for instance, environmental protection, where limited monitoring of environmental quality standards constrains the enforcement of environmental protection legislation. Similarly, policy interventions in areas as diverse as taxation, environmental protection and DRM require a coordinated policy response and effective cooperation between provincial and federal administrations that is currently absent. Increased adoption of e-governance—an approach that holds promise in enhancing transparency and accountability while reducing costs—has been slow in Pakistan: despite the implementation of technology-driven projects, such as NADRA's identification and voting platforms, and the digital government-to-person payment platform to promote financial inclusion, Pakistan only ranked 148 out of 193 countries on the UN's 2018 e-Government index.

d. Regulation of the Private Sector

The private sector is assuming an increasingly important role in service delivery, especially in the education and health sectors. Increasing population, inefficient service delivery by the public sector, and a weak devolution regime at the district level mean that the public sector has been unable to meet the demand for public services of a growing population. As a result, vast numbers of privately run schools and private health-care facilities have spread throughout Pakistan in urban and rural areas. For instance, between 2000 and 2008, the number of private educational facilities increased by 98 and 137 percent at a middle- and high-school level, respectively, whereas the corresponding figures for the public sector were only 32 and 17 percent. While private providers have thus filled a gap left by the public sector, and private market discipline holds great promise as an incentive to deliver effective services, a lack of oversight risks exacerbating existing inequalities. For example, a lack of oversight could mean that the poor do not receive adequate levels of services, or rising prices risk excluding a significant share of the population.

The proliferation of private providers of education and health services requires stronger quality control and standardization of the delivery of services. If Pakistan's central or provincial governments decide to cede responsibility for service delivery to private actors, they must ensure that the private sector complies with quality standards. However, despite innovative attempts by provinces to monitor and regulate select service providers (Hasanain et al., 2017), Pakistan currently has not established comprehensive service delivery standards for key public services. In addition, it has not yet set up independent and professional regulatory and quality monitoring systems and institutions to oversee compliance with these standards in the private sector. Thus, to ensure effective private service provision, the public sector will need to perform its role as a regulator in minimizing the vulnerability of poor segments of the population, and to ensure the affordability and quality of private sector service providers.

RECOMMENDATIONS

Addressing the constraints discussed requires providing the public with information to ensure transparency, establishing effective accountability mechanisms, reforming the management of public sector employees, and regulating privately supplied social services. This can be achieved by following four pathways: (i) increasing transparency in public financial management and service delivery; (ii) deepening devolution to ensure that performance in key service delivery functions becomes a metric for accountability; (iii) revamping the public administration system to make it more effective and efficient; and (iv) setting and enforcing quality standards for private service provision. Among these, improving transparency and accountability is a priority in providing an enabling environment for cross-cutting reforms. Efforts to deepen devolution and improve the current decentralization effort should continue both in the short and medium term. As the process evolves, accountability would be significantly improved through locally elected officials, supported by capacity building and an improved civil service, and systems that promote citizen involvement in the monitoring of services delivery.

This section outlines the rationale that reforms in each area should take. A more detailed discussion of reforms can be found in the Pakistan@100 policy note 'Nurturing People, Policies, and Institutions for Economic Development in Pakistan'.

a. Increasing Transparency and Empowering Citizens

Enhance transparency in public financial management. To enhance transparency of public financial flows, Pakistan should pass legislation that includes minimum transparency standards. Potential measures include: (i) passing a federal Right to Information Act that would provide for mandatory disclosure of key financial information; (ii) ensuring timely disclosure of budget documentation, including quarterly budget execution reports, annual financial statements (including data on public debt and contingent liabilities from sovereign guarantees), and external audit reports by the Auditor General of Pakistan; and (iii) publicizing audited financial statements of SOEs. In addition to publicizing information, leveraging modern information technology also offers a promising pathway to enhancing transparency. For example, e-procurement can increase transparency and competition, achieve cost savings and reduce corruption.

Citizen voice and agency is critical in improving service delivery. Mechanisms to strengthen the voice of citizens to hold the state, politicians and policymakers accountable can complement and further expand existing monitoring efforts at the state level to improve service delivery. This requires three steps. First, strong compacts with clear roles and responsibilities against which service providers are held accountable should be established. Second, a comprehensive monitoring of service quality, a comparison of service quality to service standards, and a publication of performance metrics is needed. Third, citizens require an avenue to provide feedback and be able to sanction service providers if they are unsatisfied. Technology holds significant potential in facilitating these steps. For example, information on service delivery performance can be easily collected and disseminated via Short Message Service (SMS). Similarly, citizen feedback can be provided through easy-to-navigate web-based applications for smart phones and by SMS responses for regular phones, which have proved to be effective in improving service delivery (World Bank, 2018e). Mainstreaming and expanding initiatives that leverage such technology, such as SMS-based citizen feedback in Punjab, an initiative that has already been expanded to cover 27 services throughout the province's 36 districts, is a promising way to improve service delivery. Improved information can also help harness the power of public pressure to increase demand for certain reforms. For example, the disclosure of pollution data and the engagement of local stakeholders will be key elements of reforms to improve environmental management.

b. Enhancing Accountability by Deepening Devolution

Strengthen local-level governments. Completing Pakistan's decentralization process by establishing elected local government authorities (LGAs) and devolving administrative autonomy, finances and expenditure responsibilities to them is necessary to enhance accountability. For this to be successful, multiple steps must be taken. First, the legal framework that establishes LGAs and defines their functions needs to be developed. Second, provincial finance commissions must be strengthened to empower LGAs in matters of finance, resource allocation and revenue collection to ensure greater fiscal autonomy of LGAs. Third, efforts must be made to ensure effective coordination (across all tiers of government) on key areas such as taxation, the regulatory environment and strengthening the role of LGAs as the primary agent for service delivery. Fourth, mechanisms to enhance local-level accountability must be established, for example by creating opportunities for local-level deliberation to promote community-based consultations, deliberations and participation in decision-making.

Improve coordination between distinct horizontal and vertical levels of government. Effective responses to some of Pakistan's development challenges require improved coordination between federal, provincial and district governments, and across governmental agencies. For example, environmental challenges such as air or water pollution require a subnational approach to policymaking and implementation, which calls for strengthening provincial EPAs and empowering cities to play a key role in environmental management. Similar coordination is needed in other areas, such as taxation, disaster risk management or the business environment. Pakistan has yet to develop the institutional coordination arrangements across horizontal and vertical government levels to address these challenges. To improve coordination, the central level could formulate national policies, provide strategic guidance, link provincial-level initiatives to a broader national vision, and provide incentives for cooperative behavior. A formal dispute resolution mechanism could facilitate the overall process. Coordination platforms such as the Council of Common Interest could be used as a forum to address interjurisdictional issues.

c. Improving Public Sector Management and the Capacity of the Public Sector

Improve human resource management and technology. Pakistan's human resource management apparatus, including recruitment, in-service training, career progression, remuneration systems, performance management, and accountability needs to be transformed. This will entail strengthening the ability of the Public Service Commissions at the federal and provincial levels to select those candidates who are best suited for specific jobs. To improve performance management, the government could consider revising the system of annual confidential performance evaluation reporting by introducing a modern, IT-based performance assessment and appraisal system for civil servants, with the possibility of introducing performance contracts. At the same time, expanding the use of technology to improve the performance of civil servants and engage citizens is a priority. This can, for example, entail collecting and curating data on citizens' behavior and needs, and leveraging technology to facilitate accounting, performance management, outcome measurement, knowledge management and communication with citizens.

Building skills. Developing the capacity of civil servants is needed to align the demands of the economy with the skill sets of government employees. This can be achieved through two pathways. First, skills can be built through in-service training and capacity-building programs, for example by strengthening the federal civil services specialized training institutes to offer domain-related training that enhances technical knowledge and skills. This includes the provision of qualified trainers and the development of domain-related, demand-based training courses and making the completion of some courses mandatory requirements for promotion.

Second, skills can be acquired through improved recruitment methods. As such, the government could consider reskilling the civil service by focusing on closing skill gaps in the areas of technology, economic transformation and people-centric service delivery. Taken together, these three systemic capacity gaps are largely to blame for below-par performance among public sector functionaries.

Enhance monitoring and implementation capacity. Policy implementation in select areas is constrained by a lack of state capacity, either arising from a lack of information or an absence of institutional mechanisms. Necessary improvements include a system that periodically monitors the accumulation of regulatory burdens on firms. Similarly, improving the measurement and monitoring of air and water quality can help enhance capacity to enforce environmental regulations.

d. Regulating the Private Sector

Encouraging private sector participation. As the public sector defines its boundaries, it opens up space for private sector participation. Ensuring that the private sector provides social services to a satisfactory level requires the government to provide and enforce a strong legal and regulatory framework within which the private sector can perform. Creating an enabling environment for effective private sector participation would require the enforcement of property law and contractual rights, the control of corruption, and the development of an appropriate regulatory framework. In the long term, a well-designed consultation program should be set up with the private sector based on a sound policy on public-private partnerships (PPPs).

Setting and monitoring service delivery standards. Minimum service delivery standards (at least for key sectors) need to be established. Following the development of service delivery standards, a body to monitor compliance with service delivery standards should be established, making use of the publicized statistics generated based on the transparency recommendations. Monitoring of performance vis-à-vis agreed targets can act as an incentive to improve quality by supporting competition. This can be done by a council consisting of technical experts who monitor outcomes vis-à-vis the agreed goals and bring bi-annual monitoring reports into the public domain, for example through presentations to parliament.



CHAPTER 7 | Way Forward

A Pakistan that achieves high and sustained growth, and curbs population growth, to reach upper middle-income status by 2047 would look very different from the Pakistan of today. It would be a country in which every child has access to a good education, mothers do not die giving birth and in which life opportunities are not predetermined before being born. An upper middle-income Pakistan would also be a country in which people no longer primarily work on farms, but are instead employed in highly productive, innovative and well-managed firms. It would be a country that has ensured that everyone, especially women and those from low-income households, is given the chance to contribute to and benefit from the country's progress. It would also be a country that has responsibly managed its natural-resource base by reducing air and water pollution, and improved water use. Finally, a Pakistan that reaches upper middle-income status on its centenary would have a political system in which political leaders respond to the demands of their citizens and where the public sector efficiently implements the government's ideas.

There is, however, a different, much less desirable, possibility for Pakistan's future. Pakistan's rise to upper middle-income status requires the formulation and effective implementation of a wide range of reforms that span all parts of government, the private sector and society. Pakistan's future looks very different if it fails to achieve these reforms: income levels will be close to what they are today, with large parts of the population, especially women, deprived of economic participation. Its consumption-based growth model, low tax revenue and inefficient resource use will have prevented crucial investments, and instead continued Pakistan's pattern of boom-and-bust growth cycles, and depleted the country's natural-resource base. In addition, its political system will remain influenced by elites that will continue to capture the majority of the economic benefits.

This report has highlighted a potential pathway for the more ambitious scenario to materialize, allowing Pakistan to become an upper middle-income country by 2047. The discussion of needed reforms put forward in this report may seem overwhelming. However, there is significant capacity for implementation, and with the right governance environment, and a strong and solid constituency for reforms that demands progress in these areas from the authorities, much of what is being proposed is possible. The following paragraphs chart a path for the federal and provincial authorities in Pakistan to start a process of reform that puts Pakistan on a faster and more sustainable growth trajectory.

a. What are the priority areas for reform?

Turn Pakistan's large youth bulge into a demographic dividend. The first step toward this demographic dividend is to lower fertility rates. Lower fertility is associated with improved development outcomes (health, education) for both mothers and children. Declines in fertility are also associated with a country's increased savings and ability to invest. Lower fertility can also lead to increased female labor force participation. The impact of improved population management will be wide ranging and significant. *To achieve lower fertility rates, Pakistan needs to develop comprehensive awareness programs to encourage informed decisions on parenthood.* Awareness programs should go beyond services and information for birth control, and also prepare young people for parenthood by including information on reproductive health,

through health, nutrition and stimulation. women's health, and child development through health, nutrition and stimulation. *Investments in human capital should prioritize early childhood development, with targeted programs that support children during the crucial first 1,000 days of the life cycle.* In addition to parental support for family size and preparing young people for parenthood, as suggested above, support should include a pregnancy package, with pre-and ante-natal care and information on nutrition, a birth package, including attended skilled delivery, birth registration and exclusive breast-feeding, and a child health and development package, including immunizations, deworming, malnutrition treatment, a pre-school package and a family life education package to introduce respectful gender-based interactions as models. *Pakistan needs to increase public spending in social sectors but, given limited fiscal space, the first priority is to improve the efficiency of current spending.* Equipping young people with the necessary human capital to participate in the labor market requires interventions in the primary, secondary and tertiary education levels. In addition to meeting targets in enrolment and completion rates, the government needs to focus on improving the quality of education, including through curriculum reform, teacher training and improved governance in the education sector. Skills development and upgrading opportunities for the existing stock of the labor force who have missed out on the earlier opportunities for human capital are important. A suite of second-chance interventions for skills development for individuals of diverse needs and abilities can be considered, such as adult literacy and numeracy programs and interventions to link workers to jobs through information provision and intermediation services.

Pakistan needs to increase fiscal space if it is to invest more in its infrastructure and people. To increase investment levels, Pakistan requires increased fiscal space to afford public investments that crowd in private financing and build the human capital of its people. This requires *a concerted effort to mobilize tax revenue that focuses on tax administration, making it taxpayer-friendly, efficient and able to leverage modern technology, and on the tax code, simplifying it and supporting federal-provincial harmonization and integration.* Increasing fiscal space also requires improved coordination between the provinces and the federal government on fiscal policy. Finally, increasing fiscal space requires a focus on the efficiency of public spending to ensure that every rupee spent has the greatest possible impact on crowding in private investments, building human capital and contributing to Pakistan's growth.

Leverage competitive forces to transform Pakistan's economy. Pakistan's economy has not changed much during the past 30 to 40 years, partly because the private sector has not been subject to the type of competitive pressures that results in a reallocation of resources to more productive uses. Incumbent firms are often protected from competition through regulations and barriers to entry, as well as protectionist trade policies. Increased competition in domestic markets will unleash the private sector's creative and innovative forces. *Adopting a more open trade and investment policy, particularly within the South Asia region, will expand market opportunities for Pakistani firms, increase competitive forces at home, while also facilitating access to modern technologies and improved management skills and business processes. To achieve and sustain a conducive environment for private investment and innovation-driven growth, Pakistan should strengthen its investment climate through legal and regulatory reforms that reduce the procedures, risks, costs and time associated with investing and doing business in Pakistan.*

Pakistan needs to ensure that the pricing of resources, especially water, reflects their scarcity and promotes sustainable use. Water needs to be used more efficiently in the agriculture sector, which accounts for over 90 percent of water use. Overcoming constraints to sustainable growth requires moving toward *abiana* rates that promote water saving and efficient use, and a 'green' investment regime that reflects pollution and other environmental implications in investment costs. Getting prices right also requires eliminating environmentally damaging subsidies and consolidating support to the agricultural sector to generate fiscal savings and promote efficient and sustainable farming practices. The correct pricing of resources needs to build on stronger institutions and regulatory frameworks, and measuring and monitoring systems—all currently relatively weak. As a first step, therefore, *Pakistan needs to strengthen institutional capacity and information and monitoring systems, which can then be used to better manage and price resources appropriately.*

b. How can the governance environment enable these reforms?

To ensure successful implementation of sectoral reforms, Pakistan must complete its devolution process. For reforms to be effective, a strong governance environment in which political leaders formulate policies that are in the public interest and manage public officials to work toward effective implementation is required. *Revamping devolution—a key way to enhance the accountability of political leaders and thus strengthen the governance environment—requires three steps.* First, Pakistan should revise its decentralization framework to clarify the distribution of expenditure responsibilities between the center and the provinces, and to link central transfers to provincial expenditure requirements. Second, provinces should establish elected local government authorities and devolve administrative autonomy, finances and expenditure responsibilities to them. Finally, effective decentralization requires improved coordination between federal and provincial departments.

Measures that enhance transparency and strengthen the voice of citizens contribute to reform implementation. Allowing voters to assess the performance of their leaders requires providing them with information and accountability mechanisms. *Added transparency is especially needed in two areas. First, Pakistan should pass legislation that includes minimum transparency standards for public financial management to give citizens access to information on the flow of public finances. Second, it should mainstream and expand efforts to publicize statistics on service delivery, and provide citizens with mechanisms to assess service delivery performance and sanction poor providers.* Existing efforts relating to e-governance, for example initiatives that provide platforms for citizen feedback, or SMS-based awareness campaigns that raise knowledge about citizens' rights, are a promising first step in this direction.

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