

The PIDE Reform Agenda for Accelerated and Sustained Growth



R.A.P.I.D

(Reforms for Accelerated Prosperity and Inclusive Development)
Pakistan Institute of Development Economics

The PIDE Reform Agenda

to unleash

**Productivity, Investment, Vibrant Cities,
Markets, Openness, Creativity, Internet Access,
and Technology Usage.**

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PAKISTAN INSTITUTE OF DEVELOPMENT ECONOMICS

PIDE Growth Commission

Salman Shah, Adviser, Government of Punjab
Shahid Kardar, Former Governor, State Bank of Pakistan
Pervez Tahir, Former Chief Economist, Planning Commission of Pakistan
Shahid Sattar, Executive Director, APTMA
Amer Z. Durrani, President, Reenergiza and Paidartwanai
Haroon Sharif, Former Chairman, BOI
Moqees Ul Haque, Chief Commercial and Group Strategy Officer, PTCL
Asma Hyder, Dean & Professor, School of Economics & Social Sciences, IBA
Mubarak Ali, Former Member, Planning Commission of Pakistan
Syed Ismail Shah, Former Chairman, PTA
Manzoor Ahmad, Former Ambassador, WTO
Zafar Mahmood, Professor, NUST
Aman Ullah, Chief Economist, Government of Punjab
Nasim Beg, CEO Arif Habib Consultancy
Ikram ul Haq, Advocate Supreme Court and International Tax Counsel

Secretariat at PIDE

Nadeem Ul Haque, Vice-Chancellor
Idrees Khawaja, Senior Research Economist
Ahmed Waqar Qasim, Research Economist
Omer Siddique, Senior Research Economist
Shahid Mahmood, Research Fellow
Durr-e-Nayab, Joint Director
Shujaat Farooq, Assistant Professor
Afia Malik, Senior Research Economist
Abedullah Anjum, Chief of Research
Abdul Jalil, Professor, SBP Chair
Mohammad Shaaf Najib, Staff Economist

Coordination

Nabeel Anwar, Staff Officer to Vice Chancellor

Report Design & Infographics

Muhammad Ahsan Zeb, Graphic Designer

Cover Page Design

Naqsh Haque

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Foreword

Think tanks and universities are a looking glass for society and policy. They should be imaginative and challenging the rest of us to dream and debate the future of society. Thinkers and researchers can pose questions that leaders might hesitate to raise, constrained as they are by their constituencies.

Sadly, in Pakistan universities are thought of as mere teaching institutions. Leaders of society and industry view ideas and research as a luxury and not a necessity. As far as ideas are concerned, we consider ourselves as passive and mere recipients. The refrain in elite circles is that our path is merely to follow.

In terms of policy, we have become beholden to international consultants that came to us through aid. Our universities are neither consulted nor treated with respect. The Pakistan Institute of Development Economics (PIDE) is fighting back with ideas to show that domestic think tanks and universities must be agents of change and new ideas.

PIDE has always led public policy, starting with the 22 families, to the development of trade liberalization to the estimation of input-output models, to the development of the demographic dividend to the estimation of the middle class. More recently, we took the lead in the analysis of the Covid-19 pandemic on the economy. PIDE has also led the debate on issues related to cities and their master planning, urban mobility, domestic commerce, civil service reform, generational accounting, the economics of tobacco and now economic growth.

Issues of national importance must be widely discussed and debated and yes, a public think tank has an important role in promoting ideas for improved welfare. For this reason, PIDE is also widely disseminating its work through webinars, academic and user-friendly publications, videos, YouTube channels and social media.

PIDE took up the challenge of developing a growth framework by soliciting the aid of a PIDE Growth Commission comprising of some of the most eminent names in academic and policy circles. PIDE staff worked with this commission intensively for eight months to develop a well-researched consensus document that lays out a comprehensive plan for achieving a sustained growth acceleration.

Our expert consensus is that our policy approach for growth and development continues to rely on the old Haq/HAG model looking for foreign financing to build hard infrastructure. Not only has this led to increasing debt problems but also to poor asset management and deteriorating governance and community. It is important that policy now focuses on developing the “software” of the economy and society. This recommended approach of building “software” is in keeping with the latest literature on economic growth and development which argues that ideas, knowledge and institutions are critical to achieving a growth acceleration (see Acemoglu and Robinson, Romer and Lucas).

I thank all the members of the PIDE growth commission and our researchers at the PIDE for their hard work. We now have a consensus document that can be used to drive the debate on our growth policy.

I would like to tell our social science and public policy community that this document also outlines several important research themes that we should all investigate further. This is a reform agenda that will require many years to implement. During that period of implementation, several areas of reform will require deeper investigation while constant monitoring and evaluation will be imperative for success.

I hope I have convinced you that this is an important document that requires attention in both policy and academic circles. I hope it will initiate debate, discussion and further research.

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List of Acronyms

AEDB	Alternative Energy Development Board
AI	Artificial Intelligence
AJK	Azad Jammu & Kashmir
BISP	Benazir Income Support Program
BOI	Board of Investment
BOP	Balance of Payment
CD	Custom Duty
CDA	Capital Development Authority
CNIC	Computerised National Identity Card
CPPA-G	Central Power Purchasing Agency-Guarantee
CTBCM	Competitive Trading Bilateral Contract Market
DHA	Defence Housing Authority
DISCO	Distribution Companies
DSA	Debt Sustainability Analysis
DTRE	Duty and Tax Remission for Exports
E&P	Exploration & Petroleum
EODB	Ease of Doing Business
ETPB	Evacuee Trust Property Board
EU	European Union
FAR	Floor Area Ratio
FATA	Federally Administered Tribal Areas
FDI	Foreign Direct Investment
FST	Federal Service Tribunal
GDP	Gross Domestic Product
GENCO	Generation Company
GFCF	Gross Fixed Capital Formation
GM	Genetically Modified
GOR	Government Officer Residence
HAG	Harvard Advisory Group
HRM	Human Resource Management
IFEM	Inland Freight Equalization Margin
IMF	International Monetary Fund
IPP	Independent Power Producer
KPI	Key Performance Indicator
LDA	Lahore Development Authority
LG	Local Government
LMC	Lahore Motorway City
LNG	Liquified Natural Gas
M&E	Monitoring and Evaluation
MOU	Memorandum of Understanding
MRI	Magnetic Resonance Imaging
NAB	National Accountability Bureau
NDFC	National Development Finance Corporation
NEPRA	National Electric Power Regulatory Authority
NOC	No Objection Certificate
NTDC	National Transmission and Despatch Company
NTP	National Tariff Policy
OES	Overseas Employment Scheme
OGRA	Oil and Gas Regulatory Authority

OMC	Oil Marketing Company
PHATA	Punjab Housing a Town Planning Agency
PICIC	Pakistan Industrial Credit and Investment Corporation
PIDE	Pakistan Institute of Development Economics
PPIB	Private Power Infrastructure Board
PSDP	Public Sector Development Program
PSE	Public Sector Enterprises
PSO	Pakistan State Oil
R&D	Research and Development
RBM	Result Based Management
RLNG	Regasified Liquified Natural Gas
SNGPL	Sui Northern Gas Pipelines Limited
SRO	Statutory Regulatory Order
SSGCL	Sui Southern Gas Company Limited
TFP	Total Factor Productivity
TIFA	Trade and Investment Framework Agreements
TMA	Tehsil Municipal Administration
UFG	Unaccounted for Gas

EXECUTIVE SUMMARY

To absorb the youth bulge, which Pakistan has, into gainful employment and sustain our high level of debt, PIDE's estimates suggest that the country must grow at a rate of 7-9% per annum for a sustained period of three decades.

We want to emphasize two things at the outset. First, the 7-9% growth rate is not the projected rate; rather, it is the rate required to stay out of the woods. Second, moving to a high and sustainable growth trajectory calls for breaking away from the past, which is possible only if we undertake deep-seated structural reforms in almost all areas influencing growth. This document lays down the reform agenda, pursuing which would put the country on a high and sustained growth trajectory.

This reform agenda focuses upon reforming almost every area that directly or indirectly influences economic growth. This includes, to begin with, reforming the functioning of the state itself. The agenda recognizes that investment and entrepreneurial activity cannot happen in markets without an enabling and facilitative role of the government. Thus, the agenda emphasizes reorienting the role of the government to function as an 'enabler' in the economy.

The agenda focuses upon the medium to long term, and the emphasis of suggested reforms is upon providing a level playing field to all and sundry to encourage a competitive environment, which is crucial for innovation and growth. Therefore the agenda avoids a sectoral approach and refrains from picking a few sectors as 'winners' or recommend specific fiscal measures for any sector.

Investment and productivity are the two major drivers of growth in any country. Both are not only relatively low in Pakistan but are on a declining course as well. The challenge then is to significantly raise the investment rate and productivity. Research has amply demonstrated that the state of institutions is a key determinant of the growth of any nation. Realizing the resource constraints that the country face, this reform agenda emphasizes reforming institutions (laws, rules, procedures and, processes) to raise productivity and investment. Thus, the focus is on altering the software of growth to improve public and private investment productivity.

Addressing the restrictive regulatory regime and procedural bottlenecks that the investors face will improve the productivity of private investment and increase its magnitude and give a much-needed boost to our low investment rate. This reform agenda takes the view that the process of public investment undertaken through the federal and provincial PSDPs is flawed – right from how projects are identified to the post-completion assessment of the returns to investment or impact on the economy and society. The agenda recommends using the Result-Based Management Framework (RBM) to identify projects suitable for public investment, monitoring implementation, and assessment of outcomes. The RBM is outlined in this report.

Economic transactions happen in markets – the greater the number and magnitude of transactions, the greater the GDP. Markets for many products are somewhat underdeveloped because these lack the institutional infrastructure so crucial to the efficient functioning of markets. Information about the price, quality and the state of demand and supply is key to the functioning of markets – the institutions that develop, process, and convey this information are either non-existent or are underdeveloped. Similarly, the entire transaction process, including the technology used to process transactions, is often a strain on the cost of transactions. Finally, full information about the solvency and creditworthiness of the parties is often not available. Using the case of three markets – real estate, agriculture, and energy (electricity, gas, and fuel oil) we illustrate what constrains the development of markets and offer primarily institutional solutions to alleviate the constraints. Establishing that one of the constraints to the development of competitive markets is a heavy government footprint on the economy, we argue for the exit of the government from the markets.

Cities are believed to be the engine of economic growth. The cities that encourage economic activity are dense, high-rise, mixed-use, and inclusive. These cities provide work, home, markets, school, hospital, and leisure for all close to each other. By clustering economic activities, these cities generate knowledge spillovers, on the one hand, and reduce transaction costs on the other. This is an environment conducive to innovation, which is crucial for economic growth. The current regulatory framework does not allow the emergence of such cities. The reform agenda recommends rethinking the regulatory environment surrounding city zoning, construction regulations, car-use, public spaces, among other things, to unleash such cities that facilitate economic activity to their fullest.

Realizing that economies grow in a competitive environment and that only open economies are competitive enough, the agenda identifies policy, regulatory, and procedural constraints that inhibit openness and suggests measures required to increase the degree of openness.

The reform agenda also recognizes that technology led by artificial intelligence (AI), 3D printing, and robotics, to name a few, are disrupting almost every field, including goods, services, jobs, and information. We stress upon developing state capacity to understand and meet the emerging challenges. This would require embedding research in all activities, just like the countries leading the scientific and technological advances. This would also require disrupting the education system to foster problem-solving skills and creativity. To begin with, this calls for almost universal internet access, and the agenda recommends spending state resources to make the internet available and affordable. We believe that the payoffs from this would be more than the typical brick and mortar projects that the PSDP funds.

The heightened economic activity that the agenda strives for is not possible in the prevailing governance milieu. To make this agenda work, governance will have to be rebuilt with government processes and research capable of undertaking reforms. Much of the mess faced in the energy sector, railways, other PSEs, education, and health sectors is due to a lack of autonomy in these sectors and because policy, regulation, and administration of these sectors are not separated. The kind of economic activity the reform agenda aims at calls for an efficient government. Arguing that an efficient government is a decentralized one, we recommend that federal and provincial governments must be focused only on policy formulation, monitoring, and evaluation. The task of regulation may be left to independent regulatory agencies staffed with professionals. Service delivery requires closeness to stakeholders, and therefore, services are best delivered by local governments. These are to be made functional in letter and spirit.

The reform agenda includes a comprehensive agenda for tax reforms to mobilize additional resources. This agenda comprises the following measures: (i) make the tax system more progressive and remove the tax breaks and concessions available to the upper-income groups; (ii) achieve a simpler, more transparent and friendly tax system; (iii) build a more revenue-yielding and buoyant tax regime; (iv) establish mechanisms to check tax evasion and corruption. The proposals encompassing this tax reform agenda have been discussed in Chapter 10 on public finances.

Pakistan has long struggled with macroeconomic stability and debt sustainability. The reform agenda emphasizes that the threats of macroeconomic instability, including the BOP imbalance and the debt trap, can be avoided only by attaining sustained growth acceleration. However, the potential of short-term hiccups temporarily derailing the reform process cannot be ruled out- reforms cannot be thought of as a preconceived agenda but a path to a goal with the path constantly needing readjustment as experience develops.

Finally, the success of the reform agenda hinges on reconfiguring the governance system to serve as an 'enabler' in the economy, and the most significant risk is that we may not fully succeed in reconfiguring governance.

The reform agenda proposes 91 concrete action points shown in the box below.

Action Points

Effectiveness of Public Investment

1. Use Result Based Management Framework (Box 3.1) for Public Investment. This would increase the effectiveness of public investment.
2. Shift focus on brick-and-mortar projects in favour of projects involving software of the society (For example, invest in R & D, developing human capital, and Access to the internet for all, etc.).
3. Ensure that project preparation and approval are informed by research, preferably undertaken at local universities.

Improving Investment Climate

4. Reduce the government's footprint on the economy – a good starting point would be the withdrawal of the government from the wheat market and sugar market.
5. NADRA's database should verify a person's profile – no need to submit attested copies of CNIC.
6. Network government departments and concerned agencies using technology and digitization. All this would reduce documentation and transaction cost.
7. Reform legal framework/judiciary to reduce litigation time.
8. Foster policy consistency, where required, and provide legal protection to policies to ensure consistency.

Reforming Markets

Real Estate Market

9. Encourage Real Estate Agent associations in various cities and regions on a self-policing and licensing system. These organizations should develop agent responsibilities and codes.
10. Abolish development by housing societies and cooperatives.
11. Developing and building should be a business of bonded licensed builders.
12. Develop a system of open, transparent electronic titles to property - no paperwork, go for automation and digitization.
13. Do away with stamp papers and transaction taxes.
14. Abolish DC rates. Buyers and sellers to disclose the price. The government to enjoy the right to buy at a declared price (this will keep buyers from declaring low prices).
15. Brokers' groups to develop an online listing service. No sales without appearing on listing service.
16. Property to be sold only after a 'for sale' sign remains on the property for at least a week.
17. Settlement attorneys to handle transaction paperwork electronically to complete the sale in a week.
18. Title agents to search and guarantee title against a fixed fee.
19. Amend rental laws to allow the rental investment industry to thrive.
20. Impart training to judges on real estate matters.

Agriculture Market

21. Government to gradually exit from wheat and sugar markets – no fixation of minimum support price and no purchases by the government from the farmers.
22. Mandate registration of seed supply firms through the Seed Act.
23. Seed supply firms to appropriately label their products to cover the information gap.
24. Revisit the approval process of new varieties to reduce the government footprint.
25. Adequately price irrigation water to encourage an efficient cropping pattern.
26. Reduce footprints of the government in the input markets, such as fertilizer, water, and extension, to let the markets operate efficiently.
27. Develop a regulatory framework for the use of groundwater.

Electricity Market

28. Focus on renewables for electricity generation. Distributed Generation offers a solution to retail competition and supplies electricity to those areas where the national grid is not feasible.
29. Supply electricity on a pre-payment basis - use smart metering technology.
30. Lease the difficult 'retail' areas to the private sector for a certain period – execute performance-based management contracts.

31. Allow only targeted subsidy on electricity and ensure its timely payment to concerned agencies.
32. Reduce the government footprint in the state-owned DISCOs and tariff determination

Natural Gas Market

33. Outsource 'retail' management for controlling theft, and install high-quality measurement devices to address the issue of Unaccounted for Gas (UFG).
34. Do away with 'Return on Assets' for allowing the Gas distribution companies to profit. Their profits should come from operational efficiency.
35. Have a single consumer tariff based on a cost-of-service.
36. Offer only targeted subsidy where necessary.
37. Have a progressive and market-based exploration policy - well-head prices based on demand and supply.
38. Revisit long-term LNG agreement to unlock some of the gas volumes and allow these to be purchased by other parties (third-party access) on short-term contracts or in the spot market.
39. Achieve convergence between the price of piped indigenous gas and RLNG.

Fuel Oil Market

40. Limit the role of government in pricing and allocation.
41. Determine petroleum prices weekly on a cost of service basis linked to international oil prices, and abolish IFEM.
42. Ex-refinery prices to be based on international practice – the regulator to set an upper limit based on the weighted average of the import prices of all OMCs.
43. Enhance oil trading and vessel chartering expertise of the PSO. Outsource oil procurement based on performance contracts.
44. Eliminate 7.5 percent deemed duty on diesel collected by refineries since 2002, as they are not upgrading their refining plants.

Building The State

45. Separate policy formulation, administration, and regulation.
46. Make the LGs operational in letter and spirit.
47. Mayors should be directly elected.
48. Clearly define the role of three tiers of government: federal and provincial governments should be more concerned with policy formulation and M&E. LGs to be responsible for most of the service delivery.
49. All ministries should publish annual reports on their performance.
50. Make regulatory bodies independent of the executive.
51. Do not post bureaucrats as executives in regulatory bodies or as directors on their boards.
52. Reform Civil Service - All points included in Box 5.4.
53. Reform Judiciary - All points included in Box 5.6.

Creative Cities

54. Vest the management of a city in a single authority
55. Do away with long-term, rigid city master plans – replace these with loose guidelines.
56. Zoning should merely differentiate between city centers and suburbs.
57. Relax floor area ratio to allow high-rise buildings.
58. Develop a rental housing market.
59. Develop a Car Policy with salient features like; congestion tolls and paid street parking.
60. Sell Apartment Parking separately from the apartment.
61. Develop an efficient public transport that serves most parts of the cities, especially its dense areas.
62. Look at street vending as a legal activity and establish street vending zones across the city.
63. Unlocking dead capital: Create a city wealth Fund. Entrust the management of all unutilized and low yield public land (like government housing) to the city wealth fund for better use – Let the Wealth Fund put such lands to uses like construction of high rise buildings for commercial and residential use

Openness

64. Revisit tariffs, including regulatory duties, and rationalize these to encourage competitiveness and openness.
65. Export subsidies, if at all given, must be linked to the performance of the recipient firms and be automatically withdrawn when thresholds are crossed.
66. Maintain a fair exchange rate to encourage a competitive environment – neither overvalued nor undervalued.
67. Focus on skills such as; e-commerce and artificial intelligence. This will make the manufacturing as well as service industry efficient.
68. Establish a cell in the Ministry of Commerce to focus on export-related issues of services.
69. Build capacity of the Authority responsible for facilitating compliance with standards.
70. Simplify procedural compliance with incentives schemes like DTRE and OES.

Internet Access

71. Make internet widely and cheaply accessible - consider fully funding fast internet access to all major cities within 2021.
72. Look at the sale of Spectrum (i.e. frequency) to mobile phone operators as an internet access issue rather than revenue generation.

Taxation

73. Discontinue the different tax treatment of blocs of income derived as dividends and interest from financial instruments. Club these sources of income as a part of total income and convert the taxes deducted at source into regular withholding/advance taxes.
74. Drop the concept of a maximum holding period beyond which a capital gain in a transaction is taxable. Tax capital gain at lower rates ranging from 15% to 5% depending on the length of the holding period.
75. Factor in minimum corporate tax in allowable capital expenditure so as not to discourage investments.
76. Introduce the Point of Sale requirement for all retailers located in all major cities.
77. Allow debt servicing of housing loans as deductible expenditure for up to 15% of taxable income
78. Restrict the tax treatment of provisioning of poorly performing loans to SMEs, small farmers, and housing.
79. Revisit exemptions and reduced rates in the different sales tax schedules.
80. Remove the cascading of sales tax on petroleum levy.
81. Transition to a more transparent import tariff regime with the abolition of regulatory duties and quasi-tariffs.
82. Convert the minimum income tax paid on imports into an advance withholding tax.
83. Levy of excise duty on industries that pollute the environment or consume scarce resources.

Preparing For The Future

84. Make E-governance the norm in 2021 in all government offices, education, and health sectors.
85. Recognize that the composition of the job market will change in the future – some jobs will be lost while many new ones will be created.
86. Disrupt the education system to prepare for the above – foster creativity and problem-solving skills in students.
87. Mainstream R&D everywhere in Pakistan by placing a large premium on research — again problem-solving and creativity.
88. Have an agile policy that takes advantage of changing technologies and Artificial Intelligence in all fields.
89. Develop a market environment that fosters innovation and risk-taking while allowing winners to emerge.
90. Starting businesses and killing businesses should be easy and digitally driven.
91. Policy and regulation must be based on research and M&E.

Social Protection and Ehsaas Strategy

Recently, the federal government has established Poverty Alleviation and Social Safety (PASS) Division, with the branding of 'Ehsaas' to uplift marginalized people. A five pillar Ehsaas strategy has been devised, having more than 140 policy actions and initiatives to reduce inequality, invest in people, and lift lagging districts. This includes:

- i. Address elite capture and make the system work for equality of opportunity
- ii. Provide effective and comprehensive safety nets for the marginalized and the vulnerable
- iii. Create livelihoods and jobs for the poor
- iv. Invest in people for human capital formation; and
- v. Lift lagging areas

To achieve the desired results from the Ehsaas strategy, PASS Division should focus on the following aspects:

- 1. Coordination among vertical and horizontal tiers:** The policy will be implemented by various federal and provincial ministries. Robust coordination is required among various tiers having clear roles & responsibilities and accountability.
- 2. Operational strategy:** In consultation with implementing arms, PASS must develop and implement an operational strategy where certain tangible targets against each of the policy action should be mapped along with resources.
- 3. Social protection framework:** Both the federal and provincial governments are running several social safety net programs. This has led to duplication as well as the exclusion of some of the deserving. To make a real impact, PASS Division should work on the consolidation of all such programs and also formulate a social protection framework by enlisting the roles and responsibilities of both the federal and the provincial governments (Nayab and Shujaat, 2020).
- 4. Stable macroeconomic environment:** To expect poverty alleviation from social safety nets programmes alone is not pragmatic. The provision of unconditional and conditional cash transfers will not eradicate poverty in regions deprived of education, health, and infrastructure and market connectivity. A stable macroeconomic environment is needed, with more stress on soft infrastructure than physical.
- 5. Create opportunity for the poor:** Most importantly, we need to give space to the poor to grow as mere handouts would not do so. A cash transfer cannot be a substitute for an opportunity. Exclusion from opportunity is the biggest reason for the people staying poor. The "apartheid social regime" (Haque, 2019a) excludes the poor in housing, employment, leisure and space from entrepreneurship, obstructing their way to exit from poverty (Haque, 2019b). Access to opportunities can do what cash transfers may not do, that is, moving out of poverty.

The reform agenda recognizes that we do not have enough knowledge about certain subjects. For example, what will be the cost of providing internet access to almost the entire population of the country? Therefore the agenda lists down potential areas of further research at the end of each chapter. PIDE would undertake and encourage research on all these areas to inform policy.

REFERENCES:

- Haque, N. U. (2019a). Why not Khokhas Everywhere? <https://pide.org.pk/blog/why-not-khokhas-everywhere/>
- Haque, N. U. (2019b). Where Are the Opportunities for the Poor? <https://pide.org.pk/blog/where-are-the-opportunities-for-the-poor/>
- Nayab Durre and Shujaat Farooq (2020). Unconditional Cash Transfer and Poverty Alleviation in Pakistan: Analysing BISP's Impact on Households' Socioeconomic Wellbeing from 2011 to 2019. PIDE Policy Viewpoint, no 18:2020

PAKISTAN'S GROWTH EXPERIENCE

"Pakistan is, by most accounts, the 'sick man' of South Asia. Per capita earning of Pakistanis has slipped to the lowest in the sub-continent. Despite an agriculture base, 40% of our children are stunted. The pandemic exposed the critical shortfalls in our healthcare. 44% of children do not attend school regularly. The majority that do, receive mediocre education. Large parts of major cities are slums, lacking basic utilities, including safe drinking water. An estimated 5 Mn people are unemployed, and we struggle to find jobs for the 2 million that reach the age of employment each year. The country has deindustrialized prematurely. We have lost share of world exports. The economy is consumption-based, reliant on imports, even for basic goods. Pakistan suffers from one of the highest electricity tariffs in the world. It also has one of the lowest productivity rates. Our agriculture is in a poor state. Not only are food shortages leading to an unbearable burden of inflation, unchecked, they also threaten food security."

Pakistan Business Council

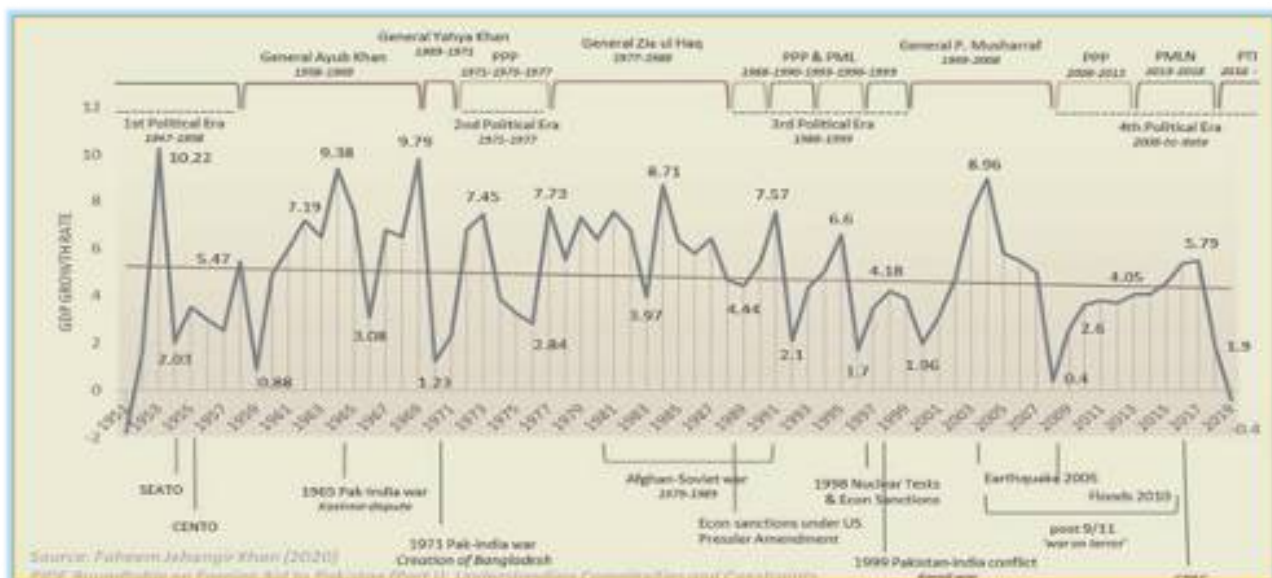
<https://www.pbc.org.pk/research/pbcs-charter-of-economy/>

VOLATILE AND EPISODIC GROWTH

Pakistan's economic growth performance, over the last seventy-two years, has fluctuated widely:

- Decades of the sixties, the eighties, and a major part of the 2000s registered high growth episodes (over 6.0%).
- Low growth was observed in the rest of the periods.
- In the last twelve years (2008-20), growth averaged 3.25% annually and crossed 5.0% just twice.

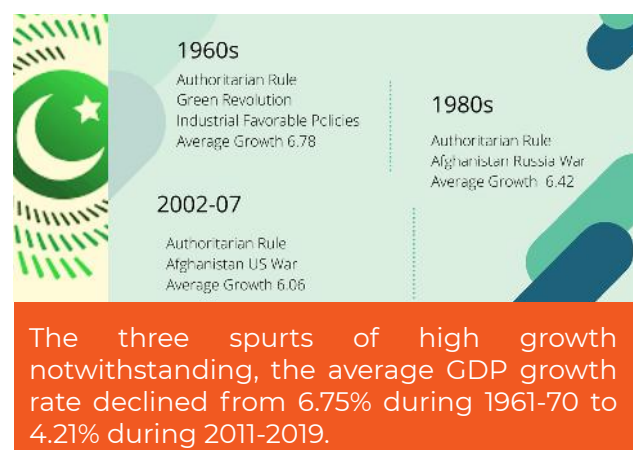
Figure 1.1: Historical Growth Trend



GROWTH SPURTS

- Literature primarily associates the three high growth episodes with interrelated exogenous factors like the authoritarian regime and geopolitical rents leading to foreign aid (Figure 1.2)
- Only the first growth spurt, besides the association with exogenous factors, is also associated with a conscious development philosophy reflected in the 'green revolution' and friendly manufacturing cum export policies.¹
- Investment and productivity are crucial

Figure 1.2 : Growth Spurts

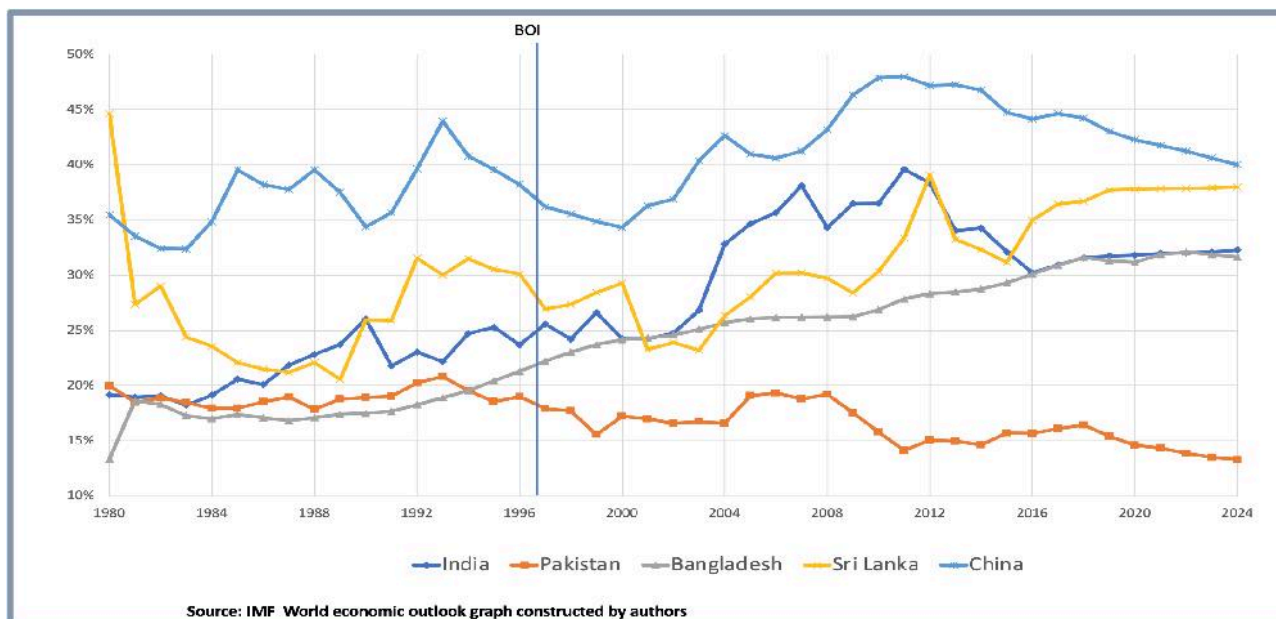


¹ See Haque et. al. Framework for Economic Growth (FEG)

DECLINING INVESTMENT AND TFP:

PAKISTAN'S HISTORICAL INVESTMENT TREND VIS-À-VIS NEIGHBOURING COUNTRIES :

Figure 1.3 : World Economic Outlook



determinants of economic growth.

- Pakistan's long-term performance on both counts has not been very impressive and by and large correlates with the declining long-term trend of GDP growth.
- Arby (2001), decomposing real GDP into long-term trends, business cycles, and short-run shocks, finds that the long term trend is of 'decline'.
- The investment as a percentage of GDP is not only declining but the country's investment rate is also less than its neighbours.

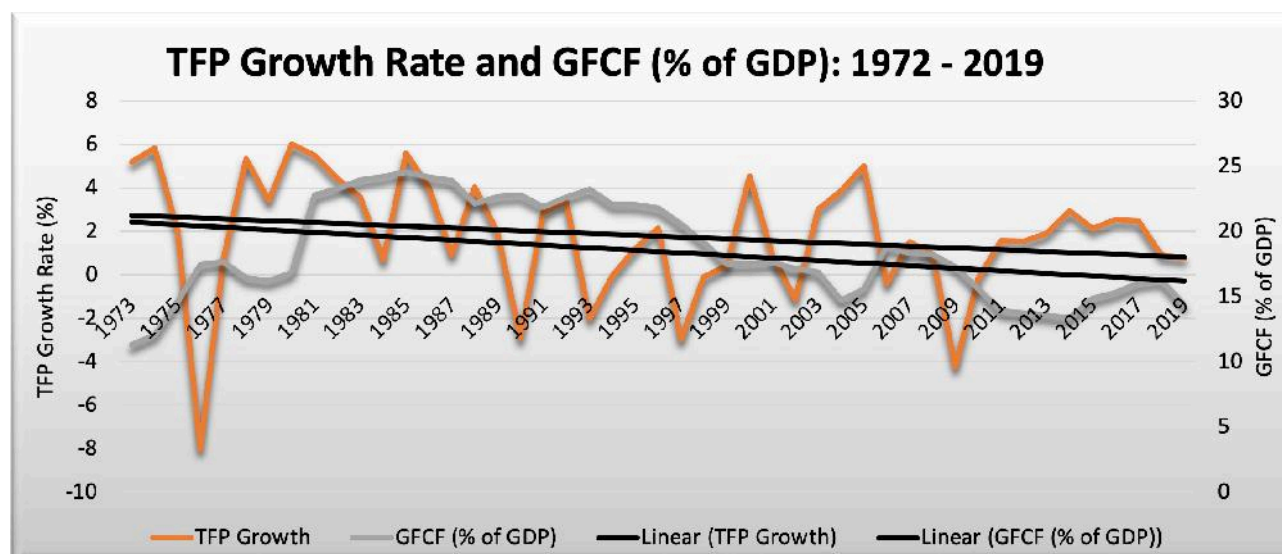
TFP: VOLATILE AND DECLINING

Figure 1.4: Total Factor Productivity

TOTAL FACTOR PRODUCTIVITY HIGH AND LOWS		
PRODUCTIVITY INCREASE DURING 1980S	PRODUCTIVITY FALL DURING 1990S	PRODUCTIVITY INCREASE DURING 2000S
<ul style="list-style-type: none"> • Revival: of Private Industrial Investment • Import Liberalization: Industrial Raw material 	<ul style="list-style-type: none"> • Soaring External and Public Debt • Unstable Policy Environment Taxation Import Tariffs • Use of SROs 	<ul style="list-style-type: none"> • Better Macroeconomic Fundamentals • Structural Reforms Openness Institutions Governance Financial Sector Privatization • Private Sector Dynamism

- The total factor productivity grew at a rate of 1.62% during 1972-2019. However, the long-term trend, similar to the trend of GDP growth, exhibits a decline.
- The TFP growth has seen highs and lows during different periods.
- The highs of TFP have typically been associated with deregulation, liberalization, better fundamentals, institutional and structural reforms, and private sector dynamism.
- The Low of productivity, on the other hand, has been associated with soaring external debt, adverse policy environment like the SROs, and policy instability reflected in frequent changes in taxes and tariffs.

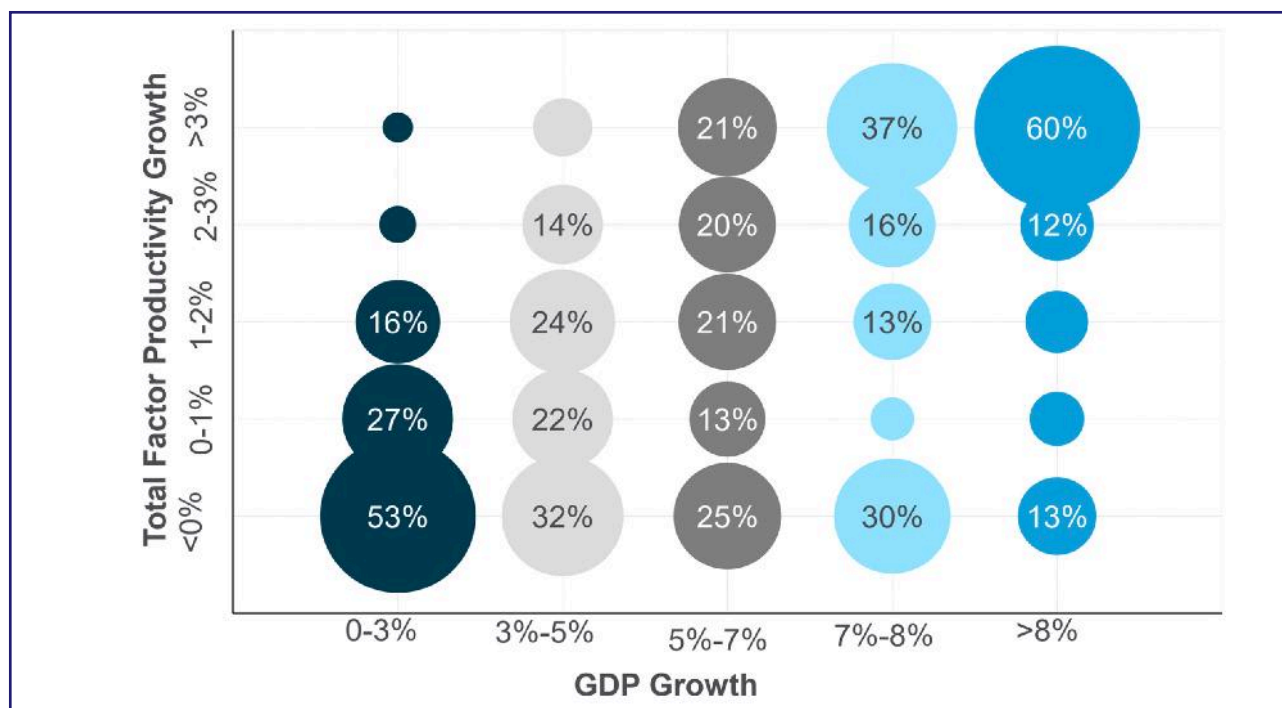
Figure 1.5: TFP Growth Rate & GFCF (% of GDP)



Pakistan's growth pattern observed over time raises several questions, including (i) what constrain growth and (ii) what kind of reforms are needed to embark upon a high and sustainable growth path. These questions are addressed in the rest of the document.

The importance of TFP growth for high GDP growth is highlighted by Citi GPS (2018) report. The estimated relationship between TFP and GDP growth is shown below (TED, Citi Research [Citi GPS (2008)]). The bubble size represents the percentage of instances at different levels of GDP growth. For example, if GDP growth is higher than 8%, then in 60% of cases, TFP growth is greater than 3%.

Figure 1.6: Total Factor Productivity & GDP



Box 1.1 What is TFP

Total Factor Productivity (TFP) of factor inputs:

- Tells how productively the economy uses the factors of production to produce output.
- Reflects a shift in the production function arising from technological progress (Barro, 1999).
- Contributes to economic growth by allocating inputs more efficiently (Balk, 2001).
- Enhances economic growth through scale economies – making operations scalable (Jorgenson and Griliches, 1967).
- Is also attributed to sociopolitical and economic factors, such as government policy, institutions, market structure, or weather shocks which influence the efficiency of factor use (Bosworth and Collins, 2008)

Figure 1.7 Action Points

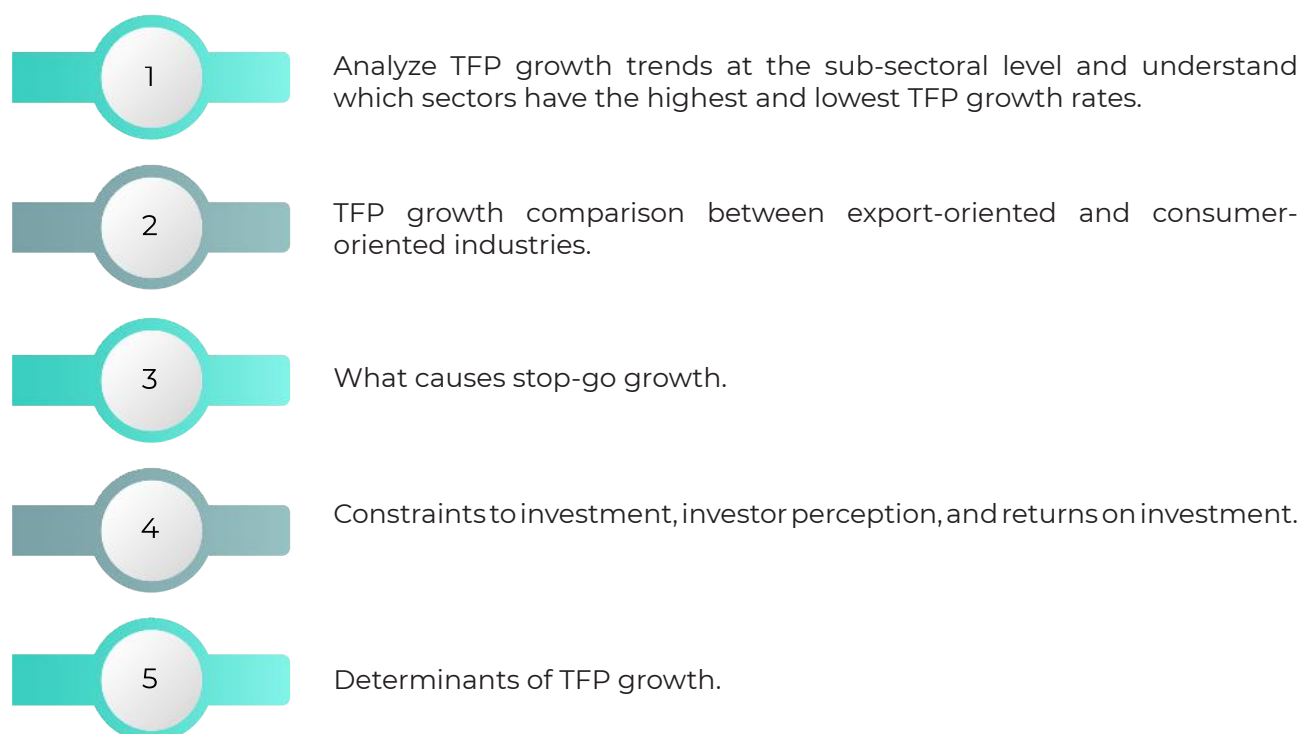


Increasing productivity from the current level of less than 2% to 3% and above can increase Pakistan's GDP growth to more than 6%. The international evidence clearly suggests that (Citi GPS 2018)



The main thrust of our Reform Agenda is that deregulation and market development will lead to higher GDP growth. This is exactly what is needed to nudge TFP growth.

Figure 1.8
Further Research



REFERENCES:

- Amjad, Rashid and Awais, Namra (2016). Pakistan's Productivity Performance and TFP Trends, 1980-2015: Cause for Real Concern. *The Lahore Journal of Economics*, 21(SE), 33-63.
- Balk, Bert M. (2001). Scale Efficiency and Productivity Change. *Journal of Productivity Analysis*, 15, 159-183.
- Barro, Robert J. (1999). *Inequality, Growth, and Investment*. (NBER Working Paper No. 7038 Cambridge, MA: National Bureau of Economic Research
- Bosworth, Barry & Susan Collins (2008). Accounting for Growth: Comparing China and India. *Journal of Economic Perspectives*, 22(1), 45-66.
- Citi GPS: Global Perspectives and Solutions (2018). *Securing India's Growth Over the Next Decade: Twin Pillars of Investment & Productivity*.
- Haq, Nadeem Ul and Planning Commission Team *Framework for Economic Growth*.
- Husain, Ishrat (2010). Pakistan's Growth Experience (1947 – 2007). *Business Review*, 5(2), 11-33.
- Jorgenson, D.W. and Griliches, Zvi (1967). The Explanation of Productivity Change. *Review of Economic Studies*, 34(3), 249-283.
- Lambert, John (2016). *Productivity Is Everything*. GAM Insights. Dublin: GAM Investments.
- Pasha, Hafiz A et. al (2002, December). *The Slowing Down of Growth Total Factor Productivity in Pakistan*. (Social Policy Development Centre Research Report No. 44). Karachi: SPDC.
- Siddique, Omer (2020). *Total Factor Productivity and Economic Growth in Pakistan: A Five Decade Analysis*. PIDE Working Paper 2020:11

THE NEED FOR A SUSTAINED GROWTH ACCELERATION²

Age structure will continue to be an important force in the country for the next fifty years. How economic growth is shaped by demographic changes in the coming years will depend on the ways policies and institutions respond to the challenges and opportunities the future holds. Time is running out to put appropriate policies in place, the absence of which may result in large-scale unemployment and immense pressure on health and education systems.

- Durr-e-Nayab (2007)

There are but two ways of paying debt: increase of industry in raising income, increase of thrift in laying out.

- Thomas Carlyle

As the sovereign debt workout processes are political at their core, they tend to benefit the powerful at the expense of the powerless.

- Barry Herman, José Antonio Ocampo, and Shari Spiegel (2010)

Demographics and Growth

Pakistan's rapidly changing demographics have led to the youth bulge and a high level of debt. For the coming next 30 years, Pakistan must grow at a stable rate of 7-9 percent per annum to improve welfare without the need for further IMF-supported adjustment.

- The working-age population (15-64 years) is growing at a greater rate than the growth rate of the total population (Figure 2.1-A). These increasing numbers entering the labour force, if gainfully employed, will yield dividends for the country. If unemployed, this demographic window can be destabilizing.
- Over 2.5 million new entrants in the working ages are expected (Figure 2.1-B). Applying current labour force participation rates on this number yields 1.5 million new jobs to be created in the economy for another two decades. And if the goal of increased female participation is to be achieved then the labour force will expand by 2 million or more jobs a year for the next 20 years.
- The estimates developed using employment elasticity of 2.2-B suggest that the economy should grow at at least 7-8% to provide gainful employment to the coming increases in the labour force.

Figure 2.1-A: Growth Rates (%) Of Total Population & Those In The Working Ages (15-64)

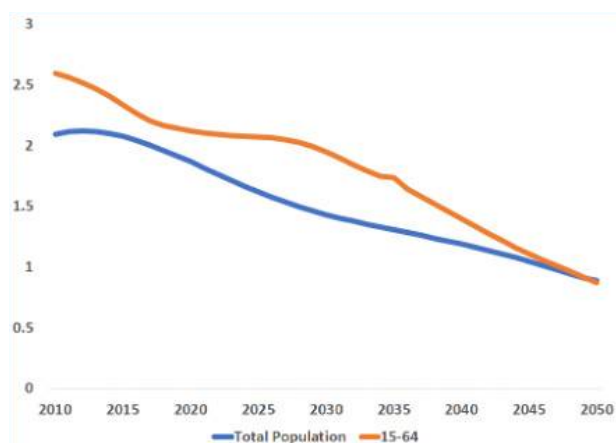
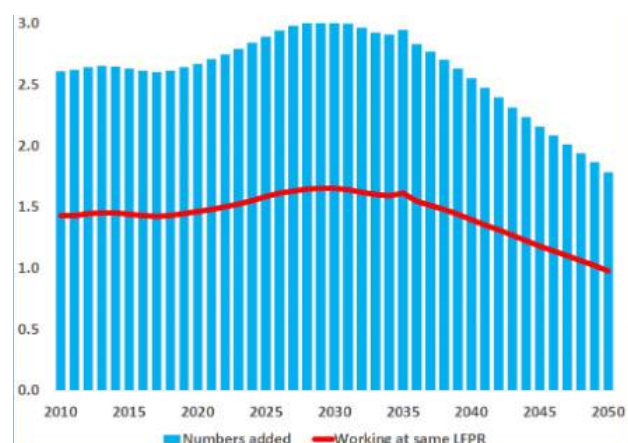


Figure 2.1-B: Numbers Of New Entrants In Working Ages & Those In The Labour Force At Constant Current Rate (Million)



Estimated by Durr-e-Nayab using UN Population and Prospects 2019

- Evolving labour dynamics (shifting sectors and technologies) emphasize the need for a growing and vibrant economy, one which can adapt to the changing needs. For instance, the

² Contributors: Nayab, Jalil, Idrees

Youth demands more from life. Changing employment preferences hint towards a desire for non-agriculture job, especially among the educated.

proportion of employed in the agriculture sector declined from over 43% to 36% during the decade (Figure 2.2A).

- This trend accompanied by high unemployment rates among the more educated youth (Figure 2.2-B), especially for the females, allude to the need to create relevant jobs following the changing demographics.

Figure 2.2-A: Proportion (%) Employed In The Agriculture Sector

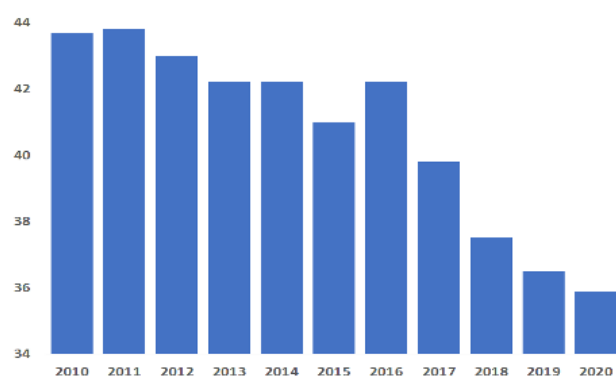
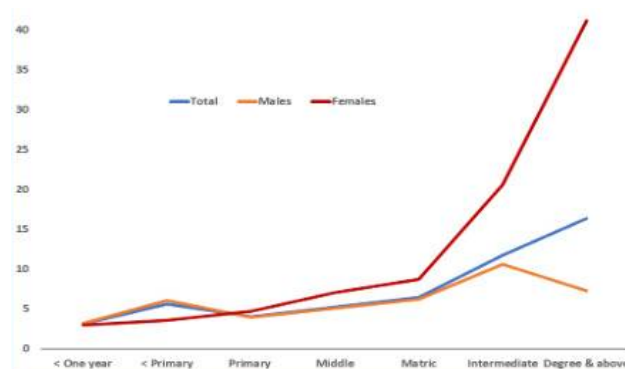


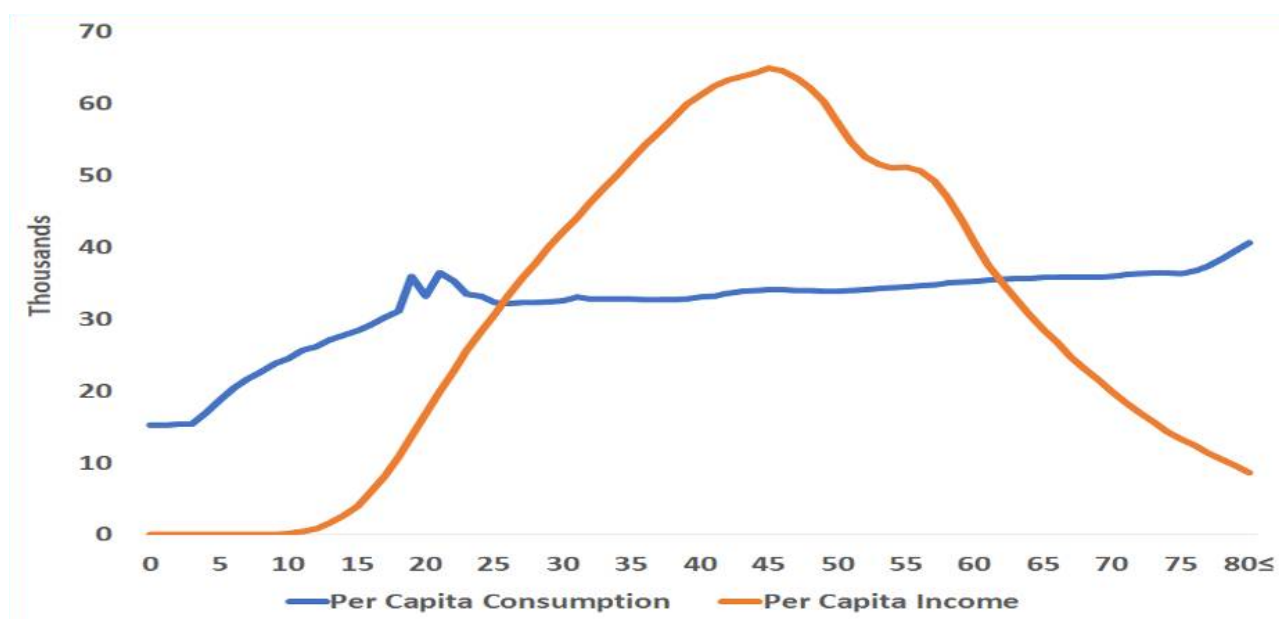
Figure 2.2-B: Unemployment Rates (%) By Education And Sex



Estimated by Durr-eNayab using Labour Force Survey, (various years), published of Pakistan Bureau of Statistics

- In Pakistan too, those in the working ages produce more than they consume, contrary to the young and the elderly (Figure 2.3). This is the very essence of the demographic dividend, and Pakistan needs to make use of it.
- Those in the working ages have an income surplus (Figure 2.3), but they are not producing much. They need to be more productive for themselves and the economy.
- The bottom line is that to provide gainful employment opportunities to the increasing numbers entering the labour force, the economy must grow at a sufficiently higher rate – 7-9% consistently over three decades³.

Figure 2.3: Per Capita Income & Consumption In Pakistan By Age



Nayab and Siddique (2019)

- Increasing growth and productivity is the only way to cope with the changing demographics and to reap its dividend as well.

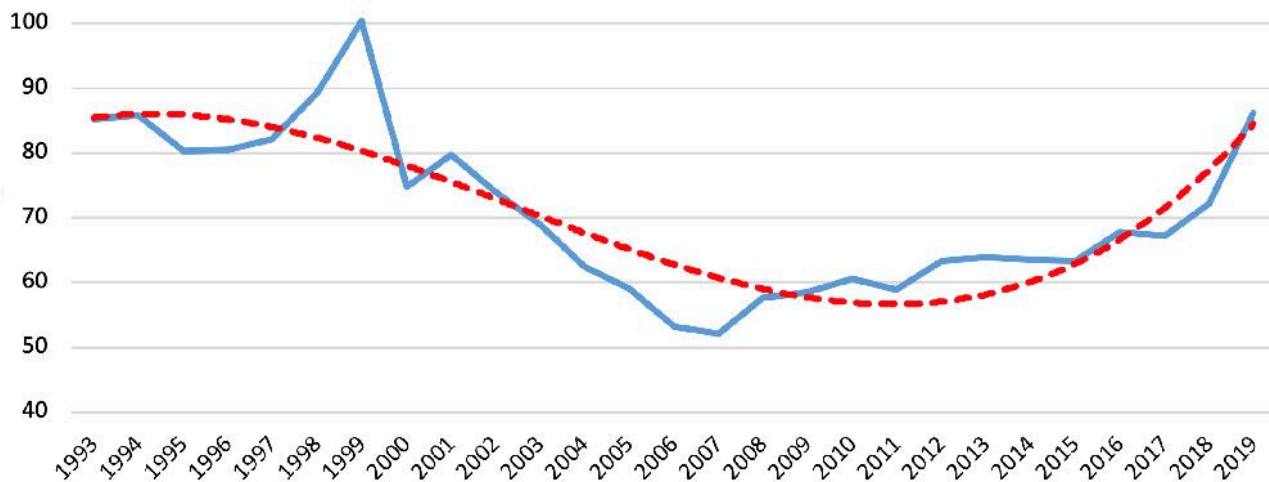
³ See FEG and Haque (2020)

Debt Sustainability and Growth nexus

Present Debt Profile

Pakistan's debt level has increased significantly over time (Figure.2.4)

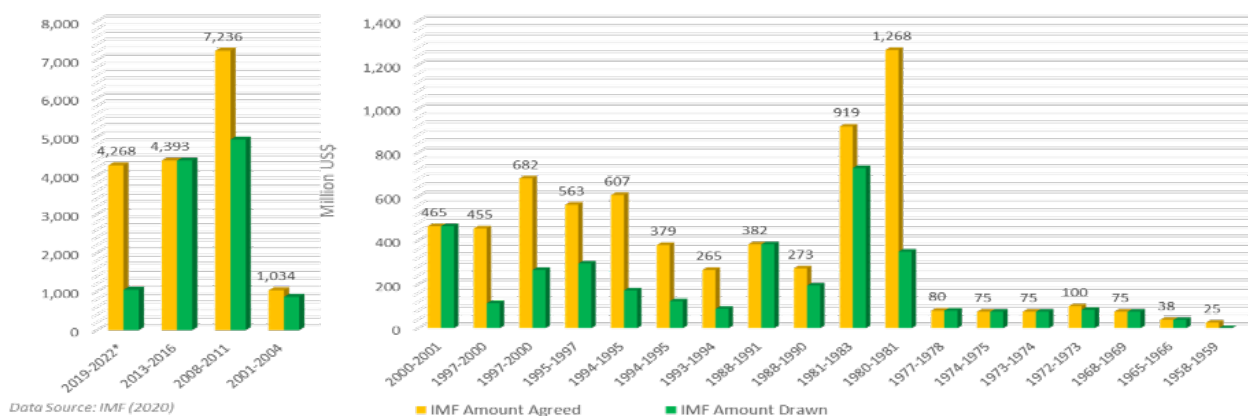
Figure 2.4: Debt-GDP Ratio



Estimated by Abdul Jalil

- IMF is the international lender of the last resort and only the countries faced with severe balance of payment difficulties are supposed to approach the IMF for emergency lending to secure a temporary relief.
- Since 1965 Pakistan has approached IMF 22 times as shown in Figure. 2.5 below. Thus the country has been perpetually in the emergency ward of the IMF.

Figure 2.5: IMF Amount; Agreed V/s Drawn



Data Source: IMF (2020)

Source: Khan, F. J. (2020). Foreign Aid & Public Sector Capacity in Pakistan. SBP Webinar Series on Economics and Finance. 17th Sept 2020.

Debt Sustainability

Debt Sustainability Analysis (DSA) suggests that at the current level of GDP growth country's debt is not sustainable, that is, the debt-to-GDP ratio will continue to increase if the country grows at a rate hovering around 4.0%. The DSA has been conducted using the methodology described in Box 2.1 (see Jalil, 2020 for more details)⁴

⁴ Malik and Kemal (2018) is another interesting study on the topic.

Box 2.1 IMF Debt Law of Motion

- The IMF debt law of motion move around the interest rate-growth differential, that is, if $(i-g)>0$, then the debt to GDP will increase where 'i' is the interest rate, and 'g' is the GDP growth.
- The IMF Debt Dynamic Equation:

$$d_t = \frac{(1+r)}{(1+g)} * d_{t-1} - pb_t$$

Where

- d =debt to GDP ratio
- r=real interest rate
- g=growth rate of real GDP
- pb =primary balance as a percentage of GDP
- t= time subscript

The Equation implies:

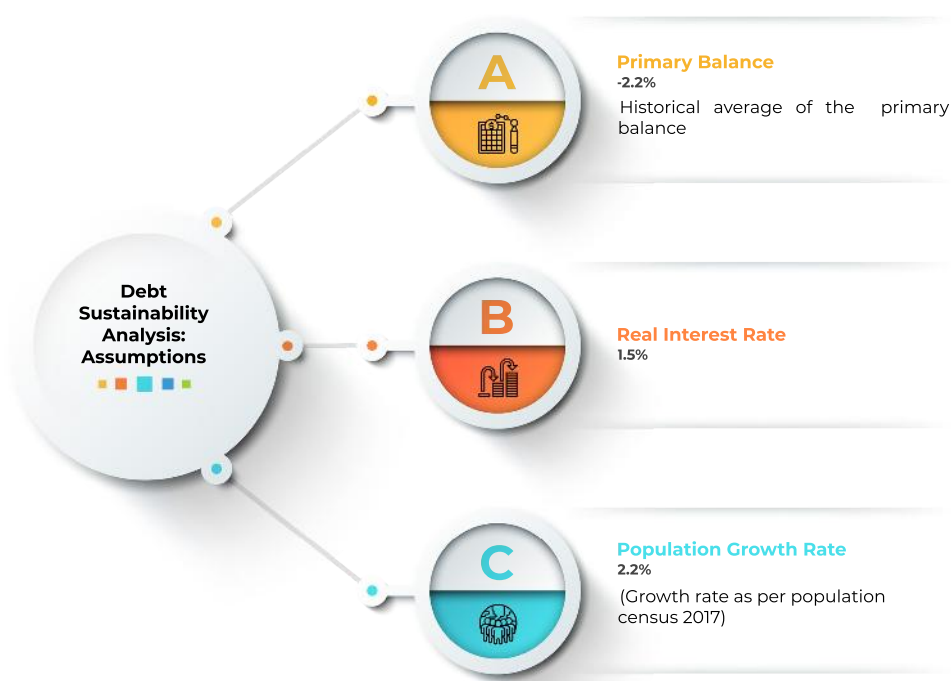
- A positive primary balance leads to a higher debt-to-GDP ratio
- A high initial debt leads to a higher debt-to-GDP ratio
- A higher growth rate leads to lower debt to GDP ratio
- A high real interest rate leads to a higher debt-to-GDP ratio

Real Interest Rate

The interest rate is the return on the savings and the cost of credit. Economists distinguish between the nominal interest rate (i) and the real interest rate (r). The nominal rate of interest is the rate that is agreed upon and paid. However, the nominal value of the agreed (nominal) interest rate may diminish due to inflation. Therefore, to arrive at real return/cost, economists subtract the loss of purchasing power due to inflation from the nominal interest rate. This process enables borrowers and savers to determine their real cost/return on their loans and savings. The real interest rate could be positive (if the nominal interest rate is greater than inflation), negative (if the nominal interest rate is less than inflation) and zero (if the nominal interest rate equals inflation).

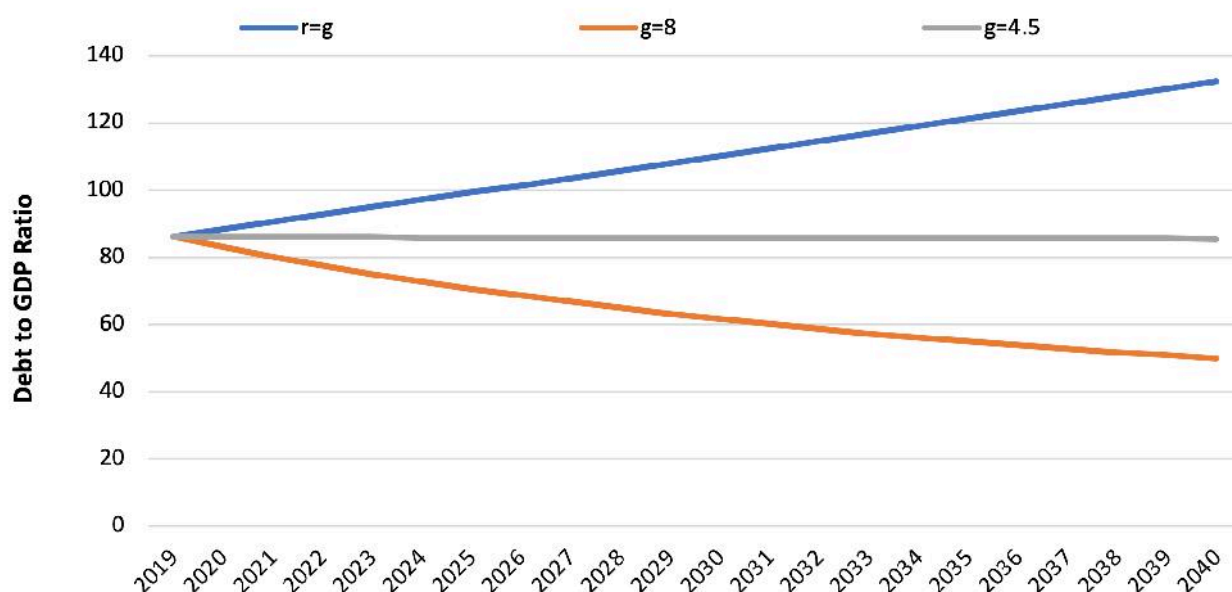
We have conducted the Debt Sustainability Analysis (DSA) for Pakistan. The assumptions underlying the DSA are mentioned in Figure 2.6.

Figure 2.6
Debt Sustainability Analysis: Assumptions



PIDE estimates suggest that to secure a reduction in the debt-to-GDP ratio from the present level of 86% of GDP, the economy should grow at a rate even greater than 7-9 percent. This is depicted in Figure. 2.7

Figure 2.7: Debt Sustainability



Box 2.2

Key Takeaways

1. To absorb the new labour force entering the market, to achieve debt sustainability, and to raise living standards Pakistan's economy should grow in the range of 7-9 percent for a reasonably long period of 30 years.
2. Our growth policy must on an urgent basis seek to catalyse private investment so that our investment GDP ratios go well beyond 20% from the current 15%.
3. The efficiency of investment will be key. For sustained growth, productivity has to increase everywhere.
4. The solution to Pakistan's perpetual BOP, fiscal, and debt issues which have led it repeatedly to the IMF also lies in sustained growth acceleration.

In the rest of the document, we develop key ideas that seek to unlock investment and productivity for sustained growth. We also identify research questions that PIDE and other researchers need to take up to deepen this research strategy. We urge the government and academia to make growth our top priority.

References:

- Nayab, D. (2007) Demographic Dividend or Demographic Threat in Pakistan? Pakistan Development Review 47(1):1-26.
- Nayab, D., and O. Siddique (2019) National Transfer Accounts for Pakistan: Estimating the Generational Economy. Pakistan Institute of Development Economics and the UNDP.
- Haque, Nadeem Ul (2020), Macroeconomic Research and Policy Making: Processes and Agenda PIDE Working Paper No. - 172
- Haque, Nadeem Ul (2011), Framework for Economic Growth, Planning Commission of Pakistan.
- Jalil, A. (2020) Debt Sustainability: Economic Growth is the Panacea Knowledge Brief 19, 2020.
- Malik, B. and Kemal, M. A. (2018) Measuring the Sufficient Debt Sustainability Condition in Pakistan. PIDE Working Paper No. 156.

WE NEED DEEP RETHINK OF OUR GROWTH POLICY⁵

“Economic institutions shape economic incentives: the incentives to become educated, to save and invest, to innovate and adopt new technologies, and so on. It is the political process that determines what economic institutions people live under, and it is the political institutions that determine how this process works.”

- Daron Acemoğlu, *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*

The Haq/HAG approach has outlived its usefulness

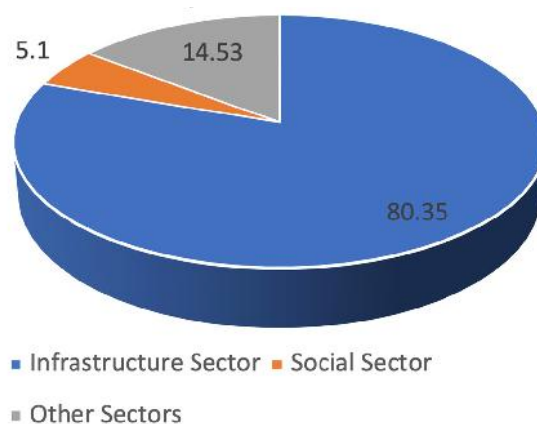
For the last 60 years, Pakistan has been pursuing project-based growth based on foreign borrowing. This was the approach put in place by the thinking of the time (Harrod-Domar and the two-gap model) and applied to Pakistan by Dr. Mahboob Ul Haq and the Harvard Advisory Group (HAQ/HAG) (see Haq 1964 and Papanek (1967).

As a result, the key features of the country's policy over the past six decades, as summarized by Haque (2020), have revolved around:

1. Building physical ('brick and mortar') projects
2. Five year plans to justify the projects
3. Seeking foreign aid given the urgent need to build beyond domestic resources.

This approach has led to an excessive focus on hardware, i.e. brick-and-mortar projects (Figure 3.1), to the neglect of software, i.e. capacity building, management, and optimizing yield on assets. Even today, 80% share of development spending is 'brick and mortar' (Pasha, 2012, Haque, 2020).

Figure 3.1: Sectoral Share in Public Sector Development Investment.



Over the years the quality of investments made through the PSDP has declined for the following reasons:

1. Over time, development financing has become highly politicized.
2. Projects are poorly managed, leading to cost and time overruns. These have huge implications for realized returns of the projects.
3. Though standards like cost-benefit analysis and other good processes are covered in the planning manual but given political economy, these are rarely followed.
4. R&D and capacity building are not part of the PSDP despite being modern drivers of growth.
5. Government departments propose development projects to finance operational needs.

Growth Paradigm has Shifted

The Haq/HAG model was framed when funding and physical capital development were considered the defining features of the growth process. Our policies too sought to borrow to build. Under the new paradigm, public investment through the PSDP will follow the Result-Based Management Framework outlined below in Box 3.1.

⁵ Contributors: Idrees(Chapter Write up), Omer (Legal Framework) Nasim Faraz: Investments, (Haq/HAG model), Endogenous growth

Box 3.1 Result Based Management

1. Conduct a baseline survey to assess the prevailing scenario.
2. Define intermediate and final project outputs based on research.
3. Define inputs required to achieve the outputs.
4. Define measurable targets at various stages of implementation.
5. Review; whether present process/procedures facilitate achievement of outputs.
6. Define quantified and measurable output indicators.
7. Undertake ex-ante surveys to determine changes in output indicators.
8. Highlight deviation from targets and possible remedial actions.
9. Gather ex-post feedback from stakeholders/beneficiaries to evaluate the extent of success/failure.
10. Conduct Result based monitoring and evaluation
 - a. Prepare Performance Monitoring report to inform the public about the effectiveness of the project.
 - b. Each sector would publish an annual report on their performance against planned targets.
 - c. The sector reports would go to an apex M & E body to be established.
 - d. The M & E body would report sectoral performance to the cabinet.

Doing Development Better (Haque et. al., 2020)

Subsequent research that has yielded several Nobel prizes has led to a deep rethink on how countries have grown. Drivers of growth are seen to be neither funding nor pure physical capital accumulation but innovation, productivity, and entrepreneurship (Lucas, Romer). Acemoglu and Robinson (2010), among others, have summarized this extensive literature emanating over decades to conclude that growth acceleration requires an inclusive state responsive to ideas, innovation, and entrepreneurship.

The lessons of development policy are visible in the experience of the industrial revolution and the rise of Europe and the USA. Many countries, learning from this experience, have achieved remarkable development in our lifetimes. The basic lessons can be summarized as follows:

1. Competitive markets with openness allow champions to emerge and make the appropriate investments. Needless to say, losers too must suffer the failure of their decisions.
2. The state's role then is to define the market rules and watch and regulate fair play, allowing winners and losers to emerge without keeping alive obsolete industry through subsidy and protection (North, 1991).
3. Ideas and innovation are important and arise from thought and research. Both of these require an open and tolerant society, which is obviously up to the state to maintain (Romer, Aghion).
4. The importance of research in all aspects of society, M&E and learning, building science becomes an important part of society's culture. The state has a critical role in leading and funding this endeavor. Thus, it is critical that the government be thinking, learning, and researching.
5. The culture of competition, discipline, and risk-taking must be developed so that entrepreneurship and opportunities abound (McCloskey, 2013).

Taking the lead from the principles outlined above, the reform agenda emphasizes the following:

To achieve the target of 7-9 percent annual GDP growth over a sustained period of 30 years, the economy must generate jobs for around two million entering the labour force annually. The reform agenda must then be bold enough to generate employment and entrepreneurial opportunities for an enormous labour force entering the market. This is the policy goal!

Recent thinking on growth indicates that growth generators need not be governments but cities, asset classes, commodities, products, firms, and people. Growth should not be difficult for those starting far behind since the recipe is long known and well established. The salient features of the recipe are: give the vibrant young people quality education, new ideas, and high ideals; strive for institutions that support free and fair markets; create a professional, well trained civil service; achieve economies of scale through a large domestic market and open up for trade and investment; and keep public spending on infrastructure and social sectors limited and focused only to critical and essential projects (Buiter and Rahbari, 2011). Recent technological developments have added to this list the will and effort to embrace technology and ensure high-speed internet for all.

The disruptions, which the technology led by AI is causing, are already visible. Growth would depend on our will and readiness to make use of the technology. To this end, the reform agenda recommends increasing access to high-speed internet manifolds, making it universal, at low cost, and disrupting the education system to produce competent and creative youth that is ready to avail opportunities thrown up by technology.

Contemporary economic growth literature considers economic governance and human capital to be the key determinants of growth (Ward, 2011 and World Bank, 1993). The typical variables such as investment and savings are regarded as endogenous to the system. This implies that we have to look for factors that allow space and freedom to invest productively (FEG, 2011). The agenda, therefore, recommends governance, judicial and regulatory reforms that would remove entry barriers for entrepreneurial activity, facilitate the development of vibrant and competitive markets, and would provide a level playing field to all.

These institutional reforms will yield not just growth, but inclusive growth – the competitive markets and the level playing field will bring in the much-needed employment and entrepreneurial opportunities for the poor, which are so essential to alleviate the immense poverty that we face. Inclusive growth will also come about by building inclusive cities – mixed-use, vertical and dense cities, upon which the agenda stresses – international experience suggests opportunities for the poor abound in inclusive cities. Finally, the elderly and other challenged ones left behind will be provided social protection through the government's flagship Ehsaas/BISP program.

Box 3.2

China Pakistan Economic Corridor

China Pakistan Economic Corridor (CPEC), which began as Chinese investment in road and energy infrastructure of Pakistan, has now entered its second phase. The second phase involves investment in the social sector, railways (ML-1), SEZs, mass transit, and social sector development – involving people-to-people exchange, transfer of knowledge in different sectors, and establishment and Academy of Social Sciences. The first phase of CPEC has contributed to GDP and employment in Pakistan and the second phase, if efficiently implemented, is also expected to contribute likewise. It is therefore important that projects envisaged in the second phase should be implemented at a fast pace. In the second phase, we are also likely to see progress on establishment of SEZs and initiation of manufacturing therein. Agriculture is yet another area in which much is expected to happen and that we will see our agriculture progress across modern lines with extensive use of modern technology.

Box 3.3 Poverty and Growth

“When average incomes rise, the average incomes of the poorest fifth of society rise proportionately. This holds across regions, periods, income levels, and growth rates. But relatively little is known about the broad forces that account for the variations across countries and across time in the share of income accruing to the poorest fifth.

When average incomes rise, the average incomes of the poorest fifth of society rise proportionately. This is a consequence of the strong empirical regularity that the share of income accruing to the bottom quintile does not vary systematically with average income. Dollar and Kraay document this empirical regularity in a sample of 92 countries spanning the past four decades and show that it holds across regions, periods, income levels, and growth rates.

Dollar and Kraay next ask whether the factors that explain cross-country differences in the growth rates of average incomes have differential effects on the poorest fifth of society. They find that several determinants of growth - such as the good rule of law, openness to international trade, and developed financial markets - have a little systematic effect on the share of income that accrues to the bottom quintile. Consequently, these factors benefit the poorest fifth of society as much as everyone else. There is some weak evidence that stabilization from high inflation and reductions in the overall size of government not only increase growth but also increase the income share of the poorest fifth in society. Finally, Dollar and Kraay examine several factors commonly thought to disproportionately benefit the poorest in society, but find little evidence of their effects. The absence of robust findings emphasizes that relatively little is known about the broad forces that account for the cross-country and intertemporal variation in the share of income accruing to the poorest fifth of society.”

Dollar, David and Kraay, Aart, “Growth is Good for the Poor” (April 2001). Available at SSRN: <https://ssrn.com/abstract=632656>

Box 3.4 Key Takeaways

1. Haq/HAG model focusing on PSDP as the driver for growth has to undergo a paradigm shift to focus on software of growth.
2. PSDP needs deep reform to increase the efficiency of investment.
3. Public projects funded through PSDP should use Result-Based Management Framework (RBM) outlined in Box 3.1.
4. Greater focus on brick-and-mortar projects to be shunned in favour of projects involving software of the society (R & D, Developing productivity and human capital, etc.).
5. Projects preparation and approval to be informed by research, preferably undertaken at universities.
6. Asset management has to be key going forward.

Figure 3.2
Further Research

- 1 Analyses of PSDP investments: Cost-Benefit Analysis/Impact assessment of selected PSDP funded projects, as case studies, to guide policy on project approval, implementation, and M&E.
- 2 The RBM framework and focus on software for the PSDP need more detail.
- 3 The PSDP process needs to be studied and improved.
- 4 Cost-benefit appraisals of some key PSDP projects.
- 5 Evaluations of assets created.
- 6 Understanding the drivers of endogenous growth.

References:

- Acemoglu D. and J. Robinson (2010), *The Role of Institutions in Growth and Development*, Review of Economics and Institutions, Università di Perugia, vol. 1(2).
- Acemoglu, D. and J. Robinson, *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. Pbk. ed. New York: Crown Business, 2013.
- Barro R.J (1996), 'Determinants of Economic Growth: A Cross-country Empirical Study', *Journal of Comparative Economics*, vol. 26, no. 4, pp. 822-824.
- Buiter W. and E. Rahbari, 'Global Growth Generators: Moving beyond Emerging Markets and BRIC', *Global Economics View*, Citigroup Global Markets, February 2011.
- Dollar, David and Kraay, Aart, *Growth is Good for the Poor* (April 2001). Available at SSRN: <https://ssrn.com/abstract=632656>
- Haq, Mahbub Ul, *The Strategy of Economic Planning: A Case Study of Pakistan*. London: Oxford University Press, 1964.
- Haque, Nadeem Ul (2011), *Framework for Economic Growth*, Planning Commission of Pakistan.
- Haque Nadeem Ul, Mukhtar, Hanid; Ishtiaq, Nohman and Gray, John (2020), *Doing Development Better*, Pakistan Institute of Development Economics.
- Haque, Nadeem Ul *Macroeconomic Research and Policy Making: Processes and Agenda* (2020).
- Heston, Alan, Robert Summers, and Bettina Aten (2006) „Penn World Table Version 6.2, Center for International Comparisons of Production, Income, and Prices at the University of Pennsylvania.
- McCloskey, D.N. (2013). 'The Great Enrichment Continues'. *Current History*, November 2013: 323–25.
- North, Douglas (1991), *Journal of Economic Perspective*, 5:3, 97-112.
- Pasha, Hafiz A; Sherani, Sakib; Ismail, Zafar H.; Rizwan, Sheikh; Asif, Iqbal; Muhammad, Imran (2011), *Review and Analysis of Pakistan's Public Investment Program*, International Growth Center, Working paper, 2011
- Papanek, G., *Pakistan's Development: Social Goals and Private Incentives*. Cambridge, Mass.: Harvard University Press, 1967
- Ward K., *The World in 2050*, HSBC Global Research, January 2011.
- World Bank Policy Research Report, *The East Asian Miracle: Economic Growth and Public Policy*, World Bank, 1993.
- World Bank (2007), *Pakistan Infrastructure Implementation Capacity Assessment (PIICA)*, South Asia Sustainable Development Unit (SASSD).

CONSTRAINTS TO GROWTH⁶

“We have not been able to deregulate the economy as much as I wanted, despite seven years of trying because the politicians and officials both like the system Bhutto put in place. It suits them very well because it gave them lots of lucrative state-appointed jobs in industry and banking sector to take for themselves or distribute to their relatives and supporters.”

(Mahbub Ul Haq in Ishrat Husain’s “Governing the Ungovernable”, 2018).

We indicated in Chapter 2 that Pakistan is facing a declining and low growth trajectory when viewed over a longer horizon. Productivity is declining, and the country’s investment rate is among the lowest in the region. In this chapter, we bring out specific examples of the constraints to doing business, which are also the constraints to growth.

Poor Investment Climate

Capacity to Undertake Transactions:

The capacity to execute large transactions efficiently is severely lacking, especially in the public sector. Reko Diq, LNG long term contract, Karkay, and IPP contracts, are examples of lacking capacity in the public sector to execute transactions efficiently – after the execution of the contract the parties have to face courts, NAB, and have renegotiations, all of which deters investors. Other examples of lacking capacity are signing FDI-related MOUs with Saudi Arabia, which could not translate into actual investment. Also, Kings College London wanted to set up a hospital in Islamabad but CDA could not offer them 26 acres of land even at commercial rates.

Inconsistency in Policies/Incentives Structure

Incentives are mostly monetary and fiscal, which by default are very fragile. There is a need to isolate these incentives from changes in political regime; all the stakeholders should agree so that if there is a change in political regime, the incentive structure does not change.

Regulatory Skills:

Most of the regulatory institutions, like NEPRA, OGRA and Competition Commission, were conceived and conceptualized by the World Bank. With bureaucrats posted in these entities, the regulators do not enjoy enough independence and professional capacity to regulate effectively.

Long Term Financing:

After the closure of development financial institutions, like NDFC and PICIC, long-term financing for establishing industrial projects is not easily available.

Foreign Engineering Firms:

To operate in Pakistan, foreign engineering firms have to enter into joint ventures with local engineering firms/individuals. This is a pure rent-seeking instrument adopted at the behest of local engineering firms.

Box 4.1

Investment Climate vs Cost of Doing Business

The investment climate is often confused with Ease of Doing Business (EODB). While the investment climate is more concerned with broader structural and capacity issues, the EODB is concerned with operational matters like procedures involved in paying taxes and securing construction permits etc. However, the World Bank has gold plated the EODB in such a manner that getting a good score on the EODB is considered the recipe for securing FDI – in fact, investment climate and not the EODB is the key to FDI. Improvement in the EODB indicators, though certainly desirable, does not always lead to an increase in investment if the investment climate continues to constrain.

Haroon Sharif, former chairman Board of Investment, Pakistan
(Discussion with PIDE)

⁶ Contributors: Idrees (Overall write up), Omer (Law & Economics, Judicial matters), Waqar (Transaction, Documentation cost), Shahid (Over-regulation), Raja Rafi (Govt footprint), Iftikhar (Excessive centralization).

Repressive Institutions:

The manner in which permissions are to be sought causes delay and provides opportunities for rent-seeking (see boxes below on footprint of the government and over-regulation).

Government Footprint in the Economy

The greater the role of the government in the economy, the lesser is the space available for the private entrepreneurs to function:

- The government, at times, dominates the entrepreneurial activity in a sector by owning and running, for example, airlines, steel mills, cement factories, banks, and even storage capacities.
- In other instances, the government restricts economic activity through restrictive regulations and introducing the permissions required.
- The government influences the economy in three ways: direct government expenditure, activities of State-Owned Enterprises, and government regulations. Together this comprises the footprint of the government on the economy.
- PIDE estimates suggest that the footprint of the government in the economy is 67% of GDP – a very high percentage indeed.
- Direct government expenditure is 22% of GDP. The combined impact of government expenditure and SOEs is 43% of GDP. The cost that the public has to incur to comply with government regulations is a cost to the economy. Again, PIDE estimates suggest this cost is around 24% of the GDP (Haque and Ullah, 2020). Some examples of the government's footprint in the economy are given in Box 4.2)

Box 4.2

Government Footprint in the Economy

- It takes an average of 9 procedures to gain a construction permit which costs an average of approximately 9% of the value of the intended construction project.
- Under the draft rules of Finance Act 2020, Banks are required to submit information to FBR of persons who deposit PKR 10 million or more within one month.
- All imported food items are required to have 'ingredients, nutritional facts and usage instructions' labeled in Urdu along with Halal certification.
- Foreign engineering companies are required to work with local engineering firms to apply for operating licenses. Furthermore, these licenses are supposed to be renewed yearly.
- Tax compliance takes on average 577 hours per year and 47 payments per year for a business.
- Documentary and border compliance costs are higher than neighboring India for both imports and exports
- Government housing at prime locations comes at the cost of commercial space.

(Haque and Ullah, 2020)

Over Regulation

There exists a strong link between freedom to carry out market transactions and economic growth. Miller et al. (2019) find that the countries with the highest entrepreneurial dynamism are the ones with the highest degrees of economic freedom. 'Economic Freedom Index' (EFI) ranks Pakistan 135th out of 180 countries (2020).

Regulations, especially if unnecessary, constrain economic activity. Box 4.3 presents several instances of regulations that either constrain economic activity or do not serve much useful.

Box 4.3 Over Regulation

- Sugar Industry: Mandatory crushing laws, support price and millers' right of access to sugarcane in designated areas constrain competitive market forces.
- An Increase in the prices of medicine has to be approved by the government.
- Toll manufacturing of medicines is not allowed.
- The use of 3D printers is banned in Pakistan – the world is increasingly using these.
- Geographic maps (even for research) can be developed without the government's approval (through Survey of Pakistan).
- Khohkas are not allowed to operate in Islamabad.
- Kiosks of street vendors were demolished at a massive scale in Karachi.
- Restrictions on the inter-provincial movement of wheat around harvesting time.

Constraining Institutions and Laws

Law-Economics Nexus:

One of the fundamental institutions that can facilitate or hinder economic growth and development is the institution of law. Unfortunately, in Pakistan, the law and economics nexus is not well-understood. Laws can facilitate as well as constrain economic activity. First and foremost, there is a need to establish clear property rights and protect property rights. Examples of laws, judicial procedures, and practices that constrain economic activity are given below:

Time-consuming litigation process⁷:

- It takes an average of 25 years to conclude the litigation.
- The shelf-life of an average case in the Punjab civil courts is over 37 months.
- From institution to the passing of the decree, an average case requires around 58 hearings.
- The stay orders and interim injunctions remain valid for extended periods.
- More than 150,000 cases are pending in 330 special courts and administrative tribunals.
- Courts admit cases lying outside their jurisdiction; e.g. cases regarding non-promotion of government employees should go to FST but high courts tend to admit such cases.

Needless litigation:

- Judges take up almost all cases; rightful as well as frivolous.
- Adjournments are frequent and of long duration.
- The verdict is challenged from one judge to another, creating a tall pyramid.
- The result is massive pendency due to frivolous and long chain of appeals and reviews, etc., consuming time that could have been devoted to gainful investment, or spent on rightful litigation.

- 38% of the businesses believe courts are a major constraint in doing business; 14% as a whole in South Asia (World Bank Enterprise Survey).
- 1/3rd of the firms believe the quality of courts to be an obstacle; 1/5th of the firms in Bangladesh (Investment Climate Assessment).
- Pakistan ranks 156th on World Bank's Enforcing Contract Index.

Problems with the judiciary:

- Judiciary at various levels has mainly four problems:
 1. An Insufficient number of judges and inexperienced officials.
 2. Lack of specialist judges - no specialization over the civil or criminal fields.
 3. Judges' training is almost non-existent; even those appointed to banking courts are not trained in commercial matters.
 4. Expert testimony is required: Complex economic and commercial transactions lead judges to make arbitrary and often costly decisions such as; tearing down buildings after these

⁷ <https://www.dawn.com/news/1390299>

are completed, regarding street vending as illegal despite licensing arrangements and upholding poor economic decisions of various officials. Expert testimony in such instances can help prevent costly and ill-informed decisions.

Transaction Costs

Market forces work effectively towards efficient and optimal equilibrium if transactions happen in a frictionless environment. Higher transaction costs reduce the frequency of transactions and lead to sub-optimal equilibrium or even market failure. The factors contributing to higher transaction costs are shown in Figure 4.1.

Figure 4.1: Transaction Costs Contributing Factors



Table 4.1 shows the transaction costs in Pakistan.

Table 4.1: Time Cost in Pakistan in Monetary Terms

Types	Time Cost Per Firm (Rs.)*	Total Time Cost (Rs. Mil.)*
Starting a Business	4,190	55.43
Construction Permits	62,015	75.72
Getting Electricity	37,502	496.42
Registering Property	36,690	485.46
Paying Taxes	2,666	325.723
Trading Across Border	103,446	774.82
Enforcing Contracts	249,109	304.16

* PIDE estimates
For methodology, see box 4.5

Time spent to perform a transaction directly impacts the occurrence of transactions (see Box 4.4).

Box 4.4

Transaction Costs Impede Growth

- Todorova (2016) argues that market failure rooted in higher transaction costs is the central reason for the poor economic performance of developing countries.
- Bardhan (1989) links the transaction cost with market failure and emphasizes that incomplete markets and market failures are the results of the substantive transaction costs.
- Williamson (1981) shows that bounded rationality and imperfect information uphold the positive transaction costs and needs of hierarchic companies.
- North (1994) argues that transaction costs depend upon the evolution of the institutions in a society and institutions that promote low transaction costs are essential for economic growth.
- Arrow (1969) has rightly pointed out the identification of transaction costs in different contexts must entail the larger part of the research agenda.

Documentation Costs

Documentation costs add to the transaction costs. An estimate of the documentation costs incurred by firms is shown in Table 4.2.

The methodology for computation of monetary cost of the transaction and the number of days lost in documentation is given in Box 4.5. Examples of the kind of documentation and transaction costs incurred by agents are given in boxes 4.6 and 4.7, respectively.

Table 4.2: Number of days Lost Due to Documentation in Pakistan

	No. of Days Lost Per Firm	No. of Days Lost (Aggregate)
Starting a Business	16	211,680
Dealing with Construction Permits	237	289,133
Getting Electricity	144	1,894,536
Registering Property	140	1,853,523
Paying Taxes	10	1,243,742
Trading Across Border	395	2,958,583
Enforcing Contracts	952	1,161,415

Box 4.5

Methodology to calculate the transaction and documentation cost

The time cost has been computed using the Doing Business Report 2018.

Time lost in performing transactions: This is the difference between the best practices around the world and Pakistan's performance on respective indicators

To measure the national loss on activities indicated in table 1, the following information has been used;

Total number of active firms in 2018 (FBR Tax Directory 2018)

Number of new entrants (WB Enterprise Survey - ES)

Number of exiting firms, World Averages (WB-ES)

Number of firms that trade across the border (WB-ES)

The time lost has been transformed in monetary terms using the GNP per working-age population.

Box 4.6: Documentation Costs

Technological Backwardness

- E-Governance is largely not practiced.
- Databases required have not been developed
- Ineffective utilization of available database.

Permission Economy

- 17 permissions are required to operate a cinema in Pakistan.

Informal Economy

- Being killed by insisting on documentation.

Titles Insecurity

- The state is not often not able to ensure the security of the title.

Trust Deficiency

- Prevalence of fraudulent transactions and dishonoring the agreements.

Box 4.7: Transaction Costs in Pakistan

Asymmetric Information

- Production Cost Structure

Stifling Regulations

- 45 Steps to Lay Internet Fiber

Outdated Governing Structure

- 50 Paisa Adjudication Fee in Stamp Act, Section 3.1

Vaguely Defined Rights

- Real Estate and Land Mafia

Defective Dispute Resolving System

- Average Case Takes 25 Years to Resolve

Large Government Footprint

- Around 67% in the Economy

Dysfunctional Institutes

- Competition Commission of Pakistan

Little Use of Technology

- Attested Copy of CNIC
- No Use of NADRA Records

Examples of High Transaction Costs

Some examples of high transaction costs are given below

- **Taxation:** The average monetized cost of compliance with tax regulations is Rs. 252,436.
- **Construction:** The cumbersome and time-consuming procedure involved in seeking approval of a house design from the Capital Development Authority (CDA) is shown in Box 4.8. The procedure obviously increases cost, especially if a professional firm is constructing.

Box 4.8: CDA Approvals

The Process and Documents Required to Obtain Approval of House Construction from CDA

Approval of Building Plan

- Photocopy of form A1, A2
- 6 copies of building plan
- Security fee
- Copy of CNIC
- Copy of allotment letter or transfer letter dully attested
- Indemnity bond
- Soundness and stability certificate
- Calculation book

Issuance of Completion Certificate

- Photocopy of Form B1, B2
- 6 copies of the completion plan
- State management dues clearance form
- Copy of CNIC
- Revenue Directorate dues clearance form
- CDA completion scrutiny fee
- Proof of payment of withholding taxes

Water Connection

- Water Connection Fee
- Water supply agreement
 - Form A3 along with its enclosure
 - Copy of CNIC of the applicant
 - Copy of the allotment letter
 - Copy of the possession letter
 - Copy of the approval plan
 - Copy of sewerage fee receipt
 - Road cut fee
 - Water connection fee

Excessive Centralization

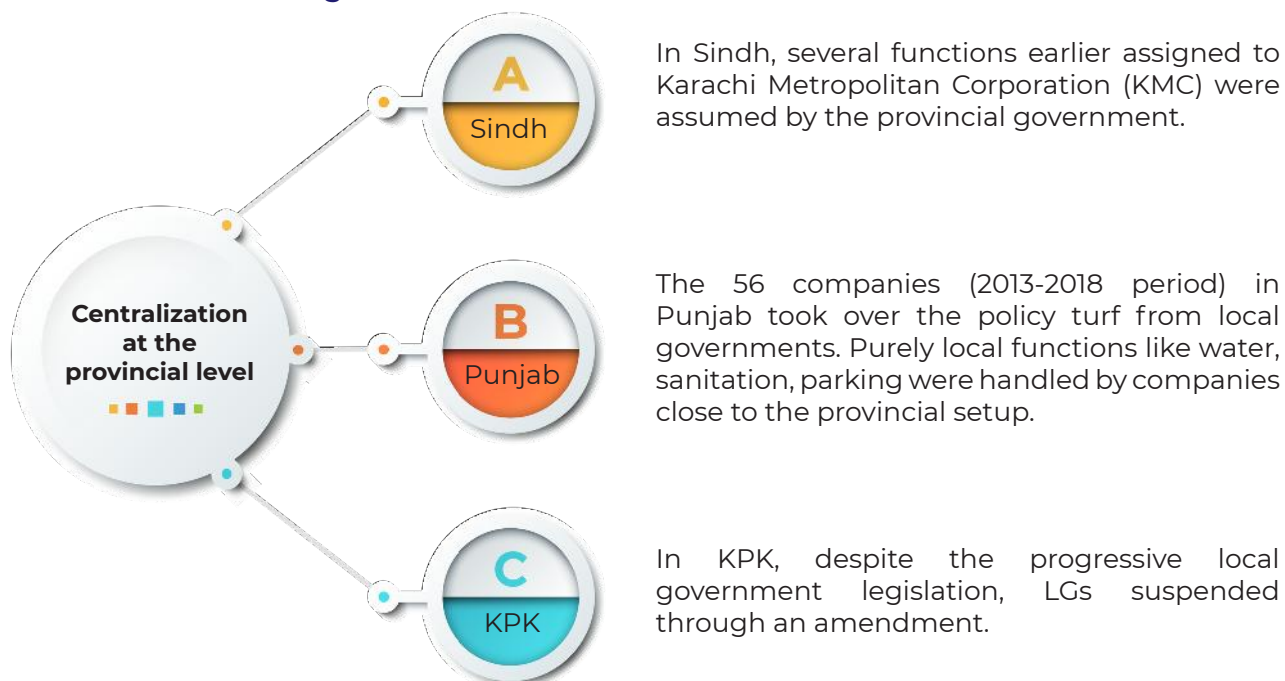
The chief merit of decentralization is that decentralized governments being closer to people, are more aware of local needs and are, therefore, better positioned to formulate policies that serve local needs, which is the true spirit of democracy. This is also the foundation of the popular decentralization theorem (Oates, 1970).

Despite the obvious merits of decentralization and the 18th Amendment, Pakistan remains an overly centralized country, and the spirit of the 18th Amendment has not spilled over to the provincial level. Some instances of centralization at the provincial level are indicated in Figure 4.9.

SMEs and Constraints

The constraints to investment and operations that the businesses face in general impact the SMEs with greater severity. These include, but are not limited to, the restrictive regulatory environment, capacity, access to finance, etc. The size of SMEs limits their ability to maneuver through these constraints. Given the significant contribution of the SMEs to employment and GDP, alleviation of the constraints faced by the SMEs would demand the special attention of the authorities.

Figure 4.2: Centralization At The Provincial Level



**Figure 4.3
Action Points**



Figure 4.4
Further Research

- A** Understanding transaction costs: Measure and quantify transaction costs for a host of activities. What institutional changes are required to employ technology for using transaction costs. For example, changing procedures that require submission of hard copies.
- B** Ways of developing the public sector's capacity to undertake transactions that are transparent and easy to execute.
- C** Studies of regulation and regulatory bodies with reference to the cost of doing business and capacity of regulatory bodies.
- D** Laws and their economic impacts - the modernization of our legal system.
- E** The time involved in the decision of court cases and contract enforcement.

References:

- Ahmed, Jahangir (2020) 'Decentralization and Institutions: An insight', PIDE Blog
- Arrow, K. J. (1969). The organization of economic activity: issues pertinent to the choice of market versus nonmarket allocation. *The Analysis and Evaluation of Public Expenditures: the PBB System*, Vol. 1.
- Bardhan, P. (1989). The New Institutional Economics and Development Theory: A Brief Critical Assessment. *World Development*. Vol. 17(9), pp. 1389-1395.
- Khattak, Ahmed and Khan (2010), 'Fiscal decentralization in Pakistan', *Pakistan Development Review*
- Miller, T., Kim, A. and Roberts, J (2019). 2019 index of economic freedom. The Heritage Foundation.
- North, D. (1994). Transaction costs through time. *Economic History*. University Library of Munich, Germany.
- Oates, W. E. (1972). *Fiscal Federalism*. New York: Harcourt Brace Jovanovich.
- Todorova, T. (2016). Transaction costs, market failures and economic development. *Journal of Advanced Research in Law and Economics*. Vol. 2(71), pp. 678-684.
- Williamson, O. E. (1981). The Economics of Organization: The Transaction Cost Approach. *American Journal of Sociology*. Vol. 87(3), pp. 548-577.

BUILDING A STATE FOR GROWTH

“Successful localization creates a situation where local entities and other groups in society are free to exercise individual autonomy but also have incentives to work together.”

- Joseph Stiglitz (1999)

From a Colonial State to a Developmental State

Many commentators have noted that the state in Pakistan has not undergone the substantial reform effort that is necessary for heightened economic activity, fostering a secure creative society and navigating complex rapidly changing, and networked global economy (See Haque, 2017, Husain, 2018, Pasha, 2018 and Ahmed, 2011).

This is an area which our research community has not been actively researching or debating. We are setting out issues here that need careful thought and debate and will be part of our research agenda going forward.

Stable Democracy

Pakistan's political arena is primarily characterized by dynastic politics and personal charisma. One source suggests that over 50% of the legislators in 2013 had a dynastic lineage and that 597 families have monopolized the political arena since 1970 (Herald, 2013). One of the weaknesses of the first Past-the-Post electoral system, which is practiced in Pakistan, is that even a candidate securing much fewer than 50% polled votes may be returned as successful.

The democratic rule in Pakistan has been interrupted several times for long periods. To move towards a stable democracy, fundamental changes in the electoral system are called for. Certain fundamental changes are proposed in Box 5.1.

Box 5.1 Towards a Stable Democracy

- Adopt one of the kinds of proportional representation electoral system. (This system is egalitarian, inclusive, and has the potential to break the stronghold of established political monopolies-dynasties ruling the political arena).
- For the political parties to be eligible to contest elections, the parties must have;
 - Elections within the party.
 - A certain, minimal percentage of the provincial population as party members (This will induce the political parties to appeal to masses beyond linguistics and ethnicity).
- Legislators should not have any say in the approval and execution of development projects.
- Only a small proportion, maybe 5%, of the legislators may hold executive positions, the rest should be legislators only.
- There should be a maximum term limit (maybe two terms) for the Prime Minister and all the legislators.
- The Mayor of the local government should be directly elected.

Everyone wants more democracy not less. There must be more debate on what democracy means and how we can make it more meaningful.

An Efficient Executive: Issues of Governance

Development can only happen when an efficient government defines policy and regulation to provide the goods and services that the people want. It is in this framework of policies and regulations that the private sector develops markets to invest in and operate in.

Results of Extensive Consultation in PIDE Webinars:

PIDE series of webinars on several governance issues. The crux of these discussions is presented in Box 5.2.

Box 5.2

Results of Consultative Discussions in PIDE Webinars

Sector	Results	Main Issue
Energy	The circular debt of over Rs 500 billion annually	Autonomy and professionalism issues. Regulation, policy, and administration not separated.
Railways	Loss of more than Rs 100 billion	Autonomy and professionalism issues. Regulation, policy, and administration not separated.
Other PSEs	Loss of over Rs 1 trillion	Autonomy and professionalism issues. Regulation, policy, and administration not separated.
Education	Quality and enrolment both well below expectations and targets	Autonomy and professionalism issues. Regulation, policy, and administration not separated.
Health care	Quality and access remain issues	Autonomy and professionalism issues. Regulation, policy, and administration not separated.
Internet access	Access issues prevent learning and business	The policy is not clearly researched or articulated, e.g., spectrum auction: viewed as a source of revenue rather than a means of spreading access.

As shown in the table above, excessive centralization, limited research, and lack of professionalism have led to huge losses in many sectors. In the current administrative setup, it is unclear who is responsible for the shortfalls. Despite huge losses, there are no serious reports based on detailed research that place responsibility for the losses. Instead, the prevailing wisdom seems to be that the consumer will pay for these losses without any change in the way business is done. Even the IMF and donors require tax or price increases to absorb the losses. There is no constituency for fixing the hemorrhage. Nor is there any knowledge of the source of the hemorrhage.

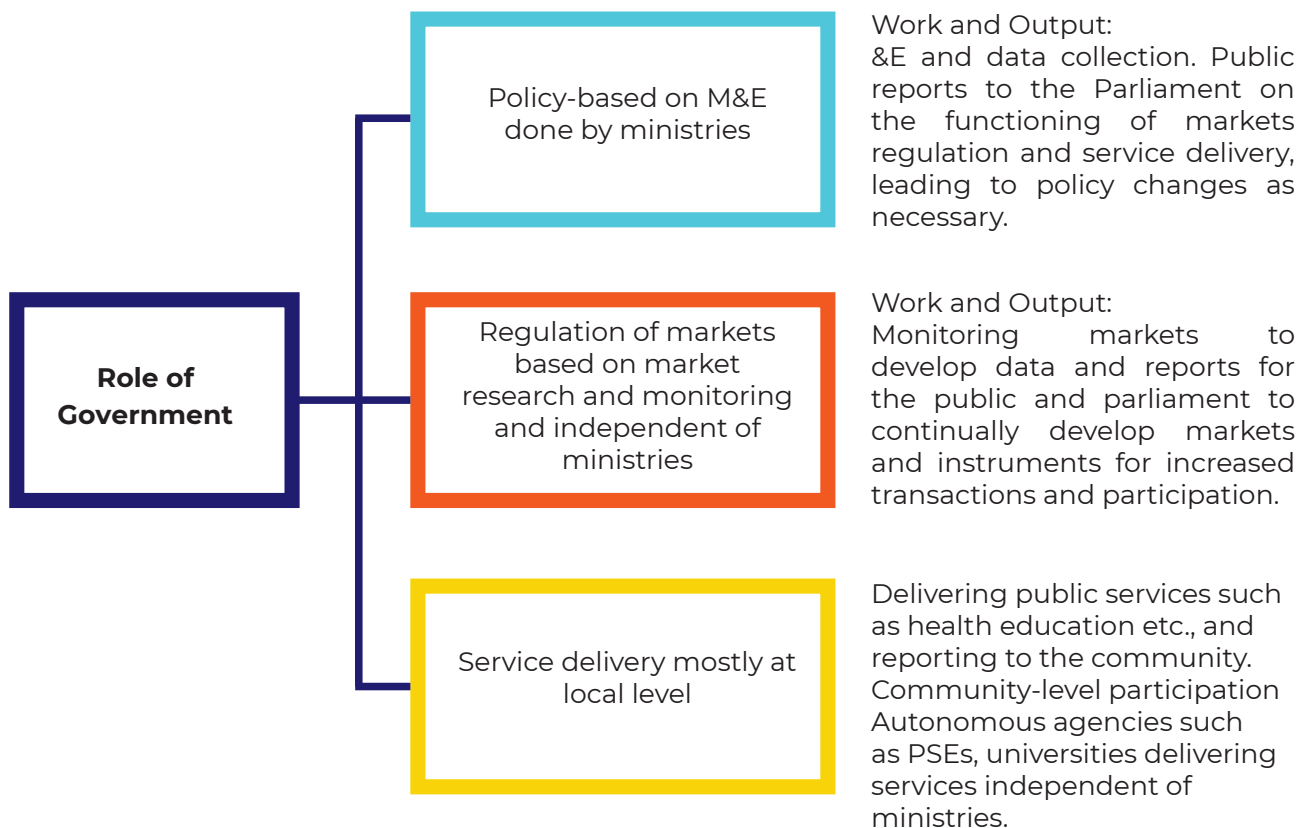
Our webinars have also revealed that most serious commentators, including some past secretaries and ministers, agree that most policy initiatives come from donors. Often, they are accepted without adequate peer review or debate. Such policies and programs make insufficient progress, yet no one is held accountable.

Earlier in Chapter 3, we pointed out the need for building a result-based governance framework. For that to work, we truly need to reconfigure the role of the government.

Developing the “Software” of Governance

An efficient government requires decentralized, functionally autonomous, and professionally run systems. A schematic of governance on first principles is presented in the chart below. The current extreme degree of centralization as shown above is costing the economy exorbitantly.

Figure 5.1: Role of Government



The principles of reform are clear and must be adopted.

1. Three tiers of government must be separated, and clarity be given to their KPIs
2. Federal and provincial governments must be clearly focused on monitoring evaluation and not running everything. Their job must be performance evaluation of service delivery agencies with a view to public reporting and not interfering directly with the agencies. Policy happens as a result of such monitoring and research as and when required – significant changes happen then.
3. Regulation and development of markets happen in autonomous professional agencies that are closely monitoring and developing ease of and frequency of transactions as well as fostering transparency and competition.
4. Service delivery happens closer to the consumer. This means the delivery mechanism must be a strong responsive local government close to communities. Also, the PSEs and other autonomous agencies such as; universities and service delivery companies are also important vehicles of delivery.

What is important is that reforms are undertaken based on these principles, and the Gordian knot of extreme centralization and its accompanying exorbitant costs is cut. Rather than central control, a system of checks and balances based on M&E, clear KPIs, budget assignments, and clear policy and regulatory research be developed. This system, built into each layer of the government, will lead to better overall governance, improving investment prospects, and increasing the number of transactions. All of this will result in growth acceleration.

Box 5.3**Decentralization: Important for Growth, Development, Competition and Service Delivery**

In any functional democracy, the government should strive to ensure the optimal provision of public services without putting an excessive financial burden on the citizens. This requires efficient utilization of resources, through better targeting, while removing administrative frictions.

1. Decentralization helps achieve efficient utilization: Competition among jurisdictions makes them perform efficiently.
2. Decentralization cuts transaction costs and overcomes administrative delays.
3. Local representatives, being closer to people, are better aware of the needs and preferences of the constituents.
4. Competition among jurisdictions induces units to be innovative and efficient.
5. Using tailor-made policies - the essence of decentralization, allows authorities to experiment with different policies across jurisdictions.
6. Decentralization is a necessity in the face of cultural diversity and the territorial requirements that may differ across jurisdictions (Pakistan has both of these traits).
7. Pakistan's experience with provincial autonomy suggests provinces tend to compete with each other in offering facilities to the population - mass transit, universal health coverage, and response to covid-19 are examples of competition at work.

This calls for a comprehensive set of reforms in the entire public service. The principles of reform are given in Box 5.4. This will be an important area for research at PIDE and our research community. The government has established a host of regulatory agencies to ensure that the private sector

Box 5.4**Principles for Reform of Civil Service**

1. The generalist colonial exam to recruit for a lifetime should be stopped. University performance and achievement, intelligence, and psychological testing, if desired, are adequate.
2. No lifetime and career guarantees to be given.
3. No service hierarchies as in the current system, with guarantees to any group to be in controlling positions.
4. Continuous recruitments at all levels without guarantees to certain groups.
5. Continuous training of public servants to be conducted at universities in specialized fields.
6. Independent agencies and all levels of civil service according to their needs.
7. No transfers across government to allow one group to control all activities especially given the costs incurred.
8. All agencies and levels of government to be monitored by the HRM ministry that prepares annual reports comparing practices, salaries, and state of public service.
9. All agencies, levels of government, and departments to make annual performance commitments for the coming three years and prepare reports on recent performance.
10. Individual performance within the purview of departments and agencies subject to review by the ministry of HRM.
11. Compensation to be generous on market terms (based on private-sector competitors) but purely in cash. The colonial system of perks, plots, privileges, ex-officio appointments, and arbitrary allowances to be discontinued. The resources released will have a huge growth impact.
12. While past pensions are overburdening the government and have to be met, going forward, the pension will be fully funded and invested. Moreover, to allow and encourage mobility, pensions will be portable, and mobility between the private and public sectors will be encouraged.

Regulation

Some of the prominent regulatory bodies include;

- NEPRA: National Electric Power Regulatory Authority
- OGRA: Oil and Gas Regulatory Authority
- PPRA: Public Procurement Regulatory Authority
- PEMRA: Pakistan Electronic Media Regulatory Authority
- DRAP: Drug Regulatory Authority of Pakistan
- CAA: Civil Aviation Authority
- CCP: Competition Commission of Pakistan

Though on paper, the regulatory authorities are independent enough to frame regulations and ensure their implementation but in practice, most of these function as the regulatory arm of the concerned ministry. For example, the NEPRA and OGRA only suggest what the electricity and Gas tariffs should be. The actual tariffs are notified by the government (relevant ministry), and more often than not, the tariffs announced are different from the ones suggested by the two bodies.

For the smooth functioning of the markets, the regulatory bodies should be granted independence in letter and spirit. To ensure the independence of the regulatory bodies, bureaucrats should neither be appointed to the boards of regulatory bodies nor on management positions in these bodies.

The regulations in an economy are aimed at encouraging what is desirable and preventing the undesirable. However, conforming to regulations has a cost in terms of time and money. As compliance with regulations adds to the cost of doing business, therefore these should be minimal. Secondly, regulations often become a source of rent-seeking/corruption as these are either relaxed or compliance is certified after seeking rents or indulging in outright corruption – this opportunity invites more regulation.

PIDE's estimates suggest that the footprint of the government in the economy is 67% of the GDP, and going by very conservative estimates, 24 percentage points of this is by way of regulations – the regulations come at a huge cost to the economy (Haque and Ullah, 2020). Three kinds of regulations will have to be done away with. These are the regulations which;

- a. were not required in the first place;
- b. have outlived their utility; and
- c. can be eliminated with digitization/e-governance within entities and across entities.

Some examples of constraining regulations that can be abolished are indicated in Box 6.5. However, it is almost impossible for any single entity to take stock of all the constraining regulations that hinder economic activity or unnecessarily add to the cost of doing business.

All public entities should take a fresh look at regulations under their domain and identify regulations/NOCs/permissions required to be abolished, which fall in either of the three categories mentioned above.

PIDE intends to make regulatory audits a part of its research agenda. However, over time perhaps a center for regulatory audits should be funded at PIDE or independently of PIDE.

Box 5.5 Restrictive Regulations

- 22 NOCs are required by private land developers to proceed with land development.
- 17 signatures are required to open a cinema.
- 45 steps are required to lay fiber for internet connectivity.
- 09 steps (on average) are required to obtain a construction permit.
- 47 procedures (on average) are required to comply with taxation laws.
- Foreign contractors cannot operate without joining hands with a local contractor.

In each of the above-mentioned cases, it should be possible to eliminate at least some of the steps. The respective ministries will have to look at rules/procedures to identify what steps can be eliminated.

SROs: The majority of the SROs are not only restrictive but also allow specific economic agents to seek rents at the cost of the industry players in particular and the society at large. These will have to be abolished.

Attestation of CNICs: Most applications require the submission of CNICs. Government departments and other entities can be linked with NADRA's database to allow verification directly from NADRA's record.

Judiciary for the twenty-first century:

Posner (1998), a leading figure in law and economics, argues that the modern age requires a legal framework that is characterized by precise and simple legal rules.

- It does not necessarily require heavy investment to upgrade the nation's judiciary.
- The judiciary that can arbitrate and enforce long-term contracts at a low cost is crucial for economic development.

Proposals to have a judiciary that can live up to the requirements of the 21st century are given in Box 5.6.

Box 5.6 Improving Performance of the judiciary

The outdated, complex, and ambiguous laws should be updated or amended, such as the Arbitration Act 1940.

Appointment of Judges:

- The appointment of judges should be based on quantifiable parameters, for example, such lawyers should be selected as judges who have won a high proportion of cases.
- To appoint judges to higher tiers, consider the performance of the concerned judge in lower courts. Consider the academic record, especially, in Law College, while appointing someone as a judge.

Training of Judges:

- Impart customized training to judges at different levels by permanent and capable faculty.

Allocation & Monitoring of Cases:

- Adopt the case-flow management system used universally in courts.
- Use a docket system and case track system - a software to monitor the speed of cases.
- Assign deadlines for the conclusion of cases and impose penalties for failure.

General:

- The judges' performance should be evaluated on quantifiable indicators.
- While hearing appeals, the superior courts should focus on points of law and refrain to reopen decisions of lower courts on facts.

- The number of tiers should be decreased from the existing four to three, namely trial, appeal, and constitutional.
- Litigants bringing unnecessary and frivolous cases should be made to pay the costs of courts' time.
- The time limit on stay orders provided in the law should be strictly and fully enforced.
- Adjournments should only be allowed in exceptional cases and not more than once.
- Increase the number of judges, if required.

Figure 5.2
Action Points

- 1 Separate Policy formulation, administration, and regulation.
- 2 Make the LGs operational in letter and spirit.
- 3 Clearly define the role of three tiers of government: Federal, Provincial and Local. Make Federal & Provincial governments more concerned with Policy formulation, and M&E. Assign most of the service delivery to LGs.
- 4 All ministries to prepare and publish annual reports on their performance.
- 5 Make regulatory bodies independent of the executive.
- 6 Do not post bureaucrats as executives in regulatory bodies or as directors on their boards.
- 7 Mayor should be directly elected.
- 8 Internet Access: Look at spectrum sale as an access issue rather than revenue generation.
- 9 Reforming Civil Service: All points included in Box 5.4.
- 10 Reforming Judiciary: All points included in Box 5.6.

Figure 5.3
Further Research

- 1 Which of the service delivery functions being performed by the federal and provincial governments can be delegated to lower tiers?
- 2 How the policy formulation and M&E role of the federal and provincial governments can be improved?
- 3 What kind of capacity is required to run different regulatory bodies, and how to develop this capacity?
- 4 Regulatory case studies to understand which regulations constrain which activity and suggest reforms.
- 5 The judicial and legal process for commerce and business to thoroughly understand the constraining process and suggest reforms.
- 6 Quantify the costs (explicit and implicit) incurred due to delay in the conclusion of litigation and the impact of delays on growth and investment.
- 7 Developing a viable local government framework.

References:

- Ahmad, Munir, *The Civil Servant in Pakistan*, Oxford University Press 2011.
- Husain, Ishrat, *Governing the Ungovernable*, Oxford University Press 2018.
- Haque, Nadeem Ul, *Looking Back: How Pakistan Became an Asian Tiger by 2050*, Kitab, 2017.
- Joseph Stiglitz (1999), *World Bank Releases Annual World Development Report*, Bridges, 3(37).
- Posner (1998), *Creating a Legal Framework for Economic Development*, *The World Bank Research Observer*, Volume 13 (1).
- Pasha, Hafiz A. *Growth and Inequality in Pakistan*, Fredrich Ebert Stiftung, 2018.
- PIDE Webinar on Case Management as an Approach to Improve Judicial Performance.. Speakers: Osama Siddique and Waqas Mir, September 13, 2020.
- PIDE Webinar on Judging the Judges: Dynamics of the Pakistani System of Justice Delivery. Speakers: Osama Siddique, Sara Malkani, and Asad Jamal, September 20, 2020.
- Nazir, Faryal. "Untangling Arbitration". *Dawn*, November 17, 2017 (<https://www.dawn.com/news/1338941>).

Developing Markets⁸

The property rights only say about the ownership of a product but it is the market that decides how the product will be used.

- Ronald Coase

The Need of the Hour: Change the Role of the Government

Thus far, we have established that for a growth acceleration required to absorb our youth bulge, policy needs a substantial re-imagining. Importantly, the role of the government must change sharply, which includes:

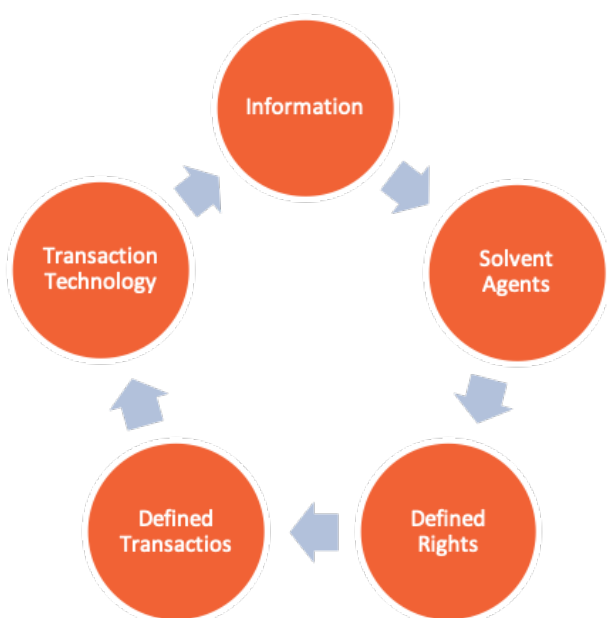
1. The footprint of the government, i.e., government domination of markets either through regulation or direct intervention, must be rolled back.
2. Instead, the government must put in significant effort and resources to build competitive markets that attract investment and entrepreneurship.
3. Rather than continuously planning new projects that create low-value assets, the policy should develop a *transaction-friendly* governance framework to underpin economic activities.

Strengthening and Building Markets

Substantial immediate gains can be made if policy seeks to build markets as a first step.

To build markets: The markets which facilitate transactions typically enjoy the characteristics shown in Figure. 6.1 and described in Box 6.1.

Figure 6.1: Characteristics of Market



Box 6.1:

Essential of a Complete Market

Information: Potential parties to the exchange have complete information about the characteristics of the product being exchanged (quality, price and life, etc.) – Asymmetric information leads to a collapse of the market (Akerlof, 1970).

Solvent Agents: Parties to the exchange are solvent – this avoids defaults and litigation.

Defined Rights: The rights of the parties to exchange are well defined – this reduces uncertainty and avoids disputes.

- **Enforcement of Rights:** The rights of the parties to the exchange, if defaulted, are enforced speedily and at a low cost to the aggrieved.

Defined Transaction: The nature of the transaction is clearly defined.

Transaction technology: Technology helps to avoid excessive paperwork and need of outdated stamp paper model. The provision of electronically secure government recordkeeping is also possible by using technology. Besides, technology drastically reduces the time-cost of the transaction.

⁸ Contributors: Organization/layout & chapter write-up (Idrees), Energy (Afia), Agriculture (Abedullah), Real Estate, Construction (Waqar)

Box 6.2

Transaction Costs

Transactions—sales and purchases of goods and services—are at the heart of all production and economic activities. GDP, as we know, is a sum of transactions – the greater the number and volume of transactions greater the GDP.

All transactions are based on a legal/regulatory framework and transaction technology. While computers and the internet have improved transactions technology, legal and regulatory frameworks remain the foundation of transactions.

In economics and related disciplines, a transaction cost is a cost incurred in making an economic exchange of some sort. In other words, the cost associated with completing a transaction are transaction costs.

In general, transaction costs are thought to be of four kinds.

- **Search and information costs:** Information on goods and services— technical details, quality, price, availability, etc.— need to be provided by suppliers while buyers may need to search for such information when making purchases.
- **Bargaining costs:** both the buyer and the seller need to arrive at a price on which to transact. In most markets, this can be seen in the distance between the bid and the asking price of the good or service. Real resources then must be expended to negotiate the difference spread and arrive at a price on which to make the transaction.
- **Settlement costs:** when the buyer and seller have concluded a sale. Money must flow to the seller while the good or service must be delivered to the buyer. The legal and regulatory framework often defines the process by which such transactions must be recorded and performed. In asset sales, the change of title must be recorded often on payment of some fee. This can take time, and the fees can be substantial.
- **Policing and enforcement costs:** Sales and purchases of many goods and services can require contracting with specific actions that need to be performed as well as changes of title that may be required over time. Contracts require monitoring and enforcement and can involve the legal and judicial system. This can be costly and time-consuming even if the legal and judicial system is modernized and well maintained.

Consider buying a house;

- First, there must be a substantial amount of time searching for taste and condition.
- Then there must be time spent settling on a price.
- Then the contract must be signed and settled with the appropriate authorities recording the change of title.
- The policing and enforcement of the contract are the costs of ensuring that the seller delivers the house in the promised condition while the buyer fulfills the payment conditions.

A reduction in transaction costs, or a reduction in resource use per transaction, increases economic growth, and economic welfare.

Economic history gives several examples of substantial transaction costs changes and associated changes in the economic growth and welfare of societies.

A “negative” example is the Soviet Union, where failure to reduce transaction costs led to economic failure.

The Current State of Markets in Pakistan

Using the case of four important markets, including real estate, construction, agriculture, and energy (electricity, gas, and petroleum) markets, we illustrate the state of markets in Pakistan with reference to the framework outlined in Figure 6.1. Table 6.1 briefly describes the present status in the aforementioned three markets vis-à-vis elements of the framework.

Table 6.1:
State of Markets in Pakistan

	Real Estate	Energy	Agriculture
Information	Insufficient	Insufficient	Insufficient
Solvent Agents	Partially	Not fully solvent	Yes (Except or wheat & sugar)
Defined Transaction	Not clearly defined in all cases	Yes	Yes
Defined Rights	Only in DHA and Islamabad	Partially	Yes
Transaction Technology/Process	Generally, less than satisfactory	Less than satisfactory	Less than satisfactory
Enforcement of Rights	Unsatisfactory	Unsatisfactory	Unsatisfactory

The information about the price and characteristics of a product, which the parties to the exchange (especially the buyers) must have, to make an informed decision is often insufficient in all the four markets considered. For example,

- In real estate very little is known about inventory and historical transactions. The setting of administered prices by the government for tax purposes only increases non-transparency.
- In the land development sector, cooperatives which are entities without clear balance sheets or capacity for land development take decades to deliver a product.
- Potential buyers and sellers of agricultural products rely on government-mandated market committees with limited information.
- Contract enforcement remains poor – rights remain unclear, settlement processes are long, paperwork complicated and the courts do not respect economic value or the value of time. People routinely game the court system to devalue transactions.
- A host of regulations and NOCs required, make the transaction process cumbersome and time-consuming which discourages the parties to transact in the first place.

These institutional issues, if addressed, will increase the volume and worth of transactions in the economy. An increase in volume and worth of transactions will increase the GDP. Institutional reform, as suggested by global experience, holds the key.

Building Markets:

The issues that constrain the development of the real estate, energy, and agriculture markets and their solutions are presented below as an illustration for the development of all kinds of markets.

Developing Real Estate Market:

Box 6.3
Developing Real Estate Market

ISSUES	SOLUTIONS
<p>Agents:</p> <ul style="list-style-type: none"> • Real estate agents are not knowledgeable and visible developers are often not registered and bonded. • Clarity on the builder's responsibility and timelines is lacking. • Cooperative housing societies are full of irregularities. 	<p>Agents:</p> <ul style="list-style-type: none"> • Develop real estate agent organizations in various cities and regions on a self-policing and licensing system. Agent responsibilities and codes be developed by these organizations. • Abolish development by housing societies and cooperatives. • Developing and building should be a business of bonded licensed builders.

<p>Role of government</p> <ul style="list-style-type: none"> • Titles are still a revenue information. Reliance on the owner to have original documents. • NOCs / permissions. • Electronic filing transactions. • Stamp papers. • Transaction taxes. • Pricing by government. 	<p>Role of government</p> <ul style="list-style-type: none"> • Develop a system of open transparent electronic titles. • No paperwork, go for automation and digitization. • Owners don't need to possess titles, should be verified by the government and only online. • No more stamp papers and transaction taxes. • Abolish DC rates. Let buyers sellers disclose price with government enjoying the option to buy at the declared price (This will refrain buyers from declaring low prices).
<p>Information</p> <ul style="list-style-type: none"> • Price and inventory information not available. 	<p>Information</p> <ul style="list-style-type: none"> • Brokers' groups to develop an online listing service. No sales without appearing on listing service. • No sales without 'for sale' sign appearing on the property for at least a week. • All past sales to be revealed on listing service. • The government should enjoy an option to buy within 30 days of the sale at the declared price. • Research is required to figure out how declared prices can be used to form an index of land and building prices (commercial and residential).
<p>Transfer and settlement</p> <ul style="list-style-type: none"> • The lengthy paper-intensive process. • Stamp papers. 	<p>Transfer and settlement</p> <ul style="list-style-type: none"> • System of settlement attorneys with fixed fees to handle paperwork electronically to complete the sale in a week. • A similar system of title agents at a fixed fee to search and guarantee the title. • No Stamp papers.
<ul style="list-style-type: none"> • Clarity of use and development. • Unclear zoning and building regulations. 	<ul style="list-style-type: none"> • City zoning and building permission to be deregulated to eliminate plot by plot permissions. Widespread mixed-use with common setbacks and environmental regulations. Eliminate NOCs.
<ul style="list-style-type: none"> • Rental framework. 	<ul style="list-style-type: none"> • Amend rental laws to allow the rental investment industry to thrive.
<ul style="list-style-type: none"> • Facilitate complex construction. 	<ul style="list-style-type: none"> • let each city develop a high-rise mixed-use zoning and liberalization framework. • let each city announce plans to deal with coming construction. • develop multiple ownership laws. • let each building carry updated insurance to prevent excessive bureaucratic monitoring and build the insurance industry.
<ul style="list-style-type: none"> • Develop a city-friendly judiciary and administration. 	<ul style="list-style-type: none"> • City government development. • Judicial training. • Real estate training of judiciary and administration.
<ul style="list-style-type: none"> • Research on real estate. 	<ul style="list-style-type: none"> • PIDE to establish Real Estate Research Centre.

Developing Agriculture Markets

Box 6.4

Developing Agriculture Market

ISSUES	SOLUTIONS
<p>Input Market</p> <ul style="list-style-type: none"> • Impure seed supply for almost all crops – adversely affects productivity. • Unregistered firms sell seed/semens without proper labeling. Even registered firms sell seed without proper label showing the quality characteristics of seed in the packet. This contributes to seed/breed impurity and discourages investment in more productive seed/semens. • Breeders working in the public sector have no incentive to develop new varieties/breeds. • More than one ministry is involved in the approval of Genetically Modified (GM) varieties. The cumbersome approval process discourages international companies to develop GM varieties. 	<p>Input Market</p> <ul style="list-style-type: none"> • Develop and enforce Seed Act in all provinces, especially its truth-in-label regime. • Research study is required to estimate crop-wise GDP lost due to the impurity of seeds. • Mandate the sale of seed only in properly labelled packets by firms registered under the Seed Act. • All seed supply firms should be made to appropriately label products to cover the information gap. • Breeders should be incentivized for developing new varieties/breeds. While selling (transferring) intellectual property like, right of new varieties/breeds to the private sector a fixed proportion of income maybe allocated to all public sector scientist involved in innovation. This will not only motivate them to innovate further but will also discourage them to release the variety illegally. • Revisit the approval process of new varieties to reduce government footprints.
<ul style="list-style-type: none"> • Indirect subsidy on the gas used in the fertilizer heavily benefits fertilizer producers. • The existence of few producers leads to a cartel like situation leading to price manipulation • Crop specific subsidies cause market failure – certain crops get a higher share in area allocation. 	<ul style="list-style-type: none"> • Indirect subsidies should be abolished. • Open up fertilizer production market to local and international investors by increasing the supply of gas/LNG. • The competition commission should play its due role in introducing competitive market practices in the fertilizer market.
<ul style="list-style-type: none"> • Canal water for irrigation is heavily subsidized-encourages water-intensive crops like sugarcane and rice at the cost of cotton, the high employment generating and low water-consumptive crop. • Overexploitation of natural resources such as groundwater imposes a heavy cost on the welfare of future generations. • Fixed share-based water allocation (mainly determined by political rather than economic consideration) among provinces and regions - nonoptimal water allocation and waterlogging and salinity problems in over water-supplying regions. 	<ul style="list-style-type: none"> • Proper water pricing would lead to an efficient cropping pattern with higher profitability and employment opportunity. • Develop a regulatory framework for the use of groundwater and to avoid overexploitation of the aquifer. • Allocate water to different provinces and regions based on open auction so that water can flow where it has the most economic benefit.

<ul style="list-style-type: none"> • Poor quality but free of cost extension services encourage lemons in the extension market – this leaves no space for the private sector in the extension market. • No collaboration among various stakeholders like pesticide and seed companies, civil society, NGOs, and public sector extension, etc.-Lack of trust among various stakeholders. • Extension agents in public and private sectors adopt the old approach of promoting individual technologies and normally individual farmers centric. 	<ul style="list-style-type: none"> • The government should reduce its footprints in the input markets, such as fertilizer, water, and extension to let the markets operate efficiently. • Promote specialized extension on well define issue with the involvement of private the sector and universities on competitive basis, while the public sector just monitors the quality of extension being provided.
<ul style="list-style-type: none"> • Poor quality infrastructure in rural areas: discourages good quality labour from staying in rural areas. • Residential construction is eating up productive farming land and is posing a threat to food security. 	<ul style="list-style-type: none"> • Heavy investment is required to improve rural infrastructure, especially on village to market roads, storage and processing facilities, machinery workshops, etc. • Let the cities go vertical – this will curb urban sprawl over agricultural land.
<ul style="list-style-type: none"> • The rules/procedures of contractual agreement regarding land and machinery between two parties create disputes which affect efficiency and productivity. <ul style="list-style-type: none"> • In case of fixed rent: Productivity of land in the future is not accounted for. • In sharecropping: the contract is often verbal and basics like; mechanism of distribution, payment of returns, and the role of each party in decision making are left ambiguous and agreed only verbally. 	<ul style="list-style-type: none"> • Develop a clear and simple contractual agreement to boost economic activities in the agriculture sector. • Share cropping may be discouraged and contractual farming may be incentivized along with certain agreed land-development investment as part of the contract. Moreover, the land market should be facilitated by the digitalization of land records.
<p style="text-align: center;">Output</p> <ul style="list-style-type: none"> • Heavily influenced by the government through minimum support price, input subsidy, movement restrictions, and tariff/subsidy on export and import (e.g., wheat and sugarcane) – affects consumer and producer welfare and puts fiscal burden – the circular debt of wheat is Rs. 700 billion. • Government stores about 80% of marketable wheat and spends around Rs.50 billion annually. This discourages the participation of the private sector in the marketing and storage of wheat. 	<p style="text-align: center;">Output</p> <ul style="list-style-type: none"> • The government should gradually exit from wheat and sugar markets. • Research is required to estimate the impact of price support, input subsidy, and tariff concessions/subsidy on export/import and the impact of these on welfare losses of consumer and producer. • Rather than fixing the minimum support prices held with public sector procurement, the future markets of agricultural commodities should be encouraged through appropriate fiscal measures and removing its constraints. • Receipt-based storage system (RBSS) linked with banking loans on the receipt should be instituted in the private sector by providing concessions in taxes, import duties on machines and equipment, etc. • A broad band of upper and lower prices should be announced for essential food commodities to indicate the limits of government beyond which it will be bound to intervene in the market to ensure food security to consumers and minimum price to producers and create investment certainty among investors.

<ul style="list-style-type: none"> The private sector is not allowed to establish agricultural output markets - farmers are bound to sell their produce in the public sector markets where prices are controlled by the Deputy Commissioner/ local government. 	<ul style="list-style-type: none"> Amend the law to allow the private sector to establish markets where farmers can sell their produce at the price determined through the supply-demand mechanism.
<ul style="list-style-type: none"> The information gap exists between producer and consumer. This promotes lemons in the market and discourages high-quality produce because consumers cannot distinguish between produce with high pesticide residue and aflatoxin. (Abedullah and Kouser, 2020). 	<ul style="list-style-type: none"> Enforcement of a proper labelling system can help solve the problem. Agriculture Market Regulatory Authority (PAMRA Act in Punjab and Sindh, which allows the establishment of the agriculture produce markets in the private sector and reduces the powers of market committees, should be implemented in letters and spirit. Food should be obligated to be sold in packages with labeling indicating various quality parameters and enforcement of proper labelling regime will help to solve the problem.
<ul style="list-style-type: none"> Too many stakeholders are involved in supply value chains of Agri-products (village collector, <i>arthi</i>, commission agent, whole seller, processor and retailer etc.). This contributes to higher retail prices. (Mustafa, and Abedullah, 2017). 	<ul style="list-style-type: none"> Facilitate development and usage of Apps that can allow farmers to communicate directly with consumers.
<ul style="list-style-type: none"> The public Research and Extension (R&E) component of the Agriculture Innovation System is tightly controlled by bureaucracy. Expenditure on agriculture innovation system is only 0.18% of agriculture GDP, which is one of the lowest in the region. Upto 80-90% of the total budget is spent on salaries. 	<ul style="list-style-type: none"> The research institutes need more freedom and resources to operate independently. Information portals for various commodities should be established where farmers and consumers can directly communicate with each other.
<ul style="list-style-type: none"> Implementation of the IPR regime is weak, e.g., if open-pollinated varieties are developed by someone in the private sector, it spreads among all farmers. This discourages the private sector from involving itself in R & D. 	<ul style="list-style-type: none"> IPR regime and its enforcement should be strengthened. Open-pollinated varieties should be developed under the public sector to enhanced the productivity of small farms.
<ul style="list-style-type: none"> Frequent seasonal and annual fluctuations in prices creates uncertainty in agriculture markets which can threaten the livelihood of farmers and discourage investment in the agriculture sector. 	<ul style="list-style-type: none"> Futures trading in agricultural products is a means to overcome the market-based risks, which can improve the long-term investment in the agriculture sector. Information portals should be established with easy access to farmers in rural areas where they can trade their commodities in future markets. Moreover, farmers should be trained on how to use these portals for future virtual trading.

<p>Rental Market of Farm Machinery</p> <ul style="list-style-type: none"> • Heavy subsidy on inputs like irrigation water and subsidy on solar panels to draw ground water is distorting the competitive market and restricting the adoption of water-saving technologies and thus the rental market. • The high unemployment and low wage rate is another major hurdle in promoting the rental market of farm machinery in Pakistan. For example, rice transplanter has been adopted in Japan and Korea long ago because of the high wage rate but its adoption is not economically viable in Pakistan and India due to the low wage rate. • Limited demand for high-tech machinery, limited expertise in handling the machinery and high capital investment involved-all of this constrains the rental market for machinery. 	<p>Rental Market of Farm Machinery</p> <ul style="list-style-type: none"> • The government should withdraw all kinds of subsidies on irrigation water and solar panels that will promote the adoption of water-saving technology and also the rental market of different tools. • Labor mobility from the farm sector to the non-farm sector will increase wages in the farm sector. Literacy and job opportunities in cities could be the possible channels.
<p>Agri-Processing Market</p> <ul style="list-style-type: none"> • Efficient and economically viable processing units require high tech processes and highly trained human resources. These are missing and involve huge investments. 	<p>Agri-Processing Market</p> <ul style="list-style-type: none"> • A conducive investment climate can attract the investment required.
<p>Agricultural Land Market</p> <ul style="list-style-type: none"> • Land market is not very well developed mainly because of lack of authenticated land-record and lengthy land transaction process, hence few land transaction happens and land does not move from less to more efficient owners through land market. • Residential construction is eating up productive farming land and is posing a threat to food security. 	<p>Agricultural Land Market</p> <ul style="list-style-type: none"> • A conducive investment climate can attract the investment required. • Land record should be digitalized and made it accessible to anyone. • Land transaction process should be made easier and transparent. • Let the cities go vertical – this will curb urban sprawl over agricultural land.

THE PROPOSED SOLUTIONS HAVE THE POTENTIAL OF OVER US\$22 BILLION ADDITIONAL INCOME IN THE AGRICULTURE SECTOR (Ali, 2018) AND THIS WILL LEAD TO ENHANCE THE CONTRIBUTION OF AGRICULTURE SECTOR BY 6% IN THE NATIONAL GDP.

Developing Energy Markets

Box 6.5 (a)

Developing Electricity Market

Issues	Solutions/ Actionable items
Financially Unviable Sector <ul style="list-style-type: none"> Weak balance sheet of DISCOs. High and continuously rising circular debt. Government borrowing increasing to finance sector deficit. 	Financially Unviable Sector <ul style="list-style-type: none"> Supply electricity to (federal, provincial departments) on a pre-payment basis. Use technology (e.g., smart meters) accompanied by regular monitoring to curb theft. Involve provincial governments in subsidy settlement issues. Resolve taxation issue of DISCOs. Federal govt. to make timely payments for the subsidy to FATA and AJK.
State-Owned Distribution Companies <ul style="list-style-type: none"> No incentive or capacity to deal with inefficiencies. Weak corporate governance: Still under the administrative control of the government. No business models. The Board of Directors lacks capacity. Non-listed companies. 	State-Owned Distribution Companies <ul style="list-style-type: none"> Let the DISCOs become financially and operationally independent from the government. Facilitate a corporate culture in DISCOs with a viable business model. Independent/apolitical boards with professional directors enjoying sufficient decision-making powers to develop a business model. Slice large DISCOs into small units for better administration. Furthermore, unbundle distribution companies between 'wire' and 'retail' business (as envisaged in NEPRA Act 2018). Lease the difficult 'retail' areas to the private sector using performance-based management contracts. Invest in building the capacity of DISCOs for bilateral contracting; they must have the capacity to purchase the electricity in 'forward markets.' Mandate listing of DISCOs in the stock exchange. <ul style="list-style-type: none"> Sell a minimum of 20 percent shares to DISCO employees and give them representation in the board.
Unsustainable Tariffs <ul style="list-style-type: none"> Power subsidies are eating a bulk of budgetary resources, which sometimes government is unable to pay or pays with significant delay. High tariffs increase the cost of doing business, harm the federal budget, and creates distress for compliant consumers. Cross subsidization across sectors is affecting industrial competitiveness. The current tariff is Increasing Block Tariff (IBT) designed to curtail demand. 	Unsustainable Tariffs <ul style="list-style-type: none"> Notify differential tariffs for each geographical market, that is, tariff determination based on the cost of service. Recover the full cost of service from all consumers. No cross-subsidization across sectors or regions. If the government wants to subsidize any area, ensure the full payment of the subsidy. Use direct subsidy via BISP for lifeline consumers. For recovery of capacity payments, there is a need to increase sales/ consumption by reducing price significantly.

	<ul style="list-style-type: none"> To increase consumption a new tariff design is required that enhances affordability and competitiveness and also resolves capacity payment issues. Further research is required to figure out a viable electricity tariff design – a transparent and efficient pricing mechanism is a prerequisite for the development of the market in electricity.
<p>Generation Complexities</p> <ul style="list-style-type: none"> Dependence on imported fuels. Long-term contracts with sovereign guarantees; the result is limited sellers in the market. 	<p>Generation Complexities</p> <ul style="list-style-type: none"> In the future focus on renewables/ indigenous resources. For renewables intermittency issues, focus on indigenous hydro & gas resources. Move from centralized energy management to decentralized management; storage technologies; micro & smart-grids. There is also a possibility to shut down some grids and make way for renewables. The localized energy grid solutions offer energy independence and efficiency. Distributed energy projects must be supported by the government. Develop an Integrated Energy Plan which includes accurate demand forecasts (econometric modelling plus spatial forecasting), focus on improving transmission and distribution systems, fuel mix, pricing of energy sources, energy allocations and increasing energy efficiency. All new capacity additions must be below the average cost of current production. Let the market dictate the new capacity additions; they should not be prescribed. Use a competitive bidding plan for all future contracts. Develop the capacity of PPIB and AEDB. Research is required to figure out how to do this. Revisit existing contracts ensuring the availability of at least 50 % of their capacity in the market. Invest in GENCOs to upgrade them and bring them to the market. <ul style="list-style-type: none"> Reduce multiple layers in PEPCO & GENCO holding power plants to avoid unnecessary generation cost build-up. Bring those IPPs in (take and pay) market which have completed their contract period.
<p>Role of Government</p> <ul style="list-style-type: none"> The government's footprint is found everywhere: in tariff determination and administration of NTDC, CPPA-G, DISCOs & GENCOs. Fragmented energy policy, planning, and governance. 	<p>Role of Government</p> <ul style="list-style-type: none"> Policymaking after consultations with all stakeholders. Invest in building institutional and human capacity. Form an inter-agency energy group for improved coordination and governance.

<p>Weak Regulatory Infrastructure</p>	<p>Weak Regulatory Infrastructure</p> <ul style="list-style-type: none"> • Empower NEPRA to conduct regular technical audits of distribution and generation companies. • Build regulatory capacity to determine the exact cost of service. • Build capacity and empower the regulator to enforce market rules and monitor market reforms. • Increase the number of members to accommodate professionals. Selection of these based on given criteria; revoke an amendment, which allows bureaucratic capture. • Improved management at the national and regional levels is required. • An autonomous, authoritative, and accountable regulator. • How to build capacity? Research is required.
<p>Insufficient Transmission Infrastructure</p> <ul style="list-style-type: none"> • Expansion in generation capacity has not been accompanied by a corresponding expansion in transmission infrastructure. 	<p>Insufficient Transmission Infrastructure</p> <ul style="list-style-type: none"> • Centralized investment in transmission expansion. • Decentralized operative control of transmission assets. • Operations agents to be selected by means of transmission concessions. <ul style="list-style-type: none"> • Move from AC to DC transmission for reliability & cost effectiveness.
<p>Market Operator and System Operator</p> <ul style="list-style-type: none"> • CPPA-G is under the administrative control of the Power Division and has a clear bias in the favor of inefficient DISCOs. • Avoiding conflict of interest and abuse of market power concerning; grid access, dispatch decisions, and grid expansion plan is necessary. 	<p>Market Operator and System Operator</p> <ul style="list-style-type: none"> • Unbiased and independent market and system operator for establishing open access. • No involvement of government in running the system. • Legislate to establish a neutral system operator towards all sellers and buyers. • Introduce transparency in operations of system operators – through automaton and making operative decisions public on website; thus reducing the influence of market participants.
<p>Legal Framework for Market Development</p> <ul style="list-style-type: none"> • CTBCM is prepared by CPPA-G with the assistance of international donors and approved by NEPRA without realizing ground realities and without thorough consultations. • No institutional setup is in place to develop a competitive market. 	<p>Legal Framework for Market Development</p> <ul style="list-style-type: none"> • Get the CTBCM evaluated by an independent evaluators. • Develop the capacity of all concerned departments/ stakeholders with respect to markets. • Develop institutional arrangements for market operations-including grid codes, access rules, and commercial tools for the operation of the transmission system in consultations with all stakeholders. • Political consensus and policy commitment for market development.

<p>Demand Side Flaws</p> <ul style="list-style-type: none"> Lack of correct demand elasticity, many a time require expensive plants to dispatch electricity to clear demand in peak hours. In Pakistan, there is an “unmet energy demand”, a market of about 80 to 100 million people. These people are largely in rural areas or in semi-urban areas with little urban footprint. 	<p>Demand Side Flaws</p> <ul style="list-style-type: none"> Increase demand participation: Integrate large customers in the market. Direct contracting between large customers and generators (B2B). Micro-grids for our rural areas or wherever it is required is more cost-effective, as compared to connecting those communities with the national grid. A research study is required on how to better forecast electricity demand.
<p>Wheeling of Power Challenges in Bilateral Contract Market</p> <ul style="list-style-type: none"> Bilateral contracting (B2B) is the first step towards the wholesale market which includes spot trading and futures trading. 	<p>Wheeling of Power Challenges in Bilateral Contract Market</p> <ul style="list-style-type: none"> Make wheeling attractive for sellers (generation companies) and buyers (bulk power consumers). Determine wheeling charges based on the economic principle of marginal cost. Do not cross-subsidize to cover sectoral inefficiencies like theft, stranded cost, and non-collection.

Box 6.5 (b)

Developing Natural Gas Market

ISSUES	SOLUTIONS
<p>Upstream: Weak Exploration Activities</p> <ul style="list-style-type: none"> Poor policy formulation and regulatory framework. Unfavorable well-head prices; taxation issues, huge administrative costs, and excessive government footprint. State-owned companies (majority shares owned by the state) lead the upstream gas sector. These firms hesitate in investing in new technologies due to red tape and fear of NAB. 	<p>Upstream: Weak Exploration Activities</p> <ul style="list-style-type: none"> Prioritize exploration activities to reduce reliance on LNG imports. Progressive and market-based exploration policy, with minimum government involvement. Well-head prices based only on demand and supply. B2B Contracts A part of royalty and taxes collected should be spent on exploration. Regular monitoring of high value blocks, e.g. block 28. Government-funded basin study incorporating the latest well logs and its availability at minimal costs. Auction of non-performing concessions held idle for long by the exploration companies. Transparent mechanisms for state-owned companies with powerful independent boards. Regulatory upstream functions (primarily exploration) should be assigned to OGRA.
<p>LNG Imports</p> <ul style="list-style-type: none"> LNG imports are dominated by long-term contracts. Delay in decision-making increases costs. 	<p>LNG Imports</p> <ul style="list-style-type: none"> Implement LNG Policy 2011 Re-visit the long-term agreement to unlock some of the gas volumes and allow these to be purchased by other parties (third-party access) on short-term contracts or in the spot market. Research is required to determine LNG demand and its import mechanism.

<p>Inefficient Gas Companies</p> <ul style="list-style-type: none"> • SNGPL & SSGCL are integrated monopolies. • Financial returns of SNGPL & SSGCL are linked to 'Return on assets' (pipeline network is the primary asset) and not to their operational efficiency. • Investment in the expansion of gas infrastructure and not on its maintenance. • High unaccounted for gas (UFGs): 7 times of world average; SNGPL (11.8%) & SSGCL (17.8%). • SNGPL and SSGCL are listed companies with significant private shares but working under strong government influence. 	<p>Inefficient Gas Companies</p> <ul style="list-style-type: none"> • Unbundling of downstream monopolies between 'pipeline' and 'retail' business. • Outsource 'retail' management for controlling theft. • Business model for gas companies based on profits from operational efficiency; no more guaranteed rate of return. • Invest in the maintenance of the distribution network and ban domestic expansion projects.. • Install high-quality measurement devices to address the UFG issue and bonus for employees only when there is a reduction in UFG. • Empower the two companies through independent and professional board of directors.
<p>Demand Mismanagement</p> <ul style="list-style-type: none"> • Inefficient use of gas. • Politically motivated gas allocation policy. • Importing LNG and injecting more gas in a leaking distribution system cannot yield positive results. 	<p>Demand Mismanagement</p> <ul style="list-style-type: none"> • Energy efficiency legislation and strict implementation in all sectors. • Allocation of gas to sectors should be from the growth perspective and not based on political decisions. • Supply gas to the domestic sector at full cost of service.
<p>Market Liberalisation</p>	<p>Market Liberalisation</p> <ul style="list-style-type: none"> • The first step to achieve gas market liberalization is third-party access to regasification terminals, transmission, and distribution systems. • For future concessions, pricing of domestic gas to be on B2B contracts without government guarantees. • A research study is required to fully understand the development of the market in the gas sector.
<p>Role of Government</p>	<p>Role of Government</p> <ul style="list-style-type: none"> • Commitment to developing competition. • Legislation for liberalization through political consensus - policymaking/ legal framework to allow third party access for healthy competition. • No need for two parallel energy systems for domestic consumers and for the industry - Gas is not cheap anymore; it should be used where it can add value. Let the market decide.

<p>Unsustainable Tariff Regime</p> <ul style="list-style-type: none"> • Consumer and producer prices are controlled by the government. • Gas pricing is driven by welfare/political considerations; it does not reflect the economic value of gas. • Uniform gas price: each consumer category, across the country is charged a uniform price, regardless of the distance, volume, or cost of supply. • Indigenous gas prices have been kept low by the government distorting the development of the gas market. • Delays in tariff determinations and below costs tariff is contributing to circular debt. 	<p>Unsustainable Tariff Regime</p> <ul style="list-style-type: none"> • No more across the board subsidy; set consumer tariff on a cost-of-service basis. • Direct subsidy via BISP etc., for lifeline consumers. • Single price for all users. • Some balance between gas and electricity prices to minimize the misallocation of energy resources. (Research is required to figure out how gas prices may be related to electricity/fuel to avoid misallocation). • Convergence between the price of piped indigenous gas and RLNG to attract new players, or a weighted average cost of domestic gas production and RLNG imports assessed by a regulator (Research is required on this aspect). • Once the third party access system is fully established, regulated pricing can be replaced by market prices established by gas-to-gas competition.
<p>Weak Regulatory Infrastructure</p> <ul style="list-style-type: none"> • OGRA lacks operational independence - all decisions are made under the influence of the government. 	<p>Weak Regulatory Infrastructure</p> <ul style="list-style-type: none"> • Empower OGRA to monitor leakages and take effective steps to control them. • Empower OGRA to determine cost-effective prices for gas companies, until the fully liberalized market starts functioning. • Employ more economists and tariff specialists. • Build capacity of OGRA for overseeing both upstream and downstream activities and promoting fair competition throughout the gas value chain. • Empower regulator to oversee the implementation, economic and technical regulations of third-party access to enforce market rules. • Increase the number of members to accommodate professionals. In the selection criteria revoke amendments that allow bureaucratic capture.

Box 6.5 (c)

Developing Petroleum Market

Issues	Solutions
<p>Incomplete Deregulation</p> <ul style="list-style-type: none"> • Fixation of fuel prices is a political decision rather than a market-driven signal. • The first right to buy crude/condensate from the upstream E&P is with the government. 	<p>Incomplete Deregulation</p> <ul style="list-style-type: none"> • Market-based pricing based on demand and supply. • Limit the role of government in pricing and allocation. <p>Research is required to figure out a better system of fixing fuel prices.</p>

<p>Pricing and taxation</p> <ul style="list-style-type: none"> • The dependence on fuel-taxation as a source of government revenue has increased. • OMCs are allowed to import directly but the import cost of oil is determined based on purchase costs of the PSO. • Retail prices do not reflect the international price trend. • Inland Freight Equalization Margin (IFEM) is for uniform tariffs but is used for various disbursements to the oil sector. 	<p>Pricing and taxation</p> <ul style="list-style-type: none"> • Determine petroleum pricing on a weekly basis linked to international prices. • Ex-refinery prices should be determined based on international practice - OGRA may set an upper limit based on the weighted average of the import prices of all OMCs. • Petroleum pricing on a cost of service basis; <ul style="list-style-type: none"> • Abolish IFEM. • 7.5 percent deemed duty on diesel should be abolished on an urgent basis as planned by the government. <p>Research on petroleum pricing and taxation is required</p>
<p>Weak Regulatory Structure</p> <ul style="list-style-type: none"> • Long term vision for the sector has not been developed. • For upstream distribution of fuel, government is the regulator. • OGRA lacks authority and capacity. • There are no checks on ensuring quality delivered to consumers. 	<p>Weak Regulatory Structure</p> <ul style="list-style-type: none"> • An independent (single) regulator with a long-term vision for both upstream and downstream activities is required. • Build capacity of the regulator (OGRA) for monitoring and enforcement of deregulated upstream/downstream petroleum sector. • Develop standards for determining the quality of imported as well as locally produced petroleum products.
<p>Storage facilities</p> <ul style="list-style-type: none"> • Pakistan continues to face logistic bottlenecks and limited stocks. 	<p>Storage facilities</p> <ul style="list-style-type: none"> • Make it mandatory for OMCs to maintain and expand strategic stock capacity. • Information on stock and storage facilities should be available on the OGRA website and updated every week.
<p>Role of Government</p> <ul style="list-style-type: none"> • The downstream and midstream petroleum policy lacks direction. 	<p>Role of Government</p> <ul style="list-style-type: none"> • Develop an effective downstream and midstream policy with incentives based on international standards. • A study is required to adjust concession agreements in compliance with international exploration practices.
<p>Domestic Refining Capacity</p> <ul style="list-style-type: none"> • Production of local refineries is below capacity and lacks quality. 	<p>Domestic Refining Capacity</p> <ul style="list-style-type: none"> • Upgrade local refineries to improve yield value and meet Euro-5 standard. • Audit of deemed duty charged by refineries since 2002 is required.
<p>Long-term contracts</p> <ul style="list-style-type: none"> • Limited benefits from the opportunities offered by the volatile crude oil markets; PSO (the market leader) relies on long-term contracts. 	<p>Long-term contracts</p> <ul style="list-style-type: none"> • PSO should enhance its oil trading and vessel chartering expertise. • Oil procurement can be outsourced based on performance contract, and cost-saving from spot to be shared with the company. <p>(Research is required to examine feasible outsourcing practices and optimum procurement plan).</p>

Box 6.6**Government Should Exit from Wheat Market**

- Banks finance the provincial food departments/PASSCO against sovereign guarantee from the government.
- Overtime bank loans have not been fully retired. This has led to circular debt of about Rs.800 billion - not sustainable activity
- Presence of government in the wheat market with opportunity to borrow cheaply from banks crowds out space for the private sector.
- All this creates inefficiencies in the wheat market.
- The solution lies in exit of the government from the wheat market.

Box 6.7**Action Points****Real Estate**

- Encourage Real Estate Agent associations in various cities and regions on a self-policing and licensing system. Agent responsibilities and codes should be developed by these organizations.
- Abolish development by housing societies and cooperatives.
- Developing and building should be a business of bonded licensed builders.
- Develop a system of open transparent electronic titles to property - no paperwork, go for automation and digitization.
- Do away with stamp papers and transaction taxes.
- Abolish DC rates. Buyers and Sellers to disclose the price. The government to enjoy the right to buy on declared price (This will refrain buyers from declaring low prices).
- Brokers' groups to develop an online listing service. No sales without appearing on listing service.
- Property to be sold only after a 'for sale' sign remains on the property for at least a week.
- Settlement attorneys to handle transaction paperwork electronically to complete the sale in a week.
- Title agents to search and guarantee title against a fixed fee.
- Amend rental laws to allow the rental investment industry to thrive.
- Impart training to judges on Real estate matters.

Agriculture

- Government to gradually exit from wheat and sugar market – no fixation of minimum support price and no purchases by the government from the farmers. To begin with the government can fix only the lower and upper bound of prices.
- Mandate registration of seed supply firms through the Seed Act.
- Seed supply firms to appropriately label their products to cover the information gap.
- Revisit the approval process of new varieties to reduce government footprints.
- Develop a regulatory framework for the use of groundwater.
- Adequately price the irrigation water to encourage an efficient cropping pattern.
- Reduce footprint of the government on the input markets, such as fertilizer, water, and extension to let the markets operate efficiently.
- To improve the efficiency of input-output markets government has to reduce its footprints, but put in place a proper regulatory framework to ensure input-output qualities.
- Branding should be encouraged for all kind of suppliers in input-output markets, and truth-in-label should be adopted to ensure quality.
- Farmers Entrepreneur Groups should be established in all major agriculture commodity clusters and all incentives and public sector services should be channeled through these groups to instigate value chain development activities in rural areas. Chinese help could be sought via CPEC in this area.

Energy

Electricity

- Supply electricity on pre-payment basis - use smart technology.
- Tariff determination based on the actual cost of service.
- Remove subsidies; if any subsidy is allowed, ensure its timely and full payment is made.
- Lease the difficult 'retail' areas to the private sector for a certain period – execute performance-based management contracts.
- Develop Business Model and list DISCOs/GENCOs in the stock exchange; sell 20 percent shares to employees and give them representation in the board.
- Develop integrated Energy Plan covering transmission, distribution, environment, and energy efficiency.
- Prepare competitive bidding document for all future contracts.
- Use wheeling charges based on marginal cost.
- Engage independent experts to evaluate CTBCM.

Gas

- Reduce government footprint on state-owned companies and in tariff determination.
- Outsource 'retail' management for controlling theft; install high-quality measurement devices to address the UFG issue.
- Business model for gas companies; profits from operational efficiency.
- Single consumer tariff based on a cost-of-service. Targeted subsidy where necessary.
- Progressive and market-based exploration policy - well-head prices based on demand and supply.
- Spend a part of royalty and taxes on exploration.
- Regular monitoring of high-value blocks.
- Auction of non-performing concessions.
- Re-visit long-term LNG agreement to unlock some of the gas volumes and allow these to be purchased by other parties on short-term contracts or in the spot market.
- Convergence between the price of piped indigenous gas and RLNG.

Petroleum

- Limit the role of government in pricing and allocation.
- Ex-refinery prices based on international practice - regulator to set an upper limit based on the weighted average of the import prices of all OMCs.
- Abolish IFEM, and determine petroleum prices weekly linked to international oil prices weekly.
- Enhance oil trading and vessel chartering expertise of PSO. Outsource oil procurement based on performance contracts.

Sustainable economic growth requires improvement in energy productivity-invest in energy innovations, distributed generation, and smart energy solutions.

The Merger of regulators (NEPRA and OGRA) is essential for the overall energy sector.

Box 6.8 Further Research

Real Estate

- Explore methods of developing an index of real estate prices – land and Building (commercial and residential)
- Estimate housing demand.
- Explore options of affordable housing.

Electricity

- Figure out a viable electricity tariff design.
- How to better forecast electricity demand.
- What kind of capacity PPIB and AEDB requires and how to develop this capacity?
- What kind of capacity building NEPRA requires and how to develop this capacity?

Gas

- How to determine LNG demand and its effective import mechanism.
- To fully understand how the market in the gas may be developed.
- What should be the mechanism of determining the retail price of gas, given that gas is received from multiple sources?

Fuel

- To understand how gas prices may be related to electricity/fuel to avoid misallocation.
- What could be a better system of fixing the retail price of fuel and taxes thereon?
- Can oil procurement be outsourced? If yes, what could be a feasible outsourcing mechanism?

Agriculture

- Size of GDP lost due to use of impure varieties of seed.
- Estimate the impact of price support, input subsidy, and tariff/subsidy import/export on welfare losses of consumers and producers.

References:

- Abedullah and Zia, U. (2020). Unraveling Water Use Efficiency in Sugarcane and Cotton Production in Pakistan. Vol. 59(2). Pakistan Development Review. PP. 321-326.
- Abedullah and S. Kouser (2020). Evaluating the Determinants of Pesticide Residues in Vegetables: A Case of Lemon Market in Pakistan. The Journal of Animal Plant Sciences Vol. 30(6). (Impact Factor- 0.481).
- Akerlof, G. (1970). The Market for “Lemons”: Quality Uncertainty and the Market Mechanism. The Quarterly Journal of Economics, 84(3), 488-500.
- Ali, A. (2020), “The Dynamics of Energy in Pakistan”, Research on Economy and Politics (REAP).
- Ali, M; Ahmad, F; Channa, H; and Davies, S. (2016). Pakistan’s Fertilizer Sector Structure, Policies, Performance, and Impacts. IFPRI Discussion Paper 01516. Development Strategy and Governance Division.
- Ali, M. (2018). Pakistan Food Security Policies and Vision 2025. Paper presented at 34th Annual General Meeting (AGM) of PIDE.
- Hina, H and A. Malik (Forthcoming) Petroleum Prices in Pakistan, PIDE Energy Brief.
- Malik, A. (2020) Circular Debt: an Unfortunate Misnomer, PIDE Working Paper Series 2020: 20.
- Malik, A. and H. Hina (Forthcoming) Gas Prices in Pakistan, PIDE Energy Brief.
- Malik, et al (Forthcoming) Energy Market Structure: Oil and Gas, PIDE Energy Monograph.
- Mustafa, M. and Abedullah. (2017). Livestock Value Chain Assessment, Rural Transformation, Issues and Constraints in Pakistan, Presented at “International Symposium of Global Value Chains (GVCs) and Decent Work Deficit in Agriculture: Present Challenges and Future Prospects” organized by the University of Agriculture Faisalabad, December 1-2, 2017.
- PIDE (2020a) Circular Debt_ An Unfortunate Misnomer, PIDE Energy Roundtable, June 25, 2020.
- PIDE (2020b) Energy Investments & Planning, PIDE Energy Roundtable, July 03, 2020.
- PIDE (2020c) Developing Electricity Market for Future, PIDE Energy Roundtable, July 07, 2020.
- PIDE (2020d) Reforming Electricity Distribution Companies, PIDE Energy Roundtable, July 25, 2020.
- PIDE (2020e) Electricity Pricing and Regulation, PIDE Energy Roundtable, September 05, 2020.
- PIDE (2020f) The Gas System in Pakistan, PIDE Webinar, October 24, 2020.
- Sattar, S. (2020a), Issues of Power Sector, presentation prepared for the PIDE Growth Strategy.
- Sattar, S. (2020b), Gas sector, presentation at the PIDE Webinar on “The Gas System in Pakistan, October 24, 2020.

THE OPPORTUNITY IN CITIES⁹

Don't be too hasty in trying to define the city; it is much too big, and there is every likelihood that you will get it wrong.

- **Georges Perec**

When we build a city, we take our grandest dreams as well as our deepest anxieties and set them in concrete for the next generation.

- **Steve Inskeep**

Charitable organizations have so emphasized the miseries and helplessness of the world's poor that no one has properly documented their capacity for accumulating assets The quantity is enormous. But most of it is dead capital.

Mystery of Capital, Hernando De Soto

[our cities reflect a] Shared economy of work and segregated economy of shelter.

(Uncivil City, Amita Baviskar)

Slums are the inevitable outcomes of master plans, not their violations.

(Uncivil City, Amita Baviskar)

Cities drive world GDP. At least 80 percent of world GDP comes from cities¹⁰. They have been the cradle of civilizations as well as progress since civilization began. Pakistan, at 220 million people, is not even 0.34% of world GDP. Hong Kong, a city of 7.4 million people, has a larger GDP contribution than Pakistan's (0.43%). Clearly, Pakistani cities are lacking in terms of contribution to GDP and growth.

Agglomeration

Cities influence economic development through agglomeration economies which occur when people locate near one another in cities and industrial clusters (Glacier, 2010). The agglomeration economies generated include:

- Low transport costs;
- Huge local market;
- Large supply, particularly of specialists; and
- Accumulation of knowledge and human capital leading to knowledge spillover, innovation, and entrepreneurship.

Agglomeration generates some diseconomies as well, like congestion and environmental hazards. From an economic perspective, the focus of urban development is to make the best use of economies of agglomeration while keeping diseconomies at bay.

Merits of Mix-Use Urban Space

The mix-use of urban space, i.e. having all that a person needs in close proximity, reduces transportation costs and generates several agglomeration economies mentioned above. The vertical and inclusive places also discourage sprawls and thus save the cities from facing diseconomies like congestion and pollution. The diseconomies which arise due to high density are taken care of by having an efficient transport system and discouraging the use of cars through measures like congestion tolls.

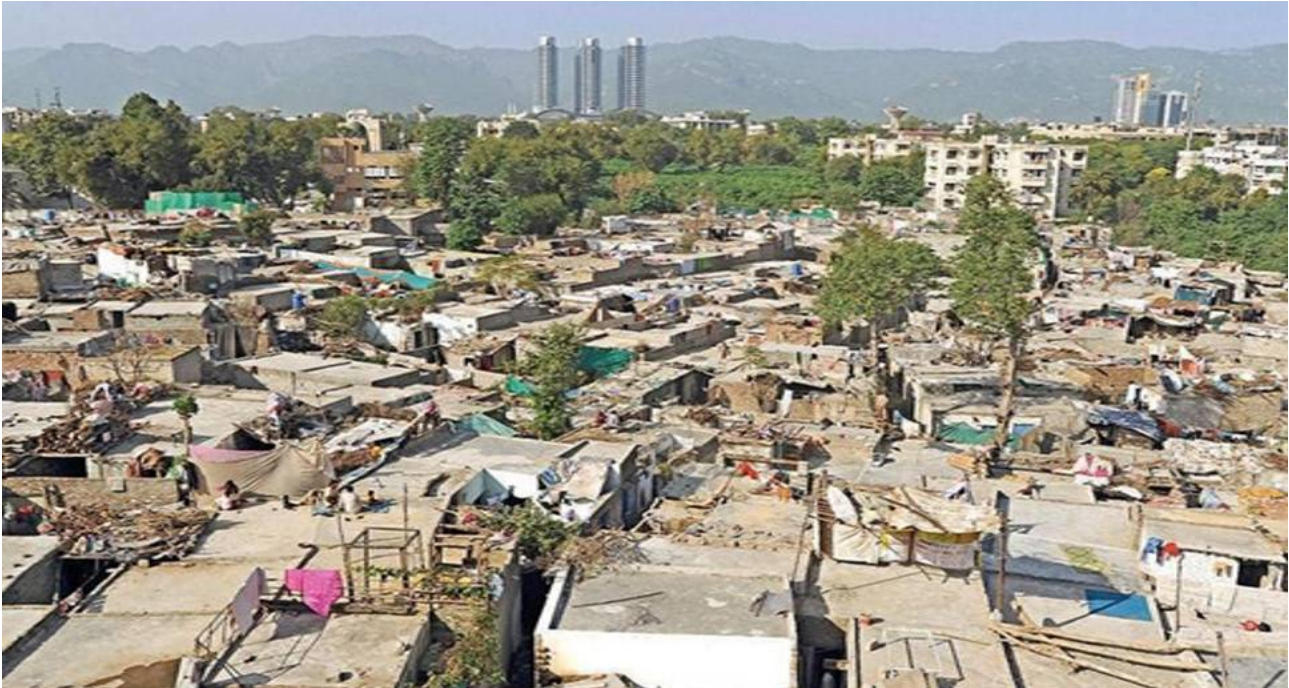
Consequences of Non-Inclusive Cities

The non-inclusivity in cities, as envisaged in master plans, have led to *katchi abadis* on the one hand and homelessness on the other – the low-income domestic workers from far off villages

⁹Contributors: Idrees and Shahid: PIDE's Magazine (P&R) on Urban Development has been extensively used for this chapter.

¹⁰World Bank (WB)

reside in slums, while male construction-related labour sleeps on green belts and verandahs in front of shops in the cities.



Islamabad: A Non-Inclusive City

The poor are a key stakeholder in the economy; if they have to work in cities, the city zoning has to allow shelter for them within the city – a shelter close to their place of work – failure to do so contributes to slums leading to host of civic and societal problems.

Box 7.1

Housing for the Poor

1. Whenever we think of housing for the poor, the solutions that are put forth, involve allotment subsidized of plots/houses or at times free of cost in suburbs of the city. The poor are expected to commute to the city for work. The poor, who are often short of cash, are likely to sell the land/ house to make ends meet and come back to reside in slums within the city.
2. The provision of mortgage financing is being debated as means of providing housing for the poor. However the poor are unlikely to have sufficient income to repay the mortgages.
3. The government and society do not have the resources to provide housing for all the poor. To select the most deserving a process has to be designed – given scarcity, this process is bound to lend to rent-seeking and corruption.
4. The solution then lies in;
 - a. Providing employment opportunities and shelter for the poor close to their place of employment within the city.
 - b. Developing a rental market where the poor and middle class can rent houses as per their need and affordability.
 - c. Encouraging investment in mix-use buildings in downtowns which the low income can afford to rent.

Construction without Real Estate Development, Haque and Khurshid (2020)

Dense, Mix-Use, Inclusive, and Vertical Cities

To facilitate the growth we will have to make our cities creative – which boils down to making the cities dense, mix-use and inclusive – this will also imply that cities expand vertically rather than horizontally, as is presently the case.

City Zoning

In a vibrant city that allows sufficient economic activity, enough space will be devoted to commercial activities. The presence of offices, schools, and warehouses in bungalows is enough to suggest that commercial space is scarce in our cities. The zoning of a business-friendly city will address this scarcity.

The Misplaced Emphasis on Housing Schemes

The prevailing thinking regarding the high-rise buildings seems to be that only housing societies and professional developers should be allowed to construct high-rise on plots of larger size. This thinking conflicts with the notion of inclusivity. We should allow high-rise buildings on plots of small size as well.

A Strong Local Government

The dense and vertical cities will require a very efficient level of civic institutions and utility agencies. This would require a very strong local government with enjoys control over the entire city. Thus, the present system of a city being controlled by multiple authorities will have to be dispensed.

Rental Market

In an inclusive city the poor would also reside, but all of them will not be able to own a house. Facilitating a vibrant rental market, which currently does not exist, is essential. The development of such a market would require an enabling; taxation, regulatory, and financing regime. **However what precisely impedes the development of the ‘rental market’ has not been sufficiently researched in Pakistan. PIDE will research the subject to understand the issues surrounding the rental market, including demand and supply, return on assets, constraints, and the way forward.**

Master Plans

The master plans, especially if these are not updated periodically, fixate the city in rigid plans that may not always serve contemporary needs. For example, even if the Karachi administration were to try, it will find it hard to implement the city’s master plan developed in the early seventies. Similarly, the master plan of Islamabad, developed in the early sixties, is not in tune with contemporary needs – the authorities had a hard time accepting towns like Bani Gala and Chak Shahzad into its fold. Thus it is clear that contrary to popular belief, the planners do not always have a clear idea of what to build where. Therefore, worldwide more and more cities are giving up master plans in favour of loose guidelines that allow markets to take decisions on usage, height, and cityscape. The cities of Pakistan should also adopt this approach (Haque and Khurshid, 2020, Iftikhar and Khan, 2020).

Car and Parking policy

To avoid congestion in the more dense areas of the city, especially during peak hours, the creative cities would need a ‘car policy’ as well as a ‘parking policy’. Shoup (1997) argues that free parking is a subsidy of significant magnitude that contributes to a variety of negative externalities, including congestion, pollution, fatalities, pedestrian injuries, traffic jams, and consequent economic waste. Dense cities need a car policy as well as a parking policy aimed at discouraging the use of cars in favour of public transport. Construction of signal-free corridors, overhead bridges, and lack of

Car Policy

- **Congestion tolls:** Pakistan should charge congestion tolls to the motorists who choose to drive into congested areas at certain peak hours.
- **Speed lanes:** speed lanes, for a charge, for those who want to drive at a high speed.
- **Efficient Public transport:** congestion tolls would have to be complemented with an efficient public transport that carries people to their workplace and public places.

Parking policy¹¹

- **Street parking:** Introduce charged street parking.
- **Use regressive parking charges** based on the use of amenities, roads, parking spaces used, and damage caused to the environment by a car – PIDE estimates suggest that a city like Islamabad with a population of 2.0 million can generate Rs. 2.8 million/day if each car is charged a paltry sum of Rs. 10/-
- **Parking charges in all major markets** – the absence of charges in some markets will lead to arbitrage – buyers shifting from charged-markets to markets without parking charges.
- **Apartments without parking:** Allow buyers to buy an apartment without parking if they so desire. This will allow low-income people to own apartments.
- **School buses:** Develop a mechanism to make schools run buses and induce parents/students to use school buses.
- **Pooled Transport:** Develop a mechanism to make people use pooled transport to and from the workplace.

Reimagining Cities

The PIDE held extensive discussions with the Lahore Development Authority (LDA) to understand construction-related matters. The problems expressed and the solutions which emerged from the discussion are presented in Box 7.2 as an illustration. More or less similar problems are faced in other metropolitans like Karachi. The solutions noted in the Box 7.2 are equally valid for other such cities¹².

Box 7.2 Reimagining Lahore	
Problems	Solution
Five authorities, including LDA, TMA, LMC, PHATA, and DHA, exercise jurisdiction over the city. LDA only regulates and develops only 20% of Lahore.	Have a single entity for governing the city – all modern cities are governed by a single entity.
Lahore is Sprawling – with the <i>kothi-garden-car life style</i> , Lahore has expanded horizontally – the city now extends from Kasur to Gujranwala. A maximum of 4-floor commercial units is the norm.	Introduce density gradients: Density gradients: Let city centres densify through the development of flat living in high-rise (10 or more floors) or midrise (less than ten floors) buildings. Zoning should merely differentiate between the city centre and suburbs. With a large city like Lahore, the city centre might even be from Model Town to the Walled City and from Cantt to Samanabad.

¹¹ This section relies on Hadi, Hafiz Ur Rehman (2021, Cars, Cars, Everywhere in 'Cities and Urbanization', PIDE P & R, January 2021.

¹² This section relies on Haque and Khurshid (2020), Ullah (2021), Lahore's Urban Dilemma, PIDE P & R, January 2021.

<p>Lahore has been micro-managed – building by-laws stretch into every area including road width etc.</p> <p>Micromanagement has led to a host of permissions required, which contributes to delays and rent-seeking; lengthy detailed guidelines, requiring a lot of interpretation, slow down work; create an insider market and lead to a lot of court intervention.</p>	<p>Lay down zoning principles and building regulations - let such principles be the guidelines.</p> <p>Guidelines by LDA must be minimal, short, and clear. Building rules should mainly be about safety and environmental hazards – setbacks and road width should be part of zoning regulations and uniform for a specific zone.</p>
<p>The prevailing Floor Area Ratio (FAR) is too tight to meet the construction target that the government has in mind.</p> <p>Height restrictions lead to:</p> <ul style="list-style-type: none"> • Box- like structures as builders want to cover maximum area. • No green spaces. • Uniform skyline/ sun exposure – with areas that are not exposed to the sun. 	<p>Relax FAR by a factor of at least two i.e. double the FAR.</p> <p>Give up height restrictions, no use of it given FAR.</p> <p>Introduce sky exposure guidelines.</p>
<p>Building Intensity:</p> <p>Setbacks concerning plot size create unnecessary complications.</p>	<p>Setbacks, if required, their rationale should be explained – these should be uniform in an area and not by plot size.</p> <p>Define the percent of the land to be used for construction, with zoning determining the setback (not the building bye-laws).</p>
<p>Some areas/houses have no or very little exposure to the sun.</p>	<p>Exposure to the sun and the exposure angle should be defined – a building should be built within the intersection of certain angles to allowing sun exposure.</p>
<p>Cities are non-inclusive: Roads being widened for cars, bridges/flyovers/underpasses being constructed for cars.</p>	<p>A car policy/parking policy should be introduced with salient features like:</p> <ol style="list-style-type: none"> a. Paid street parking in designated zones. b. Congestion tolls: those taking cars to congested areas should pay a toll. c. High-speed lanes be introduced: Those traveling in these lanes should pay too. Safe city cameras will facilitate monitoring the above. d. To allow the poor to afford apartments – parking should be sold separately from apartments. <p>Those who do not own a car or do not want to buy parking should have the option to buy an apartment without parking.</p>

In summary, to make cities inclusive and encourage construction activity therein the following measures recommended by Haque and Khurshid (2020) be adopted:

- Stop master plans. Cities evolve, but master plans inhibit their dynamism.
- Change rigid zoning laws to allow the citizens access to facilities required to lead a productive life – Commercial life near gated communities should not be banned, and there is no harm in allowing offices from overlooking the residential property. Those with a high value for privacy can move to the suburbs.
- City centres or the cores of large cities like Lahore, Karachi, Faisalabad, Peshawar etc., must allow construction of high-rise and mixed-use buildings to have the flexibility to adapt to changing market conditions.
- Generous floor area ratios (FARs) should be allowed so that the market can work
- Building codes are for areas and not individual properties. There should be no reason to get building-by-building commercialisation and permission.
- The permission regime is too costly. Let every one with ownership develop his or her properties.

Street Vending

In a country where poverty and low literacy abounds, street vending is an excellent option to generate employment. Though street vending does exist almost everywhere, however, the elite administrative structure and middle-class mindset usually treat street vendors, as the relic of an archaic era, which has no place in the modern lifestyle of sleek infrastructure and shopping malls. No government, whether from developed or developing countries, has been able to eradicate street vending. It is among the oldest urban vocations and is unlikely to go away.

Street vending provides pro-poor employment opportunities. This has the potential to fulfill a significant part of the government's resolve of providing 10 million jobs. Following measures are required to accord official blessing to street vending¹³.

- Recognized street vending as a legitimate vocation and an integral part of the economy.
- Develop database of street vendors through the conduct of a local survey.
- Develop vending zones.
- Issue vending license as per the holding space of the zone.
- Integrate street vendors in the formal economy.
- Create space for low-tech financial inclusion among street vendors.
- Promote technology diffusion for enhanced productivity.
- Provide training infrastructure for skill enhancement.

Dead Capital and Opportunities

Dead capital refers to assets not used at all or the assets yielding much less than their true potential. One such asset in Pakistan is the land, especially the land owned by the government. Public land is grossly underutilized in the country, especially the land used for government housing – huge bungalows, in some cases spread over acres, characterize public housing. If even some of these government bungalows were to be converted into high-rise buildings, this could yield enormous wealth and employment for the country and huge finances for the city.

Unlocking Dead Capital¹⁴

PIDE's crude estimates suggest that if the five GORs in Lahore spread over around 4000 acres were to have 35 high-rise buildings with an average of 35 floors each, this would require an investment of \$17.5 billion. This investment will yield an employment bang of 350,000-500,000 people during construction and 225 million sq ft of constructed space for all uses - imagine the market price of this space. PIDE would suggest that a city wealth fund may be created which should own these kinds of assets. Professional managers may be deputed to develop projects and sell these assets as public-private partnerships on a build-own-operate and transfer basis. Thus the city would earn revenues on a sustained basis. The time-bound nature of these contracts would force quick construction and returns (Haque, 2019).

¹³ The recommended measures are based on the discussion in a PIDE webinar on 'Introduction of Legislative Bill for the protection of Street Vendors' Rights' (2021).

¹⁴ Haque, Nadeem UI (2021) The Opportunity of Dead Capital, PIDE P & R, January 2021.

In London, King's cross, a 67-acre piece of public land, was once dubbed a 'wasteland'. Under a 'Renewal' plan, the authorities decided to use the place for social and cultural activities. By 2019, the project had attracted \$900 million in investment. The GORs Lahore awaits a similar 'renewal' plan.



King's Cross London



GOR Lahore

Dead capital exists in various other forms as well. For example, just by charging a parking fee, the cities can use their lands more productively to earn revenues (Haque, 2019).

Heritage and religious sites (of different religions) can be used to unlock dead capital. Just as the Gurdwara in Nankana sahib is now yielding revenue, there could be many other sites in Pakistan that can be used to generate revenues.

Table 7.1 Land Owned By Different Entities	
Organization	Land owned Total area
Railways	167,690 acres
ETPB	100,000 acres
Cantonment	600,000 acres
Pakistan Steel	18,660 acres

Table 7.1 shows huge land held by different entities. Not all but some of this could be dead capital.

Urban Forest: Urban forests present yet another opportunity for the cities – these would mitigate environmental pollution, make cities more liveable on top of creating more jobs.

Urban Farming: Urban farming is also worth exploring. This can help alleviate food supply constraints while using less land for producing more food. With good quality labour and better storage facilities available in cities, this could be a job-creating option.



Urban Forest



Urban Farming

Pakistan's dead capital is enormous. Its true magnitude (in its various forms) and its revenue potential is unexplored in its entirety. PIDE would undertake research to estimate the magnitude of dead capital in Pakistan and explore options to turn this into productive capital.

Figure 7.1
Action Points

- 1 Rigid Master plans of cities should give way to loose guidelines.
- 2 Zoning should merely differentiate between city centers and suburbs.
- 3 The city to be managed by a single authority.
- 4 Relax floor area ratio to allow high rise buildings.
- 5 Develop rental market for housing.
- 6 Develop a car policy with salient features; like congestion tolls and paid street parking
- 7 Sell apartment parking separately from the apartment.
- 8 An efficient public transport that serves most parts of the cities especially its dense areas.
- 9 Street Vending Zone: Look at street vending as a legal activity and establish street vending across the city.
- 10 Unlocking Dead Capital: Create a city wealth Fund. Management of all unutilized public land and low yield public land (like government housing) be entrusted to the city wealth fund for better use. Like the construction of high rise buildings for commercial and residential use on government land.

Figure 7.2
Research Required

- 1 Developing an index of real estate prices – city-wise and location-wise.
- 2 Master Plans:
 - a. What should be the loose guidelines that may replace the master plans?
 - b. Compare cities 'with master plans' and 'without master plans' and to assess which one serves the citizens better in terms of 'work, live and play'.
- 3 Dead Capital:
 - a. What is the magnitude and the kinds of dead capital in Pakistan?
 - b. What are the potential ways of unlocking dead capital?
 - c. What are the gains from unlocking dead capital and what would be the impact on the GDP?
- 4 How to develop the rental housing market in urban areas?
- 5 Construction regulations:
 - a. Permissions/NOCs currently required, and time and money consumed in securing these?
 - b. Permissions/NOCs that can be done away with.
 - c. Procedures that can be fast-paced with digitization.
- 6 How may the management of the city may be assigned to a single body while addressing concerns of all segments?

References:

- Hadi, Hafiz Ur Rehman (2021) Cars, Cars, Everywhere in 'Cities and Urbanization', PIDE P & R, January 2021.
- Haque (2021), The Opportunity of Dead Capital, PIDE P & R, January 2021.
- Haque and Khurshid (2020) Construction without Real Estate Development, PIDE Working Papers, 2020:9.
- Iftikhar and Khan (2020), No more master plans, please TNS, The NEWS, November 29, 2020.
- Rafi Raja (2021), Lahore's Urban Dilemma, PIDE P & R, January 2021.
- Shoup, D. (1997), The High Cost of Free Parking, Journal of Planning, Education and Research 13:3-20.

OPENNESS, COMPETITIVENESS AND COMPARATIVE ADVANTAGE

Open political systems have been gaining ground and there is a good reason for it. They work better.

- George P. Shultz

Openness of the Economy: Tariffs

In its first 40 years of existence, Pakistan remained a closed economy seeking import substitution—remnants of which are still visible in many industries such as engineering and fertilizers. On the heels of repeated stabilization efforts, Pakistan adopted trade liberalization measures in 1996/97.

However, the process almost came to a halt in 2008 when the financial and fuel crisis made the trade deficit untenable. Subsequently, the government undid several earlier reforms and levied regulatory duties and other taxes on imports. Since exports and imports are a quid pro quo relationship, higher tariffs on imports severely impacted the growth of exports, which have stagnated between US\$20-25 billion since then.

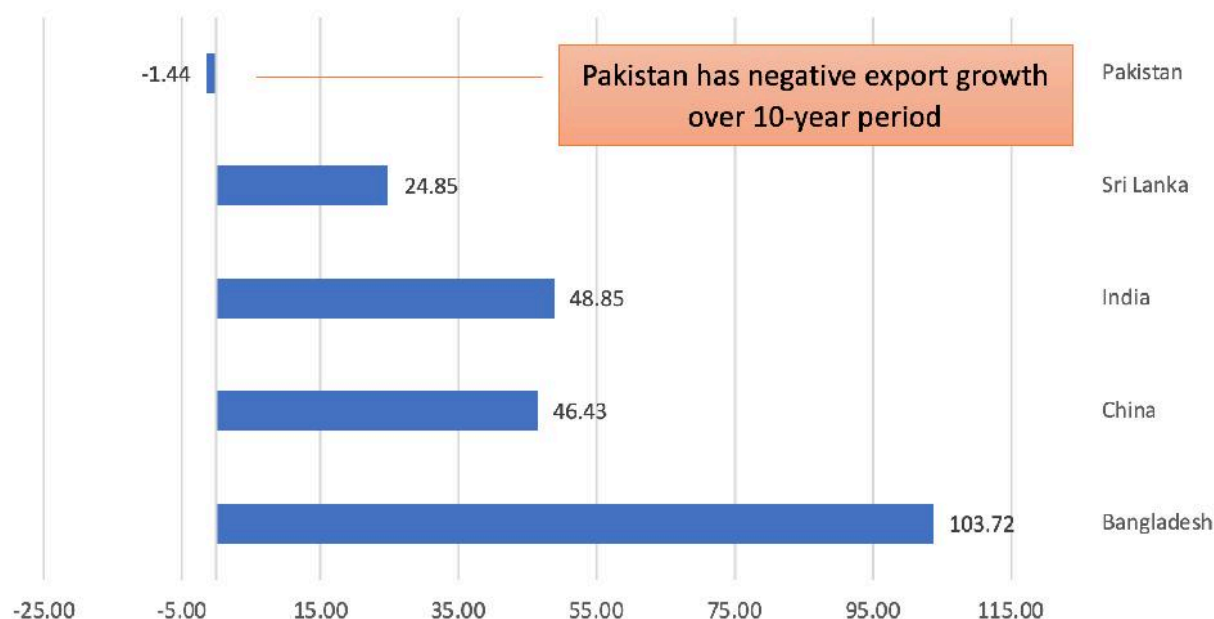
Import taxes now constitute around 48% of Pakistan's total tax revenues compared with the export-driven economies, e.g. Malaysia (1.6%), Turkey (2.4%), Indonesia (2.6%), South Korea (3.2%), Thailand (3.9%) and China (3.9%) and India (12.8%). In terms of weighted tariff, Pakistan's average is 12.7%, whereas the average tariff of top-70 exporting nations is 2.7%, South Asian average is 5.9%, and the global average is 2.6%. (<http://www.commerce.gov.pk/wp-content/uploads/2019/11/National-Tariff-Policy-2019-24.pdf>)

Countries with lower import barriers found it easy to integrate with their economies regionally and globally. These countries easily adjusted to the new global trading patterns of “Made in the World” rather than made in just one economy. Those economies which adapted their manufacturing and trading with this new trend became a part of global value chains (GVCs). More than half of world manufactured imports shifted towards intermediate goods, and more than 70% of world services imports now constitute intermediate services. Countries like Pakistan, which failed to adjust to these changing global patterns, started losing their trade share.

Growth of Exports

Over 11 years (2007-18), Pakistan's export growth has averaged a negative 1.44 percent, while regional comparator countries have managed to achieve quantum increases, with Bangladesh standing out the most with a 104 percent increase. Pakistan's export promotion strategy has clearly not yielded the intended benefits. It is time to consider what are the key hurdles and bottlenecks and what remedies can be adopted to reverse these trends (Figure 8.1).

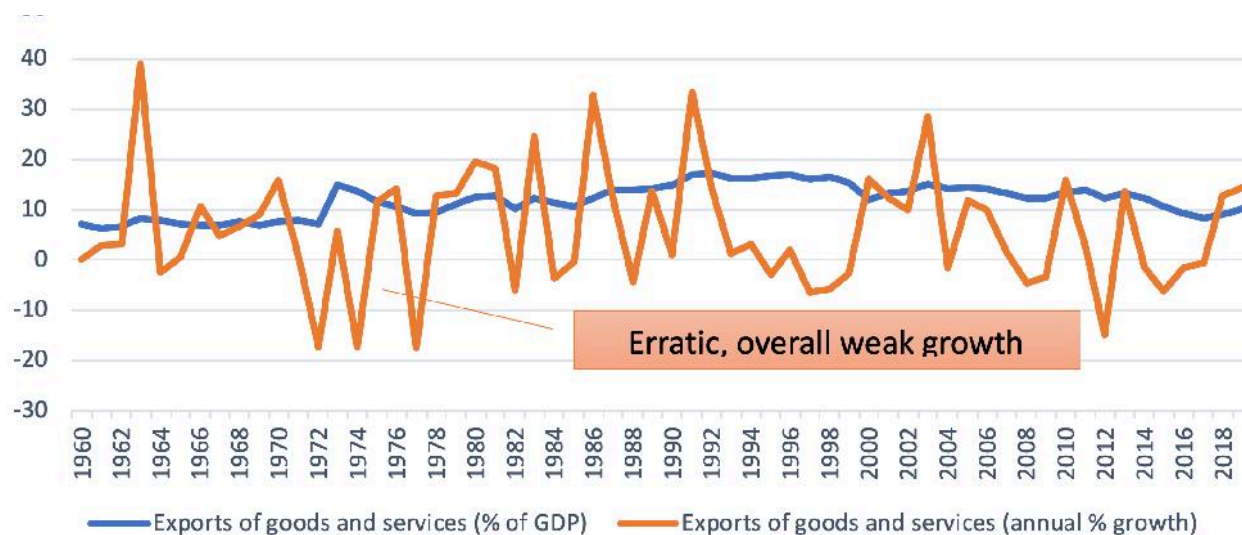
¹⁵ Panel Discussion on National Tariff Policy (NTP) held at PIDE on November 28, 2019.

Figure 8.1: Growth of Exports: 2007 - 2018

Source: World Bank (2020). World Development Indicators online database

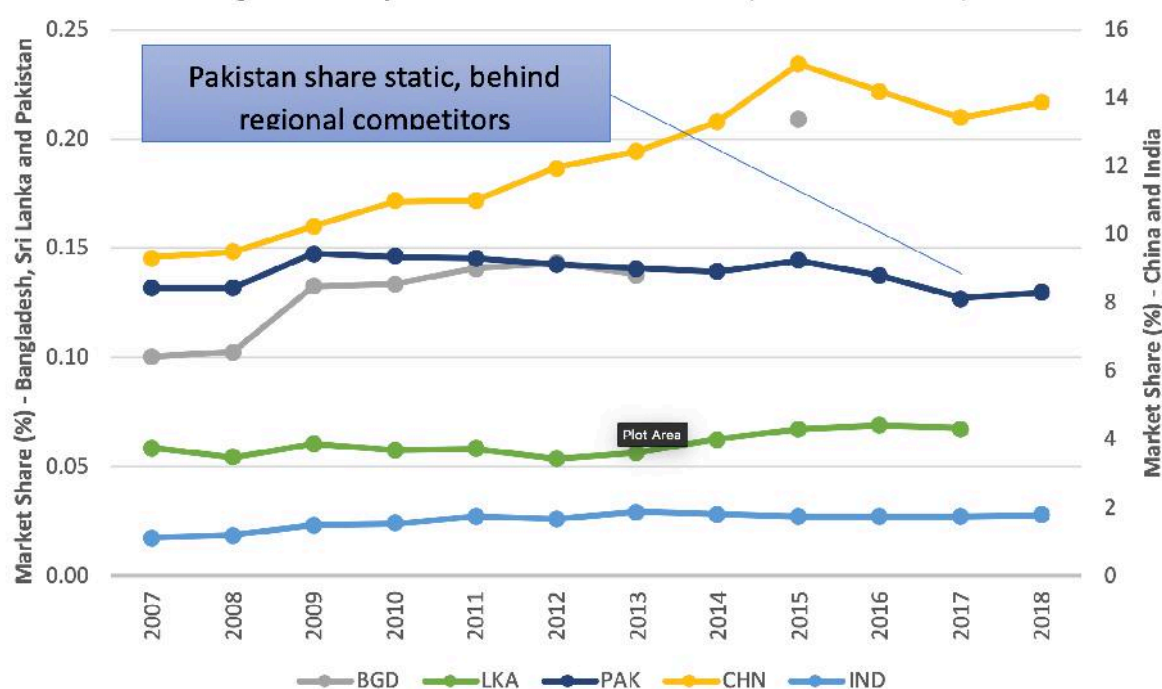
Growth Trend

The trend of exports over the years has been highly erratic and overall very weak; growth spurts are invariably followed by severe dips. All indications are that the growth trend of exports is highly volatile and has not been sustainable, with far greater dips than surges over the years (Figure 8.2).

Figure 8.2: Growth Trend of Exports: 1960 - 2018

Export Market Shares

A comparative analysis of exports in the regional market share reveals that Pakistan has made little inroads into the global market over the years, remaining largely static and behind other countries, even behind Bangladesh (Figure 8.3).

Figure 8.3: Export Market Share (2007 - 2018)

Source: World Bank (2020). World Development Indicators online database

Export Trends

The overall contribution of exports to national output (GDP) has exhibited little variation over the years. The share of exports to GDP increased by only 3.9 percentage points. For China and India, the change stood at 14.5 and 14.1 percentage points, respectively.

Table 8.1:
Exports Of Goods And Services (% Of Gdp)

Country	1961	2019	Change
Bangladesh	10.78	15.32	4.54
China	3.87	18.42	14.54
India	4.30	18.41	14.11
Pakistan	6.22	10.12	3.90
Sri Lanka	27.54	23.12	-4.41

Openness: Issues and Solutions

Issues faced by the external sector and their solutions are discussed in table 8.2

Table 8.2:
External Sector

Issues	Solutions
<p>Tariffs and other taxes on imports are much higher than other competing developing countries. Also, Pakistan Custom Tariff is highly complex and has an anti-export bias.</p> <p>There is no level playing field due to duty concessions through SROs and schedule 5 to the Customs Act for some at others' expense.</p>	<p>Reform and simplify Customs tariff to bring it at par with other competing developing countries. Eliminate all duty concessions through SROs and special Schedules.</p>

<p>The regulatory framework and inefficiencies in clearance procedures cause a potential loss of \$12 billion in exports (ITC/World Bank).</p>	<p>Reduce the number of agencies working at various ports. Instead of manual inspections, introduce automated risk-based examinations. Expedite implementation of WTO Agreement on Trade Facilitation.</p>
<p>Export of services can increase several folds through regulatory reforms. For example, Pakistan's digital finance potential is estimated at \$36 Billion by 2025 (McKinsey Global Institute) as against US\$ one billion achieved in 2020. Exploiting the full potential of exports can create 4 million new jobs.</p>	<p>Develop a national Services Export Strategy. To avail the full potential of export of digital services, reduce taxes and other restrictions for ICT goods and services. Expedite auction of new spectrum allocations for telecom companies. Join the WTO Agreement on Information Technology to attract higher foreign investment. The recent initiative to set up Special Technology Zones needs to be given high priority.</p>
<p>Low regional and global integration has isolated Pakistan in terms of trade. Pakistan has one of the best strategic locations but is unable to make use of its advantageous situation.</p>	<p>Facilitate transit trade through Pakistan to make it a transit hub. Make efforts to join RCEP (Regional Comprehensive Economic Partnership)</p>
<p>The technology used for manufacturing is outdated. Due to poor enforcement of patents and trademarks, foreign countries are reluctant to provide the latest technology to Pakistan.</p>	<p>To overcome this issue, Pakistan should sign TIFA (Trade and Investment Framework Agreements) with the EU and the United States. Focus on skills like e-commerce and AI. Both these skills will jointly make the industry efficient. This will make manufacturing as well as industry efficient.</p>
<p>Output quality: Import substitution policies practiced for long have insulated the domestic industry from the competition – lack of competition contributes to low-quality output and non-compliance with standards required to export goods – non-compliance with standards inhibits growth in exports.</p>	<p>Encourage a competitive environment, maintain a fair exchange rate – neither overvalued nor undervalued. Build capacity of the authority responsible for facilitating compliance with standards. Availability of quality agricultural output, for example, cotton.</p>
<p>Trade policy: An exclusive focus on goods: Trade policies have remained mostly focused on goods. Export of services has never been the focus - In the digital era, the export of services is becoming all the more important, especially export of IT services</p>	<p>Establish a cell in the Ministry of Commerce to focus on export-related issues of services.</p>
<p>Lack of value addition: Value addition calls for R&D and innovation, which are severely lacking in Pakistan - TRIPS does not allow export of imitations.</p>	<p>Enforce Intellectual Property Rights regime in letter and spirit.</p>
<p>Incentives schemes like DTRE and OES are too complicated, so exporters generally do not use them. Seventy percent of exporters in Bangladesh use export-related schemes, 10% of exporters in Pakistan uses these schemes (World Bank), the non-use is due to the complexity of the schemes (e.g. no duty imposed if a specific raw material is used). Secondly, due to certifications, procedural and documentation requirements smaller firms are not able to avail concessions included in these schemes.</p>	<p>If incentives must be offered, have a simplified procedure to encourage availing incentives.</p>

Subsidies: Non-targeted and forever subsidies distort incentives.	National Tariff Policy (NTP) 2019-24 has laid out the basics of implementing time-bound subsidies to the industry. The subsidies must be linked to the performance of the recipient firms and be automatically withdrawn when thresholds are crossed.
Tariffs, including regulatory duties, on some products, are excessive.	NTP 2019-24 has laid out the basic foundation for rationalizing the tariff structure. Revisit tariffs and rationalize these to encourage competitiveness and openness.
Interviews with sector specialists/experts PIDE (2020), National Tariff Policy 2019-24, PIDE Policy Viewpoint 14;2020 Qadir et al. (2019), Competitiveness in Pakistan: A Case Study of ICT Industry, PIDE Working Paper Series No. 168.	

Concessions offered through the 5th schedule (to the Customs Act 1968) create procedural restrictions; these restrictions sometimes increase dwell time at the port and also serve as an instrument of rent-seeking. Some examples are given below.

Table 8.3
Tariff Concessions And Outcomes

Description	Exemption/Concession/Restrictions	Impact
Special trade policies for the auto sector through S.R.O. 655 (I)/2006.	Prohibitively high CDs on the import of cars. Investors are obliged to use local parts within 3-5 years of setting up of the industry.	Car prices in Pakistan are much higher than international prices. No incentives for car assemblers to exports as the domestic market is captive and highly profitable. Serious barriers for new investors who are unable to localize parts due to the economies of scale.
Conditional exemptions for medical, agricultural, and some other sectors, such as 3% Customs Duty (CD) on machinery and equipment for manufacturing dairy products, if imported by members of Dairy Association and 5% CD on dentist chairs, subject to approval by Board of Investment.	Production of certificates from various ministries/associations. Restrictions on sale.	Additional cost and red tape Commercial importers who can negotiate better prices and have economies of scale are not permitted to import.

Figure 8.4
Action Points

- 1 To encourage a competitive environment to maintain a fair exchange rate – neither overvalued nor undervalued.
- 2 Focus on e-commerce platforms and AI tools. Both will jointly make manufacturing and services efficient.
- 3 Establish a cell in the Ministry of Commerce to focus on export-related issues of services.
- 4 Build capacity of the Authority responsible for facilitating compliance with standards.
- 5 Simplify clearance procedure and expedite implementation of WTO Agreement on Trade Facilitation.
- 6 Subsidies, if at all given, must be linked to the performance of the recipient firms and be automatically withdrawn when thresholds are crossed.
- 7 Revisit Customs tariff, including regulatory duties, and rationalise these to encourage competitiveness and openness.
- 8 Devise a strategy for promoting exports of Services, particularly those of digital services.
- 9 Develop a road map for acceding to RCEP and also promoting transit trade through Pakistan.

Figure 8.5
Further Research

- 1 What are the constraints involved in signing TIFA agreement with the EU and the US?
- 2 What services hold greater export potential? What are the constraints to the export of high-end services like ICT and banking etc.? How can these constraints be alleviated?
- 3 What could be an optimal framework for the rationalisation of tariffs – what would be the impact of proposed rationalisation on resource mobilisation, trade, and GDP?
- 4 Thoroughly examine SROs and other concessions to understand which SROs/ concessions offer rent-seeking opportunities and restrict the competitive environment.
- 5 What is the magnitude of welfare losses due to concessions?
- 6 How the concessions offered in the past have influenced trade and GDP?
- 7 What is the estimated impact of prevailing concessions?
- 8 What cost, in terms of time and money, has to be incurred to avail concessions?
- 9 How can the implementation of the WTO Trade Facilitation Agreement be expedited? How can the number of agencies working on inspection of exports/ imports reduce to expedite clearance of goods?
- 10 What are the pros and cons of joining RCEP? How can SAFTA and ECOTTA be made functional?

References:

- Malik A. et. Al. (2017) An Assessment of Export Performance and the Way Forward, PIDE Working Papers No. 153.
- PIDE (2020), National Tariff Policy 2019-24, PIDE Policy Viewpoint 14;2020
- Qadir et. al. (2019), Competitiveness in Pakistan: A Case Study of ICT Industry, PIDE Working Paper Series No. 168.
- Panel Discussion on National Tariff Policy (NTP), held at PIDE on November 28, 2019.
- Qadir U. (2016), "Pakistan's Automotive Industry: A Case of Stalled Development", PIDE Working Paper Series No. 138.
- World Bank (2020), World Development Indicators online database'

INTERNET ACCESS

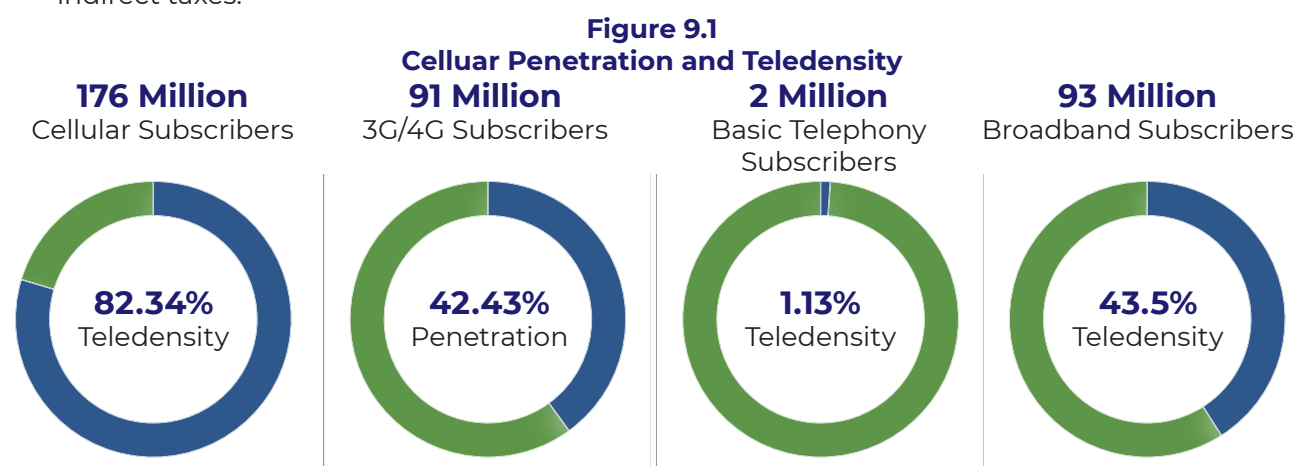
A limited population of Pakistan enjoys internet access. Imagine the benefits that would accrue to society and the economy if the entire population of the country had internet access. The internet access would prove useful in raising the literacy rate through online education to the deprived ones, providing health advice remotely in far-flung areas, enabling farmers and handicraft manufacturers to connect wholesalers and retailers directly in cities without the intervention of middlemen, and providing freelancing opportunities to many more, accelerating e-commerce. These are just a few of the benefits of internet connectivity. Given the disruption that AI and technology are causing, a full range of benefits is even difficult to imagine at this stage.

What needs to be done to provide universal internet access is described in Table 9.1, after a brief overview of the cellular industry, which is to play a key role in ensuring access.

The State of Cellular Penetration

Pakistan is an emerging cellular economy, with digital technologies beginning to transform the way people live and work. Currently, there are 169 million cellular subscribers that cover 80% population of the country.

- 40% of the population is using internet facilities.
- The total economic contribution of the mobile ecosystem in Pakistan was \$16.7 billion in 2018.
- The ecosystem created more than 450,000 direct and indirect jobs.
- It contributed \$2.2 billion to public sector revenue, including \$1.5 billion direct and \$0.7 billion indirect taxes.

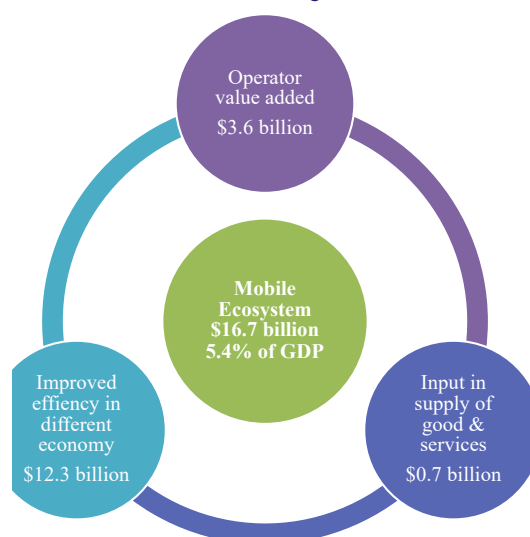


Source: Pakistan Telecommunication Authority (December 2020)

The Story So Far

- Mobile subscriber penetration is still low.
- The country scored 39.8 in the latest Mobile Connectivity Index, compared to an average of 45.7 for South Asia.
- There is a sizeable 'coverage gap'; mobile broadband (3G or 4G services) accounts for less than five in 10 cellular connections.
- Availability, affordability, and content are the key barriers.
- The smartphone adoption rate is 49%.
- Conservative pace of 4G adoption in recent years.
- (23% in 2019) suggests certain intervention are required to disrupt market dynamics.

Figure 9.2
Cellular Ecosystem



Source: GSMA 2020 Report

- Pakistan's operators invested \$5.3 billion between 2010 and 2018, but the average CAPEX as a proportion of revenue is lowest (23%) in South Asia.
- There is poor local manufacturing. Still, Samsung and Huawei account for over half of all mobile phone sales in Pakistan, reflecting an absence of homegrown firms.

Figure 9.3
Unique Mobile Subscriber Penetration (%)

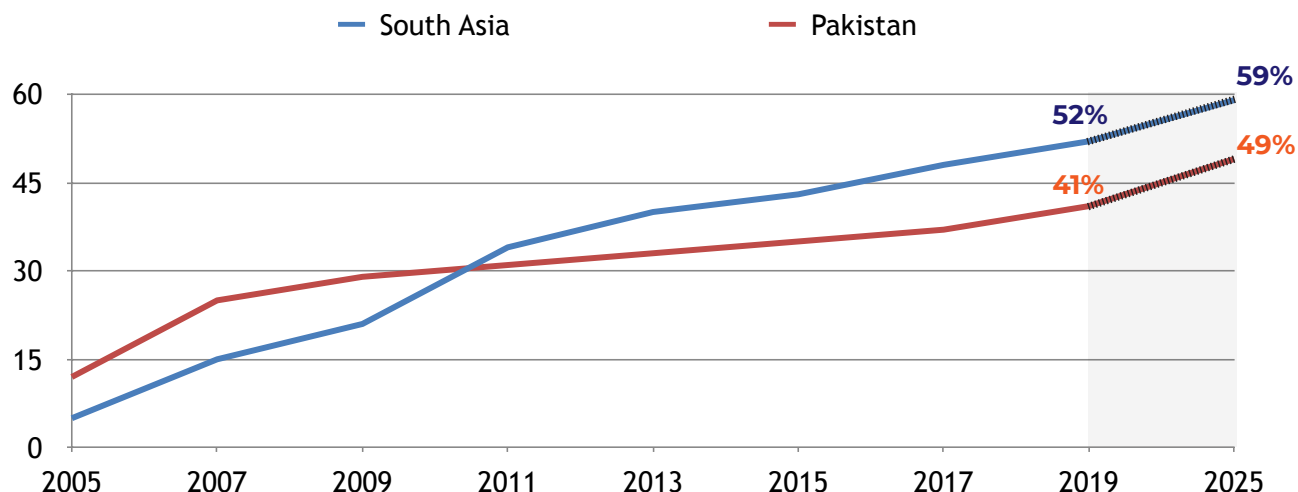


Figure 9.4
Mobile Internet Penetration, Usage Gap & Coverage Gap

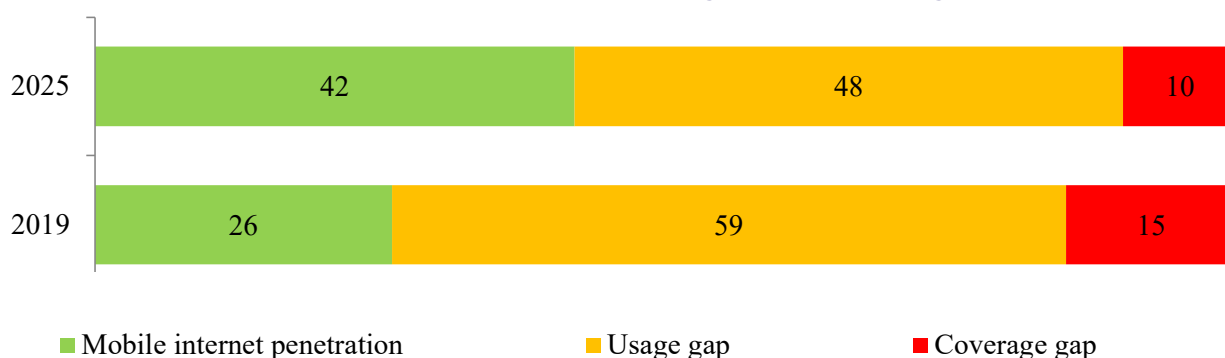


Figure 9.5
Mobile Internet Penetration (%)

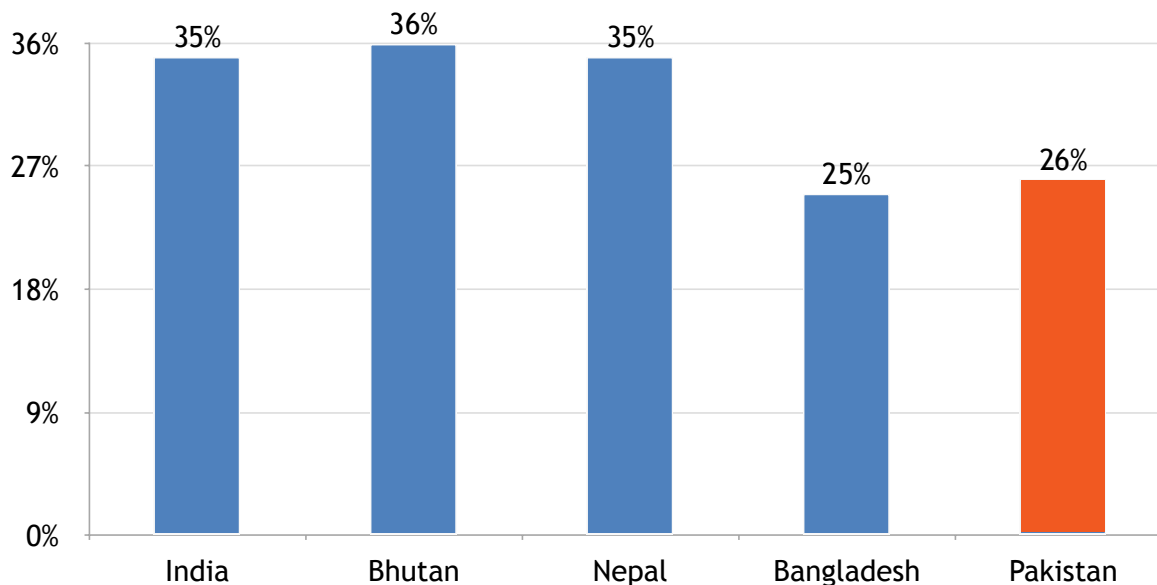


Table 9.1
Internet Access

Issues	Solutions
<ul style="list-style-type: none"> Provision of internet infrastructure does not require public investment – the infrastructure shall be laid and owned by the network operators. They have to be facilitated by easing out their overall cost. A total spectrum of 19000 MHZ is available, out of which only 256 MHZ has been auctioned so far. The infrastructure required to provide internet access is to be laid by the cellular industry. The rising demand for the internet increases the radio frequencies that a mobile phone operator requires. Radio frequencies are auctioned to mobile network operators in the shape of the spectrum. The first sale of spectrum fetched \$291 million from each of the network operators in the early 2000s. Since then, the sale of spectrum is being viewed as a revenue generation avenue. 	<ul style="list-style-type: none"> Do not eye the sale of the spectrum to mobile network operators as a source of revenue – Internet access should be a priority. Provide spectrum at a nominal price or even free of any fee. Bind the cellular industry to lay down the infrastructure required to provide access to at least 90% of the population. Spectrum for 5G, whenever auctioned, should preferably be at a nominal price or even free because the deployment (infrastructure) cost of 5G for the network operators is quite high.
A significant segment of the population, especially the recipient of grants from BISP, may not be able to afford internet charges.	Provide a targeted subsidy to those who either cannot afford or can afford only partially. This investment will carry high payoffs.
Tower sharing by network operators would reduce the cost for all operators. Some institutional issues that constrain tower sharing need to be addressed.	Institutional constraints to tower sharing need to be addressed (We need to understand the institutional constraints to tower sharing through research).
While awarding spectrum to mobile network operators some conditions regarding access are part of the contract.	Coverage obligations may be enhanced to increase access.
E-commerce: Currently, most E-commerce is relying on 'Cash on Delivery'. The real breakthrough will come when online payment becomes easier.	With the launch of RAAST by SBP, online payment is likely to become easier.
1% sales revenue of the cellular industry goes into USF (Universal Service Fund). The funds available in the USF were to be utilized for providing connectivity in remote areas. The USF has not been utilized as intended – at some point, the funds available were even used for retiring circular debt.	The law should be enacted to make it difficult for using the USF funds other than the prescribed purpose. USF needs greater focus on fixed Internet for high speed. As fixed is more underserved.

Consumers in Pakistan Face a Complex System of Taxes and Fees

- Telecom services in Pakistan are perceived as a luxury.
- For the country's bottom 20% and 40% income groups, the total cost of owning a mobile phone for both low and medium consumption baskets is above the UN's "1 for 2" target (i.e. 1 GB of data costing less than 2% of monthly income).
- The 31% tax rate as a percentage of the total cost of mobile ownership (TCMO) is significantly above the global average of 19%.

Figure 9.6
Cellular Phones: Cross Country Comparison of Taxes & Fees

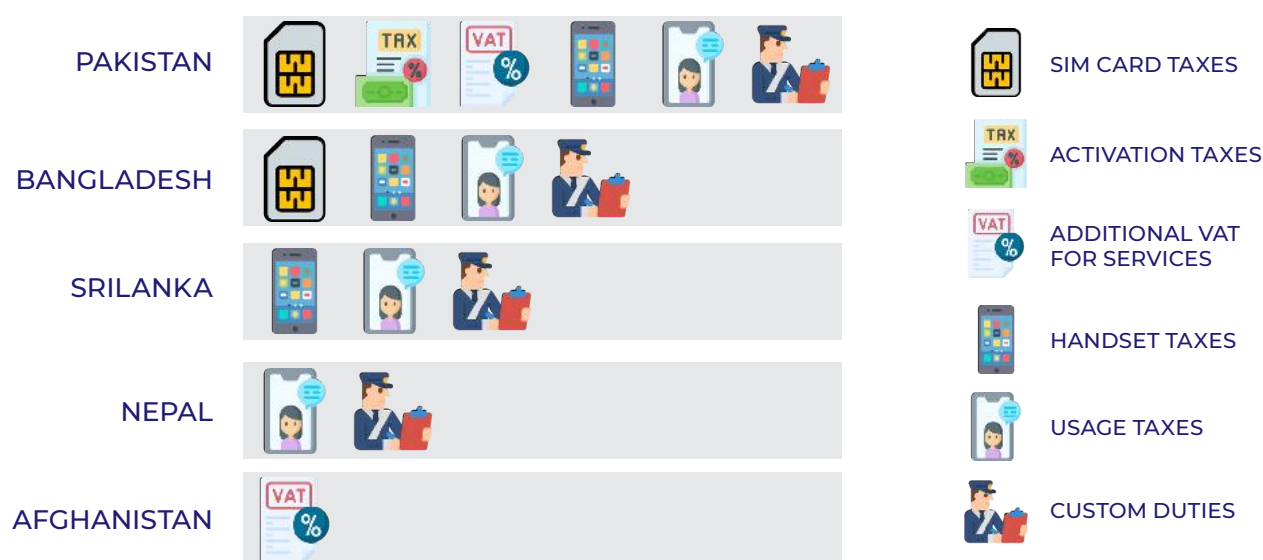


Figure 9.7
Action Points

- 1 Make internet widely and cheaply accessible - consider fully funding fast internet access to all major cities within 2021.
- 2 Look at the sale of Spectrum (i.e. frequency) to telecom firms as an internet access issue rather than revenue generation.

Figure 9.8
Further Research

- 1 What will be the cost of providing internet access to the almost entire population of the country?
- 2 What percentage of the population cannot afford the internet? What annual expenditure will have to be incurred to provide to those who cannot afford it?

References:

- Global System for Mobile Communications, GSMA (2020a). The Mobile Economy Asia Pacific 2020. GSMA Association.
- Global System for Mobile Communications, GSMA (2020b). The Mobile Economy Asia Pacific 2020. GSMA Association.
- Global System for Mobile Communications, GSMA (2020c). Mobile Internet Connectivity 2020 South Asia Fact Sheet. GSMA Association.

AGENDA FOR TAX REFORMS

The achievement of an 7-9 percent GDP growth rate will require more resources to raise the level of development spending to remove infrastructure constraints to growth and reduce the budget deficit sufficiently to bring down the Public Debt to GDP ratio.

This will require the implementation of a strong and diverse agenda of tax reforms to substantially raise revenues. The targets are as follows:

Table 10.1
KEY TARGETS

Key Targets	% of GDP		
	Current (2018-19)*	Target	Change
Tax Revenue	10.9	16.0	5.1
FBR	9.9	14.0	4.1
Direct Taxes	3.7	5.8	2.1
Indirect Taxes	6.2	8.2	2.0
Provincial Taxes	1.0	2.0	1.0
Development Expenditure	3.1	5.1	2.0
Budget Deficit	9.1	6.0	-3.1
* 2019-20 excluded because of fall in revenues due to COVID-19.			

The design and implementation of the tax reform agenda should focus on the following. First, make the tax system more progressive and remove the tax breaks and concessions to the upper-income groups. Second, achieve a simpler, more transparent and friendly tax system. Third, build a more revenue- yielding and buoyant tax regime, and fourth, establish mechanisms to check tax evasion and corruption. Our proposals with respect to taxes levied by FBR are summarized below

DIRECT TAXES

- We should discontinue the separate tax treatment of blocs of income derived as dividends and interest from financial instruments. These sources of income should be clubbed as part of total income and the taxes deducted at source be converted into regular withholding/ advance taxes.
- The concept of a maximum holding period beyond which a capital gain in the transaction of shares, open plot, or house or commercial property becomes taxable should be dropped. Irrespective of the holding period, the capital gain must be taxed but at lower rates ranging from 5 percent to 15 percent, depending on the length of the holding period.
- The design of a minimum corporate tax should factor in allowable capital expenditure so as not to discourage investments. It should be neutral towards investment decisions while minimizing compliance costs
- The Point of Sale requirement should be mandatory for all retailers located in all major commercial centres. Moreover, to ensure documentation of all sales, there should be FBR installed CCTVs monitoring the sale points.
- The debt servicing of housing loans should be made deductible for up to 15% of taxable income (under Section 29A).
- The tax treatment of provisioning of poorly performing loans should be restricted only to loans

to SMEs, small farmers, and housing (Section 100A).

- Of the more than 65 types of withholding taxes, the top 10 contribute almost 84 percent of the revenues. Among the remaining only these with the following criteria should be retained:
 - Number of withholding tax agents is small
 - Clearly progressive incidence
 - No double taxation of the tax base with provincial/local taxes
- For exports, we propose a cash incentive scheme to be disbursed on the receipt of funds. This would be profit-neutral and tax-neutral with the present system if the magnitude of the incentive payment is pitched at 12% of export receipts, with a higher rate for emerging and value-added exports.

INDIRECT TAXES

Sales Tax

- Transition to a national Integrated Sales Tax (VAT) regime combining taxation of goods and services with one common tax return.
- Introduction of a sales tax and import duty at 5% on imports of services under 'Reverse Charge' principle.
- Examination of exemptions and reduced rates in the different Sales Tax Schedules of the Sales Tax Act, 1990.
- Remove the cascading of sales tax on petroleum levy.

Import Duties

- Transition to a more transparent import tariff regime with the abolition of regulatory duties and quasi-tariffs.
- Introduction of four import tariff slabs with rates of 0%, 5%, 15%, and 25%, with peak tariffs only in few selected items. Convert the flat rate of import tariff to ad valorem tariff in the case of edible oils.
- Conversion of the minimum income tax paid on imports into an advance withholding tax.
- Online linking of the WeBOC system with the export shipment data of port authorities of our trading partners, supported by a regularly updated system of reference prices (International Trade Prices-ITPs) for items prone to under-invoicing.
- Raise the tariffs on agricultural items¹, like cotton, to provide more protection to domestic agriculture.

Excise Duty

- The excise duty on cement and a Federal Excise Duty on services should be withdrawn.
- Levy of excise duty on industries that pollute the environment or consume scarce resources.

Box 10.1

FBR: More Staff, low Yield Income tax collected 2019-20

	(Rs. in billion)
Contribution of top 10 withholding taxes	944
Advance Tax	351
Contribution of remaining 56 withholding taxes	148
Paid with returns (reflects FBR effort)	61
Total Income tax collected	1504

- The table given above shows that income tax collected with the efforts of FBR is only Rs. 61 billion which is just 4% of the total income tax collected. Inland Revenue Service (IRS) of FBR has staff of over 25,000 and also has a fully owned Pakistan Revenue Automation (Pvt) Limited (PRAL).
- On September 2, 2020, the FBR conceded before the National Assembly Standing Committee on Finance, that on June 30th 2020, refunds to the tune of Rs. 710 billion were pending. Total tax collected reported in the 'FBR Year Book for 2019-20', is Rs. 3997 billion. Excluding the refunds leaves us with net collection comes to Rs. 3287 billion - just 7.8% of GDP.

FUTURE TRENDS

“As all these trends happen, the winners will be those who are able to participate fully in innovation-driven ecosystems by providing new ideas, business models, products and services, rather than those who can offer only low-skilled labour or ordinary capital.....The fact that a unit of wealth is created today with much fewer workers compared to 10 or 15 years ago is possible because digital businesses have marginal costs that tend towards zero..... My concern, however, is that decision makers are too often caught in traditional, linear (and nondisruptive) thinking or too absorbed by immediate concerns to think strategically about the forces of disruption and innovation shaping our future.”

- Klaus Schwab (2015)

“The big question is whether people will be able to retrain and reinvent themselves in time and whether they can do it again and again and again because if you have a 50, 60-year career as life expectancy also increases, you’ll have to do it not just once. And here the biggest question -- do people have the mental ability to reinvent themselves at age 40 and again at 50 and again at 60.”

- Yuval N. Harari (2018)

The world is changing around us, and we must be prepared to adapt. Public policy in Pakistan, including planning and growth policies, seldom looks at the emerging trends to remain somewhat inward-focused. In this chapter, we look into some emerging future trends and discuss how policy could prepare us for the emerging new world.

Three major features of the coming change need to be noted. They are:

1. The global research machine is accelerating discovery and value creation like never before.
2. The coming change is widespread. Waves of further breakthroughs are likely to occur in areas ranging from gene sequencing to nanotechnology, from renewables to quantum computing. The complex interactive change will occur in the physical, digital, and biological domains for which all countries will have to be prepared.
3. Markets for goods, jobs, information, and services will be disrupted at relatively short intervals affecting the risk environment that policy and people will face.

For this reason, we feel that any planning must develop the state capacity to understand and meet the emerging challenges relatively quickly. This will mean structural changes in the way policy and business are done. More specifically, it will mean embedding research in all activities like the countries that are leading the scientific and technological advances. No longer can research be considered a luxury good to be adopted after development.

We are not conducting an exhaustive review of coming changes here and would focus on four trends that are underway which we should start to watch and consider possible action.

1. Artificial Intelligence (AI), Information Management and Data Processing

- a. These shall fundamentally change the nature of jobs and the way we do business. The management, development, and transmission of knowledge and data will disrupt many businesses and jobs, from education to knowledge-based professions.
- b. Data, as they say, is the new “oil”. It will open many new opportunities. Internet connectivity is going to be vital to learning, knowledge, and even goods and services production. Online data management will certainly create many new threats as the US is now discovering.

2. Automation, 3D Printing, and Robotics

- a. Mass production with unskilled labour and simple machines will be further disadvantaged. The value will be created in designs and research. Unskilled labour will be sharply displaced by this development.
- b. Inequalities will increase sharply creating large policy challenges.

3. Agricultural Technologies and Food Substitutes¹⁶

- a. Urban farming, hydroponics, and farm automation will challenge returns to traditional farming, which sustains a large part of Pakistan's labour.
- b. Laboratory-made food is already in the market to act as a challenge to traditional food, weakening the terms of trade for agriculture.
- c. These trends will benefit the environment and save our water but present policy challenges for adopting them.

4. Biomedical Science, Human Augmentation and Synthetic Biology

- a. While the global COVID-19 pandemic has shown the potential for supply disruptions, it has also shown the power of research and how countries compete at a fast pace to produce needed vaccines on short notice.
- b. While we supply doctors to many parts of the world, biomedical research—from medicines to robotics—will create huge value in the future. We will have to pay for these developments. Or we could position ourselves to be part of the value chain that is being created through research.

5. Climate Change and Adaptation Technologies (e.g. geoengineering, super-carbon-absorbing plants)

- a. The discourse in Pakistan is mostly on the costs of climate change, but we must prepare for possible adverse changes including mitigating environmental damage as well as preparing for the increased probability of climate disasters.
- b. There is also an opportunity in climate adaptation technologies that need to be examined. The market for electric cars and solar and wind technologies are obvious examples of these.
- c. These developments and coming changes have many policy implications. These include:

a. Sectors and Investment

- The government must discontinue the mercantilist policies of import substitution and export promotion, especially through SROs, protection, and subsidies. Some old industries will die despite protection. Their natural bankruptcy through market means must be facilitated.
- Growth will happen in the new digital and automation sectors. Global value chains will adjust in line with emerging technologies. Pakistan must have entrepreneurial companies that are nimble and highly skilled to rapidly find their place in new value chains.
- No sector will be immune from change, and many old industries will find it hard to compete. Agriculture, services, construction, logistics, and production, in general, will all change relatively soon.
- Banking and financial markets are undergoing rapid transformation. Even the payment system will change challenging domestic money management. New financing arrangements for start-ups are emerging. The policy must be flexible enough to allow these to emerge.
- Big data and AI will create opportunities across sectors in ways that are hard to foresee.

b. Employment challenges

The anxiety with the disappearance of some occupations and jobs is natural, but history tells us that modified and new jobs, which were often better, eventually develop. A sizable portion of the current job market did not even exist two decades ago. Technology does change the labor

¹⁶ See "Agriculture in Pakistan: A Revisit" at <https://pide.org.pk/pdf/PIDE-Knowledge-Brief-8.pdf>.

market dynamics but creates additional jobs for those who have the skills, and the overall impact on employment is positive (Cardullo and Ansal, 2011).

The trend towards automation and robots may have a disruptive impact on work, and employment and there are following two broad views on it.

Events of the last century have shown that technological advancements, productivity, GDP, and employment have grown together.

Technology has not reduced employment; it has only changed the nature of employment.









Table 11.1
Possible Impact of Technology on Future

Optimistic View	Pessimistic View
Technological advances would: <ol style="list-style-type: none"> 1. Improve lifestyles, increase consumerism and thereby lead to more job opportunities. 2. Increase productivity, reducing the burden on workers who can improve skills and get better wages. 3. Create demand for modern skills, increasing more opportunities for the youth. 4. Help the economy grow with companies investing in technological solutions and earning more, leading to expanding activities and creating more jobs for the people and revenues for the government. 	Technological advances would: <ol style="list-style-type: none"> 1. Make many jobs redundant, with machines replacing low-skilled workers. 2. Create a situation where human societies will suffer simultaneously from high unemployment and a shortage of skilled labour that may result from insufficient human stamina to constantly update their skills in the face of endless upheavals. 3. Make many companies close down due to competition from those companies that keep up with modern technology.

There is no reason to be pessimistic about jobs. However, the policy must recognize that the job market composition will change. Even high valued professions such as law, engineering, and education will experience disruption (see box below). Certain trends can be observed, including:

- Automation will lower the value of low-skilled labour such as factory workers, drivers, construction, salespersons, waiters, etc.
- Information and data managing professions (e.g. lawyers, doctors, accountants) will experience reduced demand as AI gets more capable of information processing and handling.
- The sharing and network economy will change the way the workforce is organized in production. Office, retail, and medicine delivery may not require the fixed and regimented approach of the past. As Uber has shown, it offers new opportunities and new challenges with less job security and benefits.

Figure 11.1
Some Jobs That Will Be Outdated In 10 Years, And Why

 <p>FARMERS Tech-based cost-effective labour</p>	 <p>CASHIERS Automated check-outs</p>
 <p>FACTORY WORKERS Faster, better and cheaper robots</p>	 <p>HEALTH WORKERS Tech with AI to do medical diagnosis</p>
 <p>TEACHERS Online courses and apps</p>	 <p>ACCOUNTANTS Do-it-yourself solutions</p>
 <p>DRIVERS Driverless vehicles</p>	 <p>PARA-LEGALS Software that collate & drafts documents</p>

-

c. Social Sectors and Welfare

Big data, AI, and international connectivity are already in our lives. As the pandemic has shown, many new issues and their solutions will emerge. The question will be how we fit into the research and development system of the world. A few key points should be noted.

- **Education** is best delivered online and will need to realign to the new needs of emerging technologies. The current policy that seeks to build more and more universities and schools may not be as it was in the last century. The industrial age of that era required a regimented and uniform education system to man the structured workplace, based on human information management and processing. The new market demands greater flexibility and creativity and less human resource with data management and processing.
- **Health** diagnosis and data management will more than likely be in the cloud. Healthcare and public health will remain locally delivered but with standards being set internationally. The advances in medical treatments that are likely to arise from the huge ongoing research will deliver many new products for our well-being which citizens will naturally place high on their demand lists.
- **Culture** and industries related to it are becoming important industries to employ people. The online video streaming market, video games, and other social media monetizable activities (Facebook, TikTok, PUBG, and others) are going to grow as sources of employment and income for many. Similarly, sports can also be a major source of employment which is almost negligible today.
- **Mental health** has been a big issue in many communities in the last decades of the 20th century. In Pakistan, policy beset with the building of modern infrastructure and some health and education has remained aloof from mental well-being, community development, and the accrual of social capital. With the coming disruptions, it may become very important for the government to begin reviewing welfare more broadly than the simple provision of

Policy Choices

rudimentary health and education.

Technology has to be adopted and mainstreamed everywhere.

- **The immediate step would be to put the provision of the internet as widely as possible and as cheaply as possible.** For the last three decades, the PSDP has been focused on roads with a current allocation of 120 billion. Perhaps it is time to consider fully funding fast internet access to all major cities within 2021.
- **E-governance should become the norm.** The use of the internet should be mainstreamed, starting from all the government processes to education and health starting now.
- **The education system will have to be turned from the current system of information assimilation to placing a large premium on research—problem solving and creativity.** Plans to build more brick and mortar universities need serious evaluation in the light of emerging changes in the labour market as well as the current glut in the market for graduates.
- Research, innovation, and entrepreneurship are already activities that advanced economies are built upon. **The policy must devote considerable attention to mainstreaming R&D everywhere in Pakistan.**
 - The government is at the center of the economy and must change to make the rest of the country change. A digital research-oriented government must be initiated from the PM and the cabinet to the lowest level.
 - Ministries and agencies must be conducting monitoring and evaluations at every level to develop evidence for future policy changes as well as provide the parliament, cabinet, and the people with performance and welfare outcomes.

- R&D must be budgeted for, and outcomes shared transparently at all levels of government and the private sector.
- The government and the private sector must use their R&D budgets to partner with the universities for specific needed research outcomes.
- At least 5% of the PSDP must be used on research for the government university collaborations. The Planning Commission must prepare an annual research report for evaluating the impact of this research budget and present it to parliament every year.
- Tax and documentation should now be facilitating transactions and entrepreneurship. Arduous requirements and onerous taxes have slowed down Pakistan enough. New technologies offer intelligent choices that are win-win provided they are fully adopted, and an intelligent research-based approach be mainstreamed.
- **In the coming environment with changing technologies and AI, government policy must be nimble and well informed, focusing on generating a market environment that fosters innovation and risk-taking while allowing winners to emerge.** This will require as argued above, developing freer markets with a forward-looking legal structure that allows electronic transactions at rapid speed. Certainly, the current SRO/permission/NOC regime has to be discontinued.
- **Starting businesses and killing businesses should be easy and digitally driven.** The law must allow for this. Even justice should be driven through the use of new technologies to allow speedy and diverse transactions to increase.
- **Regulation must be based on research and M&E but clearly with a purpose to develop a market and valuations within it.**
- **As technologies engender greater inequality, there will be demands on the government to develop policies for skill up-gradation, employment adjustments and growth, and even new health and social initiatives.** Universal basic incomes are already being experimented with in some countries. Even in Pakistan, there is a demand for universal health insurance. Such initiatives require much thought and research as the economy develops. This should be an important area for research as the country develops. But it should be remembered that building welfare without growth and employment will only lead to more and more economic difficulties, which consequently further reduces welfare.

We must all be prepared for a constant up-gradation of skills, markets, institutions, laws, and processes in the face of these rapid changes that technology is bringing. It is indeed a daunting task, but most certainly an unavoidable one! As Jacques Ellul states, *“Modern technology has become a total phenomenon for civilization, the defining force of a new social order in which efficiency is no longer an option but a necessity imposed on all human activity”*. Pakistan cannot afford to stay behind in this new ‘social order’.

Figure 11.2
Action Points

- 1 E-governance should become the norm.
- 2 The policy must recognize that the composition of the job market will change – some jobs will be lost while many new ones will be created.
- 3 The education system should be disrupted to prepare for the above, focusing on problem solving and creativity.
- 4 Mainstream R&D everywhere in Pakistan by placing a large premium on research — problem solving and creativity.
- 5 Have an agile policy that takes advantage of changing technologies and AI in all fields.
- 6 Develop a market environment that fosters innovation and risk-taking while allowing winners to emerge.
- 7 Starting businesses and killing businesses should be easy and digitally driven.
- 8 Regulation must be based on research and M&E – with clarity of purpose to develop a market and valuations within it.

Figure 11.3
Further Research

How much financial resources are required to make high-speed internet accessible to all? Can the State incur this expenditure? What would be the potential payoffs?

What financial and other kinds of resources are required to introduce e-governance in all government offices and how to mainstream the internet in the health and education sectors?



What institutional changes are required to;

- a. Ingrain research into the public and private decision-making process?
- b. Disrupt the education system to make it pro problem-solving and instilling creativity in pupils?
- c. To make it easy to start and kill a business.

What is going to be the likely path of change in the composition of the labour market due to the technological revolution – which jobs will be lost first and how soon, which ones will be lost later on.

References:

- Andrea, D. M., M. Estevão, and B. A. Wilson (2013) Productivity or Employment: Is It a Choice?. IMF Working Paper.
- Glacier, Edward L. (2010), Agglomeration Economics
- Harari, Y. N., (2018) 21 Lessons for the 21st Century. USA: Spiegel & Grau.
- Haque, Nadeem Ul and Khurshid, Nadeem (2020) Construction without Real Estate Development, PIDE Working Papers 2020:9.
- Nordhaus, William (2005) The Sources of the Productivity Rebound and the Manufacturing Employment Puzzle. NBER: Working Paper 11354.
- PIDE Webinar on 'Introduction of Legislative Bill for the protection of Street Vendors' Rights' (2020)
- Schwab, K. (2015). The Fourth Industrial Revolution: What It Means and How to Respond. Retrieved from <https://www.foreignaffairs.com/articles/2015-12-12/fourth-industrial-revolution>.

RISKS

Life does not come without risks. The risk of failure is not an argument for not trying.

Hardheaded and informed piloting will be required.

This reform agenda chalks out possible actions to unlock growth in the country. Unlike traditional plans, it is not determining infrastructure demands and a financing plan. Instead, it relies more on the much needed and long-postponed reform to transform the governance and business environment in the country for reducing transactions costs and unlocking investment opportunities.

Predicting the future is impossible, and we are all aware that 'black swan' events can and do happen. This accomplishment of this agenda will require meticulous and engaged steering with a large amount of M&E and considerable careful research to be able to make the changes envisaged. This will also require a large amount of engaged doing and several serious decisions based on active cost-benefit and other analyses as well as several legal and administrative changes.

To make this agenda work, governance will have to be rebuilt with government processes and research capable of undertaking reform. Reform cannot be thought of as a preconceived agenda but a path to a goal with the path constantly needing readjustment as experience develops. In short, much research and M&E will be required. At a minimum, implementation will require:

- Recruitment of high-quality human capital in all areas of policymaking and regulation
- Research to become a mainstream activity in every area of policy and market regulation.
- Autonomous agencies managing results and not inputs
- Regular M&E reporting on a transparent basis
- Public debate on regular reports to educate people on what is coming.
- Decentralization to create productive cities as engines of growth.

This is an active reform agenda that requires active management. For such management, without governance reorganization and enabling governance processes to navigate the reform, success will elude us. This is why much emphasis is laid on governance.

Macroeconomic Risks

Pakistan has long struggled with macroeconomic stability and debt sustainability. While, as argued here the long-term solution to this life-long existential struggle is attaining sustained growth acceleration, the possibility of short-term hiccups that might derail the reform process cannot be ruled out. Policymakers must continuously monitor the macro situation and be ready to take prompt action.

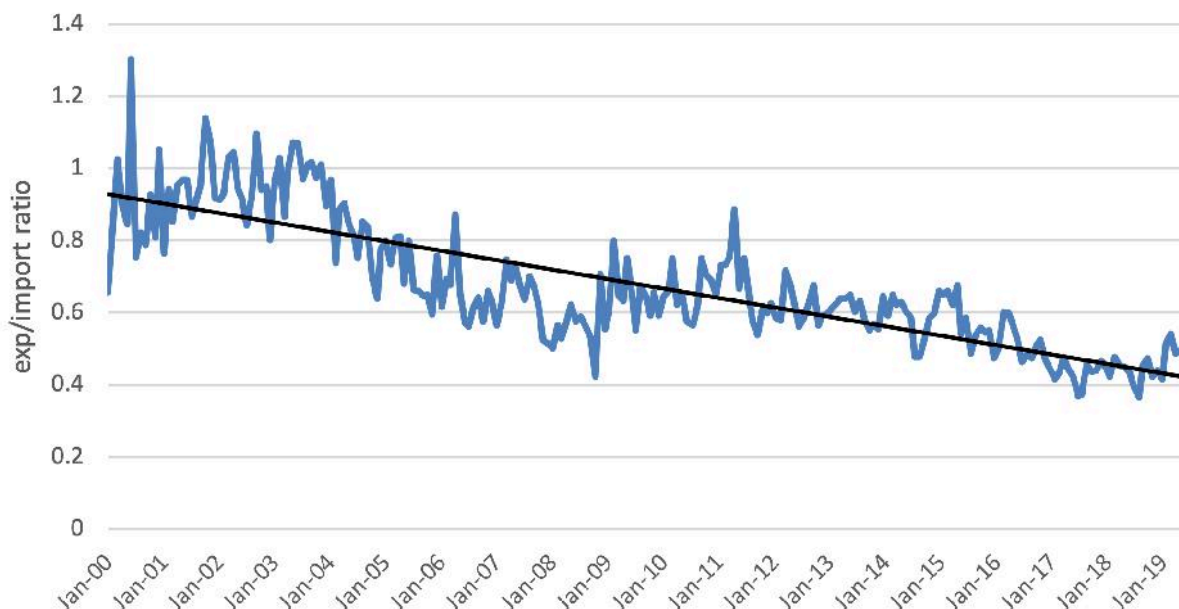
The significant risks will come from the external sector. It is well documented that the external sector and the balance of payment (BOP) position of Pakistan improved during Covid-19 considerably. Imports' contraction primarily drives the contraction in the current account deficit (CAD).

Once growth picks up, most economic sectors are expected to bounce back relatively quickly, pushing the overall economy upward. However, the increase in the economic activity may hit CAD negatively and then the BOP of Pakistan because the economic activities may affect consumptions (Imports), production (exports) or both. Unfortunately, the exports are stagnant due to a decline in productivity, among other reasons. Therefore, the increase in imports will hit

CAD negatively and then the BOP. **It implies that BOP is mainly driven by CAD.**

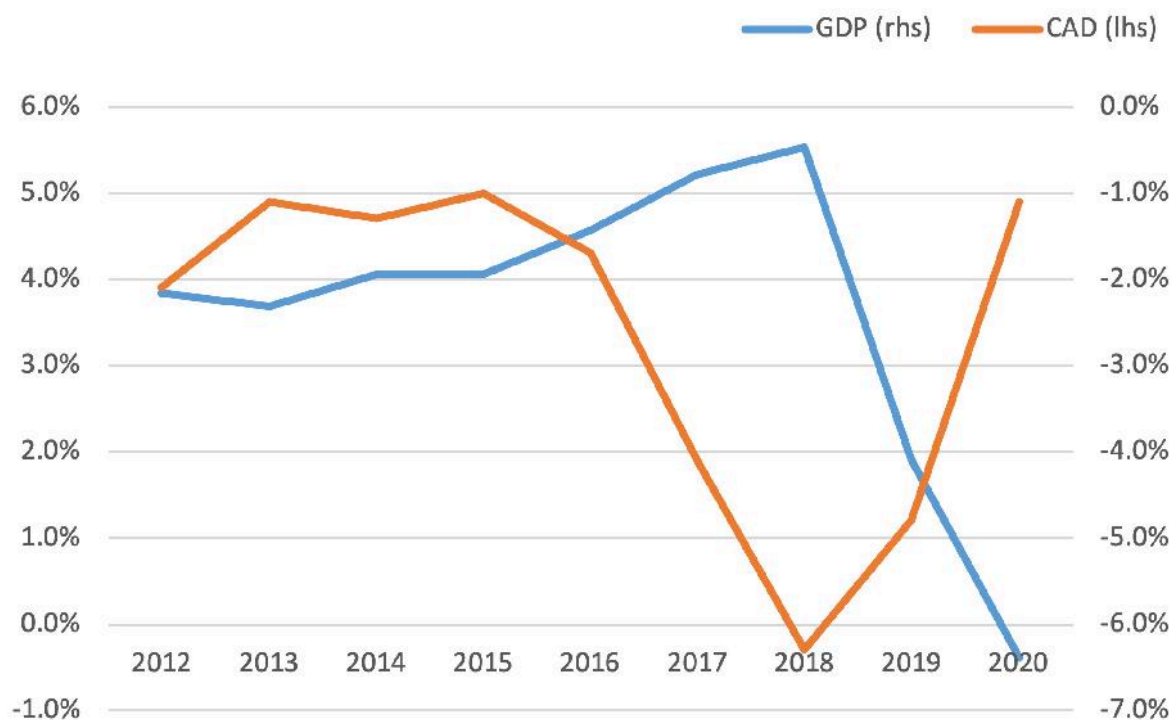
Historically, we can see that imports are increasing faster than exports. Therefore, the export/import ratio is declining over time (see figure 12.1). The pressure on the external account is building up from the mismatch of import and export. Luckily, the remittances have improved significantly over the last 20 years and reached up to 23 billion USD in FY 20.

Figure 12.1
Export/Import ratio



Traditionally growth has generated an adverse impact on current account balance as growth has led to an increase in import of machinery etc. The historical inverse relationship between GDP growth and current account deficits supports this view (Figure 12.2).

Figure 12.2
CAD and GDP Growth



The historical trends depicted above lead to the question that how the balance of payments difficulties will be handled as we move up a high growth trajectory envisaged in the reform agenda.

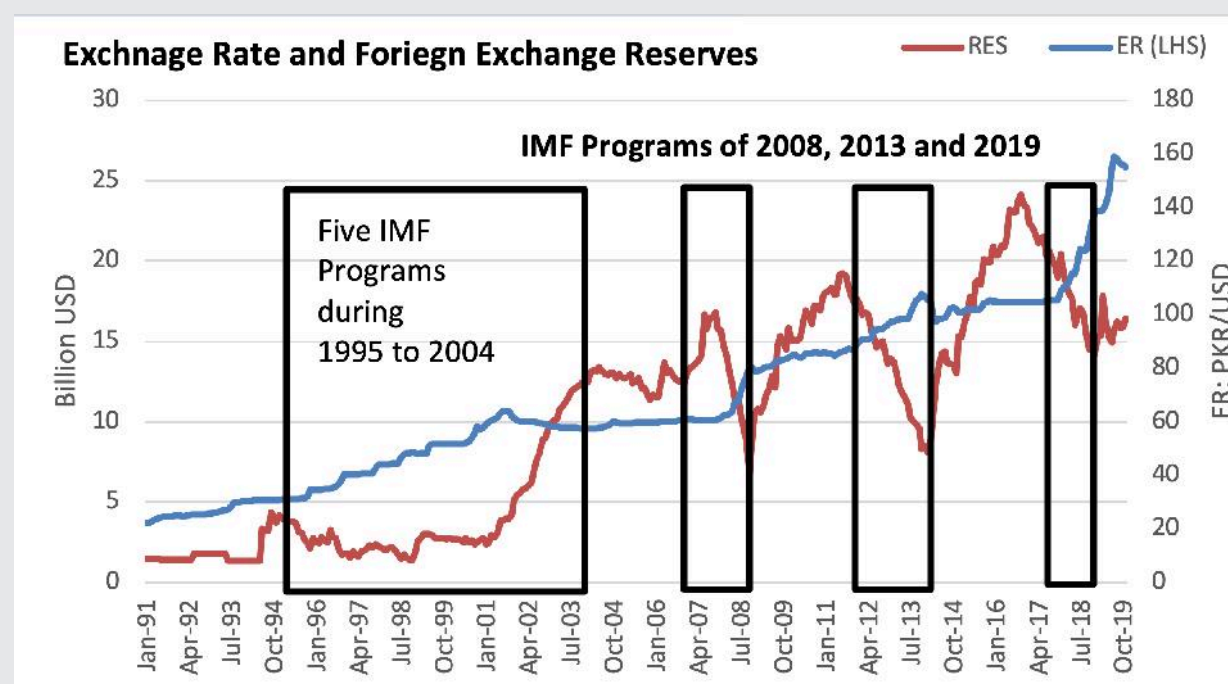
What we can say from the historical experience of other countries and from economic theory, growth and productivity will help lead to improvement in exports and a buildup of reserves. Why and when the switching point will occur will depend on many things. But the most important will be the extent of the reforms undertaken. Productivity and investment will rise for the following reasons.

1. We expect the governance reforms to allow the agenda to be carefully delivered.
2. Increased government efficiency will improve productivity
3. Opening up while allowing local markets to develop will create a competitive environment
4. Better regulation that reduces transactions costs will enable more transactions to happen.
5. Once the country is seen on a high growth path with increasing domestic investment and an open economy with functioning governments and markets, we can expect the FDI to pick up.

Box 12.1

Fixing the Rates is a Folly

Historically, it is clear that the forex reserve depleted excessively whenever the SBP tried to save the PKR parity. Consequently, we approached the IMF. The graph below shows that whenever the SBP tried to defend the exchange rate parity for a longer time, we ended up depleting the forex reserves. As a result, IMF program had to be undertaken.

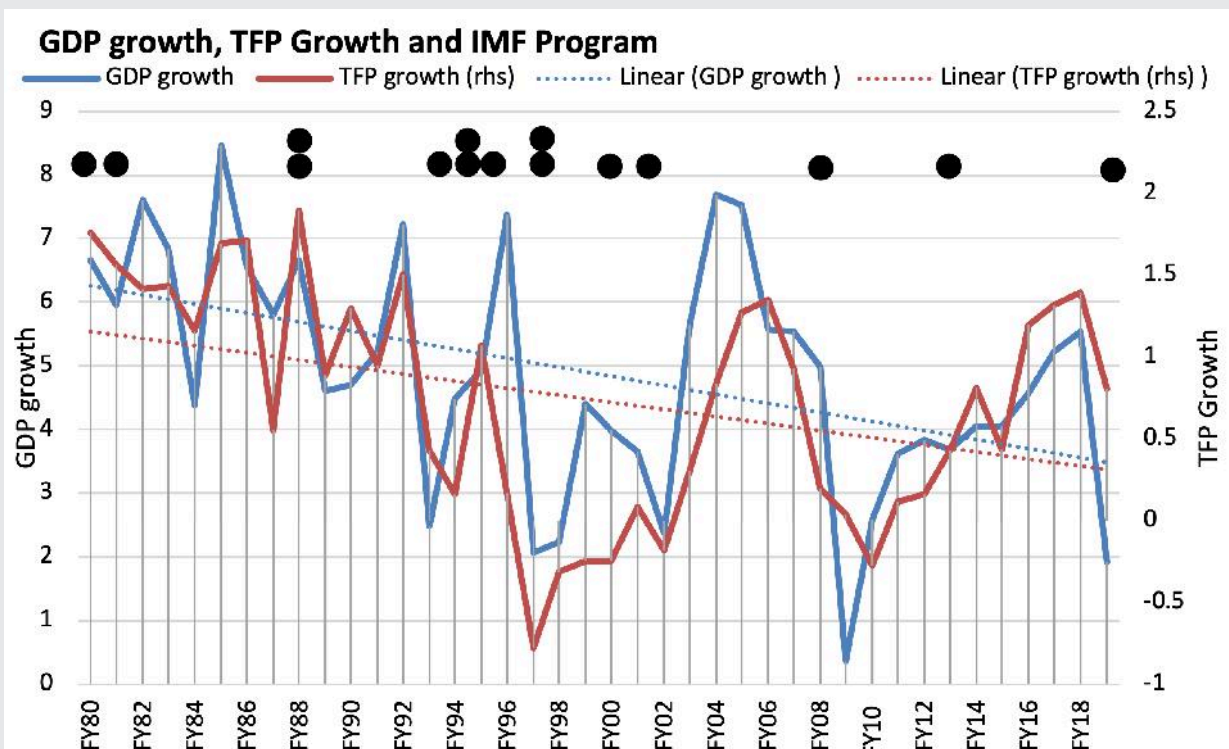


Managing the transition will require careful economic management. With the re-engineering of the government, markets and business processes outlined here, the economy will acquire more flexibility and adjust to the demands of a growing economy. With a more flexible exchange rate and carefully crafted fiscal and monetary policies, the high growth path based on reform can be managed. However, as argued here much will depend on the capacity of policy to absorb and use research.

Box 12.2

The Effects of IMF programs

- The IMF program is always connected with the stabilization program and then the lower economic growth and declining TFP.
- Indeed, Pakistan's output growth difficulties are longstanding and adopting stabilization policies further reduces growth. Both economic growth and productivity are low and declining (see Figure below, black dots are IMF programs in the corresponding year).
- Pakistan is one of the most frequent users of IMF resources. Unlike the regional competitors, it has been under IMF-supported programs almost continuously since the late 1980s and struggling in term of growth and productivity (see below).



Fiscal Deficit

The other major risk may come from the fiscal sector. The deterioration in fiscal balance is largely driven by significant leakages in expenditures especially in SOEs, energy and commodity transactions. Revenue shortfalls also contribute but there is an element of optimistic revenue projections to allow for equivalent optimism on the expenditure side. It seems that with business as usual, escaping the IMF trap of low growth and repeated adjustment programs will be difficult to escape.

With serious and prolonged reform as envisaged here, we can expect

1. Elimination of all; SOE losses as well as the circular debt in the first few years depending on the strength and pace of reform.
2. Sustained reform of the energy sector to eliminate losses and mistakes that keep prices at non-competitive levels.
3. Expenditure rationalization in government and better budget management will allow non-debt-related expenditures to be significantly contained.
4. Revenues will increase because of the higher growth and more investment as well as better policies that rely on simplicity and allowing for more transactions.
5. The number of transactions in the economy will increase to increase revenues

Conclusion:

In conclusion, let us repeat that this is not a plan, and none of these scenarios is presented as our targets or suggested outcomes. The biggest risk is the government's ability to deliver on this complex agenda, which will require a lot of detailing through research and continuous M&E. This is why the governance reforms must come early, and capacity developed to undertake this complex task.

As with all road maps, they require intelligent and continuous navigation and handling of the vehicle of travel. The biggest risk remains the inability to configure governance systems to manage this policy.

References

Haque, N., and Hina, H. (2020) Pakistan's Five Currency Crises, PIDE Knowledge Brief No. 7, <https://pide.org.pk/pdf/PIDE-Knowledge-Brief-7.pdf>



Pakistan Institute of Development
Economics (PIDE),
P.O. Box. 1091, Islamabad,
44000, Pakistan.
Tel: +92-51-9248051
Fax: +92-51-9248065