

Growth and Inequality in Pakistan

Volume – I

Hafiz A. Pasha



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FOREWORD

The global financial, ecological and social crises of our times — wherever they currently manifest themselves — are of political nature. Many countries on the globe are now challenged by similar or related phenomena albeit from very different starting points. Inequality is the scourge of our times. This, however, opens up alleys to economic and public policies to produce socially just, sustainable and green dynamic growth. Yet with neo-liberal mind sets still dominant we need to better understand the political economy of reforms. And academic debates need become comprehensible blueprints for progressive policies aiming at sustainable growth that guarantees a fair distribution of wealth.

Against this backdrop, the Pakistan Office of the Friedrich-Ebert-Stiftung (FES) has initiated a project on the *Economy of Tomorrow (EoT)* in 2013. EoT is about furthering public discourses to critically reflect on the deficits of dominant growth models and to develop recommendations for a more inclusive development trajectory.

A panel of acclaimed experts and opinion leaders from diverse backgrounds developed and debated several studies and position papers. Chaired by Dr Hafiz A. Pasha who has consolidated most of the research work done by the panel, the result is now made public in the form of this book.

For Pakistan and other developing countries inequality of income and wealth has remained an intractable challenge causing a multitude of social problems. Pakistan has now been suffering from regressively slow growth for nearly a decade which has amplified prevalent inequalities and exacerbated social and political instability. Low growth and inequality appear to feed on each other.

This publication by Dr Hafiz A. Pasha explains and strengthens the interconnectedness of inequality and low growth in Pakistan. Based on extensive research and analyses of all important facets and sectors of Pakistan's economy the volume proposes a comprehensive reform programme in key areas and Dr Pasha calls upon establishing social, ecological sustainability as precondition for sustainable growth.

We at Friedrich-Ebert-Stiftung (FES) are confident that this pioneering work will enrich economic debate, draw the attention of decision makers and facilitate a new consensus on achieving more socially just, sustainable and green dynamic growth policies for Pakistan.

Rolf Paasch and Abdul Qadir
FES Pakistan
January 2018

PREFACE

The theme of the book is Growth and Inequality. These are the two fundamental problems with the economy of the Pakistan. The rate of economic growth has barely touched 5 percent over the last decade. Simultaneously, the economic and social structure have perpetuated high income, wealth and regional disparities. Combined together, these two structural problems have led to high levels of unemployment and poverty. This has exposed the country to serious problems of law and order and religious extremism, accompanied by acts of terrorism, which have led to the killing of over 70,000 people in Pakistan and imposed heavy economic losses.

The material presented in the book is the consequence of many years of research, frequently undertaken with the help of M Phil / Ph D students at various universities in Lahore, especially the Beaconhouse National University and the Lahore School of Economics. Some of the research has been supported by international agencies like the FES, World Bank, DFID and UNDP. Also, local research institutions have provided research staff and funds to facilitate the research. This includes institutions like SPDC, IPP, IPR and PRIME. In addition the leading newspaper *Business Recorder* has provided the publication platform of abbreviated versions of the findings from the research.

The FES has been the prime agency for supporting the preparation of this book. The origins of producing this book arose from the project on Economy of Tomorrow, which has been undertaken by local experts in partnership with the FES in many countries. This book is being launched by FES.

Volume-1 of the book has seven sections relating to Population Growth; State of the Economy; the IMF Program; Growth; Investment; Employment and Regional Inequality. Within these sections there are twenty chapters.

This volume presents perhaps for the first time findings on the following:

- i) A detailed analysis in Chapter 1 of the provisional results from the Population Census of 2017. In particular, the many surprises are highlighted.
- ii) Chapter 2 presents the trend in economic indicators since 2001-02 to 2016-17. The overall conclusion is that the performance of the economy has worsened substantially since 2007-08.
- iii) Chapter 3 highlights the relatively low and generally worsening position of Pakistan in key international rankings of countries.

- iv) Chapters 4 and 5 describe the key features of the IMF Extended Facility to Pakistan from September 2013 to September 2016. An evaluation is undertaken of the extent of the stabilization achieved in the economy. Who has borne the burden of the adjustment process is identified.
- v) Chapter 7 indicates the extent to which the GDP growth rate has been overstated by the PML(N) Government. A methodology is presented for checking the consistency of GDP estimates.
- vi) Chapter 9 on 'Green Growth' is an important Chapter. It highlights how the process of growth can be made more sustainable by focusing on managing environmental hazards and on preventing the depletion of natural resources.
- vii) Chapter 11 undertakes an analytical review of the Federal Public Sector Development Program from the view point of financing, allocation priorities and issue of implementation capacity.
- viii) Chapter 12 highlights the key features of the China-Pakistan Economic Corridor (CPEC) and the potential it has for being a 'game changer' for Pakistan. However, some of the risks in terms of negative impact on regional disparities, increase in price of electricity and sustainability of the balance of payments are analyzed.
- ix) Chapter 13 focuses on the privatization program. The impact of past privatization / sales of shares is highlighted. A set of criteria is set up to determine which public sector units should be part of the future privatization process.
- x) Chapter 16 identifies the international conventions which Pakistan has ratified as the pre-conditions for getting trade concessions under GSP-plus from the European Union. A comparison is made with existing labor laws in the country and gaps in the legislation and implementation are identified.
- xi) Chapter 17 presents for the first time estimates of the size and growth of each of the four Provincial economies of Pakistan from 1999-2000 to 2015-16. It demonstrates that inter-provincial disparities are high in the country. The comparative advantage in terms of sectoral activities in each Province are also highlighted.
- xii) Chapter 18 describes the labor market situation in each Province in terms of the characteristics of the labor force, nature of employment; extent of unemployment and actions by the respective Provincial Government to promote employment.

- xiii) The Human Development Index of each Province and of each district of Pakistan is determined in Chapter 19 by application of the methodology developed by UNDP. The regional disparities are identified, especially in terms of clusters of low human development.
- xiv) Chapter 20 quantifies the urban-rural divide in Pakistan in terms of per capita value added and income. The basic finds is that the rural and urban economies are, more or less, equal in size, while almost 64 percent of the population is resident in the rural areas.
- xv) Given the prime objective of the FES Economy of Tomorrow Project, the short- and medium-term outlook for growth and investment are presented in Chapters 8 and 14 respectively.

Volume-II of the book will contain sections on the following: The Productive Sectors; the Power Sector; Trade and Balance of Payments; Public Finances and Taxation; Fiscal Federalism and Equalization; Social Development; Income and Wealth Inequality; Poverty and Social Safety Nets. At the end, the overall Reform Agenda emerging from the Chapters in the two volumes will be presented.

Special mention needs to be made of my Research Associates – Wasim Saleem, Mohammed Imran, Imtiaz Ahmed, Javeria Jannat, Mehwish Ehsan and Ayesha Javed. Thanks are also due to M. Rizwanullah Khan for the patient job of typing and composition of the book and to Liaqat Ali for secretarial support.

Any defects which remain are, of course, the sole responsibility of the author.

This book is dedicated to my parents.

Hafiz A. Pasha,
Professor Emeritus, BNU
and former Federal Minister

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LIST OF ACRONYMS

ABL	Allied Bank Limited
ABL	Allied Bank of Pakistan
ACGR	Annual Growth Rate
ADB	Asian Development Bank
ADPs	Annual Development Programs
AiIB	Asian Infrastructure Investment Bank
ARL	Attock Refinery Limited
ASP	Average selling price
ASYB	Agricultural Statistics Year Book
B.E	Budget Estimate
BD	Business Development
BISP	Benazir Income Support Program
BOP	Balance of Payment
CCI	Council of Common Interests
CCOP	Cabinet Committee on Privatization
CCP	Competition Commission of Pakistan
CEO	Chief Executive Officer
CIA	Central Intelligence Agency of USA
CNG	Compact Natural Gas
CO ₂	Carbon dioxide
CPEC	China-Pakistan Economic Corridor
CPC	Code of Criminal Procedure
CPI	Consumer Price Index
CSF	Coalition Support Fund
DAE	Diploma of Associate Engineering
DCO	District Coordination Officer
DDMA	District Disaster Management Authority
DFID	Department for International Development
DGK	Dera Ghazi Khan
DISCO	Power Distribution Company
DQAF	Data Quality Assessment Framework
ECC	Economic Coordination Committee
ECNEC	Executive Committee of the National Economic Council
EDBI	Ease of Doing Business Index
EFF	Extended Fund Facility
ERRA	Earthquake Reconstruction & Rehabilitation Authority
EU	European Union
EYB	Energy Year Book

FATA	Federally Administered Tribal Areas
FBR	Federal Board of Revenue
FDI	Foreign Direct Investment
FES	Friedrich Ebert Stiftung
FESCO	Faisalabad Electric Supply Co. Ltd.
FPI	Foreign Portfolio Investment
FTA	Free Trade Agreement
GCI	Global Competitiveness Index
GCMs	Global Circulation Models
GDP	Gross Domestic Product
GENCO	Power Generation Companies
GHGs	Greenhouse Gases
GHPL	Government Holding (Private) Limited
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
GNFS	Good and Nonfactor Services
GNI	Gross National Income
GNP	Gross National Product
GOP	Government of Pakistan
GSP+	Generalized Scheme of Preferences (Plus)
HBL	Habib Bank Limited
HDI	Human Development Index
HEC	Higher Education Commission
HESCO	Hyderabad Electric Supply Co. Ltd.
HIES	Household Integrated Economic Survey
HKH	Hindu Kush-Karakoram-Himalayan
HSD	High Speed Diesel
IBRD	International Bank for Reconstruction and Development
IDA	International Fund for the development of Agriculture
IDI	Inclusive Development Index
IDPs	Internally Displaced Persons
IESCO	Islamabad Electricity Supply Company
ILO	International Labour Organization
IMF	International Monetary Fund
IPP	Institute of Public Policy
IPPs	Independent Power Projects
IPR	Institute of Policy Reforms
IRS	Indus River System
JPCL	Jamshoro Power Generation Co. Ltd
KAPCO	Kot Addu Power Company Limited
KESC	Karachi Electric Supply Company

Kms	Kilometers
K-PK	Khyber-Pakhtunkhwa
KSE	Karachi Stock Exchange
LFPR	Labor Force Participation Rate
LFS	Labour Force Survey
LSM	Large Scale Manufacturing
MAF	Million Acre Feet
MCB	Muslim Commercial Bank
MFN	Most Favorite Nation
MOF	Ministry of Finance
MOW&P	Ministry of Water and Power
MPL	Maximum Possible Loss
MTBs	Market Treasury Bills
MW	Mega Watt
NATO	North Atlantic Treaty Organization
NBP	National Bank of Pakistan
NDA	Non-Disclosure Agreement
NDMA	National Disaster Management Authority
NEC	National Economic Council
NEPRA	National Electric Power Regulatory Authority
NFC	National Finance Commission
NFS	Non-Factor Services
NGO	Non-Governmental Organization
NHA	National Highway Authority
NICL	National Insurance Co. Ltd.
NIT	National Investment Trust Ltd.
NPCC	National Petroleum Construction Company
NPGCL	National Power Generation Co. Ltd.
NSC	National Security Council
O&M	Operation and Maintenance
OBOR	One Belt One Road
OCAC	Oil Companies Advisory Committee
OGDCL	Oil and Gas Development Corporation Limited
OMOs	Open Market Operations
PASMIC	Pakistan Steel Mills Corporation
PBS	Pakistan Bureau of Statistics
PC	Planning Commission
PDMA	Provincial Disaster Management Authority
PDS	Punjab Development Statistics
PECO	Pakistan Engineering Co. Lt.

PEPCO	Pakistan Electric Power Company
PES	Pakistan Economic Survey
PGDPs	Provincial Gross Domestic Products
PGS	Provincial Growth Strategies
PIA	Pakistan International Airlines
PIBs	Prize Investment Bonds
PML(N)	Pakistan Muslim League (Nawaz)
PNSC	Pakistan National Shipping Corporation
POL	Pakistan Oilfields Limited
PPL	Pakistan Petroleum Limited
PPP	Pakistan Peoples Party
PRCL	Pakistan Reinsurance Col. Ltd.
PRIME	Policy Research Institute of Market Economy
PRSP	Poverty Reduction Support Program
PSDP	Public Sector Development Program
PSEs	Public State Enterprises
PSO	Pakistan State Oil
PTA	Pakistan Telecommunication Authority
PTCL	Pakistan Telecommunication Company Limited
PTI	Pakistan Tehrik-e-Insaf
QIM	Quantum Index Numbers
REER	Real Effective Exchange Rate
SATP	South Asia Terrorism Portal
SBF	Standby Facility
SBP	State Bank of Pakistan
SDGs	Sustainable Development Goals
SECP	Securities and Exchange Commission of Pakistan
SLIC	State Life Insurance Corporation of Pakistan
SME	Small and Medium Enterprise Bank
SMEDA	Small and Medium Enterprises Development Authority
SNA	System of National Accounts
SNGPL	Sui Northern Gas Pipeline Ltd
SPDC	Social Policy and Development Centre
SRO	Statutory Regulatory Orders
SSGC	Sui Southern Gas Company Ltd
SSM	Small Scale Manufacturing
SUPARCO	Space and Upper Atmospheric Research Commission
TDPs	Temporarily Displaced Persons
TEVTA	Technical and Vocational Training Authority
UBL	United Bank Limited

UN	United Nations
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNESCO	United Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development
WAPDA	Water and Power Development Authority
WDI	World Development Indicator
WEF	World Economic Forum
WHT	Withholding Tax

SECTION 1

POPULATION

Chapter 1:

POPULATION GROWTH

The massive undertaking of the Population Census has finally been completed after a big gap of nineteen years. Thanks are due to the Pakistan Bureau of Statistics, to the hundreds of thousands of enumerators and army personnel who performed the task diligently and without any delays. In particular, the Census Commissioner must be recognized for having managed the process so well.

Given the big gap between the two Censuses of 1998 and 2017 respectively there was inevitably some uncertainty about the size and distribution of Pakistan's population. There were bound to be some surprises. During the intervening years the country had witnessed relatively slow economic growth, interspersed with a few years of fast growth. Different regions of the country had shown substantial variation in performance. This was bound to be reflected in the pattern of increase and movement of the people within the country.

The summary provisional results have just been released. There are, in fact, many surprises in the estimates, some of which are discussed below. It would, however, have been appropriate if detailed explanatory notes had been presented along with the results.

1.1. ISSUES

The first basic question relates to the Census methodology. There are two approaches to census enumeration. The first is the *de-jure* approach in which persons are counted at their usual place of residence. The second is the *de-facto* approach, in which persons are counted where they are found on the census date.

The 1998 Census applied both the approaches simultaneously during enumeration. However, the data was tabulated and published on *de-jure* basis for comparability with the previous censuses.

The Census Commissioner has indicated that the results of the 2017 Census are based on application of the *de-facto* approach. This could create a serious problem in analysis of trends since 1998. The provisional results may need to be

modified by reverting to the *de-jure* approach to estimation, as was done in the 1998 Census.

The second question relates to the definition of '*urban area*'. The approach adopted is based on the list of urban areas notified by the Provincial Governments. As such the areas covered by metropolitan corporations, municipal corporations, municipal committees, town committees and cantonments are treated as urban. This is consistent with the definition of urban areas used in the 1998 population census. However, it may have led to understatement of the size of urban population.

Beyond the above definitions and approaches, the explanatory notes to the 2017 Census estimates should clarify the definitions of '*household*' and, '*place of usual residence*'. Also given the large number of refugees, where they are located in the Census is of some importance. Apparently, Afghan refugees and other aliens have been counted in the census process and allocated on the basis of their location at the time of enumeration. It is not clear, however, as to how Temporarily Displaced Persons (TDPs) have been treated. Perhaps in this case the *de-jure* approach ought to have been adopted. Also, there is a case for separately presenting the number of refugees and TDPs by Province.

The final issue relates to the role of different Governments in the undertaking of a Census. According to the Constitution of Pakistan, Census is part of the Federal Legislative List – Part-II. As such, decisions regarding the Census have to be taken by the Council of Common Interests (CCI), which has been the case. The question is the extent to which Provincial Governments should actually have been involved in the conduct of the Census. The explanatory note should also clarify in some detail the role that was actually played by these Governments. The CCI will also have to formulate a policy of resolving dissent on the estimates from any Province, FATA or the Islamabad Capital territory.

Following the identification of the key issues, the major findings from the 2017 Population Census are described below.

1.2. POPULATION

The provisional results indicate that the population of Pakistan has reached 207.8 million. Agencies like the UNFPA and World Bank had estimated the population at 193 million in 2016. The Annual Plan for 2017-18, prepared by the Planning Commission had projected the population at 198.4 million, almost 9.4 million less than the new Census estimate. Interestingly, the only agency which predicted a population above 200 million in 2016 was the CIA of USA. Estimates prior to the Census of the population of Pakistan are given Table 1.1.

Table 1.1 Prior Estimates of the Population of Pakistan by different Agencies

	2016	Population	Growth Rate	% Urban
UNFPA		192.8	2.1%	
GOP, PES	2017	199.1	2.1%	40.5
CIA Fact Book	2016	202	2.3%	38.8
World Bank	2016	193	2.1%	39.4
Annual Plan, PC	2017	198.4	1.9%	43.6
CENSUS	2017	207.8		36.4

(Million)

UNFPA = United Nations Population Fund, GOP = Government of Pakistan, PES = Pakistan Economic Survey, CIA = Central Intelligence Agency of USA, PC = Planning Commission.

Source: Various Sources.

Pakistan has been ranked as the sixth largest country in terms of population. Brazil, with a population of 211.2 million, is just ahead of Pakistan. The gap is small at 3.4 million. With a higher growth rate, Pakistan could catch up in the next few years. We are doing well in at least one ranking.

The higher population implies that Pakistan is now an even more '*water stressed*' country. Also, there is a danger of the forest area of the country being depleted at an even faster rate. The expansion of urban areas could also reduce the availability of land for cultivation of crops at the periphery of cities, especially in Punjab. The higher population growth rate than previously estimated also implies that per capita income has risen more slowly.

1.2.1. Rate of Population Growth

The most common prior estimate of the population growth rate of Pakistan was 2.1 percent per annum. The latest Annual Plan assumed an even lower growth rate of 1.9 percent. The growth rate revealed by the Census for the period, 1998 to 2017, is significantly higher at 2.4 percent. This is perhaps one of the most worrisome

Table 1.2 Annual Inter - Census Growth Rate of the Population of Pakistan, 1951 to 2017

	Population (million)	Annual Compound Growth Rate (%)
1951	33.82	
1961	42.98	2.40
1972	65.31	3.80
1981	84.25	2.83
1998	132.35	2.66
2017	207.77	2.37
1951 to 2017		2.75

Source: SBP, Handbook of Statistics on Pakistan's Economy.

outcomes. It has fallen only marginally by 0.2 percentage points in relation to the last inter-Censal growth rate from 1981 to 1998. Table 1.2 gives the annual growth rate of population revealed by the various Censuses since 1951.

The growth rate is also significantly higher than the underlying natural growth rate revealed by the various Demographic Surveys. Perhaps one of the reasons is that the number of refugees and aliens in Pakistan was understated earlier. If their number has increased by 3 million between 1998 and 2017, especially with the exodus from Afghanistan after 2001, then this alone raises the growth rate by more than 0.1 percentage point. Also, there is the possibility of some overstatement by respondents who know that public resources, employment, political representation, etc., are distributed on the basis of population.

A comparison of the population growth rate with other South Asian and/or Muslim countries reveals the magnitude of the problem. Bangladesh, India and Nepal have a substantially lower growth rate at close to 1.4 percent, while Sri Lanka has an even smaller growth rate of only 0.7 percent between 1998 to 2016. Large Muslim countries also have lower growth rates, ranging from 1.3 percent in the case of Indonesia to 1.9 percent of Egypt, as shown in Table 1.3.

Table 1.3 Comparison of the Population Indicators of Pakistan with selected Countries

	Population (2016)	Growth Rate (%)	Urban Share (%)	Urban Growth (%)**	Share of Female Population (%)
(million)					
SOUTH ASIA					
Bangladesh	163	1.43	35.0	3.8 – 3.2	49.5
India	1320	1.43	33.1	2.6 – 2.4	48.2
Nepal	29	1.32	19.0	6.0 – 3.2	51.5
Pakistan*	193	2.11	39.2	3.3 – 3.2	48.6
(Census Results)	208**	2.38	36.4	3.0	48.8
Sri Lanka	21	0.71	18.4	0.6 – 1.4	51.9
OTHER MUSLIM COUNTRIES					
Indonesia	261	1.31	54.5	4.5 – 2.5	49.7
Turkey	80	1.47	73.9	2.4 – 2.2	50.8
Egypt	96	1.95	43.2	1.8 – 2.2	49.5

*as reported by the World Bank | **Decline in the annual growth rate to the growth rate in 2016
Source: World Bank, World Development Indicators.

The central and most fundamental message is that Pakistan has failed to arrest the pace of population growth. We are not far from the 'Malthusian population trap'

Table 1.4 Index of Food Production and Per Capita Food Availability in Pakistan, 1981 to 2016

	Index of Food Production (2004-06 = 100)	Population (2005 = 100)	Per Capita Food Production (2005=100)	Annual Growth Rate (%)
1981	41.9	54.0	76.3	
1998	84.6	84.9	99.6	1.6
2016	126.2	132.6	95.2	-0.3

Source: WDI, World Development Indicators

according to which the rate of population growth eventually out paces the rate of increase in food production. Between 1981 and 1998 food production per capita grew by 1.6 percent per annum. In the latest inter-Census period it has actually fallen by 0.3 percent per annum. It is not surprising that nutrition levels have fallen in the lower quintiles of the population, as shown in Table 1.4.

Another way of highlighting the problem of the population explosion in Pakistan is that if the present rate of growth continues, the population will nearly double to 400 million by 2050. Our children could grow up to find themselves potentially in a world of shortages and large megacities characterized by excessive pollution and congestion. Needless to say, population control must now rank as one of the most important objectives of our policies and programs.

Population Planning was in the Concurrent List of the 1973 Constitution of Pakistan. Following the Eighteenth Amendment, this function has been transferred to the Provinces. According to estimates by the PRSP Secretariat of the Federal Ministry of Finance, the four Provinces combined devoted only 0.5 percent of their expenditure to population planning in 2015-16, as shown in Table 1.5. The highest share was observed in the case of Balochistan of 2 percent. The other three Provinces must aim to raise their shares to at least that of Balochistan.

The prevalence of contraceptive practices among married women aged 15 to 45 years is also given in Table 1.5, as reported by the latest National Demographic and Health Survey for 2012-13. The highest rate is observed in Punjab of 41 percent. For the country as a whole, the prevalence rate is 35 percent. It is not a surprise that the average family size in Pakistan remains high at over six persons. Pakistan must aim to learn from other Muslim countries on techniques used effectively for population control. In particular, the media must be harnessed for this purpose.

Table 1.5 Public Expenditure on Population Planning - 2015-16

	Expenditure on Population Planning	% of Total Expenditure	% of married women aged 15-45 using contraception, 2012-13
Punjab	3862	0.39	40.7
Sindh	1549	0.26	29.5
Khyber-Pakhtunkhwa	1216	0.34	28.1
Balochistan	4267	2.01	19.5
Total	10984	0.51	35.4

(Rs in Million)

Source: PRSP Progress Reports, MoF
National Demographic and Health Surveys, NIPS.

1.3. POPULATION DISTRIBUTION

According to the Census, the 207.8 million people of Pakistan are distributed as shown in Chart 1.1 as follows: 52.9 percent in Punjab; 23.1 percent in Sindh; 14.7 percent in Khyber Pakhtunkhwa; 5.9 percent in Balochistan; 2.4 percent in FATA and less than 1 percent in Islamabad, the Federal capital. The changes in shares from 1981 to 2017 are given in Table 1.6.

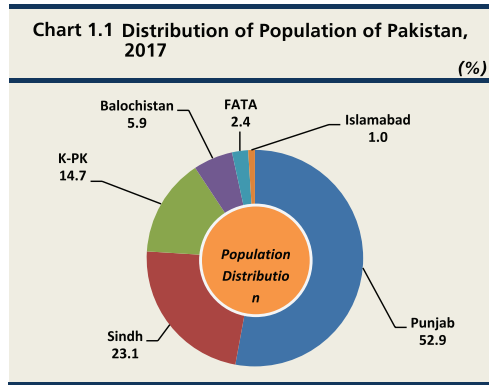


Table 1.6 Share of Population of Pakistan* in each Province 1998 to 2017

	1981		1998		2017	
	Population	Share (%)	Population	Share (%)	Population	Share (%)
Punjab	47.29	57.88	73.62	57.35 (-0.53)**	110.01	54.80 (-2.55)
Sindh	19.03	23.28	30.44	23.71 (0.43)	47.89	23.85 (0.14)
K-PK	11.06	13.54	17.74	13.82 (0.28)	30.523	15.20 (1.38)
Balochistan	4.33	5.30	6.57	5.12 (-0.18)	12.34	6.15 (1.03)
Total	81.71	100.00	128.37	100.00	200.76	100.00

*excluding FATA and Islamabad Capital Territory. These shares are used in NFC Awards.
**Annual Rate of change in the share

Source: SBP, Handbook of Statistics on Pakistan's Economy
Population Census 2017, PBS

There are many surprises in these estimates. The Federal Ministry of Planning and Development and the Pakistan Bureau of Statistics (PBS), which conducted the Census, had projected somewhat different shares in 2017. The share of Punjab in the national population was estimated with higher share of 54 percent, Sindh also with a larger share of 24 percent and K-PK and Balochistan both with significantly lower shares.

The Provincial Bureaus of Statistics had also made projections in their respective publication, *Development Statistics*. In particular, the Punjab Bureau was conservative and estimated the inter-census growth rate at only 1.9 percent. The actual growth rate revealed by the Census is 2.1 percent. Similarly, the Balochistan Bureau's projected lower growth at 2.9 percent. This would have implied one

million less population in 2017 than with the Census estimate of growth rate of 3.3 percent. The Sindh Bureau expected that the population of the Province was growing at a significantly faster rate of 2.8 percent than the growth rate revealed by the Census of 2.4 percent. As such, the Bureau's projected population of Sindh in 2017 was 3.5 million higher than the Census estimate. It is not surprising that Sindh has shown strong dissent on the Provisional results, especially since in the previous Census of 1988 it showed the highest growth rate. The only Bureau with a remarkable accurate projection was that of Khyber-Pakhtunkhwa, with a growth rate of 2.9 percent, the same as in the Census.

The question that arises is why there is variation in the population growth rate of the Provinces from a low 2.1 percent in Punjab to a high 3.3 percent in Balochistan. This implies that the cumulative growth of population from 1998 to 2017 was the lowest in Punjab at 49 percent as compared to a high of over 86 percent in Balochistan.

First, there is the possibility of under-enumeration in the previous Census of 1998. This is likely particularly in a Province like Balochistan, which is very sparsely populated. Consequently, with perhaps better coverage in 2017 the growth rate is artificially higher.

Second, natural growth rates of population differ among Provinces. There is evidence that the birth rate and the total fertility rate is smaller in Punjab, followed by Sindh, especially in the urban areas. Resort to family planning is also more prevalent in these Provinces as shown in Table 1.5. However, the rate of in-migration into these Provinces is higher, thereby compensating partially for the lower underlying population growth rate.

Interestingly, although Khyber-Pakhtunkhwa has traditionally experienced significant out-migration, especially to Karachi, it has begun to receive relatively large numbers of migrants from FATA. These findings have emerged from the Labor Force Surveys of PBS, which include a migration module.

Third, the *de-facto* approach used in the Census may have had an impact. In particular, the disproportionate location of refugees in Khyber-Pakhtunkhwa and Balochistan has probably affected the Provincial shares of population.

The population distribution among different Provinces has significant implications on the sharing of revenue transfers from the Federal Government, as per the NFC awards, on seats in the National Assembly and on quotas of government employment. Therefore, there is a strong motivation for each Provincial Government to get higher population share from the Census.

The implications of the change in population shares of Provinces due to the 2017 Census are significant. First, due to the decline in share of Punjab it will receive almost 4 percent less according to the horizontal sharing formula used in the ongoing the 7th NFC Award. This is equivalent to a reduction in transfer of over Rs 40 billion on the base of divisible pool revenues in 2016-17. There is little change in the case of Sindh. However, Khyber-Pakhtunkhwa could get an extra transfer of Rs 22 billion and Balochistan, Rs 18 billion respectively. This will positively contribute to the process of fiscal equalization in the country with the rise in the revenue share of the two relatively less developed Provinces of Pakistan.

Second, Punjab could lose at least four seats in the National Assembly if the provisional census estimates are used as the basis for allocation of seats. If current trends continue Punjab will cease to have the major share of the national population in the next fifteen years.

However, there is an upside for Punjab. With a lower rate of population growth, Punjab will tend to have faster per capita income growth. Research on the change in size of the Provincial economies reveals that Punjab had the fastest growth in per capita income from 1998 to 2017 of 2.5 percent per annum, as compared to just over 2 percent in the country as a whole. Cumulatively, the real per capita income has grown by 60 percent in Punjab since 1998, 15 percent higher than in Pakistan as a whole. Also, the Province will be in a better position to expand coverage to the incremental population, given the lower rate of population growth. This will mean a relatively better quality of life.

1.4. EXTENT AND RATE OF URBANIZATION

The main issue here is the approach adopted in the 2017 Census to define 'urban areas'. The pragmatic method used has been to follow the areas covered by Urban Local Governments as specified by Provincial Governments. However, this can lead to under-coverage in two ways. First, urban metropolitan boundaries may not have been expanded to adequately reflect residential development at the urban-rural periphery. This is probably the case especially with Karachi.

Second, rural settlements may have grown in population and acquired access to basic services, thereby qualifying for treatment as part of urban areas. Interestingly, the last Census in India of 2011 used the same definition as in Pakistan. This led to an estimate of the share of urban population at 31 percent. However, when towns with population size of 5000 or more were also included, the share of urban population increased substantially to 47 percent.

The estimates of the share of urban population in total population of a region in the provisional Census results are as follows: 36.7 percent in Punjab; 52 percent

in Sindh; 18.8 percent in Khyber-Pakhtunkhwa; Balochistan, 27.6 percent and FATA, 2.8 percent. For the country as a whole the share of urban population in the total population is 36.7 percent. The change in the rate of urbanization by Province is given in Table 1.7.

Table 1.7 Rate of Urbanization by Province, 1981 to 2017

	1981	1998	Percentage growth rate	2017	Percentage growth rate	Share of Urban Population (%)
<i>(million)</i>						
PAKISTAN**	84.3	132.4	2.65	207.8	2.37	36.38
Urban	28.8	43.0	3.48	75.6	2.96	
Rural	60.5	89.4	2.30	132.2	2.06	
			1.51*		1.44	
PUNJAB	47.3	73.6	2.60	110.0	2.11	36.72
Urban	13.1	23.0	3.31	40.4	2.96	
Rural	34.2	50.6	2.30	69.6	1.68	
			1.44		1.76	
SINDH	19.0	30.4	2.76	47.9	2.39	52.00
Urban	8.2	14.8	3.47	24.9	2.74	
Rural	10.8	15.6	2.16	23.0	2.04	
			1.61		1.34	
K-PK	11.1	17.7	2.74	30.5	2.86	18.69
Urban	1.7	3.0	3.34	5.7	3.37	
Rural	9.4	14.7	2.64	24.8	2.75	
			1.27		1.22	
BALUCHISTAN	4.3	6.6	2.52	12.3	3.27	27.64
Urban	0.7	1.6	4.86	3.4	3.96	
Rural	3.6	5.0	1.93	8.9	3.03	
			2.53		1.32	

*Ratio of the growth rates | **Including FATA and Islamabad

Source: PES
Population Census 2017

There is a surprise here also. The Ministry of Planning and Development and PBS estimated the urban share at 40.5 percent in 2017. This is almost four percentage points higher than the Census. Similarly, the World Bank estimate was higher at 39.2 percent in 2016. Also, earlier estimates of the rate of urbanization were higher. The estimated urban population growth rate ranged from 3.2 percent by the World Bank to 3.3 percent by PBS, as compared to 3 percent by the Census.

However, despite lower estimate of the extent of urbanization in Pakistan by the Census, it is perhaps a big surprise to know that Pakistan is the most urbanized country in South Asia. The share of urban population ranges from 18.4 percent in Sri Lanka to 19 percent in Nepal, 33.1 percent in India and 35.1 percent in Bangladesh, as shown in Table 1.8, as of 2016. Can this be attributed at least partly to the GT road which has over 60 percent of the national population living in the clusters in close proximity?

Table 1.8 Comparison of the Extent of Urbanization in Selected Countries ^a

	Share of Urban Population (%)	Primacy Index ^b (%)	% of Urban Population ^c in Large Cities
SOUTH ASIA			
Bangladesh	35.0	31.9	41.8
India	33.1	6.0	44.9
Nepal	19.0	22.2	22.2
Sri Lanka	18.4	18.2	n.a
Pakistan^d	36.4	19.7	53.7
OTHER MUSLIM COUNTRIES			
Indonesia	54.5	7.4	19.5
Turkey	73.9	24.5	51.1
Egypt	43.2	46.2	58.0

a estimates for 2016
b Share of the Largest City in the Urban Population
c large cities are cities with population above 1 million
d from Population Census

Source: World Bank, World Development Indicators

1.5. GROWTH OF CITIES

The size and growth of the major cities of Pakistan is given in Table 1.9. These cities all have a population of over 1 million in 2017. The largest city is Karachi and Lahore is the fastest growing city along with the Federal Capital, Islamabad.

Table 1.9 Population and Growth of Major Cities of Pakistan

	<i>(million)</i>				
	1981	1998	Annual Growth Rate (%)	2017	Annual Growth Rate (%)
Karachi	5.208	9.339	3.43	14.910	2.46
Lahore	2.953	5.143	3.26	11.126	4.06
Faisalabad	1.104	2.009	3.52	3.203	2.46
Rawalpindi	0.795	1.410	3.37	2.098	2.09
Gujranwala	0.601	1.133	3.72	2.027	3.06
Peshawar	0.566	0.983	3.25	1.970	3.66
Multan	0.732	1.197	2.89	1.872	2.35
Hyderabad	0.752	1.167	2.59	1.733	2.08
Quetta	0.286	0.565	4.00	1.001	3.01
Islamabad	0.204	1.529	5.60	1.015	3.42

Source: PBS, Statistical Year Book. Population Census 2017

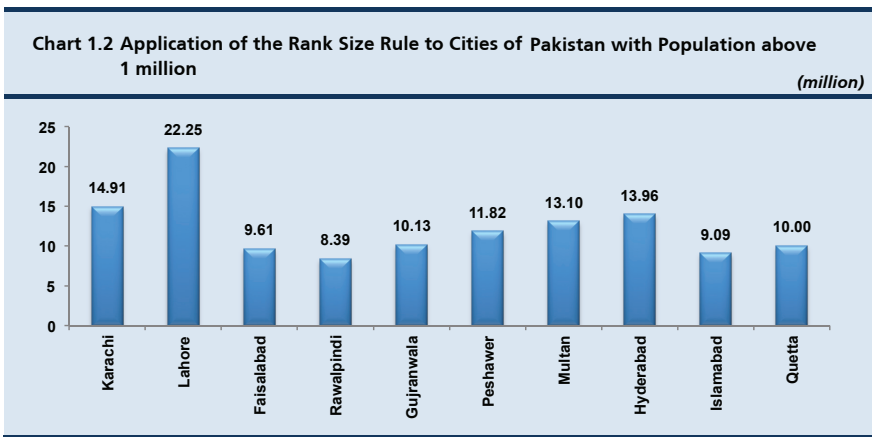
The primacy index of Pakistan is low by international standards at 19 percent while the percentage of urban population living cities with population above 1 million is relatively high at almost 54 percent. A comparison with selected countries is made in Table 1.8.

The basic question is how balanced is the urban settlement hierarchy of Pakistan, as revealed by 2017 Census. For this purpose the rank size rule is applied, which states the following:

$$\text{Ranking of a city} \times \text{Population of the City} = A \text{ constant}$$

Results are presented in Chart 1.2 for cities with population above 1 million in 2017. The dominance of the two large metropolitan cities, Karachi and Lahore, is clearly demonstrated. In particular, Lahore appears to have expanded too fast and more than doubled its population since 1998.

Medium-sized cities of Pakistan generally have lower population in relation to that indicated by the rank size rule. Within Provinces, the more imbalanced distribution is observed in Punjab. In relation to Lahore, the population of Karachi appears to be significantly understated.



Overall, the findings regarding urbanization are that, first, Pakistan is relatively more urbanized, second, that urbanization is proceeding at a moderate rate and, third, that the size distribution of cities has become more imbalanced. The bottom line is that Pakistan will have to make strong efforts to reduce the growth of the overall population and of the primate cities.

SECTION 2
STATE OF THE
ECONOMY

Chapter 2:

STATE OF THE ECONOMY

2.1. GROWTH

The new millennium started with Pakistan in the midst of sanctions imposed by the international community following the nuclear tests which constrained growth to the low rate of 2 percent per annum. Soon after, with Pakistan becoming an ally in the global ‘war-on-terror’ the economic situation changed for the better with large aid inflows. The growth rate rose to reach a maximum of 9 percent in 2004-05. This was accomplished because of a boost in all sectors—industry, agriculture and services. Investment (both public and private), as a percentage of GDP, showed a big increase, being stagnant in the early years of the new millennium.

Table 2.1 Trends in Key Macro Economic Indicators

	2001-02	2007-08	2012-13	2013-14	2014-15	2015-16	2016-17
A. Growth Rate (%)							
GDP	3.1	5.0	3.6	4.1	4.1	4.5	5.3
Agriculture	0.1	1.8	3.4	2.1	2.1	0.3	3.5
Industry	2.7	8.5	3.5	5.8	5.2	5.8	5.0
Services	4.8	4.9	3.7	3.4	4.4	5.6	6.0
B. Investment (% of GDP)							
Total*	14.5	19.2	14.2	14.0	15.7	15.6	15.8
Public	3.6	4.8	3.9	3.5	3.7	3.8	4.3
Private	9.9	12.8	9.7	9.9	10.4	10.2	9.9
C. National Savings (% of GDP)							
	16.1	11.0	13.9	13.4	14.7	14.3	13.1

* including change in stocks.

Source: PES

The high growth in Pakistan coincided with economic boom in most Asian economies, with one major difference. While the growth spurt in the emerging economies continued, more or less, unabated, growth in Pakistan could not be sustained. In fact, it was followed by a period of near stagflation. For the last five years GDP growth has averaged barely 4 percent per annum. Deep rooted economic issues have constrained high and sustained growth in Pakistan including high levels of power outages, low rate of savings and consequently inadequate investment not only by the private sector but also the public sector

in infrastructure, industry, agriculture and human capital; a weak industrial and export structure, dominated by cotton based exports, due to trade policies that failed to promote diversification; an ambivalent attitude towards the private sector; ineffective governance structure with weak public institutions and rule of law, lack of accountability, high level of bureaucratic red-tape and rampant corruption.

Table 2.2 Gross Fixed Capital Formation (Public + Private) by Sector

	(% of GDP)						
	2001-02	2007-08	2012-13	2013-14	2014-15	2015-16	2016-17
Agriculture	3.0	3.2	3.3	2.9	2.8	2.7	2.6
Large-Scale Manufacturing	3.4	3.0	1.3	1.1	1.4	1.4	1.4
Electricity & Gas	1.3	0.5	0.7	0.5	0.7	0.5	0.5
Transport & Communications	1.9	3.6	1.2	1.2	2.2	2.2	2.2
Ownership of Dwellings	2.6	2.3	2.1	2.1	2.4	2.3	2.3
Others	1.0						
TOTAL	13.2	17.1	10.8	9.9	14.1	14.4	14.7

Source: PES

2.2. INVESTMENT

Real gross fixed investment as a percentage of GDP has fallen steadily, showing a decline of over 30 percent from the peak in 2005-06. Over the period, 2012-17, it has averaged 12.8 percent of GDP, the lowest on record in more than half a century. The decline in investment in industry, especially large-scale manufacturing is very worrying (see Table 2.2). Investment in the power sector has remained low, at below one percent of the GDP. This is inadequate to close the demand-supply gap in electricity.

Investment in agriculture remains one of the key areas, especially for the private sector. The transport and communication sectors witnessed a boom up to 2007-08, with the spread of mobile phones.

2.3. GDP BY EXPENDITURE

Consumption expenditure has significantly contributed to economic activity; the official statistics indicate a share of over 90 percent over the period 2012-17 (See Table 2.3). The worrying trend is the decline in the shares of investment and exports. The former has fallen from 17.6 to 14.7 percent of the GDP. Exports of goods and non-factor services have declined from 12.7 to 9.1 percent of the GDP.

Table 2.3 GDP by Expenditure

	(% of GDP)					
	2007-8	2012-13	2013-14	2014-15	2015-16	2016-17
Private Consumption Expenditure	81.9	81.0	80.5	76.7	77.8	79.9
Government Consumption Expenditure	9.7	10.8	12.0	11.0	11.2	11.8
Domestic Capital Formation	17.6	12.6	12.4	14.2	14.4	14.7
Change in Stocks	1.6	1.6	1.6	1.6	1.6	1.6
Exports of Goods & NFS ^a	12.4	12.7	12.3	10.3	9.6	9.1
Less Imports of Goods & NFS	-33.2	-18.8	-18.8	-13.8	-14.6	-17.1
GDP (at factor cost)	100.0	100.0	100.0	100.0	100.0	100.0
· Non-factor services.						
Source: PES						

2.4. COSTS OF POWER OUTAGES

Important impediments to the revival in investment are the energy crisis along with the security situation. These two factors have pulled back Pakistan's economic growth rate by about 2.5 percentage points annually. Power outages have imposed a heavy cost on the economy of Rs.1575 billion in 2015-16, equivalent to almost 4 percent of the GDP (see Table 2.4). This implies that the growth rate of the economy could have been significantly higher in the absence of power load shedding.

Table 2.4 Economic Costs of Load shedding, 2015 - 16

	National Outage Cost (Rs in Billion)	Outage Cost per Kwh (Rs)
I. DIRECT COSTS	1220	
Domestic Consumers	276	26.5
Commercial Consumers	472	68.2
Industrial Consumers	361	60.9
Agricultural Consumers	111	33.4
II. INDIRECT COSTS	355	
TOTAL COST OF NATIONAL POWER OUTAGES	1575	
GDP	29102	
Cost as % of GDP	5.4	
Source: IPP (2011)		

2.5. COSTS OF WAR ON TERROR

The economic costs of the war on terror include both direct and indirect costs. The former include the, first, the loss of life (which cannot be quantified) and damage to infrastructure and property. Over 70,000 people have lost their lives. Second, security expenditure, both public and private, is higher so as to combat terrorism.

Since 2015 the Army has engaged in special operations in FATA, Balochistan and Karachi in the form of *Zarb-e-Azb* and more recently as *Raddul Fasaad*.

Security expenditure includes the cost of defense services, paramilitary forces, police and private security companies. In 2016-17, the total security expenditure is estimated at Rs 1587 billion, equivalent to 5 percent of the GDP. It is the largest component of expenditure by the Federal and Provincial Governments combined with a share exceeding 23 percent. It has risen by almost 2 percent of the GDP in relation to the level in 2000-01, prior to the commencement of the war on terror. Cumulatively, since 2001-02 to 2016-17, the additional cost of security is estimated at \$74 billion.

Indirect costs primarily consist of the amount of foreign and domestic investment foregone due to heightened perceptions of risk and insecurity. The level of private investment had reached a peak of 12.8 percent of the GDP by 2007-08. It has since fallen to below 10 percent of the GDP. Of course, there are multiple factors which have impacted on investment including the rise in the incidence of load-shedding, higher interest rates and increase in cost of imported machinery. It is estimated that about half the fall in investment is due to the negative impact of the war on terror.

Other indirect costs include the adverse impact on different parts of the country, like Khyber-Pakhtunkhwa, with the highest incidence acts of terror. In addition, the economy has suffered due to the higher cost of larger inventories to avoid disruption in supplies, larger insurance premium and the big decline in the number of tourists to Pakistan. The aggregate of the indirect costs is \$61 billion.

Overall, the total cumulative cost of the war on terror up to 2016-17 is \$135 billion. This includes direct costs of \$74 billion and indirect costs of \$61 billion, leading to a total cost of \$135 billion. This is more than four times the security and economic assistance provided by the USA of \$33 billion.

The estimate provided by the Ministry of Finance in the Pakistan Economic Survey of 2016-17 is somewhat lower at \$12 billion. However, a somewhat defective methodology has been adopted which focuses more on the negative impact on public finances, exports, foreign investment, etc.

2.6. MACROECONOMIC IMBALANCES

Slow economic growth over the last decade has been accompanied by large and growing macroeconomic imbalances, and Pakistan has experienced stagflation with low growth combined with high inflation. Public finances have deteriorated significantly and external transactions are being kept afloat as a result of large worker remittances and high levels of external borrowing.

Driven by a stagnant tax-to-GDP ratio, mounting public enterprise losses, and persistent subsidies for the power sector, the overall fiscal deficit has increased to an average of 5.8 percent of GDP over the last five years (See Table 2.5). The problem, however, is not only the large size of the deficit but what the deficit finances and how it is financed. Because of the low tax-to-GDP ratio averaging around 11 percent, government revenues do not even cover current expenditures. The revenue account deficit on general government account has averaged 1.6 percent of GDP in the last five years and has been responsible for almost 30 percent of the overall fiscal deficit.

Table 2.5 Summary of Consolidated Public Finances of Pakistan

	(% of GDP)					
	2007-8	2012-13	2013-14	2014-15	2015-16	2016-17
Total Revenues	14.1	13.0	14.3	14.4	15.0	15.5
Tax Revenues	9.9	9.6	10.1	11.0	12.4	12.5
Non-Tax Revenues	4.2	3.4	4.2	3.3	2.7	3.0
Total Expenditure	21.4	21.0	19.8	19.7	19.6	21.3
Current Expenditure	17.4	16.0	15.8	16.2	15.9	16.3
Development Expenditure*	4.0	5.0	4.0	3.5	3.7	5.0
Overall Fiscal Deficit	-7.3	-8.0	-5.5	-5.3	-4.6	-5.8

Source: MOF

The financing of the overall fiscal deficit has relied heavily on what are essentially inflationary means. The direct financing of the fiscal deficit by the Central Bank has been curtailed during the tenure of the IMF Program. Large commercial banks' financing of the government operations has been possible only through large liquidity infusion by OMOs to them by the State bank of Pakistan (SBP). This has resulted in significant monetary expansion, while 'crowding out' the private sector.

The overall public debt which was brought down to 57 percent of the GDP in 2007-08 has again shot up to over 67 percent by 2016-17 (see Table 2.6).

Table 2.6 Level and Composition of Public Debt

	(% of GDP)					
	2007-8	2012-13	2013-14	2014-15	2015-16	2016-17
Total Public Debt	56.9	62.7	64.3	63.3	67.6	67.2
Domestic Debt	30.8	40.6	43.6	39.1	41.0	39.9
External Debt	26.1	22.1	20.7	24.2	26.6	27.3

Source: SBP

2.7. INFLATION

Consumer price inflation averaged 5.5 percent annually during the last five years. However, consumer inflation moderated to only 2.9 percent in 2015-16 and to 4 percent in 2016-17, in part due to a change in base year of CPI from 2000-01 to 2007-08 with under-reporting of the inflation in house rent, electricity and gas prices. In recent months the inflation rate has dropped to below 4 percent primarily in response to falling international commodity prices.

2.8. BALANCE OF PAYMENTS

While the large fiscal imbalances have persisted, the foreign exchange position is an even greater area of concern. The current account deficit in the balance of payments deficit shot up to \$13.9 billion or 8 percent of GDP primarily because of the 'oil shock' in 2007-08, as shown in Table 2.7. This necessitated a resort to the IMF Standby Facility (SBF) of \$11 billion.

Table 2.7 Summary of the Balance of Payments

	(\$ billion)					
	2007-8	2012-13	2013-14	2014-15	2015-16	2016-17
Current Account Balance	-13.9	-2.5	-3.1	-2.8	-4.9	-12.4
Exports	20.4	24.8	25.1	24.1	22.0	21.9
Imports	35.3	40.2	41.7	41.4	41.3	48.5
Trade Balance	-15.2	-15.4	-16.6	-17.3	-19.3	-26.6
Remittances	6.5	13.9	15.8	18.7	19.9	19.4
Capital & Financial Account Balance	8.5	-0.5	6.9	5.4	7.6	10.5
FDI	5.3	1.3	1.6	0.9	2.3	2.6
Net Foreign Assistance	1.8	0.2	1.6	1.4	3.4	4.9
Balance of Payments	-5.4	-2.0	3.8	2.6	2.7	-1.9
Use of Fund Credit	-	-2.5	-0.6	1.9	2.0	-0.1
Reserves	9.5	7.2	10.4	14.9	19.3	16.8
Reserve of Imports (months)	3.2	2.1	3.0	4.3	5.6	4.1

Source: SBP

Stagnancy in exports and unsustainable imports due to an increasingly overvalued exchange rate (as indicated by the REER in Table 2.8) put Pakistan's current account under stress, despite the continued growth in worker remittances and disbursements from the Coalition Support Fund (CSF). Another peak in the size of the current account deficit was reached in 2016-17 at \$ 12.4 billion or more than 4 percent of the GDP.

Table 2.8 Nominal and Real Effective Exchange Rate (REER)

	Nominal Exchange Rate (Rs / \$)	REER (Base is 2010)
2007-08	62.54	96.3
2012-13	96.72	104.4
2013-14	102.86	110.1
2014-15	101.29	119.1
2015-16	104.24	120.6
2016-17	104.68	124.9

Source: SBP

Liquid foreign exchange reserves held by the SBP rose to over \$18 billion by end June 2016, enough to cover over three months of imports. This was achieved with the support from the IMF of \$6.2 billion, as part of the Extended Fund Facility. However, they have been declining since then and were \$16.1 billion in June 2017.

2.9. EMPLOYMENT

The macroeconomic challenges will have to be surmounted if the GDP is to be put back on a high growth trajectory of at least 6 percent. This is essential if Pakistan is to absorb productively its labor force, which is rising at 2.5 percent per annum from 2001-02 to 2013-14 (see Table 2.9). Currently, almost 4 million workers are unemployed. Given the demographic profile, Pakistan is witnessing a youth bulge. Almost 230 million people are projected to be looking for work by the end of 2050. If this youth population is not gainfully employed, the 'demographic dividend' for Pakistan has the danger of becoming a 'demographic curse', given the rise of militancy and extremism.

Table 2.9 Labor Force, Employed and Unemployed

	Labor Force	Employed	Unemployed	Unemployment Rate (%)
	<i>(Million)</i>			
2001-02	43.3	39.7	3.6	8.3
2007-08	53.7	50.9	2.8	5.2
2012-13	59.7	56.0	3.7	6.2
2013-14	60.1	56.5	3.6	6.0
2014-15	61.0	57.4	3.6	5.9

Source: PES

Overall, the economy has shown little dynamism since 2007-08. The recent emergence once again of large macroeconomic imbalances indicates that the focus will continue to be on stabilization of the economy rather than on growth.

Chapter 3:

PAKISTAN'S INTERNATIONAL RANKINGS

An assessment of the level and change of Pakistan in key international indices and measures is important for two reasons. First, it provides a, more or less, objective evaluation of the performance of the economic, social and governance indicators of the country in relation to other countries, especially in South Asia, at a similar stage of development. This helps to identify critical areas where there is need to improve performance and thereby in prioritizing the reform agenda both for the short and the long term. Second, the various indices influence international perceptions of Pakistan especially by foreign investors.

This chapter covers six key international indices. These are generally provided on an annual basis by international institutions like the UN agencies, World Bank, World Economic Forum and so on. The focus is also to study the change in Pakistan's ranking during the last few years, from 2010 or 2012 to the latest year for which information is available. A comparison is made of Pakistan with three South Asian economies, viz., India, Bangladesh and Sri Lanka. Other countries included in the analysis are Thailand, Indonesia, Turkey and Philippines.

3.1. HUMAN DEVELOPMENT INDEX

The most commonly referred to index is the Human Development Index (HDI) prepared by the United Nations Development Program (UNDP). Dr. Mahbub ul Haq played a major role in the development of this index. The HDI has three components, with equal weights, relating to health status of the population of a country, the level of education and the per capita income, adjusted for differences in purchasing power. The first ranking of the HDI was prepared in 1990. A recent ranking is for 2015 for 185 countries.

Unfortunately, Pakistan does very poorly in terms of human development, as shown in Table 3.1. Out of the eight countries included in the analysis, Pakistan has the lowest ranking, at 147th. Turkey has the highest ranking at 71st, followed by Sri Lanka at 73rd. Pakistan is the lowest ranked country among all countries in the world with a medium level of human development.

Table 3.1 Human Development Index Ranking 2010 to 2015

Countries	2010	2015 ^c
Bangladesh	137 (0.545)	139 (0.579)
India	127 (0.580)	131 (0.624)
Pakistan	145 (0.525)	147 ^a (0.550) ^b
China	79 (0.700)	90 (0.738)
Thailand	83 (0.720)	87 (0.740)
Indonesia	110 (0.662)	113 (0.689)
Turkey	62 (0.737)	71 (0.767)
Philippines	123 (0.669)	116 (0.682)
Sri Lanka	75 (0.746)	73 (0.766)

· Medium human development | · HDI Index Value | · 185 Countries
Source: Global Human Development Report, UNDP

The particularly worrying aspect is the poor performance with respect to other South Asian countries. Even Bangladesh has a better ranking of 139th while India is ranked 131st. Between 2010 and 2015, Pakistan's ranking has deteriorated by two places. The absolute value of the HDI has shown only a small change. In fact, Pakistan ranks much higher in terms of per capita income than in the HDI.

The worst performance by Pakistan among the three components of HDI is in education, as shown in Table 3.2. For example, the mean years of schooling of the population is only 5.1 years in 2015, as compared to 8.3 years in India and as high as 10.9 years in Sri Lanka. Clearly, Pakistan needs to invest more on education, especially at the secondary and higher levels.

Table 3.2 Magnitude of Key Indicators, 2015 in the HDI

Countries	Life Expectancy	Expected Years of Schooling	Mean Years of Schooling	GNI Per Capita*	GNI per Capita Ranking – HDI Rank
Bangladesh	72.0	10.2	5.2	3341	8
India	68.3	11.7	8.3	5663	-4
Pakistan	66.4	8.1	5.1	5031	-10
China	76.0	13.5	7.6	13345	-7
Thailand	74.6	13.6	7.9	14519	6
Indonesia	69.1	12.9	7.9	10053	-8
Turkey	75.5	14.6	7.9	18705	-7
Philippines	68.3	11.7	9.3	8395	-7
Sri Lanka	75.0	14.0	10.9	10789	21

* 2011 PPP \$
Source: Global Human Development Report, UNDP

3.2. GLOBAL COMPETITIVENESS INDEX

The next index of importance is the Global Competitiveness Index (GCI) of the World Economic Forum, which has twelve pillars of performance ranging from market size, infrastructure and institutions to technological readiness and innovation. The latest ranking is of 2016-17 for 139 countries. Here again, Pakistan has the worst ranking at 122nd, among the eight countries included in the analysis in Table 3.3. The highest ranking among these countries is of Thailand at 34th, followed by India at 39th. There is apparently a close correlation between a country's GCI ranking and the performance of its exports.

Table 3.3 Global Competitiveness Index Ranking 2012-13 to 2016-17

Countries	2012-13*	2016-17**
Bangladesh	118	106
India	59	39
Pakistan	124	122
China	29	28
Thailand	38	34
Indonesia	50	41
Turkey	43	55
Philippines	65	57
Sri Lanka	68	71

* 144 Countries | ** 139 Countries
Source: World Economic Forum

Pakistan's ranking in the GCI has improved somewhat from 124th in 2012-13. The areas of relative weakness of the country are in health and education, labor and goods market efficiency and technological readiness. Interestingly, Pakistan performs relatively better in terms of market size, innovation and business sophistication as shown in Table 3.4. The World Economic Forum in its assessment of the competitiveness of Pakistan has ranked in descending order the following negative factors: corruption, crime and theft, tax rates and government instability.

Table 3.4 Pakistan's Position in Different Pillars of Competitiveness – 2016 - 17

Relatively Good Pillars	Average Pillars	Relatively Bad Pillars
< 120*	120 – 124	> 120
Institutions [111]	Higher Education & Training [123]	Health and Primary Education [128]
Infrastructure [116]		
Macro-Economic Environment [116]		Labor Market Efficiency [129]
Goods Market Efficiency [117]		
Financial Market Development [107]		
Technological Readiness [119]		
Market Size [29]		
Business Sophistication [95]		
Innovation [75]		

*144 Countries | **140 Countries | ***139 Countries
Source: World Economic Forum

3.3. CORRUPTION PERCEPTIONS INDEX

This takes us the next very widely used index, that is, the Corruption Perceptions Index (CPI) of the Transparency International. As highlighted recently by the Federal Minister for Planning and Development, there has been an extraordinary improvement in Pakistan's ranking in recent years. It has gone up from 139th in 2012 to 116th in 2016, out of 176 countries (see Table 3.5).

Table 3.5 Ranking in Corruption Perceptions Index, 2012 and 2016 2012-13 to 2016-17

Countries	2012*	2016**
Bangladesh	144	145
India	94	79
Pakistan	139	116
China	80	79
Thailand	88	101
Indonesia	118	90
Turkey	54	75
Philippines	105	101
Sri Lanka	79	95

* Total of 174 Countries | ** Total of 176 Countries
Source: Transparency International

However, other countries in the sample of eight countries generally do better. India has a ranking of 79th, Turkey of 75th and Indonesia of 90th. The only country in the sample which performs poorly in relation to Pakistan is Bangladesh, with a ranking of 145th in 2016.

3.4. EASE OF DOING BUSINESS INDEX (EDBI)

Another index, which is potentially of interest particularly to potential investors, is the Ease of Doing Business Index (EDBI) of the World Bank. In this index there has been a substantial worsening in Pakistan's ranking from 105th in 2012 to 144th in 2016 as shown in Table 3.6. Consequently, it has now the second worst ranking among the eight countries, only better than Bangladesh. Thailand is ranked 46th. Turkey stands at 69th and India at 130th.

The critical areas identified by the EDBI which require improvement in the Pakistani context are of getting electricity, trading across borders, registering property and paying taxes as shown in Table 3.7. The country does very well in protecting minority investors, getting credit by an investor and resolving insolvency in the event of failure.

Table 3.6 Ease of Doing Business Index – 2012 to 2016

Countries	Ranking	
	2012	2016*
Bangladesh	122	176
India	132	130
Pakistan	105	144
China	91	78
Thailand	17	46
Indonesia	129	91
Turkey	71	69
Philippines	136	99
Sri Lanka	89	110

*190 Countries
Source: World Bank

The broad conclusion from analysis of the above four more popular international rankings is that Pakistan generally performs poorly. Also, in terms of change from 2010 to 2015, the results are mixed in character. If the country is to especially attract more foreign direct investment from diverse sources, a systematic effort will have to be launched by focusing on areas where the country does poor currently in these rankings.

There are other indicators also which provide useful insights on the state of Pakistan's institutions and society. These are described below.

Table 3.7 Ranking in Different Activities of Pakistan

Better than Overall Rank	Close to Overall Rank [144]	Worse than the Overall Rank
< 140*	140 – 148	> 148
Getting Credit [82]	Starting a Business [141]	Dealing with Construction Permits [150]
Protecting Minority Investors [27]		Getting Electricity [170]
		Registering Property [169]
Resolving Insolvency [85]		Paying Taxes [156]
		Trading Across Borders [172]
		Enforcing Contracts [157]

* Ranking
Source: World Bank

3.5. GOVERNANCE

The World Bank gives annually the ranking of countries in different areas of governance, under the heading of ‘Governance Matters’. Each country is placed in percentile terms within the overall distribution of scores in a particular indicator. The larger the percentile the worse is the position of the country.

Table 3.8 Ranking in Governance Matters – 2012 and 2015

	[Percentile* Ranking]						
	Average Rank	Voice and Accountability	Political Stability and Absence of Violence	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
PAKISTAN							
2012	82.2	77	99	75	74	81	87
2015	78.0	73	99	73	71	76	76
INDIA							
2012	59.3	40	88	51	65	47	65
2015	54.3	39	83	44	60	44	56
BANGLADESH							
2012	78.8	65	91	76	81	80	79
2015	77.0	69	89	76	83	73	72
SRI LANKA							
2012	57.5	70	77	52	52	47	47
2015	51.2	64	53	47	48	40	55

* The higher the percentile the worse the ranking
Source: World Bank

Two sets of rankings are presented for Pakistan, for the years 2012 and 2015 respectively in Table 3.8. The former year was in the tenure of the last PPP government, while the latter is in the tenure of the incumbent government of PML(N).

The results may perhaps come as a surprise. Pakistan's overall ranking has improved from the 82nd percentile in 2012 to the 78th percentile in 2015 as shown in Table 3.8. However, it compares unfavorably with India, Bangladesh and Sri Lanka.

The area of greatest concern in the context of Pakistan is political stability and violence, where it has almost the lowest ranking among all the countries concerned. Pakistan also performs poorly in control of corruption. However, here also there has been some improvement. Relatively better rankings are observed in regulatory quality, government effectiveness, voice and accountability.

On the whole, Pakistan will have to do much better in facilitating business, especially the setting up of new projects by investors. Given the big deterioration in Pakistan's relative position internationally with regard to ease of doing business there is need for establishing an independent Commission, with the Federal Board of Investment as the Secretariat. This Commission should be charged with the task of indentifying ways of eliminating 'red tape' and facilitating transaction, especially through use of information technology, with different Government and parastatal agencies.

3.6. INCLUSIVE GROWTH AND DEVELOPMENT

The World Economic Forum (WEF) has recently started preparing a ranking of countries in the extent of inclusiveness in the process of growth and development. The ranking for selected countries are presented in Tables 3.9 and 3.10. A total of 78 countries have been included in the rankings, with Pakistan placed 40th.

The surprise here is that in the overall Inclusive Development Index (IDI) Pakistan actually does better than India. This is one of the few rankings in which Pakistan performs better than its large neighbor. However, the other sample countries are all placed better than Pakistan. In particular, China and Turkey do well in this ranking.

Table 3.11 reveals that Pakistan does the most poorly in growth per se. However, it performs better in the inclusiveness of growth and inter-generational equity. Table 3.11 gives the relative values among the four South Asian Countries, including Pakistan in individual indicators. For example, Pakistan has a substantially lower incidence of poverty than India or Bangladesh.

Table 3.9 Ranking in Inclusive Growth and Development – 2017

Countries	IDI Score	Ranking among Developing Countries*	Rate of Change (%)
Thailand	4.42	12	1.12
China	4.40	15	1.65
Turkey	4.30	20	2.62
Indonesia	4.29	22	0.81
Bangladesh	4.03	36	0.77
Sri Lanka	4.01	39	-2.14
Philippines	4.00	40	-0.52
Pakistan	3.56	52	-0.03
India	3.38	60	2.50

* Total of 78 Countries
Source: WEF

Table 3.10 Ranking in Different Components of Inclusive Development
Ranking Among Developing Countries, 2017*

Countries	Overall IDI	Growth	Inclusion	Inter Generational Equity
Thailand	12	4	28	23
China	15	6	53	2
Turkey	20	32	23	16
Indonesia	22	27	43	3
Bangladesh	36	28	61	4
Sri Lanka	39	43	33	31
Philippines	40	45	57	5
Pakistan	52	71	44	53
India	60	65	67	43

* Total of 78 Countries
Source: World Economic Forum

Table 3.11 Magnitude of Key Indicators, Inclusive Development Index – 2017

	Pakistan	India	Bangladesh	Sri Lanka
GROWTH & DEVELOPMENT				
• GDP Per Capita (\$)	1152	1806	973	3638
• Labor Productivity (\$)	13513	14681	5433	24561
• Life Expectancy (yrs)	57.8	59.6	62.4	67.0
• Employment (%)	51.7	52.2	67.8	52.4
INCLUSION				
• Net Income Gini	37.6	47.9	40.4	37.1
• Poverty Rate (%)	36.9	58.0	56.8	14.6
• Wealth Gini	72.7	87.6	78.6	80.7
• Median Income (\$)	3.7	n.a.	2.9	5.5
INTERGENERATIONAL EQUITY AND SUSTAINABILITY				
• Adjusted Net Savings (%)	14.9	20.3	25.6	17.5
• Carbon Intensity (Kg per \$ of GDP)	126.4	162.9	71.7	44.8
• Public Debt (%)	63.6	69.1	33.9	76.0
• Dependency Ratio (%)	65.3	52.4	52.5	51.2
Source: World Economic Forum				

SECTION 3
THE IMF
PROGRAM

Chapter 4:

THE IMF PROGRAM

The IMF Extended Fund Facility (EFF) was negotiated, more or less, immediately after the assumption of power by the PML(N) after the elections in mid-2013. The EFF was for three years up to September 2016.

This Chapter describes first the key features of the EFF. In the process of finalizing the Program the Government also yielded on the need for reforms which constitute an infringement of the laws of the country. These violations are described in the second section on IMF intrusions.

The next Chapter presents an in-depth evaluation of the IMF Program, following its completion. This is followed by presentation of the medium-term projections made by the IMF of key indicators after June 2017. The Chapter ends with a description of the outcome of the IMF Article IV Consultation with the Pakistani Authorities.

4.1. FEATURES OF THE PROGRAM

The last year, 2012-13, of the PPP Government witnessed a major deterioration in economic conditions of the country. The GDP growth rate was low at 3.5 percent. There was a large fiscal deficit of 8 percent of the GDP.

More importantly, the external balance of payments position became very fragile. Foreign exchange reserves fell during the year by \$4.8 billion. This was due a deficit in the balance of payments of \$2.3 billion and a big repayment of the previous ESAF loan to the IMF of \$2.5 billion. Consequently, by end-June 2013 reserves with the SBP had fallen to only \$6 billion, providing import cover of only one and a half months.

On top of this, peak repayment of \$3.2 billion was due to the IMF in 2013-14. With a 'business as usual' scenario, there was real danger of default by Pakistan in meeting its external obligations, unless drastic steps were taken. Inevitably, there was no option but to go to the IMF as the '*global lender of last resort*'. The new Government had affectively decided to '*seek a new loan to repay the old loan*'.

The key feature of the program negotiated with the IMF was a three year Extended Fund Facility (EFF), with focus on structural reforms. Access was given to 200 percent of Pakistan's SDR quota with the IMF, equivalent to an amount of \$6.2 billion. The initial release was \$544 million, with twelve quarterly installments subsequently. This was subject to successful review each time by the IMF Staff Mission and approval by IMF's Executive Board.

The program design involved five prior actions. This included a big devaluation of the rupee (8 percent reduction in the REER). In addition, there were five performance criteria and eleven structural benchmarks. The majority of reforms were to implemented by end-June 2014. As such, the Program was '*front loaded*'.

The performance criteria included targets / ceilings on the following for each quarter:

- Level of Net International Reserves
- Size of Budget Deficit
- Borrowings from SBP
- Net Domestic assets of SBP

The Structural Benchmarks included initially the following:

- Amend Law for SBP Autonomy (March 2014)
- Privatize 26 percent of PIA to Strategic Investor (December 2014)
- Issue Tax Notices to 75,000 Non-Filers (March 2014)
- Eliminate SROs (2014)

The bottom line in the Program design for

'Stabilize First; Revive Later'

4.2. INTRUSIONS BY IMF

Traditionally, the IMF in its programs with Pakistan has restricted itself to the domain of economic reforms which are within the constitutional and legal framework of the country. The new Program, however, is different. Not only does it make comments on the adverse security situation in the country which has severely impacted on private investment and economic activity but it also tends to encroach on constitutional boundaries and make comments which may be considered as perhaps objectionable in character.

Paragraph 71 of the First Staff Mission Report on the Risks in program implementation states:

'The recent record of interventions by Supreme Court in economic and administrative issues may be another source of uncertainty'.

This tends to have a negative connotation, as if the Supreme Court may affect adversely the implementation of reforms in the Program. On the contrary, there is a general recognition, both domestically and internationally, that the Supreme Court of Pakistan has made a stellar contribution to curbing corruption and nepotism and thereby limiting the failure of governance in the country. Surely, the IMF wants and realizes that improved governance is central to the successful implementation of reforms.

The same paragraph also makes a comment on the political dynamics in the country, as follows:

'The governing party may lack political support in provinces outside of Punjab, complicating Provincial-Federal relations'.

This is factually incorrect, as in the case of Balochistan, the PML(N) has the single largest number of seats in the Provincial Assembly. More importantly, it fails to recognize the gracious and sagacious behavior of the Prime Minister, Mr. Nawaz Sharif, who has preferred not to form his own Government in Balochistan and instead build a coalition with other parties. The spirit of accommodation and consultation is also visible in the agreement at the Council of Common Interests among the federating units on the new Energy Policy and the unanimous passage of the resolution of terrorism in the recent All Parties Conference.

There are other intrusions by IMF, perhaps motivated more by a desire to achieve results. One such example relates to the commitment apparently made by Pakistan to the IMF in paragraph 37 of Memorandum on Economic and Financial Policies on normalizing trade relations by eliminating the negative list on trade and extending MFN status to India. This was probably not the time to make such an explicit statement given the somewhat strained relations with India. Various senior government functionaries have said that there is no immediate plan to grant MFN status to India.

As such, any commitment in this regard ought to have been excluded from the Memorandum. Down the road, it weakens Pakistan's negotiating position in obtaining a relaxation of non-tariff barriers by India in return for MFN status.

Another unusual stipulation, which has been upgraded to the status of a structural benchmark, is the agreement to enact amendments to the Penal Code 1860

and the Code of Criminal Procedure (CPC) 1898. The objective is to strengthen the legal framework in cases of electricity theft by enhancing investigation, prosecution and penalties. The problem is that while this is desirable, the Federal Government is not in a position to make such a commitment. The CPC was originally in the Concurrent Legislative List of the Constitution. Following the abolition of this list in the 18th Amendment, the responsibility for any changes in the CPC has passed on to the Provincial Governments. It is not clear if they were consulted on the nature of changes in the laws prior to the making of this commitment.

The Staff Report also highlights on page 65 in Table 15 that a prior action implemented by the Authorities before IMF Board consideration of the Program was as follows:

'Impose a balanced budget requirement on Provinces and agree with the Provinces to save additional revenues generated by the Program'.

'Presumably this was done through the Council of Common Interests.'

The Provinces have budgeted for a combined deficit of Rs 52 billion in 2013-14. Now as per the agreement they will not only have to eliminate this deficit but will also have to generate a cash surplus of Rs 116 billion, equivalent to 57.5 percent of the revenues generated from taxation proposals by the Federal Government in the Budget of 2013-14. This will require a cut of 5 percent in current expenditure and a 39 percent scaling down of the Provincial PSDPs in relation to the budgeted levels. In effect the already low expenditure on health and education will have to be sacrificed.

The question is that whether there was, in fact, an explicit commitment by the four Provincial governments to implement these cuts in expenditure. The large reduction in the consolidated fiscal deficit from 8 percent of the GDP in 2012-13 to 5.8 percent of the GDP in 2013-14 agreed with the IMF be difficult to achieve otherwise.

The IMF also makes some not so veiled comments on problems with on-going 7th NFC Awards in Box 2 on page 30 of the Staff Report. It suggests a revamp of the revenue-sharing formula in the next NFC Award whereby a better match is obtained between revenue and expenditure responsibilities which would not leave the federal government with chronic deficit, while the Provinces run surpluses.

The IMF needs to be informed about two relevant clauses in the post 18 Amendment Constitution. The first is Article 160 sub-section 3A, which states the following:

'The share of the Provinces in each Award of National Finance Commission shall not be less than the share given to the Provinces in the previous Award'.

The floor to the revenue share of the Provinces in the next Award is 57.5 percent. Therefore, the IMF is apparently intruding into constitutional provisions in the context of federal-provincial fiscal relations, as manifest in the NFC awards.

Instead, the objective of more balanced relations can be achieved by ensuring that in the next Award, the Provincial Governments fully take on the expenditure responsibilities associated with the functions transferred to them by the 18th Amendment. Currently, the expenditures on higher education and vertical programs have been assumed by the Federal Government. Also, subject to agreement, a part of the revenue-sharing formula may be linked to the variation in the level of tax effort and fiscal discipline among Provinces, as has been case since the 11th Finance Commission award of India.

In conclusion, as indicated above, the IMF has strayed into territories it has not tread before. The sensitivity of some of the observations made and suggested reforms ought to have been highlighted to the Fund by the Federal Ministry of Finance.

Chapter 5:

EVALUATION OF THE IMF PROGRAM¹

The three year program under the IMF's Extended Fund Facility (EFF) has now come to an end. Pakistan has received \$6.2 billion loan from the IMF under this program. During the tenure of the program, Pakistan was required to undertake wide - ranging structural reforms and implement the type of policies that would restore macroeconomic stability, gradually promote economic growth and build foreign exchange reserves to bolster external buffers.

After the completion of the twelfth and the final Review, the IMF Staff Mission Report declared '*victory*' and stated that "the Fund Supported Program has helped the country restore macroeconomic stability, reduce vulnerabilities and make progress in tackling key structural challenges. Economic growth has gradually increased and inflation has declined. External buffers have been bolstered, financial sector resilience has been reinforced, and the fiscal deficit has been reduced while social safety nets have been strengthened".

On the reform side, the Report stated that "tax policy and administration reforms allowed for further revenue mobilization. Steps have been taken to strengthen the State Bank of Pakistan's autonomy. Energy sector reform allowed a reduction of power outages, energy subsidies, and accumulation of power sector arrears. A country - wide strategy to improve the business climate was adopted".

The objective of this evaluation is to present the other side of the picture. In particular, there is need to identify the extent of the success, how these "successes" have been achieved and the failure to implement reforms that are critical for achieving higher growth.

Firstly, building foreign exchange reserves to bolster the external buffer was the main pillar of the hurriedly put together IMF Program. The idea was to build reserves and pay back the IMF loan on time. That is why many independent economists including the ones who remained associated with the IMF for a long time termed the program as a 'Self-Serving Program'.

1. This was published as an 'Open Letter to IMF' in the *Business Recorder* of 24th October 2016. It was jointly prepared with Dr. Salman Shah and Dr. Dr. Ashfaque Hasan Khan.

Such an objective of the Program forced the government to borrow extensively to build foreign exchange reserves and in the process accumulate net external debt of \$13 billion during the Program period. Incidentally, Pakistan added, more or less, the same amount to its foreign exchange reserves. The above facts clearly suggest that the external buffer was improved entirely through adding external debt. Isn't it simply postponing the current problem of insolvency to a future date?

Table 5.1 Build-Up of External Debt and Foreign Exchange Reserves

(\$ Billion)

Period	External Debt		Foreign Exchange Reserves	
	Level	Cumulative Change*	Level	Cumulative Change*
2012-13	60.9	-	6.0	-
2013-14	65.3	4.4	9.1	3.1
2014-15	65.2	4.3	13.5	7.5
2015-16	73.9	13.0	18.1	12.1

Source: SBP

Secondly, in a three year Program, the IMF has extended fifteen waivers. Perhaps never in the history of the IMF did Pakistan receive such a large number of waivers. This diluted the purpose of the Program and also reflected on the lack of emphasis towards implementing and achieving the stated goals of the Program.

Table 5.2 Number and Type of Waivers by IMF during the Program

Waiver on Level of	Reviews	Number
• Net International Reserves	1, 5,	2
• Ceiling on Government Borrowing from the SBP	2, 4, 5, 8	4
• Ceiling on NDA of SBP	3, 4, 5, 8, 12	5
• Ceiling on Fiscal Deficit	8, 9, 12	3
		14
	Others	1
	TOTAL	15

Source: IMF Quarterly Reviews

Sadly, the IMF Staff Mission has selectively highlighted the improvement in some economic indicators from 2012-13 to 2015-16. This includes rising rate of economic growth, falling rate of inflation, rising tax-to-GDP ratio, higher spending under BISP and private sector credit and falling subsidies as percentage of GDP.

The rate of economic growth achieved in the last three years remains contentious. The Pakistan Bureau of Statistics (PBS) has estimated the GDP growth rate as 4 percent or above each year, reaching 5.3 percent in 2016-17. The authors have presented contrary evidence that the growth rate has been exaggerated each year, and it has ranged between 3.1 to 4.4 percent during the Program. The Data Quality Assessment Framework (DQAF) of the IMF should have been used to check the reliability of the national income estimates.

Table 5.3 Original Projections* and Actual Outcome during IMF Program

	2013-14	2014-15	2015-16
GDP Growth Rate (%)			
Projection	2.8	3.6	3.9
Actual	4.1	4.1	4.5
Rate of Inflation (%)			
Projection	7.9	9.0	7.0
Actual	8.6	4.5	2.9
Rate of Investment (% of GDP)			
Projection	14.8	16.1	16.5
Actual	14.6	15.7	15.6
Rate of Saving (% of GDP)			
Projection	14.2	15.6	15.8
Actual	13.4	14.7	14.3
Current Account Balance (\$ billion)			
Projection	-2.3	-2.0	-2.6
Actual	-3.1	-2.7	-3.4
FE Reserves (\$ billion)			
Projection	9.4	12.3	16.7
Actual	9.1	13.5	18.1
External Debt (% of GDP)			
Projection	27.7	26.6	25.5
Actual	26.7	23.8	26.3
Revenues (% of GDP)			
Projection	14.9	14.9	15.4
Actual	14.3	14.4	15.0
Fiscal Deficit (% of GDP)			
Projection	-5.5	-4.4	-3.5
Actual	-5.5	-5.3	-4.6
Public Debt (% of GDP)			
Projection	65.9	63.9	62.6
Actual	63.5	63.3	67.6

* as of January 13, 2004, following the first review.
Sources: IMF | SBP | MOF, PES

We would like to quote the recent statement of the Managing Director of the IMF as posted on September 1, 2016 by *IMF direct*. In her words "The longer demand weakness lasts, the more it threatens to harm long-term growth as firms reduce production capacity and unemployed workers are leaving the labor force and critical skills are eroding. Weak demand also depresses trade, which adds to disappointing productivity growth".

Table 5.4 Original Projections of Trade and External Debt

(\$ billion)

Years	Exports Goods	Exports Services	Exports Total	External Debt	External Debt as % of Exports and NFS
2012-13	24.8	6.7	31.5	59.5	188.9
2013-14	26.9	7.6	34.5	63.5	184.0
2014-15	28.9	6.8	35.7	62.7	175.6
2015-16	30.9	6.9	37.8	63.7	168.5
2016-17	33.6	6.5	40.1	64.0	159.5

Source:: IMF

This statement clearly depicts the current state of economic growth and unemployment in Pakistan in terms of the social costs of the excessive focus on stabilization policy. The persistence of lower economic growth has failed to create enough jobs. People in general and youth in particular, are facing difficulties to get jobs. People remaining unemployed for a longer duration are becoming unemployable, with all its social and economic consequences. Not only that the unemployment rate has surged to a 13 years high at over 8.0 percent (including the 'discouraged worker' effect), youth unemployment rate has also increased to over 11 percent in 2014-15. Furthermore, between 2012-13 and 2014-15, the annual number of entrants into the labor force has been approximately 650,000 as against 1.3 million during 2008-13.

A particularly worrying feature of the current employment situation is the extremely high unemployment rate of 20 percent of workers with either graduate or post graduate degrees. There are 2.4 million educated workers with bad employment prospects. This is the unfortunate outcome of the IMF Program.

On the size of the fiscal deficit, the IMF Report claims that this has been reduced from 8.5 percent to 4.6 percent of the GDP. A number of steps have been taken to report smaller deficits. For example, holding back refunds and forcing commercial entities to pay taxes in advance to jack up revenue, privatization proceeds and foreign grants treated as non-tax revenue to inflate overall revenue rather than treating them as financing items, engaging in quasi-fiscal operations outside the

budget, allowing for large statistical discrepancy each year (cumulatively Rs 600 billion in three years) to show lower expenditures, exaggerating the size of the Provincial cash surplus, retaining earmarked revenues in the Federal consolidated Fund and building up large contingent liabilities (over Rs 1400 billion of power sector circular debt, accumulation of debt in commodity financing and pending tax refunds). The IMF staff has either been blissfully unaware of or has condoned this creative accounting. Adjusting for these practices implies a fiscal deficit each year in the range of 6 to 7 percent of the GDP.

Table 5.5 Measures to bring down the Fiscal Deficit

	(Rs in Billion)		
	2013-14	2014-15	2015-16
• Showing Grants 'above line'	12.3	-	-
• Privatization Receipts shown 'above the line'	103.0	110.0	-
• Retaining earmarked revenues*	31.8	57.0	79.8
• Build up of Refunds retained by FBR	50.0	60.0	70.0
• Increase in Guaranteed Debt of PSEs	16.6	117.7	105.9
• Increase in Statistical Discrepancy **	45.0	120.0	112.0
TOTAL	258.7	464.7	367.7
Reported Deficit	1388.7	1456.7	1349.3
% of GDP	5.5	5.3	4.6
Actual Deficit	1647.4	1921.4	1717.0
% of GDP	6.5	7.0	5.8

* Revenues from GIDC | ** Above normal level.
Sources: MOF | Fiscal Operations | FBR

Other areas, where serious distortions exist, are the estimates of the GDP deflator; investment and saving rates and rate of inflation, especially for poor households. A case ought to have been made for complete operational autonomy of the PBS.

Yet another "success" of the program as stated by the IMF Staff Mission is the sharp reduction in inflation rate. It has declined from 7.4 percent in 2012-13 to 2.9 percent in 2015-16. Is this decline due to the 'prudent' fiscal and monetary policies pursued during the program period? The answer appears to be in the negative. The international oil and commodity prices started collapsing since June 2014. Such a collapse in the oil and commodity prices led to a worldwide decline in inflation, including Pakistan. Furthermore, as stated above, the pursuance of stabilization policy for a prolonged period weakened domestic demand, resulting into deceleration of the rate of increase in prices. Thus, the sharp decline in inflation during the program period is due partly to the weakening of domestic demand, as well as a collapse in the international prices of oil and commodities and not to the prudent use of monetary and fiscal policies. In fact, when inflation rate was rapidly on the decline, the SBP was pursuing an easy monetary policy.

The quarterly reviews have ignored the deterioration in key economic indicators. They failed to discuss the big decline in exports - to - GDP ratio, stagnation in the overall and private investment - to - GDP ratio, fall in FDI, rise in external debt and public debt - to - GDP ratios, fall in total PRSP pro-poor expenditure to GDP and very importantly, a rise in the rate of unemployment especially among young, educated, and female workforce.

As stated above, Pakistan was asked to implement a wide-ranging reforms under the IMF Program. What has been the performance on the reform side?

5.1. POWER SECTOR REFORMS

The glaring failure of the Fund program is in the implementation of power sector reforms. The 12th Review Report declares victory primarily by demonstrating that the subsidy to the sector has fallen massively from 2 percent of the GDP in 2012-13 to only 0.6 percent of the GDP in 2015-16.

How has this been achieved? The answer is not by any major improvements in efficiency through big reduction in losses. Instead, the policy has been to raise the power tariffs to generate more revenues and thereby reduce the need for subsidies. From 2012-13 to 2015-16, the average electricity tariff (including surcharges) has been enhanced by 40 percent, leading to extra revenues of distribution companies of over Rs 250 billion. The tariffs have been increased at the time when the fuel costs have fallen by over 49 percent.

On top of this, contingent liabilities have increased exponentially in the sector. Today, the circular debt of the sector stands at almost Rs 630 billion, over 2 percent of the GDP. Sooner or later, this debt will have to be retired, as happened in 2012-13, if a breakdown is to be avoided in supplies due to liquidity problems in the sector.

IMF also claims, on behalf of the Government, that power load-shedding has been substantially reduced, especially in industry. Evidence to the contrary is the large continuing demand-supply gap according to NEPRA, and the fact that electricity consumption per industrial consumer has fallen in nine out of ten distribution companies, in comparison to the level achieved in the pre-load shedding years.

5.2. TAX REFORMS

The IMF Twelfth Review has highlighted, as one of the key successes of the Program, the over two percent point increase in the tax-to-GDP ratio. Much of the improvement has come in 2015-16. How has this been achieved? The main contribution is actually from enhancement in effective tax rates and not

by broadening of the various tax bases. The tax structure has become more regressive and created more distortions in economic activity.

The biggest failure is in lack of development of the direct tax system. The elite continues to enjoy wide ranging tax exemptions and concessions like the virtually no or low taxation of global income of residents, profits of private companies, agricultural income and unearned capital incomes. The IMF clearly prefers not to antagonize the ruling elite through its reform agenda.

Table 5.6 Level and Composition of Tax Revenues

	<i>(Rs in Billion)</i>	
	2012-13	2015-16
FBR Taxes	1936	3112
<i>% of GDP</i>	8.5	10.5
Direct Tax	736	1192
<i>% of GDP</i>	3.2	4.0
Indirect Taxes	1200	1920
<i>% of GDP</i>	5.3	6.5
Other Federal Indirect Taxes	178	265
<i>% of GDP</i>	0.8	0.9
Provincial Taxes	151	283
<i>% of GDP</i>	0.7	1.0
Overall Taxes*	2265	3660
<i>% of GDP</i>	9.9	12.4
Direct Taxes*	751	1220
<i>% of GDP</i>	3.3	4.1
Indirect Taxes	1514	2440
<i>% of GDP</i>	6.6	8.2
Share of Direct Taxes (%)	33.3	33.3

Sources: MOF, Fiscal Operations

5.3. IMPROVEMENT IN LIVING STANDARDS

Contrary to the claims by the IMF, living standards have probably fallen in Pakistan during the tenure of the Program. A number of reforms undertaken have contributed to rising unemployment and poverty.

The anti-poor actions include, firstly, the rise in input costs of fertilizer and electricity in agriculture due to hike in power and gas tariffs and additional taxation in the form of the GIDC. The result is that food prices have risen faster than the overall CPI and wages of unskilled workers. Today, Pakistan has the extremely serious problem of malnutrition. In the 2016 ranking of the Global Hunger Index, Pakistan has the 11th lowest position, even below Bangladesh, out of 118 countries. The non-implementation of the PMs agricultural package of September 2015 under the IMF pressure has contributed to the recent debacle in the sector.

Secondly, the primary adjustment mechanism for achieving the fiscal deficit targets in the Program has been large cut backs of up to 30 percent in budgeted development spending by the Federal and Provincial governments. In 2015-16 alone these cuts have implied less employment generation of almost 300,000 jobs. Thirdly, hikes in indirect taxes have affected the cost of living adversely. This includes the levy of minimum import tariffs on basic food and other items and jump in GST rates on petroleum products, especially HSD oil. Fourthly, the

decline in exports has contributed to loss of employment in labor-intensive sectors like SMEs and textiles. Consequently, as highlighted earlier, the underlying unemployment rate has gone beyond 8 percent. Fifthly, social indicators have shown only minor improvement in three years. This is due particularly to the pressure on Provincial Governments to spend less on social and other sectors so as to generate large cash surpluses.

5.4. ANTI-EXPORT BIAS

According to the original Program projections, exports were expected to show a steady annual growth rate of 8 percent and reach \$31 billion by 2015-16. Instead, they have been falling since 2012-13 to below \$ 22 billion last year, a short fall of over 23 percent. This is perhaps one of the single most important failures of the Program. It has adversely impacted on growth and employment in the country and frustrated the achievement of greater self-reliance.

How did the Program reinforce the anti-export bias? The record level of external borrowings during the last three years has led to a form of ‘Dutch Disease’. Larger reserves, based, more or less, completely on external borrowing, have created artificial stability in the value of the rupee, thereby reducing competitiveness. Enhancement of electricity tariffs by over 40 percent and gas price to industry by 64 percent, further affected competitiveness. In an effort to meet the Program revenue target, FBR has held back over Rs 200 billion of refunds, leading to liquidity problems for exporters. Further, levy of a minimum import duty of 3 percent on raw materials and intermediate goods has added to costs.

Today, the decline in ability to service external debt obligations, including those to the IMF, is clearly demonstrated by the phenomenal increase in the external debt to exports ratio. It was 193 percent in 2012-13 and has risen to 266 percent by the end of 2015-16. It is likely to continue rising and go beyond 300 percent by 2017-18. There is no other option now in the post-Program scenario but to present a strong export incentive package, including significant depreciation of the rupee.

5.5. EXTERNAL FINANCING REQUIREMENT

The original Program projections were that external financing requirements, consisting of external debt amortization and the current account deficit, would reach \$9.2 billion by 2016-17 and fall to \$8 billion in 2017-18. However, following the much larger build up of external debt, the latest estimates of the financing requirement in the 12th Review is \$10.9 billion in 2016-17, rising to \$13.2 billion in 2017-18.

However, these estimates are based on significant positive growth in remittances and exports and a big jump in FDI. This is highly unlikely given the current trends. A more realistic estimate of external financing requirement is \$15 billion in 2016-17 and \$18 billion in 2017-18. This is more than 5 percent of the GDP, which is considered the danger point. Part of this requirement will have to be met by a sizeable depletion of foreign exchange reserves. There is a high likelihood that by June 2018, reserves may fall to about half of the present level.

Where is the sustainability of our external position? Has the IMF Program reduced our vulnerabilities? Are we doomed to go back once again to the IMF? Will the reforms required next time go beyond the usual prior actions? Already, two weeks after the end of the IMF Program, Pakistan has been forced to float relatively high cost bonds externally of \$1 billion. This indicates a lack of confidence in the sustainability of reserves in coming months and years.

Finally, in the immediate aftermath of the IMF Program, the economy has begun to unravel. Agricultural growth was negative last year and the prospects for the current cotton crop are not much better. Growth of the large-scale manufacturing sector has also turned negative in the last four months for which data is available. Seven out of the twelve industrial groups are showing declining output. The fall in exports continues and the trade deficit has risen sharply. Remittances are also contracting, along with a sharp reduction in FDI. FBR tax revenue growth has plummeted and large borrowing has been resorted to by the Federal Government from SBP. Development releases of funds have been relatively small and the process of implementation of CPEC infrastructure projects is very slow. Contingent liabilities have reached alarming levels and the bleeding of public sector enterprises/utilities continues. Can we still say that the reforms implemented during the tenure of the Fund Program have left the economy in a 'sustainable position'? The answer, unfortunately, is an unambiguous no.

5.6 IMF PROJECTIONS

The last (twelfth) quarterly review of the IMF Extended Fund Facility to Pakistan was released on September 28, 2016. This review contains the final set of projections by the IMF of key macro economic variables from 2016-17 to 2019-20.

The projections are extremely positive about the medium-term to long-term prospects for the economy of Pakistan. They are based on the key assumption that the economy has sufficiently stabilized following the three-year Fund Program and is ready to embark on in a major way on a higher growth trajectory. The Authorities must have welcomed these projections as they represent a fitness

certificate by IMF. This ought to increase investment, both domestic and foreign, in Pakistan.

The key elements of the projections up to 2017-18 are as follows:

- i) The GDP growth rate will go beyond 5 percent.
- ii) The rate of inflation will remain subdued at close to 5 percent per annum.
- iii) Investment will show a strong recovery with a growth rate annually in real terms of over 8 percent.
- iv) Tax revenues will continue to rise rapidly from 12.4 percent to 13.6 percent of the GDP by 2017-18.
- v) The fiscal deficit will fall sharply from 4.6 percent of the GDP in 2015-16 to 2.9 percent of the GDP by 2017-18. Consequently, in two years, the public debt to GDP ratio will fall from 67 percent to less than 62 percent.
- vi) Foreign exchange reserves will rise from \$18 billion, as of June 2016, to \$22 billion by the end of 2017-18, despite a more than doubling in the current account deficit. This will be achieved due to more than doubling of foreign investment and big jump in external borrowing.
- vii) Exports will exhibit some dynamism and show cumulative growth of 10 percent from 2015-16 to 2017-18, despite persistent recessionary conditions in global trade. IMF expects this to be compensated for by depreciation of the Rupee to Rs 113 per US dollar by 2017-18. Remittances will also demonstrate some growth.

Why has IMF opted to make such positive projections of Pakistan's economy? The obvious explanation is that the IMF Staff Mission has a vested interest in demonstrating to the superiors in Washington that it has managed a very successful program.

Occasionally, one hears, however, exhortation from agencies, including IMF and the SBP, that momentum must be maintained in the reform process. Are the above-mentioned projections by IMF based on the full implementation of the required reforms? If so, it would have been useful to present a macroeconomic scenario with weaker implementation of reforms.

This exercise is particularly relevant now since the process of pork barreling and granting of concessions has started in the lead up to the elections in the first half of 2018. It is increasingly unlikely that deep structural reforms will be implemented in the intervening period.

What has been the fate of the IMF projections in the first half of 2016-17? It is

indeed unfortunate that contrary to these optimistic projections the economy has started unraveling. The divergence between and actual outcomes has become too large, too soon.

The key areas of divergence of the actual outcomes from the projections made by IMF for the first half of 2016-17 are as follows:

- i) First indications are that the GDP growth will be significantly less than 5 percent in 2016-17. In the first half of the year, both manufacturing and agriculture are showing a growth rate between 2.5 and 3.5 percent, while electricity generation is up by about 4 percent. At this rate, it is unlikely that by the end of the year the GDP will show a growth rate of 5 percent or more.
- ii) Fortunately, inflation has remained low at below 4 percent. However, the 'low base' effect could start operating from February 2017 onwards and take the rate of inflation to beyond 5 percent.
- iii) There has been a 6 percent real growth in imports of machinery from July to December 2016, according to the SBP. Inclusive of CPEC, imports of power generating machinery have actually declined. Despite extraordinarily low interest rates, outstanding bank credit to the private sector for fixed investment has increased in real terms by only 6 percent in the first five months.
- iv) With the current growth rate of FBR revenues, the tax-to-GDP ratio will fall and not rise by the end of 2016-17.
- v) Already, in the first six months, the fiscal deficit is estimated at almost 2.6 percent of the GDP. The annual target of 3.6 percent of the GDP is likely to be substantially exceeded.
- vi) Exports and remittances are actually declining, rather than rising, as anticipated by the IMF. The current account deficit in the first six months is 46 percent above the Fund's projections.
- vii) Foreign exchange reserves have shown little growth from \$18.1 billion in June 2016. They have actually started falling since October 2016. The IMF projection of reserves by end June, 2017 of \$20.8 billion is looking increasingly elusive.

There are two other possible explanations for the biased and defective projections by the IMF. The first is that the IMF staff members, who have made the projections, may not possess the requisite professional competence. This reminds one of the observations by the Nobel Prize winning economist, Joe Stiglitz, that postgraduates from second or third tier universities of the USA join

the IMF and other international agencies, while the output from top universities goes mostly into academia. In recent times, the problem has been compounded by the diversion of the best IMF personnel to managing large loan programs in European countries like Greece, Ukraine and Poland.

Finally, there could be an 'out of the box' explanation. The upbeat nature of the projections may be motivated by an attempt to lull the Authorities into a state of complacency. This will inevitably reduce the focus on reforms and thereby create conditions for a return of the IMF to Pakistan, within the next two years. However, this could be based on prior actions that are not necessarily only economic in nature.

Hopefully, the macroeconomic projections will be carefully scrutinized, in light of recent developments, during the forthcoming Article IV consultations with the IMF. Also, it would be extremely useful if a list of reforms is indicated for taking Pakistan to a higher growth trajectory. Similar to the 2015 consultations, the medium term macroeconomic scenarios, with reform and with no reform, should also be presented.

5.7. IMF ARTICLE IV REPORT

The IMF Executive Board has concluded in July 2017, Article IV Consultation with Pakistan. This is with a gap of more than two months after the completion of the Article IV Staff Mission.

The text of the statement by the Executive Board represents a somewhat somber assessment of recent developments in Pakistan. An appropriate quotation from the statement is as follows:

'The macroeconomic stability gains under the 2013-16 EEF (of IMF with Pakistan) have begun to erode and could pose risks to the economic outlook.'

According to the IMF, fiscal consolidation has slowed down with the deficit target for 2016-17 likely to be significantly exceeded. Simultaneously, the current account deficit in the balance of payments has widened and is expected at 3 percent of the GDP. This is equivalent to a deficit of over \$9 billion, two times the original projection, following the twelfth (last) review by IMF staff in October 2016.

The Executive Board has also highlighted the decline in foreign exchange reserves during 2016-17 over (of almost \$3 billion) up to June 9, 2017. This again is in sharp contrast to the original projection of reserves by end - June of \$20 billion, an increase of almost \$2 billion. Therefore, the divergence already is of almost \$5 billion.

The IMF observes that this decline has occurred in the context of a nominally stable exchange rate. It may be of interest that the projection following the IMF Twelfth review of the exchange rate by June 2017 was 113 Rs per US \$. This was probably agreed to by the Pakistani Authorities but not yet implemented.

The IMF has also issued an early warning, as follows:

‘Over the medium run, failure to generate sufficient exports will make it difficult to meet external obligations arising from large-scale foreign-financed investments’. Presumably, the Fund is highlighting the inability to service the debt and payment of profit obligations associated with the inflow of almost \$60 billion under CPEC.

On the policy front, the IMF notes that the process of implementation of policies has weakened recently. In particular, the Board states that the 2017-18 Budget will require additional revenue measures in light of recent revenue performance.

However, the latest macro-economic projections for 2017-18, attached with the Executive Board’s statement, are surprisingly positive and ambitious in character, despite the above-mentioned concerns. In particular, total revenues are expected to rise sharply from 15.8 percent of the GDP in 2016-17 to 17.6 percent of the GDP in 2017-18. Given the budget estimates of revenues of the Federal and Provincial Governments, this will require additional taxation measures of over Rs 300 billion to achieve the IMF projected level of revenue, beyond those already envisaged in the budget of 2017-18. This is highly unlikely during an election year.

The Directors of IMF have called on the Authorities to allow for greater exchange rate flexibility, rather than rely on administrative measures like cash margin requirement and regulatory duties on imports. Presumably, based on this expectation, exports are projected by the Fund to show substantial growth in 2017-18 of over 9 percent, with the growth of imports contained to below 7 percent, despite a peak potentially in machinery imports under CPEC.

Miraculously, foreign exchange reserves are expected to start rising once again and reach almost \$19 billion by end- June 2018, according to the Fund projection. This, to say the least, is an extremely optimistic projection.

Implicit in the latest IMF projections is an external financing requirement for 2017-18 of almost \$17 billion. This consists of a projected current account deficit of \$11 billion and potential external debt repayment of almost \$6 billion. It is highly unlikely that this financing requirement will be fully met. Even under optimistic assumptions about the level of FDI and gross external borrowing the gap is likely to be almost \$6 billion. This implies that foreign exchange reserves could fall to \$9 billion by end of 2016-17, equivalent to import cover of just over two months.

The basic question is whether in an election year the recommendations of the IMF Executive Board will be implemented. These include significant depreciation of the exchange rate, reduction in electricity subsidies, phasing out of borrowing from SBP and heavy additional taxation. These could exacerbate inflationary tendencies and reduce the space for populist spending. As such, it remains to be seen how Authorities will react to the IMF exhortations following the Article IV consultation. If the recommended actions are not taken this could expedite the financial meltdown. History could repeat itself, as happened in the election years of 2007-08 & 2012-13.

There is need to understand why the Fund, despite its concerns, has made positive macro-economic projections for 2017-18. The objective is probably to provide a degree of comfort to potential lenders to Pakistan. There is need to ensure enough liquidity with the SBP in order to be able to honor the external debt repayment obligations. After all, repayment of the over \$6 billion loan from the IMF also starts in 2017-18.

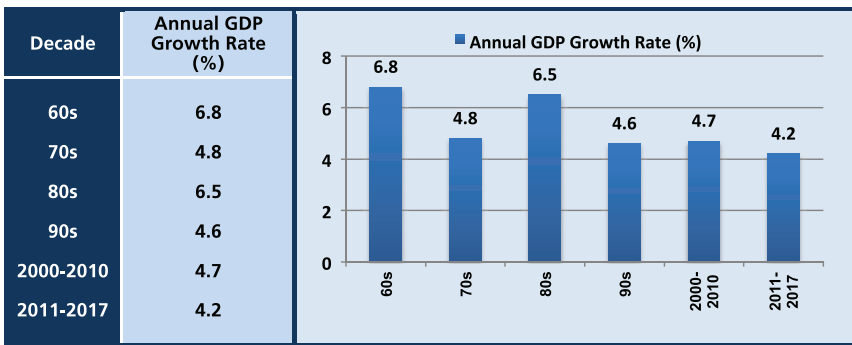
SECTION 4
GROWTH

Chapter 6:

THE RECORD OF ECONOMIC GROWTH

6.1. GROWTH IN THE FIRST FIVE DECADES

The economy of Pakistan has witnessed big fluctuations in the GDP growth rate annually over the last 70 years. A decade wise picture of the average annual growth rate is given below:



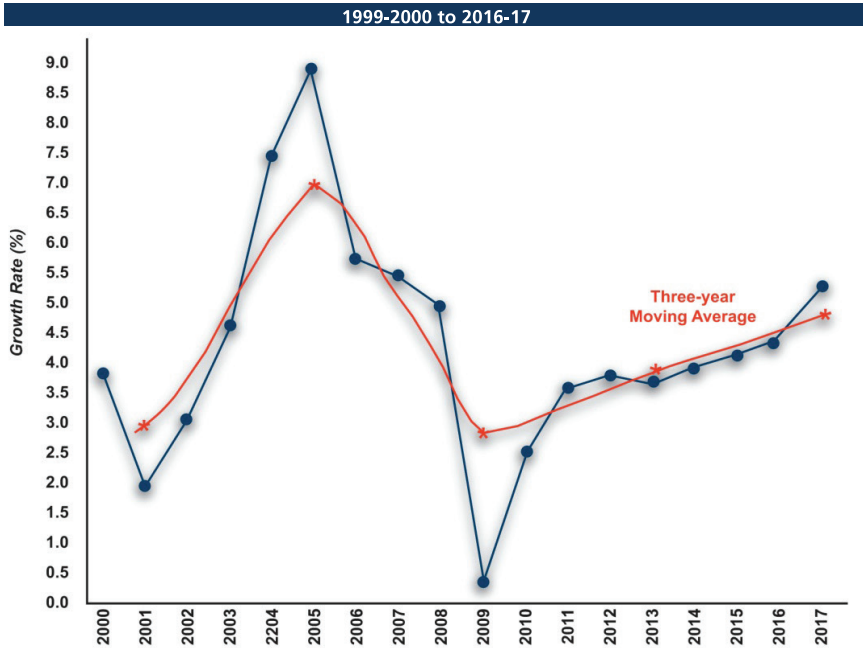
After the exceptional dynamism of the economy in the decade of the 60s and the 80s, the growth has settled at a long-term growth rate of between 4 to 5 percent since 1990. There have also been shorter business cycles in the last seventeen years, as shown in Figure 6.1.

6.2. GROWTH SINCE 1999-2000

From 1999-2000 to 2007-08, during the tenure of the Musharraf Government, the GDP growth rate rose sharply from 2 to 9 percent in 2014-15. This was facilitated by the larger aid inflows after the support of Pakistan to the USA in the Afghan War after 2001. There was also surplus power available due to the investment by the IPPs in the mid-to late 90s. Export growth was in double digits and the overall level of investment, including FDI, reached a peak of almost 20 percent of the GDP.

From 2007-08 onwards, the economy has been plagued by a number of serious structural problems. First, the exponential jump in the incidents of terrorism raised drastically the perceptions of lack of security. This was a major contributing factor to the decline in the rate of investment. Estimates are that the greater risk and uncertainty have contributed to foregone private investment cumulatively over the last nine years of almost \$74 billion. This is equivalent annually to over 3 percent of the GDP.

Figure 6.1 Annual GDP Growth Rate (%)



Second, the problem of power load shedding has become a major constraint to production and investment. By 2012-13, it is estimated that the national supply-demand gap of electricity had exceeded 30 percent or over 5000 MW. Simultaneously, electricity and gas tariffs have shown a rapidly rising trend as compared to previous decades. Estimates are that cumulatively the GDP has been reduced by 7 percent, exports by almost 15 percent and employment by 5 percent.

The combined impact of a breakdown of security, law and order and large-scale outages explains the fall in the GDP growth to below 5 percent. There have also been other problems like the stagnation in the availability of water for agriculture, lack of increase in the real investment in public infrastructure, more

oppressive tax burden on industry and so on. Exports have declined from the peak level in 2013-14 and the balance of payments position has become more fragile, especially in years of high oil prices like 2007-08 and 2012-13.

The arrival of the PML(N) Government in 2013-14 was expected to usher in an era of faster growth, given the business-friendly nature of the ruling party. But this has not happened yet in a significant way despite some improvement in the security situation, following the *Zarb-e-Azb* operation by the military. There have been major lags in completion of projects and the load shedding situation in many parts of the country has not improved substantially.

Pakistan has been engaged for three years, from 2013-14 to the first quarter of 2016-17, in an IMF program described earlier in Chapter 5. As already highlighted, growth has had to be sacrificed in order to stabilize the economy.

However, the PML(N) Government has claimed a visible improvement in the average GDP growth rate to 4.5 percent in its first four years as compared to the average of less than 3 percent during the five years of the preceding PPP Government. In fact, the Pakistan Bureau of Statistics has shown that the economy has steadily been gathering momentum. The GDP growth rate has apparently increased from 3.6 percent in 2012-13, to 4 percent in 2013-14, to 4.5 percent in 2015-16 and finally crossed 5 percent with a growth rate of 5.3 percent in 2016-17.

Unfortunately, there is strong evidence that the PBS has been fudging the National Income Accounts to show a higher GDP growth rate than is indicated by the underlying trends. This evidence is presented in the next Chapter.

Chapter 7:

THE REAL GDP GROWTH RATE

7.1 'REAL' GROWTH RATE IN 2015-16 AND 2016-17

The Pakistan Bureau of Statistics (PBS) has just released the estimate of the Gross Domestic Product (GDP) of Pakistan for 2016-17. According to this estimate, the growth rate of the GDP is 5.3 percent. This is the first time since 2007-08 that the growth rate has exceeded 5 percent. Finally, it appears that Pakistan has come out of the 'low growth trap' and the economy should perform even better in coming years. The efforts of our policy makers must be duly appreciated for providing framework and environment for achieving higher growth.

However, the fundamental question that arises is whether this growth is real or illusory in character. Last year, based on numbers for the first three quarters, PBS had reported a GDP growth rate of 4.7 percent. This growth rate was disputed by one of the leading think-tanks in the country, the Social Policy and Development Centre (SPDC), and by some independent economists.

Initially, PBS had reported in 2015-16 that there was negative growth rate in the agricultural sector, due particularly to the precipitous 28 percent decline in cotton output. During the last four decades of Pakistan's economic history, the experience is that in a year when agriculture performs poorly, with near zero or negative growth, the GDP growth rate does not exceed 4 percent. This is a reflection of the agricultural linkages with other sectors in Pakistan. Almost 60 percent of industry is agro-based and over 40 percent of transportation and domestic trade is in agricultural commodities.

SPDC estimated a substantially lower growth rate of GDP in 2015-16 of 3.1 percent, as opposed to that by PBS of 4.7 percent, as shown in Table 7.1. Apparently, the growth rate of ten sectors, out of the total of eighteen sectors, was overstated by PBS. Now that the full year data for 2015-16 has become available, PBS has revised the growth rate downward somewhat, from 4.7 percent to 4.5 percent.

Table 7.1 GDP Growth Rate, 2015-16, [PBS vs Estimated]

	Value Added 2014-15	PBS Growth Rate (%)	Estimated Growth Rate (%)	Estimated Value Added* 2015-16
AGRICULTURE	2222	-0.19	-2.07	2175
Major Crops	568	-7.18	-9.14	516
Minor Crops	247	-6.20	-6.20	232
Cotton Ginning	65	-21.0	-27.00	47
Livestock	1251	3.63	3.63	1296
Fisheries	44	3.30	3.30	45
Forestry	40	8.80	0.00	40
INDUSTRY	2161	6.80	5.50	2280
Mining & Quarrying	311	6.80	6.80	332
LSM	1130	4.60	3.46	1169
SSM	184	8.30	4.00	191
Slaughtering	99	3.32*	3.32*	102
Electricity & Gas	178	12.20	8.40	193
Construction	259	13.10	13.10	293
COMMODITY PRODUCING SECTORS	4383	3.25	1.67	4456
SERVICES SECTORS	6261	5.70	4.10	6519
Wholesale & Retail Trade	1943	4.60	2.60	1994
Transport & Comm.	1421	4.10	2.10	1451
Finance and Insurance	335	7.10	7.10	359
Housing Services	719	4.00	8.00	777
Government Services	792	11.10	5.70	837
Private Services	1051	6.60	4.78	1101
GDP (fc)	10644	4.70	3.10	10975
* Lower Growth Rate in 8 out of 18 sectors; Higher Growth Rate in 1 sector				
Source: PES and Author's Estimates				

The experience of last year and of estimates in earlier years has necessitated an in-depth examination of PBS numbers of the size of sectoral and overall GDP in 2016-17. The findings are given below. The research was undertaken by a group of post graduate students and young economists under the overall guidance of the author. The methodology used for deriving the growth rate of each sector and of expenditure components of the GDP is given in the Technical Appendix.

7.1.1. Stylized Facts on High Economic Growth

Since 1979-80, the economy of Pakistan has shown a relatively high annual growth rate of 5 percent or above in fifteen out of the 36 years that have elapsed since then. There appears to be a consistent pattern of growth in the high growth years, as follows:

- i) The large-scale manufacturing sector has been the leading sector driving the process of growth in thirteen out of the fifteen years. For example, in the five years of relatively high growth, 2003-04 to 2007-08, the GDP increased an average by 6.5 percent. During these years, the growth rate achieved in the large-scale manufacturing sector was consistently higher and averaged 9 percent.
- ii) In the two years, 1984-85 and 1995-96, when the economy grew at a rate higher than 5 percent, but with lower growth in large-scale manufacturing, the impetus was provided by agriculture, with bumper crops. The sector achieved double-digit growth rate in these two years.
- iii) In thirteen of the fifteen fast-growth years, there was also faster growth in exports than in the GDP. Part of the dynamism of the manufacturing sector was due to the buoyancy of exports, especially of textiles.
- iv) During the fast growth years, electricity generation also increased by almost 5 percent annually or more in fourteen out of the fifteen years.

7.1.2. Pattern of Growth in 2016-17

The basic question is whether the relatively high growth observed in 2016-17 is consistent with the above-mentioned historical pattern of growth in high growth years. The answer is a **NO** for the following reasons:

- i) According to PBS, the rate of growth of the large-scale manufacturing sector is 4.9 percent. This is lower than the GDP growth rate of 5.3 percent.
- ii) Rather than show growth of above 5 percent, exports have actually declined by 2 percent in the first ten months of 2016-17.
- iii) According to the data of NEPRA, the growth rate of electricity generation is relatively low at 4.5 percent in the first nine months of 2016-17.

Therefore, either Pakistan has discovered a new way of achieving high growth or there are serious grounds for questioning the growth estimate by PBS for 2016-17.

7.1.3. Performance in Relation to Targets

Ambitious targets were set in the Annual Plan and in agreement with the IMF for 2016-17 in order to achieve the target GDP growth rate of 5.7 percent in 2016-17. The performance of the economy is close to the target, with the GDP growth rate of 5.3 percent. Have the targets for different indicators also been achieved or nearly achieved in order to ensure the attainment of the growth target? Here again, the answer is a **NO** for the following reasons:

- i) A key target was to achieve a strong recovery of the cotton crop back to the peak attained in 2014-15 of over 14 million bales. This would have implied a growth rate in cotton output of over 40 percent. Instead, the estimated output is short by over 3 million bales. Results of research are that due its many linkages with the rest of the economy, a one million bale fall in the cotton crop leads to a decline in the GDP growth rate of 0.5 percentage points. This failure alone could have created a divergence from the target GDP growth rate of 1.5 percentage points. The substitution of cotton acreage by sugarcane only partially compensated for this loss.
- ii) Investment was expected to provide a growth stimulus with an increase of 10 percent in real terms in 2016-17. This was to be achieved especially by higher power sector investments and increased spending on physical infrastructure projects, partly under CPEC.

PBS estimates that investment has increased less in real terms at 8 percent. One of the reasons for this is the expected lower development spending under the national PSDP by almost 15 percent. Also, foreign direct investment is short by 38 percent in relation to the projected level.
- iii) As highlighted earlier, exports were expected to revive in 2016-17. Instead they have declined. Consequently, industrial growth is below target, with near zero growth in textiles.

Here again, based on the above, a large shortfall in relation to the key targets should have negatively impacted more on the GDP growth. As such, for these reasons also, the GDP growth rate in 2016-17 appears to be significantly overstated.

7.1.4. Inconsistencies in Estimation of Sectoral Growth

The sectors where the growth rate appears to have been overstated in 2016-17 on the basis of collateral evidence are discussed below. This evidence has been extracted from a large and diverse number of information sources. These include Federal / Provincial documents, the SBP, Associations/Councils of different industries, PSEs, International Agencies and data sources and recent financial statements of companies.

Minor Crops: This sector consists of pulses, oilseeds, vegetables, fruits, tobacco, fodder, etc. The prices of perishable food items have escalated rapidly in 2016-17 by over 13 percent. This is an indication of supply shortages. For example, the wholesale price of potatoes has gone up by 89 percent; of other vegetables by 12 percent, fresh fruits by 13 percent; oil seeds by 14 percent and tobacco by 21 percent. These increases in prices are substantially higher than the overall

rate of inflation in the wholesale price index of 6 percent. Exports of fruits and vegetables have also fallen by 18 percent and 17 percent respectively.

Despite this indication of failure of a number of minor crops, PBS has shown a marginally positive growth rate of the sector in 2016-17. In fact, in the last nine years, the sector has shown a decline in value added in four years. It remains a much neglected sector.

Livestock: This is a relatively large sector, with a share in the GDP of over 11 percent. In the absence of a recent Livestock Census it is difficult to get an accurate estimate of the growth in livestock population. However, one important piece of collateral evidence is the growth in consumption of livestock products from the Household Integrated Economic Surveys (HIES) carried out frequently by PBS. The last such survey is of 2015-16.

Milk is the single most product of the sector, with a share in value of output of over 45 percent. Beef and mutton are also major products with a combined share of 24 percent. According to the HIES, the per capita consumption of these items fell significantly in 2015-16, in relation to the level in 2013-14 by 4 to 13 percent. This pattern of decline has been observed for the last many years.

PBS reports a growth rate of 3.4 percent in 2016-17. This implies that the per capita consumption of most livestock products is rising. This is contrary to the collateral evidence of declining trend in per capita consumption of major livestock products.

Manufacturing: The growth rate of this sector at 4.9 percent has probably been significantly overstated in 2016-17. In the first month of the year it started off with a growth rate of less than 2 percent, but by March 2017 it reached 5 percent. In March alone, apparently a growth rate of 10 percent was achieved. This buoyancy is in sharp contrast to appeals by Associations of Manufacturers of various industries in crisis, including the APTMA, for government assistance in leading newspapers.

There are two industry groups, viz, textiles and food, beverages and tobacco, where the growth rate appears to have been significantly overstated. These are the largest groups with weights of 30 percent and 18 percent respectively. In the case of textiles, the collateral evidence points to decline in the production of cotton cloth. First, domestic availability of cotton yarn for cloth production has decreased, with near zero growth in yarn output and rise in exports of 6 percent. Also, exports of cotton cloth have fallen by 15 percent.

In the case of food, beverages and tobacco, the major industries are sugar,

cooking oil and cigarettes. There has been exceptional growth in sugar output of over 29 percent due to a big increase in sugarcane output. But there has been a huge decline in output of the cigarettes industry of over 42 percent. This largely neutralizes the growth in sugar output. Also, cooking oil production has risen by only 2 percent. Therefore, the overall growth rate of 6.9 percent of the food, beverages and tobacco industry group is very much on the high side. It is closer to 2.5 percent. As such, in the face of low growth in the two key industry groups, the growth rate of the large-scale manufacturing sector is closer to 3.3 percent.

Construction: This sector is reported to have achieved a growth rate of 9 percent in 2016-17, following an even higher growth rate of almost 15 percent in 2015-16. The performance of this sector is closely linked to the growth in capital formation in housing and infrastructure. Residential and other building construction accounts for over 40 percent of the value added in the sector. According to PBS, the annual increase of investment in housing is only 4 percent. The rise in capital formation in physical infrastructure, mostly in the public sector, is also below 9 percent. Therefore, the growth rate of the construction sector appears to have been overstated.

Wholesale and Retail Trade: With a growth rate of 6.8 percent, this sector has apparently achieved the highest growth rate since as far back as 2004-05. This seems highly unlikely. The performance of this sector is closely linked to growth of agriculture and manufacturing output. The combined growth of these sectors is reported at a significantly lower rate of 4 percent. Some impetus may have been provided to trading activity by the jump in imports in 2016-17. But the contribution of imports to the sectoral value added is relatively small, at less than 20 percent. As such, it is more probable that the growth rate of the wholesale and retail trade sector is closer to 5.5 percent.

Financing and Insurance: This sector has shown the highest growth rate of almost 11 percent among the eighteen sectors of the national economy in 2016-17. This is highly unlikely given the decline in profits of commercial banks, accounting for bulk of the sector, due to the sharp decline in interest rates and big decrease in investment in PIBs and MTBs.

Community, Social and Personal Services: Like wholesale and retail trade and road transport, this sector is largely a part of the informal economy. No recent surveys have been undertaken to assess the performance in recent years. However, PBS assumes a relatively high growth rate annually of this sector between 6 and 7 percent.

The only collateral evidence available on developments in the sector is the change

in level of employment, as determined from the Labor Force Surveys carried out by the PBS. The last such survey is for 2014-15. The perhaps surprising finding is that the share of this sector in total national employment is consistently been falling. It was 19 percent in 2001-02 and significantly less at 14 percent in 2014-15. In fact, employment in this sector has actually fallen from 2012-13 to 2014-15. This is probably due especially to lack of growth in social services. Therefore, unless there has been a remarkable improvement in labor productivity, the sector is highly unlikely to have achieved the high growth rate of near 7 percent in 2016-17.

7.1.5. The GDP growth rate in 2016-17

Overall, based on the above analysis, PBS appears to have overstated the growth rate of eight sectors in 2016-17. Therefore, **our conclusion is that the GDP growth rate in 2016-17 is not 5.3 percent but closer to 4.4 percent.** The sectoral growth rates are 2.5 percent in the case of agriculture, 4 percent in industry and 5.2 percent in services.

Table 7.2 GDP Growth Rate by Sector in 2016-17
(Rs in Billion at constant prices of 2005 - 06)

	2015-16 Value Added	2016-17			
		PBS Estimate	Growth Rate (%)	Own Estimate	Growth Rate (%)
AGRICULTURE	2208.1	2284.6	3.5	2263.5	2.5
Major Crops	523.3	544.9	4.1	544.9	4.1
Minor Crops	251.5	252.0	0.2	238.9	-5.0*
Cotton Ginned	50.6	53.4	5.6	53.4	5.6
Livestock	1288.4	1332.6	3.4	1324.5	2.8*
Fishing	46.6	53.4	14.5	53.4	14.5
Forestry	47.8	48.4	1.2	48.4	1.2
INDUSTRY	2325.4	2442.1	5.0	2419.8	4.0
Mining and Quarrying	335.2	339.7	1.3	339.7	1.3
Large-Scale Manufacturing	1193.1	1251.9	4.9	1234.9	3.5*
Small-Scale Manufacturing	198.6	214.9	8.2	214.9	8.2
Slaughtering	102.4	106.1	3.6	105.3	2.8*
Construction	294.2	320.8	9.0	316.3	7.5*
Electricity and Gas Distribution	201.9	208.7	3.4	208.7	3.4
SERVICES	6577.2	6970.2	6.0	6918.7	5.2
Transport, Storage & Communication	1492.9	1551.7	3.9	1551.7	3.9
Wholesale and Retail Trade	2026.3	2164.4	6.8	2147.9	6.0*
Finance and Insurance	355.9	394.3	10.8	373.7	5.0*
Ownership of Dwellings	747.3	777.2	4.0	777.2	4.0
Public Administration and Defence	832.5	890.0	6.9	890.0	6.9
Social and Communication Services	112.1	1192.6	6.3	1178.2	5.0*
GDP (FC)	11110.7	11696.9	5.3	11602.0	4.4

* lower than the PBS estimate
Source: PBS and Author's Estimates

The difference in GDP growth rate may be attributable to differences in the underlying methodology and data bases. It may also be the consequence of some pressure from the concerned Ministry on PBS to present a better picture of macro-economic indicators. ***In particular, the Government may have been keen to show that the economy has finally crossed the threshold growth rate of 5 percent.*** It is important that PBS be made an autonomous organization.

There is need to recognize that the overstatement of the GDP growth rate is not as large as in 2015-16 of 1.4 percentage points. Hopefully, the economy will finally achieve a GDP growth rate of 5 percent or more in 2017-18. This will require faster growth of agriculture (especially of cotton output), industry, investment and exports.

The methodology for cross-checking the consistency of sectoral growth rate estimates is presented in the Technical Appendix at the end of the book.

The issue of the size of GNP of Pakistan is taken up in the next section.

7.2. SIZE OF PAKISTAN'S GNP

The Ministry of Finance has apparently asked the World Bank to undertake a study to estimate the true Gross National Income (GNI) of Pakistan, as reported by the daily, *Express Tribune*. The expectation is that this will lead to a significant increase in the size of the national economy, of even up to 25 percent.

If this happens, what are the implications? First, the public debt to GDP ratio will come down sharply, probably below the limit of 60 percent of the GDP imposed by the Fiscal Responsibility and Debt Limitation Act. This will indeed be a very ingenious way of managing the public debt.

Further, it could once again restore Pakistan's position with respect to India. Currently, India's per capita income is higher by 14 percent. This gap could be eliminated by the re-estimation of Pakistan's GNP in US \$ and contribute greatly to boosting the national ego.

However, there is also a downside. It will imply a lower ratio of tax revenues, exports and investment to GDP. This will further expose the structural weaknesses of Pakistan's economy. For example, the estimated level of investment was 20.5 percent of the GDP in 2005-06. Following rebasing it turned out to be 17.7 percent of the revised GDP. Similarly, the tax to GDP ratio fell from 10.5 percent to 9.8 percent.

The World Bank actually does estimate already the Gross National Income (GNI) of all countries in US dollars. The approach is different from that adopted by

national statistical agencies. It is based on the application of the ATLAS method, which at least partially adjusts for the over or undervaluation of the national currency with respect to the US dollars.

According to this method, the GNI of Pakistan is estimated at \$272 billion in the calendar year of 2015. With this size, it is ranked as the 41st largest country immediately after Singapore, Malaysia and Egypt. The corresponding estimate of the GNI by the Pakistan Statistical Bureau (PBS) is \$ 295 billion, higher by \$ 23 billion or 8 percent. Therefore, handing over the re-estimation of GNP to the World Bank may even imply a fall rather than an increase in the size of Pakistan's economy. The basic reason for this is that Pakistan's currency is currently significantly overvalued. If in the foreseeable future the rupee depreciates then the GNI in US dollars will fall further.

The re-estimation of the GDP is known as the 'rebasings' exercise of national income. The last such exercise was completed by the PBS in 2012-13. It led to change in the base year of GDP at constant prices from 1999-2000 to 2005-06. Technical assistance was provided by the German NGO, GIZ.

The rebasing did lead to an increase in the GNI by 7 percent. Much of the increase was in the agricultural and service sectors of the national economy like minor crops, livestock, wholesale and retail trade, housing services and transport, storage and communications. Value added in the industrial sector was actually brought down by 16 percent, with a fall of almost 64 percent in small-scale manufacturing.

Earlier a rebasing exercise was undertaken in 2003, during the tenure of the Musharraf Government, to change the base year from 1980-81 to 1999-2000. This led to a bigger rise in GNI of almost 20 percent. Here again, bulk of the increase was concentrated in sectors, characterized by mostly informal activities, like wholesale and retail trade, transport and communications and social, community and personal services. In addition, the livestock and mining sectors jumped up substantially in size.

The consequence of this rebasing exercise was that it facilitated Pakistan's progressing from low income and joining the ranks of (lower) middle income countries by 2007-08. This has been considered as a major achievement by the Musharraf Government. Whether the 20 percent jump in GNI from 1999-2000 onwards was illusory or real is difficult to judge seventeen years later.

What is likely to be the impact of a rebasing exercise in 2017-18? On the positive side, the GNI could be augmented by proper estimation of emerging and fast growing economic activities related to private security, information technology,

Islamic banking, courier and internet services, public transport and mass transit, etc. Also, the informal economy may have expanded at a more rapid rate, especially the part linked to illicit transactions.

However, on the negative side, the input-output coefficients have probably increased significantly since 2005-06. This implies that the value added component in the value of production is lower. The prices of agricultural inputs like fertilizer and fuel for tube wells have gone up faster than commodity prices. Similarly, the prices/tariffs of electricity and gas inputs have gone up at a relatively fast rate. Also, imported intermediate goods prices have risen at a more rapid rate than output prices. The likelihood is that a rebasing exercise could lead to a contraction in the size of the agricultural and industrial sectors while the value added in the services sector could go up significantly. At this state the net impact of rebasing on the size of the national economy is not clear.

The pre-condition for a proper rebasing exercise is the availability of data from Censuses or surveys of particular sectors. PBS has been updating surveys on labor force, household income and expenditure and access to basic services. But the last Census of Establishments was undertaken in 2005, Census of Manufacturing Industries in 2005-06, Livestock Census in 2006 and so on. These primary data collection exercises will have to be undertaken to provide appropriate benchmarks for rebasing. As such, the re-estimation of GNP could take up to two years, especially since the PBS has been fully pre-occupied with the Population Census and probably not in a position to undertake more surveys.

Also, the logical international agency for providing technical assistance is not the World Bank but the United Nations Statistics Division. The latter institution has developed the System of National Accounts (SNA), which is used globally and provides technical support to member countries.

The expectation is that an objective resizing of the economy from the new base year onwards will eventually not only provide a more accurate estimate of the size but also of the annual growth rate of GDP in recent years. This is essential because the present Government has tended to exaggerate significantly the economy's growth rate since 2013-14.

Chapter 8:

OUTLOOK FOR GROWTH

8.1. OUTLOOK FOR 2017-18

Pakistan has moved into a period of uncertainty. On the one hand, there is political instability and the next few months could witness major unfolding events. On the other hand, there is some lack of clarity on the policy posture of the government, for example, on the extent to which the trade policy will be strengthened. A half-hearted attempt was made in recent ECC meetings.

The on-going year, 2017-18, is also the election year. During this year the ruling party may adopt very expansionary monetary and fiscal policies, with a large component of pork barreling. This is what happened in the election year, 2007-08 and 2012-13. Total public expenditure growth during these years' was exceptionally high at 36 percent and 24 percent respectively. Consequently, the fiscal deficit jumped up to above 7 percent of the GDP in both years. Interestingly, foreign exchange reserves plummeted in the two years by 38 percent and 40 percent respectively. History could repeat itself.

Fortunately, there is one silver lining. The world economy is poised to do somewhat better. This should improve the prospects of export growth for Pakistan. Also, there is the expectation that CPEC investments, both in infrastructure and in power generation will gather momentum and favorably impact on the economy down the road.

The Annual Plan for 2017-18 finalized by the National Economic Council (NEC) has set high targets. The GDP is projected to grow at 6 percent; with agriculture at 3.5 percent; industry 7.3 percent and total investment to reach 17.2 percent of the GDP, from last year's level of 15.8 percent of the GDP.

More recently, the international agencies have made somewhat more conservative projections. In the recent Asian Development Outlook, ADB expects the GDP growth rate to remain close to 5.5 percent. It expects the current account deficit to continue rising to 4.2 percent of the GDP, in excess of \$14 billion. Inflation is likely to remain restricted at close to 4 percent.

The SBP, in its recent Monetary Policy Statement, has courageously retained its optimism on the prospects for growth of the economy in 2017-18. In summary, SBP states that 'macroeconomic environment remains conducive to growth without impacting headline inflation'. As such, it expects that the GDP growth rate target of 6 percent will be achieved.

The objective of this article is to make an independent assessment of the outlook for 2017-18 for the GDP growth. There is need for some caution as the projection is made on the basis of data available for only the first quarter of 2017-18. This could change in either direction as the year progresses.

The optimistic forecast of economic growth by the SBP is predicated on favorable estimates of major crops, a healthy growth in credit to the private sector and growing exports. Also, CPEC investments are expected to play a positive role.

However, there may be significant shortfalls in achieving targeted levels of output of major crops. First, the target for area sown under cotton has been missed by 15 percent and there have been reports of a widespread pest attack. Second, there is likely to be a major water shortage of up to 20 percent for the Rabi crops, especially wheat. Third, sugarcane output has already peaked last year and growers could face a major problem of selling to sugar factories, which are lumbered with stocks of almost two million tons. Fourth, minor crops have shown little growth in the last three years. Prices of onions and tomatoes have sky rocketed largely due to shortages. Overall, the crop sector is unlikely to show a growth rate in excess of 2.5 percent, as compared to the Annual Plan target of 3.5 percent.

The large-scale manufacturing sector has made a promising start in 2017-18, with a first quarter growth rate of over 8 percent. Industries like food, beverages and tobacco, automobiles and engineering goods have achieved very high double-digit growth rates. This is partly due to a 'low base' effect as growth in July 2016 in these industries was negative. Cement production may not show the same performance as in the first month with a decline subsequently in the growth rate of local dispatches and a big fall in exports.

The crucial factor in determining the growth of the large-scale manufacturing sector will be performance of the textile industry, with the largest share of 30 percent in manufacturing value added. In turn, this will depend on the export performance. A big decline has been witnessed in the first two months of 18 percent in quantity exported of cotton cloth and some increase in cotton yarn of 5 percent.

A major risk factor will be the performance of the sugar industry which showed a record growth rate of 38 percent in 2016-17. If it is unable to largely export the surplus output, then production may fall sharply in 2017-18, thereby affecting the overall growth in manufacturing. There are also a number of industries which have been hit by cheap imports. This includes petroleum refining, chemicals and electronics.

The prospects for the construction sector depend on the extent of jump in development spending and real estate activity. The electricity and gas sector may show a relatively big expansion with the likely increase in power generation following the commissioning of new plants later this year.

Overall, there is a fairly high likelihood that the industrial sector will achieve a growth rate close to 6 percent. If this happens, it will be the first time such a high growth rate has been achieved since 2007-08.

The services sectors' growth will depend to some extent on the performance of the commodity producing sectors. At this stage the expectation is that the more buoyant sectors will be wholesale and retail trade, especially if imports grow rapidly, and public services, due to election related spending.

Services which may not perform strongly include the financial sector, due to low profitability caused by the low interest rates; ownership of dwellings and private services. A realistic forecast is for the growth rate of the services sector to be close to 5.5 percent.

Given the likely growth rates of the sectors, the GDP growth rate could reach 5 percent in 2017-18, as shown in Table 8.1. Last year PBS overstated the GDP growth rate at 5.3 percent. It was actually closer to 4.4 percent. The likely growth rate of different expenditure components of the GDP is given in Table 8.2.

Table 8.1 Projected Sector Growth Rates in 2017-18

	Share of GDP	Projected Growth Rate in Annual Plan	Likely Growth Rate
Agriculture	19.5	3.5	2.5
Industry	20.9	7.3	6.0
Services	59.6	6.4	5.5
GDP	100.0	6.0	5.0

Source: Planning Commission, Annual Plan | PES

There are a number of other major risk factors including larger crop failure, buildup of higher inventories, jump in oil prices, problems with enhancing power generation due to liquidity constraints, displacement of economic activities due to some political turmoil, possible financial difficulties due to drawdown of reserves in the latter part of 2017-18 and so on.

Table 8.2 Projected Growth of GDP by Expenditure in 2017-18

	Share of GDP	Likely Growth Rate
Private Consumption Expenditure	84.9	5.8
Public Consumption Expenditure	12.5	8.0
Gross Fixed Capital Formation	15.6	7.0
Change in Stocks	1.7	5.0
Exports of Goods and NFS	9.5	9.0
Less Imports of Goods and NFS	-18.2	12.0
Less Indirect Taxes Plus Subsidies	-6.2	13.0
GDP (fc)	100.0	5.0

(%)

Source: PES

8.2. MEDIUM TERM OUTLOOK

The emergence of a severe balance of payments crisis with low reserves will necessitate a fundamental reversion from growth to a path of stabilizing the economy, with or without a new Fund Program. Restrictive fiscal and monetary policies, along with a stronger trade policy, will have to be adopted, as described below:

FISCAL

- Broadening of the tax Base and overall improvements in tax administration.
- Postponing increases in salaries and allowances of staff in grade 17 and above.
- Keeping the national PSDP constant at Rs 2 trillion for 2018-19 and 2019-20.
- Stronger prioritization of Federal PSDP with emphasis on completion of projects in CPEC, Water and Power Sectors.
- Keeping charged expenditures constant also for two years.
- Ensuring proper fiscal management by the Provincial Governments and generation of combined cash surplus of at least Rs 200 billion each year.
- Efforts by Provincial Governments to develop their own sources of revenue.
- Targeting at least 80 percent of the financing of the consolidated deficit through domestic sources.
- Distribution of bank borrowing with two thirds from commercial banks and one third from the SBP.

MONETARY

- Ensuring that the policy rate of the SBP is at least three percentage points above the core rate of inflation.
- Tax incentives for diversion of the incremental credit of banks to the minimum extent of one third to exports, agriculture and SMEs.
- Ceiling to borrowing, with Federal Government guarantee, by PSEs.
- Enhancement in rates of return of national savings schemes to ensure a minimum rate of return of 3 to 5 percentage points, depending upon the period of maturity.
- Removing the real appreciation in the exchange rate in two moves by last quarter of 2018. Allow market determined exchange rate thereafter with no SBP intervention.

TRADE

- Implementation of a stronger trade policy to promote exports and restrict imports, with wider coverage of incentives to exports and cash margins on imports.

The resulting projections for growth up to 2020-21 are given by sector in Table 8.3 and by expenditure in Table 8.4.

Table 8.3 Projected Growth Rates of Sectors and GDP 2017-18 to 2020-21

	2017-18	2018-19	2019-20	2020-21
				(%)
Agriculture	2.5	2.5	2.5	2.5
Industry	6.0	4.5	5.5	6.0
Services	5.5	4.3	4.8	5.5
GDP	5.0	4.0	4.5	5.0

Source: PES and Author's Estimates

Table 8.4 Projected Growth of GDP by Expenditure 2017-18 to 2020-21

	2017-18	2018-19	2019-20	2020-21
				(%)
Private Consumption Expenditure	5.8	3.6	4.3	4.9
Public Consumption Expenditure	8.0	2.0	2.0	2.0
Gross Fixed Capital Formation	7.0	4.0	5.0	6.0
Change in Stocks	5.0	4.0	4.5	5.0
Exports of Goods and Services	9.0	12.0	12.0	12.0
Less Imports of Goods and Services	12.0	2.0	3.0	4.0
Less Indirect Taxes Plus Subsidies	13.0	13.0	13.0	13.0
GDP	5.0	4.0	4.5	5.0

Source: PES and Author's Estimates

Reduction in the trade deficit will require a sharp reduction in the growth rate of the volume of imports and acceleration in the growth rate of volume of exports. Similarly, bringing down the fiscal deficit will imply a low growth rate of public expenditure and sustaining high growth in tax revenues.

Consequently, the likely scenario is that the GDP growth rate could fall to 4 percent in 2018-19. It will take up to three years for the growth rate to get back to 5 percent. Thereafter, efforts can be made to push up to GDP growth rate to 6 percent.

Chapter 9:

GREEN GROWTH

9.1 OVERVIEW ABOUT ECOLOGICAL PROBLEMS

Pakistan is confronted with a number of serious environmental problems including an emerging water scarcity, rapid deforestation, rising air pollution and increasing vulnerability to natural disasters. In addition, there are concerns about the impact of climate change. These developments could have a major impact on the medium-term and long-term sustainability of economic growth in Pakistan. As such, this Chapter explores how the process of growth can be made 'green' and thereby ameliorates the negative impacts of ecological problems and climate change.

Table 9.1 Environmental Performance Indicators for a Sample of Countries

Indicators	(Percentile)*					
	Pakistan	India	Sri Lanka	Bangladesh	Malaysia	Indonesia
Environmental Burden of disease	33	29	31	30	64	34
Access to sanitation	31	9	55	17	66	28
Access to Water	44	42	31	26	71	27
Water quality index	57	70	91	85	50	55
Water stress index	10	10	30	44	67	69
Water scarcity index	5	60	24	94	49	59
Indoor air pollution	14	18	12	4	74	20
Outdoor air pollution	3	33	13	-	71	12
Sulphur dioxide emissions per populated land area	36	25	36	49	43	43
Nitrogen oxides emissions per populated land area	70	-	35	47	36	44
Non-methane volatile organic compound emissions per populated land area	58	32	26	26	18	16
Ecosystem zone	25	11	70	21	47	20
Greenhouse gas emissions per capita (including land use emissions)	86	91	83	99	20	35
Industrial greenhouse gas emissions intensity	23	13	79	48	49	55
CO emissions per electricity generation	56	-	61	27	32	23
Biome protection	61	26	63	9	84	88
Marine protection	63	50	35	25	69	68
Trawling and dredging intensity	37	42	63	-	2	17
MTI slope	65	81	31	6	73	80
Annual change in forest cover	2	100	9	32	24	4
Growing stock rate	1	76	2	23	65	100
Agricultural water intensity	3	10	12	95	55	61
Pesticide regulation	15	17	47	6	62	64
Agriculture subsidies	54	14	45	94	30	22

Note: *: The higher the percentile, the better the performance.

Source: Yale University 2011.

An Environmental Performance Index (EPI) has been developed by Yale University, USA. The standing of Pakistan in different indicators in 2011 is compared with countries like India, Sri Lanka, Bangladesh, Malaysia and Indonesia (see Table 4.1; a lower percentile indicating a worse ranking among 132 countries). Pakistan does poorly in the water scarcity index (5th percentile), indoor air pollution (14th percentile), outdoor pollution (3rd percentile), annual change in forest cover (2nd percentile), growing stock rate (1st percentile) and pesticide regulation (15th percentile).

9.1.1. Water Shortage

The country's fresh water supply is primarily fed by river flows (140 MAF) which supply 70 percent of the water, with the rest by rainfall in monsoons. The river flows are largely fed by glacial and snow-melt from the Hindukush – Karokaram – Himalayan (HKH) mountains, which are sensitive to climate changes.

Since 1999-2000, there has been little change in overall water availability at the farm gate, ranging from 133 to 138 MAF. Surface water provided by the irrigation system is subject to significant losses due to poor maintenance of canals. Ground water is mostly extracted by private tube wells, the number of which has increased by 58 percent since 1999-2000 to almost one million currently. 81 percent of these tube wells are operated with diesel and the rest, 19 percent, by electricity. 84 percent of the tube wells are in Punjab, while a number of deep tube wells have been installed in Balochistan. The over investment in tube wells is a classic example of the 'tragedy of the commons', with the water extracted per tube well falling by 78 percent in the last decade. A market has also developed for tube well water, especially in Punjab.

9.1.2. Deforestation

Deforestation is taking place rapidly in Pakistan. Almost 22 percent of the forest area has been depleted since 2000, which now stands at just above 2 percent of the land area. Almost two thirds of the forest area is in the Northern part of the country. According to the World Bank the annual cost of deforestation is in excess of 2 percent of the GDP.

Deforestation in the North leads to more rapid silting of dams, reservoirs and canals. It increases vulnerability to floods. One of the primary causes of deforestation is the poverty of people who live close to the forests, who overexploit the resources for meeting their fuel and fodder requirements. Also, depletion of forests is the consequence of poor regulations and governance, with large-scale smuggling of timber for furniture and construction activities.

9.1.3. Air Pollution

Urban air pollution is emerging as a serious hazard, leading to higher incidence of respiratory diseases. Emission from vehicles, burning of solid waste, brick kilns and natural dust are responsible for the increase in SPM. The highest incidence is in Lahore (117 ug/m³), followed by Peshawar (71 ug/m³) and Karachi (42 ug/m³). Indoor air pollution (due to burning of fuel wood) and water pollution (due to inadequate sanitation and presence of chemicals) are emerging problems.

CO₂ emissions are relatively low in Pakistan as compared to other countries, and have grown by 3 percent on a per capita basis, as shown in Table 9.2. The share of emissions due to gaseous fuel is about 42 percent, followed by liquid fuel with 37 percent and solid fuel with 11 percent. The contribution of gaseous fuel has been enhanced in Pakistan by the greater dependence on natural gas as a source of energy.

Table 9.2 CO₂ Emissions in a Sample of Countries

Country	Year	In Metric tons per capita	Kg per 2005 PPP \$ per capita
China	2009	5.77	0.93
India	2009	1.66	0.58
Indonesia	2009	1.90	0.51
Malaysia	2009	7.14	0.55
Pakistan	2009	0.95	0.40
Sri Lanka	2009	0.62	0.14
Thailand	2009	4.10	0.55

Source: WDI

9.1.4. Natural Disasters

The Incidence of natural disasters has also increased. Since 2000, Pakistan has seen a severe drought in 2001, the earthquake in 2005 and the mega floods of 2010, which covered almost 20 percent of the land area. Virtually 10 percent of the crop output was lost due to the drought. The earthquake in the North destroyed, completely or partially, almost 600,000 housing units. ERRA has since invested over Rs 125 billion in earthquake rehabilitation and reconstruction work. The floods of 2010 affected over 20 million people with over 2000 deaths, almost 5 million acres of cropped area, and loss of over 320,000 livestock. The damages have been estimated at almost \$9 billion.

9.2 ENVIRONMENTAL LAWS AND POLICIES

In order to preserve the environment, Pakistan is one of the first few countries to issue laws and policies to protect the environment. However, the Federal and Provincial Governments have not had a pro-active approach in implementing the national plans and policies that have already been prepared.

The Provincial Governments claim that the delay in implementation of policies is due to inadequate transfer of powers after the 18th Amendment. Consequently, the Provincial Governments have not pursued some of the policies which are discussed below. Additionally, there are coordination problems. Following devolution of the Ministry of Environment, an apex Federal body has not been established. Article 143 of the Constitution gives the Federal Government the authority to act as the focal point for fulfilling international obligations on global environmental protocols and agreements. In the absence of proper coordination and oversight, it is unlikely that these policies and acts will be successfully implemented.

The next section provides a brief overview of the main environmental laws and policies in Pakistan.

9.2.1. Environmental Protection Act, 1997

The Environmental Protection Act, 1997 aims to provide for the protection, conservation, rehabilitation and improvement of the environment. It also aims to promote the prevention and control of pollution and encourage sustainable development. The salient features of this Act are as follows:

- Under this act, the Federal Government is mandated to call for the establishment of the Pakistan Environmental Protection Council. The Council is to hold meetings and frame its own rules of procedure. The Council will have several functions including: coordination, supervision of the enforcement of the provisions of this Act, approval of the national environmental quality standards; and provide guidelines for the protection and conservation of species and habitats.
- The Federal Government will establish the Pakistan Environmental Protection Agency and this agency will exercise the powers and perform the functions assigned to it under this Act. The Federal agency will be in charge of implementing the national environmental policies that are approved by the Council, will publish and prepare a report on the National Environment and will also revise the National Environmental Quality Standards with the approval of the Council.
- The Federal agency will undertake enquiries and investigations into the environmental issues. Under this Act, it has the power to inspect under a search warrant issued by the Environmental Court or Environmental Magistrate any building, premises or vehicle that is suspected of breaking environmental laws. An individual may be summoned for investigation pertaining to environmental issues.

- A National Environmental Coordination Committee will be set up by the Federal government to carry out the functions of this Act.
- Every Provincial Government will establish a Provincial Environmental Protection agency to perform the functions it is specified to perform. Additionally, Provincial Sustainable Development funds will be established from grants and loans advanced by the Federal Government or the Provincial Governments and any foreign assistance.
- Environmental impact assessment will be carried out in areas such as trade, manufacturing, business activities, etc. with full participation from the public.
- Import of hazardous waste or handling of hazardous substances will not be allowed. Regulation of motor vehicles will be carried out to ensure adherence to the highest standards.
- Whosoever fails to comply with the environmental standards that are in place, will be subjected to fine, which may extend to one million rupees. The Environmental Court or Environmental Magistrate can imprison a person or party up to two years if they fail to comply.
- The Federal Government can by notification establish an Environmental Tribunal to deal with cases pertaining to the environment. The proceedings of this tribunal will be deemed to be judicial proceedings.
- The Federal Government can delegate any of the powers by notification in the official gazette to a Provincial Government and the Provincial Government has the freedom to delegate them to the local government.

9.2.2. National Drinking Water Policy

The National Drinking Water Policy aims to increase access to drinking water by establishing a new drinking, water supply and distribution system, and upgrading existing systems for both rural and urban areas (and especially for mega cities) on the basis of detailed assessment and analysis. The salient features of this policy are discussed below.

- Surface, ground water and coastal resources of the country will be protected in line with the National Environmental Policy and Pakistan Environmental Protection Act -1997. Water will be treated to ensure that it complies with the National Drinking water quality standards.
- Water safety planning will be promoted, and a national action plan for the promotion of household water treatment options will be developed and implemented.

- Surveillance agencies will be established which will undertake independent assessment of the water quality, and compliance to the national drinking water quality standards will be reported to the water regulatory agencies.
- Community participation and empowerment, especially that of women and children will ensure community ownership. A national behavioral change and communication strategy will be formulated and implemented to create public awareness. Additionally, public-private partnerships for enhancing access to safe drinking water will be developed.
- A drinking water and management information system will be established at the Federal, Provincial and local levels. For inter- and intra- sectoral coordination, a multi-stakeholder water and sanitation coordination committee will be established.
- The Pakistan safe drinking water act will be enacted to ensure compliance with national drinking water quality standards. The water conservation act and relevant standards and guidelines will be enacted. Standards for water saving plumbing equipment and appliances and legislation for regulation of groundwater exploitation will be enacted.

9.2.3. National Forest Policy

The national forest policy aims to improve conservation of forests and increase forest cover. The policies focus on reducing the adverse impact of socio economic causes, and are as follows:

- A GIS/Remote system will be developed that establishes and monitors the boundaries of the forestlands and maintains proper records. Transfer of forestland for other activities such as non-forest uses will be done through the approval of the Federal Government. Tree planting will be an integral component of all construction projects.
- In order to reduce pressure on natural forests, the government will exempt timber imports from all taxes. The creation of a forest development fund at the Federal Level will ensure conservation and development of critical waterbeds. Local governments will be provided adequate financial and institutional support for promotion of forests and natural resources.
- Forests management will be promoted by allowing timber harvesting, so as to discourage the illegal cutting down of trees. Timber harvesting will be allowed in those areas where the owners and right holders undertake fully to participate in the management and regeneration of their forests in association with the forest department. Provincial Governments will be encouraged to create and manage protected areas falling within

their geographical boundaries. Appropriate measures will be undertaken for protecting the juniper, mangrove, chalthoza and spruce forests. Biodiversity will be protected under the Biodiversity Action plan (BAP 2000), while the National Council for Conservation of Wildlife (NCCW) will provide effective advisory and coordination services.

- A national desertification control fund will be established as envisaged under National Action Program (NAP) and United Nations Convention to Combat Desertification (UNCCD) to ensure continued support for sustainable land management interventions at the grassroots level.
- Government of Pakistan will provide the necessary financial and technical assistance to provincial departments and R&D institutions for establishing regular monitoring system based on GIS and Remote Sensing. The Ministry of Environment will be responsible for establishing a cell for monitoring of the policy, while at the provincial level the provincial forest and wildlife departments will initiate actions to achieve the goal and objectives envisioned in the policy.

9.2.4. National Environmental Policy, 2005

The National Environmental Policy focuses on protecting, conserving and restoring the environment in order to improve the quality of life of the citizens through sustainable development. The main features of this policy are described below:

- Safe and sustainable water will be ensured through the enactment of the water conservation act and establishment of a water quality and monitoring and surveillance system.
- Air pollution and noise will be mitigated through the enactment of the National Clean Air act, effective enforcement of the National Environmental Quality Standards and self monitoring rules.
- To address waste management issues, a national sanitation policy will be implemented, alongside developing a national oil spill contingency plan and establishment of marine pollution control commission. Pakistan oil pollution act will be framed.
- The national forest policy will be implemented, and the biodiversity plan will be revised and updated in line with developments taking place at the national and international levels. A comprehensive policy for the wetlands will be developed.
- Climate change will be combated through establishing a national clean development mechanism (CDM). The National Energy Conservation policy will be devised and implemented.

- Strategies and programs to tackle desertification will be developed in line with the national action plan to combat desertification and drought; a national desertification control fund will be established.
- The objectives of the policy will be achieved by integrating environment into development planning. This will involve implementing the provisions of the Pakistan Environment Act 1997. The legislative and regulatory framework will be enforced for implementation of the policy at the Federal, Provincial and District level. The capacity of the MOE, provincial environment departments and environment protection agencies will be enhanced through the provision of adequate staff, equipment, infrastructure and financial resources for effective implementation of the policy. Different levels of Government will be encouraged to develop public-private partnerships and the concept of ‘participatory approaches and practices’ will be included in the curriculum of environmental education and training programs.

9.2.5. National Water Policy

The National Water policy focuses on improving water usage in the country. The main features of this policy are as follows:

- In order to undertake basin wide planning and coordinated development of water resources in the country, there is a need to adopt the principles of integrated and unified river basin development to ensure all aspects of water are properly taken care of in decision making for water resource development.
- Land will be delineated into the following zones: water resources planning zones, fresh and saline ground water zones, drought prone planning zone and environmental management zones in areas of environmental hazard.
- The sustainability of the irrigation infrastructure will be ensured through awareness creation of farmers and by increasing the level of cost sharing.
- Investments will be encouraged through public-private partnerships in urban water supply. Legislation that formally allows and defines the use of water abstraction licenses and water rates for industrial use will be enacted.
- The existing hydro-power generating capacity will be optimized in such a way that it is sustainable and compatible with meeting national irrigation requirements. The development of renewable resources will be looked into in detail.

- It will be ensured that water rights in the Provinces are in accordance with the 1991 Water Accord. Work on developing a drainage act similar to the water accord.
- Transition of SCARP tube wells from the public sector to the private sector will be expedited, and a groundwater atlas will be prepared for each canal command and sub-basin. Work will be done for improving zoning and flood manuals, and the EPA standards for drinking water will be achieved.

Overall, it appears that while laws and policies have been put in place, the biggest problem appears to be their enforcement and implementation. This is a reflection of the poor quality of governance in the area of environmental protection.

9.3. ENVIRONMENTAL MANAGEMENT

As highlighted earlier, there is debate also on where the environment protection function should be placed. Following the abolition of the Concurrent List in the Constitution' by the 18th Amendment, this function has essentially passed on to the Provincial Governments. However, these Governments have limited capacity to perform this function. A new Ministry for Climate Change has been created at the Federal level, with a still unclear mandate.

The management of water resources is a very contentious issue. Almost 40 MAF is lost from the water system due to lack of adequate reservoirs. For many years, construction of the Kalabagh Dam in the North West of Punjab has been under discussion. This Dam could provide an additional 6.5 MAF of water. While Punjab has been pushing for this dam, Sindh has been vehemently opposed on the grounds that it will reduce the availability of water downstream, while K-PK is worried that some districts, like Nowshera, will be submerged. The debate on construction of large dams has now acquired greater importance because of the realization that more cheap hydel power is needed to solve the power crisis.

There is consensus, however, on the Diamer-Basha Dam, with the ability to store 8.5 MAF and provide 4500 MW of electricity. It will also lessen the likelihood of floods. But the cost is very high at over \$11 billion and the major sponsors, appear to be reluctant to finance the project. More recently, the focus has shifted to construction of the Dasu Dam.

In the absence of increased water supplies for agriculture, there is growing appreciation of the need to conserve and use more efficiently the water available. More public resources are being allocated for lining of canals, especially in Punjab. The big emerging issue is water pricing to promote efficient use. The irrigation charges (Abiana) are currently very low and cover only about 20 percent of the O&M costs of the canal system. But this is being resisted by large landowners

who have disproportionate political representation. Eventually, with rising water scarcity, Pakistan will have to adopt new irrigation practices, like drip irrigation, and change the cropping pattern away from water-intensive crops, like sugarcane and rice.

The use of tube wells has substantially exceeded the optimal level and led to overexploitation of ground water resources. But instead of discouraging further installation, the PPP government, in one of its last acts, reduced the power tariff for tube wells by 20 percent. This has since been withdrawn.

The water issue also has a regional dimension. The common perception is that India is building dams upstream, like the Kishanganga Dam, to reduce the water flow to rivers in Pakistan. This is potentially a serious issue and could damage the already strained relations between the two countries.

Turning to the problem of managing forests, the Provincial Government of K-PK has to play the primary role. One possibility is the provision of alternate fuels at subsidized prices to people living in proximity to the forest areas. Alternatively, punitive taxation may be introduced on wood and wood products industries.

In an effort to reduce urban pollution and lower transport costs, the use of CNG in motor vehicles was introduced. Consequently, the use of CNG has increased rapidly by 12 percent annually. Now, the debate is that given the depletion of gas reserves in the country, the available gas should be diverted to higher value sectors, like power generation. Consequently, efforts are being made to ration the use of CNG and raise substantially the price, but this has been met with stiff resistance.

However, some steps have been taken to reduce air pollution including a restriction on leaded gasoline and reduction in the sulphur content of diesel oil. But there is need to introduce further regulation to ensure tougher emission standards on vehicles, encourage the use of pollution control technology by industry and relocate brick kilns far the proximity to urban centres. Also, given the highest level of air pollution in Lahore, the use of three-wheel rickshaws could initially be banned in this city, as has been done in New Delhi. But this has been argued against on the grounds that it will deprive a significant number of people of their livelihoods.

The PML(N) Government has announced that as part of the CPEC bulk of the new investment in power generation (about 7000 MW) will be with coal as the fuel source, instead of furnace oil. The implications of this on future levels of emission need to be worked out.

Finally, a National Disaster Management Authority (NDMA) was set up in 2006 following passage of the appropriate legislation. This is in addition to the multiplicity of agencies that already exist (see Chart 9.1). There is need to clarify the distribution of functions among these agencies and between different levels of government.

Chart 9.1 Multiplicity of Disaster Management Institutions in Pakistan*

Phase	Institutions	
Prevention/mitigation	<ul style="list-style-type: none"> Federal Flood Commission Provincial Irrigation Departments 	<ul style="list-style-type: none"> Water and Power Development Authority (WAPDA)/Dams Safety Council
Preparedness and response	<ul style="list-style-type: none"> Armed forces Civil Defence Emergency Relief Cell Fire Services National Crisis Management Cell Pakistan Metrological Department Police Provincial Communication and Works 	<ul style="list-style-type: none"> Provincial Food Departments Provincial Health Departments Provincial Relief Commissioners Provincial Agriculture and Livestock Departments Rescue 1122 Space and Upper Atmospheric Research Commission (SUPARCO)
Recovery and reconstruction	<ul style="list-style-type: none"> Earthquake Reconstruction and Rehabilitation Authority (ERRA) Provincial Irrigation Departments 	<ul style="list-style-type: none"> Provincial Communications and works Departments Other line departments
Note: * Besides the NDMA, Provincial Disaster Management Authority (PDMAs) and District Disaster Management Authority (DDMAs) are to be established. Source: Government of Pakistan and Provincial Governments.		

9.4. PRESENT DEBATE TO SOLVE ECOLOGICAL PROBLEMS

Pakistan was one of the first developing countries to pass a landmark Environmental Protection Act in 1997. In addition, as highlighted above a National Drinking Water Policy, a National Forest Policy, a National Water Policy and the National Environment Policy of 2005 are in place. However, the fundamental problem is the, more or less, complete lack of implementation of these policies.

The absence of commitment to a 'green' economy is due to the perceptions, first, that this is an attempt on the part of advanced countries to impose emission standards on developing countries when they pollute much more and, second, that this is likely to lead to some loss of growth.

9.4.1. Green Economy and Growth

UNEP defines a green economy as one that results in "improved human well-being and social equity, while significantly reducing environmental risks and scarcities". In its simplest expression, a 'green economy' is low-carbon, resource efficient and socially inclusive.

In a green economy, growth in income and employment is driven by public and private investments that reduce carbon emissions, enhance energy and resource efficiency and prevent the loss of biodiversity and ecosystem services. In fact, the greening of economies can be a new 'engine of growth'.

These investments need to be catalyzed and supported by targeted public expenditure, policy reforms and regulation changes. The development path should maintain, enhance and, where necessary, rebuild natural capital as a critical economic asset and as a source of public benefits, which are important for the livelihood and security of poor people who depend more on nature.

'Green' economy can make a fundamental contribution to more inclusive growth by reducing poverty across a range of important sectors – agriculture, forestry, freshwater, fisheries and energy. Sustainable forestry and ecologically friendly farming methods help preserve soil fertility and water resources. This is especially important for subsistence farming. In this sense, the green economy is particularly important in the Pakistani context with the on-going deforestation and emerging water scarcity.

9.4.2. 'Green' Initiatives in Khyber-Pakhtunkhwa

The Pakistan Tehrik-e-Insaf (PTI) Provincial Government in Khyber-Pakhtunkhwa has recognized the special ecological problems in the Northern part of the country and launched the 'Green Growth Initiative'. It heralds the beginning of the most advanced environment-friendly initiatives for preserving the environment, addressing national energy shortages and promoting tourism. The key initiatives proposed under 'Green Growth' are as follows:

PLANT

Forest:

- Increase forest area up to 22% by 2018
- Convert 30,000 hectares of additional land into forest annually
- Launch of "Tree Tsunami" campaign
- Increase tree covered area upto 30% by 2018
- Commencement of "Youth Nurseries" Program
- Preserve Khyber-Pakhtunkhwa's forests as valued natural asset
- Complete ban on cutting down trees in reserved forests

PRESERVE

National Parks:

- Establishment of an autonomous National Parks authority
 - Training of special Youth Park Management force
 - Increase protected area upto 15% by 2018
 - Build recreational Natural Wildlife Parks in every district
-

PROMOTE**Clean Energy:**

- Zero carbon growth by 2018
- 80% power generation from hydro and solar sources by 2020
- 356 community driven small hydro power projects by 2020

Source: Advertisement in newspaper, Dawn.

9.5. IMPACT OF CLIMATE CHANGE

Climate change resulting from an increasing concentration of Greenhouse Gases (GHGs) in the atmosphere and due to the use of fossil fuels and other human activities has become a major concern world over. It is particularly so for Pakistan, because climate change is posing a direct threat to its water security, food security and energy security.

Pakistan's total GHG emissions in 2008 amounted to 309 million tonnes (mt) of Carbon Dioxide (CO₂) equivalent, comprising about 54 percent CO₂, 36 percent Methane, 9 percent Nitrous Oxide and 1 percent other gases. The biggest contributor is the energy sector with 50 percent share, followed by the agriculture sector (39 percent), industrial processes (6 percent) and other activities (5 percent).

Pakistan is a small GHG emitter: It contributes only about 0.8 percent of the total global GHG emissions. On per capita basis, Pakistan with 1.9 tonnes per capita GHG emissions stands at a level which corresponds to about one-third of the world average, one-fifth of the average for Western Europe and one tenth of the per capita emissions in the U.S., putting it at 135th place in the world ranking of countries on the basis of their per capita GHG emissions.

During the last century, average annual temperature over Pakistan increased by 0.6°C, in line with the global trend, with the temperature increase over Northern Pakistan being higher than over Southern Pakistan (0.8°C versus 0.5°C). Precipitation over Pakistan has also increased on the average by about 25 percent. Studies based on the ensemble outputs of several Global Circulation Models (GCMs) project that the average temperature over Pakistan will increase in the range 1.3-1.5°C by the 2020s. Precipitation is projected to increase slightly in summer and decrease in winter with no significant change in annual precipitation. Furthermore, it is projected that climate change will increase the variability of monsoon rains and enhance the frequency and severity of extreme events such as floods and droughts.

The pattern of rainfall in the country is changing, and while climate change is regarded as an issue which is long-term in nature, the increased and abnormally

high levels of precipitation suggest that for Pakistan, climate change is already a reality. Pakistan will have to step up its efforts to deal with the effects of climate change.

The floods of 2010 have provided a clear example of the potential for damage due to climate change in Pakistan. Triggered by the coupling of two climate driven events, the rapid melting of Northern glaciers as well as erratic monsoon rains in the Northern areas, the unprecedented floods in Pakistan led to large losses to human lives and infrastructure. Climate change is predicted to cause more such floods followed by periods of drought as the Northern glaciers rapidly melt. The most important climate change potential threats to Pakistan are identified as:

- Increased variability of monsoons;
- Rapid recession of Hindu Kush-Karakoram-Himalayan (HKH) glaciers threatening water inflows into the Indus River System (IRS); reduction in capacity of natural reservoirs due to glacier melt and rise in snow line;
- Increased risks of floods and droughts;
- Increased siltation of major dams resulting in greater loss of reservoir capacity;
- Severe water-stressed and heat-stressed conditions in arid and semi-arid regions, leading to reduced agricultural productivity;
- Increased upstream intrusion of saline water in the Indus delta, adversely affecting coastal agriculture, mangroves and breeding grounds of fish; and
- Threat to coastal areas including the city of Karachi due to sea level rise and increased cyclonic activity due to higher sea surface temperatures.

The above threats lead to major concerns for Pakistan in terms of its water security, food security and energy security, thereby impacting on growth and quality of life of the people. Some of the oft-mentioned climate change related concerns of Pakistan are identified as: Increase in deforestation; loss of biodiversity; increased health risks (heat strokes, pneumonia, malaria and other vector-borne diseases) and risks to other vulnerable ecosystems (e.g. rangelands, degraded lands, mountainous areas etc.). However, what often goes unnoticed is that in future it can also lead to an increase in cross-border tensions. As countries will become water stressed, there will be greater likelihood of preserving the resources they believe they own. This, therefore, implies that climate change should be seen as an issue which can have potential implications on regional and international stability.

SECTION 5
INVESTMENT

Chapter 10:

THE PATH OF INVESTMENT

10.1. LONG-TERM TRENDS

The level of investment in Pakistan has been on declining path since the decade of the 80s. During this period it attained a peak of almost 19 percent of the GDP as shown in Table 10.1. Since 2010, it is operating at close to 15 percent of the GDP. This long-term decline in the rate of investment is the primary explanation for the significant fall in the growth rate of the economy from over 6 percent to between 4.5 and 5 percent.

Table 10.1 Average Level of Investment Annually in Different Decades

	(% of GDP)				
	Total Investment	Fixed Investment	Private Investment	Public Investment	Change in Shocks
Decade of 70s	17.1	15.9	9.6	10.3	1.2
Decade of 80s	18.7	17.0	7.8	9.2	1.7
Decade of 90s	18.3	16.6	9.1	7.5	1.7
2000-2010	17.9	16.4	11.8	4.6	1.5
2011-2017	15.1	13.5	9.9	3.6	1.6

Source: PES

There has also been a fundamental change in the role of the public and private sectors in the process of investment in the economy. During the decade of the 70s the pre-dominant share of investment was with the public sector. The regime of Zulfikar Ali Bhutto first undertook large-scale nationalization of private industrial assets and banks. This was accompanied by a '*big push*' in development of physical infrastructure, including Tarbela Dam, Port Qasim and Pipri Marshalling Yard. Simultaneously, high-tech investment took place in industries like steel, chemicals petroleum refining, etc.

However, the nationalization process scared away private investors in a big way. Consequently, private investment plunged to an all-time low. The takeover by the military in 1977 under General Zia ul Haq gradually restored the confidence of the private sector. The level of private investment went up from only 5.6 percent of the GDP to 7.8 percent of the GDP. The momentum of public investment was largely maintained. Combined together, the economy reached the peak level of investment in the 80s.

Beyond the 80s, the continuing decline in the overall level of investment is attributable primarily to a fall in the rate of public investment. It has fallen very sharply from the peak of 10.3 percent of the GDP in the 70s to less than 4 percent of the GDP during the last seven years. One of the primary reasons for this is the decline in the 'fiscal space' for development spending due to the rising debt burden. The annual cost of debt servicing in the Federal Budget has risen from 12 percent of the current expenditure in the late 70s to over 25 percent in 2016-17.

The decade of the 90s saw a visible upsurge in the rate of private investment. There was initially a big jump in investment in road transport. From the mid-90s onwards, the private Independent Power Producers invested heavily in the expansion of capacity for generation of electricity.

Developments since 2000 are discussed in the next section.

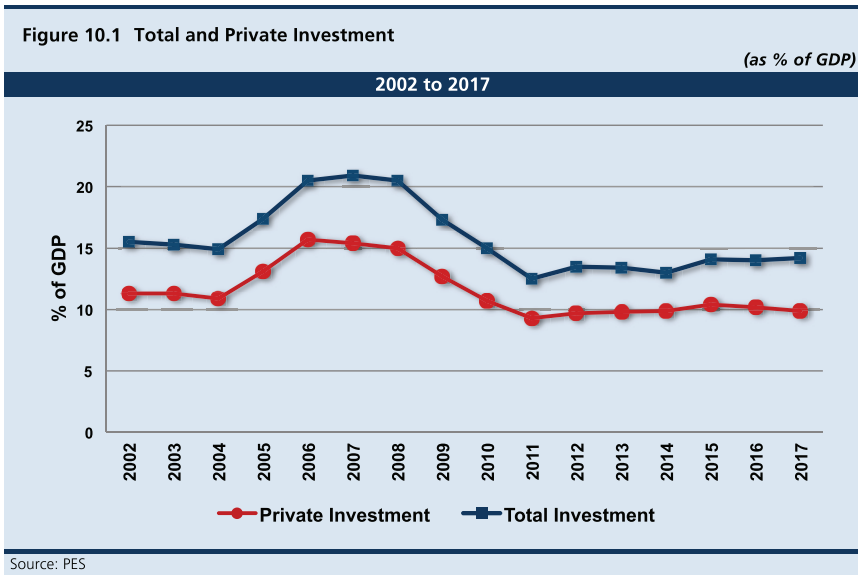
10.2. TRENDS SINCE 2000

The path of fixed investment since 2000-01 is presented in Table 10.2 and in Figure 10.1. There is a noticeable business cycle. Total fixed investment rose steadily during the tenure of the Musharraf Government, reaching a peak of over 20 percent in 2005-16. Both private and public investment showed rising trends. Thereafter, the overall rate of fixed investment plunged to a low of 13 percent by 2013-14. Thereafter, a minor recovery is visible with the rate rising to just above 14 percent.

Table 10.2 Level of Fixed Investment by the Public and Private Sectors

	<i>(as % of GDP)</i>		
	Public Investment	Private Investment	Total Investment
2001-02	4.2	11.3	15.5
2002-03	4.0	11.3	15.3
2003-04	4.0	10.9	14.9
2004-05	4.3	13.1	17.4
2005-06	4.8	15.7	20.5
2006-07	5.6	15.4	20.9
2007-08	5.4	15.0	20.5
2008-09	4.6	12.7	17.3
2009-10	4.3	10.7	15.0
2010-11	3.2	9.3	12.5
2011-12	3.7	9.7	13.5
2012-13	3.5	9.8	13.4
2013-14	3.2	9.9	13.0
2014-15	3.7	10.4	14.1
2015-16	3.8	10.2	14.0
2016-17	4.3	9.9	14.2

Source: PES

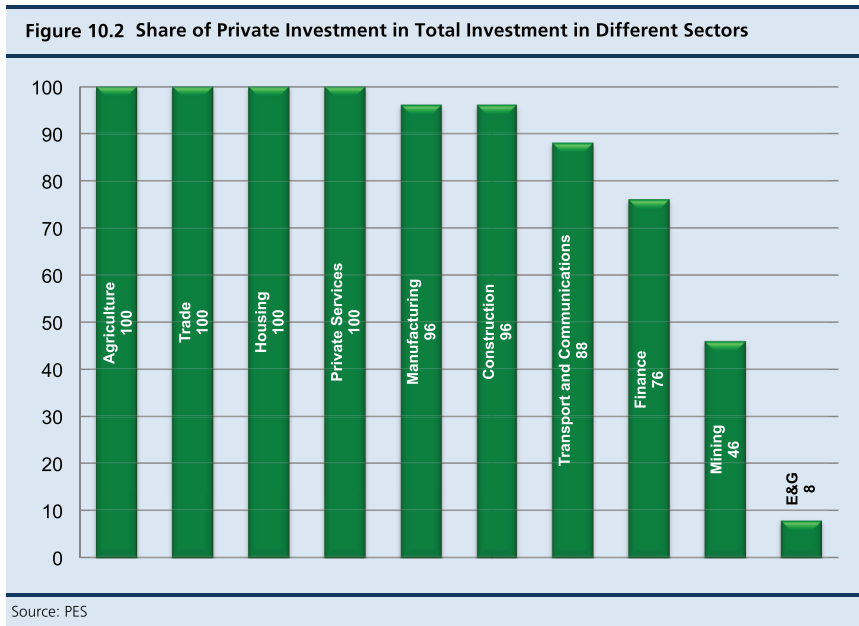


What explains this business cycle with such a large amplitude? There are, in fact, a number of factors which have been operation. Following the support provided by Pakistan to the USA in the Afghanistan after 2001, there was an outpouring of financial support to the country. This enabled the financing of a larger public sector development program. Simultaneously, the level of foreign direct investment rose exponentially. However, this inflow has shown a declining trend since 2007-08.

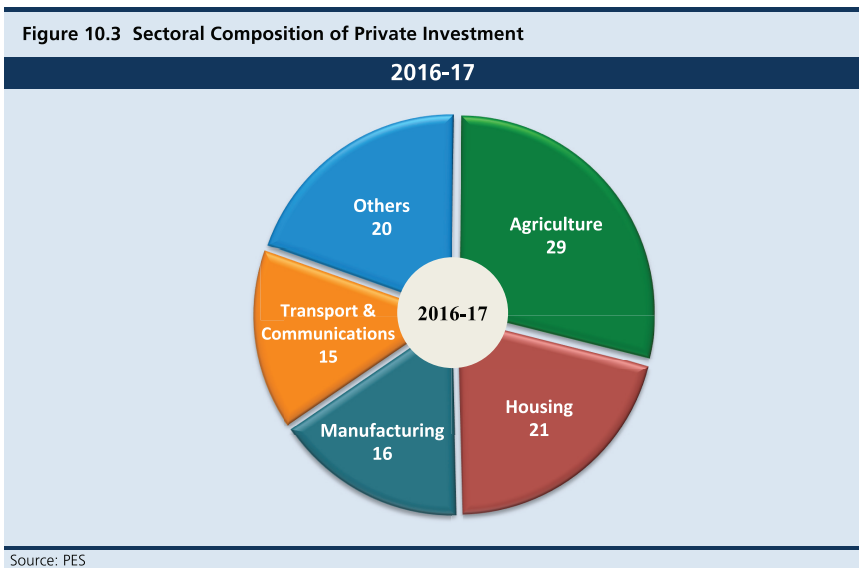
Private investment now accounts for over 70 percent of total investment. As such, the overall level of investment is influenced more by the behavior of private investors. As shown in Figure 10.2, almost the entire investment in six sectors, viz., agriculture, housing, wholesale and retail trade, private services, manufacturing and construction is by the private sector. Over 80 percent of the investment in the transport and communications sector is also by the private sector. Bulk of the public sector investment remains non-allocable to sectors within the GDP. There is need for methodology to be developed by PBS to achieve this allocation.

The resulting sectoral composition of private investment is given in Figure 10.3. Perhaps somewhat surprisingly, agriculture continues to be the largest sector with a share of 29 percent in 2016-17. Next in importance are housing, manufacturing and transport and communications with shares of 21 percent, 16 percent and 15 percent respectively.

A number of factors have also played in role in determining the path of private investment. First, since 2007-08 there has been a more than fourfold increase



in acts of terrorism by 2012-13. There has greatly increased the perception of risk and in security on the part of domestic entrepreneurs and, more particularly, foreign investors. FDI in 2016-17 was less than one third of the peak level attained a decade ago. The *Zarb-e-Azb* operations after 2014 have curbed terrorism in the country. But a visible impact on the level of private investment remains to be seen.



Second, the access to credit has diminished while the cost has increased. As shown in Table 10.3, the real markup rate on advances was close to 1 percent in 2005-06. It reached a peak of 4.5 percent in 2012-13 and still remains high at 3.7 percent. In 2005-06 the increase in commercial bank credit to the private sector was 3.6 percent of the GDP in 2005-06. It has fallen sharply since then. However, improved access is visible in 2016-17, although this is not reflected in the level of private investment. A major contributory factor to restricted access has been the '*crowding out*' due to higher Government borrowings from the banking system.

Table 10.3 Trend in the Magnitude of Variables Impacting on Private Investment

	Unit	2005-06	2012-13	2016-17
Level of Private Investment	(% of GDP)	15.7	9.8	9.9
Real Markup Rate on Bank Advances (on Machinery)	(%)	1.3	4.5	3.7
Annual Increase in Credit to the Private Sector	(% of GDP)	3.6	0.4	2.3
Annual Increase in Credit to the Government by Commercial Banks	(% of GDP)	1.0	4.5	0.4
Public Investment	(% of GDP)	4.8	3.5	4.3
GDP Growth Rate (lagged by one year)	(%)	9.0	3.8	4.7
No of Incidents of Acts of Terrorism		352	1411	360

Source: SBP | SATP | PES

As opposed to this, there is empirical evidence of '*crowding in*' of private investment by public investment in infrastructure, especially in the power sector. The rise in electricity outages since 2007-08, reaching a peak in 2012-13, has prevented the private sector from setting up new or expanding existing production facilities.

A snapshot of the profile of investment in the economy can be obtained by look at the trends in the level and composition of machinery imports in Table 10.4. Recent years have witnessed a peak in public sector and CPEC related imports of power generating machinery. Imports of textile machinery were relatively high in the earlier years, 2001-02 to 2005-06. They have since faltered as exports began to lose dynamism. Telecom equipment imports were also very high in these years with the extremely rapid expansion in the network and ownership of mobile phones. Currently, these imports are about 60 percent of the historic

peak. Overall, there been a modest cumulative growth of 30 percent in the last twelve years in the import of machinery.

Table 10.4 Trend in Imports of Machinery

(\$ million)

	2005-06	2012-13	2016-17
TOTAL IMPORTS	6070	5705	7910
Power Generating Machinery	512	959	1620
Textile Machinery	817	388	652
Electrical Machinery	509	843	1324
Telecommunication Equipment	1933	1494	1023
Agriculture Machinery	117	100	77
Office and DP Equipment	294	253	432
Construction and Mining Machinery	190	162	159
Other Machinery	1698	1506	2623

Source: SBP

Chapter 11:

REVIEW OF THE FEDERAL PSDP

11.1. SIZE OF PSDP

The Federal Public Sector Development Program (PSDP) has been set at Rs 1001 billion for 2017-18. This represents a '*big push*', with 40 percent growth over the development spending in 2016-17, as shown in Table 11.1. In effect, the Federal PSDP will rise from 2.2 percent of the GDP to over 2.8 percent of the projected GDP in 2017-18. Inclusive of the four Provincial Development Programs, the national PSDP will reach a new peak of almost 6 percent of the GDP.

Table 11.1 Trend in the Budgeted and Actual Size of the Federal PSDP, 2012-13 to 2017-18

(Rs in Billion)

	Budgeted PSDP	Actual Size	% Utilization
2012-13	360	323.5 (1.7)*	89.9
2013-14	540	432.9 (2.3)	80.5
2014-15	525	488.9 (2.1)	93.1
2015-16	700	593.3 (2.1)	84.8
2016-17	800	725 (2.3)	90.7
2017-18	1001		
ACGR (%)	20.5	20.2	

ACGR = Annual Growth Rate | * % of the GDP

Source: Planning Commission, Federal PSDP

MOF, Fiscal Operations

What are the motivations for targeting such a big increase in the size of the Federal PSDP by over Rs 275 billion? First, infrastructure investments, especially in expanding the capacity for transmission and distribution of electricity, have to be completed in time to enable the utilization of generation capacity of the new power plants. Second, CPEC infrastructure projects related to the two highway corridors and the Gwadar port are in the process of implementation and will require larger allocations for early completion. Third, 2017-18 is the election year and the objective of the incumbent Government may obviously be to create

space for a larger quantum of populist spending and pork barreling. Further, the multiplier effect of the larger PSDP will help in accelerating the growth process in the economy. As highlighted earlier, there is evidence also that higher public investment crowds in more private investment.

11.2. FINANCING THE PSDP

A number of questions arise with regard to the size and composition of the Federal PSDP for 2017-18. Will there be adequate funds available to finance the big jump in development spending? Does adequate implementation capacity exist to ensure completion of projects in time and without large cost overruns? Is the sectoral distribution of the PSDP adequately reflecting the stated priority of focusing on the power sector and CPEC?

The experience during the four years of the present Government is that there have been significant shortfalls in financing the budgeted Federal PSDP, as indicated by the shortfall in releases in relation to the budgeted amount. On average, the targeted size has been missed by 13 percent, even though there was a relatively modest growth annually in the budgeted PSDP of 15 percent. This raises serious doubts about the ability to finance the big push this year. Further, after the big shortfall in FBR revenues in 2016-17, the required growth rate in these revenues is over 19 percent, when the nominal GDP is expected to grow at a significantly lower rate of about 11 percent. Also, the budgeted level of non-tax revenues looks unattainable, given the likelihood of no receipts from the Coalition Support Fund.

Fortunately, concessional project financing of CPEC should be available in larger amounts from China. Hopefully, this will be at similar terms as project loans from ADB and IBRD/IDA. It is surprising, however, that the Budget of 2017-18 expects no significant increase in project loans, as shown in Table 11.2. In fact, a major portion, 52 percent, is expected to be for financing the Provincial PSDPs. As such, the Ministry of Finance may be left with no other option than to target for a larger fiscal deficit by almost 2 percent of the GDP, primarily by printing of money through large-scale borrowing from the SBP.

During the election year, the experience in 2007-08 and 2012-13 is that the Federal fiscal deficit goes beyond 6 percent of the GDP. If this also happens in 2017-18, as in 2016-17, it will also create demand pressures leading to a higher current account deficit in the balance of payments.

Table 11.2 External Borrowing and Domestic Financing of the Federal PSDP

(Rs in Billion)

	Project Loans	Grants	Domestic Borrowing	Actual Size of Federal PSDP
2012-13	149.6 (43.0)*	29.1 (8.4)	169.6 (48.6)	348.3 (100.0)
2013-14	194.1 (44.0)	36.6 (8.3)	210.3 (47.7)	441.0 (100.0)
2014-15	143.0 (28.5)	22.4 (4.5)	336.8 (67.0)	502.2 (100.0)
2015-16	182.4 (30.7)	28.8 (4.8)	382.2 (64.5)	593.4 (100.0)
2016-17	335.6 (46.2)	25.3 (3.5)	364.7 (50.3)	725.6 (100.0)
2017-18 (B.E)**	340.6 (34.0)	27.1 (2.7)	633.3 (63.3)	100.0 (100.0)

* Share in total financing | ** Budget Estimate
Source: MOF, Fiscal Operations

11.3. ISSUES OF IMPLEMENTATION CAPACITY

Turning to the issue of implementation capacity, the large portfolio of projects has led to a '*spreading thin*' of the PSDP. In 2017-18 there are 1148 projects under implementation, implying that the average allocation per project is even less than Rs 1 billion. The number of projects in key sectors is given in Table 11.3. Given the financing constraint and limits to implementation capacity the emphasis should be on completion of on-going projects rather than take on new projects, except those in CPEC and the water and power sectors.

Table 11.3 Number of On - Going and New Projects in the Federal PSDP, 2017 - 18

Division/Corporation*	Number of On-Going Projects	Allocation (Rs in Billion)	Number of New Projects	Allocation (Rs in Billion)	Total Allocation (Rs in Billion)
Higher Education Commission	88	26.4 (74.2)**	63	9.2 (25.8)**	35.6
National Health Services	18	37.5 (68.8)	5	16.9 (31.2)	54.5
Railways	31	33.5 (78.1)	6	9.4 (21.9)	42.9
Water & Power (Water)	48	35.0 (95.1)	33	1.8 (4.9)	36.8
National Highway Authority	72	305.0 (95.4)	13	14.7 (4.6)	319.7
PEPCO	154	239.2 (96.3)	34	9.2 (3.7)	248.4
WAPDA (Hydel)	16	127.9 (99.0)	2	1.3	129.2

* Only these with annual allocation of Rs 30 billion or more
** Share of On-Going Projects and New Projects in total allocation
Source: Planning Commission, Annual Federal PSDP, 2017-18

Unfortunately, with political pressures to placate different constituencies there continues to be a proliferation of projects. For example, the Higher Education Commission, the Ministry of Health Services and the Railway Division have allocated 26 percent, 31 percent and 22 percent respectively of their earmarked funds to new projects.

This tendency to multiply the number of projects has delayed the completion of on-going projects. As of end-June 2017, the throw forward of on-going projects is very large. For example, in the portfolio of projects with National Highway Authority (NHA) the overall throw forward is as much 74 percent of the total cost. With full implementation of the allocated PSDP in 2017-18 only 47 percent on average of the cost of on-going projects will have been incurred. A typical NHA on-going project will take almost four more years to complete. This not only delays the development impact of completed projects but also implies significant cost overruns during the execution.

The overall remaining cost of on-going projects in the Federal PSDP is Rs 6.6 trillion, while the cost of new projects is Rs 1.3 trillion. With the size of the PSDP at Rs 1 trillion, a typical project will take seven to eight years to complete. In the case of the vital project, the Diamer- Basha Dam, the cost is Rs 894 billion and the allocation is Rs 21 billion. At this rate, the Dam will take decades to complete.

The time has probably come for imposition of a moratorium on approval of new projects by the CDWP/ECNEC, except those related to water and power sectors and CPEC and for substantial pruning of new projects in other sectors. Also, a serious malpractice has emerged. A large number of unapproved projects are being allocated funds in the PSDP. This must stop.

11.4. ALLOCATION PRIORITIES

Turning to the sectoral distribution of the PSDP, a very serious problem has been identified (see Table 11.4). During 2017-18, WAPDA and PEPCO are expected to spend Rs 377.6 billion on the portfolio of projects. However, only Rs 60.9 billion have been allocated in the PSDP for these projects. The implication is that there will have to be self-financing of as much as Rs 316.7 billion. This is highly unlikely. Ultimately, borrowed funds will have to be arranged probably through the support of government guarantees. In effect, the PSDP size will be significantly larger.

Table 11.4 Allocation Priorities in the Federal PSDP

(Rs in Billion)

Priority Area	2016-17		2017-18		Growth Rate (%)
	Allocation	Share (%)	Allocation	Share (%)	
Infrastructure	469	58.6	577	57.7	23.0
Social Services	89	11.1	150	15.0	68.5
Special Areas *	42	5.2	62	6.2	47.6
Special Programs	200	25.0	211	21.1	5.5
TOTAL	800	100.0	1001	100.0	25.1

* Azad Jammu and Kashmir, Gilgit-Baltistan and FATA
Source: Planning Commission, Annual Plan, 2017-18

Investments by PEPCO in transmission and distribution are crucial for ensuring that the new generation capacity in the pipeline becomes functional. The financing strategy being adopted is risky. Instead, a substantially larger share of the costs should be financed by the PSDP. This year's allocation to the power sector has, in fact, been reduced by more than half in relation to last year.

The question that arises is how the higher allocation to the priority sector can be achieved without increasing further the size of the bloated PSDP. As highlighted earlier, this means first the deferment of implementation of new projects. Second, the Ministries / Divisions share in allocations have been increased from 35.3 percent in 2016-17 to 37.7 percent in 2017-18, as shown in Table 11.5. Simultaneously, the share of Corporations (NHA and WAPDA) has been decreased from 39.8 percent to 38 percent. This is fundamentally a move in the wrong direction. There is need for review of the PSDP allocations to raise the share of the Corporations to over 50 percent, as they are implementing high priority CPEC and other power sector projects.

Table 11.5 Allocation to Ministries/Divisions, Corporations and Special Programs, 2016-17 and 2017-18

(Rs in Billion)

	2016-17		2017-18		Growth Rate (%)
	Allocation	Share (%)	Allocation	Share (%)	
Ministries / Divisions	282.0	35.3	377.8	37.7	34.0
Corporations	318.0	39.8	380.6	38.0	19.7
Special Programs	200.0	25.0	242.6	24.3	21.3
TOTAL	800.0	100.0	1001.0	100.0	25.1

* Azad Jammu and Kashmir, Gilgit-Baltistan and FATA
Source: Planning Commission, Annual Plan, 2017-18

11.5. CPEC PROJECTS

The importance of CPEC to Pakistan cannot be overemphasized. Bulk of the projects within the ambit of CPEC is being implemented within the PSDP by Ports and Shipping and Railway Divisions and the NHA. The largest part is currently with NHA.

A detailed examination of the portfolio of CPEC projects with NHA has been undertaken, as shown in Table 11.6. Only 27 percent of the cost of these projects has been incurred up to the end of June 2017. With this year's allocation it will take almost four more years to implement a typical project. Further, less than half the financing has been arranged from China up to now for the CPEC highway projects in the Eastern and Western Corridors. This phasing is far too staggered in terms of benefiting from the multifarious development consequences of CPEC. As such, efforts should be made to increase the component of Chinese financing to enable earlier execution. Further, the Planning Commission may wish to examine the proposal of establishing an independent CPEC Authority, similar to NHA and WAPDA, to implement projects other than those related to highways.

Table 11.6 Major Projects in CPEC included in the Federal PSDP, 2017 - 18

(Rs in Billion)

Sector / Description	Cost	Throw forward	%	Allocation	Foreign Financing*	%
HIGHWAYS						
Construction of Hakla on M1	110.2	98.2	89.1	38.0	0.0	0.0
Thakot to Havelian (118 kms)	136.7	101.8	74.4	21.3	20.8	97.7
Multan – Sukkur (287 kms)	298.0	212.9	71.4	35.3	35.0	99.1
Lahore – Abdul Hakeem (230 kms)	150.6	64.8	43.2	47.0	0.0	0.0
Sukkur – Hyderabad	175.0	101.8	58.2	21.3	20.8	97.7
PORTS						
Construction of East. Bay	14.1	14.1	100.0	1.4	1.0	1.0
SUPARCO						
Pakistan Remote-Sensing Satellite	19.7	15.9	80.7	3.3	1.0	30.3
TOTAL OF ABOVE PROJECTS	904.3	609.5	67.4	167.6	78.6	46.9

Source: Planning Commission, Federal PSDP, 2017-18

11.6. SPECIAL PROGRAMS

The last issue is the size of special programs in the Federal PSDP of 2017-18. Some of these programs are in continuation of the previous year's allocations, like the special Federal Development Program, SDGs program, PM's Youth Program, funds for TDPs and security enhancement and to ERRRA. Further, some new programs have been added like the Energy for All, Clean Drinking Water

for All and special provision for CPEC projects, as shown in Table 11.7. The total expenditure on these programs in 2016-17 was Rs 72 billion. This has been raised massively to Rs 255 billion in 2017-18. Many of these Programs essentially provide a camouflage to populist spending and pork barreling. Proper mechanisms are necessary to rationalize the size of these programs, ensure spending in priority areas and avoid leakages of funds.

Table 11.7 Types of Special Programs in the Federal PSDP, 2012-13 to 2017-18

	Actual Spending 2016-17	Allocation 2017-18
Prime Minister's Global SDGs Programs	42.5	30.0
Special Federal Development Program	-	40.0
Energy for All	-	12.5
Clean Drinking Water for All	-	12.5
ERRA	10.7	7.5
Special Provision for CPEC	-	5.0
Relief and Rehabilitation of IDPs	-	45.0
Security Enhancement	14.0	45.0
PM's Initiative	5.2	20.0
GIDC Fund	0.2	25.0
TOTAL	72.6	242.5

Source: MOF, Budget in Brief, 2017-18

Overall, the Federal PSDP of 2017-18 is confronted with a number of serious issues. These include the limits to financing and implementation capacity, wrong prioritization, need for relative priority to on-going versus new projects, feasibility of adequate self-financing by Corporations in key sectors and dangers of leakages and wastages in special programs, primarily in the nature of populist spending prior to elections.

Chapter 12:

CHINA-PAKISTAN ECONOMIC CORRIDOR

12.1. INTRODUCTION

China and Pakistan have had long standing friendly ties over the last many decades. Initially, the relationship was more political and focused on security. More recently, a strong economic relationship has emerged. A Free Trade Agreement (FTA) was signed in 2006. This has led to rapid growth in bilateral trade. Today, China is Pakistan's largest trading partner. In terms of FDI, the largest inflow currently is from China, especially focused on sectors like telecommunications and power. China has also provided some semi-concessional funding, cumulatively of \$5.2 billion, for infrastructure projects, especially in the area of nuclear power generation.

Pakistan has supported China's initiatives, both international and regional. Pakistan is a member of the Shanghai Forum. More recently, Pakistan has acted as a founding Member of the Asian Infrastructure Investment Bank (AIIB), a regional development bank financially supported by China.

The China-Pakistan Economic Corridor (CPEC) represents the culmination of the broad and deep economic relationship between the two countries. It is one more manifestation of the transformation of China from a country receiving FDI to one which is aggressively pursuing investment opportunities in different regions / countries of the world.

CPEC is also part of the 'One Belt One Road' (OBOR) global initiative of China. It will contribute to the development of the Western Region (especially the Province of Sinkiang) which is currently relatively backward. More importantly, it also has a key security dimension. It will provide an alternative route to the oil resources in the Middle East, in the event the Malacca Straits is blocked to Chinese ships.

Pakistan sees CPEC as a potential '*game changer*'. It will not only lead to improvement of the transport and port (Gwadar in Balochistan) infrastructure but it will also provide large-scale financing and involvement of the private sector of China in removing the constraint of power by substantial expansion in electric

generation capacity by the end of the current decade. This will stimulate growth and promote investment, both domestic and foreign.

The objective of this Chapter is to assess the role and impact of CPEC on Pakistan's economy. Section 2 of the Chapter describes the portfolio of projects included in CPEC. Section 3 assesses the potential impact on economic growth, regional trade, exports and on the balance of payments of Pakistan over the next four to five years. Section 4 highlights some of the risks associated with CPEC in terms of implementation and any possible negative implications.

12.2. CPEC PORTFOLIO OF PROJECTS

The sectoral composition of CPEC agreed between the two Governments is given in Chart 12.1. The total size originally was \$46 billion, which is likely to be raised eventually to \$60 billion. The largest sectoral investment is in energy of \$33.8 billion and includes 17 projects, leading to an expansion of capacity of over 10,500 MW. Next in importance is the highway sector, enabling a link for China to the Arabian Sea. Total investment proposed on highway development is \$6.1 billion, involving construction/upgrading of 824 kms of roads.

Chart 12.1 Sectoral Composition of CPEC and List of Projects

Sector	Billion USD	Remarks
Energy	33.8	17 projects, 10,500 MW
Road	6.1	2 Projects, 824 KMs
Rail	3.7	2 Projects, reconstruction of 1736 KMs
Lahore Mass Transit	1.6	1 project
Gwadar Port	0.8	8 Projects
Fiber-optics	0.04	1 project
TOTAL	46.0	

Source: Planning Commission, Ministry of Planning, Development and Reform, GoP.

The railway system will also be financed to the extent of \$3.7 billion, leading to upgrading of 1736 KMs of track and for additional load carrying capacity. The Lahore Mass Transit Project (the Orange Line) has also been included by China, with special arrangements for very concessional financing.

The private and public sector component of the CPEC is given in Table 12.1. The dominant part of execution and management will be by the private sector, accounting for over 73 percent of CPEC funds. There is enormous scope between the private sectors of the two countries for developing partnerships.

Table 12.1 CPEC Component of Public and Private Sectors

Executing Agency	Sector	Amount (\$ billions)	Share (%)
Public Sector			
Federal Government	Road, Rail Gwadar Port Fiber-optics	10.6	
Provincial Government of Punjab	Mass Transit	1.6	
Private Sector		33.8	73.5
TOTAL CPEC		46.0	

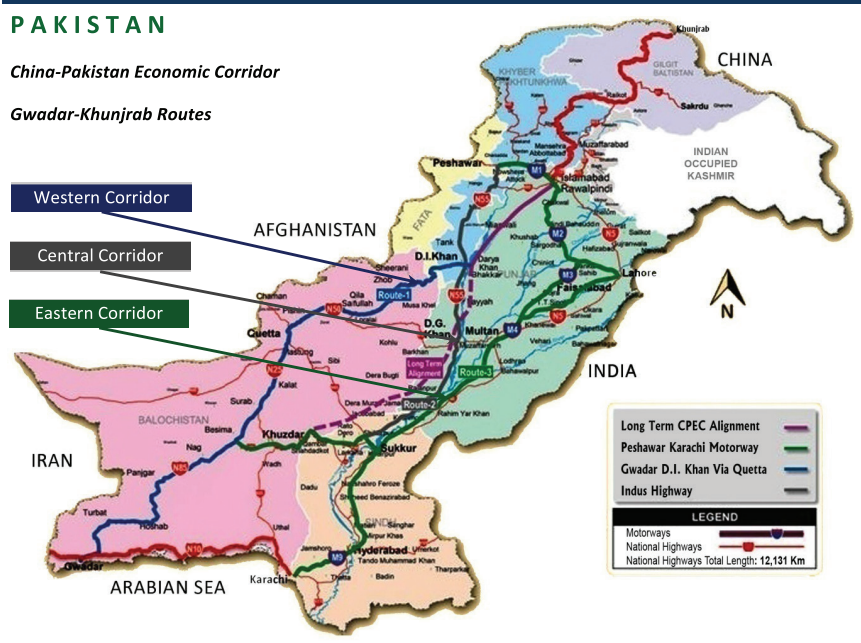
Source: Planning Commission, Ministry of Planning, Development and Reform, GoP.

A detailed description of the major projects is given below.

Highways

Three transport links are proposed with highways connecting Khunjerab with Gwadar, as shown in Chart 12.2. The first link is the Eastern Corridor, which essentially builds on the existing National Highway, from Peshawar to Karachi. A diversion is proposed at Sukkur via Khuzdar to Gwadar.

Chart 12.2 CPEC Transport Corridors



Source: NHA, Planning Wing also PC public announcement

The Western Corridor passes through a relatively underdeveloped part of the country, especially linking Peshawar with D.I. Khan in Khyber-Pakhtunkhwa, Quetta and Turbat in Balochistan on to Gwadar. The length of this proposed Corridor is significantly less than the Eastern Corridor.

In the final phase, the Central Corridor will be constructed. It will pass mostly through Punjab and link up with Balochistan. It will essentially by pass Northern Sindh.

Energy

The list of relatively large Energy Projects already identified is given in Table 12.2. Four projects are in Punjab, three in Sindh and one in Khyber-Paktunkhwa. The dominant energy source of six projects is coal, with four based on imported coal. Up to now, there is one solar project and one hydro-power project. These projects combined will have a capacity close to 9000 MW. Most projects are likely to be completed by end 2018. An additional capacity of 1500 MW is potentially in the pipeline.

Table 12.2 List of Energy Projects*

Location	Province	Capacity	Energy Source	Chinese Sponsor (Company)	Possible Date of Completion	Cost (\$ billion)
Suki Kinari	K-PK	820	Hydel	China Guerhouba	2020	1.5
Sahiwal	Punjab	1320	Coal	Shandang Royl Group	2017	1.6
Muzaffergarh	Punjab	1320	Coal	Not known yet	-	1.6
Bahawalpur	Punjab	900	Solar	Zo Energy	2016	1.3
Rahim Yar Khan	Punjab	1320	Coal	Nishat* Power	2017	1.9
Thar	Sindh	660	Coal**	SECMC	2017	0.9
Thar	Sindh	1320	Coal**	Sino-Sindh Ltd.	2017	1.9
Port Qasim	Sindh	1320	Coal	Sino Hydro	2017	1.8
Total of Above		8980				12.5
* excludes the smaller projects						
** based on indigenous coal at Thar						
Source: Planning Commission, GoP.						

The financial / physical progress of CPEC infrastructure projects already included in the Federal PSDP is given in Table 12.3. The projects are under execution since in 2015-16. They add up to about half the total allocation in CPEC. The total allocation for 2015-16 is \$929 million, out of a combined project cost of \$4902 million, representing a share of 19 percent of the execution in the first year. Progress during 2015-16 has been very slow. The releases are only 8 percent of the total allocation for the year.

Table 12.3 List of Energy Projects

(\$ million)

Sector	Sector Share	Cost of Projects in PSDP	Throw Forward	PSDP Allocation 2015-16		Total 2015-16	Releases
				Pakistan Currency	Foreign Assistance		
Roads	6,100	4,030	4,000	184.0	596.0	780.0	73.0
Rail	3,700	7	6	3.2	0	3.2	2.7
Gwadar	800	821	779	117.0	27.0	144.0	0.5
Fiber Optics	40	44	42	0.5	1.5	2.0	0
Total	10,640	4,902	4,827	304.7	624.5	929.2	76.2
Percentage							8

Source: Planning Commission PSDP 2015-16 and Planning Commission, Releases until 5 December 2015.

Financial close has taken place of Thar coal-fired 660 MW project. This is a partnership of Pakistani and Chinese sponsors. The former consists of a joint venture of the Sindh Government with five local private firms led by Engro Corp. The Chinese sponsor is SINOSURE.

The total cost is \$1.9 billion, which includes extraction of 3.8 million tons of coal from Thar and setting up the 660 MW plant. The financing is as follows:

	Amount (\$ million)
China Development Bank and Industrial and Commercial Bank of China	800
Pakistani Banks Syndicate- Habib, UBL and Alfiah	500
Equity by Sindh Sponsor	500
Chinese Contractor	100
TOTAL	1900

The agreement for financing and execution of the project was to be signed on December 21, 2015. The pre-condition was the issue of a sovereign guarantee by the Government of Pakistan by December 2015. The proposed upfront tariff, set by NEPRA, is 9.5 cents per kwh. The financing terms are as follows:

Local Bank Financing:	KIBOR + 1.7%	≈ 9%
Chinese Financing:	LIBOR + 3.3%	≈ 4% %

NEPRA assumes that the tenure of the financing is ten years. This implies that the annual amortization of the Chinese loan will be about 12% percent of the financing. This is very much in the domain of relatively high cost commercial financing.

The implementation process of two major infrastructure projects has already run into the difficulty that cost escalations are required, as follows:

		(\$ billion)		
	Projects	Original Cost	(\$ billion) Escalated Cost	% increase
1.	Multan – Sukkur Section of Eastern Corridor	3.00	3.55	18
2.	Havelian – Thakot Road	0.93	1.40	51

Apparently, the upward revision of the cost is due to bids by Chinese contractors higher than the original cost estimate presented to ECNEC for approval. This is the result of the limitation imposed under the framework agreement signed with China, according to which the bidding process is limited only to Chinese firms. The consequence of the cost escalation is a significant reduction in the economic internal rate of return of the projects.

12.3. ECONOMIC IMPACT

We assess the potential macroeconomic impact of CPEC on various dimensions of the national economy.

Growth

CPEC has the potential to raise productivity and growth from 2017 onwards, provided the projects are implemented on time and are well-managed.

However, any demand-driven expansion of the GDP as a result of project implementation is expected to be limited as increased investment may initially be offset by increased imports. Chinese contractors/companies are expected to import bulk of their required machinery and equipment mostly from China.

As opposed to this, there are likely to be major positive supply-side effects. The commissioning of power plants with combined capacity of up to 10,500 MW, starting from the end of 2017 onwards, will help greatly in removal of one of the big constraints to growth currently in the form of power outages. This cost will potentially be largely avoided. If an additional 36,000 Gwh is eventually generated by CPEC, then this will contribute to higher GDP of almost \$11 billion dollars. This will cumulatively add over 3 percent to the size of the national economy. Initially, the spurt in the growth rate of the economy may be up to two percentage points.

Employment will be generated during the construction period, although a part of the staff at the management and technical levels will be taken up by Chinese personnel. As industrial production expands initially due to more intensive utilization of existing capacity, employment will also expand, especially in labor-intensive sectors like textiles.

The availability of power is also likely to stimulate private investment. The Government proposes to establish 27 Special Economic Zones (SEZs) in close proximity to the transport corridors, with dedicated supply of electricity. A number of fiscal incentives are being offered for investment in the SEZs. These include a ten year income tax holiday and exemption of import duties on plant and machinery. Foreign investment, with at least 50 percent foreign share in the equity, is being given the special incentive of a lower corporate income tax rate of 20 percent for the lifetime of a project.

12.4. POTENTIAL IMPACTS

Balance of Payments

Bulk of the CPEC power projects are based on imported coal. This will increase the import bill significantly. The magnitude of increase will depend on the international price of coal at the time when the projects are commissioned. Currently the price is very low. This represents a fall of over 50 percent from the level in 2013. However, in the medium term, energy prices could rise significantly.

Table 12.4 presents the impact of the power component of the CPEC on the balance of payments of the country. Inclusive of repatriation of profits, this could lead to significant impact by 2018-19. The net implication could be a worsening of the balance of payments by 2018-19. The negative impact could approach \$2.7 billion. However, this may be at least partially mitigated by a jump in exports. With full implementation of CPEC the negative impact could approach \$4 billion.

Public Finances

From 2017-18 onwards, the federal PSDP will have to be expanded by at least 0.5 percent of the GDP (over Rs 180 billion) to create the '*fiscal space*' for financing of CPEC infrastructure projects. This will lead to a corresponding increase in the size of the fiscal deficit. However, the financing of the larger deficit will come mostly from external (Chinese) sources. As such, the pressure on domestic borrowing should not increase.

From 2018-19 onwards, additional tax revenues will accrue, first, from the import of fuel and on the sale of the extra power generated. This could approach Rs 75 billion (close to 0.2 percent of the GDP). In addition, the higher GDP should also translate into additional revenues of about Rs 125 billion (over 0.3 percent of the GDP). Consequently, the overall FBR tax-to-GDP ratio could rise significantly after 2017-18.

Table 12.4 Impact of CPEC on Balance of Payments (BoP)

	(\$ million)			
	2015-16	2016-17	2017-18	2018-19
INFLOW	2.5	7.0	8.5	9.0
Concessional	0.5	2.0	2.5	3.0
Commercial	2.0	5.0	6.0	6.0
OUTFLOW				
Amortization Payments on Chinese Loans	-	-0.3	-1.0	-2.0
Imports of Power Equipment	-2.0	-5.0	-6.0	-6.0
Imports of Construction and Other Equipment	-0.2	-1.0	-1.2	-1.5
Additional Fuel Import (Coal)	-	-	-0.5	-1.5
Repatriation of Profit	-	-	-0.4	-0.7
NET IMPLICATION ON THE BOP	0.3	-0.7	-0.6	-2.7

Source: Planning Commission, Ministry of Planning, Development and Reform, GoP.

Regional Development

This will depend crucially on when the West Corridor is constructed. This corridor passes through the relatively underdeveloped parts of the country. Further, the Province of Balochistan will benefit directly by development of the Gwadar Port. In addition, the Northern Areas will also see additional investment on highways. Punjab is likely to benefit more with the development of the Eastern Corridor and with the location of the majority of power projects in the Province.

Regional Trade

CPEC greatly improves the access of Chinese exports to neighbouring countries like Afghanistan, Iran and India. Pakistan will also benefit from the higher revenues from transit traffic. As already indicated, CPEC will also provide a fillip to bilateral trade among the two countries.

Overall, there are substantial benefits of CPEC. This is why it has been referred to as a 'game changer' for Pakistan and possibly for the region. However, there are a number of risks which are highlighted below.

12.5. RISKS

Stress on the Federation

The two smaller Provinces are clamoring for first priority to construction of the Western Corridor of CPEC. However, highway projects will first be implemented in the Eastern Corridor, mostly on the alignment of the existing National Highway. This will mean lower development costs. However, it will pass mostly through Punjab and northern Sindh.

The other objection which has been raised is the location of the majority of coal-fired, based on imported coal, power plants in Punjab. This increases the cost of transportation of the coal from Karachi port. However, Punjab has argued that the plants are located near the nodal centres of electricity consumption. Therefore, the location policy will reduce transmission and distribution losses.

Implementation Delays

High priority is being attached to completion of many of the infrastructure projects and power plants by 2018. However, there is the issue of adequate capacity to directly implement infrastructure projects and to support private sector investment in the power sector. This will imply the need for enhancement in capacity of institutions like the National Highway Authority. It will also be essential that there are no delays in the financial dose of power projects, so that construction work can start as planned.

Costs of Projects

Associated with the delays in implementation is the risk of escalation of capital costs of Projects. The Neelum-Jhelum and Nandipur projects are examples where cost escalations have been massive. Already, we have highlighted the rise in costs of highway projects of up to 50 percent. The monopoly power of Chinese companies, whereby bidding is restricted only to them in the case of Chinese financing, raises the likelihood of higher costs due to less competition.

Security

Another factor which could inhibit construction work is acts of terrorism in proximity to sites of projects. Fortunately, the Pakistan Army is playing an important role in the implementation of CPEC by setting up a dedicated force of military personnel to provide protection at the project locations and especially to Chinese workers.

Debt Sustainability

Prominent economists of Pakistan have raised the issue of external debt sustainability in the medium run. The total external debt could rise to \$90 billion by end of 2017-18, especially with the large borrowing from Chinese financial institutions. External repayment liabilities will begin to peak after 2017-18 because of retirement of Euro Bonds and Ijara Sukuk bonds, repayment of the IMF loan of \$6.6 billion and amortization of commercial loans from China. Special efforts will have to be made to raise exports by almost 75 percent by 2020-21 to create the requisite debt repayment capacity.

Therefore, Pakistan is entering a critical stage of development. CPEC promises to remove the key bottlenecks to faster growth. But the process of implementation of CPEC will have to be carefully managed at the micro project level and at the macro level in terms of sustainability and inclusiveness of the process of growth.

Chapter 13:

THE PRIVATIZATION PROGRAM²

Privatization of state assets provokes strong emotions. The proponents see this as a way of reducing the burden on the exchequer by transfer of loss-making public state enterprises (PSEs) and achieving efficiency gains through a private sector management less vulnerable to graft and corruption. Opponents argue that privatization could lead to the creation of monopolies, with adverse implications on employment and consumer welfare. The consequence would be a further concentration of wealth and a return to the days of large 'robber barons'. The view that is recommended by the pragmatists on this issue is that privatization should be promoted only of state companies operating in a competitive environment in industry, finance and trade, but that this process should be strictly avoided in the case of natural monopolies and of strategic assets like natural resources.

Section 1 of the Chapter describes the framework for privatization that exists currently in Pakistan. It also highlights the policy on privatization enunciated in the manifesto of the ruling party, PML (N). Section 2 reviews the history of privatization in the country and identifies the post-privatization performance in key sectors. This section also highlights the major lessons learnt.

Section 3 describes alternative models of privatization and the size and composition of the proposed Privatization Program, as agreed with the IMF in the Extended Funded Facility (EFF). Section 4 sets up the criteria for selection of units and modalities for privatization. These criteria are then applied to the units included in the Program. The projected impacts of the proposed privatization process on key variables like production, employment, public finances, balance of payments, inflation, etc., are identified in the Section 5. Finally, the key conclusions and recommendations are presented in Section 6.

2. This Chapter was originally brought out as *Policy Paper No.24* of the SPDC in 2014.

13.1. THE FRAMEWORK

13.1.1. *The Law*

Pakistan does not have a comprehensive Privatization Law like Turkey, Philippines, Algeria, Morocco, Tunisia, Jordan, Bulgaria and others. Instead, privatization is undertaken under the *Privatization Commission Ordinance of 2000*. It describes the structure and functions of the Privatization Commission, the financial provisions, the process of privatization, jurisdiction of the Courts, regulatory and other provisions.

The Ordinance has a key provision regarding the utilization of privatization proceeds accruing to the Federal Government. According to Section 16(2), ten percent shall be used for poverty alleviation program and ninety percent for retirement of Federal public debt.

Also, Section 5 states that the Privatization Commission must advise the Federal Government that monopolies are not created in the process of Privatization. Policy decisions are taken by the Cabinet Committee on Privatization (CCOP).

The *Constitution of Pakistan* contains an important provision which has important implications on the process of privatization. Article 173(2) states the following:

'Subject to the existing commitments and obligations, mineral oil and natural gas within a Province shall vest jointly and equally in that Province and the Federal Government.'

This may be taken as implying that any state companies in oil and gas exploration, extraction and distribution should be privatized only after formal approval in the Council of Common Interests (CCI). Further, the proceeds should be shared equally between the Federal Government and the Provincial Government (where the natural resources are located).

13.1.2. *The PML (N) Manifesto*

The policy on privatization of the Party is given in the section of the manifesto on '*State Owned Enterprises*', which is part of the first chapter on '*Economic Revival*'. The focus is on state-owned institutions like PIA, Railway, Pakistan Steel Mills, WAPDA and other institutions who are a major drag on Pakistan's economy, with losses currently of over Rs 400 billion per annum. It is proposed to reform these institutions through a combination of privatization and restructuring.

As such, after induction into power, PML (N) proposed to initiate the following actions to turn around the loss making PSEs:

- Appoint independent and professional boards who in turn will appoint competent CEOs of state enterprises. Professional competence and merit will be the only criteria for appointment of boards and CEOs.
- The immediate task of the boards and CEOs will be to manage these corporations effectively and to plug the losses.
- Assign quantifiable targets and monitor on regular basis. Performance evaluation will be carried out on regular basis to ensure accountability.
- Stop every kind of political interference in the affairs of these enterprises.
- Undertake deep-seated and urgent reforms in the relevant sub-sectors.
- Identify enterprises which need to be privatized and assign targets to the Privatization Commission to ensure completion of the privatization process within the assigned time frame.
- Operational standards will be prescribed and complete autonomy will be given to achieve them.
- PIA shall be transformed into a profitable and reputed airline of the Region.

There will be special focus on Pakistan Railways to improve its operations. It has strategic importance as well as being the favored mode of transportation for the common man and cargo carriages. A fully autonomous board will be set up to oversee the working of Railways. However, the implementation of the above reforms has been very weak over the last four years.

13.2. PAST PRIVATIZATION

13.2.1. Level and Composition

The major process of privatization started in 1991 during the tenure of the first Nawaz Sharif Government. The peak was attained in the Musharraf period, 1999 to 2008.

Altogether, 169 units have been involved in this process. The largest privatization proceeds have been from the sale of telecommunications companies, especially PTCL, with a share of 39 percent in total proceeds (see Table 13.1). Next in size is the banking and finance sector, with privatization and market sale of shares worth Rs 174 billion, representing a share of 37 percent. Major banks transferred to private owners include ABL, MCB, UBL and HBL.

Table 13.1 Privatization Proceeds 1991 - 2011

<i>(Rs in Billion)</i>					
Sectors	Number of Units	1991-1999	1999-2008	1991-2008	%
Banking and Finance*	31	5.6	168.5	174.1	36.6
Energy Sector	14	10.3	41.5	51.8	10.9
Telecom Sector	4	30.5	156.8	187.3	39.3
Industry	105	11.9	49.0	60.9	12.8
Others	15	0.5	1.7	2.2	0.5
TOTAL	169	58.8	417.5	476.3	100.0
*including capital market transactions of Rs 133.1 billion Source: Privatization Commission					

Fourteen units in the energy sector have also been privatized, yielding Rs 52 billion (share of 11 percent). This list includes KESC, NRL and KAPCO. 105 industrial units have also been privatized. This includes units in automobiles, cement, chemicals, engineering, fertilizer, ghee, food and textiles. Some of the major industrial units privatized include DG Khan Cement, Wah Cement, Mustekham Cement, Javedan Cement, Pak-Saudi Fertilizers, Pak-Arab Fertilizers and Pak American Fertilizers. Rs 61 billion have been generated from the sale of industrial units, with a share of 13 percent.

24 capital market transactions have been undertaken. This includes POL (24 million shares), OGDCL (15 percent of shares) PPL (15 percent of shares)³, UBL (19.6 percent of shares) and HBL (7.5 percent of shares). The total yield from these sales is Rs 133 billion, about 28 percent of the total proceeds.

Large revenues of Rs 418 billion were generated from privatization during the Musharraf period, equivalent to 88 percent of the cumulative proceeds since 1991, including almost \$ 6 billion of foreign exchange receipts. This represents a share of 30 percent of the total FDI and FPI combined during this period and 70 percent of the foreign exchange reserves at the time of transition in 2008 to the PPP government. Clearly, the Musharraf government used privatization as a way of promoting FDI and building up foreign exchange reserves.

13.2.2. Post-Privatization Experience

ADB [2014] has assessed the performance of 100 units after privatization in Pakistan. Only 20 units appear to be performing better than before. In the case of manufacturing, 16 out of the 38 privatized units were performing worse than in the pre-privatization period. Transparency has been weak and regulatory mechanisms ineffective and extremely politicized.

3. Including a GDR of 9.5 percent of shares.

A comparison of nationalized banks in the late 70s with privatized banks in recent years yields interesting conclusions. First, the latter are more risk-averse. Only 31 percent of the assets are in the form of credit and as much as 50 percent in government securities. As opposed to this, nationalized banks devoted 55 percent of their assets to credit and only 27 percent to investment in risk-free government treasury bills and bonds.

Second, the share of nationalized bank credit to agriculture was over 13 percent as compared to 5 percent only by the private banks currently. A credit plan at that time ensured that enough credit was allocated to priority sectors like agriculture, SMEs and exports. Third, the margin between the return on advances and on deposits was lower at about 5 percentage points in the late 70s as compared to over 7 percentage points currently. This highlights the likelihood of cartelization behavior by private banks. KESC is the only power distribution company that has been privatized. There are ten other distribution companies under PEPCO. KESC's performance compares unfavorably with PEPCO. Transmission and distribution losses are as high as 28 percent as compared to 18 percent in the latter. Billing losses are 15 percent, 5 percentage points higher than in PEPCO.

13.2.3. Lessons Learned

The above findings clearly indicate that privatization is no guarantee for improved efficiency. This depends not only on the management skills and experience of the new private strategic investor but also on the market environment and presence of effective regulatory mechanisms.

There is also a need for proper valuation and coverage of assets of the unit to be privatized. The Supreme Court stopped the privatization of PASMIC because of the lack of proper valuation of assets, especially land. In some cases, like KESC, despite a commitment, enough investment has not been made in the renovation and up gradation of assets. The full proceeds from privatization of PTCL have not yet been realization due to a dispute on the value of assets.

One of the biggest lessons is that gains from privatization hinge crucially on the presence of autonomous, effective and alert regulatory agencies, free from any political influence and with quasi-judicial powers. This will prevent monopolistic behavior or emergence of cartels and protect consumer interests.

There is a view that post-privatization banks have effectively formed a cartel and raised their margins between the rate of return on advances and deposits. Apparently, SBP has not done enough to get this margin reduced. The same suspicion about price-setting behavior applies to private cement companies.

13.3. THE PRIVATIZATION PORTFOLIO

13.3.1. Size, Modalities and Composition

The modalities that are proposed to be adopted in the privatization program are as follows:

- i) Market sale of shares
- ii) Privatize in 'as-is' condition
- iii) Restructure then privatization

The list of units in each category is given in Table 13.2 by sector.

Table 13.2 Units up for Privatization¹

Sectors	Market Sale of Shares	Privatization	Restructuring then Privatization
Energy	<ul style="list-style-type: none"> • OGDC • PPL • MPL • GHPL • Pak-Arab Refinery • KAPCO 	<ul style="list-style-type: none"> • IESCO • FESCO • HESCO • NPCC • JPCL • NPGCL 	<ul style="list-style-type: none"> • PSO • SSGC • SNGCL
Banking	<ul style="list-style-type: none"> • HBL • UBL • ABL • NBP 	<ul style="list-style-type: none"> • SME Bank 	
Finance and Insurance	<ul style="list-style-type: none"> • SLIC 	<ul style="list-style-type: none"> • NICL • NIT • PRCL 	
Industry		<ul style="list-style-type: none"> • HEC • PECO • PASMIC 	
Transport and Communications		<ul style="list-style-type: none"> • PIA • PIA Hotels • PNSC 	
Others		<ul style="list-style-type: none"> • Convention Centre, Islamabad 	
TOTAL	11	17	3

¹ Mostly in agreement with the IMF

Source: Privatization Commission.

Market sales are proposed in the case of 11 entities. These are mostly blue chip companies like OGDC, PPL, HBL, UBL, NBP, etc. Seventeen units are targeted for privatization in 'as – is' condition and three for restructuring followed by privatization.

The sectoral distribution is dominated by the energy sector, with 15 units in the privatization portfolio. The next sector in importance is banking and insurance with 9 units. Three industrial units, viz, HEC, PECO and PASMIC are targeted for privatization. Three units, namely, PIA (plus hotels) and NSC are from the transport and communications center.

The large size of the Privatization Program is indicated by the value of assets of the units in the portfolio. According to Table 13.3, the value aggregates to almost Rs 7 trillion (\$69 billion). This is why it is sometimes referred to as the potential 'sale of the century'. Of course, not all assets will be sold in one go.

Table 13.3 Key Financial Statistics of Major PSES* (as per recent information)

(Rs in million)

PSE	Total Assets	Net Profit (after Tax)	Return on Assets (%)
Energy Sector			
OGDC	414,011	90,777	21.9
PPL	347,578	42,155	12.1
Mari Gas	34,192	2,421	7.1
KAPCO	99,345	6,071	6.1
Banking Sector			
HBL	1715,271	23,027	1.3
UBL	1009,739	19,738	2.0
ABL	734,196	14,643	2.0
NBP	1371,718	5,306	0.4
Financial Sector			
SLIC	293,707	520	0.2
NICL	27,273	2,525	9.3
NIT	51,127	1,365	2.7
Transport			
PIA	192,355	-32,368	-16.8
PNSC	33042	660	2.0
Distribution			
PSO	281,308	12,557	4.5
SSGCL	173,285	2,447	1.4
SNGPL	173,325	3,044	1.8

*Data not available on PASMIC and PECO
Source: Annual Accounts / Reports

The total assets of the target PSEs are almost \$6.7 billion and net profits are close to \$1.8 billion. The market capitalization is \$35 billion, as shown in Table 13.4.

The nature of the privatization portfolio clearly indicates that the Government has moved away from restructuring and then privatization of loss-making PSEs. Only few of the 31 enterprises, namely, PIA, PASMIC and some of the units in the energy sector are loss-making. Others include some highly profitable entities like OGDC, PPL, Mari Gas, KAPCO, NICL, etc.

Table 13.4 Market Capitalization of Shares by Sector

<i>(Rs in Billion)</i>						
Sectors	June 2012	Share (%)	June 2013	Share (%)	June 2014	Share (%)
TOTAL	3518	100.0	5155 (46.5)*	100.0	7023	100.0
Oil and Gas	1158	32.9	1639 (41.5)	31.8	1965 (19.9)	28.0
Electricity	119	3.4	186 (56.3)	3.6	19.6 (5.4)	2.8
Banks	753	21.4	952 (26.4)	18.5	1509 (58.5)	21.5
Insurance	62	1.8	86 (38.7)	1.7	144 (67.4)	2.1
Financial Services	41	1.2	57 (29.0)	1.1	68 (19.3)	1.0
Total of Above Sectors	2133	60.6	2920 (36.9)	56.6	3882 (32.9)	55.3**

*Figures in brackets are growth rates | **The Government owns about 50 percent of the shares.

Source: SBP

Clearly, under the pressure of IMF, the emphasis is on quick generation of foreign exchange by market sales of profitable entities. As in the case of the policy adopted by the Musharraf government the objective is to build up foreign exchange reserves quickly and promote FPI into Pakistan. In some ways, the approach is one of 'selling family silver to repay debts'.

The structural benchmarks in the program with IMF with regard to privatization are given in Chart 13.1. The biggest action relates to the sale of 26 percent of PIA shares by end-December 2014.

Chart 13.1 Structural Benchmarks in IMF Program

- Hire three Financial Advisors for three PSEs in the capital market transactions list and three PSEs in the strategic privatization list
Date: end March 2014 **Status** **Partially Met**
- Privatize 26 percent of PIA's shares to strategic investor
Date: end December 2014 **Status** **Net Met**
- Offer the minority shares of UBL and PPL to domestic and foreign investors
Date: end June 2014 **Status** **Met**

13.3.2. Progress

Five market sales of shares, of NPCC, HBL, ABL, UBL and PPL respectively, have been completed since 2013. The total funds raised from the sales are Rs 170 billion. The foreign investment in these shares is \$1255 million. On average, these shares were oversubscribed by 224 percent.

It may be noted that the investors in the above shares have already seen significant appreciation in value of respectively, significantly higher than the cumulative inflation in the country. Clearly, the proceeds to the Government would have been greater if the sale had been deferred somewhat.

13.4. CRITERIA FOR PRIVATIZATION

13.4.1. Market Sale of Shares

The basic decision is if a share should be sold by the Government from its holding of equity in a company. The decision depends upon the factors described below. We designate the following, G_c = projected capita gain/loss in the market value of a share

$$d = \text{rate of annual dividend on a share}$$

$$= \text{projected mark-up annually on long term PIBs}$$

Then, market sale of shares owned by the Government in a company is justified if;

$$G_c + d < \tau$$

Or not justified if

$$G_c + d > \tau$$

Therefore, the decision as to whether to go in for more market sales hinges crucially on expectations of the future growth of share prices at three levels - market, sector, individual scrip. Further, in the case of shares of companies with ownership of natural resources, oil and gas, the Article 172(3), referred to earlier, becomes applicable. Therefore, the Provincial Governments will need to be involved in the decision to sell. In the event the sale does take place, then 50 percent of the proceeds will have to be reverted to them.

13.4.2. Privatization to Strategic Investor

Based on the past experience and the need to avoid the creation of monopolies, the following criteria have been identified to determine if a unit should be privatized and handed over for management to a strategic investor:

Criteria for Evaluating Case for Privatization			
S. #	Score	S. #	Score
1. Profit-Making		5. Outstanding Liabilities	
▪ If losses	1	▪ If no or small liabilities	1
▪ If small profits		▪ If large liabilities	0
▪ If large profits	0	6. Performance of Social Functions	
2. Monopoly		▪ If Social functions not performed	1
▪ If a competitive market	1	▪ If performed	0
▪ If a monopoly	0	7. Over employment	
3. Regulatory Authority		▪ If large over employment	1
▪ If presence of:		▪ If no or small over employment	0
▪ Strong Regulatory Authority	1	8. If Political Opposition / Resistance from Trade Unions / Transparency Issues	
▪ Weak Regulatory Authority	0	▪ If no	1
4. Valuation of assets		▪ If yes	0
▪ If proper and full valuation of assets	1		
▪ If not	0		

According to the above criteria, the case for privatization of a unit is strong / weak if it is making losses/high profits; if it will be in a competitive market / become a monopoly; if the relevant regulatory authority is effective / ineffective; if it is possible / not possible to fully evaluate the assets; if there are small / large outstanding liabilities; if the unit is not performing / performing basic social functions; if there is over employment / proper level of employment; and if there no is lot of political opposition or resistance from trade unions.

The combined (un-weighted) score is as follows:

Maximum Score 8

Minimum Score 0

A unit has to have a score of at least 5.5 (just over 2/3rds of the maximum score) to be considered for privatization.

These criteria are applied to the 20 units earmarked for privatization in the Statistical Appendix to the Chapter. The results are summarised in Chart 13.2.

Chart 13.2 Case for Privatization	
Yes	No
PASMIC	PIA
NSC	PIA Hotels*
NIT	PSO*
SME Bank	SSGC
HEC	SNGPL
Convention Centre	IESCO
NPCC	FESCO
JPCL	HESCO
PRCL	NICL
NPGL	PRCL
10	10
*Marginal case	

Therefore, according to the above criteria, there is a case for privatization of ten out of twenty units in the proposed privatization portfolio.

13.5. IMPACT OF PRIVATIZATION

The direction of impact of different forms of privatization is given in Chart 13.3. It is clear that the impact varies with the modality of privatization.

Chart 13.3 Impact of Different Forms of Privatization

	Market Sale of Minority Shares	Restructuring + Privatization or Privatization
Production	0	+
Employment	0	-
Fiscal	+ / -*	- / +**
Balance of Payments	+ / -	+ / -
Consumer Welfare	0	?

*Better now; worse later | **Worse now; better later | ? Not Clear

13.5.1. Market Sale of Shares

This does not lead to any change in management. As such, there is no impact on production or employment. The major short-run impact of a favorable nature is on the balance of payments and public finances. If sales lead to larger foreign investment, then there is some improvement in the reserve position, as has happened recently with the sale of ABL, UBL, HBL and PPL shares. Similarly, the proceeds from sale of shares help in the retirement of federal debt and reduce the cost of debt servicing.

However, the subsequent effects are negative. The repatriation of dividends or encashment of shares affects the balance of payments position. Also, by sale of shares the Government foregoes the future stream of dividend income. This is especially the case with sale of shares of profitable companies like PPL.

13.5.2. Privatization to a Strategic Investor

In this case if the new private management is more efficient then there could be gains in production. Also, the surplus employment could be retrenched. There could be some net losses initially if the outstanding liabilities have to be retired. For example, the loans of and guarantees issued to PIA aggregate to over Rs 300 billion. The price that these units fetch may be lower than the outstanding liabilities. However, following the privatization the Government will save the annual cost of subsidies.

The balance of payments impact depends on whether the strategic investor is a foreign entity. If this is the case, then there is more foreign investment. The impact thereafter is negative due to repatriation of profits.

Consumer welfare gains are ambiguous. If higher efficiency translates into a fall in price than consumers will benefit. As opposed to this, there is the danger of

exercise of monopoly power of formation of a cartel. The privatization of cement units in the last decade may have led to cartelization, which the CCP has not been able to break. Similarly, the SBP has been unable to prevent the increase in the margin between the returns on advances and no deposits, following the large-scale privatization of the banking sector.

Under pressure of the IMF, the Government has opted for market sale of shares of profitable companies primarily to build foreign exchange reserves, of up to \$2 billion in 2014-15. Restructuring of loss-making PSEs has taken the back seat. Only some initial steps have been taken to improve the workings of PIA and the Railway.

13.6. CONCLUSIONS AND RECOMMENDATIONS

On the basis of application of rational criteria, the paper recommends a truncated process of privatization. Market sales of shares of profitable companies with valuable assets, must generally be avoided. The shares of such companies are likely to continue appreciating in future and yield large capital gains.

Privatization to a strategic investor may be resorted to in eleven out of the twenty units included in the list for privatization. As per the manifesto of the PML-N, the focus should instead be on restructuring of loss-making PSEs.

In particular, bulk over 80 percent, of the losses is in the power sector. The Government has done little to improve efficiency in the sector by replacement and modernization of old plants and the transmission system, cutting down of billing losses, build up of arrears, etc. Given the state of the power sector, especially of low liquidity due to accumulation of circular debt, it is unlikely that any private investor would like to rapidly take over a GENCO or a DISCO.

It is extremely important that interests of employees are protected. A proper severance package must be offered. In addition, a portion of the shares being sold must be allocated to employees, either individually or collectively, subject, of course, to payment of the reservation price.

There will be need to strengthen regulatory agencies like CCP, SECP and others to ensure that no monopoly or cartel emerges post-privatization. Also, to the extent that units to be privatized are performing social functions, then these should continue after privatization, possibly with a subsidy from the Government.

The nature of the Government, which is seen as business-friendly, requires even more that transparency of transactions be fully preserved. The development of a business – political nexus must be avoided. Members of the Privatization Commission have to be careful about any conflict of interest.

The Privatization Program must be handled carefully and with concern for different stakeholders. It should not degenerate into a desperate rush for selling ‘family silver’ to acquire foreign exchange, as happened in the earlier years of the Musharraf years. Instead, if proper restructuring of major national enterprises takes place then the benefits to the economy and to the people in general will be substantially enhanced.

Table S -1 Application of Criteria for Evaluation of Case for Privatization

Criteria	PIA	PIA Hotel	PASMIC	NSC	PSO	SSGC/SNGPL	NIT
Profit Making	1	0	1	“	0	“	“
Monopoly	1	1	1	1	1	0	1
Regulatory Authority	“	1	1	1	0	0	1
Valuation of Assets	0	0	0	1	1	1	1
Liabilities	0	1	0	1	1	1	1
Social Functions	0	1	1	1	0	0	1
Over employment	1	1	1	1	1	1	1
Political Opposition/ Resistance by Unions/ Transparency Issues	0	0	“	1	1	1	1
TOTAL	3“	5	5“	7“	5	4“	7“
%	44	63	69	94	63	56	94
Privatization (Yes/No)	No	No / Yes*	Yes	Yes	No / Yes*	No	Yes
*marginal cases							

Table S -2 Application of Criteria for Evaluation of Case for Privatization

Criteria	IESCO/ FESCO	HESCO	NPGL	NPCC	JPCL	PRCL	SME Bank	NICL	HEC	PECO	Convention Centre
Profit Making	1	1	1	1	1	0	1	0	1	“	1
Monopoly	0	0	1	1	1	0	1	0	1	1	1
Regulatory Authority	1	1	“	0	“	0	1	0	1	1	0
Valuation of Assets	0	0	1	1	1	1	1	“	1	1	1
Liabilities	0	0	0	0	0	1	0	1	0	0	0
Social Functions	0	0	1	1	1	“	0	1	1	1	1
Over employment	1	1	1	1	1	1	1	1	0	0	1
Political Opposition/ Resistance by Unions/ Transparency Issues	0	1	1	1	1	1	1	1	1	1	1
TOTAL	3	4	6.5	6.0	6.5	4.5	6	4.5	6	5.5	6
%	38	50	81	75	81	56	75	56	75	69	75
Privatization (Yes/No)	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Chapter 14:

OUTLOOK FOR INVESTMENT

14.1. OUTLOOK FOR 2017-18

The Annual Plan approved by the NEF has targeted for an increase in the overall rate of investment from 15.8 percent of the GDP in 2016-17 to 17.2 percent of the GDP in 2017-18. The national, Federal and Provincial Governments combined. Public Sector Development Program (PSDP) has been raised substantially by 33 percent to Rs 2101 billion. This implies a jump in public investment by over 0.8 percent of the GDP and in private investment of 0.6 percent of the GDP. Both are ambitious targets.

The Government's expectation is that the process of increase in investment will be led by larger outlays on CPEC projects, both on infrastructure and on power generation projects. Simultaneously, the SBP is optimistic about keeping interest rates low, in the presence of limited inflation, and of making substantial credit available to the private sector. These favorable factors should stimulate private investment.

The allocation of funds from the Federal PSDP for CPEC infrastructure projects is Rs 180 billion out of the total development program size of Rs 1001 billion in 2017-18. Most of these projects are in the highways and ports and shipping sectors. In the first quarter of 2017-18 the National Highway Authority has received 17 percent of its annual allocation of Rs 326 billion. However, only 3 percent of the funds committed to the Ports and Shipping Division have been released. Does this mean that there will be a major delay in the development of Gwadar Port?

Turning to the power sector investment, perhaps the best indicator is the level of import of power generating machinery. According to the PBS the import of such machinery has actually fallen by 19 percent while the SBP reports an even bigger decline of 45 percent. Although the period of observation is only the first two months of 2017-18, this is the first indication that all is not well with expansion of capacity of the power sector. Hopefully, CPEC projects will pick up momentum in coming months.

There are other issues with regard to the attainable level of public investment in 2017-18. The first relates to the feasibility of achieving the 33 percent jump in the size of the national PSDP. There are constraints both of financing and implementation capacity. Already, in the first quarter the fiscal deficit has exceeded 1.5 percent of the GDP. If this trend persists, then the deficit could substantially exceed the annual target of 4.1 percent of the GDP.

The Federal Government, in particular, has the option of letting the fiscal deficit rise to almost 6 percent of the GDP or cutback significantly the size of the PSDP, to limit the deviation from the deficit target. At this stage, it appears that the more likely prospect is that the special programs of pork barreling will received their full allocations as 2017-18 is the election year. There may be some cutback in allocations to various Ministries. However, the Planning Commission must try to ensure full releases and their utilization in the case of CPEC projects and projects in the high priority water and power sectors.

Private investment is also subject to considerable uncertainty. The investment climate has been adversely affected by the on-going political quagmire which has largely neutralized the improvement in the security environment. A pre-requisite for higher investment by the private sector is political stability and of policies which promote investment..

Traditionally, the private sector of Pakistan has invested primarily in four sectors, viz., agriculture, large-scale manufacturing, transport and communications and housing. The combined share of these sectors in total private investment is almost 80 percent.

Investment in agriculture ought to have risen sharply following the implementation of the relief package and enhancement in credit by over 30 percent. It is disappointing to note that the increase in investment was only 4 percent in 2016-17. In the case of transport and communications it was 1 percent and in housing, 4 percent.

Investment in large-scale manufacturing is vital from the viewpoint not only of expansion of capacity but also for the adoption of new technologies for higher efficiency and competitiveness. The structural problems with Pakistan's industry today are vividly highlighted in the big retreat of investors from this sector.

As far back as 1999-2000, private investment in manufacturing was above 3 percent of the GDP. Last year, it was down to 1.5 percent of the GDP. Given declining exports and substantial excess capacity the level of investment in textiles, in particular, has also fallen sharply. The peak was obtained in 2004-05 when almost one billion dollars of textile machinery was imported. By 2016-17, it had fallen to \$652 million.

There is a need for providing more fiscal incentives for investment. First, the accelerated depreciation allowance must be brought back to 50 percent from the reduced rate of 25 percent. Second, the tax credit for balancing, modernization and replacement must also be doubled.

The SBP is optimistic about providing significantly higher credit to the private sector at low interest rates this year. Last year, it was increased by as much as 67 percent, but private investment rose by only 7 percent. In fact, as a percentage of the GDP it fell from 10.2 percent to 9.9 percent of the GDP.

There is also the high probability that credit to the private sector may not expand as rapidly as anticipated by SBP. As the year progresses and the fiscal deficit rises exponentially, the Government may be compelled to seek a large amount of borrowing from commercial banks. Already, Rs 220 billion has been borrowed from these banks in the first quarter as compared to a retirement of Rs 260 billion of debt last year in the corresponding period. Inevitably, the private sector may be 'crowded out' from credit by commercial banks in the latter part of 2017-18.

Overall, the prospects for total investment in 2017-18 are of a mixed nature. Public investment is likely to rise sharply, especially on special programs of a political nature. The Planning Commission must ensure that due priority is given to CPEC infrastructure projects and to projects in the water and power sectors.

Private investment is unlikely to show limited growth especially given the prevailing uncertainty on the political front. One positive factor could be expanded supply of electricity. However, this should be forthcoming at lower tariffs.

Overall, the forecast for the overall rate of investment in 2017-18 is 16 percent of the GDP, somewhat above last year's level but much below the target. Pakistan will continue to have an investment level which is only half that attained by India and Bangladesh.

14.2. MEDIUM TERM OUTLOOK

The earlier Chapter on Outlook for Growth has highlighted that they very large and growing current account and fiscal deficits will necessitate a reversion back to the path of stability away from the achievement of a higher GDP growth. This reversion of strategy also has basic implications for the medium-term outlook for investment.

The resort to stabilization policies implies, first, that there will not be enough '*fiscal space*' for raising significantly the level of public investment as a percentage of the GDP. The federal PSDP will have to be better prioritized. CPEC and other major physical infrastructure projects should receive the highest priority, as

expenditures on many of these projects will reach their peak levels in the next few years. Simultaneously, allocations to other sectors will have to be cut back.

Second, prospects for private investment are mixed. On the one hand, removal of the demand-supply gap of electricity will be a major positive factor. On the other hand, stabilization of the economy will imply higher real interest rates, higher prices of imported machinery due to depreciation of the rupee and limited availability of credit from the commercial banks for the private sector.

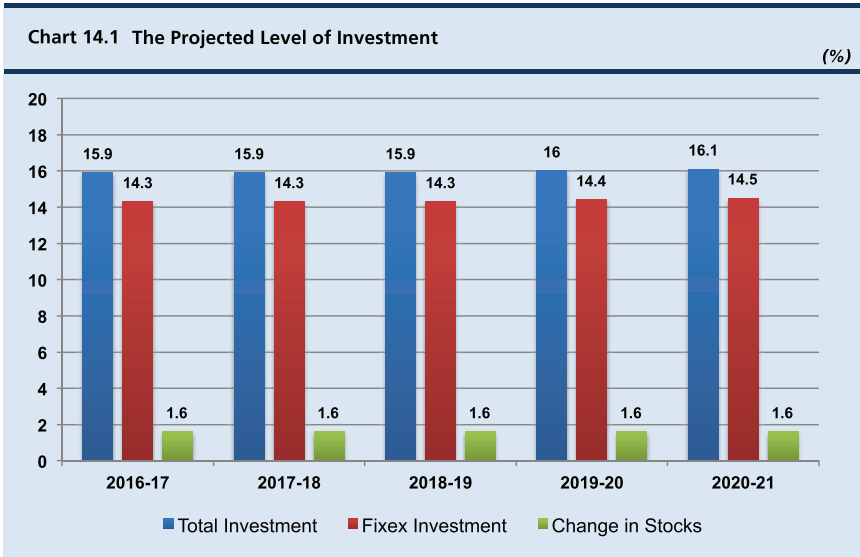
Overall, the medium-run prospect for the overall rate of investment is for little increase in relation to the GDP. The composition will change somewhat in favor of the public sector, as shown in Table 14.1.

Table 14.1 The Projected Level of Investment

(% of GDP)

	2016-17	2017-18	2018-19	2019-20	2020-21
Total Investment	15.9	15.9	16.9	16.0	16.1
Fixed Investment	14.3	14.3	14.3	14.4	14.5
Public Investment	4.3	4.4	4.5	4.6	5.8
Private Investment	10.0	9.9	9.8	9.8	9.8
Change in Stocks	1.6	1.6	1.6	1.6	1.6

Source: Author's Estimates



SECTION 6
EMPLOYMENT

Chapter 15:

THE EMPLOYMENT SITUATION

15.1. STATE OF THE LABOR MARKET

The Pakistan Bureau of Statistics has released recently the findings of the latest Labor Force Survey of 2014-15. The Bureau must be complimented for undertaking this Survey, more or less, annually and publishing the findings quickly. This enables timely monitoring of the employment situation in the country.

Thirty three such surveys have been carried out by PBS. The coverage is nationwide. The sample size was 42,108 households in the 2014-15 survey. Information is provided on the level and characteristics of the labor force and employment, the level of unemployment, the number of hours daily, the occupational distribution and wages.

Between 2012-13 and 2014-15 the number of jobs created was 1.4 million. Accordingly, the decrease in the number of unemployed workers was 100,000. As such, by the end of 2014-15, the number of unemployed workers was 3.6 million. However, if the number of discouraged workers is included and the normal increase in labor force allowed for, the total number of unemployment rises to 5.3 million.

The reported unemployment rate is just under 6 percent. Apparently, it has fallen slightly from the level in 2012-13. However, if appropriate adjustment is made the unemployment rate rises to 8.5 percent in 2014-15. This is the highest rate of unemployment in the last thirteen years.

A worrying feature of the current unemployment situation is that the employment rate among literate workers is more than twice that among illiterate workers. In fact, the highest rate of unemployment rate, three times above the national average, is observed in the case of highly educated workers with either degree of post-graduate qualifications.

Similarly, the unemployment rate among female and young workers is also relatively high. There is little difference in the unemployment rate between urban and rural areas of the country. After 2012-13, the unemployment rate has

improved the most in Khyber-Pakhtunkhwa. However, employment growth has been the fastest in Punjab.

Significantly changes have occurred in the sectoral distribution of employment. Employment has fallen somewhat in agriculture. The positive finding is that almost two-thirds of the new jobs created during the last two years have been in the manufacturing sector. Only one-third of the additional jobs are in the services sectors, which largely fall in the informal economy. The prospect of finding '*decent work*' is much higher in the formal sector. Currently, about 27 percent of the workers are engaged in the formal sector.

An important development is the trend towards increased labor force participation rate of women in Pakistan, which is currently one of the lowest in the world. It has risen significantly after 2008-09 by almost three percentage points, to reach 22 percent. Meanwhile, the labor force participation rate for males has actually fallen by 1.5 percentage points.

What is the trend in real wages? Between 2008-09 and 2014-15, real wages have increased for technicians and professionals, while that for unskilled workers have fallen. The skill premium is rising in the economy. Beyond a point, this could become a source of greater inequality. There has also unfortunately been some increase in the gender wage differential for similar skills in the last six years.

In the context of the employment situation, one disturbing feature is the number of 'idle' young males, which is very large and exceeds 4 million. They are perhaps more vulnerable to crime and / or militancy. It is unfortunate that the Youth Employment Programs launched by the Government have not been so successful in enabling productive engagement in the labor force.

The overall message is that both positive and negative developments are observed in the labor market of Pakistan. For a sustainable unemployment-reducing situation to develop, the growth rate of the GDP will have to rise to over 6 percent. Simultaneously, the State and the private sector will both have to invest more in improving the skill endowment of the labor force.

15.2. PROBLEM AREAS

15.2.1. Bonded Labor

Bonded labor in Pakistan arises primarily due to non-repayment of debt. A laborer becomes bonded when his or her labor is demanded in repayment for a loan. This is known as *peshgi* in Pakistan. The worker is then forced to work for little or no wage, often for seven days a week.

The bonded worker essentially forfeits his/her right to choice of employment, right to move freely and the right to sell his/her labor at market value. Additionally, bonded laborers are routinely threatened and subjected to all kinds of physical abuse by employers.

Bonded labor is present in some sectors of the economy of Pakistan, most notably in agriculture, brick kilns, carpet weaving, fisheries, and mining. No reliable statistics exist of the number of bonded worker. However, *ILO estimates that the number of bonded workers in Pakistan is in excess of 2 million.*

15.2.2. Child Labor

Convention on Minimum Age, 1973 deals with child workers, aged up to 15 years. *In 2012-13 the number of child workers in the labor force was almost 2.7 million, over 11 percent of the children in the age group of 10-14 years. The number has declined by 48 percent to 1.4 million by 2014-15.*

87 percent of the child workers are resident in the rural areas and the remainder, 13 percent in the urban areas. 56 percent are male and 44 percent female.

The key indicators of problems in the labor market are highlighted in Chart 15.1. These include the incidence of child and bonded labor; gender inequality in the labor market; workers earning less than the minimum wage; extent of prevalence of 'decent work'; spread of collective bargaining and level of labor productivity.

Table 15.1 Incidence of Child Workers

	2003-04	2008-09	2012-13
Population	148159	169996	184349
% of Population aged 10-14 years	12.82	13.28	12.79
Number of Children aged 10-14 years	18993	22575	23578
Labor Force Participation Rate (%)	12.80	13.08	11.40
Number of Child Workers	2431	2953	2688

Source: LFS

Chart 15.1 Key Indicators of Problems in the Labor Market

Bonded Labor
▪ Prevalence of Bonded Labor
Child Labor
▪ Prevalence of Child Labor by Sector
Access / Gender
▪ Incidence of Women in Marginal Occupations
▪ Employment Distribution by Sex by Sector
▪ Incidence of Women who are Unpaid Family Workers
Wages
▪ Incidence of Workers with wages below the Minimum Wage
▪ Wage Differential by Sex
▪ Trend in Real Wages
▪ Wage Differentials by Occupation
'Decent' Work
▪ Share of Workers in the Informal Sector
▪ Share of 'Overworked' Workers (> 50 hours a week)
▪ Share of Part Time Workers (< 35 hours a week)
▪ Distribution of Workers by Employment Status
Labor Productivity
▪ Trend in Labor Productivity by Sector
Collective Bargaining
▪ Extent of Trade Unionization of Workers
▪ Incidence of Industrial Disputes
Safety
▪ Incidence of Work Related diseases/injury
Unemployment
▪ Unemployment Rates by Sex by Age Group
▪ Unemployment by Level of Education

15.2.3. Female Workers

As indicated earlier, the labor force participation rate (LFPR) of females is relatively low in Pakistan, compared to other South Asian Countries. In 2012-13, the LFPR of females aged 10 years and above is just over 24 percent, less than one third of the male LFPR. *The positive development is that the female LFPR is rising.*

The distribution of employment by gender is given in Table 15.2. Overall, females account for 15 percent of the total employment. The presence of females in different sectors is generally determined by prevailing social norms and the physical nature of work.

Sectors with relatively greater presence of females include agriculture, manufacturing and community, social and personal services, especially education and health. Their presence is very limited in sectors like construction, trade and transport.

The Labor Force Survey also quantifies the number of women in marginal occupations like subsistence agriculture, own construction of one's dwelling, etc. The number is estimated at 10 million in 2012-13, with a decline of 3 percent since 2008-09. Inclusion of marginal occupations leads to a significant increase in the female LFPR.

Table 15.2 Distribution of Employment by Sex within Sectors, 2012-13

('000')

	Male	%	Female	%	Total
Number Employed	52188	85	9098	15	61277
Sectoral Distribution:	468	425	-9.2	471	10.8
Agriculture	19949	77	5873	23	25822
Manufacturing	7104	84	1378	16	8482
Construction	3699	100	-	-	3699
Wholesale and Retail Trade	8914	98	167	2	9081
Transport and Communication	3570	99	37	1	3607
Finance and Insurance	538	99	6	1	544
Community, Social and Personal Services	7911	83	1589	17	9500
Others	503	93	39	7	542

Source: LFS

Table 15.3 presents the distribution by gender of employment in different occupations. Women have an extremely limited presence of only 2 percent in high level occupations like senior officials, managers and legislators. This highlights problems of access, despite the presence of quotas in the civil service.

Table 15.3 Distribution of Employment by Sex within Occupations, 2012-13

('000')

	Male	%	Female	%	Total
Number Employed	52188	85	9098	15	61277
Legislators, Senior Officials and Managers	6896	98	168	2	7064
Professionals	1045	82	224	18	1269
Technical and Associate Professionals	2048	70	863	30	2911
Clerks	1015	97	31	3	1046
Service Workers and Sales Workers	3357	97	111	3	3468
Skilled Agricultural Workers	17241	81	4029	19	21270
Craft and Related Trades Workers	8572	86	1360	14	9932
Plant & Machine Operators & Assemblers	2378	100	19	-	100
Elementary (Unskilled) Occupations	9635	81	2285	19	11920

Source: LFS

Women have higher presence of 18 to 30 percent in three occupations, namely, professionals, technicians and associate professionals and skilled agricultural workers. *Given the rising number of highly education women in the country, the challenge is to promote upward mobility of such women. Today, almost 40 percent of the persons in Pakistan with a degree, post-graduate or Ph.D qualification are women.*

At the lower end of the labor market, a very high proportion of unpaid family workers are women. Almost 80 percent these women are engaged in agricultural activities. Since this labor input is not remunerated, despite its contribution to output, the GDP of Pakistan is understated.

We turn next to an important indicator, the differential in wages by gender. For an unbiased comparison, there is need to control for differences in sectoral and occupational distribution. Focusing on individual sectors, *women have approached men in the level of remuneration in sectors like finance and insurance, public administration and education services*, as shown in Table 15.4. These sectors are mostly part of the formal economy and there is apparently no wage/salary discrimination in a particular job.

Table 15.4 Ratio of Female to Male Wages by Sectors 2008-09 and 2012-13

	Average Wage per Month (Rs)					
	Female		Male		Ratio of Wage (%)	
	Share (%)	Wage	Share (%)	Wage	2012-13	2008-09
Agriculture	38.1	3863	8.8	7873	49.1	59.4
Manufacturing	17.5	5169	24.1	11733	44.0	39.4
Electricity, Gas	0.1	19128	1.6	24904	76.8	81.0
Construction	0.8	10454	20.4	9609	108.8	96.1
Wholesale & Retail Trade	0.5	7245	9.7	8668	83.6	74.1
Finance & Insurance	0.6	28624	1.3	22293	128.4	44.2
Public Admin & Defence	0.9	21031	7.7	21559	97.5	66.5
Education	23.8	14282	6.6	21278	67.1	114.3
Health	5.8	15894	2.0	18131	87.7	109.3
Other Services	1.4	4421	2.4	8559	51.7	49.8
Domestic Services	9.2	4329	1.3	9079	47.7	44.2
TOTAL	100.0	7869	100.0	12804	61.4	64.9

Source: LFS

Turning to wage differentials by occupation, it is surprising to find that the average remuneration of female professionals and technicians is less than 70 percent of their male counterparts (see Table 15.5). This category includes almost 30 percent of female workers. There is need for an in-depth analysis of the gender wage differential in various occupations.

Table 15.5 Ratio of Female to Male Wages by Occupation 2012-13

Occupation	Average Wage per Month (Rs)				Ratio of Wage (%)
	Female		Male		
	Share (%)	Wage	Share (%)	Wage	
Managers	0.9	34618	2.4	38113	90.8
Professionals	23.8	15051	7.1	24326	61.9
Technicians and Associate Professionals	6.1	13429	5.9	19801	67.8
Clerical Support Workers	0.8	13720	3.9	19029	72.1
Skilled Agricultural Workers	1.0	3246	1.1	9703	33.4
Service and Sales Works	1.2	9516	14.2	11052	86.1
Craft and Related Trade Workers	15.4	4563	23.2	11031	41.4
Plant and Machine Operators and Assemblers	0.4	6862	9.3	11729	58.5
Elementary Occupations	50.3	4309	32.7	8826	48.8
TOTAL	100.0	7869	100.0	12804	61.4

Source: LFS

15.2.4. Real Wages

There is conflicting evidence on the trend in real wages during the last few years. Table 15.6 presents the annual increase in real wages for skilled and unskilled workers by location in two periods, 2001 to 2008 and 2008 to 2013 respectively. A clear pattern is visible. *Real wages increased rapidly in the first period, 2001 to 2008, but have fallen significantly since 2008.* This is consistent with changing conditions in the labor market and *the slow growth in labor productivity*, as given in Table 15.8.

However, the LFS data presents a different picture. According to Table 15.7, real wages have continued to rise in most sectors of the economy. A fall is observed in only two sectors, viz., agriculture and services. The biggest increase in real wages is in public administration. This reflects the liberal policy on salary increases to government employees followed by the PPP government.

Table 15.6 Trend in Real Wages

	Annual Increase in Wages (%)			
	2001 to 2008	Growth Rate of Real Wages	2008 to 2013	Growth Rate of Real Wages
Skilled Worker 1^a				
Islamabad	15.0	6.5	8.4	-2.6
Karachi	9.8	1.3	4.0	-7.0
Lahore	10.5	2.0	5.3	-5.7
Peshawar	11.7	3.2	6.4	-4.6
Quetta	13.3	4.8	8.4	-2.6
Skilled Worker 2^b				
Islamabad	15.0	6.5	8.4	-2.6
Karachi	11.2	2.7	5.1	-5.9
Lahore	11.3	2.8	4.4	-6.6
Peshawar	12.1	3.6	7.9	-3.1
Quetta	13.3	4.8	12.9	1.9
Unskilled Worker^c				
Islamabad	14.0	5.5	11.8	0.8
Karachi	9.8	1.3	7.4	-3.6
Lahore	10.9	2.4	9.6	-1.4
Peshawar	14.6	6.1	14.9	3.9
Quetta	17.0	8.5	12.9	1.9

^aCarpenter | ^bMason
Source: Pakistan Economic Survey (PES)

Table 15.7 Wages of Employees by Sector (Rs per Month)

	2008-09	2012-13	Growth Rate of (%)	
			Nominal Wage	Real Wage
Agriculture	4349	6221	9.4	-1.6
Manufacturing	6768	11022	13.0	2.0
Wholesale & Retail Trade	5619	8656	11.4	0.4
Transport & Communications	8069	12470	11.5	0.5
Public Administration & Defense	11207	21549	17.8	6.8
Education	10424	18703	15.7	4.7
Health	9889	17412	15.2	4.2
Domestic Services	3680	6517	15.3	4.3
Other Services	6254	8197	7.0	-4.0

Source: LFS

Table 15.8 Trends in Labor Productivity

	<i>(Rs in Billion at 2005-06 prices)</i>	
	2005-06	2012-13
AGRICULTURE		
Value Added	1775.6	2152.3
Employment (million)	20.54	22.73
Labor Productivity	86446	87032
INDUSTRY		
Value Added	1616.1	2129.1
Employment (million)	9.82	12.54
Labor Productivity	164572	169786
SERVICES		
Value Added	4324.3	5945.3
Employment (million)	17.01	19.31
Labor Productivity	254221	308353
GDP		
Value Added	7716.0	10226.7
Employment (million)	47.37	56.58
Labor Productivity	162888	180748

Source: PES

15.2.5. 'Decent' Work

Decent work, according to ILO, represents opportunities for work that is productive, delivers a fair income, provides security at the workplace and social protection for families. It provides better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men.

The Informal Work Force

A large part of the labor force works in the informal sector in Pakistan. Conditions for 'decent work' are seldom satisfied in the informal sector. Wages are low and variable, the working day is characterized by long hours of work, job security is minimal and the working environment has health and other hazards. There is also little or no scope for collective bargaining.

The LFS gives the distribution of the labor force into three segments – in agriculture, formal non - agriculture and informal non – agriculture. Trends in the number of workers in the last component are presented in Table 15.9. Currently, the number of workers employed in the informal sector is 23.5 million, representing over 41 percent of the total number employed.

Table 15.9 Number of Employed Workers in the Informal Sector

	2003-04	2008-09	2012-13
	('000')		
▪ Population	148159	169996	1843349
▪ % 10 years and above	69.53	71.85	71.94
▪ Population above 10 years of age	103015	122142	132621
▪ LFRP (%)	43.74	56.66	45.70
▪ Labor Force	45059	55770 (4.36)	60608 (2.10)
▪ Unemployment Rate (%)	7.69	5.46	6.24
▪ Employed Number	41594	52724 (4.85)	56826 (1.89)
▪ % Employed in Agriculture	43.05	44.91	43.71
▪ Employment of Non-Agricultural Workers	23688	29045 (4.16)	31987 (2.44)
▪ % in informal sector	70.0	73.30	73.60
▪ Number of Workers employed in the Informal Sector	16582	21290 (5.12)	23542 (2.54)

Source: PES

The worrying trend is the fast growth in informal sector workers between 2003-04 and 2008-09 of over 5 percent annually. This was a period when the informal sector the economy grew very fast. The failure in labor absorption implies a degree of 'jobless growth' in the formal sector. Since 2008-09, employment growth in the informal sector has fallen to 2.5 percent annually.

Incidence of Work Related Injuries / Diseases

The LFS gives the incidence of work related injuries / diseases, during the last twelve months prior to the Survey. *The incidence of injuries/diseases is relatively high and growing* (see Table 15.10). Over 4 percent of the workers have been affected in 2012-13. The incidence is almost twice in the case of male workers. The highest number of injuries / diseases is in agricultural work and among self-employed workers.

Table 15.10 Incidence* of Injuries / Diseases Work Related – 2012-13

	2008-09	2012-13
PAKISTAN	2.71	4.02
Male	3.15	4.52
Female	1.09	2.28
DISTRIBUTION BY SECTOR		
Agriculture	50.43	49.15
Manufacturing	13.96	13.32
Construction	14.54	15.24
Trade	7.54	9.20
Transport	8.14	7.03
Others		6.06
DISTRIBUTION BY OCCUPATION		
Craft and Related Workers	22.11	18.78
Agriculture	44.86	43.51
Elementary Occupations	19.83	20.92
Others		16.79
DISTRIBUTION BY EMPLOYMENT STATUS		
Self-Employed	38.87	38.80
Employee	38.36	38.12
Contributing Family Worker	22.68	22.42
Other		0.66

*in the 12 months prior to the survey

Source: LFS, PBS

'Over Worked' Workers

The share of workers working more than 49 hours a week is given in Table 5.11. *The percentage of 'overworked' workers is high, although it has been declining since 2001-02.* In 2012-13, almost 39 percent of the workers put in 49 or more hours a week. The incidence of 'overworked' workers is higher in the urban areas, among males and employers / self-employed.

Table 15.11 Share of 'Overworked' Workers (Working 49 or more hours a week)

	2001-02	2008-09	2012-13
Total	43.2	38.2	37.7
Rural	41.5	34.4	33.1
Urban	45.7	50.0	48.4
Male	47.4	43.9	45.9
Female	16.4	17.0	9.1
By Occupation			
Employer	54.9	70.3	62.4
Self Employed	53.9	54.3	51.8
Unpaid Family Worker	31.1	21.6	18.3
Employees	38.0	38.4	38.0

Source: LFS

15.2.6. Minimum Wages

The minimum wage in 2012-13 was Rs 8000 per month. According to Table 15.12, over 44 percent of the workers received less than the minimum wage. This percentage was higher in the case of females at 72 percent; among rural workers at 51 percent and in sectors like agriculture (74 percent), other services (61 percent) and domestic services (71 percent).

Table 15.12 Percentage of Employees receiving less than the Minimum Wage by Sector

	2012-13
PAKISTAN	44.5
Male	40.7
Female	72.0
Urban	37.7
Rural	50.9
SECTOR	
Agriculture	74.6
Manufacturing	47.7
Construction	47.8
Transport	34.8
Finance and Insurance	11.3
Public Admin and Defence	8.3
Education	25.4
Health	29.4
Other Services	61.3
Domestic Services	71.3

Source: LFS

15.2.7. Collective Bargaining

The trade union movement is relatively underdeveloped in Pakistan as shown in Table 15.13. Also, more recent data is not available. In 2007, there were 455 registered trade unions, according to ILO. The total membership was 441,000, with a trade union density of 1.2 percent. This compares with 32.9 percent in India, 17.9 percent in Sri Lanka and 59 percent in Turkey. The fundamental question is why the process of formation of trade unions has been so slow and retarded in Pakistan.

Table 15.13 Trade Union Membership in Selected Developing Countries

Country	Year	Number of Trade Unions	Number of Members (000)	Members per Union	Trade Union Density (%)
India	2008	9702	9573	979	32.9
Malaysia	2012	694	890	1282	9.3
Pakistan	2007	455	441	969	1.2
Philippines	2012	18428	1833	99	8.7
Sri Lanka	2011	2057	1042	506	17.9
Turkey	2008	102	3205	31420	59.0

Source: ILO

15.3. YOUTH PROGRAMS

UNESCO defines youth as persons aged between 15 and 24 years. There are accordingly 39 million youth in Pakistan today, with a population share of 21 percent. Due to the demographic bulge, their number is growing relatively fast at almost 2.6 percent, with the increase of one million annually. The share of urban based youth is 38 percent, while the remainder, 62 percent live in the rural areas. The overall labor force participation rate of youth in the country is 44 percent, 24 percent for females and 65 percent for males. Altogether, it is estimated that almost 17.5 million youth are in the labor force, representing 29 percent of the total labor force.

There have been two striking developments during the last five years. First, in the tight conditions prevailing in the labor market, there is a '*discouraged worker*' effect on male youth, whose participation in the labor force has declined significantly. In fact, there are almost four million male youth who are neither working nor studying. These '*idle*' youth constitute a potential threat to society due to their possible greater propensity towards crime and militancy.

Second, there has been, on the contrary, a sharp increase in labor force participation of female youth. A positive interpretation of this is that greater access to education and changing social values are enabling more young women to work. However, this may also be consequence of the big jump in the cost of living which is compelling families to find more than one earner.

Turning to the employment absorption of youth, this is deteriorating over the last few years as the growth rate of the economy has remained low. Today, the unemployment rate among youth is above 11 percent. A large proportion of workers have part time work or are engaged in the informal sector with low wages. This compares with the national unemployment rate of 6 percent. The number of unemployed youth exceeds two million, with 59 percent in the urban areas and 80 percent being males. The situation is worsening; with an additional 180,000 youth getting unemployed every year and new entrants have only a 60 percent chance of finding a job in the first two years.

These developments clearly justify a special program for greater integration of youth into mainstream of the economy. In addition, they have become politically more active as evinced in the last elections. They are demanding that their rights be honored. It is important that this be done if, an, '*Arab Spring*' situation is to be avoided. The Prime Minister of Pakistan has taken due notice of the concerns of youth. He has announced a number of programs to facilitate education and productive labor absorption of youth. These programs ought to be welcomed by all sections of society, given the dangers of alienation of youth.

The Prime Minister has announced a total package for youth of Rs 20 billion. The first is a program of micro interest free loans of Rs 12,000 each to 250,000 youth costing Rs 3 billion. The second is a scheme of discounted interest rate loans at 8 percent ranging from 0.5 million to 2.0 million loans each, with an annual running liability of Rs 5.0 billion. The third is a youth training scheme involving a monthly stipend of Rs 10,000 each during internship, costing annually Rs 4 billion. The fourth is a skill development scheme for jobless youth of Rs 5,000 monthly with the annual cost of Rs 0.8 billion.

The next program is for students from underprivileged areas for Masters of higher level training in the form of scholarships of Rs 40,000 per year with the cost of Rs 1.2 billion. Finally, there is the Prime Minister's Laptop Scheme for 100,000 students, costing Rs 4 billion. Therefore, the schemes are wide ranging in character and will potentially benefit almost half a million youth. Given that there are currently two million unemployed and four million 'idle' youth in the country, these schemes could have significantly benefits and visible impact over the next few years.

The issue is one of delivery capacity for six diverse programs/schemes. The Federal Government will have to work closely with the Provincial Governments, especially in the schemes relating to youth training and skill development. NGOs are the natural partners for the scheme of micro-interest free loans, especially in the rural areas.

The Higher Education Commission could be asked to operate the post-graduate scholarships program. The Government of Punjab had earlier run a laptop scheme and the Federal counterpart announced could also be managed with the partnership of other Provincial Governments. The largest scheme of small business loans at a discounted interest rate is to be operated by the National Bank of Pakistan and the First Women's Bank. With relatively large loans per youth of up to Rs 2 million, this is the scheme which is potentially most vulnerable to wrong targeting and leakages. With almost 200,000 unemployed graduate or post-graduate youth in the country, there could be a veritable stampede for these loans.

Therefore, it will be important to clearly define objective eligibility criteria and to ensure that the process of selection of beneficiaries is fair and transparent. Also, it is important that the projects financed are economically viable and repayment of these loans takes place. Otherwise, the level of bad debts of the two public financial institutions could rise significantly.

It is suggested that SMEDA, an organization set up in the earlier tenure of Mr. Nawaz Sharif and some business schools be invited to prepare a menu of feasibility studies of small projects, which pass the market test of profitability and are replicable in large numbers. Borrowers can then select mostly from this menu of projects. In addition, strong monitoring arrangements will have to be put in place to ensure proper utilization of funds made available.

Given the level of frustration among the youth of Pakistan today, it is important that all six schemes operate transparently without any intervention by influential parties in the choice of beneficiaries. Otherwise, the Prime Minister's noble intentions of reaching out to the youth may magnify the problem, not reduce it. Also, ultimately the full productive absorption of youth will hinge on the economy growing fast once again.

Chapter 16:

LABOR CONVENTIONS AND LAWS

16.1. THE GSP+ AND ADHERENCE TO CONVENTIONS

From January 1, 2014, onwards Pakistan became eligible for an EU trade program known as GSP+. This allows virtually all exports of Pakistan to enter the EU free of duty. Pakistan can now export some 6,000 tariff lines, including textiles and clothing, free of duty to the European Union's 27 member countries. Historically, Pakistan has had difficulty competing in the EU market because competitors such as Bangladesh, Sri Lanka, Turkey, Morocco, Tunisia and Mexico already enjoyed duty free access. GSP+ will provides Pakistan's industries with an edge compared to countries such as China, which does not have duty free access to the EU, and India, which has only limited concessions for apparels under the standard GSP.

The coverage of GSP+ is restricted to those countries which are considered to be vulnerable due to a lack of diversification and insufficient integration into the international trading system. These countries have to meet the following two criteria:

- i) GSP-covered imports should represent less than 2 percent of the EU's imports from all GSP beneficiaries (Pakistan's share of total GSP imports is 1.6 percent).
- ii) The seven largest GSP-covered products / sections must cover at least 75 percent of the country's total GSP-covered exports to the EU (Pakistan's seven largest GSP sections account for 94.6 percent of its total GSP-covered exports).

Even if a developing country meets the above criteria, however, its entry into GSP+ is not automatic. The country must also demonstrate that it has ratified and implemented 27 core international conventions on human and labor rights, sustainable development, and good governance.

If the GSP-covered imports exceed 2 percent of the EU's imports from all GSP beneficiaries (Pakistan's share of total GSP imports is 1.6 percent), it could lose GSP+ status when the scheme is reviewed after 3 years. Furthermore, the EU

regulations on safeguards in the textile, agriculture and fisheries sector provide that on 1st January of each year, the European Commission can remove the tariff preferences for products whose imports increase by more than 13.5 percent in quantity (by volume) as compared with the previous calendar year. However, these provisions only apply for those products whose share exceeds 6 percent of total EU imports in value.

16.2. CONDITIONS FOR ELIGIBILITY AND CONTINUATION

In addition to the vulnerability criteria discussed above, Pakistan has had to ratify 27 core international conventions and subscribe to binding commitments to implement them effectively. These are mainly UN and International Labor Organization (ILO) conventions and conventions on the environment and good governance. Examples of such conventions are the Convention on the Elimination of all Forms of Racial Discrimination, the International Convention on the Rights of the Child, the Freedom of Association and Protection of the Right to Organize Convention, and the Convention on International Trade in Endangered Species. Given below is the complete list of the required conventions.

The Government of Pakistan (GoP) has signed a 'binding undertaking' committing itself to maintaining the ratification of the 27 relevant international conventions and ensuring their effective implementation. It has also accepted, without reservation, reporting requirements and monitoring mechanisms imposed by those conventions. Finally, the GoP is committed to accepting and cooperating with the EU monitoring procedure. The EU is in the process of giving Pakistan a scorecard, which will form the basis of dialogue on GSP+ compliance.

The UN/ILO reporting systems are operational, but the EU will not limit itself to these sources. It may use information from civil society organizations and social partners that are considered to be accurate and reliable reporting sources. Detailed procedural rules have been drawn up regarding the specific roles for all contributing parties. European Commission, EU Member States, beneficiary country concerned, third parties, etc.

The EU will report on compliance every two years, with the first report to be issued by January 1, 2016 in the case of Pakistan. The report will cover the status of ratification of the relevant conventions, the compliance with any reporting obligations under those conventions, and the status of the effective implementation thereof.

GSP+ was taken away from Sri Lanka in 2010 due to non-effective implementation of certain human rights conventions. GSP concessions were also withdrawn from Belarus and Myanmar on the grounds of serious and systematic violation

of labor rights. The GSP+ preferences can be withdrawn partially or fully if the Government of Pakistan fails to meet its commitments on enforcing the required conventions. The burden of proof for compliance rests on the Government. If, after investigation, the EU is convinced that the binding commitments are not met, it can temporarily withdraw the GSP+ concessions.

The following 27 conventions have been ratified by Pakistan as pre-condition for getting the GSP+ status from EU:

- 1) Convention on the Prevention and Punishment of the Crime of Genocide (1948)
- 2) International Convention on the Elimination of All Forms of Racial Discrimination (1965)
- 3) International Convention on Civil and Political Rights (1966)
- 4) International Convention on Economic Social and Cultural Rights (1966)
- 5) Convention on the Elimination of All Forms of Discrimination Against Women (1979)
- 6) Convention Against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment (1984)
- 7) Convention on the Rights of the Child (1989)
- 8) Convention concerning Forced or Compulsory Labour, No.29 (1930)*
- 9) Convention concerning Freedom of Association and Protection of the Right to Organize, No.87 (1948)*
- 10) Convention concerning the Application of the Principles of the Right to Organize and to Bargain Collectively, No.98 (1949)*
- 11) Convention concerning Equal Remuneration of Men and Women Workers for Work for Equal Value, No.100 (1951)*
- 12) Convention concerning the Abolition of Forced Labor, No.105 (1957)*
- 13) Convention concerning Discrimination in Respect of Employment and Occupation, No.111 (1958)*
- 14) Convention concerning Minimum Age for Admission to Employment, No.138 (1973)*
- 15) Convention concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labor, No.182 (1999)*
- 16) Convention on International Trade in Endangered Species of Wild Fauna and Flora (1973)

- 17) Montreal Protocol on Substances that Deplete the Ozone Layer (1987)
- 18) Basel Convention on the Control of Trans boundary Movements of Hazardous Wastes and their disposal (1989)
- 19) Convention on Biological Diversity (1992)
- 20) The United Nations Framework Convention on Climate Change (1992)
- 21) Cartagena Protocol on Bio-safety (2000)
- 22) Stockholm Convention on persistent Organic Pollutants (2001)
- 23) Kyoto Protocol to be United Nations Framework Convention on Climate Change (1998)
- 24) United Nations Single Convention on Narcotic Drugs (1961)
- 25) United Nations Convention on Psychotropic Substances (1971)
- 26) United Nations Convention against illicit Traffic in Narcotic Drugs and Psychotropic Substances (1988)
- 27) United Nations Convention against Corruption (2004)

*Labor-related conventions.

16.3. LABOR CONVENTIONS

We describe below the key contents of the eight Labor Conventions and the labor standards that are embodied in these conventions.

16.3.1. Forced Labor Convention, 1930

The objective of this Convention is to suppress the use of forced or compulsory labor in all its forms. Forced or compulsory labor is all work or service which is exacted from a person under the menace of a penalty and for which the person has not offered himself voluntarily.

Exceptions include the following:

- a) Compulsory military service;
- b) Work or service as part of normal civic obligations;
- c) Work or service during an emergency;
- d) Community service.

The competent authority in a country will not allow forced labor for private gain. Also, the authority shall issue complete and precise regulations governing the use of forced labor.

The Annual Report that a member makes, who has ratified the Convention, shall contain information on the extent of recourse to forced labor and the purposes for which it has been used.

16.3.2. Abolition of Forced Labor Convention, 1957

This follows the 1930 Convention, described above. It contains proposals consistent with the UN Universal Declaration of Human Rights. It seeks to suppress the following forms of forced labor:

- a) As a means of political coercion or education;
- b) Mobilizing labor for economic development;
- c) As a means of labor discipline;
- d) As punishment for having participated in strikes;
- e) As a means of racial, social, national or religious discrimination.

16.3.3. Freedom of Association and Right to Organize Convention, 1948

The Convention adopts proposals concerning freedom of association and right to organize as a means of improving conditions of labor and as essential to sustained progress. It states in Article 2 that workers and employers have the right to establish and join organizations of their choosing without previous authorization. Such organizations cannot be dissolved or suspended by administrative authority. However, these organizations will respect the law of the land.

The extent to which this Convention applies to the armed forces and the police shall be determined by national laws or regulations.

16.3.4. Right to Organize and Collective Bargaining Convention, 1949

This Convention shall apply particularly to the following:

- a) make the employment of a worker subject to the condition that he will not join a union or shall relinquish trade union membership;
- b) cause the dismissal of a worker by reason of union membership.

16.3.5. Equal Remuneration Convention, 1951

This Convention adopts proposals with regard to the principle of equal remuneration for men and women workers for work of equal value.

The term *remuneration* includes the basic or minimum wage or salary and any other emoluments in cash or in kind.

This principle of equal remuneration shall be applied by means of the following:

- a) National laws or regulations;
- b) Legally established or recognized machinery for wage determination;
- c) Collective agreements between employers and workers;
- d) A combination of these various means.

16.3.6. Discrimination (Employment and Occupation) Convention, 1958

This Convention focuses on the elimination of *discrimination* in the field of employment and occupation. For purposes of this Convention, the term discrimination includes:

- a) any distinction, exclusion or preference made on the basis of race, color, sex, religion, political opinion, national extraction or social origin, which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation;
- b) such other distinction, exclusion or preference which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation as may be determined by the Member concerned after consultation with representative employers' and worker's organizations, where such exist, and with other appropriate bodies.

Any distinction, exclusion or preference in respect of a particular job based on the inherent requirements thereof shall not be deemed to be discrimination.

For the propose of this Convention the terms *employment* and *occupation* include access to vocational training, access to employment and to particular occupations, and terms and conditions of employment.

Each Member for which this Convention is in force undertakes, by methods appropriate to national conditions and practice:

- a) To seek the cooperation of employer's and worker's organizations and other appropriate bodies in promoting the acceptance and observance of the policy;
- b) To enact such legislation and to promote such educational programs as may be calculated to secure the acceptance and observance of the policy;

- c) To repeal any statutory provisions and modify any administrative instructions or practices which are inconsistent with the policy;
- d) To pursue the policy in respect of employment under the direct control of a national authority;
- e) To ensure observance of the policy in the activities of vocational guidance, vocational training and placement services under the direction of a national authority;
- f) To indicate in its annual reports on the application of the Convention the action taken in pursuance of the policy and the results secured by such action.

Any measures affecting an individual who justifiably suspected of, or engaged in, activities prejudicial to the security of the State shall not be deemed to be discrimination, provided that the individual concerned shall have the right of appeal to a competent body established in accordance with national practice.

16.3.7. Minimum Age Convention, 1973

This Convention aims at total abolition of child labor. Each member commits to a national policy designed to progressively raise the minimum age for admission to employment to a level consistent with the fullest physical and mental development of young persons.

The minimum age for wage in the Convention is at least 15 years. A Member whose economy and administrative facilities are insufficiently developed may, after consultation with the organizations of employers and workers concerned, where such exist, initially limit the scope of application of this Convention.

Each Member which avails itself of the above provisions shall specify, in a declaration appended to its ratification, the branches of economic activity or types of undertakings to which it will apply the provisions of the Convention.

The provisions of the Convention shall be applicable as a minimum to the following: mining and quarrying; manufacturing; construction; electricity, gas and water; sanitary services; transport, storage and communication; and plantations and other agricultural undertakings mainly producing for commercial purposes, but excluding family and small-scale holdings producing for local consumption and not regularly employing hired workers.

This Convention does not apply to work done by children and young persons in schools for general, vocational or technical education or in other training institutions, or to work done by persons at least 14 years of age in undertakings,

where such work is carried out in accordance with conditions prescribed by the competent authority, after consultation with the organizations of employers and workers concerned, where such exist, and is an integral part of:

- a) A course of education or training for which a school or training institution is primarily responsible;
- b) A program of training mainly or entirely in an undertaking, which program has been approved by the competent authority; or
- c) A program of guidance or orientation designed to facilitate the choice of an occupation or of a line of training.

National laws or regulations may permit the employment or work of persons 13 to 15 years of age on light work which is:

- a) Not likely to be harmful to their health or development; and
- b) Not such as to prejudice their attendance at school, their participation in vocational orientation or training programs approved by the competent authority or their capacity to benefit from the instruction received.

16.3.8. Worst Forms of Child Labor Convention, 1999

For the purposes of this Convention, the term the *worst forms of child labor* comprises:

- a) All forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom and forced or compulsory labor, including forced or compulsory recruitment of children for use in armed conflict;
- b) The use, procuring or offering of a child for prostitution, for the production of pornography or for pornographic performances;
- c) The use, procuring or offering of a child for illicit activities, in particular for the production and trafficking of drugs as defined in the relevant international treaties;
- d) Work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children.

Each member shall, after consultation with employers' and workers organizations, establish or designate appropriate mechanisms to monitor the implementation of this Convention.

16.4. LABOR LAWS IN PAKISTAN

There are a number of labor laws in Pakistan, which have been enacted either at the Federal or the Provincial level. Many of these laws pertain to the implementation of the eight international labor conventions that Pakistan has ratified. The list of labor laws is given in Chart 16.1.

Chart 16.1 Labor and Human Resource Laws

BONDED LABOUR SYSTEM (ABOLITION) ACT, 1992
COMPANIES PROFITS (WORKERS' PARTICIPATION) ACT, 1968
DISABLED PERSONS, (EMPLOYMENT AND REHABILITATION) ORDINANCE, 1981
EMPLOYEES' COST OF LIVING (RELIEF) ACT, 1973
EMPLOYMENT (RECORD OF SERVICES) ACT, 1951
EMPLOYMENT OF CHILDREN ACT, 1991
ESSENTIAL PERSONNEL (REGISTRATION) ORDINANCE, 1948
FACTORIES ACT, 1934
INDUSTRIAL STATISTICS ACT, 1942
MINIMUM WAGES ORDINANCE, 1961
PAYMENT OF WAGES ACT, 1936
PROVINCIAL EMPLOYEES' SOCIAL SECURITY ORDINANCE, 1965
EMPLOYEES SPECIAL ALLOWANCE (PAYMENT) ACT, 1988
FAIR PRICE SHOPS (FACTORIES) ORDINANCE, 1971
INDUSTRIAL RELATIONS ACT 2010
WEIGHTS AND MEASURES (INTERNATIONAL SYSTEM) ENFORCEMENT ACT, 1975
ROAD TRANSPORT WORKERS ORDINANCE, 1961
WEST PAKISTAN INDUSTRIAL AND COMMERCIAL EMPLOYMENT (STANDING ORDERS) ORDINANCE, 1968
WEST PAKISTAN MATERNITY BENEFIT ORDINANCE, 1958
WEST PAKISTAN MINIMUM WAGES FOR UNSKILLED WORKERS ORDINANCE, 1969
WEST PAKISTAN SHOPS AND ESTABLISHMENTS ORDINANCE, 1969
WORKERS CHILDREN (EDUCATION) ORDINANCE, 1972
WORKERS WELFARE FUND ORDINANCE, 1971
WORKMENS COMPENSATION ACT, 1923

We examine in the relevant laws the provisions that have been built in for enforcement mechanisms, penalties, etc.

16.4.1. Enforcement Mechanisms

Abolition of Bonded Labor: The law is titled *Bonded Labor (Abolition) Act*, 1992. The Government may confer such powers as required on the *District Coordination Officer (DCO)* to ensure that the provisions of the Act are carried out. It shall be the duty of the DCO to determine if bonded labor is being enforced in his jurisdiction.

Any person who forces bonded labor is punishable with imprisonment for a period not less than two years or more than five years, or with a fine which shall not be less than 50 thousand rupees, or with both. If a fine is recovered, payment shall be made to the bonded worker at the rate of not less than 50 rupees for each day for which bonded work as extracted for him.

A *Vigilance Committee* shall be set up at the District level, consisting of elected representatives, labor department, media, etc. The tasks of the Committee include implementation of the law and help in rehabilitation of freed bonded labor.

A Magistrate of the first class empowered in this behalf by the Provincial Government may try any offence under this Act. Any offence under this Act shall be tried summarily. The offence is cognizable and bail able.

Child Labor: The law is titled *Employment of Children Act, 1991*. A 'child' is defined as a person who has not completed his fourteenth year of age. The law prohibits employment of children in certain occupations and processes.

A Cadre of Inspectors is to be appointed to check if any establishment is violating the law. The punishment for violation of the law is imprisonment for a period not less than six months and up to two years. No court inferior to that of a Magistrate of the first class shall try any offence under this Act.

Minimum Wages: The law is titled *Minimum Wages Ordinance 1961*. The law proposes the establishment of Minimum Wages Board by a Provincial Government, with representation both from employers and workers. The Board will recommend to the Provincial Government, the minimum rates of wages for adult unskilled workers and juvenile workers employed in industrial undertakings in the Province.

Any employer who contravenes the provisions of this Act shall be punishable with imprisonment for a term which may extent to six months and a fine of Rs 500. Cases of violation will be tried by a Magistrate.

Collective Bargaining: The law is titled *Industrial Relations Act, 2010*. Section 3 of the Act provides for freedom to a worker to join a trade union and for unions to be established, except is some activities specified in Section1: Unions can apply for registration under this Act. The Government can appoint Registrars of trade unions. In the presence of competing unions, the Registrar will decide which union is the legitimate collective bargaining agent. He will also regulate unfair practices.

The law also provides for registration of Federation of Trade Unions. A number of returns have to be filed to the Registrar by a Trade Union. Shop stewards are to be appointed as a link between labor and management. There is also a provision for establishment of Workers Management Council in establishments employing fifty persons or more.

The Government may also establish Labor Courts, with the function of adjudicating on industrial disputes. Such courts will be deemed to be a Civil Courts. Further, the Government may also constitute Labor Appellate Tribunals.

A person who commits any breach of any term of any settlement shall be punished with a penalty. For the first offence, the penalty may be up to twenty thousand rupees and for any subsequent offence, up to fifty thousand rupees.

16.4.2. Assessment

The laws described above are comprehensive in character and cover key areas related to the Conventions like abolition of bonded labor, prohibition of child labor, minimum wages, establishment of trade unions and collective bargaining. An important 'missing' law is one that would ban discrimination in payment of wages, especially to women for equal work and in access to different occupations.

Special institutional arrangements have been proposed for ensuring implementation:

- i) Setting up of Vigilance Committees in the Bonded Labor (Abolition Act).
- ii) Setting up of a Cadre of Inspectors for enforcement of the Employment of Children Act.
- iii) Establishment of Minimum Wages Board in the Minimum Wages Ordinance.
- iv) Appointment of Registrars of Trade Unions and establishment of Labor Courts under the Industrial Relations Act.

There is need for a periodic third party *field survey* at the Provincial / District levels to determine if the above provisions of the laws have been honored. The assessment of the contribution made towards the attainment of objectives embodied under the Laws by the special institutional arrangements may be assessed and appropriate actions taken.

SECTION 7
REGIONAL
INEQUALITY

Chapter 17:

GROWTH OF PROVINCIAL ECONOMIES⁴

The time for formulation of Provincial Growth Strategies (PGS) has come. These strategies should form the basis for the allocation among sectors of the funds in the respective Annual Development Programs (ADPs). This role of the Provinces in promoting the growth of their respective economies has been greatly facilitated by the passage of the 18th Amendment. This Amendment has led to the abolition of the Concurrent List in the Constitution and the resultant transfer of the large number of functions in this List to the Provinces.

Unfortunately, not much is known currently about the size, composition and growth of the Provincial economies. Pakistan, unlike India, does not have a tradition of constructing and maintaining Regional Income Accounts so as to estimate and derive the trends in the Provincial Gross Domestic Products (PGDPs). This has rendered it extremely difficult to engage in meaningful planning at the Provincial level.

The Pakistan Bureau of Statistics (PBS), in coordination with the Provincial Bureaus of Statistics, should have undertaken the task of distributing the national GDP into the PGDPs on the basis of allocators for each sector. This has not happened because planning has been very much in the Federal domain under the Planning Commission, Government of Pakistan. The approach now require is a 'bottom-up' process whereby Provincial development plans are first prepared and then aggregated into the National Plan. The task for the Federal Planning Commission is to ensure that there is a consistent sectoral and macroeconomic framework to support the Provincial and Federal Plans.

The objective of this Chapter is to present estimates by sector of the PGDPs for the period, 1999-2000 to 2016-17. In the process, there is substantial deepening of the knowledge on the economy of Pakistan, especially in terms of the location of different activities.

4. This Chapter was originally prepared as a report by the Institute of Policy Reforms (IPR) in 2015. The research has since been updated and presented in this Chapter.

The Chapter is organized as follows: Section 2 describes the methodology used for constructing the regional income accounts to yield estimate of the PGDPs. Sections 3 and 4 presents the results of the application of the methodology and conclusions derived regarding the relative size, composition and growth of the four Provincial economies. Section 5 quotes or constructs other indicators of regional growth to judge the consistency of the PGDP estimates. Section 6 asks the question as to whether regional inequality has been increasing or decreasing in Pakistan over the last fifteen years? Section 7 identifies the sub-sectors which can act as potential drivers of growth in each Province. Finally, in Section 8 are presented a summary of the major findings and recommendations.

17.1. METHODOLOGY FOR ESTIMATION OF THE PGDPs

The methodology essentially involves the identification of appropriate regional allocators of the value added in different sectors/ sub-sectors. The choice depends also on the availability of data. There are three possible approaches including estimation of factor incomes, output or expenditure.

Table 17.1 gives the allocator used for each sub-sector. The total number of sub-sectors is 17. The factor income approach has been adopted for four sectors, the output method for seven sectors and the expenditure approach for the remaining six sub-sectors. Eight sources of data have been used.

On a long-term basis, over a period of 27 years from 1972-73 to 1999-2000, three Provincial economies of Punjab, Sindh and Khyber-Pakhtunkhwa have grown at virtually the same rate of close to 5 percent. The only Province which has shown a significantly lower growth rate is Balochistan.

There is also another pattern in terms of the impact of business cycles. When the economy is growing fast, as in the Zia ul Haq period, Sindh performs relatively well. In low growth periods, as from 1973 to 1977, Punjab manages a somewhat higher growth rate. The question is whether these patterns are also observed in the more recent period?

Table 17.1 Regional Allocators for Different Sectors/Sub - Sectors

Sector/Sub-Sector	Allocator	Data Sources*
AGRICULTURE		
Major Crops	Share in Output of major crops	PDS, ASYB
Minor Crops	Share in Output of minor crops	PDS, ASYB
Livestock	Share in Consumption Expenditure	HIES
Forestry	Share in Expenditure on Forest Products	HIES
Fishing	Share in Output	PDS, ASYB
INDUSTRY		
Mining and Quarrying	Share in Output of Crude Oil, Natural Gas and Coal	PDS, EYB
Large-Scale Manufacturing	Share in Output of 100 industries	PDS, PES ^a
Small-Scale Manufacturing	Share in Informal Sector Employment in Manufacturing	LFS
Slaughter	Share in Consumption Expenditure on Livestock Products (excluding milk)	HIES
Electricity, Gas and Water	Shares in electricity generation, electricity consumption, gas consumption and canal water withdrawal	PDS, EYB, ASYB
Construction	Income-Adjusted Share in Employment	HIES, LFS
SERVICES		
Transport, Storage and Communications	Shares in Consumption of POL and number of cellular phone subscribers	OCAC, PTA
Wholesale, and Retail Trade, Hotels and Restaurants	Share in trade margins in marketing of goods and in employment in hotels and restaurants	HIES, LFS
Finance and Insurance	Share in bank advances	SBP
Ownership of Dwellings	Share in actual and imputed rents	HIES
Public Administration and Defense	Income-Adjusted share in employment	HIES, LFS
Community, Social and Personal Services	Income-Adjusted share in employment	HIES, LFS
data was only available for selected industries, for other industries data was obtained directly from the Punjab Bureau of Statistics and Pakistan Bureau of Statistics		
*Punjab Development Statistics, ASYB=Agricultural Statistics Year Book, HIES=Household Integrated Economic Survey, LFS=Labor Force Survey, OCAC=Oil Companies Advisory Committee, PTA=Pakistan Telecommunication Authority, SBP=State Bank of Pakistan, EYB=Energy Yearbook		

Table 17.2 Annual Growth Rate of the Provincial Economies in Different Epochs

	1973-77 (Bhutto)	1977-88 (Zia ul Haq)	1988-1999 (BB + NS)	1973-1999 (%)
Punjab	3.2	6.0	4.4	4.9
Sindh	1.9	7.0	4.1	5.0
Khyber-Pakhtunkhwa	1.1	7.0	4.3	5.0
Baluchistan	2.5	4.9	4.6	4.4
Pakistan	2.5	6.4	4.5	4.9
BB = Benazir Bhutto, NS = Nawaz Sharif Source: SPDC, Working Paper No.5, 2005.				

17.2. SIZE AND GROWTH OF PROVINCES

The respective size of the Provinces in the initial year, 1999-2000, and in the latest year, 2016-17, is given in Table 17.3. As expected, Punjab is the largest provincial economy with a share of just over 54 percent in 2014-15. However, the share of this Province has fallen somewhat since 1999-2000.

The next economy is that of Sindh with a share of 30 percent in 2014-15. There has been a modest increase in the share of this Province since 1999-2000. The economy of Khyber-Pakhtunkhwa has a share in the national economy of 13 percent. It has increased its share significantly since 1999-2000. Balochistan is by far the smallest province, with a declining share.

Table 17.3 Size of the Provincial Economies

<i>(at constant prices of 2005-06, Billion Rs)</i>				
	1999-2000	Share (%)	2016-17	Share (%)
Punjab	3147.7	55.3	6320.4	54.0
Sindh	1686.7	29.6	3522.1	30.1
Khyber-Pakhtunkhwa	644.2	11.3	1523.4	13.0
Baluchistan	214.5	3.8	343.0	2.9
Pakistan	5693.1	100.0	11708.9	100.0

Source: Estimated

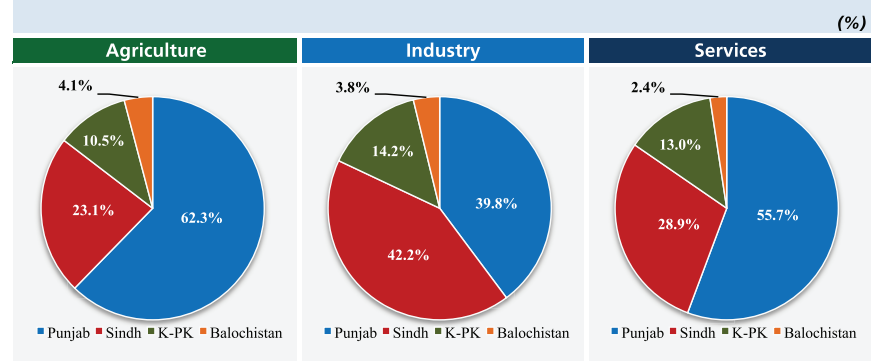
Table 17.4 Share of the Provinces in the National Economy by Sector* - 2016-17

	Agriculture	Industry	Services
Punjab	62.3	39.8	55.7
Sindh	23.1	42.2	28.9
Khyber-Pakhtunkhwa	10.5	14.2	13.0
Baluchistan	4.1	3.8	2.4
Pakistan	100.0	100.0	100.0

*Sub-sectoral estimates can be made available by IPR on request.
Source: Estimated

Table 17.4 presents the sectoral distribution of value added among the Provinces. Punjab dominates in agriculture, with a share of over 62 percent. It is significant that the industrial sector of Sindh, with a share of 42 percent, is even larger than that of Punjab. In services, the ranking of size is the same as in agriculture. The shares have been depicted in Chart 17.1.

Chart 17.1 Share of the Provinces in the National Economy by Sector* 2016-17



Turning to the growth rates of the Provincial economies, these have been derived for three periods, as follows:

Musharraf Period:	1999-2000 to 2007-08
PPP Period:	2008-09 to 2012-13
PML(N) Period:	2013-14 to 2016-17

Table 17.5 presents the Provincial growth rates in the above periods. The performance of the four regional economies is also visually presented in Chart 17.2.

Table 17.5 Annual Growth Rates of the Provincial Economies in Different Periods

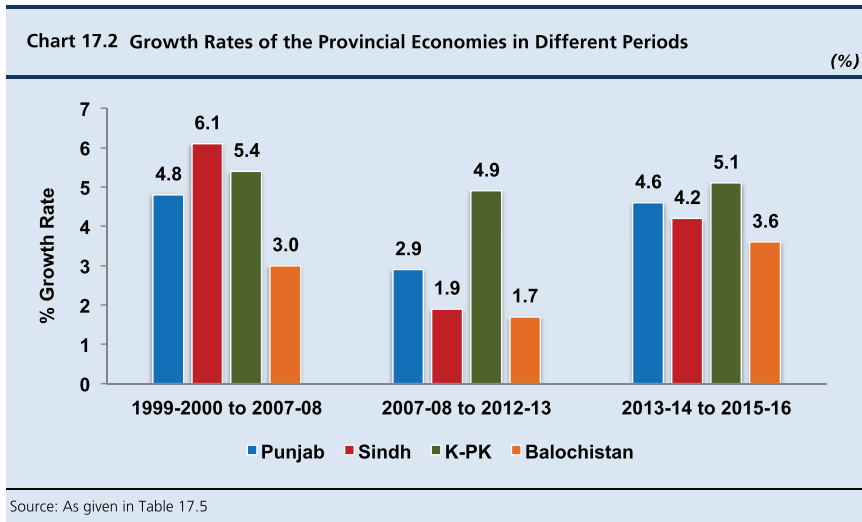
	1999-2000 to 2007-08	2008-09 to 2012-13	2013-14 and 2016-17	1999-2000 to 2016-17
Punjab	4.8	2.9	4.6	4.2
Sindh	6.1	1.9	4.2	4.4
Khyber-Pakhtunkhwa	5.4	4.9	5.1	5.2
Baluchistan	3.0	1.7	3.6	2.8
Pakistan	5.6	2.8	4.5	4.5

(%)

Source: Estimated on the basis of GDP growth rate annually in PES, which are overstated in recent years.

As highlighted earlier, during the Musharraf period, the economy achieved relatively fast rates of growth. Sindh was the best performing economy with a growth rate in excess of 6 percent. In the slow growth period of the PPP Government, the growth rate of Sindh's economy plummeted to below 2 percent, with some recovery in the last two years. This is consistent with the earlier finding that the performance of Sindh fluctuates more with the business cycle. The economy of Punjab has maintained an intermediate growth rate. In the Musharraf period, its growth rate was below that for the national economy. It has since shown somewhat higher growth than the rest of the country.

The real surprise is the dynamism of the economy of Khyber-Pakhtunkhwa. It has maintained a growth rate close to 5 percent throughout the fifteen years and achieved the highest growth rate since 2007-08. Explanations for this performance are offered in the subsequent section. Hitherto, there has been the common perception that the economy of Khyber-Pakhtunkhwa is the most adversely affected region by the war on terror.



Balochistan has been a straggler, with a growth rate, which has not exceeded 3 percent at any time during the last fifteen years. This is one of the really worrying features of the growth process since 1999-2000. The people of Balochistan are probably suffering today from a greater sense of deprivation and exclusion.

A detailed description of the growth performance of each economy is given in the following section.

17.3. GROWTH PERFORMANCE OF INDIVIDUAL PROVINCES

17.3.1. Punjab

The sectoral value added estimates are presented for Punjab in Table 17.6. The dominance of agriculture is the most pronounced in Punjab. The latest estimate of the share of this sector in the Provincial economy is over 24 percent, as compared to 20 percent for the rest of Pakistan.

Clearly, in the presence of strong forward and backward linkages, the performance of the agricultural sector has a vital role to play in the growth process of the Province. Unfortunately, the emerging structural problem for Punjab is the loss of dynamism of agriculture. This sector grew at the rate of almost 4.5 percent in the decade of the 90s, but since then it has managed a growth rate of only about 2 percent. The fundamental problem is the lack of buoyancy in the production of major crops, as highlighted in Box 17.1. This is a reflection especially of the growing water constraint, diminishing returns to fertilizer use (especially urea) and increasing land degradation due to water logging and salinity. The cotton

crop, in particular, is more vulnerable to pest attacks. Further, floods, especially in 2010-11 and more recently, have also damaged crops.

The industrial sector of Punjab performed well in the Musharraf period, especially in textiles and other agro-based industry. The rise in the incidence of power outages after 2008 has impacted severely on industrial production. The small-scale sector has been hit badly and exports affected. The services sector also maintained a high growth rate between 1999-2000 and 2007-08. But the fall in buoyancy of the commodity producing sectors has inevitably impacted on the dynamism of this sector.

Table 17.6 Estimated PGDP OF Punjab by Sector, 1999 -2000 to 2016-17

<i>(Rs in Billion at Constant Prices of 2005-06)</i>										
SECTOR	1999-2000	Share (%)	2007-08	Share (%)	2012-13	Share (%)	2013-14	Share (%)	2016-17	Share (%)
Agriculture	994.9	31.61	1162.3 (1.96)*	25.37	1296.9 (2.22)	24.58	1347.1 (3.87)	24.45	1438.6 (2.87)	22.81
Industry	418.9	13.30	708.4 (6.79)	15.46	816.6 (2.88)	15.48	852.9 (4.44)	15.48	981.8 (3.62)	15.50
Services	1733.9	55.09	2710.7 (5.74)	59.17	3162.8 (3.13)	59.95	3308.9 (4.62)	60.06	3900.0	61.69
PGDP	3147.7	100.00	4581.4 (4.80)	100.00	5276.1 (2.86)	100.00	5508.9 (4.41)	100.00	6320.4	100.00

*Annual Compound Growth Rate
Source: Estimated

Box 17.1 THE Slowdown in Growth of Major Crops in Punjab

- Punjab accounts for 75 percent of the national value added in the major crops sector of agriculture.
- The agricultural economy of the Province performed well in the decade of the 90s. It has faltered since then as shown below:

	Share of National Output (%)	Growth Rate 90s	<i>(Annual Growth Rate %)</i>	
			1999-2000 to 2007-08	2007-08 to 2016-17
Wheat	77	6.6	-0.7	3.5
Rice	63	7.7	3.6	1.1
Sugarcane	67	1.7	5.1	1.3
Cotton	73	5.1	0.4	1.0

Source: PBS, Government of Punjab, PDS

17.3.2. Sindh

As highlighted above, the economy of Sindh showed exceptional dynamism in the Musharraf period. The leading sector was industry with double-digit growth rate of 10 percent as shown in Table 17.7. Currently, the economy of Sindh has the highest share of industry in its PGDP of 29 percent.

Conditions in Sindh changed fundamentally after 2008. The breakdown of law and order in the Metropolitan city of Karachi has led to a severe loss of economic momentum, from over 6 percent growth in the earlier years to below 2 percent after 2008. This implies a loss to the regional economy of almost Rs. 400 billion per annum.

Industry has actually contracted since 2008. Box 17.2 highlights the major industries, which have exhibited negative growth rates. Agriculture of Sindh has also performed poorly over the last fifteen years, with an average growth rate of less than 2 percent. The services sector, especially trade, has also been impacted by periodic closures and lack of security. The growth rate has fallen to just over 3 percent.

Table 17.7 Estimated PGDP OF Sindh by Sector, 1999 -2000 to 2014-15

(Rs in Billion at Constant Prices of 2005-06)

SECTOR	1999-2000	Share (%)	2007-08	Share (%)	2012-13	Share (%)	2013-14	Share (%)	2016-17	Share (%)
Agriculture	379.2	22.48	440.3 (1.88)*	16.23	480 (1.74)	16.09	498.4 (3.83)	16.16	532.2 (2.87)	15.11
Industry	412.9	24.48	884.6 (10.00)	32.61	864.8 (-0.45)	28.99	903.5 (4.48)	29.30	1040.0 (3.61)	29.53
Services	894.6	53.04	1387.5 (5.64)	51.15	1637.8 (3.37)	54.91	1681.9 (2.69)	54.54	1949.9 (3.66)	55.36
PGDP	1686.7	100.00	2712.4	100.00	2982.6 (1.92)	100.00	3083.8 (3.39)	100.00	3522.1 (3.52)	100.00

*Annual Compound Growth Rate
Source: Estimated

Box 17.2 Growth of Manufacturing in Sindh

- Index of Industrial Production grew at 10 percent between 1999-2000 to 2007-08.
- Some Industries showed phenomenal growth rates like sugar (24 percent); cement (17 percent); cotton fabrics (14 percent); beverages (9 percent) and vegetable ghee (8 percent).
- There was a slump in the manufacturing sector after 2007-08. Many Industries showed negative growth rates, including fertilizer (-14 percent); cars (-8 percent); POL refining (-7 percent); sugar (-5 percent); cotton yarn (-5 percent) and cotton fabrics (-1 percent).

Source: GOS, Sindh Development Statistics.

17.3.3. Khyber-Pakhtunkhwa

Contrary to expectations, Khyber-Pakhtunkhwa has performed well despite being a front-line state in the war on terror as shown in Table 17.8. The basic contributing factor is the large inflow in per capita terms of remittances, both foreign and domestic. Almost 20 percent of household income in the Province comes from remittances, as compared to less than 10 percent in Punjab and below 3 percent in Sindh and Balochistan. Consequently, it is estimated that almost 27

percent of the national home remittances flow into Khyber-Pakhtunkwa. These remittances have shown rapid growth of over 15 percent in recent years.

Table 17.8 Estimated PGDP of Khyber -Pakhtunkhwa by Sector - 1999 - 2000 to 2014-15

(Rs in Billion at Constant Prices of 2005-06)

SECTOR	1999-2000	Share (%)	2007-08	Share (%)	2012-13	Share (%)	2013-14	Share (%)	2016-17	Share (%)
Agriculture	163.1	25.32	182.5 (1.41)*	18.57	218.1 (3.63)	17.45	226.4 (3.81)	17.25	241.8 (2.87)	15.87
Industry	113	17.54	224.8 (8.97)	22.87	292.2 (5.38)	23.37	305 (4.38)	23.24	351.2 (3.64)	23.05
Services	368.1	57.14	575.7 (5.74)	58.57	739.8 (5.14)	59.18	781.2 (5.60)	59.52	930.4 (6.49)	61.08
PGDP	644.2	100.00	938.0 (5.42)	100.00	1250.1 (4.92)	100.00	1312.6 (5.00)	100.00	1522.4 (5.20)	100.00

*Annual Compound Growth Rate
Source: Estimated

Today, Khyber-Pakhtunkhwa has acquired the characteristics of a remittance-led service economy, with a limited indigenous production base. Box 17.3 gives the growth in individual services as compared to the whole country. Reasons for the high growth are also given in the Box. In 2014-15, the services sector accounted for 60 percent of the provincial economy. This is the highest share among the Provinces.

Box 17.3 Growth of Services in Khyber -Pakhtunkhwa

- The services sectors of K-PK have shown exceptional dynamism, as revealed by the following table:

Growth Rate of Services: 1999-2000 to 2016-17 (%)

Sub-Sectors	Khyber-Pakhtunkhwa	Pakistan
Transport, Storage & Communications	5.8	4.6
Wholesale and Retail Trade	4.7	4.4
Finance and Insurance	2.9	5.3
Ownership of Dwelling	6.5	4.0
Public Administration and Defence	5.8	5.8
Social and Community Services	7.0	5.9
Services Total	5.6	4.8

- Afghan transit trade and NATO supply movement have contributed to the higher growth in the transport sector. The ownership of dwellings sub-sector has achieved a high growth rate of 6.5 percent due to the investment in housing from home remittances. These inflows have also created high demand for economic and social services.

17.3.4. Balochistan

The Province of Balochistan has remained the slowest growing Province since 1999-2000. The insurgency in the Province and actions taken in response by the military has reduced investment and economic activity, and in some years the real per capita income may have actually fallen, as shown in Table 17.9.

Table 17.9 Estimated PGDP of Balochistan by Sector - 1999-2000 to 2016-17

(Rs in Billion at Constant Prices of 2005-06)

SECTOR	1999-2000	Share (%)	2007-08	Share (%)	2012-13	Share (%)	2013-14	Share (%)	2016-17	Share (%)
Agriculture	59.7	27.83	70.3 (2.06)	25.78	85.2 (3.92)	28.68	88.3 (3.64)	28.36	94.4 (2.94)	27.52
Industry	56.4	26.29	73.4 (3.35)	26.92	77.1 (0.98)	25.95	80.5 (4.40)	26.31	92.8 (3.72)	27.05
Services	98.4	45.88	128.9 (3.43)	47.28	134.7 (0.88)	45.35	137.1 (1.78)	44.81	155.8 (1.00)	45.43
PGDP	214.5	100.00	272.6 (3.04)	100.00	297.0 (1.72)	100.00	305.9 (3.00)	100.00	343.0 (2.54)	100.00

*Annual Compound Growth Rate
Source: Estimated

However, there is one side of the story of Balochistan, which has not been highlighted. The Province has had spectacular success in the production of fruits and vegetables, which have made it the fastest growing province in agriculture. Box 17.4 shows that in some products, Balochistan contributes a large share of the national output.

Box 17.4 Growth of Minor Crops in Balochistan

- The growth rate in the minor crops has been impressive since 1999-2000, at over 5 percent per annum. In 2016-17, minor crops accounted for 45 percent of total agricultural value added in Balochistan as compared to 12 percent for the country as whole.
- The share of Balochistan in national production of some minor crops and the growth rate are given below:

(Annual Growth Rate %)

Sub-Sectors	Share of National Output (%)	Balochistan	Rest of Pakistan
Tomato	40	18	3
Other Vegetables	16	11	0
Apples	81	5	-1
Apricot	93	6	-4
Grapes	98	5	0

Source: ASYB

The favorable 7th NFC Award to Balochistan is beginning to have some positive impact on the economic growth rate. From below 2 percent between 2007-08 to 2012-13, it has risen to above 2.5 percent in the last four years.

17.4. PROXY INDICATORS

17.4.1. Per Capita Household Income

This section tests for the reliability of the trends revealed by the PGDP of each Province estimated above. In specific terms, is there other evidence to support

the findings. Has Khyber-Pakhtunkhwa shown exceptional dynamism? Has Balochistan been a straggler? Did Sindh grow fast initially and has since visibly slowed down? Has Punjab performed moderately well?

The first set of data is that of per capita income from the Household Integrated Economic Survey (HIES) carried out by the PBS periodically. Table 17.10 shows the Provincial rankings in terms of per capita household income in different HIES.

Table 17. 10 Rankings of the Provinces in per Capita Income

Province	2001-02	2007-08	2015-16
Punjab	2	1	1
Sindh	1	2	2
Khyber Pakhtunkhwa	4	3	3
Balochistan	3	4	4

Source: ASYB

The findings are largely consistent with the results on rates of economic growth has moved up in the rankings, from the bottom position in 2001-02, to 3rd in 2007-08 and thereafter Punjab has ascended from second to first place. Sindh has slipped from first to second place, while Balochistan has fallen from 3rd to 4th place. Overall, there have been major changes in the ranking of the four Provinces over the last fifteen years.

17.4.2. Employment

The level and growth of employment in each Province is given in Table 17.11. This data has been extracted from the Labor Force Surveys, carried out periodically by the PBS. The indicator used to get a sense of the dynamism of a regional economy is the growth of non-agricultural employment. Agricultural employment is not considered a good indicator because of the presence of high levels of '*disguised unemployment*'.

In the first period, 1999-2000 to 2007-08, the fastest growth rate of employment of almost 4.5 percent per annum is in Sindh. This is consistent with the dynamism of the Sindh economy during these years. The surprise is the relatively slow growth of jobs in Punjab in this period.

The rise of employment in the non-agricultural sector has a very different pattern in the latter period, 2007-08 to 2012-13. The fastest growth of over 4 percent is observed in Khyber-Pakhtunkhwa, especially in the informal sector of the Province, mostly in services. There has been a visible pickup in the employment growth of Punjab. Here again, the good performance of the economy of Khyber-Pakhtunkhwa in recent years is highlighted.

Table 17.11 Growth of Employment by Sector in each Province

	2001-02	2007-08	ACGR (%)	2012-13	ACGR (%)
(Million)					
KHYBER-PAKHTUNKHWA					
Number of Employed	4.95	5.73	2.46	6.14	1.39
Agricultural	2.19	2.56	2.63	2.26	-2.46
Non-Agricultural	2.76	3.17	2.33	3.88	4.12
Formal	0.98	0.85	-2.34	0.91	1.37
Informal	1.78	2.32	4.51	2.97	5.06
BALOCHISTAN					
Number of Employed	1.74	2.13	3.42	2.48	3.09
Agricultural	0.87	1.12	4.30	1.30	3.02
Non-Agricultural	0.87	1.01	2.52	1.18	3.16
Formal	0.44	0.45	0.38	0.40	-2.33
Informal	0.43	0.56	4.50	0.78	6.85
SINDH					
Number of Employed	9.45	12.26	4.43	13.96	2.63
Agricultural	3.55	5.66	8.08	5.99	1.13
Non-Agricultural	5.90	6.60	1.89	7.97	3.84
Formal	2.82	2.29	-3.41	2.70	3.34
Informal	3.08	4.31	5.75	5.27	4.10
PUNJAB					
Number of Employed	27.03	28.97	1.16	33.43	2.91
Agricultural	11.58	12.58	1.39	14.93	3.48
Non-Agricultural	15.45	16.39	0.98	18.50	2.45
Formal	4.58	3.80	-3.06	4.30	2.50
Informal	10.87	12.59	2.48	14.20	2.43
PAKISTAN					
Number of Employed	43.17	49.09	2.16	56.01	2.67
Agricultural	18.17	21.92	3.17	24.48	2.23
Non-Agricultural	25.00	27.17	1.40	31.53	3.02
Formal	8.86	7.39	-2.98	8.32	2.40
Informal	16.14	19.78	3.45	23.21	3.24

Source: PBS, LFS

17.4.3. Other Indicators

One sensitive indicator of the underlying growth of incomes in an economy is the rate of annual increase in income tax revenues. This data has become available from the Year Books of FBR. Between 2008-09 and 2012-13, the fastest annual growth in revenues is observed in Khyber-Pakhtunkhwa of almost 18 percent. Next is Sindh with growth rate of 15 percent, followed by Punjab, Balochistan and Islamabad, of 12 to 13 percent. Yet again, the exceptional buoyancy of Khyber-Pakhtunkhwa is demonstrated.

Finally, information on the growth in value of owner-occupied housing is extracted from the HIES. Here again, the biggest rate of increase is observed in Khyber-Pakhtunkhwa of almost 20 percent per annum, between 2007-08 and 2013-14, as compared to 13 percent for the country as a whole. Clearly, this reflects the impact of the large and rapidly growing remittances to the Province of Khyber-Pakhtunkhwa.

Overall, the findings from estimates of PGDP are mostly confirmed. The evidence largely points to the dynamism of the economy of Khyber-Pakhtunkhwa, especially after 2007-08. This is perhaps the most unexpected finding from this research.

17.5. TRENDS IN REGIONAL INEQUALITY

The basic question is as follows: Has inter-provincial inequality increased or decreased in the last fifteen years? During the Musharraf era the fastest growth of Sindh province, with the highest per capita PGDP, is likely to have accentuated the extent of inequality. In the more recent period, the emergence of Khyber Pakhtunkhwa could imply a reduction in inequality. However, the slow growth since 1999-2000 in Balochistan, the Province with the lowest per capita GDP, has been a constant factor in perpetuating inequality.

The per capita GDP of each Province, at constant prices of 1999-2000 is given in Table 17.12 for the period, 1999-2000 to 2014-15. Deviations from the national average have also been quantified and highlighted visually in Chart 17.3.

The per capita GDP of Punjab was 4 percent below the national average in 1999-2000. This gap increased to 6 percent by 2007-08. It has since come down once again to 4 percent. Sindh has a per capita PGDP substantially above the national average. It was 25 percent higher in 1999-2000, rising to 31 percent by 2007-08. Since then, it has come down to 22 percent.

K-PK has caught up significantly. It had a per capita PGDP 18 percent below the national average in 1999-2000. The gap has been reduced to only 6 percent by 2014-15. Balochistan has fallen further behind, from a 26 percent gap in 1999-2000 to almost 45 percent by 2014-15.

Given the contrasting trends, a summary measure needs to be developed to quantify the extent of inter-provincial inequality.

The indicator used is the population-weighted coefficient of variation, as follows:

Where CV_t = coefficient of variation in year t ; w_{it} = population share of the i th province in year t and d_{it} = percentage deviation of the i th province in year t from the national average.

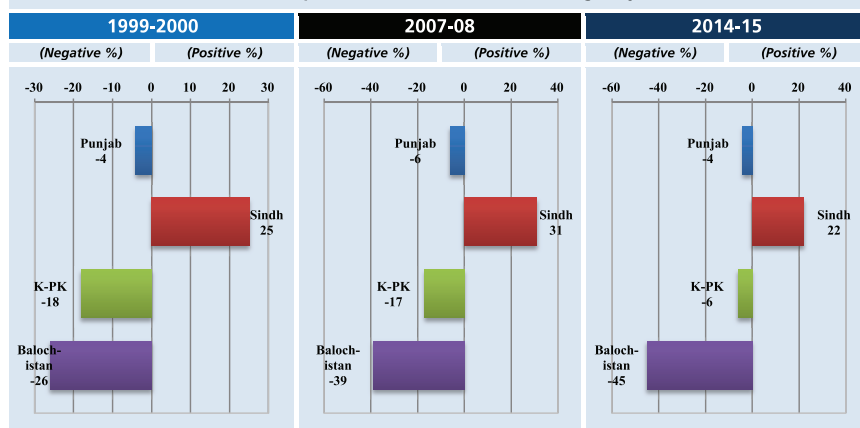
$$CV_t = \sum_{i=1}^4 w_{it} d_{it}^2$$

Table 17.12 Per Capita PGDP by Province, 1999 -2000 to 2014-15

	<i>(Rs in Billion at Constant Prices of 2005-06)</i>			
	1999-2000	2007-08	2012-13	2014-15
PUNJAB				
PGDP (billion Rs)	3147.7	4581.4	5276.1	5757.0
Population* (million)	77.65	91.98	101.49	105.30
Per Capita GDP (000)	40.537	49.808	51.986	54.672
Deviation from National Average (%)	-3.8	-5.7	-4.0	-3.9
Annual Growth Rate (%)		2.61	0.85	2.55
SINDH				
PGDP (billion Rs)	1686.7	2712.5	2982.7	3192.5
Population* (million)	32.02	39.19	44.17	45.99
Per Capita GDP (000)	52.676	62.214	67.529	69.417
Deviation from National Average (%)	+25.0	+31.0	+24.6	+22.0
Annual Growth Rate (%)		3.47	-0.49	1.38
KHYBER-PAKHTUNKHWA				
PGDP (billion Rs)	644.2	983.0	1250.0	1380.9
Population* (million)	18.5	22.5	24.8	25.8
Per Capita GDP (000)	34.709	43.688	50.403	53.523
Deviation from National Average (%)	-17.6	-17.3	-6.9	-6.0
Annual Growth Rate (%)		2.92	2.90	3.05
BALUCHISTAN				
PGDP (billion Rs)	214.5	272.6	297.0	313.7
Population* (million)	6.9	8.4	9.8	10.0
Per Capita GDP (000)	31.086	32.452	30.306	31.370
Deviation from National Average (%)	-26.2	-38.6	-44.0	-44.9
Annual Growth Rate (%)		0.53	-1.36	1.74
PAKISTAN				
PGDP (billion Rs)	5693.1	8549.5	9816.3	10644.1
Population* (million)	135.13	161.841	181.255	187.033
Per Capita GDP (000)	42.130	52.826	54.157	56.910
Annual Growth Rate (%)		2.86	0.50	2.51

Source: PBS, LFS

Chart 17.3 Deviation of Per Capita PGDP from National Average, by Province



Source: Estimated.

The estimated values are as follows:

The results indicate that inter-provincial inequality increased sharply during the Musharraf period. Following the return to democracy, it has come down. Over the fifteen year period, it has declined significantly.

Year	Coefficient of Variation
1999-2000	234.1
2007-08	353.2
2014-15	199.1

17.6. GROWTH DRIVERS BY PROVINCE

We finally focus on the sub sectors in which a particular province has a comparative advantage. If the growth strategy of a province focuses on these sub-sectors of comparative advantage, then it is likely to be more consistent with the factor endowments of the province, including the natural resources.

The comparative advantage is based on the magnitude of the location quotient. This is derived as follows:

$$LQ_{ij} = \frac{S_{ij}}{S_j}$$

Where;

LQ_{ij} = location quotient of the i th sector in the j th province;

S_{ij} = shares of the i th sector of the j th province in value added nationally in the i th sector

S_j = share of the j th province in the GDP of Pakistan.

Table 17.13 presents the sectors of comparative advantage in each Province, where LQ is greater than one, based on data of 2016-117. In summary, these are given below for each Province.

Punjab: important (major) crops; cotton ginning; livestock (especially milk production); large-scale and small-scale manufacturing slaughtering; construction; transport and communications; finance and insurance; public administration and defense and economic, social and community services.

Sindh: cotton ginning; livestock; fisheries; mining and quarrying; large-scale manufacturing; wholesale and retail trade; finance and insurance and ownership of dwellings.

Khyber-Pakhtunkhwa: livestock; forestry; slaughtering, construction; electricity and gas; transport and communications; economic, social and community services; ownership of dwellings.

Balochistan: minor crops; fishing; forestry; mining and quarrying; electricity and gas; wholesale and retail trade; public administration and defense.

Table 17.13 Comparative Advantage of the Provinces
Lij is greater than 1

	Punjab	Sindh	K-PK	Balochistan
AGRICULTURE				
Important Crops	✓	-	-	-
Minor Crops	-	-	-	✓
Cotton Ginning	✓	✓	-	-
Livestock	✓	✓	✓	-
Fishing	-	✓	-	✓
Forestry	-	-	✓	✓
INDUSTRY				
Mining and Quarrying	-	✓	-	✓
Large-Scale Manufacturing	✓	✓	-	-
Small-Scale Manufacturing	✓	-	-	-
Slaughtering	✓	-	✓	-
Construction	✓	-	✓	-
Electricity & Gas	-	-	✓	✓
SERVICES				
Transport & Communications	✓	-	✓	-
Wholesale & Retail Trade	-	✓	-	✓
Finance & Insurance	✓	✓	-	-
Ownership of Dwellings	-	✓	✓	-
Public Admin & Defense	✓	-	-	✓
Social and Community Services	✓	-	✓	-
Number of Sub Sectors	11	8	8	7

Source: estimated.

17.7. FINDINGS AND RECOMMENDATIONS

Not much has been known hitherto about the size, composition and growth of the Provincial economies of Pakistan from 1999-2000 to 2016-17. The objective of this study has been to fill this major gap.

The findings of research are as follows:

- i) Prior to 1999-2000, earlier research has revealed the long-term convergence of the three Provincial economies Sindh, Punjab and Khyber-Pakhtunkhwa to, more or less, the same growth rate of their PGDPs of 5 percent. However, Balochistan has performed poorly in relation to the other Provinces.
- ii) A pattern of growth is also visible. During periods of high growth, like in the 80s, the Province of Sindh performs relatively well. In low growth periods, like in the 70s, Punjab manages a somewhat higher growth rate.
- iii) Punjab has a share of 54 percent in the national GDP in 2016-17. The next economy in size is Sindh, with a share of 30 percent. Khyber-Pakhtunkhwa and Balochistan have shares of 13 percent and 3 percent respectively.
- iv) Punjab dominates in agriculture, with a share of over 62 percent. It is significant, however, that the industrial sector of Sindh, with a share of 42 percent, is even larger than that of Punjab. In services, Punjab has the largest share of almost 56 percent.
- v) During the Musharraf period, from 1999-2000 to 2007-08, the fastest growing Provincial economy was Sindh, with a growth rate in excess of 6 percent. Balochistan had the lowest growth rate of only 3 percent.
- vi) During the period of the PPP Government, from 2008-09 to 2012-13, the growth rate of the Sindh economy has plummeted to 2 percent only. The fastest growing economy during this period is Khyber-Pakhtunkhwa, at almost 5 percent. The same pattern is seen, more or less, in the first four years of the PML(N) Government. Balochistan has remained a straggler, with a low growth rate of about 3 percent.
- vii) The emerging structural problem for Punjab is the loss of the dynamism of agriculture. From a growth rate of almost 5 percent in the 90s, it has fallen to only 2 percent. This is a reflection especially of the emerging water constraint. Since 2008, power outages have impacted severely on industrial production in the Province.
- viii) The breakdown of law and order in Karachi has led to a visible loss of momentum in the economy of Sindh. It is estimated that the annual cost of the troubled situation in Karachi is almost Rs 400 billion.
- ix) Contrary to expectations, Khyber-Pakhtunkhwa has performed well despite being a frontline state in the war on terror. A major contributing factor is the large inflow of home remittances, which on average account for 20% of the income of households in the Province. Consequently, it has

acquired the characteristics of a remittance-led service economy. However, the indigenous production base remains limited.

- x) The insurgency in Balochistan and the resultant military action have affected economic activity and investment in the Province. In some years, the real per capita income may even have fallen. There is need, however, to highlight the spectacular success of Balochistan in the production of fruits and vegetables, which has made it the fastest growing province in agriculture.
- xi) Other proxy indicators of growth have been used to test for the reliability of the PGDP estimates. These include the trend in household incomes as revealed by the HIES, growth of employment, rise in collection of income tax and growth in value of owner-occupied property. These indicators also confirm the dynamism of Khyber-Pakhtunkhwa, the loss of buoyancy by the economy of Sindh, the moderate growth performance of Punjab and the persistent low growth of Balochistan.
- xii) The trend in inter-provincial inequality increased sharply during the Musharraf era, due, in particular, to the fast growth of Sindh, with the highest per capita PGDP. Since then inequality has come down, with the fall in the growth rate of Sindh and the exceptional performance of the economy of Khyber-Pakhtunkhwa, a Province with relatively low PGDP. Overall, over the fifteen year period, there has not been much change in the magnitude of inter-provincial in- equality.
- xiii) The sub-sectoral estimates for each Province of value added enable the determination of areas of comparative advantage of each Province. Out of the 17 sub-sectors in the national economy, Punjab has a comparative advantage in 11, Sindh in 8, Khyber-Pakhtunkhwa in 7 and Balochistan also in 7 sub-sectors. Each Province ought to concentrate on sub-sectors where it has the comparative advantage, if the growth potential is to be maximized.

Chapter 18:

PROVINCIAL LABOR MARKETS

The responsibilities of the Federal and the Provincial Governments in managing unemployment are linked to the allocation of functions following the 18th Amendment, which led to the abolition of the Concurrent List. Accordingly, the following functions stand transferred to the Provincial Governments:

- i) Welfare of labor; conditions of labor, provident funds; employer's liability and workmen's compensation, health insurance including invalidity pensions, old age pensions;
- ii) Trade Unions; industrial and labor disputes;
- iii) The setting up and carrying on labor exchanges, employment information bureaus and training establishments;
- iv) Unemployment insurance.

Therefore, the Federal Government's role in management of unemployment is more macro and indirect, by following a development strategy which promotes employment and reduces unemployment. The Provincial Governments not only have a similar role but also more directly in performing functions indicated in (iii) and (iv) above.

18.1. FEDERAL GOVERNMENT

18.1.1. The Unemployment

Before the role of the Federal Government is discussed, the trends in the unemployment rate at the national level are given in Table 18.1.1. The unemployment rate fell significantly between 2001-02 and 2007-08. Since then it has been rising, given the

Table 18.1 Rate of Unemployment

	2001-02	2007-08	2012-13	2013-14* (Projected)
Pakistan	8.27	5.20	6.24	6.92
Urban	9.80	6.34	8.83	9.50
Rural	7.55	4.71	5.08	5.62

*Projected on the basis of the employment elasticity of output.
Source: PBS, Labor Force Surveys.

low rate of growth in GDP. It is estimated at almost 7 percent in 2013-14. In the first year, the PML(N) Government has most probably not been able to reduce the unemployment rate in the country. The unemployment rate is higher in urban areas and may have approached 9.5 percent in 2013-14. This is one explanation for the growing discontent in the cities.

18.1.2. Size of PSDP

The size of the PSDP, executed at the Federal level, is given in Table 18.2.

Development expenditure not only expands the productive capacity of the economy and greater labor absorption but also provides employment during the period of construction.

Table 18.2 Size of Federal PSDP (actual expenditure)

	Size (Rs in Billion)	% of GDP
2009-10	294	2.0
2010-11	233	1.3
2011-12	313	1.6
2012-13	348	1.5
2013-14	441	1.7

Source: MOF, Government of Pakistan.

The size of the Federal PSDP executed in 2013-14 is 1.7 percent of the GDP. This is slightly larger than the level in 2012-13, but below that attained in 2009-10. For major impact on unemployment, the size of the PSDP will have to be raised substantially. In 2014-15, the budgetary allocation for the PSDP is Rs 525 billion, equivalent to 1.8 percent of the projected GDP. First indications are that the PSDP may be cutback during the year.

18.1.3. Sectoral Priorities

Major supply-side constraints have emerged in the economy. These have negatively impacted on employment. The biggest problem is the shortage of energy. Also, in years to come, water will become a major factor impeding growth of agriculture.

Therefore, larger allocations from the Federal PSDP must go to the water and power sectors. The recent trend in allocations is an increase in the share of these sectors. It is likely to rise even further as large Chinese financing becomes available for CPEC.

18.1.4. Social Protection

One of the major factors contributing to poverty is unemployment or low wage employment. The Federal Government has been operating since 2009-10 the Benazir Income Support Program (BISP). This program gives monthly income support to households below the poverty line. Originally, the stipend of Rs 1000 per month was given. In the Budget of 2014-15, this has been raised to Rs 1500

with a targeted coverage of over four million households. Credit is due to the PML(N) government for not only continuing a program started by the PPP, but also for raising the funds allocated to the program.

18.1.5. Youth Programs

Today, there are 17.5 million youth (15 to 24 years age), representing almost 29 percent of the labor force. The unemployment rate among these youth is as high as 11 percent. The situation is worsening year-to-year, with an additional 180,000 youth getting unemployed each year and new entrants having only 60 percent chance of finding a job.

As highlighted earlier, the Prime Minister has announced a number of programs for youth, with the objective of their productive absorption into the economy. The following programs have been started:

- i) micro interest free loans of Rs 12,000 each to 250,000 youth;
- ii) loans ranging from 0.5 million to 2 million, with a concessionary rate of 8 percent;
- iii) youth training scheme involving a stipend of Rs 10,000 per month during the internship;
- iv) skill development scheme for jobless youth at Rs 5,000 monthly.

The total cost of these programs annually is about Rs 20 billion. However, the initial feedback is that the programs are moving slowly because of problems of providing collateral for loans and lack of implementation capacity of agencies executing these programs.

18.1.6. Export – Led Employment

One of the primary ways of reducing unemployment is to promote labor-intensive export-oriented industries, like the garments industry in Bangladesh. But exports have not well since the induction of the PML (N) Government. One major explanation is the energy shortage. It is unfortunate that Pakistan has not been able to take full advantage of the GSP+ status given by the EU at the start 2014.

Exports grew by less than 2 percent in 2013-14 and have actually fallen by 10 percent in the first quarter of 2014-15. This is leading to a reduction in employment in major industrial centers, like Faisalabad.

The issue is one of competitiveness of exports. This has been impaired by the large revaluation of the rupee in early 2014. Currently, the rupee is overvalued

by almost 20 percent, despite the recent fall. This step by the SBP has revealed a strong anti-export bias.

Overall, in its first year, the PML (N) government has failed to arrest the rise in unemployment. The energy shortage has persisted and constrained the growth in output and employment. Exports have fallen, among other reasons because of a wrong move on the exchange rate front. While a number of employment promotion programs have been put in place, they are yet to have a significant impact.

18.2. PUNJAB

18.2.1. The Labor Market

Punjab had the highest labor force participation rate (LFPR) among the Provinces of Pakistan in 2012-13. It is 70.2 percent in the case of males and 26.4 percent among females, implying an overall LFPR of 48.3 percent

for population aged 10 years and above. The LFPR is 52.5 in rural areas and 40.8 percent in urban areas.

The labor force is estimated at 35.7 million in 2012-13, of which 72.6 percent is male. The annual growth rate of the labor force is 1.95 percent. The number employed is 33.4 million, of which 72 percent are in the rural areas. The overall unemployment rate is projected at close to 7 percent in 2013-14, as shown in Table 18.3. It has risen from 5.5 percent in 2007-08.

18.2.2. Factors Contributing to Unemployment

The principal factor contributing to the rise in the rate of unemployment is the slowdown in the growth rate of the regional economy of Punjab, concomitant with the fall in the GDP growth rate of the national economy. The economy of Punjab is estimated to have grown annually at over 5 percent between 2001-02 and 2007-08. This fell to 3 percent between 2007-08 and 2013-14.

18.2.3. Profile of Unemployment

In 2012-13, the unemployment rate was significantly higher in the urban areas at 8.7 percent as compared to 5.4 percent in the rural areas. There is also a large difference in the unemployment by gender. It is 5.4 percent in the case of males and 9.2 percent among female workers.

Table 18.3 Unemployment Rate in Punjab

	2001-02	2007-08	2012-13	2013-14 (P)
Punjab	8.51	5.54	6.38	7.02
Urban	10.78	7.14	8.70	
Rural	7.56	4.91	5.44	

Source: PBS, Labor Force Surveys.

A worrying feature of the labor market is the high unemployment rate of highly educated workers (with degree or above) of 10.6 percent. Also, youth (15-29 years) are finding it difficult to get jobs. Their unemployment rate currently is 11.4 percent.

18.2.4. Education Spending

The expenditure by the Government of Punjab has been comparatively low, as shown in Table 18.4. The Provincial Government spends only 1.6 percent of the provincial GDP in educating its people for better jobs. This is the lowest ratio among the four Provinces. The share of provincial expenditure has increased in the case of primary and secondary education. It now stands at 79 percent.

Table 18.4 Education Spending in Punjab

(Rs in Billion)

	Total Education Expenditure	% of Provincial GDP	Share of Expenditure on Primary and Secondary Education
2007-08	73.4	1.3	71.3
2012-13	196.1	1.6	73.8
2013-14 (Provincial)	218.0	1.6	78.9

Source: MOF, PRSP Progress Reports.

18.2.5. Development Spending

Projects implemented under the Annual Development Program (ADP) of the Provincial Government not only increase the capacity of the regional economy and increase the labor absorption but also increase employment directly during the period of construction.

The size of the ADP of Punjab and the share devoted to water and power, the two major constraints to higher employment is given in Table 18.5. Despite the big increase in transfers following the 7th NFC Award, the level of development spending has fallen sharply from 2.1 percent of the provincial GDP in 2007-08 to 1.4 percent in 2013-14. However, the share of water and power sectors in the ADP has increased.

Table 18.5 Development Expenditure by the Government of Punjab

(Rs in Billion)

	ADP (Actual Expenditure)	% of Provincial GDP	Share of Expenditure on Water and Power
2007-08	118.8	2.1	n.a.
2012-13	154.6	1.3	8.5
2013-14	196.3	1.4	14.8

Source: MOF, Fiscal Operations.

18.2.6. Training

The Government of Punjab has given high priority to training. The Technical and Vocational Training Authority (TEVTA) of Punjab is operating under the TEVTA Act of 2010. The basic objective is to promote and provide demand driven technical education and vocational training service.

TEVTA offers short courses as well as degrees like B. Tech and DAE. The total enrolment is about 86,000 in a network of over 500 institutes at the district level. It is proposed to expand the number in the next three years to almost 500,000.

18.2.7. Overall Assessment

Overall, the rate of unemployment continues to rise in Punjab. The Government of Punjab is not devoting enough resources on educating its people for better. However, it is focusing strongly on technical and vocational training for raising employability, especially of young workers. The level of development is also relatively low, which limits the prospects for faster growth in output and employment.

18.3. KHYBER-PAKHTUNKHWA (K-PK)

18.3.1. The Labor Market

K-PK had a relatively low LFPR among the Provinces of Pakistan in 2012-13. It is 60.2 percent in the case of males and 14.2 percent among females, implying an overall LFPR of 36.8 percent for population aged 10 years and above. The LFPR is 37.1 percent in rural areas and 35.9 percent in urban areas.

The labor force is estimated at 6.7 million in 2012-13, of which 80.5 percent is male. The annual growth rate of the labor force is only 1.1 percent, due largely to migration of workers. The number employed is 6.1 million, of which 83 percent are in the rural areas. The overall unemployment rate is projected at close to 9 percent in 2013-14, as shown in Table 18.6. It has shown only marginal increase after 2007-08. However, urban unemployment has shown a rising trend.

Table 18.6 Unemployment Rate in Khyber - Pakhtunkhwa

	2001-02	2007-08	2012-13	2013-14 (Projected)
K-PK	13.09	8.62	8.57	9.00
Urban	12.16	9.77	11.82	
Rural	12.79	8.40	7.88	

Source: PBS, Labor Force Surveys.

18.3.2. Factors Contributing to Unemployment

The principal factor contributing to the rise in the rate of unemployment is the slowdown in the growth rate of the regional economy of K-PK, concomitant with the fall in the GDP growth rate of the national economy. The economy of K-PK is estimated to have grown annually at about 5 percent between 2001-02 and 2007-08. This fell to 3 percent between 2007-08 and 2013-14. The Province has been particularly vulnerable to acts of terrorism.

18.3.3. Profile of Unemployment

In 2012-13, the unemployment rate was significantly higher in the urban areas at 11.8 percent as compared to 7.9 percent in the rural areas. There is also a large difference in the unemployment by gender. It is 6.7 percent in the case of males and 16.5 percent among female workers.

A worrying feature of the labor market is the high unemployment rate of highly educated workers (with degree or above) of about 18 percent. Also, youth (15-29 years) are finding it difficult to get jobs. Their unemployment rate currently is over 12 percent.

18.3.4. Education Spending

The expenditure by the Government of K-PK has been comparatively high in relation to other Provinces, as shown in Table 18.7. The Provincial Government devotes 3.1 percent of the provincial GDP in educating its people for better jobs. This is the highest ratio among the four Provinces.

Table 18.7 Education Spending in Khyber - Pakhtunkhwa

(Rs in Billion)

	Total Education Expenditure	% of Provincial GDP	Share of Expenditure on Primary and Secondary Education
2007-08	24.3	2.2	71.3
2012-13	84.4	3.3	76.5
2013-14 (Provincial)	89.7	3.1	77.5

Source: MOF, PRSP Progress Reports.

There has been a visible jump after the 7th NFC Award. The share of provincial expenditure has increased in the case of primary and secondary education. It now stands at 78 percent.

18.3.5. Development Spending

Projects implemented under the ADP of the Provincial Government not only increase the capacity of the regional economy and increase the labor absorption but also increase employment directly during the period of construction.

The size of the ADP of K-PK and the share devoted to water and power, the two major constraints to higher employment is given in Table 18.8. The level of development spending has fallen from 2.9 percent of the provincial GDP in 2012-13 to 2.5 percent in 2013-14. The share of water and power in the ADP is also low.

Table 18.8 Development Expenditure by the Government of Khyber - Pakhtunkhwa

(Rs in Billion)

	ADP (Actual Expenditure)	% of Provincial GDP	Share of Expenditure on Water and Power
2007-08	27.9	2.5	n.a.
2012-13	74.3	2.9	5.6
2013-14	72.6	2.5	5.2

Source: MOF, Fiscal Operations.

18.3.6. Overall Assessment

Overall, the unemployment situation is adverse and worse than in the other provinces. Reliance has been placed on out-migration of workers to relieve the pressure on the labor market. The formal sector of the Province is small and much of the employment is in the informal sector. Growth of the regional economy has been severely impact by the high incidence of acts of terrorism. During 2013-14, both the ADP and education spending declined as a percentage of the GDP. The Government of K-PK needs to formulate a regional development strategy, which will promote employment.

18.4. SINDH

18.4.1. The Labor Market

Sindh had a labor force participation rate of 45.3 percent in 2012-13. It is 70.7 percent in the case of males and 15.9 percent among females. The LFPR is 51.6 percent in rural areas and 39.2 percent in urban areas.

Table 18.9 Unemployment Rate in Sindh

	2001-02	2007-08	2012-13	2013-14 (Projected)
Sindh	5.15	3.10	5.24	5.60
Urban	7.09	3.63	8.72	
Rural	2.19	2.04	2.52	

Source: PBS, Labor Force Surveys.

The labor force is estimated at 14.7 million in 2012-13, of which 83.6 percent is male. The annual growth rate of the labor force is 2.35 percent. The number employed is 14 million, of which 57.7 percent are in the rural areas. The overall unemployment rate in the lowest in Pakistan and is projected at close to 5.6 percent in 2013-14, as shown in Table 18.9. It has risen from 3.1 percent in 2007-08, with a big jump in urban employment.

18.4.2. Factors Contributing to Unemployment

The principal factor contributing to the rise in the rate of unemployment is the slowdown in the growth rate of the regional economy of Sindh, concomitant with the fall in the GDP growth rate of the national economy. The economy of Sindh is estimated to have grown annually at over 7 percent between 2001-02 and 2007-08. This fell very sharply to about 2 percent between 2007-08 and 2013-14 due, in particular, to the bad law and order situation in Karachi.

18.4.3. Profile of Unemployment

In 2012-13, the unemployment rate was significantly higher in the urban areas at 8.7 percent as compared to 2.5 percent in the rural areas. There is also a large

difference in the unemployment by gender. It is 4.67 percent in the case of males and 8.16 percent among female workers.

A worrying feature of the labor market of Sindh is the high unemployment rate of highly educated workers (with degree or above) of 8.05 percent. Also, youth (15-29 years) are finding it difficult to get jobs. Their unemployment rate currently is 7 percent.

18.4.4. Education Spending

The expenditure by the Government of Sindh has been comparatively high, as shown in Table 18.10. The Provincial Government spends 1.4 percent of the provincial GDP in educating its people for better jobs. This is the lowest ratio among the four Provinces.

The share of provincial expenditure has increased in the case of primary and secondary education. It now stands at 74 percent.

Table 18.10 Education Spending in Sindh

(Rs in Billion)

	Total Education Expenditure	% of Provincial GDP	Share of Expenditure on Primary and Secondary Education
2007-08	38.0	1.1	62.6
2012-13	98.4	1.5	73.5
2013-14 (Provincial)	106.1	1.4	73.5

Source: MOF, PRSP Progress Reports.

18.4.5. Development Spending

Projects implemented under the ADP of the Provincial Government not only increase the capacity of the regional economy and increase the labor absorption but also increase employment directly during the period of construction.

Table 18.11 Development Expenditure by the Government of Sindh

(Rs in Billion)

	ADP (Actual Expenditure)	% of Provincial GDP	Share of Expenditure on Water and Power
2007-08	45.4	1.4	n.a.
2012-13	102.3	1.5	12.8
2013-14	120.9	1.6	14.9

Source: MOF, Fiscal Operations.

The size of the ADP of Sindh and the share devoted to water and power, the two major constraints to higher employment is given in Table 18.11. Despite the big increase in transfers following the 7th NFC Award, the level of development spending has risen marginally from 1.4 percent of the provincial GDP in 2007-08 to 1.4 percent in 2013-14. However, the share of water and power in the ADP has increased.

18.4.6. Overall Assessment

Sindh enjoys the lowest unemployment rate among the four Provinces. In recent

years, as the growth rate of the regional economy plummeted, the rate of urban unemployment, in particular, has risen sharply. This is a reflection of the inability of the Provincial Government to improve the bad law and order situation in Karachi. The Provincial Government also appears to be attaching relatively low priority to education and for implementing programs for directly creating employment opportunities.

18.5. BALOCHISTAN

18.5.1. *The Labor Market*

Balochistan had a relatively low labor force participation rate of among the Provinces of Pakistan in 2012-13. It is 68.5 percent in the case of males and only 10.4 percent among females, implying an overall LFPR of 42.3 percent for population aged 10 years and above. The LFPR is 44.6 percent in rural areas and 36.8 percent in urban areas.

The labor force is estimated at 2.6 million in 2012-13, of which 88 percent is male. The annual growth rate of the labor force is high at over 7 percent. The number employed is 2.5 million, of which 79 percent are in the rural areas. The overall unemployment rate is projected at close to 4.4 percent in 2013-14, as shown in Table 18.12. It has risen from 2.8 percent in 2007-08. There was a big decline in the unemployment rate between 2001-02 and 2007-08.

	2001-02	2007-08	2012-13	2013-14 (Projected)
Balochistan	7.76	2.78	3.93	4.40
Urban	12.70	3.80	6.25	
Rural	6.69	2.21	3.28	

Source: PBS, Labor Force Surveys.

18.5.2. *Factors Contributing to Unemployment*

The principal factor contributing to the rise in the rate of unemployment is the slowdown in the growth rate of the regional economy of Balochistan, concomitant with the fall in the GDP growth rate of the national economy. The economy of Balochistan is estimated to have grown annually at 4 percent between 2001-02 and 2007-08. This fell to 2 percent between 2007-08 and 2013-14.

18.5.3. *Profile of Unemployment*

In 2012-13, the unemployment rate was significantly higher in the urban areas at 6.3 percent as compared to 3.3 percent in the rural areas. There is also a large difference in the unemployment by gender. It is 3.5 percent in the case of males and 7.3 percent among female workers.

A worrying feature of the labor market of Sindh is the high unemployment rate of highly educated workers (with degree or above) of 13.5 percent. Also, youth (15-29 years) are finding it difficult to get jobs. Their unemployment rate currently is 6.5 percent.

18.5.4. Education Spending

The expenditure by the Government of Balochistan has been comparatively high, as shown in Table 18.13. The Provincial Government spends 1.4 percent of the provincial GDP in educating its people for better jobs. This is a relatively high among the four Provinces. The liberal 7th NFC award to the Province has led to a major increase in education expenditure. The share of provincial expenditure has increased in the case of primary and secondary education. It now stands at 76 percent.

Table 18.13 Education Spending in Balochistan

(Rs in Billion)

	Total Education Expenditure	% of Provincial GDP	Share of Expenditure on Primary and Secondary Education
2007-08	7.4	1.4	62.2
2012-13	29.1	2.8	72.2
2013-14 (Provincial)	36.8	3.1	76.4

Source: MOF, PRSP Progress Reports.

18.5.5. Development Spending

Projects implemented under the ADP of the Provincial Government not only increase the capacity of the regional economy and increase the labor absorption but also increase employment directly during the period of construction.

Table 18.14 Development Expenditure by the Government of Balochistan

(Rs in Billion)

	ADP (Actual Expenditure)	% of Provincial GDP	Share of Expenditure on Water and Power
2007-08	22.0	4.2	n.a.
2012-13	40.3	3.8	16.1
2013-14	40.6	3.4	15.5

Source: MOF, Fiscal Operations.

The size of the ADP of Balochistan and the share devoted to water and power, the two major constraints to higher employment, is given in Table 18.14. Despite the big increase in transfers following the 7th NFC Award, the level of development spending has fallen sharply from 4.2 percent of the provincial GDP in 2007-08 to 3.4 percent in 2013-14. Nevertheless, this is a relatively high ratio. Also, the share of water and power in the ADP is high.

18.5.6. Overall Assessment

Despite being a backward Province, Balochistan has a low level of unemployment. This is a reflection of the small population base and low labor force participation,

especially of females. Following the favorable 7th NFC Award, the Provincial Government has made to raise the level of education spending. However, it needs to raise the size of the ADP and focus on expanding the productive capacity of the regional economy.

Chapter 19: LEVEL OF HUMAN DEVELOPMENT IN PROVINCES AND DISTRICTS OF PAKISTAN

The Human Development Index (HDI) is considered as a better measure of development than just per capita GDP. The HDI has three components, namely, measures of health, education and per capita income (in purchasing power parity terms) respectively. The HDI is computed annually for 188 countries by the United Nations Development Program (UNDP). Pakistan currently stands at 146th, with a medium level of human development.

There have been occasional attempts at deriving the HDI at the Provincial level in Pakistan. This was first done for the Pakistan Human Development Report of UNDP for 2003. In 2008, the Pakistan Bureau of Statistics (PBS) estimated the HDI for each Province. However, there has been no attempt the update index values for recent years. Also, the findings were defective as the substantially understated the per capita income of Sindh relative to the other Provinces. This is also the first attempt at estimating the HDI at the district level.

The need for this research has arisen following the setting up of the 9th National Finance Commission (NFC). In the last NFC award, multiple criteria were used for the first time for distribution of transfers from the divisible pool to the Provinces. One criterion was the level of backwardness. The HDI was used as one measure of backwardness of a Province, along with the incidence of poverty.

The following measures have been used to construct the HDI: life expectancy in years for health; mean years of schooling of population aged ten years and above for education and income per capita. The methodology for deriving the value of HDI is the same as that used by UNDP.

Diverse sources of data have been used. Estimates of the HDI are for the period, 2013-14 to 2015-16. The HDI ranges from 0 to 1. The larger the value the higher the level of human development.

19.1. HDI RANKING OF PROVINCES

The Provincial rankings are as follows: Sindh is ranked first with HDI of 0.565, followed by Punjab at 0.542, Khyber Pakhtunkhwa at 0.512 and Balochistan at 0.462. Sindh gets the highest ranking primarily because of a per capita income 22 percent higher than the national average, thanks to Karachi. Three provinces, Sindh, Punjab and Khyber-Pakhtunkhwa are at the medium level of human development, Balochistan is at the low level of human development.

HDI values have also been derived at the Provincial level for 2008, to determine the annual rate of improvement in the index. For the country as a whole the HDI has risen at the rate of one percent only over the last six to seven years. The fastest rate of growth is observed in Khyber-Pakhtunkhwa, followed by Punjab, Balochistan and Sindh.

The two basic questions at this stage are as follows: Why has Khyber-Pakhtunkhwa put in the best performance since 2008? Why has the HDI of Sindh been relatively slow-moving in the last seven to eight years?

The primary reason for the divergence is the difference in growth rate of per capita incomes. Contrary perhaps to expectations, Khyber-Pakhtunkhwa has been the most dynamic regional economy, despite being affected most by terrorism as shown in Chapter 17. The primary explanation for this is that as much as 30 percent of the domestic and international remittances have been destined for Khyber-Pakhtunkhwa, while the corresponding share of population is much smaller at below 14 percent. These remittances have shown extremely rapid growth since 2008. Beyond this, the many families in the Province who are receiving remittances have shown a strong demand for health and education services.

The relatively small increment of HDI in Sindh is due to the poor performance of the economy, especially of Karachi, after 2008. The breakdown of law and order in the city has contributed to the slow growth in income. However, there is some evidence of revival after 2012.

The consequence of the faster improvement in the HDI of Khyber-Pakhtunkhwa versus Sindh and Punjab is that regional disparities in the HDI among different regions of Pakistan have narrowed somewhat in recent years. However, there is need to push more strongly for a higher HDI of Balochistan. Punjab, being the largest Province, continues to show a performance close to the national average.

19.2. HDI OF DISTRICTS

We turn now to the HDI at the district level. The findings are extremely rich and useful in character and provide valuable insights for regional planning. Estimation of the per capita income at the district level is based on quantifying the value added in the agriculture and manufacturing. The services sector is assumed to be linked in sized and growth to the commodity-producing sector. The distribution of districts in a Province by level of HDI is given in Table 19.1.

Table 19.1 Distribution of District of Provinces by Level of HDI

(Number)

	Low HDI	Medium HDI	High HDI	Total
Punjab	22	12	2	36
Sindh	21	3	1	25
Khyber Pakhtunkhwa	20	6	-	26
Balochistan	32	-	-	32
TOTAL	95	21	3	119
Islamabad	0	0	1	1
Pakistan	95	21	4	120

Source: Estimated

We focus first on the higher end of the regional distribution of HDI. Which are the districts of Pakistan that have achieved a high level of human development? This requires a particular district to have HDI value of above 0.7, as specified by the UNDP.

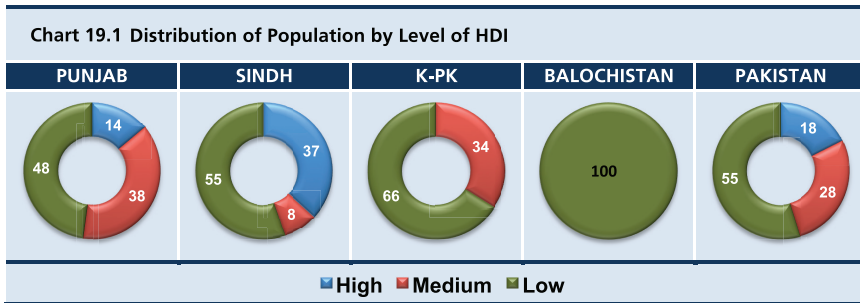
There are four locations in the country characterized by a high level of human development. These include the Federal capital Islamabad, Karachi, Lahore and Rawalpindi districts. It is interesting that this list does not include the other two provincial capitals and the third largest city of Pakistan, Faisalabad.

The districts with a medium level of human development are those with a HDI value 0.55 to 0.70. 21 districts of Pakistan fall in this category. 12 districts are from Punjab and include Chakwal, Sialkot, Jhelum, Gujranwala, Gujrat, Faisalabad, Attock, Multan, Sargodha, Mianwali, Sheikhpura, Mandi Bahauddin, Toba Tek Singh. The six districts from Khyber-Pakhtunkhwa with medium HDI are Peshawar, Abbottabad and Haripur, Nowshera, Malakand and Mansehra. Two districts of Sindh, Hyderabad and Sukkur are, at the medium level of human development, Quetta district in Balochistan is still at the low level of HDI, despite being a Provincial capital.

Overall, for Pakistan as a whole, 18 percent of the population lives in locations with high level of human development and 28 percent in districts with medium level of development. Almost 54 percent of the population resides in districts characterized by low level of human development (HDI less than 0.50). The number of such districts is 96 out of the total of 119 districts in Pakistan.

The three districts in each Province with the lowest HDI can also be identified. In Punjab, these districts are Layyah, Muzaffargarh and Rajanpur, all in South Punjab. In Sindh, it is two districts in the South, namely Tharparkar and Badin, with one district in the North, Jacobabad. The three most backward districts in Khyber-Pakhtunkhwa are Batagram, Khohistan and Upper Dir. In Balochistan, the districts at the bottom are Qila Saifullah, Barkhan and Musakhel.

The distribution of the population of each Province by level of HDI is given in the Chart 19.1.



The extent of inequality in HDI is most pronounced among the districts of Sindh. This Province is effectively a *'dual economy'*, with a highly developed primate city, Karachi, and a relatively underdeveloped hinterland. Inequality is, more or less, the same in Khyber-Pakhtunkhwa and Punjab. Balochistan has the least inequality, as all districts are at the low level of development.

The results of the research on HDI of Provinces and Districts of Pakistan should prove useful. They will help in identifying the right regional development strategy in each Province. Also, they can be used as one of the criteria for horizontal sharing by the National Finance commission and the Provincial Finance Commissions.

Chapter 20:

THE URBAN – RURAL DIVIDE

The recent Population Census has revealed that the share of urban population in the country is 36.4 percent. The remainder, 63.6 percent, of the population lives in rural areas of the country. The basic question is how large is the urban – rural divide in terms of the per capita income or value added differential. This will highlight not only the inequality between the incomes or value added but also provide a measure of the likely pressure for migration from rural to urban areas of Pakistan.

The Chapter is organized as follows: Section 1 presents estimates of rural and urban per capita incomes as derived from the Household Integrated Economic Surveys (HIES), carried out periodically by the Pakistan Bureau of Statistics (PBS). Section 2 describes the approach adopted to disaggregate the value added in each sector of the economy into the rural and urban components. This leads to an overall measure of the rural and urban GDPs respectively.

Section 3 of the chapter highlights the differences in the structure and growth of the two economies. Section 4 quantifies the absolute and relative per capita value added from 2007-08 to 2015-16. This enables an answer to the question whether the divide is rising or diminishing over time. Section 5 disaggregates the national urban and rural economies by Province. Finally, in Section 6, the urban and rural divide is quantified by Province.

20.1. ESTIMATES FROM HOUSEHOLD SURVEYS

The per capita income estimates in the rural and urban areas of Pakistan are given in Table 20.1. These are derived from the HIES conducted in 2007-08, 2010-11 and 2015-16. It needs to be emphasized that these estimates include the receipt of foreign and domestic remittances. As such, they do not represent estimates of per capita value added.

According to Table 20.1, the urban per capita income in Pakistan in 2007-08 was almost 52 percent above the rural per capita income. Apparently, it has

been rising since then and the gap has widened to 61 percent by 2015-16. Throughout this period the growth in real per capita income has been faster in the urban areas.

Table 20.1 Urban and Rural Per Capita Income*, 2007-08 to 2015-16

*(Rs at constant prices of 2007-08**)*

	Urban Per Capita Income	Annual Growth Rate (%)	Rural Per Capita Income	Annual Growth Rate (%)	Ratio of Urban to Rural Income
2007-08	2848		1879		1.516
2010-11	3052	1.7	1979	1.3	1.542
2015-16	3684	3.8	2284	2.9	1.613

* from Household Integrated Economic Surveys of PBS

** The consumer price index is assumed to be the same for urban and rural areas.

Source: PBS, PES

Table 20.2 gives the income differential between urban and rural areas in each Province. It is highest in Sindh, followed by Balochistan, Punjab and Khyber-Pakhtunkhwa.

Table 20.2 Average Per Capital Income in Rural and Urban Areas by Province, 2015-16

(Rs at Current Prices per month)

	Household Income	Household Size	Per Capita Income
PUNJAB	26230	6.04	5998
Urban	46616	5.92	7874
Rural	30973	6.09	5086
Ratio			1.548
SINDH	33948	6.22	5458
Urban	42846	5.87	7299
Rural	23825	6.62	3598
Ratio			2.029
KHYBER-PAKHTUNKHWA	38349	7.34	5225
Urban	49910	7.10	7029
Rural	35691	7.39	4830
Ratio			1.455
BALUCHISTAN	30041	7.84	3831
Urban	41991	7.88	5328
Rural	25569	7.82	3270
Ratio			1.629
PAKISTAN	35662	6.31	5652
Urban	45283	6.03	7510
Rural	30110	6.47	4654
Ratio			1.614

Source: HIES

Urban per capita income is more than twice the rural per capita income in Sindh. This is primarily attributable to the presence of the primate city, Karachi, in the Province. The city alone accounts for 59 percent of the Provincial urban

population and has a heavy concentration of economic activity within the Metropolitan boundaries.

The Province of Balochistan also has a relatively high income differential of 63 percent. The interior of Balochistan is very underdeveloped and a sizeable part of the income is generated in the capital city, Quetta.

The urban–rural divide of Punjab is less at 55 percent. Here the rural areas are characterized by relatively high yielding agriculture. On the urban front, with the exclusion of Lahore and Faisalabad, most of the cities and towns have labor-intensive small-scale manufacturing.

The real surprise is the presence of the lowest income differential in Khyber-Pakhtunkhwa of 45 percent. The largest city, Peshawar, is characterized by considerable informal economic activity while the agricultural sector in the rural areas is relatively underdeveloped. The narrowing of the gap is primarily due to the large inflow of foreign and domestic remittances into the rural areas of the Province. Almost 24 percent of the income of rural households is from the receipt of remittances.

There is need to recognize that per capita income estimates may not be accurate estimates of the value added generated from economic activities within a region. First, as highlighted above, the net inflow of remittances could lead to a significant divergence. Second, urban households, especially in the two top quintiles, may be prone to substantially understate their income in surveys in the presence of large quantum of tax evasion. Therefore, reliance on the findings from the HIES may tend to significantly underestimate the urban–rural divide.

Table 20.3 Rural and Urban Per Capita Income*

	Household Income	Household Size	Per Capita Income	At Constant Prices of 2007-08
<i>(Rs)</i>				
2015-16				
Pakistan	35662	6.31	5651	2773
Urban	45283	6.03	7510	3684
Rural	30110	6.47	4654	2283
Ratio			1.614	1.614
2010-11				
Pakistan	21785	6.38	3415	2332
Urban	27664	6.19	4469	3052
Rural	18712	6.49	2883	1969
Ratio			1.550	1.550
2007-08				
Pakistan	14456	6.58	2197	2197
Urban	17970	6.31	2848	2848
Rural	12626	6.72	1879	1879
Ratio			1.515	1.515

Source: HIES

20.2. ESTIMATES OF URBAN AND RURAL GDP

The methodology used first estimates the Provincial GDPs. The resulting estimates have already been given in Chapter 17. In the second stage, allocators are used to disaggregate the Provincial GDP into its urban and rural components by sector. The sectoral allocators are given in the Chart 20.1.

Application of the methodology leads to the first set of results on the shares of urban and rural areas respectively in the value added in each major sector. The shares are highlighted in Chart 20.2.

As expected, the rural share is highest in agriculture at 94 percent. The urban share is highest in banking and insurance at 85 percent, followed by the share in large-scale manufacturing at 71 percent, as shown in Table 20.4. Rural areas have relatively large share in mining and quarrying at 65 percent; slaughtering at 53 percent; construction at 65 percent and public administration and defense at close to 50 percent.

Chart 20.1 Allocators of Sectoral Value Added between Urban and Rural Areas for Different Sectors/Sub - Sectors

Sector/Sub-Sector	Allocator	Data Sources*
AGRICULTURE INDUSTRY		
Agriculture	Income-Adjusted Share in Employment	HIES, LFS
Mining and Quarrying	Income-Adjusted Share in Employment	HIES, LFS
Large-Scale Manufacturing	Income-Adjusted Share in Employment	HIES, LFS
Small-Scale Manufacturing	Share in Informal Sector Employment in Manufacturing	LFS
Slaughter	Share in Consumption Expenditure on Livestock Products (excluding milk)	HIES
Electricity, Gas and Water	Income-Adjusted Share in Employment	HIES, LFS
Construction	Income-Adjusted Share in Employment	HIES, LFS
SERVICES		
Transport, Storage & Communications	Income-Adjusted Share in Employment	HIES, LFS
Wholesale, and Retail Trade, Hotels and Restaurants	Income-Adjusted Share in Employment	HIES, LFS
Finance and Insurance	Income-Adjusted Share in Employment	HIES, LFS
Ownership of Dwellings	Share in actual and imputed rents	HIES
Public Administration and Defense	Income-Adjusted share in employment	HIES, LFS
Community, Social & Personal Services	Income-Adjusted share in employment	HIES, LFS
* HIES = Household Integrated Economic Survey, LFS = Labor Force Survey, SYB = Statistical Yearbook		

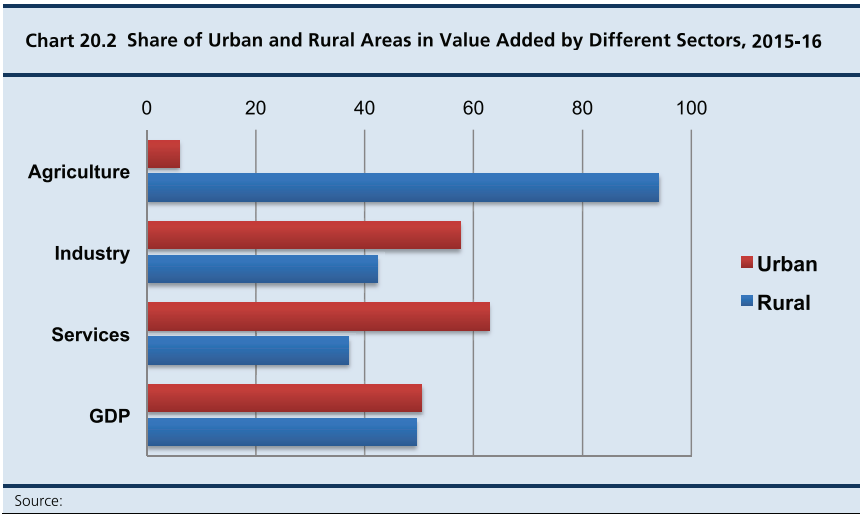


Table 20.4 Sectoral Share of Urban and Rural Areas, 2015-16

	Rural	Urban	Total
AGRICULTURE	94.0	6.0	100.0
INDUSTRY	42.4	57.6	100.0
Mining and Quarrying	64.5	35.5	100.0
Large-Scale Manufacturing	29.0	71.0	100.0
Small-Scale Manufacturing	47.8	52.2	100.0
Slaughtering	52.9	47.1	100.0
Construction	65.3	34.7	100.0
Electricity and Gas	41.3	58.7	100.0
SERVICES	37.1	62.9	100.0
Transport and Communications	42.6	57.4	100.0
Wholesale and Retail Trade	32.4	67.6	100.0
Finance and Insurance	15.2	84.8	100.0
Ownership of Dwellings	34.9	65.1	100.0
Public Administration and Defence	47.8	52.2	100.0
Social, Commercial & Private Services	42.0	58.0	100.0
GDP	49.5	50.5	100.0

Source:

Overall, we have an important finding. The economy is partitioned into two, more or less, equal parts. Half of the GDP is generated in the rural areas and the remaining half in the urban areas. Given that the population distribution is 64:36, it is clear that per capita value added in the rural areas is significantly lower than in the urban areas.

20.3. STRUCTURE AND GROWTH

The evolution of sectoral value added in aggregative terms from 2007-08 to 2015-16 is given for the rural economy in Table 20.5 and for the urban economy in Table 20.6. The differences in the structure of the two economies are highlighted in Chart 20.3.

Table 20.5 The Size and Sectoral Distribution of the Rural GDP

(Rs in Billion at constant prices of 2005-06)

	2007-08	2010-11	Growth Rate ^a (%)	2015-16	Growth Rate ^b (%)	Growth Rate ^c (%)
Agriculture	1758.5	1822.2	1.2	2074.4	2.6	2.1
Industry	777.3	814.1	1.5	998.3	4.1	3.1
Services	1982.1	2014.0	0.5	2436.2	3.8	2.6
GDP (fc)	4517.9	4650.3	1.0	5508.9	3.4	2.5
% of National GDP	52.8	51.0		49.5		
Population (million)	108.4	115.8	2.2	129.3	2.2	2.2
Per Capita GDP (Rs)	41678	40158	-1.2	42605	1.2	0.3

a Annual growth rate from 2007-08 to 2010-11 | b Annual growth rate from 2010-11 to 2015-16 | c Annual growth rate from 2007-08 to 2015-16
Source: Estimated.

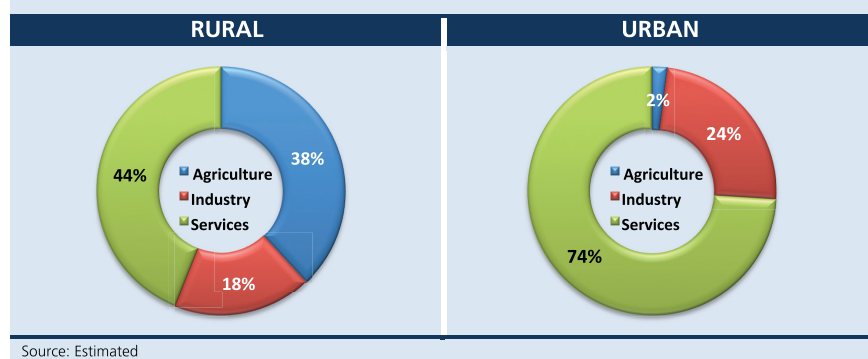
Table 20.6 The Size and Sectoral Distribution of the Urban GDP

(Rs in Billion at constant prices of 2005-06)

	2007-08	2010-11	Growth Rate ^a (%)	2015-16	Growth Rate ^b (%)	Growth Rate ^c (%)
Agriculture	110.3	155.0	10.9	132.4	-3.2	2.3
Industry	1110.7	1124.3	1.2	1343.9	3.6	2.4
Services	2809.1	3193.1	4.3	4148.2	5.2	4.9
GDP (fc)	4030.1	4472.4	3.5	5624.5	4.6	4.2
% of National GDP	47.1	49.0		50.5		
Population (million)	59.4	64.4	2.7	73.6	2.7	2.7
Per Capita GDP (Rs)	67846	69447	0.8	76420	1.9	1.5
Ratio of Per Capita Urban to Rural GDP	1.628	1.729	2.0	1.793	0.7	1.2

a Annual growth rate from 2007-08 to 2010-11 | b Annual growth rate from 2010-11 to 2015-16 | c Annual growth rate from 2007-08 to 2015-16
Source: Estimated.

Chart 20.3 Sectoral Shares in the Rural and Urban Economies, 2015-16 (%)



The estimates provide some interesting insights. First, the off-farm economy in the rural areas is large and accounts for 62 percent of the rural GDP. Of course, most of these activities have either backward or forward linkages with agriculture.

Second, the urban economy consists primarily of service activities, which constitute almost 74 percent of the urban GDP. These activities include trade, transport, communications, banking, public and private social and personal services.

The annual growth rates of the rural and urban GDP are also presented in Table 20.5 and 20.6 respectively. There were floods in 2010-11. Consequently, the rural economy have shown a growth rate of only one percent between 2007-08 and 2010-11. There has been a substantial recovery in the next five years and the growth rate has jumped to 3.4 percent. For the eight year period as a whole, the rural economy has shown a growth rate of only 2.5 percent. This has barely kept pace with the growth of rural population.

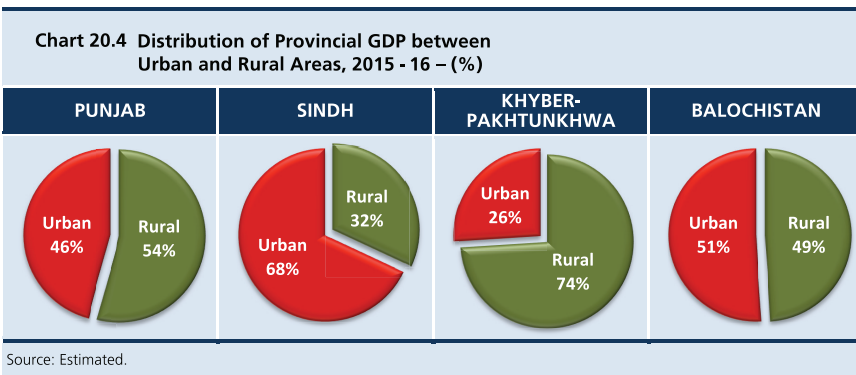
The urban economy has demonstrated a better performance as shown in Table 20.6. It achieved a growth rate of 3.5 percent from 2007-08 to 2010-11 and 4.6 percent from 2010-11 to 2015-16. Consequently, economic growth has outpaced population growth and per capita income has increased significantly.

The divergence in growth of the urban and rural GDPs has implied that the urban-rural divide in per capita value added has widened. It was 63 percent in 2007-08, rising to 73 percent by 2010-11 and reaching 79 percent by 2015-16.

These estimates of the urban-rural differential are higher than these revealed by the various HIES. According to the value added estimates the gap was 79 percent in 2015-16, whereas according to the HIEs it is 61 percent. Part of this difference is attributable to the equalizing effect of remittances from urban to rural areas.

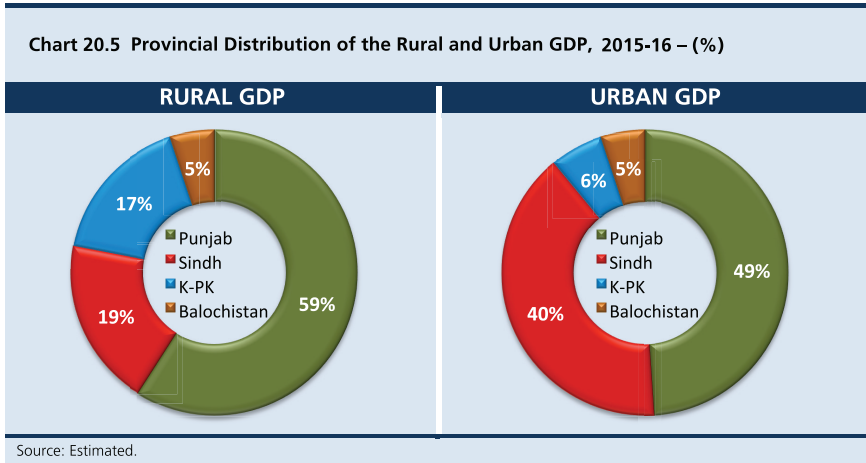
20.4. PROVINCIAL ESTIMATES

The methodology described above in Section 2 has been applied to the sectoral value added in the GDP of each Province. The results are presented in Chart 20.4.



Sindh is the only Province where the urban GDP has the dominant share of 68 percent. As opposed to this, the rural share is very large in Khyber-Pakhtunkhwa at 74 percent. Overall, as highlighted earlier, the national GDP is evenly split between the urban and rural economies.

The regional distribution of the rural and urban GDP is presented in Chart 20.5. The major part, 59 percent, of the rural economy is located in Punjab and 19 percent in Sindh. The two smaller Provinces combined have a share of 22 percent.



The urban economy is largely concentrated in Punjab and Sindh with shares of 49 percent and 40 percent respectively. The two smaller provinces contribute 11 percent to national urban GDP.

20.5. PROVINCIAL URBAN-RURAL DIVIDE

The urban-rural value added per capita differential is quantified for 2015-16 in Table 20.7. The largest gap is observed in Balochistan of 169 percent, followed by Sindh with urban-rural differential of almost 100 percent. The Province of Punjab and K-PK have substantially less inequality at 46 percent and 54 percent respectively.

The gap in terms of value added versus income per capita appears to be larger in the Provinces of K-PK and Balochistan, while it is lower in Punjab and almost the same in Sindh. Two Provinces, in particular, which will have to focus on reducing the urban-rural divide are Balochistan and Sindh.

Table 20.7 Average Per Capita Value Added in Rural and Urban Areas by Province, 2015 -16

(Rs per Month at Current Prices)

	Per Capita Value Added		
	Rural	Urban	Overall
PUNJAB	9843	14382	11522
<i>Ratio</i>		46.1*	
SINDH	9539	19057	14484
<i>Ratio</i>		100.0	
KHYBER-PAKHTUNKHWA	8143	12513	8954
<i>Ratio</i>		53.7	
BALUCHISTAN	6025	16184	8785
<i>Ratio</i>		168.6	

* % difference between value added per capita and per capita in urban and rural areas.

Source: Estimated | PES

The estimates of relative value added per capita provide the basis for the ranking of the four Provinces. In the rural measure, Punjab ranks the highest and Balochistan the lowest. The ranking is very different in urban areas. As expected, in the presence of Karachi, Sindh has the highest per capita value added. Somewhat surprisingly, Balochistan is ranked second.

Table 20.8 Ranking of Provinces in terms of Per Capita Value Added

	Per Capita Value Added	
	Rural	Urban
Punjab	1	3
Sindh	2	1
Khyber-Pakhtunkhwa	3	4
Balochistan	4	2

Source: Estimated

The overall conclusion is that the urban-rural differential is large and growing. This will put greater pressure on migration to large cities, as has been observed in the case of Lahore in the latest Census and earlier in the case of Karachi. Consequently, these cities are seeing a breakdown in the provision of basic municipal services and high levels of congestion and pollution.

The answer lies in laying substantially greater emphasis on rural development. The agricultural sector has shown very limited growth annually of only 2.5 percent from 2007-08 to 2015-16. This has to be raised to close to 4 percent. Revival of agriculture will also provide a strong stimulus to the off-farm economy in rural areas of Pakistan.

TECHNICAL APPENDIX

**TECHNICAL APPENDIX
CONSISTENCY CHECKING OF NATIONAL INCOME ACCOUNTS**

	Sector/Sub-Sector	Indicators for Consistency Check
(20.88)	AGRICULTURE	
(5.34)*	Important Crops	<ul style="list-style-type: none"> Production Data and Value Added (at constant prices) per unit. [PES]
(2.32)	Other Crops	<ul style="list-style-type: none"> Relationship between Growth of Output and Prices (for vegetables and fruits) CPI, ASP] Relationship with growth in quantity of imports of pulses [PBS] Growth in exports of fruits and vegetables
(0.61)	Cotton Ginning	<ul style="list-style-type: none"> Relationship between growth of cotton output [PES]
(11.76)	Livestock	<ul style="list-style-type: none"> Relationship between growth of output of livestock products [PES] Relationship with growth in consumption of livestock products [HIES, PBS]
(0.---)	Forestry	<ul style="list-style-type: none"> Growth in Total Forest Production [PES] Growth in Output of Wood Products Industry [PBS, QIM] Growth in consumption of firewood [HIES]
	Fishing	<ul style="list-style-type: none"> Growth in Fish Production [PES] Growth in Fish Consumption [HIES]
* Share of GDP		
(20.30)	INDUSTRY	
(2.92)	Mining & Quarrying	<ul style="list-style-type: none"> Growth of Output of Gas, Oil Limestone, etc. [PES, EYB]
(10.62)	Large-Scale Manufacturing	<ul style="list-style-type: none"> Consistency of weights and growth of individual industries with overall growth of QIM [PBS, SBP] Relationship with Growth in Consumption of major manufactured consumer products (less net trade) [HIES] Relationship with Growth in Electricity Consumption by Industrial Consumers
(1.73)	Small-Scale Manufacturing	<ul style="list-style-type: none"> Relationship with growth in exports of major small-scale manufacturing industries [PBS] Growth in the informal sector of manufacturing [LFS]
(0.93)	Slaughtering	<ul style="list-style-type: none"> Growth in Production of Beef and Meat [PES] Growth in Consumption of Beef and Meat [HIES]
(1.67)	Electricity Generation & Distribution & Gas	<ul style="list-style-type: none"> Growth in Electricity Generation [PES] Growth in Electricity Consumption [PES] Growth in Gas Generation [PES]
(2.44)	Construction	<ul style="list-style-type: none"> Growth in Availability of Cement [QIM, PBS] Real Growth in Federal + Provincial PSDP [BD] Growth in Employment in Construction Sector [LFS]

TECHNICAL APPENDIX (...Contd.)
CONSISTENCY CHECKING OF NATIONAL INCOME ACCOUNTS

	Sector/Sub-Sector	Indicators for Consistency Check
(58.82)		
(18.26)	Wholesale & Retail Trade	<ul style="list-style-type: none"> • Growth in Output of the Commodity-Producing Sector [PES] • Growth in Volume of Imports [PES] • Growth in Employment in Sector [LFS]
(13.36)	Transport, Storage & Communication	<ul style="list-style-type: none"> • Growth in Availability of HSD and Motor Sprit [OCAC, PBS] • Growth in Tonnage Handled by the Ports [PES] • Growth in Other Traffic • Growth in Number of Trucks on Road
(3.14)	Finance & Insurance	<ul style="list-style-type: none"> • Change in Net Rates of Return (the Spread) [SBP] • Growth in Investment in Government Securities [SBP] • Growth in Bank Deposits [SBP] • Growth in Number of Bank Branches [SBP]
(6.75)	Housing Services	<ul style="list-style-type: none"> • Growth in Number of Housing Units [HIES] • Growth in Rental Expenditure by Households [HIES] • Growth in Availability of Cement
	General Government Services	<ul style="list-style-type: none"> • Growth in Consumption Expenditure by Federal and Provincial Governments Combined [BD] • Growth in Real Wages [BD] • Growth in Employment [LFS]
	Other Private Services	<ul style="list-style-type: none"> • Growth in Employment [LFS] • Growth in Revenues from WHT [FBR]
(76.4)*	Private Consumption Expenditure	<ul style="list-style-type: none"> • Growth in Household Consumption Expenditure at constant prices (HIES)
(11.7)	Government Consumption Expenditure	<ul style="list-style-type: none"> • Growth in Real Current Expenditure of Federal and Provincial Governments [BD]
(--.8)	Gross Fixed Capital Formation-Private Sector	<ul style="list-style-type: none"> • Growth in Credit to the Private Sector by the Banking System [MOF] • Growth of Imports of Machinery [PBS] • Growth in Number of Industrial and Commercial Consumers of Electricity [NEPRA] • Growth in Value of Fixed Assets of Companies [SBP] • Growth in WHT on Contractors [FBR]
(3.57)	Gross Fixed Capital Formation Public + Government	<ul style="list-style-type: none"> • Growth in Federal and Provincial PSDPs [PC]

TECHNICAL APPENDIX (...Contd.)
 CONSISTENCY CHECKING OF NATIONAL INCOME ACCOUNTS

GDP BY EXPENDITURE

Expenditure Components		Indicators for Consistency Check
(1.6)	Change in Inventories	• Growth in Stocks of Agricultural Products
(10.6)	Exports	• Growth in Real Exports of Goods & Services
(13.7)	Imports	• Growth of Real Imports of Goods & Services
Source:		

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