

Fifth Annual Report 2012

THE STATE OF THE ECONOMY:

THE PUNJAB STORY



INSTITUTE OF PUBLIC POLICY
BEACONHOUSE NATIONAL UNIVERSITY, LAHORE

**IPP's Fifth Annual Report
2012**

**The State of the Economy:
The Punjab Story**

Institute of Public Policy
Beaconhouse National University

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Institute of Public Policy Beaconhouse National University

Institutional backing is absolutely essential to policy makers of today, to guide their actions in promoting development and peace. These are times of change and challenge. There is a need for policy makers to base their policies on sound analytical work. Therefore, the Beaconhouse National University established the Institute of Public Policy (IPP) as an independent, private sector think tank for research on economic, social, political and foreign policy issues.

IPP's mission is to "work in the areas of importance for improving the welfare of the citizenry. Its work will focus in particular on public policies in areas of economics, social and political development, as well as on foreign policy".

Key activities of the Institute include: independent and objective analysis of the economy; strategic analysis of the concepts and doctrines in selected areas of public policy; research in the areas that are important for regional cooperation; seminars and workshops to bring together policy makers, experts and other members; funded research projects and dissemination of research findings with the view to enhance public awareness and contribute to debate on issues of public policy.

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■ Mr. Sartaj Aziz	Ex-officio Member, Vice Chancellor, BNU

Dr. Aisha Ghaus-Pasha is the Director of the Institute.

PREFACE

This is the Fifth Annual Report of the IPP. Its release coincides with the final year of the democratically elected government which took over after the general elections held in March 2008. The Report would therefore be of interest, not only to the present policy makers but also to all other political parties which are formulating their respective political strategies and manifestos in preparation for the next general elections due in early 2013.

In the face of all the predictions about doom and gloom, it is a matter of some satisfaction that the democratic process is on track. Despite poor governance record of the elected government and mounting economic difficulties, no political party has been advocating any non democratic options. In fact, all political parties inside and outside the Parliament, participated actively in the civil society movement which restored the superior Judiciary in March 2009 and then in the passage of the 18th Amendment in April 2010 which, as explained in IPP's Fourth Annual Report, not only restored the balance of power between the President and Parliament but also strengthened the Federation by enhancing the degree of provincial autonomy.

The emergence of a vibrant civil society and a vigilant media supported by a very large network of the private T.V. channels has also transformed the entire political landscape of the country and in the process improved the prospects for evolving a strong democratic order, free from external pressures and continuing oversight of an over bearing Establishment.

But the journey towards a strong and self sustaining democratic order is not going to be easy. It will face many formidable challenges including the ongoing tussle between the higher Judiciary and the Executive, as the latter adjusts to the working of an independent Judiciary and also between the Executive and the Parliament, as the latter takes up its new responsibilities to provide guidance on foreign and economic policies.

Superimposed on these challenges will be the growing geo-political turmoil, as the United States (US) begins its planned withdrawal from Afghanistan and militant extremism intensifies its onslaught to gain political and physical space in Pakistan.

But the greatest challenge for democracy in the coming years will be to provide good governance and deal with problems like inflation, unemployment, poverty and load shedding. These subjects are the focus of the analysis and research findings presented in this Report.

The fundamental cause of the serious economic crisis facing the country is virtual stagnation in the real economy for several years. With an average growth of only 2.5 percent in these four

years every other indicator has been on the decline. Even the 2.4 percent growth rate in 2010-11 was largely due to a 4.1 percent growth in services sector, including 13 percent growth in public administration and defence, attributable mainly to the 50 percent increase in salaries to civil servants in June 2010. The growth in the real sectors of the economy namely industry and agriculture was nominal.

The stagnation in the economy is partly the result of a declining Investment – Gross Domestic Product (GDP) ratio and partly due to the unprecedented energy crisis, which has already led to the closure of thousands of factories and large-scale unemployment of workers of these factories. But large-scale investment supported by domestic public and private savings will require a visible revival of confidence in the future of the economy, strong institutions, the rule of law and good governance.

As in previous Annual Reports, this year's special topic is Punjab with an in-depth analysis of economic growth in Punjab as compared to the rest of Pakistan, its social sector development and regional disparities among districts and divisions in Punjab.

The research for the special chapters on Punjab was undertaken by several M.Phil students of the Economics Department of the Beaconhouse National University under the supervision of Dr. Hafiz Pasha. I hope the findings and conclusions presented in the Report will be useful for the provincial officials and other stakeholders as they prepare to undertake enhanced development responsibilities under the 18th Amendment.

We plan to undertake similar research for other provinces in the future Annual Reports of the Institute of Public Policy.



Sartaj Aziz

Vice Chancellor
Beaconhouse National University

The Institute of Public Policy is grateful to the Asia Foundation for its financial support for the preparation, publication and dissemination of this Report.

FOREWORD

The IPP is making available its Fifth Annual Report at a difficult moment in Pakistan's history. Pakistan has been variously called a fragile state, a country facing an existential threat, and the world's most dangerous place. Its standing in various measures of social and economic development continues to slide. In the domestic political discourse, the negatives about the country's situation are emphasised more than the positives. In other words, it would be hard for policy analysts to think positively about the country's current position and its future prospects. That withstanding we see some glimmer of hope. This is for at least three reasons.

First, Pakistan is successfully negotiating its way through a difficult period of transition. It is moving from a political system dominated by the Military towards the one which will have the citizenry represented by the people chosen in free and fair elections. While moving in that direction, it is finding a way to introduce a number of checks and balances on the exercise of the Executive Authority. In this context the roles of the Judiciary, the civil society and the media will become important.

Second, the process of devolution made possible by the 18th amendment to the Constitution and supported by the 7th Award of the National Finance Commission (NFC) has begun to move the centre of gravity of economic policy making from the federal to the provincial levels. Thus empowered, the provinces should be able to manage to a considerable extent their own affairs. In order to do that effectively, they will need to understand well their own circumstances, plan to overcome their weaknesses and augment the financing they receive from the federal government by raising their own resources. This is the reason why we have made the "Punjab Story" the focus of this Report. We will have more provincial stories to tell in our future Annual Reports.

Third, we are witness to a historic move – the opening to India in economic affairs. After more than six decades of turning their backs towards each other, Pakistan and India may be able to work together in a number of areas, in particular in trade. This will have enormously positive consequences for Pakistan and would set right a number of distortions that occurred in the structure of our economy because of the uneasy relations with our neighbor. The IPP is engaged in an important study to analyze the various aspects of this important development. We will report on our findings in the 2013 Annual Report.

As before, the Report was written by a group of people who are committed to working in the hope of seeing a better future for Pakistan. That said, I would be failing in my role as the Chairman of the Institute if I do not recognise the enormous amount of work – both in terms of making contributions to the Report's substance as well as supervising the herculean labor that required to get it into publication – by the Director of IPP, Dr. Aisha Ghaus-Pasha. Once again the effort was supported by the Asia Foundation through a grant. We are grateful for its continuing interest in our work.



Shahid Javed Burki

Chairman

Institute of Public Policy

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CONTENTS

PREFACE	V
FOREWARD	VII
RESEARCH TEAM	IX
LIST OF ACRONYMS	XVII

CHAPTER - 1

Working the Economy in a Fast Changing Domestic Political and International Environment .....	.02
The First Four Reports .....	.03
The 2012 Report .....	.09

CHAPTER - 2

Pakistan's Economy 2012: Floundering or Resilient? .....	.18
Macroeconomic Imbalances .....	.20
Deteriorating External Resource Position .....	.23
Investment Decline .....	.24
Loss of Competitiveness .....	.26
Lagging Exports .....	.27
Trends and Prospects in World Trade in Manufactures .....	.29
Distribution Issues Remain Critical .....	.31
Economic Prospects in 2011-12 .....	.32
The Underlying Potential of the Pakistan Economy and some Positives .....	.37

CHAPTER - 3

Revival of Growth .....	.44
Introduction .....	.44
Historical Perspective .....	.45
Quality of Growth and the recent slowdown .....	.46
The Three Transitions .....	.49
Planning Commission's Growth Framework .....	.51
Entrepreneurship and the Firm as the Driver of Growth .....	.55
Budgetary Proposals for 2012-13 .....	.57
Conclusion .....	.60

CHAPTER - 4

The Size and Growth of The Regional Economy of Punjab	.64
Methodology for Construction of Regional Income Accounts	.65
Long-Term Growth Trends	.67
Agriculture	.68
Industry	.70
Services	.72
Overall Shares and Growth Trends	.74
Comparative Advantage of Punjab	.76
Variability of Growth	.78
Employment and Growth	.79
Explanations for Growth Differentials	.80
Policy Implications and Conclusions	.83

CHAPTER - 5

Trends in Social Sector Development in Punjab	.88
The Human Opportunities Index (HOI)	.88
Factors Contributing to the Improvement	.91
What has been the Trend After 2007-08?	.94
Prospects for Social Development	.95
Emerging Issues	.99

CHAPTER - 6

Regional Disparities in Punjab	.108
Choice of Development Indicators	.109
Ranking of Districts and Divisions	.111
Profile of Backwardness	.114
Trends in Development Ranking	.117
Has Regional Inequality Increased in Punjab	.119
Has Lahore Diverged from the Rest of Punjab?	.121
Relationship between Development inputs and Outcomes	.122
Roots of Regional Inequality in Punjab	.123
Implications of a New Province	.125
Conclusions and Policy Implications	.127

APPENDICES

Technical Appendix	132
Statistical Appendix 1	134
The Size and Growth of the Regional Economy of Punjab	134
Statistical Appendix 2	146
Key Indicators	146

TABLES

Table 1.1	Major Macroeconomic Indicators	06
Table 1.2	Sectoral Shares in the Pakistani Economy	14
Table 1.3	Structural Changes in the Pakistani Economy	15
Table 2.1	Growth Rates of GDP, GNP and GNI	18
Table 2.2	Domestic Absorption of Resources	19
Table 2.3	Major Macroeconomic Indicators	19
Table 2.4	Fiscal Trends	21
Table 2.5	Price Trends	22
Table 2.6	Public Debt Burden	23
Table 2.7	Investment in Large Scale Manufacturing in 1999-2000 Prices	25
Table 2.8	Textiles and Clothing Exports of Major Developing Countries	27
Table 2.9	World Manufactured Exports and Market Share of Major Developing Countries	28
Table 2.10	Change in Real Household Income	31
Table 2.11	Change in Real Consumption Expenditure by Households	31
Table 2.12	Targets and Projections for 2011-12	35
Table 3.1	Pakistan's Economic Growth 1950-2010	45
Table 4.1	Regional Allocators for Different Sectors/Sub-Sectors Agriculture and Industry	66
Table 4.2	Earlier Estimates of the Long-term Growth Rate of Punjab and the Rest of Pakistan	67
Table 4.3	Share of Punjab in the Production of Key Major Crops	68
Table 4.4	Share of Punjab in the Production of Minor Crops	69
Table 4.5	Share of Punjab in the Livestock Sector	69
Table 4.6	Comparison of the Growth Rate of Punjab and the Rest of Pakistan in the Agricultural Sector	70
Table 4.7	Sectoral Shares in the Agricultural Economy of Punjab	70
Table 4.8	Share of Punjab in Mining and Quarrying	70
Table 4.9	Share of Punjab in the Electricity and Gas Sector	71

Table 4.10	Comparison of the Growth Rates of Punjab and the Rest of Pakistan in Industry	72
Table 4.11	Share of Punjab in Transport, Storage and Communications	73
Table 4.12	Share of Punjab in Wholesale and Retail Trade and Hotels and Restaurants ..	73
Table 4.13	Comparison of the Growth Rates of Punjab and the Rest of Pakistan in Services	74
Table 4.14	Sectoral Shares in the Services Economy of Punjab	74
Table 4.15	Share of Punjab in the National Economy	75
Table 4.16	Sectoral Comparison of the Economy of Punjab and the Rest of Pakistan ...	75
Table 4.17	Annual Growth Rate of GRP of Punjab and the Rest of Pakistan	75
Table 4.18	Comparison of the Growth Rate of Punjab by Government of Punjab and IPP (2002-03 to 2006-07)	75
Table 4.19	Location Quotients of Punjab by Sector/Sub-Sector as of 2010-11	77
Table 4.20	Standard Error around Trend Growth Rate	78
Table 4.21	Relationship between Employment and Economic Growth in Punjab	79
Table 4.22	Growth Rates by Sectors in Different Periods in Punjab and Rest of Pakistan	80
Table 5.1	Statement Showing Total Funds Released to District Governments Since 2001- 2002 to 2010-11	93
Table 5.2	Impact of the NFC Award on Government of Punjab (first year after award) ..	96
Table 6.1	Ranking of the Districts of Punjab	111
Table 6.2	Distribution of the Districts of Punjab in Different Sub-Regions by Level of Development	112
Table 6.3	Ranking of Divisions of Punjab	113
Table 6.4	Ranking of Districts in Different Groups of Indicators	115
Table 6.5	Correlation of Individual Indicators with the Composite Indicator	116
Table 6.6	Correlation among District Rankings in different Studies	118
Table 6.7	Evolution of District Rankings over the Last 40 years	118
Table 6.8	Spread of Development Indicators Among Different Sub-Regions of Punjab ..	119
Table 6.9	Trend in Regional Inequality at the District Level in Punjab	120
Table 6.10	Has Lahore District Diverged from the Rest of Punjab?	121
Table 6.11	Development Inputs and Outcomes in Social Services	122
Table 6.12	Input and Output Rankings at the Divisional Level in Social Services	122
Table 6.13	Results of Regressions of the Composite Development Index with Long-term Factors Impacting on Regional Inequality	124
Table 6.14	Combined Share of the Three divisions - Multan, Dera Ghazi Khan and Bahawalpur - in Punjab	126

BOXES

Box 4.1	The Two Punjabs	77
Box 4.2	Punjab's Share in Tax Revenues	81
Box 5.1	Computing the Human Opportunity Index	89
Box 5.2	Indicators of Opportunities used in the HOI Analysis of Pakistan	90
Box 5.3	Development of Provincial Taxes	101
Box 6.1	Composite Development Index, HDI and Poverty	114
Box 6.2	Pattern of Electricity Consumption in Punjab	117
Box 6.3	Regional Inequality within Provinces	121

CHARTS

Chart 4.1	Sectoral Shares in the Industrial Economy of Punjab	72
Chart 5.1	Rate of Change in Key Social Indicators	94
Chart 5.2	Disparities in Key Social Indicators	95
Chart 6.1	Map of Punjab showing Top and Bottom Districts	113

ACRONYMS

ACGR	Annual Cumulative Growth Rate
ADB	Asian Development Bank
ADP	Annual Development Programme
AEPAM	Academy of Educational Planning and Management
AIT	Agricultural Income Tax
ASYB	Agricultural Statistics Year Book
BHUs	Basic Health Units
BISP	Benazir Income Support Programme
BoP	Balance of Payments
CAD	Current Account Deficit
CCI	Council of Common Interests
CLL	Concurrent Legislative List
COAS	Chief of Army Staff
CoSF	Competitiveness Support Fund
CPI	Consumer Price Index
CSF	Coalition Support Fund
D. G. Khan	Dera Ghazi Khan
DFID	Department for International Development
EU	European Union
EYB	Energy Year Book
FAP	Farmers Association of Pakistan
FBR	Federal Board of Revenue
FESCO	Faisalabad Electric Supply Company
FLL	Federal Legislative List
FPI	Food Price Index
FTA	Free Trade Area
FY	Fiscal Year
G-20	Group of 20
GDI	Gross Domestic Income
GDP	Gross Domestic Product
GEPCO	Gujranwala Electric Power Company
GFCF	Gross Fixed Capital Formation
GNI	Gross National Income
GNP	Gross National Product
GoPu	Government of Punjab

GRP	Gross Regional Product
GST	General Sales Tax
GT-Road	Grand Trunk Road
H & N	Helbock and Naqvi
HDI	Human Development Index
HEC	Higher Education Commission
HIES	Household Integrated Economic Survey
HOI	Human Opportunity Index
ICOR	Incremental Capital Output Ratio
IDI	Composite Development Indicator
IEF	Index of Economic Infrastructure
IEH	Index of Social Services
IESCO	Islamabad Electric Supply Company
IMF	International Monetary Fund
IMF-SBA	International Monetary Fund-Standby Agreement
IPD	Inverse Population Density
IPP	Institute of Public Policy
ITPs	International Trade Prices
IWI	Index of Income and Wealth
Km	Kilometers
K-PK	Khyber Pakhtunkhwa
KSE	Karachi Stock Exchange
LESCO	Lahore Electric Supply Company
LFS	Labour Force Survey
LGA	Local Government Act
LGO	Local Government Ordinance
LGS	Local Government System
LHWs	Lady Health Workers
LNG	Liquefied Natural Gas
LSM	Large-Scale Manufacturing
LTU	Large Taxpayer Units
M2	Broad Money
MAT	Minimum Assets Tax
MCB	Muslim Commercial Bank
MEPCO	Multan Electric Power Company
MFN	Most Favored Nation
MICs	Multiple Indicator Cluster Survey
MINFAL	Ministry of Food and Agriculture

MoF	Ministry of Finance
MTBF	Medium Term Budgetary Framework
MTDF	Medium Term Development Framework
MW	Mega Watt
NA	National Assembly
NCA	National College of Arts
NEAS	National Education Assessment System
NEPRA	National Electric Power Regulatory Authority
NER	Net Enrolment Rate
NFA	Net Foreign Assets
NFC	National Finance Commission
NIH	National Institute of Health
NRP	Non-Resident Pakistanis
O&M	Operations and Maintenance
OCAC	Oil Companies Advisory Committee
OLS	Ordinary Least Squares
P & A	Pasha and Ayezaz
P & H	Pasha and Hasan
P & S	Pasha and Salman
P & D	Planning and Development
PAA	Provincial Allocable Amount
PBS	Pakistan Bureau of Statistics
PDS	Punjab Development Statistics
PEF	Punjab Education Foundation
PEIRA	Private Educational Institutions Regulatory Authority
PERI	Punjab Economic Research Institute
PES	Pakistan Economic Survey
PEYB	Pakistan Energy Year Book
PFC	Provincial Finance Commission
PIA	Pakistan International Airlines
PILDAT	Pakistan Institute of Legislative Development and Transparency
PM & DC	Pakistan Medical and Dental Council
PML-N	Pakistan Muslim League-Nawaz
POL	Petroleum Oil and Lubricants
PPPs	Public-Private Partnerships
PRA	Provincial Retained Amount
PSDP	Public Sector Development Programme
PSLM	Pakistan Social and Living Standards Measurement

PSYB	Pakistan Statistical Year Book
PTA	Pakistan Telecommunications Authority
PTCL	Pakistan Telecommunications Company Limited
r	Correlation Coefficient
R&B	Rural Roads
R&D	Research and Development
R ²	Correlation Coefficient Squared
RBC	Reinforced Brick Concrete
RCC	Reinforced Cement Concrete
REER	Real Effective Exchange Rate
RHCs	Rural Health Centres
RTO	Regional Tax Office
SAFTA	South Asian Free Trade Area
SBP	State Bank of Pakistan
SMEs	Small and Medium Enterprises
SPDC	Social Policy and Development Centre
SROs	Statutory Rules and Orders
SSM	Small-Scale Manufacturing
TA	Technical Appendix
TB	Tuberculosis
TFP	Total Factor Productivity
TOE	Thermal Oil Equivalent
TPP	Tawana Pakistan Project
TV	Television
UBL	United Bank Limited
UIPT	Urban Immoveable Property Tax
UNDP	United Nations Development Programme
US	United States
WAPDA	Water and Power Development Authority
WB	World Bank
WTO	World Trade Organisation

Chapter - 1

**Working the Economy
in a Fast Changing
Domestic Political and
International Environment**

Chapter - 1

Working the Economy in a Fast Changing Domestic Political and International Environment

The Fifth Annual Report authored by the IPP, maintains the tradition established in 2008 when the first of the series was presented to the policy makers and the public. At the time of the Report's release – it was made public while the federal and provincial governments were preparing the budget for the financial year 2008-09 for their jurisdictions – there was an assumption that the findings presented in the IPP document may have some influence on the policy makers. It is under the same assumption that the 5th Annual Report covering the year 2012 is being made available to the public.

The same set of authors that produced the earlier Reports have reflected on the state of the economy as it appears to them at the time of this writing – the spring of 2012. Choosing the policy makers and opinion makers as their principal audience the authors provide some thinking on the main problems the economy faces at this difficult and dark period in Pakistan's history. They also examine the opportunities that exist for improving the economy's state and improving also the conditions, both economic and social, of the general citizenry. In order to place the Fifth Report in context, it would be useful to reflect, albeit briefly, what was covered in the previous four documents.

It will be noted that today, in the spring of 2012, Pakistan is a very different place than was the case in 2008 when the First Report was written. There is much debate in the public sphere about the health of the Pakistani state, not only its economy but also the structure of its politics and the country's relations with the outside world. Given the difficulties the country currently faces it is easy to be despondent and dejected and to be deeply concerned about the future. But those sentiments, while easy to understand, must be tempered with the recognition that a number of positive developments have occurred. Pakistan today has an evolving democratic system that is unlikely to be thrown off-course. It is not likely that we will see a repeat of history. On several occasions in the past attempts were made to bring in a representative form of government only to be stymied by Military interventions. Pakistan now has better informed citizenry that is able to have its voice heard and that voice has expressed a clear preference for democracy.

The space within which the non-state actors can act has also expanded. The media, both print and electronic, feels few constraints to voice a diversity of opinions. The international community which, at times feels exasperated by the way the country and its leadership groups act, recognises that Pakistan has a central role to play in bringing peace to this highly troubled region of world. There are some encouraging signs that a way is being found to work with India in a manner that brings benefits to the citizens of both countries. Pakistan continues to work closely with China and the Middle East – and increasingly with Turkey, a rising economic power in this region – to craft mutually beneficial economic relations. And, after a rough period, Pakistan seems ready to have a new basis of relationship with the US that will be put in place not by an authoritarian ruler but by the people's representatives sitting in the country's Parliament. Pakistan is on its way to evolving a new structure of governance in which sub-national administrations will have greater autonomy. The higher courts – the Supreme Court and the Provincial High Courts have been able to free themselves from the influence of the Executive Branch.

Since economics is our main business and while we are concerned with its state in 2012, we – as we have done on four previous occasions – are placing a series of options that we believe should be reflected upon as the policy makers, both at the central and provincial level, sit down to write the budgets for the geographic space for which they have responsibility.

THE FIRST FOUR REPORTS

The First Report was written in 2008¹ when the process of political transition had begun with the reins of power moving from the hands of the Military to those of the newly elected representatives of the people. It was recognised that the Military oversaw a fair election held in February 2008. This remains the impression even when it was discovered that some 38 million votes – 30 percent of the total – were bogus. Such near-revolutionary transitions do not always happen smoothly; this one took 8 months, from the time an elected Prime Minister (PM) took office (in March 2008) to the time when the Military President resigned to be replaced by his duly elected civilian successor (in September 2008). Coalition governments took office in five capitals, Islamabad and the four provincial headquarters. Pakistan, in other words, began its democratic life in a pluralistic setting. This was an encouraging development since the country is too diverse a political entity to be governed by one or two centralised political organisations.

The 2008 Report concentrated on the imbalance that was created on the fiscal and external fronts, both caused mostly by profligacy that is not unusual when governments prepare to face the electorate. The administration headed by General Pervez Musharraf spent freely and mostly unwisely to secure votes for the political party that had provided its support during its long tenure.

It ran large fiscal deficits and allowed the State Bank of Pakistan (SBP) to ease money supply. Using these developments as the background we presented our estimate of what we considered to be the sustainable levels of both fiscal and Balance of Payments (BoP) accounts. To achieve the former, we advocated constraints on public expenditure, particularly of current expenditure while encouraging the policy makers to reform the tax system and expand the tax base. On the external side we advocated a well thought-out move towards an export-oriented strategy while using public policy to increase the supply of exportable goods and commodities. In improving the export situation, we urged the policy makers to take cognisance of the enormous changes that were occurring in the shape and structure of the global economy. When we wrote the First Report the world was still about six months away from plunging into what came to be labelled as the Great Recession of 2008-09. This downturn affected Pakistan both directly and indirectly. It raised a number of questions that are vital for the shaping of public policy in Pakistan. These include the appropriate role of the state and regulatory constraints on market capitalism. It also raised the important issue of the content and direction of Pakistan's external trade.

A number of developments occurred in 2008 after the release of the First Report. These were taken up in the Second Report published in the spring of 2009². Recognising that the rapid running down of foreign exchange reserves was moving the country towards a serious BoPs crisis, the new policy makers in Islamabad decided to do what they had done so many times in the past. They went to the International Monetary Fund (IMF) for support. The Fund responded positively recognising that extreme economic strains on a newly democratising polity could result in a political setback. The Fund was especially concerned that the performance conditions it might attach should not seriously hurt the progress of the economy or place additional burdens on the country's poor and underprivileged. This represented an important development in the Fund's policy priorities.

The change in the Fund's approach was based on the experience it had gained from the interventions it made in several Asian countries in the financial crisis of 1996-97. Then the approach was to bring about adjustment as rapidly as possible even if it meant squeezing growth out of the economic system. This stance stabilised the economies assisted by the Fund but also had the effect of increasing the incidence of poverty. When applied to countries such as Indonesia, it set back by years the attempts to alleviate poverty. Pakistan was a beneficiary of the change in the Fund's emphasis.

The Fund's decision about Pakistan was taken as the global economic system was moving into a deep recession with the near-collapse of the global financial system. In spite of the energies

spent in a remarkable presidential election in the US that saw the swearing-in of the country's first Afro-American President in January 2009, Washington was able to take four important decisions to rescue the global economy. It launched a fairly large stimulus package; it rescued the rapidly failing banking system; it provided large funds to save the collapsing automobile industry; and it gathered the world's nineteen major economies under the umbrella of G-20 to coordinate economic policy making. At their meeting in London in April 2009, the G-20 agreed to inject new funds into the IMF and the development banks. An additional \$250 billion was provided to the Fund. This enlargement in the Fund's resource base benefited Pakistan and the size of its program was increased from \$7 billion to \$11 billion.

We took note of these developments in the Second Annual Report in which we examined the Fund's programme and made some recommendations for fine tuning it in order not to sacrifice growth on the altar of rapid adjustment. We were of the view that even with the needed adjustment we could formulate public policies in order to obtain two desirable results. First, to climb on the trajectory of growth that was being followed with such success by the countries in our neighbourhood – particularly India but also to some extent Bangladesh. Second, to opt deliberately for what development economists had begun to call “inclusive growth” – growth which made its rewards available to a wider segment of the population. This, we suggested, would be a significant departure from the results achieved by the latest growth spurt in Pakistan's history – from 2002 to 2007 – when the bulk of the rewards of GDP increase were captured by a narrow economic elite. We presented some detailed ideas on how the less advantaged segments of the population could become the beneficiaries of economic advance. We proposed the development of community based institutions that could work for the inclusion – and hence the economic betterment – of the poor in both urban areas and the countryside.

In looking at the macroeconomic situation, we noted the considerable deterioration that had occurred largely with the GDP growth rate declining by more than three percentage points. This had occurred in spite of the flow into the country of fairly significant amounts of capital from the Fund. We saw that flow as papering over the fault-lines that had developed under the country's economic structure and had brought it to the edge of an economic abyss. What was required was to develop a set of policies for improving the domestic resource situation. We continued to urge the policy makers to put a great deal of energy into bringing about structural changes to place the country on a sound footing. As we had done in the past, we continued to urge action to promote exports.

Table 1.1 above shows how our (and the government's) perception of the macroeconomic situation continued to weaken over the years. To take one example: The GDP growth for the year 2008-09 declined from an estimate of 3 percent in the Second Report, to an expectation of 2.5 percent in the Third Report to the actual of only 1.2 percent indicated in the Fourth Report.

The year 2009 proved to be a difficult one for Pakistan. The escalation of the US war effort in Afghanistan had several consequences for Pakistan. Of particular significance was the spill over into the country of extremist activity and the consolidation of the sanctuaries these groups had created in Pakistan's tribal belt. With the government's limited resources there was little fiscal space for serious economic development, Pakistan's economy came under serious strains. Of particular concern were two types of disruptions – one caused by the deterioration in the security situation as well as the dislocation in the system of production caused by serious shortages of electric power. Our estimates of the impact of both the security problem faced by the country and energy shortage on the economy broke new ground. In determining the impact of the deteriorating security situation we looked at both direct costs (for instance on increasing the size of security forces and their deployment) and indirect costs (for instance the loss of confidence in the economy's future) for the economy.

The estimate for the impact of energy shortage was based on a survey of a number of privately owned enterprises that had devised different approaches – some of them highly innovative – to deal with power shortages and load shedding. In the 2010 Report, the Third in the series, we estimated the cost to the economy of both increased extremist-inspired domestic violence and

Table 1.1				
Major Macroeconomic Indicators				
First Annual Report	2006-07			
GDP Growth per Annum (%)	7.0			
Fiscal Deficit (As % of GDP)	-0.9			
Current Account Deficit (As % of GDP)	-4.9			
Second Annual Report	2006-07	2007-08	2008-09 (E)	
GDP Growth per Annum (%)	5.9	6.2	3.0	
Fiscal Deficit (As % of GDP)	-4.3	-7.4	-5.0	
Current Account Deficit (As % of GDP)	-4.9	-8.4	-6.0	
Third Annual Report	2006-07	2007-08	2008-09	2008-09 (E)
GDP Growth per Annum (%)	5.9	6.2	2.5	3.0
Fiscal Deficit (As % of GDP)	-4.3	-7.4	-5.2	-5.8
Current Account Deficit (As % of GDP)	-4.9	-8.4	-5.6	-2.9
Fourth Annual Report	2006-07	2007-08	2008-09 (E)	2009-10
GDP Growth per Annum (%)	5.9	3.7	1.2	4.1
Fiscal Deficit (As % of GDP)	-4.3	-7.6	-5.2	-6.3
Current Account Deficit (As % of GDP)	-4.9	-8.4	-5.7	-2.0
(E) Estimated cost				
Source: The IPP Annual Reports				

power shortages. Because of these we had to tone down our earlier optimistic conclusion that Pakistan, while making adjustments to macroeconomic balances it could, after a lapse of 3 to 5 years, move on to a higher and sustainable growth strategy.³

In the macro part of our analysis in 2010, we were considerably more concerned than in the previous Reports. We estimated the rate of increase in domestic consumption in a period of slow growth. The conclusion that consumption had increased at a rate several-fold higher than the rate of economic growth provided a clear evidence that our call for engineering inclusive growth had not been heeded by the policy making community. Both fiscal and trade policies – aided perhaps by remittances, some of which were now directed towards higher income groups – were making the already rich in Pakistan considerably richer. Pakistan's income and asset distribution had palpably deteriorated.

Soon after the 2010 Report was released, Pakistan was hit by devastating floods caused by “one-in-hundred years” rainfall in the catchment areas of the Indus River system. The damage done to land, crops and physical assets was estimated at \$10 billion while a fifth of the population was displaced from their homes. The movement of people that ensued was equal in magnitude to the one caused by the exchange in population following the 1947 partition of India. The earlier migration had left a deep impact on Pakistan's economic, political and social development. The 2010 disaster could also produce a lasting impression. However, the fact that both the state and the citizens were able to deal with the crisis with some – but not extraordinary – foreign assistance suggested the resilience of both the government and the people.

While the government was dealing with the flood crisis, a committee of political leaders from different parties was mandated to design the 18th Amendment to the 1973 Constitution. The main purpose was to restore the much tinkered-with constitution to its original shape. Originally, the 1973 basic law was meant to create a federal structure in which the provinces would wield a great deal of administrative, economic, and legal powers. That was in the 1973 Constitution, more as an intent than as a reality. At the same time two successive Amendments – the 8th and the 17th – inserted by military rulers had created a quasi-presidential system with a good amount of power resting with the central authority and with little accountability of the president to the people's representatives sitting in the National Assembly (NA).

What emerged from the deliberation of the committee was a far-reaching draft Amendment that suggested not only restoring the 1973 Constitution to its original form. It also included a number of changes in governance, in particular in the way the members of the senior Judiciary were to be appointed. The Amendment was presented to the Parliament in July 2010 and after relatively short

debate was passed by both chambers of the National Legislature. It was signed into law by President Asif Ali Zardari in September 2010. Coupled with the announcement of the 7th NFC Award in November 2009, these changes in the structure of the Pakistani government were far-reaching and profound. By changing the formula on which the amounts in the divisible pool were allocated by giving some weight to considerations other than population, 7th NFC Award dealt with some of the long-standing grievances of the smaller provinces, in particular Balochistan. That province saw a near-doubling in its share in the divisible pool mostly at the expense of Punjab. The weight of population in the formula was reduced to 82 percent while the incidence of poverty (10.3 percent), collection of revenues (5 percent) and the land mass (2.7 percent) were assigned weights amounting to the remaining 18 percent.

Given these rather significant changes, the Fourth IPP Report⁴ presented an in-depth analysis of both the NFC Award and the 18th Amendment. Its main contention was that the two government initiatives had brought about a significant change in the way the government in Pakistan – the term government employed in the collective sense by including those of the provinces as well – would do its business. However, unless the task of transferring a number of responsibilities from the federal to the provincial governments was carried out with appropriate and careful preparation, the result would be fairly disruptive. One particular concern expressed in the 2011 Report was the availability of adequate funding for the provinces to handle these additional responsibilities and the presence in them of the needed capacity. It was also emphasised that the envisaged dispute resolution mechanism had to be strengthened to keep the government functioning without disruption at the national and sub-national level.

We expressed the concern in our assessment of the decentralisation of government that was becoming possible as a result of the passage of the 18th Amendment that the process should not stop after reaching the provincial level. If that happens we would have taken only half a step towards creating one aspect of good governance – bringing government to the citizenry's doorsteps. Many services that people want can only be delivered by an effective system of local governance. The US provides an interesting example of a functional democratic system that reaches down to the people. There are 90,000 local governments operating in that country; 1,800 per state in the federation. People vote for one million functionaries of the vast local government system. This extent of "localisation" is an essential ingredient of good governance. In Pakistan, vested interests must not be allowed to checkmate the further evolution of devolution.

After the preparation and presentation of the 2010 Report, the IPP was invited by the Islamabad based Competitiveness Support Fund (CoSF) to evaluate the capacity available at various

provinces to handle the new responsibilities that were being given to them through the passage of the 18th Amendment. This work was completed in the summer of 2011 and its findings were presented to a number of audiences in Karachi and Islamabad⁵.

The usual macro-analysis in the Report indicated growth expectations for the immediate as well as the near-term. The concern with increase in consumption in the proportion of national income while the proportion that was invested in the economy had declined to a worryingly low level was reiterated. Also re-emphasised was the need to focus the public policy makers' attention on increasing exports⁶.

THE 2012 REPORT

The recently concluded 2011 has been a busy year for Pakistan. All that has occurred was not necessarily for the good of the country. From our perspective the following four developments have special significance. The first of these is the process of decentralisation and transfer of additional functions to the provinces. It has gone apace and much has already been achieved. However, how the provinces in a finance-constrained environment will deal with this situation has now become an increasingly important area of concern for the economic and social performance. It is legitimate to emphasise provincial development as a factor in comprehending what is happening at the sub-national level. The main reason for federalism in governance is that the sum of the whole should be greater than the parts. A well functioning federal system produces results that should be better than what would be expected simply by adding what is occurring in the provinces. There are important externalities that flow from successfully achieved federalism. This is the context in which the 2012 Report presents an in depth analysis of Punjab.

The Punjab story which we tell in considerable detail in a later chapter is instructive. It dispels the notion that this province, the largest in the country by way of both population and share in national product, is currently the engine of growth for the country as a whole. There are two reasons for this. One, the structure of the Provincial economy is such that a significant part of the provincial product is produced by the relatively less well performing sectors. Two, the province has severe weaknesses in social development that have reduced the contribution a relatively young population can make to the development of the economy.

This significantly departs from the conclusion reached in an earlier IPP study that looked at Punjab's economic situation in 2008 and projected it forward by a decade. It was suggested that the province, by adopting a number of policies which were detailed in a policy matrix appended to the study, could attain double digit rates of growth. It would then be able to pull the rest of the country forward. That reading of the Punjab situation turned out to be over optimistic.⁷

Two important conclusions that emerge from the Punjab story as developed for the Fifth Report have to do with sub-regional divergence – how and why the regions in the province have diverged from one another and the worrying underperformance of the agriculture sector. This is the first serious attempt made by any analyst or institution in the country to estimate intra-provincial income and development disparities. By providing a quantitative estimate of these factors, we have provided some important areas for action in terms of public policy. What is true for Punjab in terms of intra-provincial disparities is also the case of the other provinces. Our work in the area of regional disparities offers a context within which the demand for the creation of new provinces should take place.

The process of carving out new provinces makes both political and economic sense by bringing government closer to the people, it has also to be looked at in terms of the country's sorry and deteriorating resource situation. India has followed the route of state-creation by keeping the size of the federating units relatively small. In Pakistan the 7th NFC Award and the 18th Amendment have created a greater degree of decentralisation. If the full extent of these developments in terms of defining the relative positions of the federal government and the provincial administrations gets to be realised, it will put greater emphasis on provincial resource generation. By taking out the less developed regions of a large province such as Punjab and turning them into a province will have some unintended consequences. This could result in sharpening provincial disparities rather than reducing them if a process of fiscal equalisation in favour of backward areas had been ongoing in the province. The NFC Award, as opposed to this, has a significant element of fiscal equalisation which could benefit south Punjab if it was granted the status of a province.

By including the subject of regional disparities in our policy research agenda we will be adding an important dimension to our overall work. This will provide us with the base for analytical work in the future Annual Reports.

The other important conclusion that we draw from the Punjab story concerns the continuing weakening of the province's agriculture. This sector was the backbone of the provincial economy ever since the British administration made heavy investment in the area to turn it into the granary for the food-deficit provinces in their expanding domain. This was done by developing an elaborate network of irrigation canals that used the massive supply of water in the Indus system of rivers. In addition the colonial government also invested in a road-network built around the fabled Grand Trunk Road (GT-Road). Railways were also brought in to help transport the food surplus that got to be generated by the developing agriculture sector in the province. Pakistan,

in other words, inherited a highly developed agricultural economy when it gained independence in August 1947. This unfortunately was allowed to be run down.

After independence the focus of policymakers' attention was the development of the urban economy. The irrigation and railway systems were not adequately maintained and the road system was developed more to serve the urban areas than to cater to the needs of the countryside. How much Pakistan has lost by not fully exploiting its agricultural potential can be gauged by comparing productivity levels in the Pakistani part of the province with that in the area that is now part of India. East Punjab's agriculture has much higher levels of productivity than the western part of the old province. It also has much greater integration of industry with agriculture, considerably better research-and-development infrastructure, much greater participation of women in the workforce, and a much more developed system of farm-to-market roads.

Reviving the provincial agricultural economy will pay high dividends for Pakistani Punjab. This should become the focus of public policy. One example of what can be achieved is provided by a foreign corporation that has invested heavily in Pakistan's food and beverage industry. Its business model, focused on potato cultivation, has several components: development and distribution of quality seeds to a selected group of farmers, guaranteed prices for their produce, and provision of technical-knowhow. The farmers working with the firm have achieved levels of productivity approaching world standards. Since there is always a demonstration effect in these kinds of developments, other farmers have begun to replicate what has been achieved with those associated with the foreign firm.

By incorporating in this Report a detailed analysis of the Punjab situation we are introducing a new feature in the annual document. We will extend this analysis to other provinces in later years, the assumption being that with the 7th NFC Award and the 18th Amendment much of the development action will of necessity shift to the provinces. Since public policy choices will be made at that level, provincial analysis will become an important part of the work of IPP. In addition to writing Annual Reports we will continue to work on the projects that will be concerned with some aspects of provincial development.

That said, policy making at the centre will not lose its significance. Keeping that in view we offer our usual reading of the latest macroeconomic situation. This has been made difficult by three other developments in 2011: the decision by Islamabad to terminate the program with the IMF which has put additional strain on an already stressed external situation; a sharp deterioration in relations with the US, resulting in reduced flow of official development assistance; and a sharp

rise in the price of oil, an important component of the import basket. The last development has turned terms of trade against Pakistan, causing a decline in the rate of growth in GDP. In light of these and several other developments we are, for the fifth time running, lowering expectation for the country's economic performance in the immediate future.

Pakistan's economic history is punctuated with crises. Some of these were associated with the strains the country developed in managing external accounts. We have dealt with serious crises in 1999-2000 and again in 2008-09. We seem to be headed towards a critical situation once again. Usable foreign reserves with the SBP are being run down to meet external obligations. The main reasons for the crisis that is building now are the same as before: insufficient attention to increasing export earnings; allowing growth to be dependent on fiscal expansion which in turn increased the level of imports; and creating circumstances that resulted in increasing the levels of consumption well over the levels investment needed, in part, to produce exportable surpluses. Each time the country had to go to the IMF for support. This time the Fund policymakers are likely to demand a heavy condition-laden program which may be difficult to adopt given the country's fragile political situation.

The decision to terminate the program with the Fund needs a few words of explanation. Given what was said earlier about the general easing of Fund's conditionality, its program with Pakistan negotiated in the end of 2009 was not particularly an onerous one. Some of the provisions incorporated in the program were at the suggestion of Islamabad, one reason why several Pakistani policy makers began describing the program as "home grown". That said, the Fund emphasised the need to increase domestic resource mobilisation. That there was good reason to move in that direction was demonstrated by the constantly declining tax-to-GDP ratio. It had fallen to only 8.6 percent, the lowest of any major developing nation. However, after repeatedly setting targets, Islamabad was not able to move in the direction in which the Fund wanted it to go. Islamabad's failure in this regard was a reflection of politics. The Islamabad coalition government was not able to overcome the resistance of its partners – the regional parties – to tax the citizenry. In the end the ruling establishment gave up the attempt and sent a signal to the Fund that it would not be able to meet the set goals. The Fund withdrew its support. This will have serious consequences for the future.

Pakistan enters the financial year 2012-13 with a fiscal situation that is worse than any other situation the country has faced in its crises-filled history. The sharp decline in the tax-to-GDP ratio has occurred at a time of a fundamental transformation of the country's political structure. As discussed above, the combination of NFC 7th Award with the devolution envisaged in the 18th

Amendment has weakened the federal system's fiscal authority while not fully compensating it with the capacity or the willingness of the provinces to raise resources of their own. The present government in Islamabad has not been able to devise a strategy to deal with this structural problem. It has opted for a short term approach: to meet its deficit by resorting either to borrowing from the SBP or to go to the banking sector to secure the needed finance. Either approach has grave consequences: the former has produced inflationary pressures; the latter has adversely affected private investment by "crowding it out". When Islamabad has attempted to deal with the problem by reducing government expenditure it has done so by cutting development expenditure. The axe has fallen on social expenditures with obvious long-term implications.

There is one positive development in 2011 in an otherwise difficult year. Pakistan is now engaged in a process that should result in improving economic relations with India. To begin with the two countries are working to repair trading relations by taking a number of steps, mostly in the context of the South Asian Free Trade Area (SAFTA) that became operational in 2006.

Normalisation of trade relations with India would profoundly affect the structure of the Pakistani economy, moving it closer to its comparative advantage. Poor relations with India have meant a fundamental departure in Pakistan's case from generally accepted gravity model of trade. According to this model most important trading partners should be those that are close to the country and also have significant mass. By "mass" economists mean the size of the economy. Both India and China fit the bill for Pakistan. With China, Pakistan has negotiated a Free Trade Agreement (FTA) followed by a currency-swap arrangement. Both are resulting in increasing the volume of trade, albeit in China's favor. The same is likely to happen if an opening occurs with India. The IPP has been commissioned to do a study on the prospects of India-Pakistan trade. Its results will be reported in a chapter in the Institute's Sixth Report to be published in 2013.

While the Punjab economic and social story has a prominent place in this Report, we will also comment on what we consider should be an appropriate growth strategy. The Planning Commission has prepared a document on the subject which departs from the traditional production function approach. The new growth equation goes beyond including capital and labor in the equation. It incorporates human resource development (skill formation and education) as well as technological change into the growth equation by making them – in the words of economists – endogenous rather than exogenous factors. The Planning Commission wishes to move even further. It focuses on obtaining growth by focusing on developing the country's abundant human resource; by creating increased space for the private sector by reducing

government oversight particularly by reducing the scope and reach of the regulatory system; by reforming the civil service system; and by improving the quality of governance.

The Commission also puts forward the idea that cities should become the growth poles of economic activity. It would like to see a total rewrite of the zoning laws in all major cities in order to encourage vertical rather than horizontal development. It puts considerable emphasis on developing domestic trade with the aim of creating supply chains that, in turn, should help to increase exports. We critique this strategy by factoring in three developments into the proposed growth model: devolution of authority to the provinces; many fundamental changes in the structure and content of the global economy; and taking advantage of some of the new innovations in the global production and trading systems. These factors were not adequately incorporated by the Commission in its strategy.

The chapter on growth apart from examining the Planning Commission's approach will suggest a fundamental paradigm shift. However, in the absence of detailed empirical work, this paradigm can only be briefly mentioned, leaving the working of details to a larger date – once the institute has carried out a solid back ground work in the area.

Our assessment offered in the chapter on growth accepts the notion that the changes proposed by the Commission are necessary but not sufficient conditions for achieving sustainable growth. Also, it would take time before they produce the desired results. A strategy focused on growth revival should therefore include supplementary prescriptions for the transition.

Table 1.2
Sectoral Shares in the Pakistani Economy

(Percentage of GDP)

	2005	2006	2007	2008	2009	2010 (R)	2011 (P)
Agriculture	22.4	22.5	21.9	21.3	21.8	21.2	20.9
Major Crops	8.4	7.6	7.7	6.9	7.3	6.9	6.5
Minor Crops	2.7	2.6	2.4	2.6	2.5	2.2	2.3
Livestock	10.6	11.6	11.1	11.2	11.3	11.4	11.5
Manufacturing	26.3	25.9	26.3	25.8	25.3	26.4	25.8
Large-Scale	12.9	13.2	13.4	13.4	12.1	12.3	12.1
Small-Scale	4.1	4.3	4.3	4.5	4.7	4.9	5.1
Services	51.3	51.7	51.8	52.9	52.9	52.4	53.3
Transport and Communication	10.4	10.2	10.0	10.0	10.2	10.1	10.0

R: Revised Source

P: Provisional

Source: Pakistan Economic Survey, GoP

In this chapter we also draw the attention of the policymakers to the fairly significant changes that are currently taking place in the sectoral composition of the economy. These can be viewed from the data presented in Tables 1.2 and 1.3 above on the shares of various sectors in the national product and their rates of growth in the six year period since 2005. For instance, the share of livestock has grown even though that of agriculture has declined by 1.5 percentage points in this period. Similarly the share of small manufacturing has increased. These changes have significance for employment generation, poverty alleviation as well as producing exportable surpluses for trade with India.

Table 1.3
Structural Changes in the Pakistani Economy

(Real GDP Growth Rates)

	2005	2006	2007	2008	2009	2010 (R)	2011 (P)
Agriculture	6.5	6.3	4.1	1.0	4.0	0.6	1.2
Major Crops	17.7	-3.9	7.7	-6.4	7.8	-2.4	-4.0
Minor Crops	1.5	0.4	-1.0	10.9	-1.2	-7.8	4.8
Livestock	2.3	15.8	2.8	4.2	3.1	4.3	3.7
Manufacturing	15.5	8.7	8.3	4.8	-3.6	5.5	3.0
Large-Scale	19.9	8.3	8.7	4.0	-8.1	4.9	1.0
Small-Scale	7.5	8.7	8.1	7.5	7.5	7.5	7.5
Services Sector	3.4	4.0	4.7	3.8	3.6	2.8	1.3
Transport and Communication	12	-2.4	5.8	5.3	-1.4	4.6	3.9

R: Revised Source

P: Provisional

Source: Pakistan Economic Survey, GoP

This Report has several important messages. These include the belief that while Pakistan is passing through one of the more difficult periods in its history – some call it steering the country through a “perfect storm” – it could emerge from it stronger and also as a respected member of the international community. This is a period of transition in many areas – political, economic, constitutional, and the external orientation. It is moving from management by the Military to rule by the elected representatives of the people. It is attempting to adopt a new development model of growth that will ultimately dispense with, in the words of the economist Daron Acemoglu and the political scientist James A. Robinson⁸, “extractive” economic and political systems in favor of an “inclusive” approach. It has adopted constitutional changes that have brought the provinces to the centre of economic policy making. This will position the government closer to the people. It is in the process of designing a new relationship with India, its long-time rival, while developing a more enduring relationship with US. It is building upon the already strong relations with China

while formulating new ties with the Muslim World. It is inevitable that deep changes on so many fronts would be unsettling. As the political economist Samuel P. Huntington emphasised more than four decades ago in *Political Order in Developing Societies*, change is difficult and disruptive⁹. It has to be managed so that disruption inevitably caused by it does not become corrosive.

The principal purpose for the Annual Reports written by the IPP has been and will continue to be to bring before the policy makers, opinion makers and informed citizenry details about the state of the economy as well as the state of the society at the time of each writing. But we go beyond description – we also offer solutions so that those responsible for managing the affairs of the state have the options from which they can choose; a menu from which they can select. It is also our hope that the Report would generate informed debate on the many issues the country faces at this difficult moment in its history.

Chapter - 2

Pakistan's Economy 2012: Floundering or Resilient?

Chapter - 2

Pakistan's Economy 2012: Floundering or Resilient?

Despite expected recovery in the growth rate of GDP from a low point of 2.4 percent in 2010, the state of the Pakistan economy remains precarious. Strong agricultural growth this year has been dampened by weak commodity prices and once again a sharp rise in international oil prices of oil is adversely impacting not only real national income and external payments situation but also it is making much needed energy sector subsidy adjustments much more difficult.

Over the three years (2008-11), the very sharp increase in worker remittances had made possible a rise in average annual growth in Gross National Income (GNI) of 3.3 percent, higher than the growth

Table 2.1				
Growth Rates of GDP, GNP and GNI				
	2007-08	2008-09	2009-10	2010-11
Gross Domestic Product	3.7	1.7	3.8	2.4
Gross National Product	3.7	2.2	5.1	2.9
Gross National Income	0.7	2.5	5.1	2.4
Source: Pakistan Economic Survey (various issues)				

in GDP (2.6 percent) as the terms of trade that had deteriorated sharply in the previous two years tended to stabilise (see Table 2.1). In 2011-12 the rapid rise in worker remittances has continued and would add at least 0.5 percent to Gross National Product (GNP) growth but on the other hand, the loss of real national income from adverse terms of trade would be once again substantial because of rise in the international oil prices as well as a significant drop in export prices of textiles and clothing.

Our preliminary estimates suggest that the negative impact of worsened terms of trade is likely to be in the range of 1.5 to 2.0 percent of GDP. The net effect of continued strong growth in worker remittances and terms of trade loss would be to reduce growth in national income during 2011-12 to only 2.0 to 2.5 percent, much lower than the average in the previous three years and substantially below the GDP growth rate of 3.5 percent. Consequently, real private consumption which showed a remarkable growth of 25 percent between FY 2008 and 2011 (see Table 2.2), despite sluggish growth of domestic economy, would only register very modest gains in per capita in 2011-12. This may explain why public protests, triggered no doubt by electric power and gas shortages, have gathered greater momentum this year.

Table 2.2
Domestic Absorption of Resources

	2006-07	2007-08	2008-09	2009-10	2010-11
Consumption of which (Private)	4415 (3883)	4518 (3779)	4746 (4240)	4929 (4412)	5275 (4719)
Investment including stocks Of which Gross Fixed Capital (955) Formation (GFCF)	1043 (1025)	1114 (927)	1016 (820)	916 (817)	915
Total	5458	5632	5728	5845	6,190

Source: Pakistan Economic Survey (various issues)

Table 2.3
Major Macroeconomic Indicators

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
GDP growth per annum (%)	7.1	6.0	5.9	3.7	1.7	3.8	2.4
Fiscal Deficit (As % of GDP)	-3.3	-4.3	-4.3	-7.6	-5.2	-6.3	-6.8
Current Account Deficit (as % of GDP)	-4.0	-3.9	-4.9	-8.4	-5.7	-2.2	0.2
GDP Deflator Change (%)	7.0	10.5	7.8	16.2	20.3	10.5	18.8
Consumer Price Change (%)	9.3	7.9	7.8	12.0	20.8	11.7	13.9
Change in Net Domestic Assets of Monetary System (%)	17.1	12.4	11.3	23.2	12.8	12.7	13.1
M2 Change	19.3	14.9	19.3	15.3	9.6	12.5	15.9
Level of Foreign Exchange Reserves (Millions of US Dollars-at the end of the period)	12,597	13,122	17456.	11,510	12,036	15346	17824
Gross Total Investment (as % of GDP)	17.5	20.5	22.5	22.1	18.2	15.4	13.4
Gross National Savings (as % of GDP)	17.5	17.7	17.4	13.6	12.5	13.1	13.6
Ratios of Investment and Savings are in current prices: Numbers for GFCF excluding inventories (as % of GDP) in 1999-2000 prices are given follows:	15.3	17.3	18.4	18.1	15.5	13.7	13.3

Source: Pakistan Economic Survey (various issues)

No doubt the economic picture has been adversely affected by last year's devastating floods, slowing world economy, and adverse terms of trade. More fundamentally, however, the economic performance appears to have deteriorated almost steadily over the last few years. We appear to have fallen further away from a desirable sustained growth path of 6 to 7 percent per annum – deemed necessary to create adequate number of jobs and reduce poverty – than at any time in Pakistan's recent history.

There are five main manifestations of this situation:

- The spectre of macroeconomic instability hangs heavily on the economy, with continued large fiscal deficits financed by borrowing from the banking system, continued strong inflationary pressures, a growing external financing gap and a real danger of a large loss in foreign exchange reserves in the coming months (Table 2.3).

- Investment in physical and human capital is now at its lowest level in decades because of financial constraints, security situation, lack of confidence in political stability, and grave and persistent shortages in energy sector.
- Loss of international competitiveness reflecting an overvalued exchange rate, slow growth in factor productivity, poor governance, and high cost of doing business is adversely affecting both growth and foreign exchange position.
- No appreciable change in the structure of output and exports towards greater diversification and higher value added products appears to be taking place.
- Continued rent seeking and widespread corruption is deepening the income divide, particularly in a situation where the economic pie is not expanding much and the labor market is not robust enough to make possible real wage increases.

MACROECONOMIC IMBALANCES

2011-12 is the fourth year of the democratically elected governments and would be the last full year before the elections are held both at the federal and provincial levels. In the economic sphere the inability to bring fiscal deficits and losses of public enterprises under control are probably the biggest failures of the coalition government at the center.

No doubt the democratic government inherited in March 2008 the baggage of large ongoing energy subsidies from the Musharraf and caretaker governments – a problem that was compounded by a further rise in international oil prices in the spring and summer of 2008. However, public policies must be held responsible for consistently underestimating the magnitude of the deficit problem, a part of which has been manifest in ever growing circular debt and increasing losses of major public enterprises, notably the Railways, Pakistan International Airlines (PIA), Water and Power Development Authority (WAPDA) and the Pakistan Steel Mills.

Lax expenditure control and a fairly irresponsible and large increase in public sector salaries across the board in 2010, and ineffective efforts to mobilise government tax revenue that have resulted in a stagnant or declining tax-to-GDP ratio have deepened the fiscal problems (see Table 2.4).

It is encouraging that tax revenues collected by the Federal Board of Revenue (FBR) have shown strong growth in the first six months of 2011-12. Collections at Rs. 867.4 billion were over 26 percent above the corresponding period last year. This tax revenue growth is a consequence of rapid growth in general sales tax on petroleum products because of higher value of both oil imports and domestic production. Any reversal of international oil price increases would have an adverse impact on tax revenues. The chances of meeting the full year FBR tax target of Rs. 1952

Table 2.4
Fiscal Trends

(Percentage of GDP)

	2006-07	2007-08	2008-09	2009-10	2010-11
Tax Revenue	10.2	10.0	9.2	9.3	9.4
Total Revenue	14.9	14.3	14.1	14.2	12.5
Total Expenditure	20.7	21.7	19.3	20.5	18.9
Current Expenditure	15.8	17.7	15.6	16.3	16.1
Development Expenditure	5.0	4.0	3.5	4.5	2.8
Overall Deficit	5.8	7.4	5.2	6.3	5.9*
Revenue Deficit	0.9	3.0	1.5	2.1	3.6

*Excluding arrears of Electricity Bills

Source: Pakistan Economic Survey (various issues)

billion depend on the ability of FBR to successfully implement the tax administration improvement measures. Also, the required growth rate in the remaining fiscal year is about 26 percent which will be on top of the 28 percent achieved last year, largely due to the introduction of flood related taxes (income tax surcharge, regulatory duties on imports). Achievement of the revenue target by FBR would reverse the decline in tax-to-GDP ratio witnessed in the last few years, but even so the tax ratio (including provincial taxation) would not match the level of 10.5 percent in 2008-09.

Looking ahead, there is a general agreement that the present low tax-to-GDP ratio of around 10 percent should be gradually increased to 14 to 15 percent over the next five years or so. However, this cannot be done by simply reducing tax evasion and strengthening federal taxation. To increase the tax-to-GDP ratio by nearly 1 percent per annum, two other pre-requisites are necessary – a growth rate of at least 6 percent per annum in the economy and a major effort by provinces to increase the presently abysmal provincial tax-to-GDP ratio of 0.4 percent. This ratio, which was over 1 percent of GDP in the earlier decades of Pakistan's history, can be improved by effective taxation of property and services and institution of a meaningful agricultural income tax.

Meanwhile, the decentralisation initiative, following the 18th Amendment and the NFC Award, which has been described as too much too fast, is complicating central government's capability to come to grips with the fiscal crisis. We believe actual deficits adjusted for unfunded losses of public enterprises and build up of energy arrears and circular debt have been close to 7 percent of GDP per annum from 2008-09 to 2010-11, only slightly lower than in 2007-08. Some further deterioration appears likely in the current fiscal year FY 2012. At the time of writing of this Report government borrowing from the banking system had crossed Rs. 1 trillion for the first time in history.

Therefore, the problem is not just the persistently large deficit but the way they are financed. About half of the overall deficit of around 7 percent of GDP over the four years (2008-09 to 2011-12) reflects the revenue deficit, the excess of current expenditure over revenues as adjusted for unfunded public enterprise losses and build up of arrears. The revenue deficits would appear to be even larger if current expenditure under development outlays is taken account of. It is a matter of special concern that revenue deficit appears to have reached a peak of 4.3 percent of GDP in 2010-11.¹ Even with some expected improvement in the ratio of tax revenues to GDP during 2011-12, both the overall deficit and the revenue deficit, are likely to remain at record levels.

As highlighted above, the financing of the budget deficit is increasingly relying on borrowing from the banking system. The increase in domestic credit is estimated by the IMF to reach a peak of 18 percent during 2011-12, compared with average growth of 12.5 percent in the previous two years. The increase in public sector borrowing (including public sector enterprises) during the two and a half years to December 2011 was Rs. 768 billion or 34 percent. In contrast, the credit to private sector expanded only by Rs. 277 billion or 9 percent in nominal terms and showed a significant drop in real terms. Clearly, large public sector borrowing is crowding out the private sector, though other factors such as security situation and energy shortages are also hampering private sector activity.

The financing of large budget deficits, largely through borrowing from the banking system, is on the one hand fueling inflationary pressures (see Table 2.5) and on the other hand exerting pressure on the BoP.

Even with expected substantial loss of foreign exchange reserves during 2011-12 which has the effect of moderating the growth of money supply, M2 is expected to show an increase of close to 13 percent during this year, compared to almost 16 percent in 2010-11 due to decline in Net Foreign Assets (NFA).

It is not surprising, therefore, that double digit inflation has acquired a persistent and structural character. Fortunately, the inflationary expectations do not appear to have risen sharply as yet—the velocity of money is stable and there has not been a sharp rise on foreign currency deposits. However, the ratio of rupee financial assets to nominal GDP has declined somewhat, suggesting some reversal of financial deepening.

Table 2.5
Price Trends
(Percent per Annum)

	GDP Deflator	Consumer Prices
2007-08	16.2	12.0
2008-09	20.6	20.8
2009-10	11.9	11.7
2010-11	18.8	13.9

Source: Pakistan Economic Survey (various issues)

Real returns on bank deposits and real interest rates on government securities continue to be negative. It is the negative real interest rates on government borrowing that is keeping the public debt burden from spiralling out of control (see Table 2.6). Notwithstanding continued large fiscal deficits, the ratio of public debt to GDP has not

Table 2.6 Public Debt Burden				
	2008-09	2009-10	2010-11	2011-12
Ratio of Public Sector Debt to GDP	60.7	61.5	60.1	61.2
Nominal Interest rate on Public Debt	10.5	8.3	7.7	7.3*
Average real interest rate in percent (Nominal rate minus GDP deflator)	-9.7	3.4	-6.2	-4.6
Inflation rate (GDP deflator, in percent)	20.8	11.7	13.9	11.9*
* Projected				
Source: IMF (2012)				

deteriorated much as the nominal cost of borrowing is more than offset by the declining real value of government debt obligations. A serious loss of confidence in the currency and a sharp rise in inflationary expectations could, however, change the situation and raise the real cost of government borrowing significantly.

DETERIORATING EXTERNAL RESOURCE POSITION

The most immediate danger to macroeconomic situation is posed by the deteriorating external resource position. The current account balance of payments (including transfers) that had turned into a modest surplus in 2010-11 because of strong export prices showed a deficit of \$2.6 billion or 1.1 percent of GDP in the first seven months of 2011-12, notwithstanding a further sharp jump of 20 percent in remittances to \$7.3 billion compared to the corresponding period last year. The main factors causing deterioration were the weakening of export prices, further rise in international oil prices and strong import growth under increasing competitive pressures. Export receipts in the first seven months of 2011-12 were only 7.5 percent higher than in the corresponding period of last year and are likely to show very little increase in the year as a whole because the weakness in prices and volume continues. However, due to continued strong inflow of worker remittances, which could show a gain of \$2 billion during 2011-12 to over \$13 billion, the current account deficit is likely to be contained to about \$4.5 billion or over 2 percent of GDP.

While the current account BoPs deficit would not be inordinately large, the financial account of BoPs is under considerable pressure. Almost all the deficit during July 2011-January 2012 was financed by the drawdown of foreign exchange reserves and the SBP sees substantial risk of further drop in reserves in the period up to the end of June 2012. This is because the net private direct investment flows have slowed down, net disbursements on account of foreign assistance and borrowing have become modest, and large repayments to the IMF are

becoming due. The financial account position will come under even greater pressure in the next two years as payments of more than \$6 billion are due to the IMF in FYs 2012 and 2013. Agreement with China to hold local currency and delayed debt payments to Islamic Bank are merely palliatives.

Even assuming that the current account deficit can be contained at \$5 billion annually during the next two years, the annual gross financing requirements would exceed \$10 billion. It is difficult to see how these will be met without either exceptional financing (such as going back to the IMF, huge privatisation effort, or large foreign aid infusion) or further drawdown of foreign exchange reserves to dangerously low levels. The urgent need to revive domestic investment and growth rate (see discussion below) would call for even a larger current account BoP deficit and even greater need for lining up adequate external resources before the possibility of a new foreign exchange crisis materialises.

INVESTMENT DECLINE

As stressed in last year's Report, the burden of adjustment required to reduce the totally unsustainable current account BoP deficit in 2007-08 (8.4 percent of GDP) has fallen entirely on the investment side. GFCF, in constant 1999-2000 prices, dropped more than 20 percent between 2001-08 and 2010-11 and a further decline appears indicated for 2011-12 based on capital goods imports, public sector development outlays, and domestic cement use. As a percentage of GDP, fixed investment decreased from 18.4 to 13.3 percent over the last three years and would likely be only 12.5 percent of GDP in 2011-12.

If proper allowance is made for normal depreciation of capital – wear and tear and obsolescence of machinery and running down of the infrastructure – the net annual additions to nation's capital stock are at present barely 2 percent. The loss of capital due to the devastating earthquake in 2005 and devastating floods in 2010 and 2011 must be set against this.

The problems in the public sector infrastructure are becoming acute in the irrigation sector and would adversely affect the assured water supply for agriculture. It must be pointed out that large investment in water sector in the 1960s and 1970s sustained Pakistan's agricultural growth to an extraordinary extent. Now the large Dams are slowly silting up and prospects of financing a new Dam have dimmed. Even if foreign interest in Bhasha Dam or alternatively Kalabagh Dam can be revived, the delivery of 6 to 7 million acre feet of water would take a decade.

Unless investment trend is quickly reversed, it will be difficult to sustain a growth rate of GDP of more than 3 to 3.5 percent per annum. However, in the near term, it may be possible to revive

growth to 4 to 4.5 percent per annum through a better management of the power sector capacity which can help relieve the constraint on production, particularly in the manufacturing sector.

The problem is, however, not only with the low aggregate level of investment but also with the pattern of investment. As our 2010 report pointed out, the investment boom of 2003-08 was led mainly by service related industries – notably telecommunications and finance – and public sector development spending. There was only a modest growth in private sector manufacturing investment. Since then there has been a deep decline in investment in Large-Scale

Table 2.7		
Investment in Large-Scale Manufacturing in 1999-2000 Prices		
	Rs. in Billion	As % of GDP
2002-03	121	
2005-06	140	
2006-07	142	2.7
2007-08	124	2.3
2008-09	94	1.6
2009-10	78	1.3
2010-11	53	0.9

Source: Pakistan Economic Survey (various issues)

Manufacturing (LSM) from Rs. 124 billion in 2007-08 to Rs. 53 billion in 2011-12 and further decline is likely in the current year (see Table 2.7). This drop in investment, in a sector which is typically a leading sector if not the engine of growth in a developing country, is almost of catastrophic proportions. At its peak in 2006-07, large scale manufacturing investment was over 2.7 percent of GDP; in the current year it will probably touch a low of 0.8 percent.

As mentioned above, investment is suffering generally because of financial constraints, security situation, lack of confidence in political stability, and grave and persistent shortages in energy sector. More broadly there is a decline in confidence in country's future which may not be easy to reverse. Nevertheless, the sharp drop in LSM should be a particular source of alarm because it also denotes problems in international competitiveness and poses a special danger for the BoPs situation.

The situation demands a thorough review of the problem with special attention to strengthening of incentives and induction of direct foreign investment which would help promote exports and improve productivity. More broadly, policy focus should be on shifting resources from private and public consumption to investment especially as prospects for large foreign assistance have become clouded. In any case, large inflows of foreign aid have, at the margin, proved counterproductive because they encouraged substitution of foreign savings for domestic resource mobilisation.

The progress towards improving both the education indicators and quality of education is slow. The latest Social and Living Standards Measurement Survey (PSLM) indicates that the net enrolment rate at the primary school level at 56 percent in 2011-12 has not improved since 2006-07. There

has, however, been a small improvement in the net enrollment at the secondary level from 18 to 20 percent since 2006-07 and the gender gap at both levels has narrowed. Furthermore, literacy rate has risen from 56 percent in 2007-08 to 58 percent in 2010-11 with improvement resulting entirely from increased female literacy.

The United Nations Development Programme (UNDP) Human Development Report 2010 has provided estimates of both mean and expected years of schooling. In mean years of schooling, Pakistan at 4.9 years is roughly at the same level as India and Bangladesh, but in expected years of schooling at 6.8 years it trails far behind not only India (10.3) and Bangladesh (8.1) but also Nepal (8.8). Clearly policies and investment are not yet in place to narrow the gap in human development with India.

LOSS OF COMPETITIVENESS

The loss of economic momentum due to macroeconomic imbalances and sluggish investment is compounded by a loss of international competitiveness which is directly hurting output growth, particularly in the manufacturing sector. Indeed, the large-scale manufacturing sector seems to be in the grip of a vicious circle, demand for its products is suffering because of relentless competition from imports, particularly China, and inability to make headway in increasing the very low share Pakistan has in world manufactured goods exports. This is contributing to insufficient investment in manufacturing, especially for exports, and the failure to modernise and expand capacity, and improve productivity, hampering export growth.

The competitive pressures were reflected in 2010-11 and 2011-12 in an especially sharp rise in a range of imports including rubber, glass, electric fans, bicycles, plywood which are hurting import competing industries.² Competition from China is intense in consumer goods because of the FTA. Pakistan's trade with China is very lopsided, with a very large trade deficit, because we have not been able to take advantage of the FTA to push exports to the fastest growing and second largest economy in the world. Moreover, we have not made much progress in developing export zones with Chinese help that was offered. Pakistan needs to develop a clear strategic trade relationship with China and equally important to implement it with seriousness and resolve.

The progress made recently in opening up trade with India is to be welcomed. The advantages of a more open trade with a large and rapidly growing neighbour with which low cost transport links can be easily forged and extended are obvious. Larger imports from India may intensify competitive pressures in some industries but as against that the exporters would gain a huge market. The governments of both India and Pakistan need to address the various barriers

currently hindering trade between the two countries. In any case, it is doubtful that in many consumer goods imports from India would out bid Chinese imports.

The goal of improving competitiveness should not simply be improving cost advantage of existing products but also to move up the value chain in cotton textiles and to develop a wide variety of other manufactured exports and diversified agricultural products. In a sense the failure to deepen and broaden industrial and export structures lies at the root of our competitive problems. An entrepreneurial mindset that favours short term maximisation of profits may be the result of long periods of political instability and uncertainty. But in policy terms two things could help to improve the situation. First, the incentives for longer-term investment and labor skills upgrading must be strengthened. Secondly, a thorough review and revision of tax, labor and regulatory policies that frequently introduce a bias against scale of production and do not encourage firms to make full use of economies of scale, is needed.

In the short-run, keeping the exchange rate at a realistic level should be an important goal. All too often in the past there has been resistance to exchange rate adjustments even when they are needed simply to compensate for a domestic inflation rate that is higher than international rate. According to the SBP Real Effective Exchange Rate (REER) appreciated by 6.5 percent in 2011-12.³ The nominal depreciation of the rupee in 2011-12 has merely compensated for the continuing higher rate of inflation in Pakistan compared to international rate and it has not offset the real appreciation registered in 2010-11. According to IMF (2012), the Pakistani rupee is currently overvalued to the extent of ten percent.

LAGGING EXPORTS

The sharp rise in the price of cotton and cotton based textiles and clothing during 2010-11 contributed to a big jump of nearly 30 percent in Pakistan's exports after a relative stagnation of two years. The trend, however, has been halted in the current year and exports could decline modestly in 2011-12. The

Table 2.8 Textiles and Clothing Exports of Major Developing Countries (\$ Billion)				
	Textile Exports		Clothing Exports	
	2008-09	2009-10	2010-11	2011-12
China	41.1	76.9	74.2	129.8
India	8.3	12.9	8.7	11.2
Turkey	7.1	9.0	11.8	12.8
Indonesia	3.4	4.2	5.0	6.8
Vietnam	0.7	1.6	4.7	10.8
Pakistan	7.1	7.8	3.6	3.9
Bangladesh	0.7	1.3	6.9	15.7
World Exports	201.9	250.6	276.4	351.4
Source: WTO				

euphoria about the large price – induced gains in textile exports last year was not justified. The sobering fact is that Pakistan's textiles and clothing exports are losing further ground to major competitors, not only China but also India, Bangladesh, Vietnam and Turkey. As Table 2.8 indicates,

Pakistan's textile and clothing exports increased by only 6.5 percent over 2005-2010 while those from Bangladesh and Vietnam more than doubled and those from China and India increased by 79 percent and 42 percent respectively.

The important long-term story is that Pakistan has continued to fall behind other developing countries in export development and has especially not exploited opportunities for manufactured goods exports offered by international developments. As Table 2.9 shows, Pakistan was still substantially ahead of Turkey and Indonesia in the level of its manufactured exports in 1980 and had about a quarter of Indian exports, though it had already fallen behind Malaysia, Philippines and Mexico in the 1970s. But thirty years later Pakistan's manufactured exports are less than 30 percent of Indonesia's level and only 18 percent of Turkey's. India's exports are now 8 to 9 times larger, while Vietnam which is a new comer to the field has manufactured exports three times that of Pakistan. But an issue is whether external environment still favours an export-oriented strategy.

Table 2.9
World Manufactured Exports and Market Share of Major Developing Countries

	Manufactured Exports				
	1980 (in US\$ Billion)	2010 (in US\$ Billion)	1980 (Market Share %)	2005 (Market Share %)	2010 (Market Share %)
China	8.7	1476.9	0.80	9.6	14.8
Hong Kong	18.0	373.2	1.60	3.8	3.7
Korea	15.7	411.5	1.43	3.5	4.1
Singapore	8.3	254.2	0.76	2.5	2.6
Taiwan	17.4	234.4	1.59	2.4	2.4
Mexico	4.4	222.3	0.40	2.3	2.2
Malaysia	2.4	133.2	0.22	1.4	1.3
Thailand	1.6	141.5	0.15	1.2	1.4
India	5.0	138.1	0.46	0.96	1.4
Brazil	7.5	71.1	0.69	0.85	0.71
Turkey	0.8	88.5	0.07	0.82	0.89
Indonesia	0.5	58.4	0.05	0.54	0.59
Philippines	2.1	43.8	0.19	0.50	0.44
Vietnam	-	49.7	-	0.22	0.50
Pakistan	1.3	15.9	0.12	0.18	0.16
Bangladesh	0.5	17.9	0.05	0.12	0.18
Total for above Countries	94.1	3690.6	7.82	30.88	37.05
World Exports	1,092.4	9962.0	100.0	100.0	100.0

Source: WTO Statistical Tables.

Note: Figures for Singapore, Bangladesh and Vietnam are tentative

TRENDS AND PROSPECTS IN WORLD TRADE IN MANUFACTURES

Successive IPP Annual Reports have emphasised the rapid and sustained international trade expansion in the last several decades and the opportunities it offered for rapid economic advance in developing countries. Stimulated by growth in world income, liberalisation of trade, reduction of tariffs, and technological changes reducing transport costs and improving information flows, the world trade has grown at a much faster pace than world output since the 1960s. The leading edge of this expansion has been the growth in world manufactured goods exports which have increased steadily from less than \$200 billion in 1970 to the peak of 10.5 trillion in 2008, showing an average real growth of 11 percent. While the nature of international trade in manufactures has changed quite significantly from finished goods to intermediate products or components, the growth trend was sustained till 2008. However, there was a fairly sharp decline in 2009 due to the deep international recession but a quick recovery in 2010 and it is estimated that in 2011 the earlier peak was exceeded.

However, even before the setback to international trade in 2009 there was increasing concern in developed countries particularly in the US that domestic jobs were being lost as a result of rapid growth of exports of manufactured goods from developing countries and that the process of globalisation was causing harm to domestic industries and employment in the West. Prominent figures including noble Laureates Joseph Stiglitz and Michael Spence and Professor Roni Roderick have argued against the seemingly unfettered march of globalisation. While Jagdish Bhagwati, Kenneth Rogoff, Martin Wolf, Gary Hufbauer and many others remain firmly in the pro-globalisation camp, political currents in the US have certainly shifted in favor of protecting or stimulating manufacturing jobs in the US.

However, it is not at all clear that the thrust of policies in the US would be to provide greater protection, avoid unfair competition, or more encouragement to US exports of manufactured goods. Certainly President Obama's suggestion that the US should aim at doubling US exports over the next five years – a very ambitious target requiring an average annual growth of 15 percent – presumably through improved competitiveness and greater domestic investment in physical and human capital would not argue for slowing down the pace of globalisation.

But even if growth in world trade slows down somewhat, the shifts in the present dominant shares of China and high income East Asian countries are likely. China's manufactured goods exports much more than doubled over 2005-10 and its share in the world reached an all time high of 14.8 percent in 2010 rising from 9.6 percent in 2005; between 2005 and 2010 Chinese exports alone accounted for nearly 30 percent of the entire increase in world manufactured

exports. But domestic and external pressures on China's exports are growing. Domestically wages are rising and the need to shift focus of growth strategy towards domestic consumption is being felt. Externally, there is a certain pressure to appreciate Chinese currency and to slow down its huge trade surpluses.

It is also noteworthy that high income countries like Korea, Singapore, Taiwan, and Hong Kong, which together were even more dominant than China in world manufactured exports till 2000, have gained little additional share over the last decade as their economies have matured and their wages have risen sharply.

So we believe that even with a somewhat slower growth in world trade, developing countries other than China would have considerable scope for gaining additional market share in the world. So far in the last decade, only Vietnam, Turkey, and India have been able to expand their share in the world markets significantly.

The issue for Pakistan is whether it can catch up and begin expanding its exports annually by 10 to 12 percent in real terms and gradually increase its share in the world market. Its recent export performance suggests that Pakistan faces formidable challenges. However, if policies and critical investments help to reverse the loss of competitiveness, there can be several grounds of optimism. First, Pakistan's market share in world manufactured goods other than textiles is very small – its share in world clothing exports in 2010 was 1.1 percent and in manufactured goods (excluding textiles and clothing), it was only 0.045 percent. Secondly, though right now Pakistan is not very competitive in textiles and clothing, the room for productive improvements is immense provided the right investments in modernising industry and upgrading skills are made with the help of foreign partners. Pakistan should look for help to China as well as countries like Korea, Malaysia, Turkey, and Hong Kong that increasingly face limits on their textile and clothing exports because of rising wage costs. Thirdly, proximity to China and India, the two fastest growing markets in the world, offer great long-term potential. Finally, the potential of agricultural exports has not even begun to be explored seriously.

As stressed in last year's Report, nothing in our view will be as critical for achievement of Pakistan's goals of inclusive and self reliant growth that creates jobs and increases wages as an outreach to the world provided greater export orientation is combined with critical foreign private investments in key export areas where Pakistan lags in competitiveness, technology, and access to markets.

DISTRIBUTION ISSUES REMAIN CRITICAL

Our discussion of macroeconomic aggregates above suggests that real per capita income (GDI) grew by 4.4 percent over the three years (2007-08 to 2010-11) (Table 2.1) but that per capita growth in private consumption was much higher at 18 percent as real investment declined sharply. These numbers are, however, higher than reported by the results of the annual Household Integrated Economic Survey (HIES) and the developments in the labour market. The former indicates that real income per household increased cumulatively by 2.9 percent over the three years 2007-08 to 2010-11 (see Table 2.10) and real consumption grew by 4.3 percent over the same period (see Table 2.11). At the same time, the slow growth in employment of 2.5 percent over the same period registered by the labor surveys and fragmented data on real wage rates suggest rising unemployment, particularly among the youth and decline in real wages over the last three years.

This discrepancy needs urgent

attention of policy makers, analysts and academics. A plausible explanation is that income distribution is worsening sharply because of high level corruption, economic rent seeking, and

Table 2.10
Change in Real Household Income

(Rs per Month)

	2007-08	2010-11		Percentage
		Nominal	Real*	Change
Average	14456	21785	14875	2.9
lowest 20%	7812	11386	7775	-0.5
next 20%	9910	14274	9747	-1.6
next 20%	11172	16841	11499	2.9
next 20%	13227	20784	14192	7.3
highest 20%	24659	37728	25762	4.5
Rural	12626	18713	12777	1.2
Urban	17970	27664	18890	5.1
Punjab	14601	22859	15609	6.9
Sindh	14819	20606	14070	-5.1
K-PK	14044	20130	13745	-2.1
Balochistan	11375	18534	12656	11.3

* Nominal income has been deflated by the Consumer Price Index with the base year of 2007-08. The index value is 1.4645.

Source: Pakistan Economic Survey (various issues)

Table 2.11
Change in Real Consumption Expenditure by Households

(Rs per Month)

	2007-08	2010-11		Percentage
		Nominal	Real	Change
Average	12660	19336	13203	4.3
lowest 20%	7485	11503	7855	4.9
next 20%	9209	14268	9743	5.8
next 20%	10445	16537	11292	8.1
next 20%	12235	19014	12983	6.1
highest 20%	19866	29902	20418	2.8
Rural	11128	16919	11552	3.8
Urban	15601	23595	16360	4.9
Punjab	12611	19070	13022	3.3
Sindh	12718	20103	13727	7.9
K-PK	13472	19577	13368	-0.8
Balochistan	10656	18183	12416	14.0

Source: Pakistan Economic Survey (various issues)

continued large inequalities of asset holdings, especially of land, and the high end incomes and consumption are not adequately captured in HIES as well as in the reported income distribution data.

It could also be that the sharp rise in rural incomes during the last few years is not adequately captured in the HIES surveys. The growth in rural incomes of 1.2 percent over the last three years shown in Table 2.10 does seem very much on the low side. This could also reflect the negative impact of the devastating floods in 2010-11.

The apparent statistical inconsistencies need to be explored seriously and data sets reconciled as far as possible. But there is enough indirect evidence to suggest that the low income and middle income groups have not shared adequately in the income growth that has taken place during the last three years. High inflation generally and sharp rise in food and energy prices have hit most households very hard. Between 2007 and 2010 the nominal wage increases have generally been well below the rise in general price level over the three years.

Even though we believe that the HIES surveys understate income inequality, it is noteworthy that they report that inequality has continued to increase during the last three years. Overall, the lowest two quintiles of households have suffered a drop in their real incomes, while significant increases have been recorded in the case of upper income households. This also implies that the incidence of poverty must have increased during the last three years.

Given the stagnation or fall in real household incomes for the bottom 40 percent income receivers, declining levels of nutrition and food security, rising unemployment and underemployment and deterioration in the quality of public services, it is not surprising that a high and increasing proportion of households have reported dissatisfaction with their economic situation (compared to the year before the survey). According to PSLM, two years ago this percentage was 33 percent which has increased to 43 percent in 2010-11, while the percentage who have reported an improvement has fallen from 22 to 17 percent.

ECONOMIC PROSPECTS IN 2011-12

To summarise, the Annual Plan for 2011-12 envisages some recovery of the flood-ravaged economy with a GDP growth rate above 4 percent and progress in macroeconomic stabilisation with the rate of inflation at 12 percent for the year, but down to 8.5 percent by June 2012. The Federal Budget for 2011-12 targets for a modest fiscal deficit of 4 percent of the GDP while pursuing economic revival by a cut in indirect tax rates on industry and a big jump in development expenditure of 72 percent. The deficit is to be contained through a cutback in subsidies,

particularly to the power sector, by Rs. 234 billion, along with some broad-basing of the General Sales Tax (GST) on goods to cover agricultural inputs, machinery and domestic sales of export sectors.

Soon after the start of the new financial year, there have been some negative developments, both global and local. First, the debt-downgrade of US and a looming debt crisis in Europe imply a weaker economic recovery globally, thereby affecting the prospects for Pakistani exports. Second, the floods in Sindh, two years running, have inflicted some damage. Over 6 million people have been affected. Standing Kharif crops over 2.2 million acres of cotton, rice, sugarcane and vegetables have been damaged. Third, the actual fiscal outcome for 2010-11 has turned out to be worse than revealed by the revised estimates at the time of the framing of the budget. Revenues were Rs. 91 billion lower and expenditure Rs. 77 billion higher, especially on power subsidies. This has made the task of achieving the 4 percent fiscal deficit target even more difficult.

Simultaneously, the political temperature has heated up. The Pakistan Muslim League - Nawaz (PML-N) has taken on the role of a more aggressive opposition. Large rallies by political parties are taking place on the back of large-scale public protests, in particular, against the high level of power outages. The government is in a reactive mode and engaged in fire fighting operations with subventions to the power sector, railway, etc.

Now that the Senate elections have been held, the next general elections are due in February 2013. The present composition of the agitation by the PML-N is seen as an effort at forcing early elections. Whether it succeeds or not, it is clear that the country is moving into an election mode. Consequently, it has become increasingly difficult for the government to implement reforms to improve the fiscal situation like a big hike in power tariffs, campaign against tax evasion, etc. On the contrary, there is likely to be a shift in the policy stance towards pump priming of the economy by the stimulation of aggregate demand prior to elections. The first indication of this is the sharp cut of 150 basis points in the policy rate of the Central Bank. Development expenditure is also likely to remain high with special allocations to mega projects, for schemes in key constituencies and larger funds for Benazir Income Support Programme (BISP).

Pakistan has also exited from the International Monetary Fund, Stand-by-Arrangement (IMF-SBA) on the 30th September on the grounds that foreign exchange reserves at \$17.3 billion are adequate. Clearly, implementation of reforms to fulfil the IMF conditionalities had become more difficult in the prevailing political environment. Markets did react unfavourably initially in the last

week of September and the rupee fell to below Rs. 90 to the dollar in the open market, and recovered only after intervention by the SBP. This could be a precursor of things to come.

What then are the prospects for 2011-12? The IPP Macroeconomic Model has been used for forecasting the outcomes for the year, based on continuation of the coalition government up to the next elections, likely in early 2013, with deterioration in the reforms situation. The IPP projections are compared with the official targets as well as with recent projections made by the IMF for Pakistan in Table 2.12.

Fiscal Projections: As compared to the target fiscal deficit of 4 percent of the GDP the expected outcome is 7 percent of the GDP. The divergence is due particularly to, first, a shortfall of up to Rs. 50 billion in achieving the FBR revenue target of Rs.1952 billion, second, a major shortfall in non-tax revenues due to uncertainty in flow of reimbursements from the Coalition Support Fund (CSF) of Rs. 119 billion, third, non-realisation of revenues of Rs. 75 billion by the Pakistan Telecommunications Authority (PTA) and, fourth, possibly somewhat lower profits of the SBP, partly compensated for by lower interest payments on short-term domestic debt.

Current expenditure is likely to be higher, first, because of the efforts to reduce the outstanding stock of 'circular debt' in the power sector and the inability to increase power tariffs sufficiently along with emergent larger losses in entities like PIA, Railway, Pakistan Steel Mill, etc. This could raise subsidies over the budgeted figure by over Rs. 200 billion. Second, with higher international prices and larger fertilizer imports (due to gas shortage) the subsidy on imports could be higher by over Rs. 50 billion. Third, the cost to the provincial governments of the 15 percent hike in salaries and 20 to 25 percent in pensions is about Rs. 40 billion. Development expenditure is unlikely to be curtailed drastically due to the pressure of pre-election spending.

The size of the estimated deficit in 2011-12 is Rs. 1462 billion, almost Rs. 600 billion higher than the official estimate. The outlook for net external assistance has turned negative following the end of the IMF program. Gross inflow of Rs. 414 billion was budgeted. This includes Rs. 118 billion of program loans, Rs. 44 billion of Eurobonds and Rs. 34 billion from the US as support under the Kerry-Lugar bill. In addition, receipts of Rs. 70 billion from proceeds of privatisation of Pakistan Telecommunication Limited (PTCL) are expected. All these inflows are uncertain now.

External debt repayments of Rs. 243 billion have to be made during the year. Therefore, an optimistic estimate of the net availability of external assistance for financing the budget deficit is about Rs. 66 billion. This implies that domestic financing of Rs. 1386 billion will have to be arranged, 28 percent above last year's high level. This could exceed the appetite for government

Table 2.12
Targets and Projections for 2011-12

	Unit	2010-11 Actual	Annual Plan Target	IMF Outlook	Projections from IPP Model
GDP Growth Rate	%	2.4	4.2	3.8	3.6
<u>Sectoral:</u>					
Agriculture	%	0.6	3.4	-	2.3
Industry	%	-0.1	3.1	-	3.0
Services	%	4.1	5.0	-	4.4
Rate of Inflation					
CPI	%	13.9	12.0	14.0	13.0
Money Supply Growth	%	15.9	16.2	18.3	13.0
Rate of Growth of Employment	%	1.1	-	-	1.4
FISCAL^a					
Total Revenues	% of GDP	12.5	-	12.4	12.2
Tax Revenues	=	9.4	-	-	9.8
Non-Tax Revenues	=	3.1	-	-	2.4
Total Expenditure	=	19.1	-	18.0	19.2
Current Expenditure	=	16.3	-	-	16.2
Development Expenditure ^b	=	2.8	-	-	3.0
Fiscal Deficit	=	6.6	4.0	5.3	7.0
<u>Financing:</u>					
External	% ^c	9.0	-	-	4.8
Domestic	%	91.0	-	-	95.2
Public Debt	% of GDP	57.6	-	57.3	58.7
BoPs					
Exports ^d Growth	%	29.3	5.6	-2.3 ^f	-3.0
Imports Growth	%	14.5	6.0	6.5 ^f	12.4
Remittances Growth	%	25.8	0	-	15.0
Current Account Surplus (+)					
Deficit (-)	\$ Million	+437	-1401	-3900	-5000
FDI Growth	%	-28.8	40.0	-	-4.7
Net Aid Inflow	\$ million	357	1974	-	500
Change in FE Reserves ^e	\$ million	2493	-	-1883	-4500

^a for federal and provincial governments combined; ^b Including net lending; ^c Share in financing; ^d of goods (f.o.b) in US \$; ^e inclusive of repayment to IMF of \$ 1.2 billion; ^f Goods and Services

Source: IMF Article IV Consultation Report
Planning Commission, GoP
IMF Economic Outlook
IPP Model

paper of commercial banks. Consequently, in the latter part of the financial year, there is likely to be pressure on interest rates and significant borrowings from the Central Bank could become inevitable. Already, as indicated above, by early April 2012, government borrowing from the banking system had exceeded Rs. 1 trillion.

Balance of Payments Projections: There is likely to be a qualitative transformation in the prospects for external balances, some of which has already become visible. The current account deficit is projected at close to \$4.5 billion, as compared to the official forecast of \$1.4 billion and IMF's projection at close to \$3.9 billion. Exports are expected to remain, more or less, at last year's level due, first, to lack of buoyancy in global markets, second, a fall in prices of textile products from the peak attained in early 2011 and, third, constraints to production in export-oriented sectors due to power and gas shortages. In addition, exports of services could be lower because of smaller inflows from the CSF.

Imports of goods are expected to show a growth of over 12 percent as, first, oil prices are currently over 25 percent above the average last year and are unlikely to fall sharply in coming months, second, edible oil prices remain relatively high and, third, larger imports of fertiliser. However, machinery imports are unlikely to be larger in the presence of a depressed environment for the private sector. Remittances are expected to show a growth of over 15 percent from the already high level attained last year.

The outlook for Foreign Private Investment (direct plus portfolio) remains negative. Net inflow of foreign assistance is projected at \$500 million. In addition, debt repayment of \$1.2 billion has to be made to the IMF. Overall, the deficit in the BoPs in 2011-12 is likely to imply a fall in foreign exchange reserves from \$14.8 billion at the end of 2010-11 to \$10.3 billion by 30th June 2012. Such a decline in reserves is likely to put pressure on the exchange rate.

GDP Growth: As compared to the Annual Plan projection of GDP growth rate of 4.2 percent, the expectation is of a growth rate of 3.6 percent. This reflects, first, the fact that private investment is likely to continue declining in real terms, second, the on-going efforts to stimulate the economy are likely to spill over more into inflation than higher output in the presence of severe supply-side constraints in the economy.

Rate of Inflation: The rate of inflation is projected at close to 13 percent, similar to that by the IMF. This represents an upsurge from the present rate of 11 percent. Reasons for this are, first, the short-run impact of the initial loss of output in the Sindh floods on prices of food items,

second, the faster depreciation in the value of the rupee could increase the component of imported inflation, especially in energy prices, and, third, increasing government borrowing in the latter part of the year could lead to faster growth in money supply, although this will be moderated by the decline in NFAs, due to the fall in foreign exchange reserves.

In conclusion, 2011-12 promises to be yet another difficult year, due to underlying political and economic developments. The phenomenon of stagflation will persist and external payments position will become increasingly vulnerable due to a weakening of both the current and financial accounts of the BoP. In effect, Pakistan is moving gradually but inexorably to a period of financial difficulties.

THE UNDERLYING POTENTIAL OF THE PAKISTAN ECONOMY AND SOME POSITIVES

The above sections have primarily highlighted the negative aspects of Pakistan's economy today. But there is a growing view that things are not so bad and that despite many negative shocks the economy has shown resilience. These silver linings in the cloud are identified below. A picture that depicts the glass to be at least half full points to the sectors that are consistently growing and adding value, and more importantly, exposes the huge underlying potential which despite poor governance keeps taking the national economic activity to the next level.

Amidst great adversities and serious financial challenges there do exist positives, which can be built upon as we move forward. On the back of a slowly but surely evolving sizeable middle class, companies are going through a period where domestic sales are buoyant. An exceptionally high percentage of young employable youth is harnessing a new social dynamic as these fresh minds strive to create their own opportunities, thereby unleashing a wave of entrepreneurial development. For example, the quality and speed at which the urban consumer and service sectors (fashion wear, eateries, home décor, health care centers, private education, beauty salons, leisure & entertainment, etc) are growing, it is becoming clear that it has but a few parallels in the world.

Foreign exchange remittances by the Non-Resident Pakistanis (NRP) have again never been higher. Add to this our exports that crossed \$25 billion in 2011 and if we can somehow supplement these inflows by re-attracting the currently dried-up direct foreign investment, there exists a strong case for Pakistan being able to successfully balance its Current Account Deficit (CAD) in future – Pakistan, as we know, even with the high oil prices, imports between \$35 to 40 billion per year.

The country's foreign exchange reserves have thus far shown only a modest decline and upon conducting a regional comparative analysis on the performance of the Pak Rupee one finds that it has fared better than most currencies in the neighborhood, including the Indian Rupee, in the recent past. Also, against the European currencies like the Euro and the Sterling, the Pak Rupee has in effect gained in value when comparing its parity during the pre and post European crisis periods.

The textile sector accounts for approximately 38 percent of our industrial labour force and the present operating level of 60 percent basically means a loss of jobs in this sector alone of about one million workers. Ironically, in textiles, energy shortages – electricity and natural gas – has forced industry wide closures resulting in loss of global market share. Comparing this with 2007, when the industry was operating on full capacity, in the four ensuing years an extra 3.20 million fresh young employable workers should have been absorbed in the textile sector. Instead it is at present accommodating 1 million less than its peak in 2007, running an industry *per se* is becoming untenable, especially in Punjab, where it is forced to close for nearly 170 days a year for want of power and energy. The cotton prices, which peaked in March/April 2011, have dropped by nearly 50 percent and the high demand cycle of 2010-11 also seems to have hit a bend.

However, on the other hand the good news is that in spite of all these challenges the Pakistani textile exports have shown a sort of unexpected stubbornness and tenacity. Textile exports in quantity terms dropped only by approximately 15 percent from last year and when compared with other main textile exporting countries, this drop does not appear to be too disturbing – China 10 percent, Bangladesh 12 percent and India 18 percent. Not only has the textile sector increased its exports in net terms when working it down from the relative drop in cotton prices, but it also shows that with a bit of help from the government on power and energy supplies, it has the potential to in fact gain on its current global market share. Further, as and when the European Union (EU) Concessions Package comes into effect it will give an additional boost to our industry, both in terms of enhanced linkages and an improved perception depicting that the developed world is still eager to keep Pakistan economically engaged.

As per the latest data released by the FBR, the revenue collection this year is on target. If this drive by the federal government for revenue generation is successful and also serves as an inspiration to the provinces to play their due role in resource generation, then the tax-to-GDP ratio can start rising once again.

Moreover, there is a huge undocumented sector in the economy, which by most accounts may be comparable in size to the documented sector. While surely this represents a serious concern

for the economic managers who have failed to bring this segment into the tax net, it also at the same time presents an opportunity vis-à-vis the potential it carries in terms of generating additional revenues. The issue here is mainly of management. Even in the most developed economies of the world, the undocumented sector gains ground when the government falters and fails to deliver on fair, transparent and good governance. Economic recovery in itself is a long haul and does not come overnight. The Turkish miracle also did not happen overnight, but was initiated more than 30 years ago when Turgat Ozal brought about some radical changes that led to Turkey's development and enabled entrepreneurial growth. Ozal's reforms aimed at bringing legal order to reintroduce the culture of documented economy as against the undocumented one and that too in a non coercive way. A method which did not spread fear but carried incentives for everyone to become a part of the formal Turkish economy. His signature reform was to re-direct government support to those businesses that could export and generate badly needed foreign reserves. Tariff rules, exchange rates, and subsidies were all changed to promote exports.

Moving on to the home front, domestic sales are buoyant and this in a way is very welcome since it reduces the national and corporate reliance on exports. All governments and corporations invariably strive to develop a strong domestic consumption base. The corporate sector in general may be under performing, but in spite of the heavy odds, it has posted some impressive results in the last twelve months. LSM has begun to turn the corner by registering a 1.5 percent growth from negative 0.8 percent in 2011, more than 1.5 million motorcycles were sold last year and the Automobile sector's sales have started recovering strongly. This development in itself provides a new hope that Pakistan is rebalancing, moving away from an economic model reliant primarily on foreign demand.

Many companies and banks have announced healthier profits, with the consumer goods companies leading the pack by churning out some unprecedented results. This, coupled with the new policy announcement on investment in the shares markets and treatment of capital gains, has given a boost to the Stock Markets with the Karachi Stock Exchange (KSE) Index climbing to near 14,000 points. If the returns can continue to be promising, such an opportunity is bound to lure back foreign investment into the Pakistani share markets. The injection of purchasing power in the rural areas, through higher prices in wheat and then in cotton, have surely contributed to the buoyant consumer demand.

Also, the rural economy over the last three years has done well after the drop in 2007-08, even though internationally the commodity prices in general are beginning to fall. In the last two

years wheat, sugar cane, rice, maize and cotton crops have all posted yearly gains despite the situation caused by floods. Government agencies have done well in proactively interacting with the Farmers Association of Pakistan (FAP) in a kind of public-private partnership and the results of this are there for everyone to see. In fact the recent reversals to the Indian farmers with regards to indiscriminate use of the Bt Cotton variety in India to a large extent vindicates the cautious approach of the Pakistani side where both the government and the FAP were reluctant to promote this variety on a wider scale than necessary. As the oil prices climb so do the maize prices, since corn in many countries is used to extract alternate fuel to oil, and this in the coming year for the Pakistani maize farmer would mean extra revenues. In maize cultivation Pakistan is already way ahead of the curve as most of our farmers have mastered the art of taking up to three crops a year, whereas, other regional countries take a maximum of two.

Further, there are other positives that also deserve to be mentioned.

- a) The financial sector remains healthy posting impressive results. Muslim Commercial Bank (MCB) and United Bank Limited (UBL) just announced net profits after tax of more than Rs.19 and Rs.16 billion respectively. Pakistan along with Brazil and India, is amongst the few countries in the world which weathered the Western financial storm successfully, because not only were they well regulated and insulated but also smart enough to carry very balanced portfolios that looked more inwards than outwards.
- b) The government's initiative on granting the MFN (Most Favored Nation) to India shows that the regional trade issues are being resolved proactively to help enhance trade and create opportunities within the neighborhood. Trade as we know has its own dynamics, creates its own opportunities and provides no guarantees that countries who were ahead at the start of the race would also cross the finishing line in the same order.
- c) Growth in the last couple of years has been elusive in the presence of a somewhat contractionary monetary policy. Perhaps the policy of the SBP in maintaining a stable monetary policy will give a good signal to the investors.

The bottom line is that the Pakistani people are bright, innovative and resilient. The economy may be barely surviving the test of modern times. It is sadly not currently living up to its true potential. Unless the decline is arrested now, the situation will become increasingly difficult to retrieve with each passing day. The economic management needs to be strengthened and conducted in a way that it is transparent, discourages corruption, does not stifle growth and

innovation, the cost and access to credit for budding entrepreneurs are not severely raised, the process of financial inclusion is not constrained, and equitable distribution of resources is ensured. And in doing so care should be taken that in the process the very spirit of free enterprise does not get stifled.

Chapter - 3

Revival of Growth

Chapter - 3

Revival of Growth

INTRODUCTION

Pakistan today is South Asian's weakest economy. Its GDP growth rate is one-half that of Bangladesh's and one-third that of India. Both India and Bangladesh are likely to sustain high levels of growth rates into the future. This cannot be said about Pakistan. Since we began writing the Annual Reports, we have been suggesting that the country could revive its economy by adopting the right set of policies. However, as discussed in chapter one, our view of the future has become, over the years, progressively less optimistic. We have continued to lower our sights and increasingly viewed the future with greater trepidation and lesser amount of hope. But this could change if those responsible for making economic policies begin to focus on reviving growth by planning for the future.

The reasons for being less optimistic are to be found in what can be described as the "political economy" of change. Pakistan is a country in a state of transition. Devising economic strategies that depend on deep structural change is always difficult. This is one reason why the country is presently trapped in a vicious cycle. The move towards a democratic political order means satisfying a number of conflicting interests. Reconciling them needs institutional strength that is absent in the country at this time. In such a situation policy makers are likely to opt for the lowest-common denominator in defining their priorities. Such an approach cannot pull the country out of the economic morass in which it finds itself today. Not being able to get out of a difficult situation makes it even more difficult. That, in turn, creates more problems for the making of public policy.

If somehow those in power in Islamabad and in the provincial capitals can develop the political will to take the brave decisions that are needed today, in which direction should they move? While we are unable to provide a comprehensive answer to this question at this stage, we can set the context in which it must be carefully thought out. What the country needs at this delicate moment in its history is a paradigm shift. That can and should be made after carefully reviewing these options.

This chapter has five parts. In the first part, we present an historical perspective on growth trends in the past six decades and their sectoral composition. In the second part, we discuss issues relating to the quality of growth in terms of the impact on poverty and income distribution along with identifying some of the causes of the recent slowdown in growth. In the third parts, we discuss the “three transitions” through which the country is currently passing. This discussion emphasises the close links that exist between political and economic developments occurring at this time. For this transition to succeed and move in the preferred direction, it will be necessary to adopt a model of growth that will be ‘inclusive’ in its orientation and not continue to be “extractive”. In the chapter’s fourth part, we analyse the growth strategy embedded in the “framework” released early last year by the Planning Commission with a brief description of three earlier attempts at longer term planning. The analysis will underscore both the strengths and weaknesses in the proposed strategy.

In the fifth part, we will focus on the implications of one part of the Commission’s strategy: improving entrepreneurship in the economy by developing the Pakistani firm. We conclude the chapter by pulling together some of the lessons to be learnt from history. We identify history’s six important lessons.

HISTORICAL PERSPECTIVE

In terms of growth, Pakistan’s economic performance was not spectacular but fairly positive. The Pakistan economy grew by an average rate of 5 percent between 1950 and 2010. In the 1950s, 1970s and 1990s, the growth rate was slow, 3 percent, 4.8 percent and 4.6 percent respectively and in the decades of 1960s and 1980s, it was relatively high at 6.8 percent and 6.5 percent respectively. The sectoral rates of growth in each decade is given in the table 3.1.

Table 3.1
Pakistan's Economic Growth 1950-2010

Years	Agriculture	Manufacturing	Services	Overall GDP	Per Capita Income
1950s	1.5	7.6	3.6	3.0	0.8
1960s	5.1	9.9	6.7	6.8	3.9
1970s	2.4	5.5	6.3	4.8	1.6
1980s	5.4	8.2	6.7	6.5	3.4
1990s	4.4	4.8	4.6	4.6	2.2
2000s	3.2	7.0	5.3	4.8	2.6
1950 - 2010	3.7	7.2	5.5	5.1	2.4

Source: Pakistan Economic Survey, GoP

There is an apparent correlation between Military rule and a higher GDP growth in Pakistan. This was largely due to the relative “stability” of Military rule compared to the recurrent instability during the rule of civilian administrations. But a more important factor, contributing to higher growth during military rule, was the flow of foreign assistance. Each period of Military rule coincided with certain important international developments in which Pakistan played a major role and in return received substantial flows of concessional foreign assistance or debt relief on generous terms. These were the memberships in Cento and Seato during the Ayub era (1958-69), active support for mujahideen in Afghanistan, after the 1979 Russian invasion, under General Zia-ul-Haq (1977-88) and participation in the international campaign against terrorism, after the 9/11, under General Pervez Musharraf (1999-2008).

In comparison, the level of foreign assistance invariably declined during periods of democratic civilian rule. The sharpest decline was in the 1990s after the imposition of sanctions under the Pressler Amendment in October 1990. As a result the net inflow of foreign assistance became negative by 1999.

It is however instructive to recall that military led growth model, at least in the 1980s and 2000s was not driven by productivity growth, major investments in human development or sharp increases in domestic savings. It was fuelled largely by foreign savings pushing up investment and consumption in certain sectors. In analyzing the growth record of each decade, it is useful to recognise the importance of time lags between investments and their outcome. Longer investments in one decade in major water, industrial or energy projects normally yield benefits in the following decade.

There were other domestic and international factors which also influenced the growth trends negatively or positively in different periods. These included the oil price shocks of early 1970s during the regime of Zulfikar Ali Bhutto which caused inflation and slowed down the pace of growth. Conversely larger inflows of remittances following the mass migration of workers to the Middle East after the oil boom of mid 1970s reached almost 7 percent of GDP in the late 1970s during Zia-ul-Haq’s rule. Some of these remittances were invested in small-scale industries and transport services.

QUALITY OF GROWTH AND THE RECENT SLOWDOWN

In dissecting growth trends for different periods, it is equally important to analyse the quality of growth from two different perspectives:

- How “inclusive” was the growth process and its impact on poverty?
- How balanced was the growth process in removing regional disparities among and within provinces?

While accelerated GDP growth is a necessary condition for poverty reduction, it is not sufficient. Poverty reduction also requires improved income or asset distribution and sustained human development. That is why the high rate of growth in the 1960s (6.8 percent per annum) was not accompanied by a corresponding decline in poverty, but there was some decline in poverty in 1970s, despite a slower growth rate (4.8 percent).

There was a sharp reduction in poverty in the 1980s, from about 40 percent of the population in 1979-80 to 26 percent in 1990, partly because of accelerated agricultural growth and partly as a result of the flow of remittances from expatriate Pakistanis to the rural population. But this declining trend did not last through the 1990s. According to official figures, the level of poverty, under the basic needs definition, rose to 32 percent by 1999-2000 largely due to a decline in the net flow of foreign assistance and a sharp decline in remittances. The increase in rural poverty was even sharper – from 25 percent in the early 1990s to 35 percent in 2000. There was some reduction in poverty between 2002 and 2007, following the sharp increase in remittances and foreign assistance after 9/11 and the resultant surge in the growth rate. But the past five years have seen a sharp decline in the growth rate and higher food prices. The proportion of people below the poverty line of one dollar a day has correspondingly gone up to at least 45 percent.

The issue of regional disparities was a burning issue throughout Pakistan's history. It became a rallying point in the eastern wing of Pakistan, as people began demanding greater provincial autonomy. After a brief but bitterly fought civil war, East Pakistan, helped by Indian forces, became the independent state of Bangladesh.

The past has an important lesson to offer for the present. Resentments should not be allowed to build-up to the point where cohabitation is no longer possible. They must be addressed in time and this requires movement in both political and economic arenas. Simply moving in one area while standing still in the other is not helpful.

Regional resentments are still with us in “new” Pakistan, the country that emerged after Bangladesh became independent in December 1971. Balochistan is restive. A significant number of people in Khyber Pakhtunkhwa have taken up arms against the state in an effort to set up an entirely different form of governance from the one to which the majority of the population subscribes. There are growing regional disparities in all the four provinces. As we point out in a later chapter, the southern districts of Punjab are doing considerably less well than those in the province's centre and north. Sindh's urban areas are racing ahead of the province's countryside. In addition to the activities of those who are defined as “non-state actors”, Khyber Pakhtunkhwa also has the problem of regional disparities. What can be done to take care of these problems

and the deep resentment they have created among fairly large segments of the population? Can we plan our way out of this situation that poses an existential threat to the country? We have some answers to these questions in the report's later chapters.

This brief recounting of the crises faced by the country in the past has great relevance for dealing with the difficulties faced in the present. It shows that by not adopting a strategic approach towards crisis-management, policymakers keep in place the circumstances that produced the difficult situations in the first place. Relations with India remain difficult; government still has not found a way to regulate the industry so that industrial houses do not dictate public policy and also work not only for generating profits but for the benefit of the citizenry as well; an urban bias persists in economic policymaking; and regional disparities continue to pose serious problems for the country's integrity.

The most worrisome dimension of Pakistan's growth story is the recent slowdown in the rate of growth. For the past 6 years in a row, since 2006, the average growth rate has declined to 2.5 percent. This is the lowest growth rate of for any six-year period in Pakistan's history. There are many exogenous factors which adversely affected the Pakistan economy like the unprecedented increase in oil prices in 2007-08 and the fall out of the Afghan War on the spread of extremism and insurgency within Pakistan. But there are deeper structural factors that plague the Pakistan economy. These must be identified and addressed.

Many spurts of growth in Pakistan could not be sustained since they were based on the premise that large doses of foreign capital would keep flowing into the country and that increases in consumption by the upper income strata would provide the fuel the economy needed to move forward. This was essentially the strategy pursued by the now discredited regime headed by General Pervez Musharraf.

There were two major problems in the approach followed by the last Military government. There was excessive reliance on external capital which had become available in generous amounts following Islamabad's decision to side with the US in the latter's war against terrorism. As the recent souring of relations between Pakistan and America has demonstrated vividly, dependence on external capital places the economy on a shaky ground. External finance can never replace domestic resource mobilisation.

Second, by encouraging investments into consumption by developing instruments of finance that were to result in excessive bank borrowing for automobiles and consumer durables, the economy was not provided with a base that would support long-term growth. The government

also allowed speculative activities to proceed unchecked in the stock markets and real estate. The consumption boom that resulted from these approaches gave the impression of a vibrant economy. This, of course, was not the case. The balance of payments crisis that resulted from this way of managing the economy demonstrated that an economy without a viable growth strategy can produce short-term growth spurts but not sustainable progress.

With the return of democracy in 2008, after Musharraf's nine-year rule, the political establishment was too preoccupied with managing the transition to civilian rule to pay much attention to economic management. Those now in power in Islamabad and the provincial capitals seem not to be too concerned that the absence of growth was doing long-term damage to the economy. Even the economic elite – the owners of assets in industry, agriculture, commerce, and finance – appear to feel that growth was not necessary since their interests were well served by the way the economy was operating. This is where the situation stands today.

THE THREE TRANSITIONS

Pakistan is moving through a period of triple transitions. How this process materialises over time and shapes the country will matter not only for this large and important South Asian state. It will also impact much of the Muslim World. Several other Muslim states are also in the process of changing their systems of governance which will impact their economies and societies. Most Muslim countries were governed for many decades by autocrats who took command of the political systems because of the power of the Military in the political system. That was the case in Egypt, Libya, Yemen and Syria and, of course, Pakistan.

The Arab Spring brought to a sudden end that style of governance in several countries. This change had also occurred three years earlier in Pakistan when a democratically elected government took over the reins of power from the Military. The pressure for change came from much the same source – the rising and restive middle class. Several decades ago, Samuel P. Huntington, the American political scientist, had argued that economic prosperity in the institution – poor countries in the developing world does not necessarily lead to political development. It can – and often is – destabilising. This is what happened in Turkey and Pakistan in the 1990s and early 2000s and later in much of the Arab world. It is interesting to note that the rise in the aspirations of the youth in this part of the world followed impressive rates of economic growth. General Musharraf was chased out of his office following a growth spurt in the economy. The “spring” arrived in all large Muslim countries not just in the Arab world following rapid growth in their economies.

As Huntington had suggested the youth once freed from economic want, start to look for space at the table or in the room where decisions are made, affecting all aspects of their lives and not just their economic well being¹. This participation was not allowed in the Military – dominated political systems. Demilitarisation of politics became the rallying cry in all large Military – led Muslim states stretching from Indonesia in the East to those on the Mediterranean coast in the West. Even Iran was affected when the results of the last presidential election were challenged by large crowds in Tehran and other major cities.

However, it turns out that demilitarisation means more than moving policymaking from the armed forces to elected parliaments. Why does that happen? One answer comes from Daron Acemoglu and James Robinson, the authors of a recently published book titled *Why Nations Fail*.² The authors rightly suggest that elections – even those that are honest and fair – do not necessarily move societies from what they call “extractive” to “inclusive” systems. Extraction of a country’s wealth for use by the elite can occur even in democratic societies when there are no checks other than periodic elections available to constrain those who dominate the political system. This is where other instruments to check and balance elite behavior enter the picture. And that is precisely what is needed in Pakistan at this time.

In Pakistan, a discredited Military was forced to step back from power by public opinion. The political space thus created was occupied by peoples’ elected representatives. They assumed control but did not govern wisely. While they increased their personal wealth that of the rest of the citizenry either stagnated or, for the groups occupying the lower rungs of the income distribution ladder, even declined. As Pakistan successfully went through a period of political transition, it saw significant economic decline. Pakistan is now the sick man of South Asia.

It is to remedy this situation that three other institutions have entered the political space thus beginning the process of the second transition. The Judiciary, the media and many civil society organisations are now engaged in attempts not only to keep the men in uniform in their barracks but also to constrain the rapacious behavior of the political establishment. There are now three cases before the increasingly assertive Supreme Court that will take the country from the phase of demilitarisation to a system in which meaningful checks can be exercised on those who wield power. One case is attempting to force the administration headed by PM Yusuf Raza Gilani to reopen proceedings in a Swiss Court which was looking at money-laundering and misuse of public funds charges against President Asif Ali Zardari. The Swiss proceedings were stopped at the request of the Pakistani government when Mr. Zardari became President.

In the second case the court wants the Military intelligence agencies to account for hundreds if not thousands of missing persons. These people were picked up by the agencies as a part of their campaign to contain the rise of Islamic extremism or to deal with the separatist aspirations of a segment of the population of the restive population of Balochistan. And the third case has opened an old complaint lodged by a politician decades ago against the “troika” that then governed Pakistan. The term troika was used to refer to the group made-up of the President, the PM and the Chief of Army Staff (COAs). The complainant alleged that large amounts of funds were passed on to the candidates favored by the troika to contest an election held in 1990.

The third transition relates to the decentralisation of power from the center to the governments at the sub-national levels. This was the main subject of the Fourth Annual Report by the IPP³. The 18th Amendment to the Constitution passed in 2010 does precisely that but the implementation of its provisions is being delayed by the lack of capacity in the provinces to absorb this change.

Pakistan, in other words, is engaged in a significant transformation of its political system. If it succeeds it could serve as a model for the countries in other parts of the Muslim World who are also attempting to move from extractive to inclusive systems of governance. Turkey has already traveled some distance on this route. If Pakistan could also advance along this course there will be profound consequences for economic development. A functioning democratic system with appropriate checks and balances should help the country to move from “extractive” to “inclusive” economic policymaking.

PLANNING COMMISSION'S GROWTH FRAMEWORK

Planners working in the National Planning Commission are often tempted to go beyond the conventional five years and prepare longer term plans. This is desirable and often necessary because for many sectors like energy, transport or education, a period of five years is too short a time frame for meaningful targets and programs. But a more important purpose of these longer terms plans is to provide a clear direction for strategic or structural changes in policies and strategies which the economy needs.

There were three such attempts at longer term planning in Pakistan's history:

The first was a 20 year Perspective Plan (1965-1985) which was launched by the Planning Commission along with the Third Five Year Plan (1965-1970). This Plan laid down four major goals:

- Doubling of per capita income over the 20 years period by achieving a minimum increase of 6.5 percent in GDP and 4 percent in per capita income.

- Removal of income disparities between East and West Pakistan.
- Achieving total self reliance by drastically reducing the need for foreign assistance through larger domestic resources and sharp increase in exports.
- Combining growth with social justice to ensure that the benefits of growth reach all segments of society and all parts of the country and by reducing unemployment and under employment.

Within three months of the launch of this Perspective Plan, the 1965 war between India and Pakistan broke out leading to a substantial increase in defence expenditure from Rs.1350 million in 1964-65 to Rs. 2650 million in 1965-66 i.e. from 2.2 percent of GDP to 4 percent. Simultaneously the flow of external assistance, which was interrupted by the war, was restored only partially in 1966. The overall flow of foreign assistance during the Third Plan Period (1965-1970) declined from 6 percent to 3 percent of GDP. This substantial shrinkage of resources for development to the extent of 4.8 percent of GDP adversely affected the Perspective Plans' goal of reducing disparities between East and West Pakistan and for diverting more resources to the social sectors. The Perspective Plan "died" when Bangladesh became independent in December 1971.

The second serious attempt to evolve a long term framework came in 1998 with the *Planning Commission's Vision, 2010*. The main thrust of this exercise was aimed at preparing the country for the knowledge economy and the globalisation challenge. It suggested a road map for human resource development, the rule of law and good governance.

Here again, within 16 months of the launch of Vision 2010, the government of PM Nawaz Sharif was dismissed by General Musharraf and all the hard work undertaken by a very large segment of the academic community and civil society organisations in formulating different sub-strategies was wasted.

The third, boldest attempts of all, was the launch of Vision 2030 by the Planning Commission in February 2006, which stated:

"This 25 year Vision (2005-2030) envisages a developed, industrialised, just and prosperous Pakistan through rapid and sustainable development in a resource constrained economy by deploying knowledge inputs". To achieve this Vision, Pakistan will have to overcome the binding constraint of limited resources – financial, scientific, technical, technological and human. All the stakeholders in the country will be called upon to meet the pre-requisites of sustainable development which, inter alia, includes consistency and continuity of economic policies,

transparency in governance, development of physical, technological and intellectual infrastructure, well-defined linkages between wage structure, productivity and taxation, an educated and enlightened working class, and continuous coordination between universities, R&D institutes and industry.

In particular, realisation of the Vision would require emphasis in education, justice, health, governance and management institutions and finances. More specific targets and policies were to be spelled out in Medium Term Development Framework (MTDF) for each five year period.”

It is surprising that planners in the Musharraf’s team should have waited for the 6th and almost final year of his tenure to launch such a framework. If undertaken in 2000 or 2001, it might have provided a better sense of direction for economic policy making during Musharraf’s rule. It is clear that those responsible for writing the Vision 2030 operated in a political vacuum.

Planning Commission’s *Growth Framework* launched in 2011, seeks to create a framework within which the economy could begin to move forward at a faster pace. Given the economy’s recent performance and the experience with previous planning efforts, the Commissions’ growth framework attempts to chart a new course. Its ‘production function’ puts considerably less weight on capital as a factor than on some other possible contributors to growth. Having seen how difficult it is to increase domestic savings and tax-to-GDP ratio in a society engaged in the fundamental restructuring of its political system – a process, as suggested above that is going through “three transitions” – and recognising also that there are not all that many friends abroad who are prepared to lend a helping hand, the Commission has placed its faith on the “soft side” of the development equation.

Development and growth economics have come a long way in understanding the determinants of growth. When this part of the discipline was developed, the production function – the mathematical construct that had income increase determined by two variables, labor and capital – informed the making of public policy. Increase the two variables, this approach suggested, and growth will be the outcome. Developing countries emerging from centuries of colonial exploitation had a great deal of labor surplus but not much capital. The development trick then was to move workers from low productivity jobs to the jobs where they could produce more. There were large number of people employed in the sectors of agriculture and services; they could be moved out of the countryside and from the poorly developed urban service sector to the potentially more productive manufacturing or modern services. This would result in improving worker efficiency so that the same amount of output could be produced by fewer people. Those no longer needed would be encouraged to move to other parts of the economy.

This was then the basic development model used by scores of developing countries to have their economies grow.

This model left two unanswered questions. How would the capital needed be obtained to put the workers who were pried loose from the traditional sectors to contribute effectively to the economy? It couldn't be generated from within the domestic economy since savings were generally very low in the developing world. Two, who would be the agents of change, getting the new economy to work? The answer to the first question came in the form of foreign assistance initially given by rich countries and then by multilateral development banks that had the mandate to provide assistance to poor developing countries. The second question is still looking for an answer. Initially the developing world relied on their governments to create the environment which would make possible the transfer of workers from low productivity activities as well as to choose the activities in which these workers would get engaged. India under Jawaharlal Nehru, the country's first PM, became the most articulate advocate of what can be called the "state-led model of economic growth."

There is a belief that the country can return to the growth path by focusing not so much attention on capital accumulation but on improving economic efficiency. In the language of "old economics" it should be possible to obtain higher growth with lower levels of investment – to lower, as it were, the Incremental Capital Output Ratio, (the ICOR). For this to be done, the Commission in the Growth Framework is seeking to introduce a number of structural reforms – to improve the quality of governance; to reform the system of civil administration; to make the system of industrial regulation work for the consumers; to encourage the development of cities so that they become centers of innovation; to improve the efficiency of firms; and to facilitate the development of domestic commerce. By concentrating on these efforts, Pakistan would be able to improve economic efficiency. It was suggested by a Task Force appointed by the Commission that appropriate adjustments in public policies and the Public Sector Development Programme (PSDP) could significantly increase Total Factor Productivity (TFP). This would require greater focus on increasing exports and improving the quality of human resources. The two together account for over 50 percent increase in TFP in a country in Pakistan's situation. The task force has also recommended major restructuring of the PSDP by putting greater emphasis on three areas – social development, infrastructure development and productive activities – while reducing the scope of the special programmes. That said, but there is at least one serious problem with this approach.

It will not produce the kind of impact wished by the Commission in the time frame it has in mind.

These changes will take time – a great deal of time as the World Bank (WB) has suggested in its *World Development Report, 2010* on fragile states⁴. It will take a generation or two before they can have material consequences. As we argue at some length in chapter two, the important objectives of increasing resource mobilisation and tax-to-GDP ratio cannot be ignored because of political expediency.

As currently articulated, there are some other gaps in the Growth Framework. We will underscore two of these. Firstly, it does not give sufficient attention to the need for providing adequate physical infrastructures required by a country at Pakistan's stage of development. At the time of independence, the country inherited fairly well developed surface irrigation, railways and road networks. These were developed by the colonial administration to turn the provinces of Punjab and Sindh into the granaries for the food-deficit areas in British India's northeast. This was the British government's response to the repeated famines that had taken heavy human and economic tolls in these areas. Not only did the colonial rulers tap the waters in the Indus River system for irrigation, they also constituted an elaborate system of roads and railways to transport food-grains from Punjab and Sindh to northeast India, and to the port in Karachi for the export of wheat to Britain.

Pakistan paid little attention to the further development of this infrastructure. In fact, the vast irrigation system was poorly maintained. The result is that about half of the water flowing through the network is either lost to evaporation or seeps into the ground. The railway system has met with a worse fate. In recent times, the railways – once the pride of British India – are rapidly becoming dysfunctional. The road system was developed to serve the urban areas. Little attention was paid to provide for the countryside. In other words, a major emphasis in the growth strategy has to be on the development of physical infrastructure.

The second important gap in the Growth Framework is the way it was developed. It is not the product of close consideration between the federal government and the provinces or between the Planning Commission and the private sector. It is more of an intellectual exercise than a strategy into which various parts of the political and economic societies will buy-in. As we have emphasised earlier, a viable economic strategy has to be embedded in the political system.

ENTREPRENEURSHIP AND THE FIRM AS THE DRIVER OF GROWTH

With many regime changes Pakistan has wavered between the approach to put the state on the commanding heights of the economy, and the approach to free private entrepreneurs to work on their own without too many restrictions placed in their way. It is the latter approach that is now at

the center of what is called entrepreneurship-focused model of development. In this model the kitchen is left in the hands of the private enterprises to mix the ingredients for growth in a way that produces the best results. What good entrepreneurs do is to develop “production recipes”.

The “recipe” metaphor was used recently in a report produced by a group of consultants for the Planning Commission. Professor Philip Auerswald of George Mason University who headed the team explains that in traditional development economics the emphasis is placed on inputs and outputs – so much labor and capital need to combine to produce so much output – but not on the “recipe” that will turn the inputs into outputs. It is the recipe that really produces growth at the margin. He calls this the “production recipe” to distinguish it from the “production function” of growth economics. Even though in recent years other variables such as human development, technological improvements, and institutional capacity have been brought in directly into the production function, there is still not the full recognition that it takes individual firms to play the role of a chef to produce the best meal out of the available ingredients.

Firms only exist when the cost of doing business is reasonable – what economists call “transaction” costs are not excessive. If these are high, as is the case when the political and bureaucratic systems allow a great deal of corruption, or when the state of infrastructure is poor, or when the regulatory system is very demanding, efficient firms will not develop. Too much entrepreneurial energy will be spent on dealing with these distractions in the production process. These are Pakistan’s conditions today; resolving them would help entrepreneurship to play an important role in economic revival and growth.

Economic growth usually means growth of firms and only those firms become growth oriented when they work on their recipes to improve the efficiency of the production process as well as the quality of the output being produced. There are three different ways in which ordinary firms become growth firms. First, they make modifications to the existing production recipe. This they do by learning from their own experiences. Second, they create their own recipes. This requires investment in research and development and, of course, entrepreneurship. Third, when an environment is created that allows the entry of new firms that bring in new ideas while encouraging the exit of those that have lost the cutting edge because they are set in their own ways. At the margin, much of the growth that occurs comes about because of the entry of new firms.

If it is expected that a growth strategy must give considerable attention to the development of firms, what are precisely the policy options the state must emphasise. Here some international experience should help to point to some of the areas we consider to be of considerable

importance as Pakistan attempts to forge ahead. The first is investment in the development of human capital, a neglected area in the country. Those who study China's extraordinary economic growth since 1979, when the reformist Deng Xiaoping established his control over the Communist Party and thus over the country, should recognise that he would not have been able to achieve his miracle, unless Mao Zedong had prepared the Chinese population to develop themselves and the economy in which they worked. This was done by providing universal education and healthcare and by liberating women. Mao could have done this by not incurring such high human costs. That said Deng would not have achieved the remarkable transformation of the Chinese economy had Mao not preceded him.

If the development of human resource is critical for the development of the firms, it will need the expenditure of enormous amount of resources to close the gap that exists in Pakistan in terms of what needs to be done in this area and what has actually been accomplished. While the state's performance has been weak, the private sector has done much better.

Pakistan's very large human resource is one asset which could contribute to the revival of growth. Properly trained and given the necessary skills, the country's large and young population could become an asset. Ignored – as it has been in the past – it could become a burden. A multi-pronged approach is needed to focus on the development of the human resource. Given the past record in attempting to use the public sector to educate and train the country's youth, it would be wiser to focus on using the private sector to prepare the workforce that a growing and modernising economy needs. The public sector's role should be confined largely to regulating the working of the private sector. Standards should be set for the institutions operating at various levels. These should be done with the help of the private sector and should include the development of a curriculum, encouraging the writing of text books, laying down standards for teachers at various levels, setting standards for admissions at various levels, and providing public funds to help those who cannot pay the fees charged by private institutions.

In other words, the Planning Commission's Growth Framework suggest that government's very limited resources should be spent on the "softer" side of managing development rather than on spending on brick and mortar.

BUDGETARY PROPOSALS FOR 2012-13

There are two ways of overcoming the resource constraint: to rely on increasing domestic resource mobilisation and to obtain larger efficiency from the investments already made or to be made in the future. In so far as the first is concerned we have some specific suggestions for the budget of 2012-13. These are as follows:

- i. Introduction of a Minimum Assets Tax (MAT) in the income tax system. This should represent the minimum personal income tax liability. It is suggested that this should be one percent of the net worth of an individual taxpayer, assessed on a global basis. The introduction of MAT will not only broaden the base but also contribute greatly to enhancing the progressivity of the tax system.
- ii. The provincial governments may be motivated to develop the agricultural income tax and broaden the sales tax on services base by extending the tax net to services consumed by upper income groups and the corporate/business-related sectors.
- iii. Conversion of the presumptive tax regime in the case of contractors, commercial importers and services into a minimum withholding tax.
- iv. Introduction of a more sophisticated tax regime in the banking sector which links the corporate tax rate to the margin between returns on advances and deposits and introduces a tax credit scheme for incremental lending to key sectors like agriculture, small and medium enterprises (SMEs), and exports. Simultaneously there should be a reduction of the tax rate on cash withdrawals from the banking system.
- v. Rationalisation of the import tariffs, especially on intermediate goods and raw materials, combined with withdrawal of SROs which benefit special interests.
- vi. Tackle the problem of under invoicing of imports by improvement of customs valuation procedures and reintroduction of the system of International Trade Prices (ITPs) on goods which are prone to underreporting of prices.
- vii. Expansion of the system of investment allowances for tax deductibility/credit in personal income tax for investment in approved savings instruments.
- viii. Reduction of the excise duty on cement, POL products and beverages.
- ix. Introduction of a policy for fixation of retail prices of POL products such that in the event of increase in international prices the tax burden does not rise automatically, but remains constant by variation in the rate of petroleum levy. If, of course, the international prices fall then the petroleum levy can appropriately be enhanced.
- x. Introduction of special fiscal incentives for Public-Private Partnerships (PPPs) in key sectors like power generation and distribution. Granting of 100 percent initial depreciation allowance on investments in captive power generations.
- xi. Introduction of special tax treatment for mutual funds and special venture capital funds.

On the expenditure side, the following proposals are made:

- i. Resolution of the circular debt problem, along with strong legal and administrative measures against power theft and non-payment of bills, steps for higher utilisation of existing capacity for power generation and greater diversion of gas supplies to the power sector.
- ii. Drastic changes in priorities for allocation to projects in the federal PSDP on the basis of the following criteria: faster implementation of on-going projects in the power and water sectors, completion of mature projects and projects in Balochistan as part of the *Aghaz-e-Hakooq* package.
- iii. Adoption of a policy of limiting increases in government salaries and pensions to a maximum of the rate of inflation in the consumer price index.
- iv. Launch of a major Food for Work Program, especially in the underdeveloped areas, with the surplus wheat available, so as to increase employment and food security.
- v. Freeze the level of non-salary expenditure at the previous year's level.

Along with fiscal policy, monetary and trade policy should be used as instruments for revival of growth in the following ways:

- i. Protection of exports in a recessionary global environment by avoiding any appreciation of the real effective exchange rate and reintroduction of concessionary financing of exports.
- ii. Introduction of a higher presumptive tax rate on income of commercial banks on holdings of government paper.
- iii. Enhancement of the slope of the yield curve of interest rates to avoid excessive recourse to short-term treasury bills and the resulting problems of roll-over.
- iv. Establishment of a link between the policy rate of the SBP and the "core" inflation rate.

The likelihood of some of the above proposals being implemented in 2012-13 may not be high in view of the fact that it is an election year. But surely the government would like to avoid a situation where it goes to the voters in a year's time in an environment of economic stagnation, galloping inflation rate and serious difficulties in sustaining the external balance of payments.

CONCLUSION

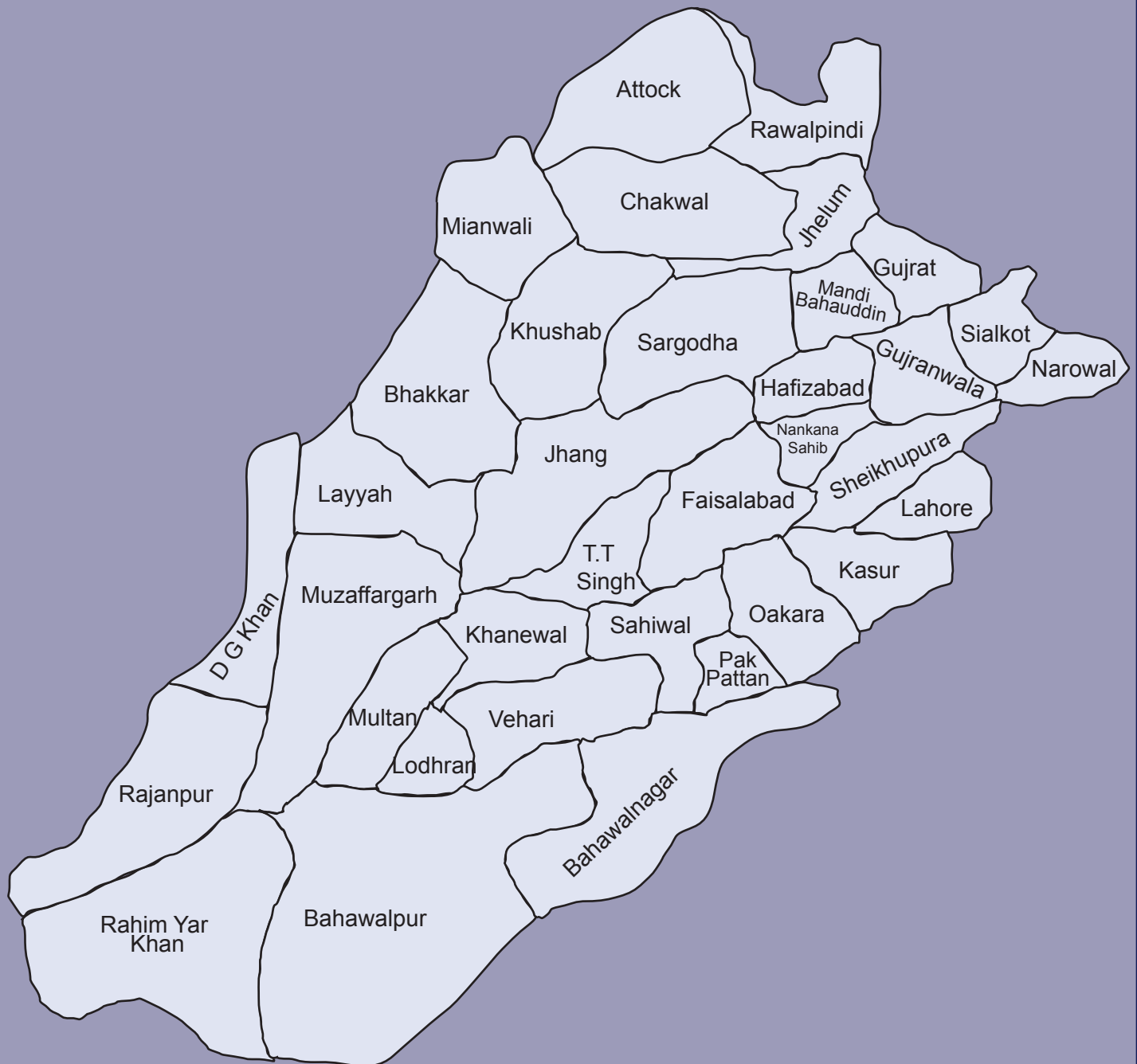
There are many lessons on offer from a careful reading of Pakistan's chequered economic history. Several of these are pertinent for policymaking at this delicate moment for the country. We will focus on six of these in order to suggest the course the country could adopt in dealing with the current set of crises.

1. There is trouble on a number of fronts not just the economic front. What the past teaches us is not to plan in the arena of economics without being mindful of what is happening in other areas – politics, the make-up of the society, relations with the world outside. There were crises in the country's history before but they came mostly one at a time. They have now come together. In the past when policymakers dealt with crises they ignored their political consequences. Most of those who governed from Karachi, country's first capital, and then from Islamabad, operated in essentially apolitical environments. That is no longer the case. Now into the fifth year of rule by an elected government, politics has taken precedence over economics. The pendulum has swung too far in the other direction. This too will not do.
2. For six and a half decades the country's policymakers have taken the easy way out of the familiar "development conundrum" faced by all emerging economies. High rates of economic growth need high rates of investment which in turn needs high rates of domestic savings. Investments need to be made by both the public and private sectors and this means access to financial resources by both parts of the economy. Pakistan's geography has offered the policymakers at different times in our history the opportunity to trade-off our location with foreign resources. This may have worked over the short-term. Pakistan has enjoyed three growth spurts in its history, each associated with the availability of external finance. This has made the country extremely vulnerable to outside pressures and influences. There is an urgent need to break-out of this pattern. A growth strategy must come equipped with a domestic resource mobilisation approach which has the political support of all segments of the society and all regions in the country.
3. Islamabad working with provincial capitals, must formulate a multi-year, comprehensive and balanced growth strategy. What should be the strategy's principal objectives? It should aim to lift the economy on to a higher plane. It should be "inclusive", ensuring that the fruits of growth are delivered widely to all segments of the society and to all regions in the country. Growth and distribution must come together, not sequentially. This did not happen in the past. Whenever the policymakers turned their attention to formulate growth strategies they ignored distributional objectives. There were grim consequences of this neglect.

4. Pakistan must finally settle the respective roles of the state and the private sector in the economy. The yo-yo approach of the past has resulted in leaving the country with a number of demand-supply gaps, particularly in electric power, natural gas, physical infrastructure, education, and health. Taken together these pose formidable obstacles to achieving sustainable growth at a high level. In some of these areas, policymakers have swung between private and public ownership creating an enormous amount of market and consumer confusion.
5. There needs to be greater awareness of the country's endowment which is impressive in several areas. This is certainly the case in agriculture and human resources. The former is owed to the massive investments made by the colonial administration in the late nineteenth and the early twentieth century. The latter is the result of what economists call the "demographic dividend" when the dependency ratio is low.
6. Pakistan needs to come out in the world and work hard to end the isolation from which it currently suffers. One reason for this are the various "travel advisories" issued by the Western governments since the security situation began to deteriorate. One example of the cost of isolation is that no western airline flies to the country. In an increasingly globalising economy such isolation has very large economic costs. Opening to India will certainly help Pakistan to reach out to the world outside. The policymakers should aim to allow more exchanges with places and people outside our borders.

What Pakistan needs today is an informed debate on the need for reviving growth in the economy and on the best ways of achieving this objective. For the last fifty years the country has operated without a viable well thought-out growth strategy that also has broad political and social appeal. The Planning Commission has developed one; it needs to enter public discourse.

The Punjab Story



Chapter - 4

The Size and Growth of The Regional Economy of Punjab

Chapter - 4

The Size and Growth of The Regional Economy of Punjab

The passage of the 18th Amendment to the constitution is a historic step forward in the process of decentralisation of economic decision making and planning down to the provincial level in Pakistan. Coupled with the 7th NFC Award, which has significantly increased the share of the provinces in the divisible pool of taxes, the major share, in excess of 60 percent, of the overall public sector development program is now being financed and executed by the provincial governments. Therefore, sectoral and spatial planning have largely been devolved to the provinces, with the federal government primarily focusing on the macroeconomic framework and the conduct of fiscal, monetary and trade policies.

But for the provincial planning function to be performed effectively there is increasingly a need to have up-to-date information on sectoral developments in the regional economy and on the spatial distribution within the provinces of economic activity, infrastructure and services. For this purpose it is necessary, first, to have estimates of the Gross Regional Product (GRP) of a province in terms of its size, sectoral composition and growth. Second, spatial planning at the district or division level will require determination of the magnitudes of various regional development indicators.

The objective of this chapter is to arrive at latest estimates of the size, sectoral distribution and growth of the economy of Punjab. This will help in a number of important ways, first, it will check for the reliability of previous estimates of the GRP of Punjab upto 2006-07 by the Government of Punjab (2008), earlier by ADB, Department for International Development (DFID), WB (2005) and Bengali and Sadaqat (2005). Second, it will help in answering a number of key questions. Has Punjab historically led the national economy in the growth process? Has Punjab's growth rate faltered more in recent years due to the large energy shortage? In which sectors does Punjab have a comparative advantage with respect to the rest of Pakistan?

The chapter is organised as follows: Section 2 gives a brief description of the methodology for construction of the regional income accounts, with a more detailed statement in a Technical Appendix¹. Section 3 reviews earlier estimates of the growth rates of Punjab in different decades

and draws some conclusions about the relationship between growth of the regional economy and the national economy. Section 4 presents estimates of value added in different sectors of agriculture, followed in Section 5 with corresponding estimates for industry and in Section 6 for services. Section 7 computes the shares of different sectors in the economy of Punjab and compares these with the rest of Pakistan. Also, Punjab's shares in each sector of the national economy are presented. Furthermore a comparison is made of the overall growth rates. Based on these estimates, the location quotients are computed in Section 8 to determine in which economic activities Punjab has comparative advantage with respect to the rest of Pakistan.

Section 9 quantifies the extent of variability in sectoral growth rates and answers the question whether the Punjab economy is prone to more or less fluctuations than the national economy. Section 10 establishes the relationship between growth of employment and growth of GRP. Section 11 provides explanations for the growth differentials between Punjab and the Rest of Pakistan. Finally, in Section 12 we present the policy implications and conclusions.

METHODOLOGY FOR CONSTRUCTION OF REGIONAL INCOME ACCOUNTS

There are three approaches to estimation of value added in a sector/sub-sector. The first is the output/product approach which, as described in detail in the Technical Appendix (TA), is applied to the following: Major crops, minor crops, fishing, mining and quarrying, large-scale manufacturing, electricity and gas, transport and communications.

The second is the factor incomes approach, which involves aggregation of incomes accruing to different factors of production like labor, capital and land. This approach is used for the following: Small-scale manufacturing, construction, public administration and defence and community and personal services.

The third approach is the expenditure approach, which is the basis of the value added in the following: Slaughtering, forestry, livestock, wholesale and retail trade, ownership of dwelling and finance and insurance.

A number of regional allocators have been used to distribute the value added between Punjab and the rest of Pakistan. These are listed in Table 4.1, alongwith the data sources. Most of the reliance has been placed on official data sources like the *Punjab Development Statistics* (PDS) and the *Pakistan Economic Survey* (PES). Fortunately, results of the two surveys, *HIES* and *LFS*, both for 2010-11, have been released by the Pakistan Bureau of Statistics (PBS). This greatly facilitates determination of latest trends in income, consumption and employment at the national and provincial levels.

Table 4.1
Regional Allocators for Different Sectors/Sub-Sectors
Agriculture and Industry

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, AYSB
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 withdrawals	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	Shares 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 Defence	Income-Adjusted share in employment	HIES, LFS
Community, Social and Personal Services	Income-Adjusted share in employment	HIES, LFS

^a 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

*PDS = Punjab Development Statistics, ASYB = Agricultural Statistics Year Book, HIES = Household Integrated Economic Survey, LFS = Labour Force Survey OCAC = Oil Companies Advisory Committee, PTA = Pakistan Telecommunications Authority, SBP = State Bank of Pakistan, EYB = Energy Yearbook.

There are some significant caveats to the quantification of the size of regional economies. First, GRP estimates generally ignore the flows of factor incomes between regions of a country. These are likely to be large depending upon the level and pattern of both internal and international migration. In the Pakistani context, it is likely that the province of Khyber Pakhtunkhwa is a large net recipient of remittances, both internal and from abroad. As opposed to this, the destination of a large component of internal migration is Karachi and, therefore, there is probably a net transfer of incomes out of Sindh. It is not known, in the absence of relevant data, whether Punjab is a net recipient of factor incomes and if so, how much.

Second, there is the problem of regional allocation of lumpy public goods and services at the national level. For example, the LFS does not include as respondents members of the armed forces. Also, there are services provided by federal entities like the SBP and Pakistan Railways where regional allocation of value added is difficult. As such, we have allocated such activities on the basis of population shares.

Third, an ingenious use of various tax bases for measuring economic activity at the provincial level has been proposed by Hussain and Rana (2010). The FBS has a rich data base on revenue collections at the collectorate and commissionerate level. These can be aggregated to arrive at provincial totals. We have used this data base as a cross-check to the provincial shares arrived at by the use of more conventional allocators.

LONG-TERM GROWTH TRENDS

Before we present the results for the last decade, we review the long-term growth trends of the GRPs of Punjab and the rest of Pakistan on the basis of estimates by Bengali and Sadaqat (2005). The respective growth rates decadalwise are presented in Table 4.2.

Table 4.2
Earlier Estimates of the Long-term Growth Rate of
Punjab and the Rest of Pakistan
(Annual Average Growth Rate)
(Percentage)

	Punjab	Rest of Pakistan	Pakistan
1973-80	4.3	3.8	4.1
1980-90	6.0	6.3	6.1
1990-2000	4.8	3.9	4.4
1973-2000	5.1	4.8	5.0

Source: Bengali and Sadaqat (2005)

Over the period from, 1972-73 to 1999-2000, Punjab has apparently grown faster than the rest of Pakistan in two decades – the 1970s and the 1990s. However, Punjab has grown somewhat less rapidly in the 1980s. Overall, from 1973 to 2000, Punjab has grown somewhat faster at 5.1 percent than the Rest of Pakistan at 4.8 percent. We have the makings of a consistent pattern here. The decades of 70s and 90s were both periods of relatively slow growth, with the average

GDP growth rate falling below 4.5 percent. As opposed to this, during the 80s the national economy grew rapidly, at a rate above 6 percent.

Therefore, it appears that Punjab outperforms the Rest of Pakistan in periods of low growth but grows less rapidly in periods of fast growth. Why is this the case? The answer to this question at this stage is that in periods of fast growth, industry is generally the leading sector, and Punjab does not perform as well because of the structure of its economy, characterised by less dependence on industry. As opposed to this, during periods of low growth, the agriculture sector plays a more important role and Punjab is a relatively more agricultural economy compared to the rest of the country. It will be interesting to see if this hypothesis holds true for the decade of 2000-2010 also.

AGRICULTURE

We turn to estimates of the value added in the agricultural sector. Throughout the chapter we gave data for three years – 1999-2000, 2006-07, 2010-11. The year 1999-2000 is in effect the base year of the analysis and we use extensively the PBS publication, *Rebasing of the National Income Accounts* to 1999-2000. And the year 2006-07 is the year when the spurt of growth in the GDP during the Musharraf era came to an end. The next four years are relatively slow growth years of the national economy, with the average GDP growth rate falling to about three percent only.

Major Crops: The share of Punjab in the national output has been estimated on the basis of share in output of individual major crops. Table 4.3 gives the share of Punjab in four key crops – wheat, rice, cotton and sugarcane. It may be noted that the impact of the devastating flood was felt last year and this could have distorted the shares. However, Punjab has

Table 4.3				
Share of Punjab in Production of key Major Crops				
(Percentage)				
Years	Wheat	Rice	Cotton	Sugarcane
1999-00	78.2	48.1	58.4	78.4
2006-07	76.6	56.6	80.5	68.6
2010-11	80.5	70.2	67.4	67.8
Share of Punjab in Pakistan's Major crops Value Added				
Years	Major Crops			
1999-00	71.4			
2006-07	74.5			
2010-11	76.3			
Source: HIES, PDS.				

relatively large share in all the four key crops, with some decline over the last decade in the share in the national output of cotton and sugarcane. Overall, as shown in Table 4.3, the share of Punjab in value added in major crops has increased from 71 percent in 1999-2000 to 76 percent in 2010-11. Clearly, Punjab plays a very dominant role in this sector.

Minor Crops: This sub-sector of agriculture consists of vegetables, fruits, pulses, condiments, oil seeds, fodder, etc. Punjab has a relatively large share, in excess of 60 percent, in pulses, vegetables, fruits and fodder, as shown in Table 4.4. Overall, the share of Punjab in the national value added in minor crops has declined gradually from almost 56 percent in 1999-2000 to below 54 percent in 2010-11.

Table 4.4 Share of Punjab in the Production of Minor Crops (Percentage)			
	1999-00	2006-07	2010-11
Pulses	64.8	65.5	63.6
Vegetables	79.8	78.4	80.9
Fruit	61.1	62.3	64.8
Condiments	17.9	19.1	17.9
Oilseed	60.7	44.1	27.3
Fodder	79.7	78.6	80.9
Other Crops	87.4	67.5	45.1
Share of Punjab in Value Added			
Years	Minor Crops		
1999-00	55.6		
2006-07	55.3		
2010-11	53.9		

Source: PDS, AS YB.

Livestock: Nationally, the livestock sector has the highest share of value added in agriculture, approaching 53 percent. Therefore, developments in this sector have an important bearing on the overall agricultural growth rate. Table 4.5 gives the share of Punjab in consumption of livestock products. The largest item is milk, where the share of Punjab has been declining from 65 percent to 61 percent over the last decade. As opposed to this, Punjab's share in mutton, beef and poultry has been increasing. Overall, Table 4.5 indicates that the share of Punjab in the value added in the livestock sector has fallen from 62 percent in 1999-2000 to 59 percent in 2010-11.

Table 4.5 Share ^a of Punjab in the Livestock Sector (Percentage)				
Years	Product	Mild and Milk Mutton	Beef	Poultry
1999-00	64.7	57.8	39.8	64.6
2006-07	64.1	66.9	39.4	69.0
2010-11	60.6	62.7	40.7	66.9
Share of Punjab in Value Added				
Years	Livestock			
1999-00	62.3			
2006-07	62.3			
2010-11	59.1			

^a = Share in consumption

Source: HIES, PDS

Fishing and Forestry: Punjab has a relatively small share in fisheries, with much of the activity in this sector concentrated in Sindh. Similarly, the output of the forestry sector comes out largely in Khyber Pakhtunkhwa. As such, the share of Punjab in the two sectors is 22 percent and 47 percent respectively in 2010-11.

In summary, the annual growth rates of the agricultural sector in Punjab, compared to that in rest of Pakistan, are presented in Table 4.6, for the two sub-periods, from 1999-2000 to 2006-07 and from 2006-07 to 2010-11.

Table 4.6
Comparison of the Growth Rate of Punjab and the Rest of Pakistan in the Agricultural Sector (Average Annual Growth Rate)

(Percentage)

	Punjab	Rest of Pakistan	Pakistan
1999-2000 to 2006-07	3.3	2.5	3.0
2006-07 to 2010-11	1.0	3.0	1.7
1999-2000 to 2010-11	2.5	2.7	2.5

Source: IPP's estimates.

The evolving structure of the agricultural economy of Punjab is presented in Table 4.7. The important change is the decline in shares of major crops, minor crops, forestry and fishery and the rise in the share of livestock sector.

Table 4.7
Sectoral Shares in the Agricultural Economy of Punjab

(Percentage)

Years	Major Crops	Minor Crops	Livestock	Forestry and Industry	Total
1999-00	41.0	11.9	44.2	2.9	100.0
2006-07	40.2	9.4	48.8	1.6	100.0
2010-11	37.5	9.3	51.7	1.5	100.0

Source: IPP's estimates.

INDUSTRY

Industry consists of the sectors of mining and quarrying, large-scale manufacturing, small-scale manufacturing, slaughtering, construction, electricity, gas and water.

Mining and Quarrying: Punjab appears to have a very small share in the mineral resources of Pakistan, with shares in 2010-11 of only 5 percent in gas, 22 percent in crude oil and 17 percent in coal. There has been a precipitous decline in the share of Punjab in the national value added in mining and quarrying from 23 percent in 1999-2000 to 13 percent in 2010-11.

Table 4.8
Share of Punjab in Large scale Manufacturing

(Percentage)

Years	1999-00	2006-07	2010-11
Cotton Yarn	37.8	32.9	29.3
Cotton Cloth	59.3	43.1	36.9
Vegetable Ghee	46.5	41.8	48.7
Sugar	54.2	61.3	59.4
Cigarettes	45.4	45.3	58.0
Beverages	69.5	80.4	69.5
Petroleum Products	20.9	16.3	42.4
Cement	46.2	39.1	51.1
Fertilizers	60.6	64.0	58.0
Chemicals	92.1	95.6	97.9
Automobiles	48.9	42.9	37.8
Re Rolled Steel Products	5.8	11.1	13.0

Share of Punjab in Value Added

Years	LSM
1999-00	40.3
2006-07	35.9
2010-11	39.2

Sources: PDS, SYB.

Large-Scale Manufacturing: Data is available on production by 100 industries within large-scale manufacturing. The share of Punjab in major industries, from the viewpoint of value added, is given in Table 4.8. Punjab has a relatively large share in sugar, cigarettes, beverages, fertilizer, cement and chemicals. The share has increased over the last decade in vegetable ghee, sugar, cigarettes, petroleum refining, cement, chemicals and steel products, while the share has fallen sharply in textiles and automobiles. Overall, the share of Punjab in the value added in large-scale manufacturing fell significantly from 40 percent to 36 percent over a period from 1999-2000 to 2006-07. Since then, it has risen to 39 percent.

Small-Scale Manufacturing: It appears that Punjab has a dominating presence in this sector, with a share of 70 percent in national value added. This share has remained, more or less, constant over the last decade.

Slaughtering: Punjab has share of about 53 percent in value added in slaughtering. The share increased in the first sub-period and has declined somewhat since then.

Construction: The share of Punjab in construction was 54 percent in 1999-2000 which increased to 59 percent in 2006-07 and has fallen to 55 percent in 2010-11.

Electricity and Gas: Punjab has a major energy deficit. Its share in electricity generation is only 30 percent currently while the share in

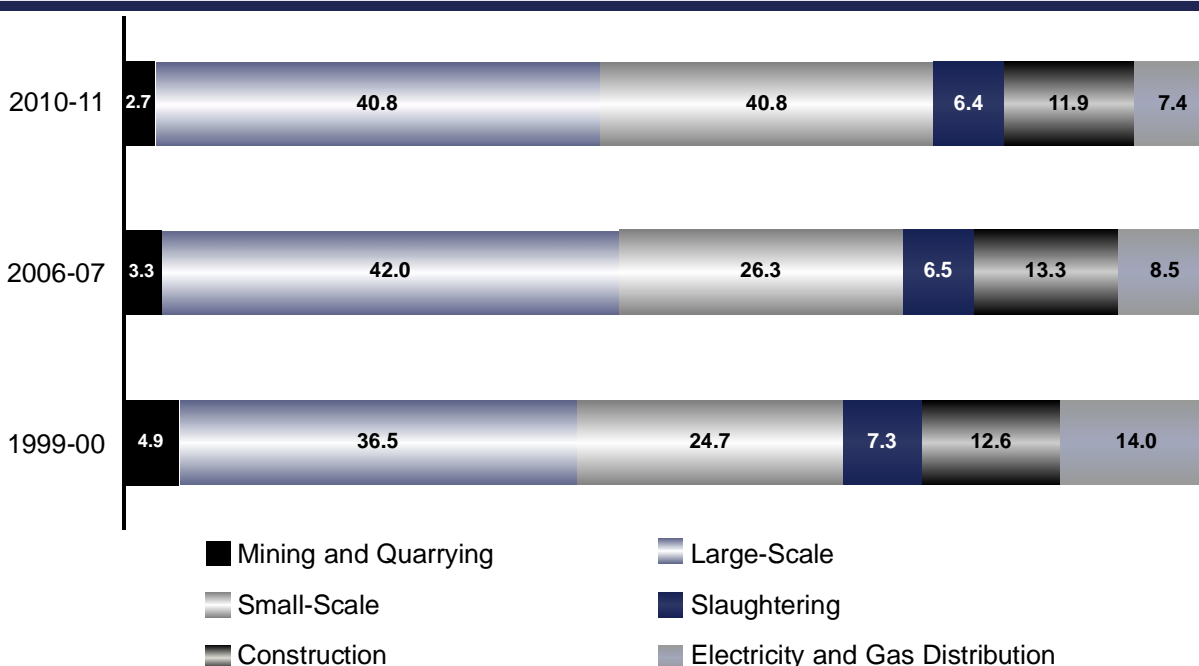
electricity consumption is close to 62 percent, which has increased from 59 percent at the beginning of the last decade. As far as gas consumption is concerned, Punjab had a share of 40 percent in 1999-2000, which rose to 44 percent by 2006-07 and has since fallen to 42 percent. Overall, the share in the value added of the sector was 37 percent in 1999-2000, increasing to 45 percent in 2006-07 and then falling sharply to 39 percent by 2010-11, as shown in Table 4.9.

The changing structure of the industrial economy of Pakistan is highlighted in Chart 4.1. The shares of large-scale and small-scale manufacturing have increased while the shares of all other sectors have declined.

Table 4.9			
Share of Punjab in the Electricity and Gas Sector			
(Percentage)			
Years	Natural Gas	Generation	Consumption
1999-00	39.8	28.5	59.3
2006-07	43.5	39.6	62.3
2010-11	42.1	30.8	61.7
Share of Punjab in Value Added			
Years	Electricity and Gas		
1999-00	37.3		
2006-07	45.1		
2010-11	39.4		
Source: PDS, PE YB.			

Chart 4.1
Sectoral Shares in the Industrial Economy of Punjab

(Percentage)



Source: IPPs estimates.

In summary, the annual growth rates of the industrial sector in Punjab, compared to that in the rest of Pakistan, are presented in Table 4.10 for the two sub-periods, 1999-2000 to 2006-07 and 2006-07 to 2010-11.

Table 4.10
Comparison of the Growth Rates of Punjab and the Rest of Pakistan in Industry
(Average Annual Growth Rate)

(Percentage)

	Punjab	Rest of Pakistan	Pakistan
1999-2000 to 2006-07	6.9	7.8	7.4
2006-07 to 2010-11	3.3	1.6	2.3
1999-2000 to 2010-11	5.6	5.5	5.5

Source: IPP's estimates.

SERVICES

Services consist of various economic activities including transport, storage and communications; wholesale and retail trade²; finance and insurance; ownership of dwellings; public administration and defence and community and personal services.

Transport, Storage and Communications: The indicator used to size the value added in transport is the input of POL products (excluding kerosene oil). The share of Punjab in POL consumption has decreased from 57 percent in 1999-2000 to 52 percent in 2010-11.

However, in telecommunications, the share of Punjab in number of cellular subscribers has risen significantly from 50 percent to 62 percent over the last decade. Overall, the share of Punjab in value added in transport, storage and communications is estimated at over 58 percent in 2010-11, as shown in Table 4.11.

Table 4.11
Share of Punjab in Transport, Storage and Communications

(Percentage)

Years	Consumption of POL Products	Number of Cellular Subscribers	Value Added
1999-2000	56.7	50.0	56.7
2006-07	55.7	59.1	57.9
2010-11	51.6	61.6	58.1

Source: PTA, OCAC.

Wholesale and Retail Trade;

Hotels and Restaurants:

The share of Punjab in trade margins in the marketing of consumer goods, both domestic and imported, has varied over the last decade. It was 55 percent in 1999-2000, increasing to 59 percent by 2006-07 and then falling back to 56

Table 4.12
Share of Punjab in Wholesale and Retail Trade and Hotels and Restaurants

(Percentage)

Years	Trade Margin in Marketing of Consumer Goods	Employment in Hotels and Restaurants	Value Added
1999-2000	54.9	55.7	55.0
2006-07	58.8	55.8	58.5
2010-11	55.5	52.8	55.2

Source: PTA, OCAC.

percent in 2010-11. The share of Punjab in the national employment in hotels and restaurants is somewhat lower. Overall, the share of Punjab in value added by the sector is estimated about 55 percent, as shown in Table 4.12.

Banking and Finance: The regional allocator for this sector is share in bank advances. Accordingly, the share of Punjab in banking and insurance is estimated at 48 percent in 1999-2000, rising to 55 percent by 2010-11.

Ownership of Dwellings: Punjab's share in rents was 57 percent in 1999-2000, which increased to 59 percent in 2006-07 and has since fallen to 53 percent by 2010-11.

Public Administration and Defence: The share of Punjab in this sector has remained, more or less, constant at 56 percent.

Community and Personal Services: The share of Punjab stood at 61 percent in 1999-2000 and has fallen to 59 percent in 2010-11.

In summary, the annual growth rates of the services sector of Punjab compared to that of the rest of Pakistan are given in Table 4.13.

The changes in the structure of the services economy of Punjab are highlighted in Table 4.14. The basic change is the increase in the shares of banking and insurance and community and personal services and a fall in shares of other sectors.

Table 4.13
Comparison of the Growth Rates of Punjab and the Rest of Pakistan in Services
(Average Annual Growth Rate)

(Percentage)

	Punjab	Rest of Pakistan	Pakistan
1999-2000 to 2006-07	6.3	5.2	5.8
2006-07 to 2010-11	3.6	5.3	4.3
1999-2000 to 2010-11	5.1	5.0	5.1

Source: IPP's estimates.

Table 4.14
Sectoral Shares in the Services Economy of Punjab

(Percentage)

	Transport Storage and Communication	Wholesale and Retail Trade	Bank and Insurance	Ownership of Dwellings	Public Administration and Defence	Community and Personal Services	Total
1999-2000	22.4	33.7	6.3	6.1	12.2	19.3	100.0
2006-07	19.3	33.3	10.6	5.3	11.4	20.2	100.0
2010-11	19.3	31.5	8.2	4.8	12.2	24.0	100.0

Source: IPP's estimates.

OVERALL SHARES AND GROWTH TRENDS

Based on the above analysis of individual sectors we are now in a position to present results on the following:

- (i) Share of Punjab in the national economy in agriculture, industry and services
- (ii) Sectoral composition of the Punjab economy
- (iii) Comparison of the growth trends of Punjab during the last decade with the rest of Pakistan
- (iv) Per capita income of Punjab

Share of Punjab in the National

Economy: The evolution of Punjab's shares in different sectors of the national economy is presented in Table 4.15. The economy of Punjab showed relative buoyancy between 1999-

Table 4.15
Share of Punjab in the National Economy

(Percentage)

Years	Agriculture	Industry	Services	Total
1999-2000	63.6	45.0	56.2	55.5
2006-07	64.9	43.5	58.0	55.7
2010-11	63.1	45.2	56.5	54.9

Source: IPP's estimates.

2000 and 2006-07 in agriculture and services, while the share in industry declined. During the

last four years, while there has been some recovery in the share of industry, the share in the two other sectors has fallen. Overall, Punjab currently has a share of about 55 percent in the national economy.

Sectoral Composition of the Punjab Economy: The sectoral

composition of the economy of Punjab is highlighted in Table 4.16. An important conclusion is the relative importance of agriculture in the economy of Punjab. As opposed to this, the process of industrialisation has gone further in the rest of Pakistan, particularly in the province of Sindh. Also, it is of interest to note the relatively large share of services in Punjab.

Growth Trends: The overall growth rates of the GRP of Punjab and the rest of Pakistan are given in Table 4.17. We have the important result, perhaps contrary to popular perceptions, that Punjab has lagged somewhat behind the rest of Pakistan during the last

decade. Between 1999-2000 and 2010-11 the average annual growth rate of Punjab has been 0.2 percentage point less than that of the rest of Pakistan. However, much of the short fall in the growth of Punjab has been in the last four years.

The GoP in its Economic Report for 2007 has estimated the growth rate of the GRP of the province from 2002-03 to 2006-07, the high growth period of the Musharraf era. These estimates indicate that Punjab actually grew faster than the rest of the country during these

years, as shown in Table 4.18, by 0.4 percentage points annually, whereas the estimates made

Table 4.16
Sectoral Comparison of the Economy of Punjab and the Rest of Pakistan (2011)

	(Percentage)		
	Punjab	Rest of Pakistan	Pakistan
Agriculture	24.0	17.0	20.9
Industry	21.2	31.0	25.8
Services	54.8	52.0	53.3
Total	100.0	100.0	100.0

Source: IPP's estimates.

Table 4.17
Annual Growth Rate of GRP of Punjab and the Rest of Pakistan

	(Percentage)		
	Punjab	Rest of Pakistan	Pakistan
1999-2000 to 2006-07	5.6	5.4	5.5
2006-07 to 2010-11	2.5	3.4	2.9
1999-2000 to 2010-11	4.5	4.7	4.6

Source: IPP's estimates.

Table 4.18
Comparison of the Growth Rate of Punjab by Government of Punjab and IPP (2002-03 to 2006-07)

	(Percentage)		
	Punjab	Rest of Pakistan	Pakistan
GOPu*	7.5	7.1	7.3
IPP	6.6	7.0	6.8

*GOPu estimates are based on estimations from Punjab economic report and economic survey

Source: IPP's estimates

here indicate a lower growth rate by 0.4 percentage points. It is likely that the estimates of growth in Punjab by the GoP are overstated. This may have been motivated by the desire to show exceptional performance by the provincial government of that time.

Per Capita Income: Estimates of value added in different sectors of Punjab at constant prices of 1999-2000 have been converted into current prices by using sector-specific GDP deflators, as obtained from the national estimates. Given the estimated population, the per capita GRP of Punjab is estimated at Rs. 97,492 (\$1140) per annum in 2010-11. This is 2 percent lower than the corresponding estimate for the rest of Pakistan. It may be noted that these numbers do not include net factor incomes.

The above sections have presented a summary of the growth trends and structure of the regional economies (Punjab and the Rest of Pakistan). This report also includes a Statistical Appendix on Regional Income Accounts, containing the following on an annual basis, from 1999-2000 to 2010-11:

Regional Income Accounts of Punjab

Table S-1: Share of Punjab in the National Economy in Different Sectors

Table S-2: GRP by Sector of Punjab at constant factor cost of 1999-2000

Table S-3: Sectoral Shares in GRP of Punjab at constant prices

Table S-4: Real Growth Rates of Sectors of Punjab

Table S-5: GRP by Sector of Punjab at current factor cost

Table S-6: Sectoral Shares in GRP of Punjab at current prices

Similar tables, Table S-7 to Table S-12, are also included for the rest of Pakistan.

A comparison is made of the Pakistani Punjab with the Indian Punjab in Box 4.1. The striking findings are, first, the relatively slow growth on this side of the border and, second, the substantially higher per capita income in the Indian Punjab.

We now proceed to undertake further analysis of our estimates.

COMPARATIVE ADVANTAGE OF PUNJAB

Based on the above estimates of Regional Income Accounts of Punjab we are now in a position to identify the sectors in which the province has a comparative advantage over the rest of Pakistan by computing the location quotients for each sector/sub-sector, as follows:

Box 4.1 The Two Punjabs

It is indeed instructive to make a comparison of the two Punjabs. The Indian Punjab consists of three states – Punjab and Haryana – with Chandigarh as the common capital and Himachal Pradesh.

The Indian Punjab has a population close to 61 million, under two-thirds of the Pakistani Punjab. The average annual growth rate of the Indian Punjab during the last decade is almost 8 percent as compared to just over 4.5 percent for the Pakistani Punjab. While the growth rate of agriculture is not very different, industry in Indian Punjab has grown at above 10 percent per annum, while the corresponding rate for this side of the border is 7 percent. The non-farm sector in rural areas is clearly more developed on the other side of the border.

In agriculture, yields are significantly higher in Indian Punjab, by 65 percent in wheat, 77 percent in rice and 18 percent in sugarcane. This demonstrates that there is a potential for raising yields in Pakistani Punjab.

Overall, in purchasing parity terms the per capita income of Indian Punjab is estimated at \$3846 per annum in 2009-10 as compared to \$2386 in Pakistani Punjab, a difference of 38 percent.

$$LQ_i = \frac{S_{ip}}{S_p}$$

where LQ_i = location quotient of the i th sector/sub-sector, S_{ip} = share of the i th sector/sub-sector of Punjab in the value added by the sector in Pakistan, S_p = overall share of the GRP of Punjab in the GDP. It may be pointed out that usually the location quotients are derived on the basis of employment shares. Here, we use instead shares in value added.

Sectors/sub-sectors of comparative advantage are where the location quotient exceeds unity. The location quotients for different sectors/sub-sectors of Punjab are presented in Table 4.19.

Table 4.19
Location Quotients of Punjab by Sector/Sub-Sector as of 2010-11
(LQ > 1 indicates comparative advantage)

Sector/Sub-Sector	LQ	Sector/Sub-Sector	LQ	Sector/Sub-Sector	LQ
AGRICULTURE	1.15	INDUSTRY	0.82	SERVICES	1.03
Major Crops	1.39	Mining and Quarrying	0.23	Wholesale and Retail Trade,	1.01
Wheat	1.47	Gas	0.09	Hotels and Restaurants	
Rice	1.28	Crude Oil	0.38	Wholesale & Retail Trade	1.02
Cotton	1.23	Coal	0.31	Hotels and Restaurants	
Sugarcane	1.23	Large-Scale Manufacturing	0.71	Transport & Communication	1.11
Minor Crops	0.98	Textile	0.58	Transport	0.92
Vegetables	1.47	Agro-based	1.05	Telecommunications	1.12
Fruits	1.18	Other Consumer Goods	0.96	Banking and Finance	1.00
Condiments	0.33	Intermediate Goods	1.03	Ownership of Dwellings	0.97
Others	0.93	Engineering Goods	0.53	Public Administration	1.01
Livestock	1.08	Small-Scale Manufacturing	1.27	and Defence	
Milk	1.10	Slaughtering	0.96	Community and Personal	1.07
Beef and Mutton	0.87	Construction	1.01	Services	
Poultry	1.22				
Fishing	0.40				
Forestry	0.86				

Source: CMI, PDS, PS YB.

The results are very revealing. Overall, at the broad sector level Punjab has a major comparative advantage in agriculture and a minor comparative advantage in services. The industrial sector as a whole is relatively underdeveloped in Punjab, although there are some sub-sectors within the sector in which it has acquired some comparative advantage.

Within agriculture, the economic activities in which the location quotient exceeds one are as follows:

Major Crops: cultivation of wheat, rice, cotton and sugarcane

Minor Crops: vegetables, fruits

Livestock: milk production

Within industry, the sub-sectors with comparative advantage in Punjab are as follows:

Large-Scale Manufacturing: Agro-based (sugar, beverages, etc.), intermediate goods (fertilizer, chemicals, etc.)

Small-Scale Manufacturing: Within services, the particular economic activities where Punjab appears to have significant comparative advantage are as follows:

Transport and Communications: Especially telecommunications

Community and Personal Services: It is clear that any development strategy for Punjab would need to consolidate the position of the province in sectors/sub-sectors in which the province has comparative advantage in relation to the rest of Pakistan and seek to remove the principal constraints to growth in the relatively underdeveloped areas of economic activity.

VARIABILITY OF GROWTH

We examine here whether the economy of Punjab is subject to more fluctuations in the process of growth, particularly because it is more dependent on agriculture and this sector is more vulnerable to weather conditions, leading to droughts at one extreme as in years 2000-01 and 2001-02 and floods at the other extreme as in 2010-11.

The standard errors around the estimated long term trend (1973 to 2011) are presented for each sector in Table 4.20. We obtain a somewhat surprising result. The

Table 4.20
Standard Error around Trend Growth Rate
(long-term: 1973-2011) +/-

(Percentage)

	Punjab	Rest of Pakistan	Pakistan
Agriculture	3.2	3.5	2.9
Industry	4.2	4.3	3.3
Services	2.2	2.2	1.9
GDP	1.9	2.2	1.8

Source: IPP's estimates.

agricultural sector of Punjab appears to be subject to somewhat less fluctuation than the rest of Pakistan. In the other two sectors, industry and services, the variability of the growth rate is, more or less, the same. Overall, the economy of Punjab shows greater stability in the GRP growth rate as compared to the rest of Pakistan. This confirms that historically the peak growth rate obtained in the upturn of the business cycle in the rest of Pakistan is likely to be higher than in Punjab. As opposed to this, during downturns the latter economy is likely to show a smaller decline in the growth rate.

Overall, it is estimated that a 95 percent confidence interval of the growth rate of Punjab around the long-term trend growth rate is ± 3.8 percent, while it is ± 4.4 percent for the rest of Pakistan. It is of interest to note that the overall GDP growth rate of Pakistan shows less fluctuation than parts of the country. This can, of course, be attributed to greater size. But there is also some evidence of a negative covariance between the growth rates of Punjab and the rest of Pakistan which leads to less variability at the national level.

EMPLOYMENT AND GROWTH

Now we investigate the relationship between the growth rates of employment and the GRP over the last decade in Punjab. Annual growth rates are presented in Table 4.21 for the two sub-periods. It appears that while unemployment fell in Punjab

Table 4.21
Relationship between Employment and
Economic Growth in Punjab

(Percentage)

	GDP	Employment	Electricity
ACGR 1999-00 to 2006-07	5.6	3.3	0.59
ACGR 2006-07 to 2010-11	2.5	1.4	0.54
ACGR 1999-00 to 2010-11	4.5	2.6	0.58

Source: LFS

in the fast-growth period upto 2006-07, given that the growth rate of the labor force is close to three percent. However, it has increased significantly in the low-growth period from 2007-08 onwards. Overall, the unemployment rate in Punjab has shown some increase over the last decade.

The elasticity of employment with respect to growth of the regional economy appears to be relatively high in Punjab at close to 0.6. This is, however, somewhat overstated due to the inclusion of underemployed workers in the employed labor force. If adjustment is made for the extent of underemployment, then the employment elasticity falls to 0.5. Therefore, the economy of Punjab will have to grow at a rate above 6 percent on a long-term basis if increasing unemployment is to be avoided.

EXPLANATIONS FOR GROWTH DIFFERENTIALS

Contrary perhaps to perceptions, Punjab's economy has grown at a somewhat slower rate compared to the rest of Pakistan, as shown in Table 4.22. It appears that from 1999-2000 to 2006-07, when there was buoyancy in the economy, Punjab and the rest of Pakistan grew at, more or less, the same rate at about 5.5 percent per annum. The big difference is in the last four years, a period of low growth, in which the growth rate of Punjab's economy was lower by almost one percentage point. These differentials are interestingly in sharp contrast to the long-term historical trends when Punjab performs relatively well in periods of low growth and lags behind in periods of high growth.

Table 4.22 shows that if the abnormal years are removed from the analysis, that is, the drought years, 2000-01 and 2001-02, and 2010-11, when there were devastating floods, the difference between Punjab and the rest of the country increases. For the period, 2002-03 to 2009-10, Punjab's growth rate rises to 5 percent as compared to almost 6 percent for the rest of the country. Also, Punjab no longer does as well during the period of fast growth from 2002-03 to 2006-07.

Table 4.22 also shows that over the period, 2002-03 to 2009-10, Punjab's growth rate in all sectors is lower, with again the surprising

Table 4.22
Growth Rates by Sectors in Different Periods
in Punjab and Rest of Pakistan
(Annual Average Growth Rate)

	(Percentage)		
	Punjab	Rest of Pakistan	Pakistan
1999-2000 to 2006-07			
Agriculture	3.5 (5.1)*	2.5 (5.1)	3.0 (4.7)
Industry	7.0 (7.4)	8.0 (10.6)	7.4 (9.0)
Services	6.3 (7.1)	5.2 (6.0)	5.8 (6.6)
GRP	5.6 (6.6)	5.5 (7.0)	5.5 (6.8)
2006-07 to 2010-11			
Agriculture	1.0 (0.3)**	3.1 (4.8)	1.7 (1.9)
Industry	3.4 (4.3)	1.7 (2.4)	2.3 (3.1)
Services	3.0 (2.6)	4.6 (4.8)	3.7 (3.5)
GRP	2.5 (2.3)	3.4 (4.0)	2.9 (3.1)
1999-2000 to 2010-11			
Agriculture	2.5 (3.3)***	2.7 (5.0)	2.5 (3.6)
Industry	5.6 (6.2)	5.7 (7.5)	5.5 (6.8)
Services	5.1 (5.4)	5.0 (5.6)	5.0 (5.4)
GRP	4.5 (5.0)	4.7 (5.9)	4.6 (5.3)

Source: IPP's estimates

* Average growth rate from 2002-03 to 2006-07

** Average growth rate from 2006-07 to 2009-10

*** Average growth rate from 2002-03 to 2009-10

conclusion that the biggest differential in growth rates is in agriculture. Clearly, there is a need to examine the emerging constraints to agricultural growth in Punjab. Industry has also grown faster by over one percentage point in the rest of Pakistan. The only sector in which Punjab has exhibited a growth rate close to the national economy is services. For the period, 2006-07 to 2009-10, the slower growth in Punjab is confirmed by the decline in the share of Punjab in federal tax revenues as shown in Box 4.2.

Box 4.2 Punjab's Share in Tax Revenues

Data is available on tax collections at the Regional Tax Office (RTO)/Large Taxpayer Unit (LTU) and collectorate level from FBR. This enables determination of the regional pattern of revenues, as has been done by Husain and Rana (2010). We estimate the share of Punjab in different taxes from this data base for the latest year, 2009-10, for which data is available.

The focus here is on domestic taxes on income, sales and production to get an estimate of the tax bases that are relevant in determining the size and growth in GRPs. The estimated shares of Punjab for the years, 2006-07 and 2009-10, are given below. This is the period when the growth rate of the economy fell sharply.

Punjab's share in tax collection appears to have fallen in direct taxes and excise duty, and increased in the case of domestic sales tax. POL products are a major source of sales tax revenue and the jump in Punjab's share in this tax is largely due to the expansion of the Pak-Arab refinery. Overall, share in the three taxes combined has remained more or less unchanged.

	Share of Punjab* in Revenues (%)	
	2006-07	2009-10
Direct Taxes	34.2	33.7
Domestic Sales Tax	29.9	44.0
Excise Duty**	53.2	42.9

Source: FBR

*Collection in Islamabad has been allocated among provinces on the basis of population.

**Excluding the revenue from 1 percent excise duty on imports.

The broadest tax base is that of direct taxes. The decline in Punjab's share tends to indicate that the non-agricultural GRP of the province may have grown at a somewhat lower rate than the rest of the country. The relatively low share of Punjab in revenues compared to its population may also be noted. The highest incidence of taxes is on the large-scale manufacturing sector and Punjab has a relatively low share in the national value added in this sector.

What explains the relatively poor performance of Punjab's economy? We first consider the period of fast growth from 2002-03 to 2006-07. The first factor is 'structural' in nature. Given the relatively large share of agriculture in the regional economy, the growth rate of Punjab is likely to be lower, other things being equal, because even in good years agriculture is unlikely to average a growth rate above 4 to 5 percent. Second, in the peak of the business cycle, industries producing consumer durables, like automobiles, and industries providing construction inputs, like cement, show very high growth rates. During 2002-03 to 2006-07, production of automobiles showed the extraordinarily high growth rate of 31 percent, while the growth rate of the cement industry was also high at 18 percent. These industries which are sensitive to the business cycle, have a larger presence in the rest of Pakistan, particularly in Sindh, and further push up the growth rate of this region during periods of high growth.

The third factor is the good performance of manufactured exports between 2002-03 and 2006-07, with an annual growth rate in excess of 14 percent. Clearly, units located closer to Karachi port were in a better position to exploit these opportunities. Consequently, the textile sector of

Sindh benefited more from the export boom. The result was a big fall in the share of Punjab in value added in cotton yarn to 33 percent in 2006-07 and in cotton cloth to 43 percent.

Why did Punjab's economy performed relatively poorly from 2006-07 to 2009-10, excluding the flood – affected year, 2010-11? Agriculture, which has traditionally been the backbone of Punjab's economy, has ensured that the province has a floor to its growth rate, thereby implying less variability in growth, as demonstrated earlier. But during the last few years, the performance of the agricultural sector has been disappointing, especially of major crops which showed little growth from 2006-07 to 2009-10. Wheat and cotton production was virtually stagnant, while the output of sugarcane and cotton fell by 10 percent and 17 percent respectively. The only crop with significant growth of 26 percent was rice. In addition, there was hardly any growth in minor crops. In 2011-12, however, cotton production may reach a peak level in excess of 14 million bales. However, wheat output may suffer because of high fertilizer prices and water shortage in the Rabi season.

The loss of momentum in the agricultural sector needs to be studied carefully and corrective measures taken on a priority basis. It probably reflects the emerging constraints of water and power. Total availability of water at the farm gate in Punjab declined by 2 percent from 2006-07 to 2009-10. Further, the high levels of power loadshedding in rural areas of the province have probably affected the operation of over 100,000 tubewells in Punjab, which use electricity.

The second factor which has affected industrial production, more than other sectors, is the large energy shortage of power and gas, which has affected Punjab disproportionately. For example, during the last few years, there has been a cumulatively drop in gas consumption in the province of 13 percent while there has been an increase of 16 percent in the rest of Pakistan, especially in Sindh which accounts for the bulk of gas production in Pakistan. Furthermore, the increase in consumption of electricity since 2006-07 has been restricted to only 2 percent, compared to 6 percent in the rest of the country.

We have tested whether industries of Punjab which are relatively energy-intensive have been impacted more by power loadshedding. The results are significant. For example, the textile industry, which relies relatively more on gas and power supplies, has been adversely hit. Consequently, the share of Punjab in the national production of cotton yarn has continued to fall from 33 percent in 2006-07 to 29 percent in 2010-11, while the corresponding share in cotton cloth has declined from 43 percent to 37 percent. It is not surprising that large-scale riots against power outages are concentrated in the major industrial cities of Punjab like Faisalabad, Lahore, Gujranwala, etc, due to the resulting losses in employment and incomes.

Another factor contributing to the slowdown in the regional economy of Punjab is the absence of the 'fiscal multiplier' and the contribution to enhancing the development potential of the province by development expenditure at the provincial and federal levels. While the regional incidence of the latter is unclear, it has declined sharply in real terms between 2006-07 and 2010-11. On top of this, the real ADP of the GoPu has also declined in real terms during this period by two percent. This is in comparison to an increase of 89 percent in the three other provinces combined. Therefore, in the presence of a contractionary policy followed in Punjab the 'fiscal multiplier' has been absent and there is not enough public investment taking place to remove the growing infrastructure gap. Currently, the size of the ADP executed by the GoPu is about one percent of the GRP. This is very low in comparison, for example, to the states of India which have development expenditure approaching three percent of their GRP.

POLICY IMPLICATIONS AND CONCLUSIONS

The above findings of research indicate that it is a 'myth' that Punjab always leads the national economy in the process of growth. Punjab did grow faster than the rest of Pakistan in the decades of 1970s and 1990s but lagged behind in the fast growth period of the 1980s. During the last decade, the Punjab economy demonstrated slower growth than the rest of the country and the gap has widened in the last three to four years. This is in contrast to official estimates by the GoPu which show that the province registered a higher growth rate upto 2006-07. Our results indicate that these estimates may have significantly overstated the growth of Punjab.

The loss of growth momentum in Punjab, especially in recent years, is primarily attributable to emergence of large infrastructure gaps of water availability for the agricultural sector and of energy for the entire economy, especially industry. Clearly, the development priority must focus primarily on removing these constraints to growth. Currently, the GoPu devotes less than one third of its ADP to infrastructure development. This share will have to be raised substantially and the inter-sectoral allocation will have to shift from highways to irrigation schemes and power projects.

Punjab has apparently suffered in terms of gas allocations because of Clause 158 of the Pakistan Constitution which states that

The Province in which a well-head of natural gas is situated shall have precedence over other parts of Pakistan in meeting the requirements from that well-head, subject to the commitments and obligations as on the commencing day.'

There is some lack of clarity on the clause, 'subject to commitments and obligations as on the commencing day'. This provision of the 1973 Constitution was invoked in 2010-11, following a court decision in Khyber Pakhtunkhwa and Sindh, but some transition time should have been allowed. Over time, the province may have to explore options of import of Liquefied Natural Gas (LNG) (possibly from India). Of course, if the price of gas approaches the level indicated by the Thermal Oil Equivalent (TOE) and market forces are allowed to operate then distortions in the allocation of gas may be reduced.

Turning to power generation, transmission and distribution, Article 157, Clause (2) and (3), state:

- (2) *The Government of a Province may,*
- (a) *to the extent electricity is supplied to that Province from the national grid, require supply to be made in bulk for transmission and distribution within the Province;*
 - (b) *levy tax on consumption of electricity within the Province;*
 - (c) *construct power houses and grid stations and lay transmission lines for use within the Province; and*
 - (d) *determine the tariff for distribution of electricity within the Province.*
- (3) *In case of any dispute between the federal government and a provincial government in respect of any matter under this Article, any of the said Governments may move the Council of Common Interests for resolution of the dispute.*

Therefore, there is considerable scope for an aggressive role to be adopted by the GoPu in expanding power supplies. The Council of Common Interests (CCI) has also empowered the provinces to undertake large power generation projects. On a top priority basis the GoPu needs to develop an ambitious energy sector development plan which includes run-of-the river small hydel power plants, conversion into electricity of the bagasse from sugar factories and the setting up of public-private partnerships for thermal power generation.

Initial steps in this direction have already been taken. Plan to generate 3000 mega watt (MW) in private and public sectors over the next three years has been prepared. 52 projects on hydel, coal, solar, biomass and biogas with the total capacity of 1300 MW have been initiated. Construction has started on two canal fall projects. Steps have also been taken for energy conservation.

Beyond tackling the energy constraint, Punjab's development strategy must focus on sectors/sub-sectors in which it has a comparative advantage, as identified above. This will include policies and programs to develop the yields in major crops, minor crops (especially fruits and vegetables), milk production and marketing, poultry, agro-based industry, SMEs and service sectors like telecommunications.

The potential gains from the opening of trade with India, following the granting of MFN status also need to be capitalised on. Punjab may benefit disproportionately from this move. A plan should be drawn up to maximise the gains including investment in trade facilitation, removal of any local impediments to trade, etc.

Finally, the GoPu needs to follow a more expansionary fiscal policy, with the objective of achieving a quantum jump in the size of the ADP, such that the above-mentioned priorities can be addressed more effectively. This will require a more aggressive policy of resource mobilisation involving the development of provincial taxes on services, agricultural income and real estate.

Chapter - 5

Trends in Social Sector Development in Punjab

Chapter - 5

Trends in Social Sector Development in Punjab

The previous chapter describes the rate and pattern of economic development in Punjab. This chapter focuses on the trend in social development using a broader concept of social development¹. Section 5.1 describes a new measure which has been developed to determine the level of access to social services. Section 5.2 provides explanations for the improvement in this level of access up to 2007-08. This is followed in Section 5.3 by an attempt to identify the trends in social sector development after 2007-08. Section 5.4 explores the future prospects for development of social sectors in Punjab. Section 5.5 discusses some emerging issues.

THE HUMAN OPPORTUNITIES INDEX (HOI)

To a large extent, the poverty and inequalities that one observes in Pakistan today are rooted in the opportunities that were available to children when they were growing up. If poverty and inequality are to be reduced in the future, there must be greater equality in opportunities for children today. The idea that there should be equality in opportunities for children is a concept that has recently been focused on by the World Bank. Few would disagree with a guiding principle that there should be equality of opportunity – that the “circumstances” a person is born into – for instance, gender, location, parental and economic background – should not determine his/her access to opportunities. Opportunities refer to access to basic goods and services (education, health conditions and basic infrastructure) that improve the likelihood of a child achieving the full potential (WB 2011).

According to the WB (2011), “A large body of social science literature has been concerned with equality of opportunity for some time. Amartya Sen (1979, 2001) has been deeply influential in arguing for an equitable distribution of “capabilities”, which essentially amount to a person's ability and effort to convert resources into outcomes they have reason to enjoy. John Roemer's (1998) work *Equality of Opportunity* was the first to formalise an equality of opportunity principle and remains the most relevant piece of academic literature. Roemer argues that policy should work to equalise opportunities independent of circumstances and that outcomes should depend only on effort”. The concept essentially builds on the earlier concept of Human Development Index (HDI) developed by Amartya Sen and Mahbub ul Haq in the UNDP. The WB (2006) argues

Box 5.1 Computing the Human Opportunity Index

The Human Opportunity Index (HOI), which measures how far a society is from universal provision of basic services and goods, such as sanitation, clean water, education, and the extent to which those goods and services are unevenly distributed. A key feature of HOI is that it not only takes into account the overall coverage rates of these services, but also how equally the coverage is distributed – by measuring the extent to which those without coverage are concentrated in groups with particular circumstances (e.g., economic status, gender, parental education, ethnicity and so on), which are conditions a child is typically born into.

The HOI is defined as the difference between two components:

- The overall coverage rate of the opportunity (C); and
- A "penalty" for the share of access to opportunities that are distributed in violation of the equality of opportunity principle (P).

The HOI is defined as:

$$HOI = C (1 - D)$$

Or, equivalently:

$$HOI = C - P$$

Where:

$$P = C * D$$

C is the average coverage

D is the Dissimilarity Index, formally defined as:

$$D = \frac{1}{2C} \sum_{i=1}^n w_i / C - \hat{p}_i |$$

The term \hat{p}_i is the predicted coverage rate of individual i . It is obtained from a logit model using the circumstances as independent variables. C is the average coverage rate in the population and w_i is the weight.

Source: World Bank (2011)

that inequality of opportunity, both within and among nations, results in wasted human potential and weakens prospects for overall prosperity. The measure now increasingly being used by the WB to measure opportunities for citizens is the HOI (see Box 5.1 on methodology for construction of HOI).

WB (2011) computes the HOI for Pakistan using data from PSLM surveys. Results are presented for two points in time (1998-99 and 2007-08) to illustrate the extent of progress over roughly a decade. The analysis is conducted at the national level and for the four provinces. Particular attention was paid to documenting the current situation and the recent changes at the provincial level, given that Pakistan is embarking on devolution of responsibilities to the provinces with the implementation of the 18th Amendment.

Box 5.2
Indicators of Opportunities used in the HOI Analysis of Pakistan

EDUCATION:

1. Enrolment of children aged 6-10
2. Enrolment of children aged 11-15
3. Primary completion of children aged 15-24
4. Secondary completion of children aged 20-24

HEALTH:

1. Did not have diarrhea in the last 30 days for children less than 5
2. Ever received immunisation.
3. Received full immunisation as recording to a record in a health card or a self – response of the mother.
4. Received full immunisation as recorded on a health card.
5. Received adequate pre-natal care, defined as at least 3 parental care visits with the first on occurring before the fourth month of pregnancy.
6. Received any post-natal care within 6 weeks after birth.
7. Attended by some traditional or formal birth attendant (defined as trained dai, doctor, lady health visitor, lady health worker, nurse)
8. Attended by formal birth attendant (defined as doctor, lady health visitor, lady health worker, nurse).
9. Institutional birth (defined as being at a government or private hospital/clinic).

INFRASTRUCTURE:

1. Having improved sanitation (defined as improved if moved from flush to public sewage, flush to pit or pit latrine, unimproved if moved from flush to open drained, raised latrine or no toilet) for children aged 0-16.
2. Having an electricity connection for children aged 0-16.
3. Having a gas connection for children aged 0-16.
4. Having a telephone connection for children aged 0-16.

Source: The WB (2011)

Presenting the preliminary results which the WB (2011) states, there appears to have been an improvement generally in both coverage and equality in education, health, basic infrastructure in Pakistan, between 1998-99 and 2007-08, with some variation across provinces. Box 5.2 presents the choice of indicators. There is improvement in coverage in maternal health, but an increase in inequality. The international comparisons show that the rate of change in the HOI for education compares favorably to those obtained in other countries, but the level of the Index for education is still low relative to all Latin American countries and many African countries. In basic infrastructure, both the changes and the level of the HOI compare well to Latin America and the level is far above that of African countries.

Summary of important findings of the study in the context of the province of Punjab are as follows:

- There has been improvement in both coverage and equality in primary school enrolment and completion.

- There has been a greater improvement in equality of opportunities in primary education than in secondary education.
- Gender is not a very important determinant anymore of the inequality in opportunities.
- There has been an improvement in health indicators related to child immunisation along with a decline in inequality.
- Pre-natal and post-natal coverage continues to be very low.
- There has been good progress in infrastructure indicators and a statistically significant decrease in inequality in water supply and sanitation, electricity, gas and telephones.
- The overall finding is that in the period 1998-99 and 2007-08 in majority of social sector indicators, Punjab has
 - Highest HOI in 2007-08 among the provinces.
 - Less inequality in 2007-08 than other provinces.
 - Declining trend in inequality between 1998-99 and 2007-08.

Therefore, the study concludes that there have been positive developments in the social sectors from 1989-99 to 2007-08, particularly in Punjab.

FACTORS CONTRIBUTING TO THE IMPROVEMENT

An important contributing factor appears to be the rapid growth in expenditure on social services in Pakistan, including Punjab. During the period, 1998-99 and 2007-08, expenditure on education increased from 1.9 percent to 2.5 percent of the GDP. Likewise, expenditure on health increased from 0.4 percent of GDP to 0.6 percent. Similarly, the annual growth rate in real expenditure on social services in Punjab during this period has been high. It is as follows: primary education, 11 percent; health, 10 percent; water supply and sanitation, 24 percent and; secondary education, 8 percent.

Another contributing factor potentially can be the change in the institutional framework for the delivery of these services. In 2001, the Devolution Plan was promulgated by the then Military government of General Pervez Musharraf. This was, however, a top down initiative with minimal involvement of the provincial governments, which adversely affected sub-national ownership of the reform process. The Devolution Plan led to the establishment of district governments, transferring the provision of all social services to the local governments. To finance their expenditure liabilities, these governments had access to one sixth of General Sales Tax (GST) revenues collected by the federal government and transferred to sub-national government. This earmarking of GST revenues was done in 1998 to compensate local governments for the abolition of octroi (tax on goods imported into local jurisdiction) and Zila tax (export tax), previously the mainstay of urban and rural councils respectively. The two taxes were abolished

because of their distortionary consequences. However, besides the transfer of part of GST revenues, local governments were given very limited fiscal powers which necessitated the establishment of elaborate revenue sharing arrangements between the provincial and local governments to finance the expenditure on services. These revenue sharing transfers took place according to the provisions of the Provincial Finance Commission (PFC) Awards.

The task of the PFCs has been to decide, first, on how the total provincial resources are to be distributed vertically between provincial and local governments to finance the on-going delivery of services under their respective jurisdictions and, second, how the resources transferred are to be distributed horizontally between local governments. Generally, the methodology adopted by the PFCs has been to first determine the vertical distribution of the total quantum of provincial resources comprising federal divisible pool transfers, straight transfers, and grants and provinces' own revenue receipts. Based on benchmarks of expenditure these resources have than been distributed between the Provincial Retained Amount (PRA) and the Provincial Allocable Amount (PAA) with the latter representing the proposed magnitude of transfer of fund to local governments. During recent periods of the awards, the first claim to provincial resources has been granted to 'common' or 'priority' expenditures consisting of pensions, debt servicing and subsidies at the provincial level.

Prior to the promulgation of the ordinance, Pasha and Pasha (2000) estimated that given the proposed allocation of functions, transfers would have to be about 40 percent of provincial resources. In fact, during 2002-03, transfers represented 39 percent of available provincial resources for the four provinces combined.

The share of local transfers in provincial resources of the government of Punjab is given in Table 5.1. This share has fluctuated, rising to a peak of 55 percent during 2003-04 and then falling to 30 percent in 2010-11. An important reason for the decline in the share has been the expansion of the revenue receipts of the provincial government in the aftermath of the 7th NFC Award and reversion back to the provincial government responsibilities of managing secondary education and district/tehsil level hospitals in the provinces. Overall, the priority attached by provincial governments for allocations meant for local governments has declined somewhat during the last few years after the induction of the present government.

The equity of fiscal decentralisation is influenced primarily by the formula given by the PFCs for the horizontal distribution of transfers among local governments. These transfers largely determine the level of expenditure of district governments. Broadly speaking, the formula for horizontal distribution can be distinguished between current and development transfers. Current

Table 5.1
Statement Showing Total Funds Released to District Governments Since 2001-2002 to 2010-11
(Rs. in Millions)

Financial Year	Total Release to District Governments	Total Release to TMAs	Total Release to Union Administration	Total Transfers to LGOs	Provincial Receipts	Percentage Share of Transfers to LGs
2001-2002	20,460	-	-	20,460	108,300	19
2002-2003	55,052	708	-	55,760	128,100	44
2003-2004	64,920	4,671	2,702	72,293	130,500	55
2004-2005	73,181	4,884	2,713	80,778	168,000	48
2005-2006	87,102	5,726	2,972	95,800	191,200	50
2006-2007	107,594	8,709	4,009	120,312	228,500	53
2007-2008	117,525	11,604	4,631	133,759	272,400	49
2008-2009	125,314	11,134	4,417	140,865	307,000	46
2009-2010	133,331	11,264	4,590	149,185	406,600	37
2010-2011	145,465	10,440	5,019	160,924	531,600	30

Source: Finance Department, GoPu.

transfer is constrained by the need to ensure that expenditure on the existing network of services is fully financed, to prevent any dislocations in the process of provision. There is inherently greater flexibility in the design of development transfers, although this also has to be linked to the throw forward in the implementation of development schemes. Analysis of per capita transfers at the district level reveals little correlation with the level of development of a particular jurisdiction. There PFC transfers have not played a significant role in the process of fiscal equalisation. This is also discussed in Chapter 6.

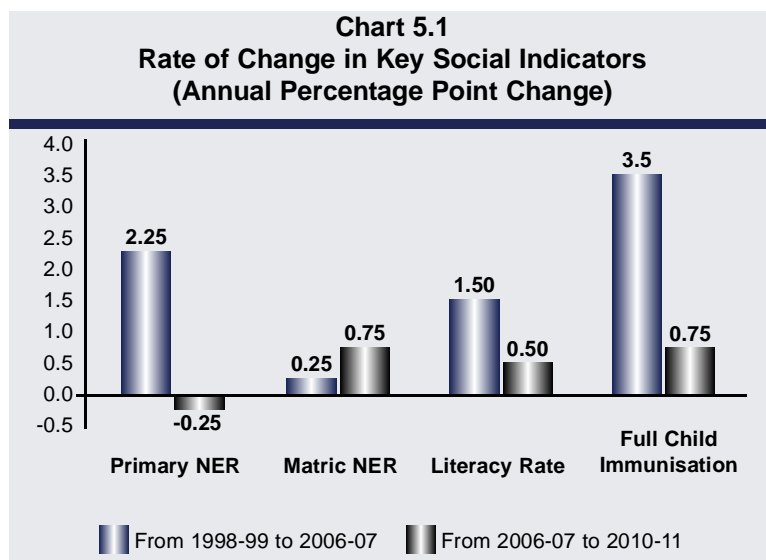
The success of the devolution initiative was, however, compromised by the pace and range of services transferred in one 'big bang' to the local governments, which stretched their capacity to the limits. A more "gradualist" or incremental strategy could have helped in an orderly transition. Therefore, institutional capacity of local governments was a major issue. The capacity constraint was not only the availability of staff at the local level but also the technical quality of the staff. Issues relating to inter-governmental relations were serious, with provincial governments not fully prepared to delegate powers to local government. Also, absence of vertical integration among local tiers was an issue. It must, however, be acknowledged that the Devolution Plan contributed to some empowerment at the local level and gave a voice to disenfranchised groups like women and minorities.

To conclude, it appears that the breakthrough in social sectors from 1998-99 to 2007-08 was, in a large part, because of the big improvement in the macroeconomy and the resulting fiscal stimulus. According to Social Policy and Development Centre (SPDC) (2007):

“The process of devolution and the improvement in social indicators has been facilitated more by the improvement in the macroeconomic environment after 2002 which has led to larger transfers’ to local governments than by any conscious effort on the part of provincial governments to support the process of decentralisation “.

WHAT HAS BEEN THE TREND AFTER 2007-08?

The WB has not studied yet the period after 2007-08. Here we undertake a preliminary analysis of trends in the social sectors in recent years in Punjab. Chart 5.1 shows the rate of change in key social indicators over the last five years. For comparison, rate of change in the prior period, 1998-99 to 2006-07, is also given. Primary Net Enrolment Rates (NET), which increased at an annual rate of 2.25 percentage points in the earlier



Source: PSLM (various issues)

part of the last decade, have actually fallen by -0.25 percentage points, over the period, 2006-07 to 2010-11. There is, however, some growth in net enrolment rates for secondary education (matric). Overall the literacy rate shows slower growth in the last few years (0.5 percentage points annually as compared to 1.5 percentage points earlier) and so do child immunisation rates (increase of 0.75 percentage points compared to 3.5 percentage points in the earlier period).

An important reason for this slowing of the rate of improvement in social indicators is the lack of buoyancy in expenditure on social services. With the downturn in the process of growth and the pressure for fiscal consolidation, expenditure on social development shows contraction in real terms. Between 2006-07 and 2009-10, expenditure on education in Pakistan has declined from 2.5 percent of the GDP to 2 percent, while health expenditure has fallen from 0.6 percent to 0.5 percent of the GDP. In Punjab, we witness a decline in the annual real growth rate in transfers to local governments of 7 percent; in expenditure on education of 2 percent; and expenditure on

health of 18 percent. Clearly, a falling tax-to-GDP ratio and rising commitments on debt servicing, security and subsidies to loss making public enterprises have 'crowded out' resources for social sectors, which in turn has slowed down the rate of improvement in key social indicators.

How has regional inequality in access to social services in Punjab changed after 2006-2007? Chart 5.2 presents the ratio of maximum-to-minimum level of service provision in districts in Punjab in key social services. In five out of the eight key social indicators, including net primary enrolment rate, literacy rate, full child immunisation rate, post-natal consultation and sanitation, there is a decline in the max-to-min ratio over the period 2006-07 to 2010-11. Clearly, regional

Chart 5.2 Disparities in Key Social Indicators Max-to-Min Ratio at District Level			
Indicator	2006-07	2010-11	Trend
Net Primary Enrolment Rate	2.01	1.82	↘
Net Matric Enrolment Rate	3.92	4.04	↗
Literacy Rate	2.81	2.41	↘
Full Child Immunisation Rate	2.70	1.46	↘
Pre-Natal Consultation	2.60	2.66	↗
Post-Natal Consultation	23.67	18.00	↘
Piped Water Coverage	20.29	80.00	↗
Improved Toilet Coverage	3.65	3.34	↘
Source: PSLM (various issues)			

inequality in these indicators has declined over time. The indicators in which there appears to be some increase in regional inequality are secondary education (matric), pre-natal consultation, and piped water supply. Overall, there appears to be a reduction in regional inequality in provision of social services in the province. This, interestingly, is despite the failure of PFC transfers to achieve fiscal equalisation. It is, likely, however that the share of provincial development allocations from the ADP to the backward areas, especially south Punjab, have increased. This is confirmed in Chapter 6. However, regional inequality in services like post-natal consultation, water supply and sanitation still remain high.

PROSPECTS FOR SOCIAL DEVELOPMENT

The future outlook of social development in Pakistan in general and Punjab in particular will be influenced by two hallmark developments of recent years – the 7th NFC Award and the 18th Amendment to the Constitution of Pakistan. The NFC which determines revenue sharing transfers between the federal and provincial government for five years announced the 7th NFC Award in 2009. Inter-governmental resources transfers are the lifeline of provincial governments in Pakistan. These transfers account for 80-90 percent of provincial revenues. This dependence is a consequence of the imbalance in the allocation of functional responsibilities and fiscal powers between the federal and provincial governments in Pakistan, which has given rise to large vertical imbalances. As mentioned earlier inter-governmental transfers take place

according to provisions of the NFC Award. These have historically taken three forms: divisible pool transfers, straight transfers and grants and subventions.

The 7th NFC Award reconstituted by the President of Pakistan on 24th July 2009 deliberated over six meetings before reaching a consensus in Lahore over the vertical and horizontal sharing of the divisible pool of taxes. There are important differences between the previous and new revenue-sharing arrangements. First, the 7th NFC Award increases the share of the provinces in the divisible pool from about 50 percent (including grants) to 56 percent in the first year and 57.5 percent in subsequent years. Second, it enlarges the size of the divisible pool by reducing the federal collection charges from an average of 5.2 percent to 1 percent. Third, Punjab showed accommodation to the longstanding demand of other provinces to have multiple indicators for horizontal distribution. Previously, divisible pool (excluding 1/6th of sales tax) was distributed on the basis of population. Under the 7th NFC Award, multiple criteria will be used to determine the share of each province as follows: population, 82 percent; poverty/backwardness, 10.3 percent; revenue contribution (both collection and proxy generation), 5 percent; Inverse Population Density (IPD), 2.7 percent. This implies that the share of Punjab has fallen from 57.32 percent to 51.74 percent.

The impact of the NFC Award on the GoPu in the first year after the award is given in Table 5.2. While the award did increase provincial revenues substantially, the gains have not yet been fully translated into a corresponding increase in expenditure. In fact, there is a reduction in development expenditure of Rs. 25 billion. In the first post-NFC year, the province preferred to generate a cash surplus and pay off previous outstanding overdraft obligations with the SBP. Also, over Rs. 13 billion had to be diverted for relief and rehabilitation after the devastating floods of 2010.

Table 5.2
Impact of the NFC Award on Government of Punjab
(First year after Award)

(Rs. in Billions)

Indicator	(Revised Estimates)		
	2006-07	2010-11	Change
Total revenue	383	517	134
Federal Transfers	325	461	136
Provincial Revenues	58	56	-2
Current Expenditure	303	375	72
Revenue Surplus	80	142	62
Federal Loans and Grants	18	13	-5
Development Expenditure	132	107	-25
Cash Surplus	-34	48	82

Source: Fiscal Operations, MoF, GoP, Islamabad.

Consequently, real transfers to local government increased by one percent only, real expenditure on education rose by 5 percent, and real expenditure on health fell by 18 percent in 2010-11.

Once these outstanding liabilities are paid-off, the additional resources ought to be diverted to development, including the social sectors. The indications of this are given in the budget of 2011-12, when big increases are proposed in real terms as follows: transfers to local governments, 5 percent; education, 53 percent; and health, 63 percent. If these increases materialise, then the NFC Award will improve the availability of public resources for social service delivery which will augur well for social development in Punjab.

Turning next to the implications of the other major development, the 18th Amendment is also likely to have major implications for the social sectors. The 18th Amendment has abolished the Concurrent Legislative List (CLL) of the constitution and made some changes in the Federal Legislative List (FLL), Part I and II. The former has been transferred to the provinces, with the major exception of electricity which has been brought under FLL-II. Some functions have been shifted from FLL-I to FLL-II, making them the joint responsibility of the federal and provincial governments. Fifteen ministries/seventeen divisions of the federal government have been devolved to the provinces. In addition, some functions of ministries which remain at the federal level are also transferred. Furthermore, fiscal powers of the provinces have also simultaneously been enhanced. Overall, the 18th Amendment can potentially lead to a more balanced and decentralised structure of government of Pakistan and thereby empower the provinces more.

The devolution process under the 18th Amendment was undertaken in three phases. Phase-I was completed in December 2010 when five divisions – Special Initiatives, Zakat and Ushr, Youth Affairs, Population Welfare and Local Government and Rural Development – were devolved. In Phase-II, completed in April 2010, five more divisions - Education, Social Welfare and Special Education, Livestock and Dairy Development, Culture and Tourism – were transferred. Phase-III was completed by 30th June, 2011, devolving seven more divisions – Food and Agriculture, Health, Labour and Manpower, Women and Development, Sports, Environment and Minorities Affairs. Consequently, the number of divisions in the federal government declined from 50 to 33.

Focusing on the social sectors, functions in education transferred to provincial government relate to curriculum, syllabus, planning, policy, centers of excellence and standards of education (except higher education). Functions in health transferred to the provincial government include drugs and medicines; spread of infectious disease from one province to another; mental illness and retardation. However, a number of key autonomous bodies and attached department are retained at federal level as follows:

Education:	Academy of Educational Planning and Management (AEPAM) National Educational Assessment System (NEAS) National College of Arts (NCA) Private Educational Institutional Regulatory Authority (PEIRA)
Health:	Pakistan Medical and Dental Council (PM&DC) National Council for Homeopathy & Tibb National Institution of Health (NIH) Central Drugs Laboratory

The Higher Education Commission (HEC) has also been retained at the federal level till the Amendment to the HEC Act. Also, the federal government is meant to continue to finance its operations till 2014-15, the last year of the current NFC Award.

On the development side, devolution led to a transfer of 232 projects to the provinces with an understanding that the province may choose to adopt or abandon the projects. Projects/schemes under the vertical program in Health and Population Welfare were transferred to the provinces with continued federal funding till 2014-15. Ten vertical programs in health have been devolved to the provinces, including National Program for Family Planning and Primary Health Care, National Maternal Neo-Natal and Child Health Program.

The provincial budgets of 2011-12, however, show limited provisions for devolved functions. Punjab budgeted about one billion rupees for current and development expenditure on devolved subjects in 2011-12. Budget allocation by Sindh and Khyber Pakhtunkhwa is about Rs. 3 billion.

The future of local governments in Pakistan is also likely to have some bearing on social sectors. The 18th Amendment affects the status of local government through the addition of Clause 140 A which states:

'Each Province shall, by law, establish a Local Government System (LGS) and devolve political, administrative and financial responsibility and authority to the elected representatives of the local government'

Clearly, the provincial government in Punjab will have to take the initiative of taking the devolution process to its logical end, that is, to the local level. The provincial government has already proposed some changes in the local government structure in the proposed (not yet finalised and approved) Local Government Act (LGA) 2010. The new law is closer to the Local Government Ordinance (LGO) of 1979 than the Devolution Plan of 2001. It brings back the separation between urban and rural jurisdictions done away in the Devolution Plan. Also,

reversion of secondary education and Tehsil and District hospitals back to provincial government is proposed as was the case under the LGO of 1979. With the abolition of transfers of one sixth of sales tax earmarked for local governments in lieu of Octroi and Zila Tax in the 7th NFC Award, fiscal dependence on the PFC transfers has acquired more importance. The proposed Punjab LGO, 2010 as it stands currently appears to have downgraded the PFC to a Grants Committee with domination by provincial representatives. Both changes appear to be counter to the spirit of devolution. Also, further postponement of local government elections does not augur well for the process of decentralisation in the country and participation in the democratic process at the local level.

EMERGING ISSUES

While a number of old issues continue to persist, some new issues have also emerged in recent years which are likely to affect social sector development in Pakistan. These issues are especially on the fiscal and institutional fronts.

Fiscal issues

Raising Provincial Resources

Given the extremely low tax-to-GDP ratio, provinces will also have to enhance revenue mobilisation from own sources under their own fiscal jurisdiction. The provincial governments combined are generating tax revenue of only Rs. 63 billion. The overall level of resource mobilisation by the four provincial governments from their own tax and non-tax revenue sources has fallen from over 1 percent of the GDP in the early 90s to below 0.5 percent of the GDP in 2009-10. This decline can be attributed to a number of factors. The first is the relatively low revenue potential and/or low elasticity of some revenue sources due to relatively small and /or slow growing tax bases or because of specific rates of taxes, fees and charges which have not been indexed to inflation. Second, the large transfers from the federal government have created a 'dependency syndrome' whereby the provincial governments have been reluctant to incur the political costs of additional taxation, as shown by the tax-free budgets in 2010-11 and 2011-12.

However, the authors of the 7th NFC Award appear to have been cognisant of this danger and were able to get the provincial representatives in the NFC to agree to the following clause:

'The NFC recommended that the federal government and the provincial governments should streamline their taxation in order to achieve a 15 percent tax-to-GDP ratio by the terminal year, 2014-15. Provinces would initiate steps to effectively tax the agriculture and real estate sectors. Federal government and provincial governments may take necessary administrative and legislative steps accordingly'.

In addition, the 18th Amendment to the Constitution has explicitly transferred the sales tax on services and capital value taxation of immovable properties to the provinces. This aspect of the recent structural changes have not received due attention. The implication is that the potentially buoyant tax bases – services, agricultural income and immovable property – are now in the exclusive fiscal domain of provincial governments. The federal government cannot share revenues from these sectors. Since these sectors are currently undertaxed, the responsibility of taxation reforms and improved tax administration to enhance the overall consolidated tax-to-GDP ratio is now incrementally more on the provincial governments than before. The provinces will have to embark on a strategy to mobilise higher revenues from these buoyant tax bases. Some suggestions to achieve this are presented in box 5.3.

Currently, there is no link between taxation and benefits at the sub-national level. As such, sub-national governments will also have to introduce and enhance user charges particularly on economic services. This can contribute to increasing efficiency and accountability in sub-national service provision. The level of cost recovery is currently abysmally low. For example, the extent of recovery of Operations and Maintenance (O&M) costs is less than one-fourth in irrigation. The provincial government may announce a policy of raising the rates annually, over the next five years so that, more or less, full O&M cost recovery is achieved by the end of the period.

Implementation of the proposals for development of provincial taxes on agriculture, real estate and services could yield significantly additional revenues, as estimated by IPP (2011) of up to 0.8 percent of the GDP, equivalent to almost Rs. 126 billion on the current tax base. Enhanced revenues will contribute not only to significant enhancement in the national tax-to-GDP ratio but also enable the provincial governments to expand the coverage and quality of basic social services.

Expenditure Management

Besides resource mobilisation, sub-national governments also need to focus on expenditure priorities largely based on needs. Political economy considerations, of course, inevitably influence priorities also. Choices to be made, for example, are in the following areas:

- Primary vs secondary and higher education
- Curative vs preventive health
- Development vs O&M expenditure
- Economic infrastructure vs social sectors
- Allocation to developed vs backward areas in the provincial Annual Development Plan (ADP)

Box 5.3 Development of Provincial Taxes

TAXES ON AGRICULTURE

The case for the effective imposition of the agricultural income tax is made on the ground that the absence of it is seen as a violation of the principle of horizontal equity in taxation. Also, due to the rise in international commodity prices and domestic support/procurement prices, agricultural incomes have raised rapidly implying now greater ability to pay taxes. Potential mechanism to enhance the revenues from Agriculture Income Tax (AIT) is, first, through increase in tax rates. The presumptive tax rates per acre in the first schedule are very low at Rs. 150 to Rs. 250 per acre. They are equivalent to less than one percent of the average net agricultural income per acre. They have also remained unchanged since 2003. There is a case for their enhancement to Rs. 750 per acre up to 25 acres and to Rs. 1250 per acre beyond 25 acres, with the proviso that the tax is only applied on acreage in excess of 12 acres. Second, penalties are remarkably small. For example, the penalty for non-filing of a return is only up to a maximum of Rs. 1000. This needs to be substantially raised to, say, Rs. 10000 or so. Also, the penalty for default in payment should be changed at, say, 15 percent per annum. Further, the tax liability under AIT may be made chargeable as arrears of land revenue. Overall, the AIT yields only about Rs. 1 billion in Punjab and less than Rs. 2 billion in the whole of Pakistan. If changes of the type identified above are brought in the Acts and collection efficiency is improved, then the tax could yield nationally Rs. 10 billion to Rs. 15 billion. From the viewpoint of improving taxpayer compliance, 50 percent of the tax collected from a person could be reverted to the Zila Council of the district in which he/she is located.

DEVELOPMENT OF TAXES ON REAL ESTATE

This is the second area of taxation which the provincial governments are committed to develop as per the 7th NFC Award. Within property-related taxes, the taxes which are considered as having the maximum revenue-yielding potential are the urban immovable property tax and the capital value tax. But two basic changes are required initially. First, there is a multiplicity of taxes on property transactions. This needs to be rationalised. Second, the capital value tax on property currently replicates the stamp duty and needs to be replaced by a capital gains tax on property.

Turning to the Urban Immovable Property Tax (UIPT) total collection nationally from the tax is less than Rs. 8 billion. The revenue potential of this tax has been substantially underexploited for a number of reasons:

- Due to absence of regular reassessments, the assessed annual rental values are currently about one third or one fourth of the market rental values
- Differential treatment in favour of owner-occupied properties
- Underassessment of commercial and industrial properties
- Lack of expansion in rating areas in line with the spatial growth of metropolitan cities and lack of notification of new towns as rating areas
- Defects in the assessment formula, especially in the case of luxury properties.

These issues need to be resolved. In the short run there is a case for ad hoc enhancement of 150 percent to 200 percent in the case of assessed rental values, with a bigger increase in the case of larger properties. This should then be followed by a comprehensive market survey of rents to update the assessment formula.

DEVELOPMENT OF GST ON SERVICES

In accordance with the provisions of the 7th NFC Award, sales tax on services is exclusively in the provincial fiscal domain. Progress has been made to operationalise the devolution of GST on services to the provincial governments. However, a number of issues continue to persist. First, broadening the base of taxation to include currently uncovered services, perhaps excluding education and health, second, amicable resolution of the problem arising from Sindh's collection of GST on services. Sindh Assembly, recently passed a GST Bill which provides for provincial collection of GST not only on standalone services, but services in other groups also like telecom, banking and finance. Provincial collection of sales tax on these services raises a number of issues: One, special accounting provisions will have to be made to allow input invoicing of tax finally paid in the other provinces, enhancing substantially the complexity of tax administration; two, if input invoicing on such services is not allowed burden of a significant proportion of the tax collected in Sindh will be 'exported' to the other provinces, there is a real danger that this may provoke a 'tax-war' among the provinces; third, this will erode the tax revenue share of the other provinces, which will not augur well on equity grounds. Punjab, in particular, will not accept this and this can potentially lead to a reaction which will destroy the common markets and leads to serious economic distortions and dislocation.

Also due attention has to be given to allocative and technical efficiency in the provision of social services. In an environment of resource constraints, to achieve its development goals the government will have to make expenditures more cost effective and efficient. In other words, achieve more output with given inputs. This has become especially important since the infrastructure deficits in power and water (for agriculture) have reached near-crisis levels and the provincial ADP is likely to allocate more resources to these sectors. The key question for example are: What should be the mix of inputs into health and education sectors which ensure maximum output, given available resources? Such an analysis is undertaken in the study *Assessing Financial Impact of Development Expenditure (2009)*. This section draws heavily from this study.

Enrolments, both of boys and girls, in government schools expanded rapidly during the 1980s, which was the consequence particularly of a big increase in the number of teachers. This was followed by a period of slow growth up to 2003-04 when emerging resource constraints limited the rate of construction of new schools and expansion in the number of teachers. In fact, there is evidence that the number of teachers in both boys and girls schools actually declined from 1997-98 to 2003-04. Thereafter, some recovery is observed in the education sector and total enrolments of boys and girls increased annually by 2.6 and 3.2 percent respectively. This is faster than the growth of school-going age population, implying that enrolment rates have increased.

The study develops a production function for both education and health. The level of enrolment in relation to the school-going age population depends upon the coverage of the network of schools, that is, the number of schools in relation to the school-age population and on the availability of teachers, that is, the ratio of teachers to the number of school rooms.

The fundamental issue with regard to allocative efficiency is the choice between teachers and schools. This requires the derivation of marginal productivity of each input from the production function so that a comparison can be made between the ratio of marginal productivities with the ratio of marginal costs. Applying an Ordinary Least Square (OLS) regression to data from 1981-82 to 2007-08 and deriving elasticities the results show the following:

- (i) In the case of boys, a 1 percent increase in the number of schools leads only to a 0.07 percent increase in enrolment while a 1 percent increase in the number of teachers yields an increase of as much as 0.75 percent in enrolment.
- (ii) In the case of girls, a 1 percent increase in the number of schools leads to a 0.29 percent increase in enrolment while a 1 percent increase in the number of teachers yields an increase of 0.68 percent in enrolment.

The elasticities give the first indication that in the case of boys expansion in the number of schools is not likely to be as efficient as devoting the same resources to increasing the number of teachers. In the case of girls, marginal productivity of both inputs appears to be relatively high.

Finding with respect to estimation of marginal productivity show that one additional school class room adds 2 students while the presence of an additional teacher adds 28 students, in the case of boys. For girls one additional school class room adds 8 female students while the presence of an additional teacher adds 25 students.

Based on the marginal costs of increase in different inputs, the study indicates that for maximisation of allocative efficiency the priorities for expansion in the education sector of the GoPu should be as follows:

First Priority:	Construct more schools for girls
Second Priority:	Increase teachers in schools for boys
Third Priority:	Increase teachers in schools for girls
Fourth Priority:	Construct more schools for boys

Given the complementarity of inputs, the cost effective strategy is as follows:

1. Construct more girls' schools with the normal complement of teachers per school
2. Provide existing boys' schools with more teachers

Punjab may contemplate a moratorium temporarily on the construction of new schools or up gradation of existing boys' schools, except in backward areas like South Punjab which are underserved.

Along with these changes in expenditure allocation, there is need for development of stronger monitoring and information system, for example, to address issues like ghost schools and absenteeism of teachers, through greater community participation. Also there is a need for assessment of initiatives like the Daanish Schools, Punjab Education Foundation (PEF), Tawana Pakistan Project (TPP) through independent and objective evaluation.

Turning next to the health sector, there are a number of serious allocative efficiency issues which arise in the context of provision of curative health issues. These relate first to the location of health facilities in rural and urban areas respectively, that is, the choice between construction of basic health units, rural health centers with only basic services and tehsil or district-level hospitals and, second, whether more resources should be devoted to the expansion of health facilities or to the provision of more medical personnel, especially doctors, and larger supplies of medicines and other material inputs.

The decade of the 1980s witnessed a rapid expansion in public curative health services and the number of out-patients increased annually by over 8.5 percent, due largely to fast growth in the number of beds and doctors. The process of expansion slowed down in the decade of the 1990s and there was a shift in emphasis towards provision of rural health services. From 2003-04 onwards there has been an extraordinarily rapid increase in the number of out-patients of as much as almost 14 percent per annum. This is the first indication that the technical efficiency of the health system has improved in recent years.

The study estimates the production function of out patients as the extent of access to public curative health services measured by the number of beds available to the population and the ratio of doctors to beds. Implications on efficiency of the presence of rural health services were measured by the share of beds in Basic Health Units (BHUs) and Rural Health Centres (RHCs) in the total number of beds.

Regression results yield elasticity estimates which enable the following conclusions:

- a. A 1 percent increase in the number of doctors in government health facilities leads to a 1.26 percent increase in the number of out-patients.
- b. A 1 percent increase in the number of urban beds, in tehsil and district-level hospitals, leads to a very big increase of almost 4 percent in the number of out-patients.
- c. A 1 percent increase in the number of rural beds, in BHUs and RHCs leads to only a minor increase of 0.11 percent in the number of out-patients. In fact, this low efficiency ratio highlights the need for an in-depth field investigation of RHCs and BHUs to identify factors hindering performance.

Given the large differences in elasticities, the implications for allocative efficiency of health sector budgets of the GoPu are clearly as follows:

- First priority: Expansion in capacity and number of tehsil and district-level hospitals.
- Second priority: Increase in the number of doctors in existing facilities.

As opposed to the earlier policy of setting up of more BHUs and RHCs there is a need now to study the efficiency of these health outlets before any ambitious plans for expansion are implemented.

Functional/Institutional issues

Turning next to the institutional side, an important danger arising from the current arrangements is the creation of a kind of a 'principal agent' problem in the context of vertical programs in health

and population welfare, which despite the 18th Amendment remain the financial responsibility of the federal government leading to financing by one entity and delivery by another entity. What happens if during the year the federal government is faced with a revenue shortfall and has to cut back the PSDP as has been the case during the last few years? As it does not have the responsibility for delivery of the services in the vertical programs it may naturally be inclined to disproportionately cut back on the allocations to such programs. Will provincial governments then have to cover the residual financing gap or agitate for restoration of the original allocations? Evidence of a cutback already is agitation by Lady Health Workers (LHWs) who have not been paid their salaries for a number of months.

Therefore, the better transitional arrangement would have been either to have agreement in the CCI that allocations to vertical programs (and the HEC) by the federal government would be protected from any cutbacks or for earmarked development grants to be made by the federal government to the provincial governments for vertical programmes and that these programs would then be shown as part of the respective provincial ADPs. The latter option is clearly superior in that it would have introduced much greater accountability on provincial governments to ensure proper delivery of services from the vertical programs. It would have also meant a greater sense of 'ownership' of these programs which are of an on-going nature by the provincial governments and their financing will anyway become the responsibility of provincial governments after 2014-15.

Another important institutional question relates to the devolution of health sector. The Health Division was devolved in the last phase by 30th June, 2011. But decisions are not yet clear about the extent and nature of transfer of these functions to the provinces. This is likely to be a complex process in the case of this division which performed diverse functions including, first, drug control as per the Drugs Act of 1976. The law provides for a system of licensing of each manufacturing establishment and registration of all finished drugs. Quality control is ensured through inspection and laboratory services. Second, the law also provides for fixation of drug prices in order to ensure availability of basic drugs at reasonable prices, while ensuring competition.

The emerging issues from the devolution of the Health Division are of a very serious nature as follows:

- i. Will the provinces have the capacity to rigorously perform the regulatory functions of licensing and registration of drugs? What happens if one province follows a more liberal drug control policy? Not only is this likely to lead to negative spillover effects on other provinces but also to an overall loss of quality control. Will it be possible to introduce export controls from one province in the country to another province?

- ii. The drug price fixing role has been performed relatively effectively hitherto by the Health Division. Here also, one or more provinces may allow greater escalation in the prices of drugs, perhaps in an effort to attract more manufacturing units into their respective jurisdictions. This will not only lead to a jump in the price level of medicines but also to sub-optimal locations of pharmaceutical concerns in the country.

In conclusion, a number of emerging issues have been identified relating to the local governments which, as already highlighted, play a pivotal role in the provision of social services. First, given the difficult macroeconomic conditions and the need in the short to medium-run to remove infrastructural bottlenecks, especially in Punjab as identified in the previous chapter, it is unlikely that there will be significantly enhanced flows of public resources to the social services. Therefore, greater emphasis will have to be placed on improving the technical and allocative efficiency of whatever limited resources become available. Second, there is a need for early finalisation of the new local government law and local government elections. Greater administrative authority to local governments along with greater accountability will also lead to efficiency gains. Third, there is also a need for capacity building in project identification, preparation and execution.

Further, outcome based Medium-Term Budgetary Framework (MTBF) for social sectors needs to be developed. MTBF is a multi-year approach to planning and budgeting which links spending plans with government's policies and priorities. It provides the government departments the space and flexibility to formulate plan and implement policies that focus on service delivery or outputs. An MTBF in Punjab has already been prepared in the Departments of Health, Irrigation and Power, Higher Education, Livestock and Dairy Development, Public Health Engineering, Communication and Works and Excise and Taxation. Overall, the quality of governance in the delivery of social services will have to improve if social indicators are to show any improvement in the years to come.

Chapter - 6

Regional Disparities in Punjab

Chapter - 6

Regional Disparities in Punjab

Chapter four has presented latest estimates by IPP of the size, growth and composition of the regional economy of Punjab while chapter five has highlighted the trends in social sector development. We turn now to an examination of the extent of regional inequality among districts and divisions of Punjab. This is motivated by a number of considerations. First, there has been talk about a new province (Seraiki, Bahawalpur) within Punjab. It is important to understand the implications of this on the process of regional development in the province. Second, it is useful to determine if over the last few decades regional disparities as a whole have been increasing and if sub-regions (like Southern Punjab) have fallen further behind.

Third, it is necessary to identify the profile of backwardness in Punjab in order to focus regional planning towards development inputs which are relatively underprovided in the less developed districts. This is especially important in the post 18th Amendment era when provincial governments, as opposed to the federal government, have become the leading agents in the development process, with over 60 percent of the overall PSDP being executed by them.

Beyond the above basic questions around the profile and trend in regional development in Punjab we ask a number of ancillary questions as follows: What are the historical roots of regional inequality in Punjab? How efficient are different districts in converting development inputs into outcomes? In line with some perceptions, has the metropolitan city of Lahore diverged from the rest of Punjab? What is the priority being given in the provincial development allocations and in the PFC Awards on equalisation of the provision of basic services among different parts of the province?

Section 2 of this chapter presents the list of development indicators chosen for the ranking of districts and the sources of data. The methodology for constructing the composite development index is described in the TA-II. Section 3 presents the latest ranking in terms of development of districts and divisions of Punjab. The correlation of these rankings with the level of human development and incidence of poverty at the district level are also quantified. This is followed in Section 4 by a description of the profile of backwardness in Punjab. We examine in Section 5 the

trend in development ranking of districts over the last forty years. Section 6 then answers the question whether regional inequality has increased or decreased in Punjab.

Section 7 explores whether the metropolitan and capital district of Lahore has diverged from the rest of the province. Section 8 develops the relationship between inputs and outputs in the social sectors and determines which parts of Punjab are more efficient in converting development inputs into outcomes. This is expected to give some insight into issues of institutional capacity and the regional allocation of resources. Section 9 undertakes a long-term historical analysis of the roots of regional inequality in Punjab. Section 10 examines the case for a new province in South Punjab on the basis of the characteristics and strength of the economic bases, level of human capital and taxable capacity. Finally in Section 11 we present the policy implications and key conclusions emerging from the research, including an analysis of the regional distribution of funds in the provincial ADP and of transfers to local governments under the PFC Awards.

CHOICE OF DEVELOPMENT INDICATORS

The district development rankings are based on the following indicators:

Income and Wealth Indicators

Cash Value of Major Crops per capita: Output at the district level of four major crops viz, wheat, cotton, rice and sugarcane, is included in the analysis. Cash values are estimated on the basis of farm-gate prices at different locations.

Cash Value of Minor Crops per capita: Output of ten minor crops has been analysed including gram, maize, pulses, onion, potato, tomato, citrus fruits, banana, mango and apple. Here again farm gate prices have been used to obtain cash value of output.

Milk Production per capita: Milk is the primary output from the livestock sector. Given the number of milch animals in each district and the average yields the total output of milk has been estimated. The farm gate price per litre was applied to determine the value of milk output in each district.

Industrial Value Added per capita: Data on value added in large-scale manufacturing is available from the census of the sector of 2005-06 for each district. This is divided by population to yield the per capita value added.

We recognise that, in view of the importance of small-scale manufacturing, the exclusion of the small-scale sector due to lack of data at the district level, biases the results against districts like Sialkot, Gujranwala and Gujrat, which have large clusters of small enterprises in particular industries.

Percentage of Houses with 'Pucca' Construction: Most studies, including Pasha and Hasan [1982] have demonstrated that the quality of the housing stock is perhaps the best indicator of income and wealth position of households in a district. 'Pucca' refers to houses constructed with roofs of Reinforced Cement Concrete (RCC)/Reinforced Brick Concrete (RBC) and walls of burnt bricks.

Vehicle Ownership per Capita: Ownership of durables, like automobiles and tractors, is an important indicator of the economic status, especially of the top half of households in a district. A weighted measure has been constructed of the stock of vehicles as follows: motorcars, jeeps and station wagons (weight of 1), tractors (weight of 1/3) and motorcycles (weight of 1/15).

Social Sector Indicators

Literacy Rate: The literacy rate of population above the age of 15 years has been used.

School Enrolment Rate: An overall measure has been constructed of gross enrolment rates at the primary, middle and secondary levels of boys and girls combined.

Number of Beds per 1000 population: The number of beds in hospitals, dispensaries, rural health centres and basic health units have been aggregated and divided by the population.

Extent of Immunisation of Children: This is the percentage of children in a district who have undergone immunisation through the public health services.

Access to Improved Water: The quality of drinking water can have vital implications on health, especially of children. This indicator gives the percentage of households with access to an improved water source, like tap water.

It needs to be emphasized that the official statistics may not fully allow for private provision of social services, especially in the relatively large cities of Punjab. This could imply somewhat greater regional inequality than estimated by us.

Economic Infrastructure Indicators

Percentage of Households with electricity: The indicator measures the percentage of households in a district who use electricity for lighting.

Roads to Geographic Area: Weights have been assigned to lengths of different types of road as follows: motorway (28 per kilometer (km)), national highways (8 per km), provincial high-ways (4 per km), R&B roads, farm-to-market roads, sugar cess roads and district council roads (1 per km). The indicator is length of roads per 100 square kms of geographical area.

Most of the data sources are official government publications, either federal or provincial. These include the PDS brought out by the provincial Planning and Development (P&D) department, PES of the Ministry of Finance (MoF), Islamabad; ASYB of the now defunct MoF and Agriculture, Islamabad and the PSLM Survey of the PBS. In addition, some specialised sources of data have also been used.

RANKING OF DISTRICTS AND DIVISIONS

The methodology for constructing the composite indicator from the above indicators is described in detail in the TA-II. Three group indicators are first estimated of Income and Wealth (IWI), social services (IEH) and economic infrastructure (IEF). These group indicators are then aggregated to arrive at the composite development indicator (IDI).

The distribution of districts of Punjab by high, intermediate and low level of development, with each category accounting for a approximately one-third of the population, is presented in Table 6.1. According to the table, there are eight districts in the top category with, as expected, Lahore district ranking first. Other districts which fall in the top districts group are Rawalpindi and Faisalabad, with relatively high levels of urbanisation. The other districts, which are relatively more developed are Sheikhupura (with a large industrial agglomeration proximate to Lahore), Sialkot, Hafizabad, Kasur and Jhelum.

Table 6.1
Ranking of the District of Punjab

TOP ONE THIRD OF POPULATION			INTERMEDIATE ONE THIRD OF POPULATION			BOTTOM ONE THIRD OF POPULATION		
Ranking	Districts	Composite Development Indicator	Ranking	Districts	Composite Development Indicator	Ranking	Districts	Composite Development Indicator
1	Lahore	0.712	9	Mandi Bahauddin	0.525	24	Attock	0.414
2	Sheikhupura	0.688	10	Gujranwala	0.512	25	Vehari	0.413
3	Rawalpindi	0.664	11	Toba Tek Singh	0.487	26	Khanewal	0.404
4	Hafizabad	0.575	12	Sahiwal	0.483	27	Narowal	0.400
5	Sialkot	0.557	13	Okara	0.478	28	Bahawalnagar	0.372
6	Faisalabad	0.551	14	Sargodha	0.478	29	Layyah	0.344
7	Kasur	0.548	15	Chakwal	0.468	30	Rahim Yar Khan	0.336
8	Jhelum	0.537	16	Gujrat	0.461	31	Lodhran	0.315
			17	Jhang	0.460	32	Muzaffargarh	0.295
			18	Nankana Sahib	0.459	33	Bahawalpur	0.283
			19	Mianwali	0.449	34	D. G. Khan	0.254
			20	Khushab	0.444	35	Rajanpur	0.102
			21	Pakpattan	0.436			
			22	Bhakkar	0.433			
			23	Multan	0.429			

Source: IPP's estimates

The presence of some of these districts in the top group needs to be explained. Sialkot scores highly in access to infrastructure and has a vibrant export-oriented small-scale sector. Hafizabad, a district located in Gujranwala division, is in a rich rice-growing area and also has relatively developed economic infrastructure. Kasur district is proximate to Lahore and has a developed agricultural base. Jhelum district has some unusual features. It scores poorly in the level of local economic activities but has good access to services and infrastructure. It also has a large Military presence, especially of retired soldiers, and receives a high level of remittances and pensions.

The next category includes 15 districts which can be categorised as at the intermediate level of development. They are spread all over the province, including Gujranwala and Gujrat in the north; Sahiwal and Sargodha in Central Punjab and Multan in South Punjab. Table 6.2 indicates, however, that the majority of districts at the intermediate level of development are located in Central Punjab.

Table 6.2
Distribution of the Districts of Punjab in Different
Sub-Regions by Level of Development

	Level of Development			Total
	High	Intermediate	Low	
North Punjab ^a	4 (43.8)*	4 (42.5)	2 (13.7)	10 (100.0)
Central Punjab ^b	4 (52.5)	10 (47.5)	-	14 (100.0)
South Punjab ^c	-	1 (13.5)	10 (86.5)	11 (100.0)
Total	8	15	12	35

*percentage of population in the sub-region

^a Districts in Rawalpindi and Gujranwala divisions

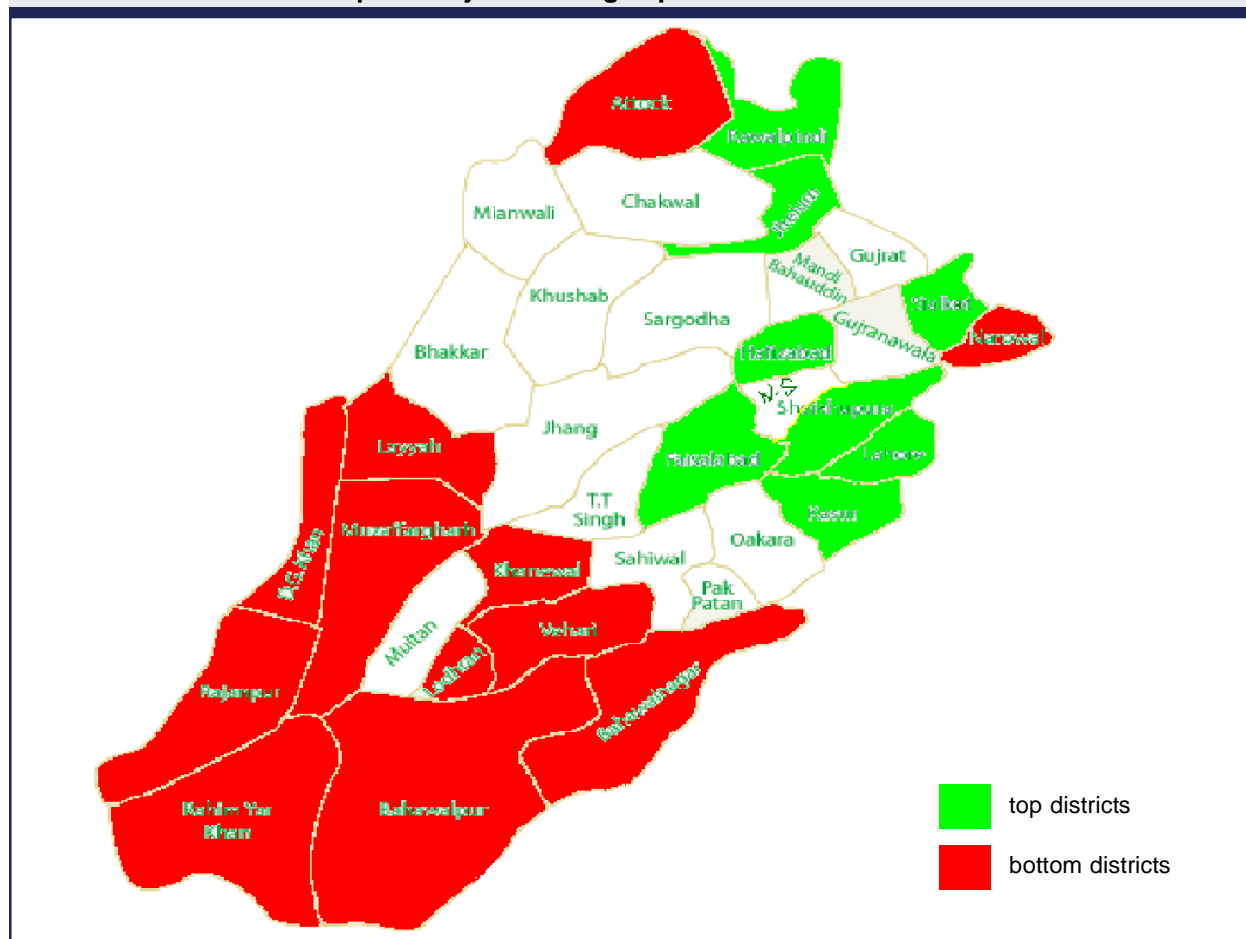
^b Districts in Lahore, Faisalabad, Sahiwal and Sargodha divisions

^c Districts in Multan, D.G. Khan and Bahawalpur Divisions

Source: IPP's estimates.

The bottom one third of the population resides mostly in districts of South Punjab like Vehari, Khanewal, Bahawalnagar, Layyah, Rahim Yar Khan, Lodhran, Muzaffargarh, Bawalpur, D. G. Khan and Rajanpur. This confirms the fact that South Punjab is the most underdeveloped part of the province. The location of districts by level of development is shown in the map of Punjab in Chart 6.1.

Chart 6.1
Map of Punjab showing Top and Bottom Districts



We have also derived the development rankings at the division level in Punjab. Consistent with the results at the district level, Table 6.3 reveals that Lahore is the most developed division followed by Rawalpindi. Divisions at the intermediate level of development are Faisalabad, Sargodha and Sahiwal. The underdeveloped divisions are Multan, Bahawalpur and D. G. Khan, all in South Punjab.

Table 6.3
Ranking of Divisions of Punjab

	Composite Index	Economic Base	Infrastructure and Services
Lahore	1	5	1
Rawalpindi	2	9	2
Gujranwala	3	8	3
Faisalabad	4	2	4
Sargodha	5	3	5
Sahiwal	6	1	6
Multan	7	7	7
Bahawalpur	8	6	8
D. G Khan	9	4	9

Source: IPP's estimates.

Box 6.1 **Composite Development Indicator, HDI and Poverty**

The purpose of this note is, first, to make a comparison of the district rankings according to the composite index with the HDI for each district estimated by Haq and Pasha (2011). Second, to see if the index constructed by us predicts well the incidence of poverty in different parts of Punjab.

According to the HDI, the most developed district of Punjab is Lahore and the least developed is Rajanpur. The same districts are identified by the CDI. Overall, the correlation of district rankings obtained from the two indices is quite high at 0.732.

Jamal (2007) has estimated the incidence of poverty in districts of Pakistan by applying the small area estimation technique on data obtained from the PSLM Survey and the HIES of 2004-05. Since then while the overall level of poverty may have changed it is unlikely that relative levels of poverty among districts have altered significantly.

The results of Jamal (ibid) clearly indicate the high level of poverty in South Punjab at about 43 percent compared to 27 percent for the whole of Punjab. An important result is that poverty is higher in small towns and cities than in rural areas. This is particularly true in South Punjab where the limited urbanisation that has occurred has not been accompanied by the development of industry and services. Consequently, unemployment rates are high.

The correlation between the CDI and the incidence of poverty at the district level in Punjab is high, at 0.771. Therefore, the former can be used as a good predictor of poverty.

We present the correlations between the CDI at the district level, the level of human development and the incidence of poverty in Box 6.1.

PROFILE OF BACKWARDNESS

The basic question is in what respects are the backward districts underdeveloped? Answering this question has vital implications for regional planning in the province. Table 6.4 presents the rankings of districts in the three components – income and wealth, social services and economic infrastructure.

A comparison of these rankings with the ranking in the CDI, reveals that, contrary to expectations, the top districts of Punjab do not perform so well in the income and wealth indicator. Their ranking improves in most cases due to relatively better access to social services and economic infrastructure. A good example is Jhelum which is ranked 20th in income and wealth, due primarily to low crop yields and acreage in a barani area, but is ranked 3rd in access to social services.

As opposed to this, the bottom one third of districts do better in income and wealth than in the overall level of development. The agricultural base of these districts, in particular, is relatively developed. Districts of South Punjab are in the wheat-cotton belt. Even though their combined share in the population of the province is less than 32 percent, they contribute 86 percent to the output of cotton in Punjab and 41 percent in wheat. Also, in minor crops they have large shares of 93 percent in mangos and 50 percent in onions respectively.

Table 6.4
Ranking of Districts in Different Groups of Indicators^a

	Overall Development Indicator (IDI)	Income and Wealth (IWI)	Social Services (IEH)	Economic Infrastructure (IEF)	IWI Minus IDI
Lahore	1	3	2	4	2
Sheikhupura	2	1	14	3	-1
Rawalpindi	3	7	1	1	4
Hafizabad	4	4	19	19	0
Sialkot	5	13	7	5	8
Faisalabad	6	10	10	6	4
Kasur	7	2	27	18	-5
Jhelum	8	20	3	12	12
Mandi Bahauddin	9	9	11	11	0
Toba Tek Singh	11	17	12	9	6
Sahiwal	12	14	18	14	2
Okara	13	8	21	17	-5
Sargodha	14	24	13	7	10
Chakwal	15	32	4	10	17
Gujrat	16	33	5	8	17
Jhang (including Chiniot)	17	5	23	24	-12
Nankana Sahib	18	16	17	22	-2
Mianwali	19	15	16	25	-4
Khushab	20	11	15	41	-9
Pakpattan	21	12	30	13	-9
Bhakkar	22	6	22	30	-16
Multan	23	21	20	15	-2
Attock	24	31	8	23	7
Vehari	25	23	24	16	-2
Khanewal	26	18	28	21	-8
Narowal	27	34	9	20	7
Bahawalnagar	28	19	25	28	-9
Layyah	29	25	26	32	-4
Rahim Yar Khan	30	22	32	29	-8
Lodhran	31	30	31	26	-1
Muzaffargarh	32	27	33	27	-5
Bahawalpur	33	29	29	33	-4
D.G. Khan	34	26	34	34	-8
Rajanpur	35	35	35	35	0

Source: IPP's estimates.

In the initial process of industrialization in the country when the textile industry of Pakistan was being established through a licencing regime, supported by cheap capital goods (through an overvalued exchange rate), the question is why this industry was developed in Faisalabad rather than Multan. The latter city had a rich hinterland of cotton-producing area and was located closer to Karachi with lower transport costs to export markets. Is the answer to be found in the realm of political economy or in the presence of more aggressive entrepreneurship in Central Punjab?

Another significant conclusion is that within the composite income and wealth indicator, the districts of South Punjab do better generally in income indicators than in the wealth indicators like quality of the housing structures. Is this the consequence of a more skewed land distribution? Elements of 'feudalism' continue to persist in this area as compared to the emergence of a progressive medium sized farmer (the 'Kulak') class in Central Punjab.

The poor endowment of social services in the districts of South Punjab does raise the issue of whether this area has been 'neglected' in provincial and local development allocations. The development inputs which are most highly correlated with the overall level of development are identified in Table 6.5. The backward districts appear to be underprovided with education facilities, water supply and sanitation, roads and electricity. Access to health services appears to be more equal across the province.

Two results presented in Table 6.5 are worth highlighting. First, as suggested earlier, the best indicator of the level of development is the quality of the housing stock, measured by the percentage of dwelling units which are '*pucca*'. Second, we observe a negative relationship between the level of agricultural incomes and the overall level of development. This indicates that the underdeveloped districts have the minimum economic base required for embarking on the path of growth. The pre-requisite is adequate access to social services and economic infrastructure. This will enable development of downstream activities in industry and commerce.

Table 6.5
Correlation r of Individual Indicators with the Composite Indicator

Indicator	r	Indicator	r
Houses with 'Pucca' Construction	0.865	Access to Health Facilities	0.495
Literacy Rate	0.844	Vehicle Ownership	0.438
Access to Improved Water Supply and Sanitation	0.818	Industrial Value Added	0.096
% of Households with Electricity	0.774	Cash Value of Minor Crops	-0.060
School Enrolment Rate	0.745	Value of Milk Production	-0.072
Road Coverage	0.702	Cash Value of Major Crops	-0.250
% of Children Immunised	0.629		

Source: IPP's estimates.

Box 6.2 Pattern of Electricity Consumption in Punjab

Per capita electricity consumption is usually considered as a good indicator of the level of development. It is possible to estimate electricity consumption in different parts of Punjab, given the presence of a number of distribution companies. Data has been analysed for 2007-08, the last year prior to the start of loadshedding. The results are given below:

Disco	Area Covered	Index of Per Capita Electricity Consumption (Punjab Average = 1000)	Ranking
IESCO	Islamabad + Rawalpindi Division	159.8	2
GEPCO	Gujranwala Division	89.7	4
LESCO	Lahore Division	184.1	1
FESCO	Faisalabad + Sargodha Division	94.0	3
MEPCO	Multan + Bahawalpur + DG Khan + Sargodha Division	54.8	5

Source: NEPRA.

The divisions of South Punjab plus Sargodha Division have very low per capita energy consumption, only about half that of the province. The rankings clearly indicate the relatively high development of Lahore, Rawalpindi and Islamabad.

The sectoral pattern of electricity consumption is also very different. LESCO has the largest share of industrial and commercial consumption in the province. It is only in agricultural consumption where South Punjab + Sargodha Division dominate, with a share of 47 percent in the electricity consumed within the province by the sector. The share in commercial consumption of this region is very low, indicating the underdevelopment of the services sector in South Punjab.

Electricity consumption is also considered as a good indicator of the level of development. Box 6.2 presents the pattern of electricity consumption in different parts of Punjab. The estimates confirm the relatively low development of South Punjab, especially in industry and services.

TRENDS IN DEVELOPMENT RANKING

We examine now the long term trends in the development ranking of districts. For this purpose we have conducted an exhaustive review of literature including Helbock and Naqavi [1976], Pasha and Hasan (1982), Pasha, Malik and Jamal (1990), Haq and Zia (2008), Punjab Economic Research Institute (2008), Haq (2009), Afzal (2010) and Pasha and Malik (2011).

The correlation among district rankings in different studies are presented in Table 6.6. Earlier studies are compared with the ranking obtained above. Prior to this, we have to allow for the fact that over the decades the number of districts in Punjab has increased. In the 70s, there were 19 districts as compared to 35 now.¹ Therefore, for a comparison to be made we had to find out how new districts were created and include them in the original 19 districts.

The correlations in Table 6.6 indicate that development ranking of the 19 districts has changed significantly over time. Rankings in the earliest study for the 70s of Helbock and Naqavi [ibid] are only weakly correlated with the present rankings, with a rank correlation

coefficient of only 0.51. The correlation rises to 0.88 by the 90s when compared with Pasha, Malik and Jamal [ibid]. The most recent ranking, prior to the present study, is by PERI for the mid years of the last decade. The rankings come very close, with a correlation coefficient as high as 0.94.

The evolution of district rankings over the last four decades is presented in Table 6.7. Lahore has retained its first position. Districts which have shown dramatic improvement are Gujranwala (8th to 3rd), Sheikhpura (13th to 5th) Sargodha (14th to 9th), Sialkot (16th to 6th). As opposed to this, districts which have shown a major deterioration in rankings are Multan (4th to 13th), Rahim Yar Khan (6th to 16th), Bahawalnagar (11th to 15th), Bahawalpur (12th to 17th) and Dera Ghazi Khan (15th to 19th).

Table 6.7
Evolution of District Rankings over the Last 40 years

Districts	Year of Study		District	Year of Study	
	70s	2011*		70s	2011
	H & N	P & A		H & N	P & A
Lahore	1	1	Bahawalnagar	11	15
Rawalpindi	2	2	Bahawalpur	12	17
Faisalabad	3	8	Sheikhpura	13	5
Multan	4	13	Sargodha	14	9
Jhelum	5	4	D.G. Khan	15	19
Rahim Yar Khan	6	16	Sialkot	16	6
Gujrat	7	7	Attock	17	10
Gujranwala	8	3	Muzaffargarh	18	18
Mianwali	9	12	Jhang	19	14
Sahiwal	10	11			

* may not coincide with Table 1, due to different district boundaries.

It is important to note that most districts of South Punjab have declined in their relative position within the province. However, all these districts were not always backward. In fact, in the 70s, Multan and Rahim Yar Khan were relatively developed districts with a ranking of 4th and 6th respectively. Therefore, the conclusion is unavoidable that South Punjab has been somewhat neglected in the provision of economic infrastructure and services.

Table 6.8
Spread of Development Indicators Among Different Sub-Regions of Punjab

	(Ratio with respect to the average value of indicator)			
	North Punjab	Central Punjab	South Punjab	Spread**
<i>Crop* cash values per capita</i>				
70s	0.82	1.06	1.08	0.26
Late 2000s	0.78	0.97	1.22	0.44
<i>Livestock value added per capita</i>				
70s	0.67	1.49	0.75	0.82
Late 2000s	0.80	1.08	1.07	0.28
<i>Manufacturing value added per capita</i>				
70s	1.23	1.22	0.60	0.63
Late 2000s	0.72	1.20	0.98	0.28
<i>Literacy Rate</i>				
70s	1.30	1.08	0.70	0.60
Late 2000s	1.20	1.04	0.78	0.42
<i>School Enrolment</i>				
70s	1.20	1.06	0.80	0.40
Late 2000s	1.06	1.04	0.75	0.31
<i>Health Facilities</i>				
70s	1.01	1.26	0.73	0.53
Late 2000s	0.97	0.83	1.26	0.43
<i>Housing Quality</i>				
70s	1.17	1.35	0.51	0.84
Late 2000s	1.21	1.14	0.65	0.56
<i>Water Supply and Sanitation</i>				
70s	1.02	1.40	0.59	0.81
Late 2000s	1.07	1.33	0.51	0.82
<i>Electricity</i>				
70s	1.00	1.27	0.73	0.54
Late 2000s	1.06	1.03	0.92	0.14
<i>Roads</i>				
70s	1.16	1.20	0.67	0.53
Late 2000s	1.19	1.17	0.63	0.56

* major + minor crops

** Maximum - Minimum

Source: PDS, PSLM

HAS REGIONAL INEQUALITY INCREASED IN PUNJAB?

We now turn to the issue of whether regional inequality as a whole has increased or decreased in Punjab over the last four decades. We first quantify the trend in the value of indicators (relative to the provincial average) at the sub-regional level for North, South and Central Punjab respectively in Table 6.8.

A number of conclusions emerge from the Table, as follows:

- (i) Except for the agricultural crop cash value indicator, South Punjab continues to fall below North and South Punjab. The latter has caught up with the provincial average in livestock and health facilities. However, while South Punjab remains relatively underdeveloped it has come closer to the provincial average in quality of housing and electricity. The gap has widened in school enrolment, water supply and sanitation and roads.
- (ii) Central Punjab has continued to be the most developed sub-region of Punjab, but there are strong indications that the gap between this sub-region and the province as a whole has substantially narrowed over the last 40 years or so.
- (iii) The gap between Central Punjab and North Punjab has also diminished in most indicators.

In view of the above somewhat contrasting developments with respect to regional inequality we compare the spread (maximum minus minimum) in indicator values of the three sub-regions over time. Out of the ten indicators that have been analysed, the spread has declined in seven indicators and increased in three indicators, namely, crop cash values, water supply and sanitation and roads. Therefore, the analysis at the sub-regional level indicates that the trend in the majority of indicators is towards a reduction in regional inequality.

We now carry the analysis deeper to the district level in Table 6.9. The measure used for quantifying dispersion at the district level is the coefficient of variation. Table 6.9 indicates that regional inequality in Punjab is currently most pronounced in industry, access to improved water supply and sanitation and hospital beds. Also, importantly, regional inequality at the district level has declined in eight out of ten indicators, with the

Table 6.9
Trend in Regional Inequality at the District Level in Punjab

	Coefficient of Variation (%)	
	70s	Late 2000s
Crop Cash Values per Capita	24.3	44.2
Industrial Value Added per Capita	89.0	90.8
Livestock Value per Capita	66.0	25.7
Literacy Rate	38.9	19.9
School Enrolment Rate	-	-
Health Facilities	75.6	58.9
Quality of Housing	124.7	31.5
Water Supply and Sanitation	103.5	83.1
Electricity	65.7	7.4
Roads	40.7	38.8

Source: IPP's estimates.

exception of crop cash values and industrial value added. Therefore, the analysis, at both the sub-regional and district levels respectively demonstrates that in the majority of development indicators regional inequality has declined in Punjab on a long-term basis over the last 40 years.

HAS LAHORE DIVERGED FROM THE REST OF PUNJAB?

The previous section has already given the indication that while Central Punjab remains more developed than the rest of the province, it has converged closer to the provincial average in most indicators and the gap has narrowed over the last few decades. Is this the case also with Lahore district, the most developed district of Punjab, which has the metropolitan city of Lahore, the capital of Punjab.

Table 6.10 presents the ratio of the magnitude of the development indicators of Lahore district to the provincial average. It is striking that the district has also converged closer to the provincial average in nine out of ten indicators, with the exception of roads. Therefore, contrary perhaps to expectations, development resources do not appear to have been disproportionately concentrated in Lahore and other relatively large cities of Punjab like Rawalpindi, Faisalabad and Gujranwala have come closer to Lahore in access to basic utilities and services. It is, of course, possible that being the primate city of Punjab, Lahore has attracted more migrants and this has put pressure on the availability of services.

It is of interest to note that among provinces of Pakistan, Punjab has the lowest level of inequality among districts in the level of human development as shown in

Box 6.3. This is due particularly to a greater spread of education.

Table 6.10
Has Lahore District Diverged from the Rest of Punjab?
(Ratio of Lahore District to Average for Punjab)

	P&H (1982)	P&A (2010)	Divergence (D)/ Convergence (C)
Crop Cash Value	1.07	0.45	C
Manufacturing Value Added	1.10	0.70	C
Livestock	0.88	0.82	C
Literacy Rate	1.67	1.23	C
School Enrolment Rate	1.40	1.15	C
Hospital Beds	2.87	0.20	C
Pucca Houses	4.55	1.58	C
Water	4.65	3.00	C
Electricity	3.19	1.03	C
Metalled Road	1.38	1.39	D

Box 6.3

Regional Inequality within Provinces

Haq and Pasha (2011) have estimated the HDI for each district of Pakistan with the latest data. This enables a comparison of the level of regional inequality within the four provinces of Pakistan. The results are as follows:

Provinces	Coefficient of Variation of HDI among districts within the province
Punjab	0.221
K-PK	0.229
Balochistan	0.296
Sindh	0.312

Lo and behold, Punjab is the province characterised by the least degree of regional inequality. Sindh has the highest level of inequality because of sharp duality between the metropolitan city of Karachi and the interior of the province. The success of Punjab appears to lie primarily in the spread of education. K-PK has done somewhat better in trying to equalize among districts the coverage of health services.

RELATIONSHIP BETWEEN DEVELOPMENT INPUTS AND OUTCOMES

The issue that we examine in this section is whether underdevelopment is the consequence primarily of a relative lack of development inputs or also due to lower rate of conversion of inputs into outcomes. We conduct this research in the context of social services. This has been made possible by the availability of data from the Multiple Indicator Cluster Survey (MICs) survey at the district level in Punjab for 2007-08.

The indicators of inputs and outputs are presented in Table 6.11

Table 6.11 Development Inputs and Outcomes in Social Services	
INPUT	OUTPUT / OUTCOME
EDUCATION	
<ul style="list-style-type: none"> Availability of primary education facility (either public or private) within 2 kms <ul style="list-style-type: none"> Boys Girls 	<ul style="list-style-type: none"> Gross enrolment rate at primary level <ul style="list-style-type: none"> Boys Girls
HEALTH	
<ul style="list-style-type: none"> Feeding of infants Consumption of iodised salt, vitamin A by children below 5 years Availability of skilled attendant at delivery Care provided by Lady Health Worker Immunization Availability of health facility within half an hour Post-natal care Used of improved water and sanitation Hygiene practices 	<ul style="list-style-type: none"> Under-5 mortality rate (per 1000 births) Infant mortality rate (per 1000 births) Child disability incidence (2-9 years) Incidence of chronic cough, Tuberculosis (TB) and hepatitis

The resulting input and output rankings at the division levels² are given in Table 6.12.

Table 6.12 Input and Output Rankings at the Divisional Level in Social Services				
Division ^a	Education		Health	
	Input Ranking	Output Ranking	Input Ranking	Output Ranking
Lahore	4	3	2	4
Rawalpindi	1	1	1	1
Gujranwala	2	2	4	2
Faisalabad	5	4	3	3
Sargodha	3	6	6	6
Multan ^b	6	5	5	5
Bahawalpur	7	7	8	8
D. G. Khan	8	8	7	7
Spread	0.437	0.280	0.757	0.699
Correlation coefficient	←	0.949	→	← 0.867 →

^a presented in order of overall development ranking.

^b inclusive of the division of Sahiwal.

Source: IPP's estimates.

The results in Table 6.12 indicate that the correlation between input and output ranking is high, although somewhat lower in the case of health. It is also reassuring that the spread in the level of outputs is lower than in the level of inputs in both education and health. This indicates relatively more efficient conversion of inputs into outcomes in the less developed divisions, especially in South Punjab. This strengthens further the case of equalisation of the provision of basic social services in the province not only on the basis of equity but also efficiency by expanding the network of services in South Punjab.

ROOTS OF REGIONAL INEQUALITY IN PUNJAB

We now explore what have been the historical roots of regional inequality in Punjab, dating back to the days of the British Raj. Both institutional, infrastructure and location-specific variables have been used to explain inequality at the district level, as follows:

Presence of Military cantonments: Traditionally Military cantonments have been established at different locations in Punjab. The question is has the presence of cantonments provided a stimulus to the local economy?

Presence of Railway junction: The presence of a railway junction within a district is likely to have stimulated marketing of agricultural produce, especially in pre-partition days when the railway was a major source of transport and junctions acted as transshipment points.

Distance from GT-Road: Clearly, whether a district has the GT-road passing through it or if it is located in close proximity to it is likely to have influenced its development prospects. Historically, the majority of large settlements have either been connected by the GT-road or linked to the GT-road by the secondary highway network.

Extent of Urbanisation: The extent of urbanisation, especially the share of population in the primate city/town, of a district increases the prospects of agglomeration economies in industry and economies of scale in the provision of services. At the time of partition most skilled workers from East Punjab migrated to Central Punjab and played a significant role in the small scale industrial sector.

Extent of Irrigation: There is a clear difference in land use and cropping intensity and yields between the irrigated areas and barani areas of Punjab. Therefore, extension of the irrigation canal network to a district must have substantially improved its agricultural growth prospects in the days of the Raj.

Proximity to Federal Capital: The shift of the federal capital from Karachi to Islamabad in the early 60s, may have significantly influenced the growth prospects of districts proximate to the new capital, like Rawalpindi. Also, the process of development was greatly centralised for a long time and most decisions related to industrial and agricultural policies were taken in Islamabad alongwith regional development allocations.

Proximity to Provincial Capital: It has been argued that people living closer to the provincial capital, Lahore, enjoy greater access. This, it is felt, has operated to the disadvantage of South Punjab and transaction costs have been higher in seeking services and decisions from the provincial government.

Administrative Status: Districts which also enjoy divisional headquarter status, other things being equal, are likely to have greater presence of provincial functionaries and therefore greater institutional capacity to faster local development and a larger public expenditure multiplier.

The composite development index and the components of the index respectively of the districts have been correlated with the above variables. The results of the OLS regressions are presented in Table 6.13.

Table 6.13
Results of Regressions of the Composite Development Index with
Long-term Factors Impacting on Regional Inequality

	Index of			
	Composite Development Index	Income and Wealth	Access to Social Services	Access to Economic Infrastructure
Presence of Military cantonments	i	i	i	i
Presence of Railway Junction	i	i	i	i
Distance from GT-Road	-*	i	i	-*
Extent of Urbanisation	+	+	+	+
Extent of Irrigation	|	+	i	i
Distance from Federal Capital	i	i	-*	-*
Distance from Provincial Capital	-*	i	i	i
Administrative State	|	i	i	i
Dummy Variable for South Punjab	-*	-*	i	i
Adjusted R ²	0.727	0.408	0.741	0.680

- = indicates negative correlation

+ = indicates positive correlation

i = insignificant

* Significant at the 5 percent level

** Significant at the 10 percent

Source: IPP's estimates.

The regression results indicate, first, the relative insignificance of the presence of Military cantonments and railway junctions. The former, in particular, are probably ‘enclaves’ insulated from the civilian population. Second, the distance from GT-road has had a significant impact on the IDI and access to infrastructure. Third, the extent of urbanisation is significant in all regressions. Fourth, extent of irrigation has a significant impact, as expected, on the IWI. The extent of irrigation in South Punjab is 95 percent as compared to 81 percent for Punjab as a whole. Fifth, the distance from the federal capital is important in influencing access both to social services and infrastructure. Sixth, the distance from provincial capital has a significant impact on the composite index. This tends to confirm that districts which are more remote from Lahore are placed at a disadvantage. Seventh, the administrative status of a district, other things being equal, does not appear to matter.

Lastly, we have an interesting result. We have used a dummy variable which had a value of 1 for the districts of South Punjab and zero otherwise. This variable has emerged as very significant in determining the CDI. How do we interpret this result? Does this reflect the negative impact of a feudal structure or the relative absence of entrepreneurship? Is this a confirmation of the “neglect” of development in South Punjab? More importantly, it may provide the basis for concluding that South Punjab has historically not attracted entrepreneurs and skilled workers, specifically from East Punjab.

IMPLICATIONS OF A NEW PROVINCE

There has been a growing clamour for a new province to be established in the South Punjab, consisting pre-dominantly of the Seraiki population. Given data limitations, we are able to only examine here the implications of a process of administrative decentralisation whereby the three divisions – Multan, D. G. Khan and Bahawalpur – combined constitute a higher level of administrative unit, equivalent to or actually a province. Of course, this does not include the full Seraiki – speaking population, who are also located in K-PK and elsewhere in Punjab.

We derive the share of the three divisions combined in a number of key variables in Table 6.14. The relatively strong agricultural base of South Punjab is clearly visible. As compared to the share of 31 percent in the provincial population, South Punjab has a share of over 36 percent in the value of agricultural output. Major crops in which the region appears to have a comparative advantage are wheat, cotton and sugarcane with shares in provincial production of 41, 86 and 35 percent. In fact, we have already speculated why in the presence of such a dominant share in cotton, more downstream textile units have not emerged in the region.

The share in minor crops is relatively small at 26 percent. But the region has large shares in output of onions, tomatoes and mangos of 50, 37 and 93 percent respectively. Similarly, the share in livestock output is large relative to the population at 36 percent.

The region remains underdeveloped in the large-scale manufacturing sector despite a strong agricultural base which ought to have promoted the establishment of agro-based industries.

South Punjab has relatively low rates of vehicle ownership, especially of cars and motorcycles. This is probably a reflection of the lower level of urbanisation. However, a large share in tractors of over 42 percent confirms the presence of a greater proportion of large farmers in South Punjab.

As highlighted earlier, the region has a more limited network of social services, especially hospital beds and water connections. The share in the provincial road network is 32 percent, close to the population share but substantially lower than the share in land area.

On the fiscal side, South Punjab appears to have a relatively limited tax base. For example, its contribution to federal direct tax revenue is only 13 percent of the overall provincial contribution. This is attributable to the dominance of agriculture in the regional economy, which is exempt from the federal income tax.

Table 6.14
Combined Share of the Three divisions – Multan, D. G. Khan and Bahawalpur^a – in Punjab (Mostly for 2008-09)

	(% share)
Population	31.4
Rural	36.5
Urban	20.6
<i>Land Area</i>	48.5
<i>Agriculture (Value of Output)</i>	36.2
<i>Major Crops</i>	41.0
(Wheat) ^b	(41.0)
(Cotton)	(85.6)
(Sugarcane)	(35.2)
Minor Crops	41.0
(Onions)	(50.1)
(Tomatoes)	(37.2)
(Mangos)	(92.8)
Livestock Output^c	36.7
<i>Industry</i>	
Large-scale manufacturing Value added	19.4
<i>Motor Vehicles</i>	17.8
Cars, Jeeps, Wagons	10.7
Motorcycles and scooters	26.6
Tractors	42.4
<i>Number of Schools</i>	
Primary	34.5
Middle	31.9
Secondary	26.5
<i>Number of Hospital Beds</i>	18.0
<i>Water (Tap Connections)</i>	20.5
<i>Roads</i>	32.4
<i>Electricity Connections</i>	35.9
Fiscal:	
Contribution to Federal Tax Revenue	12.9
Share in Provincial ADP ^d	
2006-07	14.7
2009-10	29.9
Poverty Incidence	43.0

^a consisting of 11 districts

^b figures in brackets are for crops in which the share in output exceeds share in population

^c provided by milk production

^d According to PILDAT (2010)

Source: PDS, FBR, Haroon Jamal (2007)

Finally, in terms of the incidence of Poverty, South Punjab has a higher percentage of population below the poverty line of 43 percent as compared to 27 percent for the province as a whole according to Jamal (2007) in 2004-05. This is clearly attributable to the fact that it is the most underdeveloped part of the province, especially in industry and services. Also, it is likely that the income distribution is more skewed in South Punjab.

Turning to the share in the provincial ADP, the estimates by Pakistan Institute of Legislative Development and Transparency (PILDAT) (2010) indicate that the share of South Punjab has increased substantially since 2006-07, following the induction of the present democratically government. The share has virtually doubled from less than 15 percent in 2006-07 to 29 percent. It is now approaching the share in population. However, to achieve a degree of fiscal equalization, the share of South Punjab in the provincial ADP will have to significantly exceed the population share.

Overall, South Punjab appears to be economically viable as a separate province, especially in terms of basic food security. However, in fiscal terms, the share in provincial tax revenues is likely to be low, unless agricultural incomes/production are tapped, especially of cotton and sugarcane. But the political economy for this may not be favourable in the presence of a powerful lobby of landlords in this area.

But provinces rely more than 80 to 90 percent on federal transfers to meet their expenditure obligations. What will South Punjab get from the divisible pool if the revenue sharing formula in the 7th NFC Award is applied to it? It is, in fact, likely that it will get more in per capita terms than the rest of the province according to the criteria, with a lower population density and higher incidence of poverty and somewhat less due to lower share in revenue collection. Overall, the fiscal equalisation built into the Award will ensure that South Punjab does better.

CONCLUSIONS AND POLICY IMPLICATIONS

The research undertaken in this study on Regional Disparities in Punjab has come to the following conclusions:

- (i) There is a classic 'North-South' divide in Punjab, with districts in South Punjab being less developed than districts in Central and North Punjab. This is also the case at the divisional level in Punjab.
- (ii) Districts of South Punjab perform relatively well in terms of the economic base, especially agriculture, but have limited economic activity in industry and services. The primary factors contributing to underdevelopment are limited access to infrastructure and social services.

- (iii) Regional planning in Punjab will have to focus on the equalisation across districts of access to education and health facilities, improved water supply and sanitation, electrification³ and development of the secondary and tertiary road network.
- (iv) Industrial development in South Punjab will have to concentrate on downstream agro-based industries, including textiles. There is a strong case for giving fiscal incentives for investment in the region.
- (v) There have been major changes in development rankings of districts of Punjab over the last four decades. Some districts of Central and North Punjab have significantly improved their ranking. The deterioration in ranking is mostly in districts of South Punjab. This indicates that some districts, like Multan and Rahim Yar Khan, were at one stage relatively developed but perhaps were unable to maintain their position partly due to the land tenure structure and partly due to the absence of an entrepreneurial class in the local business community. However, there may also have been some neglect in the provision of services in this region.
- (vi) Overall, regional inequality has declined despite the fall in ranking of districts of South Punjab. This is because, first, Central Punjab, the most developed part of the province, has converged nearer to the provincial average, second, North Punjab has come closer to Central Punjab, and, third, while South Punjab remains the most underdeveloped region, the gap in most indicators in relation to the provincial average has narrowed over time. Also, Lahore district, the most developed area of Punjab, has not diverged but converged over time to the provincial average.
- (vii) Regional inequality in Punjab is currently most pronounced in large-scale manufacturing, access to improved water supply and sanitation and health facilities.
- (viii) The relationship between development inputs and outcomes indicates that there is not only an equity case but also an efficiency case for faster expansion of social services in the relatively backward areas of the province, including South Punjab.
- (ix) The roots of regional inequality in Punjab from the days of the British Raj lie in distance from the GT-road, extent of urbanisation, coverage of the canal irrigation network and distance respectively from the federal capital and provincial capital.
- (x) A higher level administrative unit or a province in South Punjab, consisting of the three divisions – Bahawalpur, Multan and D.G. Khan – and comprising 11 districts appears to be economically viable, especially in terms of basic food security. But, the sub-national tax base is limited. However, the process of fiscal equalization built into the 7th NFC Award, in the event South Punjab become a province, will ensure that this region gets higher per capita transfers than the rest of Punjab.

- (xi) The present government has made a strong effort to raise the share of South Punjab in development allocations. The share in ADP has virtually doubled to 26 percent, close to the population share. But from the viewpoint of fiscal equalisation the share needs to be increased further. Also, the share of the local government of South Punjab in transfers from the provincial government according to the formula set by the PFC is 31 percent. Here again, the implied fiscal equalisation is limited.

In conclusion, the development story of Punjab is a fascinating one. In the process of research many of the 'myths' and popular perceptions about the province have not been validated by the empirical analysis. For example, it is not true that Punjab has always led the national economy in the process of growth, especially during the last decade. Also, South Punjab has not always been backward and still has a stronger agricultural base than perhaps expected. We recommend that more efforts be made by institutions and students of the province to undertake in-depth research on development in their province.

Appendices

Technical Appendix

We have essentially adopted the methodology used for construction of the HDI by UNDP (2011). The composite development index (IDI) has three components – Income and Wealth (IWI), Education and Health (IEH) and Economic Infrastructure (IEF). It is similar to the HDI except that we also include economic infrastructure. The respective components are given in the attached chart TA-1.

Below the three components, we have two further levels, such that weights within each level add to unity. Altogether we have thirteen indicators, as follows: income¹ per capita, wealth, literacy rate, school enrolment rate, hospital beds, access to improved water supply and sanitation, child immunisation, roads and electrification.

The weights at each level are assigned on the basis of *a priori* judgment as in the HDI. However, we test for the sensitivity of rankings of the districts to changes in weights. This is done by correlating the development rankings obtained with different weights with rankings in the base case, as follows:

	Weight of			Correlation (r) with Ranking in Base Case
	IWI	IEH	IEF	
	0.50	0.30	0.20	
	0.50	0.24	0.16	0.990
	0.43	0.40	0.17	0.992
	0.44	0.26	0.30	0.995

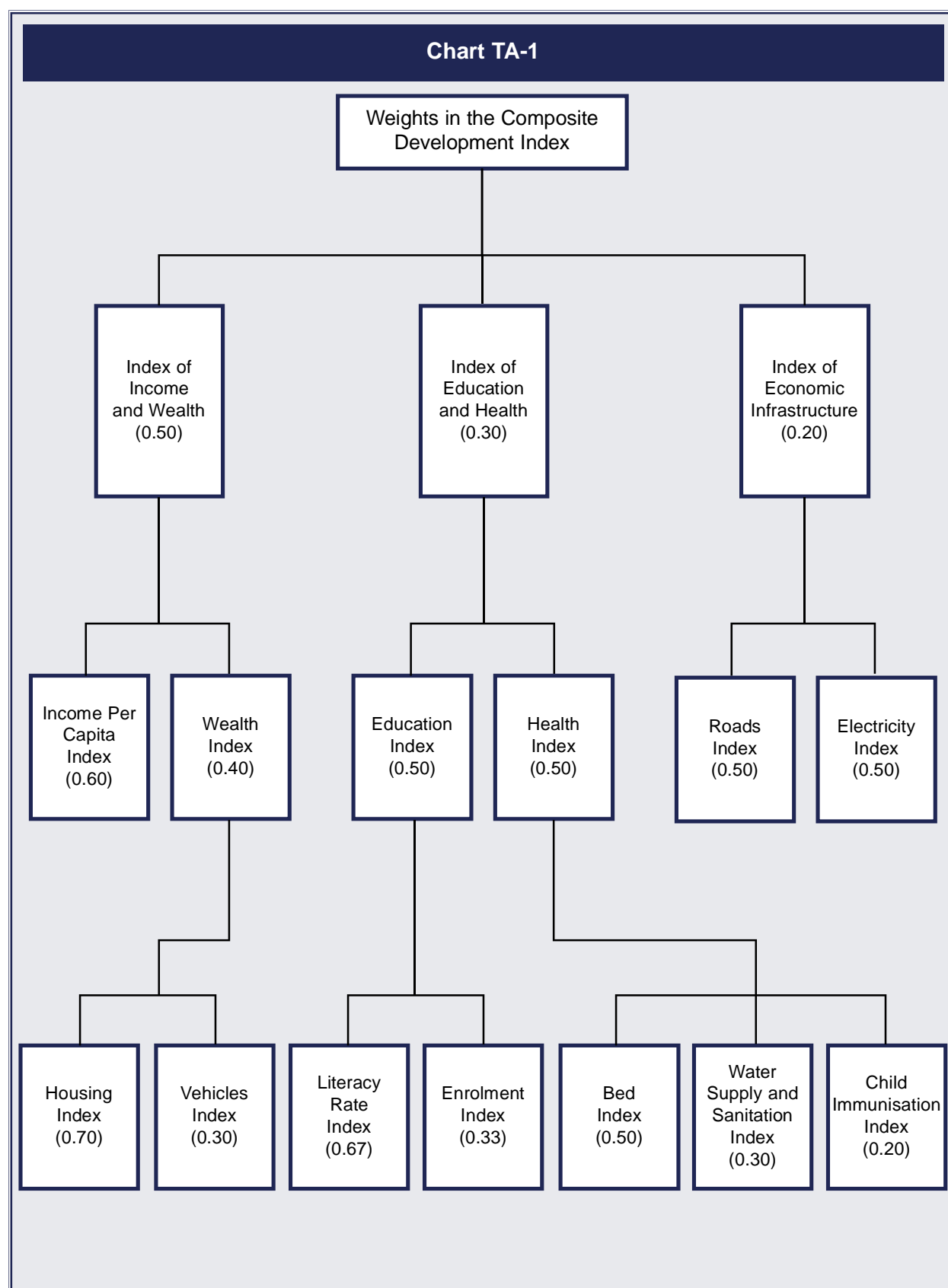
The correlations are very high, at close to unity. This demonstrates that the ranking of districts is not sensitive to the choice of weights.

Each indicator is constructed on a scale of 0 to 1, as follows:

$$I_i = \frac{Actual_i - Min_i}{Max_i - Min_i}$$

where I_i is the index, $Actual_i$ is the observed value for the i^{th} district, Min_i is the minimum value observed in the districts and Max_i is the maximum value.

¹ This includes the following indicators – major crop cash value, minor crop cash value, milk production and industrial value added per capita.



Statistical Appendix 1

The Size and Growth of The Regional Economy of Punjab

Table S-1
Share of Punjab in the National Economy in Different Sectors

(Percentage)

	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
AGRICULTURAL SECTOR	63.6	63.7	63.5	63.6	63.7	65.1	65.1	64.9	63.3	62.7	61.9	63.1
Major Crops	71.4	74.0	73.6	73.7	74.2	76.2	74.9	74.5	72.5	71.9	70.3	76.3
Minor Crops	55.6	54.5	55.9	55.9	55.2	54.4	53.9	55.3	54.5	53.1	54.0	54.0
Livestock	62.3	61.7	61.0	60.7	60.5	60.5	63.0	62.3	61.6	60.7	59.9	59.1
Fishing	23.9	21.0	24.7	25.0	25.6	26.5	23.6	22.4	21.5	21.4	21.9	22.2
Forestry	42.3	42.0	41.8	45.5	49.5	53.6	46.9	45.9	45.1	46.0	47.0	48.0
INDUSTRIAL SECTOR	45.0	46.0	47.2	46.2	44.7	43.4	42.4	43.5	42.2	44.2	44.8	45.2
Mining and Quarrying	22.6	27.4	27.6	18.1	16.8	15.3	16.5	14.9	14.1	13.3	12.9	12.9
Manufacturing	49.0	48.8	50.0	49.5	47.6	44.9	43.9	45.1	44.0	47.6	48.3	48.7
Large Scale	40.3	39.5	40.8	39.9	38.7	35.9	34.1	36.0	34.2	38.6	39.4	39.2
Small Scale	69.6	71.8	72.1	72.4	70.7	70.3	69.8	70.1	70.6	68.9	69.3	69.8
Slaughtering	52.7	53.6	54.4	53.4	52.8	53.0	57.9	55.9	53.8	53.5	53.3	53.0
Construction	54.0	55.5	56.7	57.7	58.5	58.9	59.0	58.9	58.4	57.7	56.6	55.4
Electricity and Gas Distribution	37.3	38.9	40.1	41.7	43.9	47.9	44.4	45.1	42.1	39.5	39.4	39.4
SERVICES SECTOR	56.2	55.9	56.8	57.2	57.3	57.1	58.4	58.0	56.7	56.7	56.5	56.5
Transport, Storage and Communication	56.7	56.3	55.6	57.2	57.9	56.9	59.2	57.9	57.6	57.0	56.0	58.1
Wholesale and Retail Trade	55.0	53.6	56.2	56.1	56.1	56.3	59.1	58.5	56.6	56.8	55.7	55.2
Finance and Insurance	48.0	51.2	53.8	54.9	55.2	55.5	53.9	54.0	53.6	54.6	54.2	55.0
Ownership of Dwellings	56.8	56.8	54.9	54.7	55.0	55.1	59.1	58.5	57.0	56.7	56.2	53.4
Public Administration and Defence	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	55.9	57.2	55.4
Social and Community Services	61.0	61.3	61.5	61.4	61.4	60.7	59.9	60.8	58.1	58.0	58.6	58.8
GDP	55.5	55.5	56.1	56.1	55.6	55.3	55.8	55.7	54.4	54.9	54.5	54.9

Source: Given in Chapter 4.

Table S-2
Gross Regional Product by sector of Punjab at constant factor cost of 1999-2000
(Millions)

	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
AGRICULTURAL SECTOR	587,528	575,449	574,464	599,099	614,465	668,652	711,230	738,237	727,566	749,753	743,554	767,418
Major Crops	244,173	228,141	221,574	236,952	242,567	293,380	277,020	297,052	270,417	289,119	276,080	287,676
Minor Crops	69,845	66,323	65,555	66,810	68,570	68,564	68,109	69,287	75,691	72,863	68,281	71,569
Livestock	259,974	267,139	273,930	279,655	286,840	293,559	353,948	359,968	370,408	376,721	387,694	396,388
Fishing	3,625	3,094	3,182	3,333	3,485	3,625	3,906	4,268	4,489	4,559	4,729	4,904
Forestry	9,912	10,751	10,223	12,350	13,002	9,525	8,249	7,662	6,562	6,490	6,770	6,881
INDUSTRIAL SECTOR	373,575	398,120	419,214	428,023	481,399	523,538	533,436	595,120	585,664	612,287	672,896	677,210
Mining and Quarrying	18,304	23,408	24,975	17,478	18,677	18,706	21,109	19,677	19,483	18,267	18,079	18,155
Manufacturing	255,962	279,069	298,702	315,695	346,273	376,992	400,780	445,528	455,768	475,033	509,413	528,209
Large Scale	136,533	148,351	158,530	166,453	190,587	211,931	217,912	250,232	247,213	256,823	275,046	276,449
Small Scale	92,089	102,143	110,265	119,033	125,052	133,614	144,242	156,507	169,609	177,855	192,454	208,251
Slaughtering	27,340	28,575	29,907	30,209	30,634	31,448	38,626	38,789	38,946	40,356	41,913	43,509
Construction	47,174	48,740	50,636	53,571	48,408	57,815	63,852	79,180	74,211	65,086	82,118	80,919
Electricity and Gas Distribution	52,134	46,903	44,901	41,278	68,042	70,025	47,694	50,735	36,202	53,902	63,286	49,926
SERVICES SECTOR	1,015,268	1,042,551	1,108,795	1,174,113	1,246,570	1,346,275	1,465,758	1,559,063	1,613,686	1,642,694	1,682,562	1,751,612
Transport, Storage and Communication	227,206	237,730	237,699	254,808	267,100	271,511	293,445	300,874	310,483	318,383	321,520	337,568
Wholesale and Retail Trade	342,099	348,122	375,141	396,714	429,908	483,802	495,911	518,802	528,819	523,075	537,014	552,472
Finance and Insurance	63,617	57,550	70,943	71,401	78,301	103,001	142,979	164,456	181,237	170,742	150,456	143,068
Ownership of Dwellings	62,685	65,078	65,069	66,993	69,720	72,280	80,204	82,294	82,918	85,474	87,626	84,809
Public Administration and Defence	123,363	126,085	134,728	145,123	149,700	150,543	165,737	177,472	179,516	185,655	194,857	213,416
Social and Community Services	196,298	207,986	225,215	239,073	251,841	265,139	287,482	315,166	330,713	359,366	391,089	420,279
GDP	1,976,371	2,016,120	2,102,474	2,201,235	2,342,435	2,538,465	2,710,424	2,892,419	2,926,917	3,004,734	3,099,012	3,196,240

Source: Given in Chapter 4.

Table S-3
Sectoral Shares in GRP of Punjab

(Percentage)

	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
AGRICULTURAL SECTOR	29.7	28.5	27.3	27.2	26.2	26.3	26.2	25.5	24.9	25.0	24.0	24.0
Major Crops	12.4	11.3	10.5	10.8	10.4	11.6	10.2	10.3	9.2	9.6	8.9	9.0
Minor Crops	3.5	3.3	3.1	3.0	2.9	2.7	2.5	2.4	2.6	2.4	2.2	2.2
Livestock	13.2	13.3	13.0	12.7	12.2	11.6	13.1	12.4	12.7	12.5	12.5	12.4
Fishing	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Forestry	0.5	0.5	0.5	0.6	0.6	0.4	0.3	0.3	0.2	0.2	0.2	0.2
INDUSTRIAL SECTOR	18.9	19.7	19.9	19.4	20.6	20.6	19.7	20.6	20.0	20.4	21.7	21.2
Mining and Quarrying	0.9	1.2	1.2	0.8	0.8	0.7	0.8	0.7	0.7	0.6	0.6	0.6
Manufacturing	13.0	13.8	14.2	14.3	14.8	14.9	14.8	15.4	15.6	15.8	16.4	16.5
Large Scale	6.9	7.4	7.5	7.6	8.1	8.3	8.0	8.7	8.4	8.5	8.9	8.6
Small Scale	4.7	5.1	5.2	5.4	5.3	5.3	5.3	5.4	5.8	5.9	6.2	6.5
Slaughtering	1.4	1.4	1.4	1.4	1.3	1.2	1.4	1.3	1.3	1.3	1.4	1.4
Construction	2.4	2.4	2.4	2.4	2.1	2.3	2.4	2.7	2.5	2.2	2.6	2.5
Electricity and Gas Distribution	2.6	2.3	2.1	1.9	2.9	2.8	1.8	1.8	1.2	1.8	2.0	1.6
SERVICES SECTOR	51.4	51.7	52.7	53.3	53.2	53.0	54.1	53.9	55.1	54.7	54.3	54.8
Transport, Storage and Communication	11.5	11.8	11.3	11.6	11.4	10.7	10.8	10.4	10.6	10.6	10.4	10.6
Wholesale and Retail Trade	17.3	17.3	17.8	18.0	18.4	19.1	18.3	17.9	18.1	17.4	17.3	17.3
Finance and Insurance	3.2	2.9	3.4	3.2	3.3	4.1	5.3	5.7	6.2	5.7	4.9	4.5
Ownership of Dwellings	3.2	3.2	3.1	3.0	3.0	2.8	3.0	2.8	2.8	2.8	2.8	2.7
Public Administration and Defence	6.2	6.3	6.4	6.6	6.4	5.9	6.1	6.1	6.1	6.2	6.3	6.7
Social and Community Services	9.9	10.3	10.7	10.9	10.8	10.4	10.6	10.9	11.3	12.0	12.6	13.1
GDP	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Given in Chapter 4.

Table S-4
Real Growth Rates of Sectors of Punjab

(Percentage)

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
AGRICULTURAL SECTOR	-2.06	-0.17	4.29	2.56	8.82	6.37	3.80	-1.45	3.05	-0.83	3.21
Major Crops	-6.57	-2.88	6.94	2.37	20.95	-5.58	7.23	-8.97	6.92	-4.51	4.20
Minor Crops	-5.04	-1.16	1.91	2.63	-0.01	-0.66	1.73	9.24	-3.74	-6.29	4.81
Livestock	2.76	2.54	2.09	2.57	2.34	20.57	1.70	2.90	1.70	2.91	2.24
Fishing	-14.65	2.83	4.77	4.55	4.02	7.73	9.27	5.20	1.56	3.71	3.70
Forestry	8.47	-4.92	20.80	5.29	-26.74	-13.40	-7.12	-14.36	-1.09	4.31	1.65
INDUSTRIAL SECTOR	6.57	5.30	2.10	12.47	8.75	1.89	11.56	-1.59	4.55	9.90	0.64
Mining and Quarrying	27.88	6.70	-30.02	6.86	0.16	12.85	-6.79	-0.99	-6.24	-1.03	0.42
Manufacturing	9.03	7.04	5.69	9.69	8.87	6.31	11.17	2.30	4.23	7.24	3.69
Large Scale	8.66	6.86	5.00	14.50	11.20	2.82	14.83	-1.21	3.89	7.10	0.51
Small Scale	10.92	7.95	7.95	5.06	6.85	7.95	8.50	8.37	4.86	8.21	8.21
Slaughtering	4.52	4.66	1.01	1.41	2.66	22.83	0.42	0.41	3.62	3.86	3.81
Construction	3.32	3.89	5.80	-9.64	19.43	10.44	24.01	-6.28	-12.30	26.17	-1.46
Electricity and Gas Distribution	-10.04	-4.27	-8.07	64.84	2.91	-31.89	6.38	-28.65	48.89	17.41	-21.11
SERVICES SECTOR	2.69	6.35	5.89	6.17	8.00	8.88	6.37	3.50	1.80	2.43	4.10
Transport, Storage and Communication	4.63	-0.01	7.20	4.82	1.65	8.08	2.53	3.19	2.54	0.99	4.99
Wholesale and Retail Trade	1.76	7.76	5.75	8.37	12.54	2.50	4.62	1.93	-1.09	2.66	2.88
Finance and Insurance	-9.54	23.27	0.65	9.66	31.54	38.81	15.02	10.20	-5.79	-11.88	-4.91
Ownership of Dwellings	3.82	-0.01	2.96	4.07	3.67	10.96	2.61	0.76	3.08	2.52	-3.21
Public Administration and Defence	2.21	6.85	7.72	3.15	0.56	10.09	7.08	1.15	3.42	4.96	9.52
Social and Community Services	5.95	8.28	6.15	5.34	5.28	8.43	9.63	4.93	8.66	8.83	7.46
GDP	2.01	4.28	4.70	6.41	8.37	6.77	6.71	1.19	2.66	3.14	3.14

Source: Given in Chapter 4.

Table S-5
Gross Regional Product by Sector of Punjab at Current factor Cost

(Millions)

Current	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
AGRICULTURE	587,528	601,772	613,140	674,681	745,244	856,469	941,583	1,082,211	1,274,386	1,648,671	1,854,102	2,385,152
Major Crops	244,173	240,792	233,316	272,779	305,445	379,093	347,600	407,194	486,486	703,969	761,061	1,087,827
Minor Crops	69,845	71,232	74,458	72,965	69,813	83,923	90,732	101,860	115,293	126,148	141,758	196,371
Livestock	259,974	275,153	290,612	311,526	350,077	376,075	483,139	549,744	647,584	789,495	919,338	1,065,056
Fishing	3,625	3,479	4,039	4,153	4,283	4,631	7,200	9,543	11,289	12,728	13,196	13,662
Forestry	9,912	11,116	10,714	13,258	15,625	12,746	12,913	13,870	13,734	16,330	18,750	22,237
INDUSTRIAL SECTOR	373,575	427,481	460,636	489,346	610,811	709,005	794,341	933,349	1,073,703	1,272,401	1,538,189	1,854,556
Mining and Quarrying	18,305	29,112	32,300	24,843	34,898	27,772	36,148	37,573	42,547	46,071	47,810	55,624
Manufacturing	255,962	294,024	320,472	355,959	424,726	501,264	583,932	686,723	817,637	944,138	1,146,252	1,450,729
Large Scale	136,533	162,248	172,892	192,170	240,597	292,253	341,752	413,609	501,249	580,163	712,947	909,655
Small Scale	92,089	102,970	116,562	127,750	141,871	156,141	171,677	196,150	236,334	272,118	311,971	380,182
Slaughtering	27,340	28,805	31,018	36,040	42,258	52,870	70,504	76,965	80,054	91,857	121,334	160,891
Construction	47,174	52,527	54,015	58,243	67,510	90,284	106,160	132,563	152,037	170,083	199,670	219,656
Electricity and Gas Distribution	52,134	51,818	53,849	50,301	83,677	89,686	68,100	76,490	61,482	112,109	144,458	128,547
SERVICES SECTOR	1,015,268	1,138,941	1,242,150	1,366,701	1,530,895	1,797,043	2,207,234	2,515,576	2,975,648	3,691,652	4,236,181	5,134,570
Transport, Storage and Communication	227,206	288,859	301,967	348,814	391,217	432,277	537,356	586,245	665,457	904,901	1,034,247	1,238,380
Wholesale and Retail Trade	342,099	370,786	405,034	440,503	502,614	615,877	746,446	843,014	1,035,836	1,194,655	1,373,708	1,720,631
Finance and Insurance	63,617	59,874	76,684	79,584	91,259	131,182	196,525	241,553	298,152	339,230	333,982	357,268
Ownership of Dwellings	62,685	70,624	69,376	73,926	80,445	91,134	109,135	120,681	136,188	169,546	194,204	214,652
Public Administration and Defence	123,363	131,622	145,624	160,078	174,779	192,275	226,592	261,904	296,841	370,475	433,275	539,924
Social and Community Services	196,298	217,175	243,465	263,796	290,580	334,299	391,181	462,180	543,174	712,845	866,765	1,063,715
GDP PUNJAB	1,976,372	2,168,194	2,315,927	2,530,728	2,886,950	3,362,518	3,943,158	4,531,136	5,323,737	6,612,723	7,628,472	9,374,279

Source: Given in Chapter 4.

Punjab Per Capita GDP

Punjab	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Per Capita GDP (Rs.)	24,843	26,772	28,091	30,153	33,788	38,658	44,576	50,365	58,186	71,067	80,589	97,492
Per Capita GDP (\$)	480	458	457	515	587	651	745	831	930	905	962	1,140

Source: Given in Chapter 4.

Table S-6
Sectoral Share in Current GRP of Punjab

(Percentage)

	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
AGRICULTURAL SECTOR	29.7	27.8	26.5	26.7	25.8	25.5	23.9	23.9	23.9	24.9	24.3	25.4
Major Crops	12.4	11.1	10.1	10.8	10.6	11.3	8.8	9.0	9.1	10.6	10.0	11.6
Minor Crops	3.5	3.3	3.2	2.9	2.4	2.5	2.3	2.2	2.2	1.9	1.9	2.1
Livestock	13.2	12.7	12.5	12.3	12.1	11.2	12.3	12.1	12.2	11.9	12.1	11.4
Fishing	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1
Forestry	0.5	0.5	0.5	0.5	0.5	0.4	0.3	0.3	0.3	0.2	0.2	0.2
INDUSTRIAL SECTOR	18.9	19.7	19.9	19.3	21.2	21.1	20.1	20.6	20.2	19.2	20.2	19.8
Mining and Quarrying	0.9	1.3	1.4	1.0	1.2	0.8	0.9	0.8	0.8	0.7	0.6	0.6
Manufacturing	13.0	13.6	13.8	14.1	14.7	14.9	14.8	15.2	15.4	14.3	15.0	15.5
Large Scale	6.9	7.5	7.5	7.6	8.3	8.7	8.7	9.1	9.4	8.8	9.3	9.7
Small Scale	4.7	4.7	5.0	5.0	4.9	4.6	4.4	4.3	4.4	4.1	4.1	4.1
Slaughtering	1.4	1.3	1.3	1.4	1.5	1.6	1.8	1.7	1.5	1.4	1.6	1.7
Construction	2.4	2.4	2.3	2.3	2.3	2.7	2.7	2.9	2.9	2.6	2.6	2.3
Electricity and Gas Distribution	2.6	2.4	2.3	2.0	2.9	2.7	1.7	1.7	1.2	1.7	1.9	1.4
SERVICES SECTOR	51.4	52.5	53.6	54.0	53.0	53.4	56.0	55.5	55.9	55.8	55.5	54.8
Transport, Storage and Communication	11.5	13.3	13.0	13.8	13.6	12.9	13.6	12.9	12.5	13.7	13.6	13.2
Wholesale and Retail Trade	17.3	17.1	17.5	17.4	17.4	18.3	18.9	18.6	19.5	18.1	18.0	18.4
Finance and Insurance	3.2	2.8	3.3	3.1	3.2	3.9	5.0	5.3	5.6	5.1	4.4	3.8
Ownership of Dwellings	3.2	3.3	3.0	2.9	2.8	2.7	2.8	2.7	2.6	2.6	2.5	2.3
Public Administration and Defence	6.2	6.1	6.3	6.3	6.1	5.7	5.7	5.8	5.6	5.6	5.7	5.8
Social and Community Services	9.9	10.0	10.5	10.4	10.1	9.9	9.9	10.2	10.2	10.8	11.4	11.3
GDP PUNJAB	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Given in Chapter 4.

Table S-7
Share of Rest of Pakistan in the National Economy in Different Sectors

(Percentage)

	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
AGRICULTURAL SECTOR	36.4	36.3	36.5	36.4	36.3	34.9	34.9	35.1	36.7	37.3	38.1	36.9
Major Crops	28.6	26.0	26.4	26.3	25.8	23.8	25.1	25.5	27.5	28.1	29.7	23.7
Minor Crops	44.4	45.5	44.1	44.1	44.8	45.6	46.1	44.7	45.5	46.9	46.0	46.0
Livestock	37.7	38.3	39.0	39.3	39.5	39.5	37.0	37.7	38.4	39.3	40.1	40.9
Fishing	76.1	79.0	75.3	75.0	74.4	73.5	76.4	77.6	78.5	78.6	78.1	77.8
Forestry	57.7	58.0	58.2	54.5	50.5	46.4	53.1	54.1	54.9	54.0	53.0	52.0
INDUSTRIAL SECTOR	55.0	54.0	52.8	53.8	55.3	56.6	57.6	56.5	57.8	55.8	55.2	54.8
Mining and Quarrying	77.4	72.6	72.4	81.9	83.2	84.7	83.5	85.1	85.9	86.7	87.1	87.1
Manufacturing	51.0	51.2	50.0	50.5	52.4	55.1	56.1	54.9	56.0	52.4	51.7	51.3
Large Scale	59.7	60.5	59.2	60.1	61.3	64.1	65.9	64.0	65.8	61.4	60.6	60.8
Small Scale	30.4	28.2	27.9	27.6	29.3	29.7	30.2	29.9	29.4	31.1	30.7	30.2
Slaughtering	47.3	46.4	45.6	46.6	47.2	47.0	42.1	44.1	46.2	46.5	46.7	47.0
Construction	46.0	44.5	43.3	42.3	41.5	41.1	41.0	41.1	41.6	42.3	43.4	44.6
Electricity and Gas Distribution	62.7	61.1	59.9	58.3	56.1	52.1	55.6	54.9	57.9	60.5	60.6	60.6
SERVICES SECTOR	43.8	44.1	43.2	42.8	42.7	42.9	41.6	42.0	43.3	43.3	43.5	43.5
Transport, Storage and Communication	43.3	43.7	44.4	42.8	42.1	43.1	40.8	42.1	42.4	43.0	44.0	41.9
Wholesale and Retail Trade	45.0	46.4	43.8	43.9	43.9	43.7	40.9	41.5	43.4	43.2	44.3	44.8
Finance and Insurance	52.0	48.8	46.2	45.1	44.8	44.5	46.1	46.0	46.4	45.4	45.8	45.0
Ownership of Dwellings	43.2	43.2	45.1	45.3	45.0	44.9	40.9	41.5	43.0	43.3	43.8	46.6
Public Administration and Defence	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.1	42.8	44.6
Social and Community Services	39.0	38.7	38.5	38.6	38.6	39.3	40.1	39.2	41.9	42.0	41.4	41.2
GDP	44.5	44.5	43.9	43.9	44.4	44.7	44.2	44.3	45.6	45.1	45.5	45.1

Source: Given in Chapter 4.

Table S-8
Gross Regional Product by sector of Rest of Pakistan at constant factor cost of 1999-2000

(Millions)

	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
AGRICULTURE	336,081	328,050	329,969	342,843	350,388	358,751	380,868	398,800	421,285	445,249	458,391	449,105
Major Crops	98,027	80,333	79,337	84,553	84,490	91,678	92,985	101,565	102,771	113,016	116,571	89,146
Minor Crops	55,834	55,350	51,662	52,636	55,551	57,429	58,348	55,956	63,196	64,338	58,200	61,002
Livestock	157,146	165,927	175,038	180,840	186,931	191,317	207,552	217,432	231,000	243,532	259,089	274,355
Fishing	11,538	11,621	9,719	10,013	10,126	10,066	12,634	14,812	16,345	16,760	16,897	17,137
Forestry	13,535	14,820	14,213	14,800	13,291	8,260	9,347	9,035	7,972	7,604	7,634	7,465
INDUSTRIAL SECTOR	457,288	467,076	469,325	498,160	595,409	683,730	723,391	772,412	801,453	773,382	827,449	822,150
Mining and Quarrying	62,746	62,120	65,456	78,940	92,796	103,915	107,179	112,577	118,564	119,081	122,299	122,816
Manufacturing	266,839	292,288	298,139	322,349	381,166	463,251	512,173	542,773	580,333	523,813	544,863	557,231
Large Scale	202,069	227,336	230,329	250,502	302,045	378,828	421,673	445,257	476,413	408,462	423,016	428,487
Small Scale	40,280	40,167	42,732	45,454	51,789	56,507	62,414	66,858	70,530	80,318	85,108	90,156
Slaughtering	24,490	24,785	25,078	26,393	27,332	27,915	28,086	30,658	33,390	35,032	36,739	38,588
Construction	40,212	39,106	38,605	39,218	34,410	40,375	44,343	55,356	52,865	47,798	62,867	65,250
Electricity and Gas Distribution	87,492	73,562	67,125	57,654	87,036	76,189	59,697	61,706	49,691	82,689	97,420	76,854
SERVICES SECTOR	792,278	820,845	843,351	879,866	927,377	1,012,284	1,045,793	1,128,077	1,233,358	1,252,348	1,296,679	1,349,911
Transport, Storage and Communication	173,777	184,465	189,597	190,744	194,176	205,660	202,628	218,612	228,814	240,320	252,581	243,820
Wholesale and Retail Trade	279,743	301,442	292,474	310,951	336,785	374,893	342,515	368,492	405,412	398,300	426,354	448,005
Finance and Insurance	68,837	54,905	60,818	58,680	63,467	82,500	122,077	140,058	157,149	142,076	127,099	117,104
Ownership of Dwellings	47,740	49,515	53,535	55,473	57,044	58,934	55,616	58,293	62,603	65,155	68,290	73,898
Public Administration and Defence	96,928	99,067	105,857	114,025	117,621	118,283	130,222	139,443	141,049	146,453	145,651	172,090
Social and Community Services	125,253	131,451	141,070	149,994	158,284	172,013	192,735	203,178	238,331	260,043	276,704	294,994
GDP	1,585,647	1,615,971	1,642,644	1,720,869	1,873,173	2,054,765	2,150,052	2,299,290	2,456,095	2,470,979	2,582,519	2,621,166

Source: Given in Chapter 4.

Table S-9
Sectoral shares in GRP of Rest of Pakistan

(Percentage)

	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
AGRICULTURAL SECTOR	21.2	20.3	20.1	19.9	18.7	17.5	17.7	17.3	17.2	18.0	17.7	17.1
Major Crops	6.2	5.0	4.8	4.9	4.5	4.5	4.3	4.4	4.2	4.6	4.5	3.4
Minor Crops	3.5	3.4	3.1	3.1	3.0	2.8	2.7	2.4	2.6	2.6	2.3	2.3
Livestock	9.9	10.3	10.7	10.5	10.0	9.3	9.7	9.5	9.4	9.9	10.0	10.5
Fishing	0.7	0.7	0.6	0.6	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.7
Forestry	0.9	0.9	0.9	0.9	0.7	0.4	0.4	0.4	0.3	0.3	0.3	0.3
INDUSTRIAL SECTOR	28.8	28.9	28.6	28.9	31.8	33.3	33.6	33.6	32.6	31.3	32.0	31.4
Mining and Quarrying	4.0	3.8	4.0	4.6	5.0	5.1	5.0	4.9	4.8	4.8	4.7	4.7
Manufacturing	16.8	18.1	18.1	18.7	20.3	22.5	23.8	23.6	23.6	21.2	21.1	21.3
Large Scale	12.7	14.1	14.0	14.6	16.1	18.4	19.6	19.4	19.4	16.5	16.4	16.3
Small Scale	2.5	2.5	2.6	2.6	2.8	2.8	2.9	2.9	2.9	3.3	3.3	3.4
Slaughtering	1.5	1.5	1.5	1.5	1.5	1.4	1.3	1.3	1.4	1.4	1.4	1.5
Construction	2.5	2.4	2.4	2.3	1.8	2.0	2.1	2.4	2.2	1.9	2.4	2.5
Electricity and Gas Distribution	5.5	4.6	4.1	3.4	4.6	3.7	2.8	2.7	2.0	3.3	3.8	2.9
SERVICES SECTOR	50.0	50.8	51.3	51.1	49.5	49.3	48.6	49.1	50.2	50.7	50.2	51.5
Transport, Storage and Communication	11.0	11.4	11.5	11.1	10.4	10.0	9.4	9.5	9.3	9.7	9.8	9.3
Wholesale and Retail Trade	17.6	18.7	17.8	18.1	18.0	18.2	15.9	16.0	16.5	16.1	16.5	17.1
Finance and Insurance	4.3	3.4	3.7	3.4	3.4	4.0	5.7	6.1	6.4	5.7	4.9	4.5
Ownership of Dwellings	3.0	3.1	3.3	3.2	3.0	2.9	2.6	2.5	2.5	2.6	2.6	2.8
Public Administration and Defence	6.1	6.1	6.4	6.6	6.3	5.8	6.1	6.1	5.7	5.9	5.6	6.6
Social and Community Services	7.9	8.1	8.6	8.7	8.5	8.4	9.0	8.8	9.7	10.5	10.7	11.3
GDP	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Given in Chapter 4.

Table S-10
Real Growth Rates of Sectors of Rest of Pakistan

(Percentage)

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
AGRICULTURE SECTOR	-2.39	0.58	3.90	2.20	2.39	6.17	4.71	5.64	5.69	2.95	-2.03
Major Crops	-18.05	-1.24	6.58	-0.08	8.51	1.43	9.23	1.19	9.97	3.15	-23.53
Minor Crops	-0.87	-6.66	1.89	5.54	3.38	1.60	-4.10	12.94	1.81	-9.54	4.81
Livestock	5.59	5.49	3.31	3.37	2.35	8.49	4.76	6.24	5.42	6.39	5.89
Fishing	0.72	-16.36	3.02	1.13	-0.59	25.52	17.24	10.34	2.54	0.82	1.42
Forestry	9.49	-4.09	4.13	-10.20	-37.85	13.16	-3.34	-11.76	-4.62	0.40	-2.22
INDUSTRIAL SECTOR	2.14	0.48	6.14	19.52	14.83	5.80	6.78	3.76	-3.50	6.99	-0.64
Mining and Quarrying	-1.00	5.37	20.60	17.55	11.98	3.14	5.04	5.32	0.44	2.70	0.42
Manufacturing	9.54	2.00	8.12	18.25	21.54	10.56	5.97	6.92	-9.74	4.02	2.27
Large Scale	12.50	1.32	8.76	20.58	25.42	11.31	5.59	7.00	-14.26	3.56	1.29
Small Scale	-0.28	6.39	6.37	13.94	9.11	10.45	7.12	5.49	13.88	5.96	5.93
Slaughtering	1.20	1.18	5.25	3.56	2.13	0.61	9.16	8.91	4.92	4.87	5.03
Construction	-2.75	-1.28	1.59	-12.26	17.34	9.83	24.84	-4.50	-9.58	31.53	3.79
Electricity and Gas Distribution	-15.92	-8.75	-14.11	50.96	-12.46	-21.65	3.37	-19.47	66.41	17.81	-21.11
SERVICES SECTOR	3.61	2.74	4.33	5.40	9.16	3.31	7.87	9.33	1.54	3.54	4.11
Transport, Storage and Communication	6.15	2.78	0.60	1.80	5.91	-1.47	7.89	4.67	5.03	5.10	-3.47
Wholesale and Retail Trade	7.76	-2.98	6.32	8.31	11.32	-8.64	7.58	10.02	-1.75	7.04	5.08
Finance and Insurance	-20.24	10.77	-3.52	8.16	29.99	47.97	14.73	12.20	-9.59	-10.54	-7.86
Ownership of Dwellings	3.72	8.12	3.62	2.83	3.31	-5.63	4.81	7.39	4.08	4.81	8.21
Public Administration and Defence	2.21	6.85	7.72	3.15	0.56	10.09	7.08	1.15	3.83	-0.55	18.15
Social and Community Services	4.95	7.32	6.33	5.53	8.67	12.05	5.42	17.30	9.11	6.41	6.61
GDP	1.91	1.65	4.76	8.85	9.69	4.64	6.94	6.82	0.61	4.51	1.50

Source: Given in Chapter 4.

Table S-11
Gross Regional Product by Sector of Rest of Pakistan at Current Factor Cost

(Millions)

Current Factor Cost	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
AGRICULTURE	336,081	343,529	355,151	384,635	419,507	457,765	515,639	603,029	742,795	962,855	1,124,848	1,313,506
Major Crops	98,027	84,787	83,541	97,338	106,391	118,463	116,676	139,224	184,888	275,179	321,347	337,100
Minor Crops	55,834	59,447	58,678	57,485	56,559	70,295	77,729	82,261	96,260	111,388	120,828	167,378
Livestock	157,146	170,905	185,698	201,450	228,141	245,095	283,309	332,062	403,858	510,370	614,378	737,165
Fishing	11,538	13,067	12,338	12,472	12,445	12,859	23,292	33,125	41,102	46,786	47,151	47,741
Forestry	13,535	15,323	14,897	15,890	15,972	11,054	14,632	16,357	16,687	19,133	21,143	24,121
INDUSTRIAL SECTOR	457,290	514,782	528,713	594,568	806,175	950,280	1,129,357	1,281,263	1,584,502	1,722,574	2,039,470	2,468,501
Mining and Quarrying	62,747	77,258	84,652	112,201	173,392	154,279	183,534	214,968	258,922	300,341	323,423	376,283
Manufacturing	266,839	314,108	322,378	369,475	477,760	635,370	786,861	880,590	1,132,885	1,125,344	1,340,817	1,717,218
Large Scale	202,069	248,631	251,197	289,204	381,302	522,404	661,310	735,964	965,976	922,716	1,096,499	1,409,935
Small Scale	40,280	40,493	45,172	48,782	58,755	66,035	74,285	83,793	98,276	122,887	137,962	164,589
Slaughtering	24,490	24,985	26,009	31,488	37,703	46,931	51,265	60,832	68,633	79,741	106,356	142,695
Construction	40,212	42,143	41,182	42,637	47,987	63,049	73,725	92,676	108,303	124,907	152,860	177,121
Electricity and Gas Distribution	87,492	81,273	80,501	70,255	107,036	97,581	85,238	93,029	84,392	171,982	222,369	197,879
SERVICES SECTOR	792,278	896,739	946,377	1,024,287	1,137,895	1,352,006	1,570,373	1,819,671	2,270,550	2,812,309	3,273,725	3,951,202
Transport, Storage and Communication	173,777	224,138	240,861	261,115	284,406	327,434	371,053	425,961	490,416	683,033	812,488	894,464
Wholesale and Retail Trade	279,743	321,068	315,778	345,273	393,743	477,237	515,555	598,772	794,108	909,682	1,090,634	1,395,275
Finance and Insurance	68,837	57,123	65,740	65,405	73,971	105,072	167,795	205,717	258,527	282,278	282,134	292,433
Ownership of Dwellings	47,740	53,735	57,078	61,213	65,819	74,307	75,677	85,485	102,822	129,243	151,351	187,035
Public Administration and Defence	96,928	103,417	114,418	125,776	137,326	151,073	178,036	205,781	233,233	292,248	323,865	435,372
Social and Community Services	125,253	137,259	152,502	165,505	182,631	216,882	262,256	297,954	391,444	515,825	613,253	746,623
GDP REST	1,585,649	1,755,050	1,830,240	2,003,490	2,363,577	2,760,050	3,215,369	3,703,963	4,597,847	5,497,739	6,438,043	7,733,208

Source: Given in Chapter 4.

Rest of Pakistan Per Capita GDP

	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Per Capita GDP (Rs.)	27,378	29,565	30,072	32,116	36,963	42,113	47,798	53,654	64,831	75,506	86,201	100,830
Per Capita GDP (\$)	529	506	490	549	642	709	798	885	1,036	962	1,029	1,179

Source: Given in Chapter 4.

Table S-12
Sectoral Share in Current GRP of Rest of Pakistan

(Percentage)

Current Factor Cost	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
AGRICULTURAL SECTOR	21.2	19.6	19.4	19.2	17.7	16.6	16.0	16.3	16.2	17.5	17.5	17.0
Major Crops	6.2	4.8	4.6	4.9	4.5	4.3	3.6	3.8	4.0	5.0	5.0	4.4
Minor Crops	3.5	3.4	3.2	2.9	2.4	2.5	2.4	2.2	2.1	2.0	1.9	2.2
Livestock	9.9	9.7	10.1	10.1	9.7	8.9	8.8	9.0	8.8	9.3	9.5	9.5
Fishing	0.7	0.7	0.7	0.6	0.5	0.5	0.7	0.9	0.9	0.9	0.7	0.6
Forestry	0.9	0.9	0.8	0.8	0.7	0.4	0.5	0.4	0.4	0.3	0.3	0.3
INDUSTRIAL SECTOR	28.8	29.3	28.9	29.7	34.1	34.4	35.1	34.6	34.5	31.3	31.7	31.9
Mining and Quarrying	4.0	4.4	4.6	5.6	7.3	5.6	5.7	5.8	5.6	5.5	5.0	4.9
Manufacturing	16.8	17.9	17.6	18.4	20.2	23.0	24.5	23.8	24.6	20.5	20.8	22.2
Large Scale	12.7	14.2	13.7	14.4	16.1	18.9	20.6	19.9	21.0	16.8	17.0	18.2
Small Scale	2.5	2.3	2.5	2.4	2.5	2.4	2.3	2.3	2.1	2.2	2.1	2.1
Slaughtering	1.5	1.4	1.4	1.6	1.6	1.7	1.6	1.6	1.5	1.5	1.7	1.8
Construction	2.5	2.4	2.3	2.1	2.0	2.3	2.3	2.5	2.4	2.3	2.4	2.3
Electricity and Gas Distribution	5.5	4.6	4.4	3.5	4.5	3.5	2.7	2.5	1.8	3.1	3.5	2.6
SERVICES SECTOR	51.4	52.5	53.6	54.0	53.0	53.4	56.0	55.5	55.9	55.8	55.5	54.8
Transport, Storage and Communication	11.0	12.8	13.2	13.0	12.0	11.9	11.5	11.5	10.7	12.4	12.6	11.6
Wholesale and Retail Trade	17.6	18.3	17.3	17.2	16.7	17.3	16.0	16.2	17.3	16.5	16.9	18.0
Finance and Insurance	4.3	3.3	3.6	3.3	3.1	3.8	5.2	5.6	5.6	5.1	4.4	3.8
Ownership of Dwellings	3.0	3.1	3.1	3.1	2.8	2.7	2.4	2.3	2.2	2.4	2.4	2.4
Public Admn. and Defence	6.1	5.9	6.3	6.3	5.8	5.5	5.5	5.6	5.1	5.3	5.0	5.6
Social and Community Services	7.9	7.8	8.3	8.3	7.7	7.9	8.2	8.0	8.5	9.4	9.5	9.7
GDP REST	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Given in Chapter 4.

Statistical Appendix - 2

Key Indicators

Table A-1
Level and Pattern of Growth

	GDP Growth Rate (%)	Incremental Capital Output Ratio	Volatility of Growth ^a (%)	Extent of Balanced Growth ^b	Relative Growth Rate of Labor Intensive Sectors ^c
2000-01	2.0	9.05	-2.2	7.18	0.78
2001-02	3.1	5.59	-0.2	4.79	1.01
2002-03	4.7	3.72	1.4	4.04	1.68
2003-04	7.5	2.10	3.9	13.27	0.16
2004-05	9.0	1.86	4.8	9.09	0.72
2005-06	5.8	3.15	0.5	11.83	0.72
2006-07	6.8	2.88	0.8	4.85	0.82
2007-08	3.7	5.18	-3.1	4.07	1.22
2008-09	1.7	9.42	-4.9	4.60	n.c
2009-10	3.8	3.98	-1.6	4.93	1.98
2010-11	2.4	6.01	-2.0	5.08	n.c
Average	4.6	4.81	-0.2	6.70	1.01

n.c. = not computed

Source: Pakistan Economic Survey (various issues)

^a Difference in the growth rate of GDP during a year minus the trend growth rate (as approximated by the average growth rate during the previous five years)

^b Computed as the weighted (share of value added in 1999-2000) standard deviation of the growth rates of individual sectors during a particular year. The larger the magnitude of this indicator the less the extent of balanced growth

^c Labor-intensive sectors of the economy are identified as agriculture, small scale manufacturing, construction, whole sale and retail trade, public administration and defence and social services

Table A-2
Level and Pattern of Investment

	Gross Domestic Capital Formation (% of GDP)	National Savings as % of Investment (%)	Private Investment as % of Total Fixed Investment (%)	Share of Private Investment in Labor Intensive Sectors (%)
1999-2000	17.4	91.0	65.0	40.3
2000-01	17.2	95.8	64.0	37.5
2001-02	16.8	110.7	72.7	33.7
2002-03	16.9	123.1	73.8	31.6
2003-04	16.6	108.0	72.4	34.4
2004-05	19.1	91.5	74.3	36.0
2005-06	22.1	82.3	75.6	30.5
2006-07	22.5	77.7	72.0	31.4
2007-08	22.1	61.5	73.2	36.0
2008-09	18.2	68.7	74.0	41.8
2009-10	15.4	85.1	73.9	46.9
2010-11	13.4	103.0	72.3	50.8
Average	18.1	91.5	72.3	37.6

Source: Pakistan Economic Survey (various issues)

Table A-3
Agricultural Growth and Profitability

	Growth Rate (%)	Share of Growth in Crop Sector (%)	Volatility in Agriculture Growth ^a (%)	Change in Ratio of Output Prices to Fertilizer Prices (%)	Change in Agriculture Terms of Trade with Manufacturing (%)
1999-2000	n.a.	n.a.	1.1	6.6	n.a.
2000-01	-2.2	n.c.	-7.1	-3.1	4.6
2001-02	0.1	n.c.	-2.0	-5.4	0.0
2002-03	4.1	60.8	2.0	-0.7	-0.8
2003-04	2.4	44.6	0.4	0.4	0.2
2004-05	6.5	95.7	4.4	-4.5	-2.1
2005-06	6.3	n.c.	4.1	-4.9	-8.0
2006-07	4.1	61.0	0.2	13.7	6.4
2007-08	1.0	n.c.	-3.7	-18.8	-0.2
2008-09	4.0	59.1	-0.1	-6.6	14.4
2009-10	0.6	n.c.	-3.8	15.5	-0.4
2010-11	1.2	n.c.	-2.0	-6.9	-1.0
Average	2.6	n.c.	-0.5	-1.3	1.2

n.c. = not computed, n.a. = not available

Source: Pakistan Economic Survey (various issues)

^aThe difference in the growth rate of agriculture during a year minus the trend growth rate (as approximated by the average growth rate during the previous five years)

Table A-4
Level and Pattern of Manufacturing Growth

	Growth Rate (%)	Growth Rate of Export Oriented Industries (%)	Growth Rate of Import Substituting Industries (%)	Share of Growth in Large-Scale Manufacturing (%)	Growth Rate of Manufactured Exports (%)
1999-2000	1.5				
2000-01	9.3	27.6	4.6	76.3	6.2
2001-02	4.5	9.7	3.1	52.0	1.5
2002-03	6.9	4.3	7.6	68.2	22.2
2003-04	14.0	8.0	15.5	84.6	11.6
2004-05	15.5	26.5	12.7	87.0	15.6
2005-06	8.7	5.9	11.1	75.2	14.4
2006-07	8.3	9.9	7.5	74.3	3.4
2007-08	4.8	12.8	2.3	58.9	12.2
2008-09	-3.6	4.3	-2.4	n.c.	3.3
2009-10	5.5	6.5	14.8	59.1	0.4
2010-11	3.0	4.7	3.8	22.1	20.3
Average	6.5	10.9	7.3	65.8	10.1

n.c. = not computed

Source: Pakistan Economic Survey (various issues)

SBP, Annual Report (various issues)

Table A-5
Growth in Employment by Sector

	Employment (000)						2001-02 to 2010-11		
							Employment	Value Added	Employment
	2001-02	2005-06	2006-07	2007-08	2009-10	2010-11	Growth Rate (%)	Growth Rate (%)	
Agriculture	20474	19075	20775	21894	23945	24228	1.9	3.3	0.58
Manufacturing and Mining	4982	5421	6433	6382	7024	7376	4.5	7.3	0.62
Electricity and Gas	299	296	n.a	n.a	n.a	n.a	-0.3	3.9	-0.07
Construction	2757	3579	3145	3093	3565	3769	3.5	5.6	0.63
Wholesale and Retail Trade	5090	6635	6862	7167	8673	8722	6.2	4.6	1.35
Transport and Communication	2216	2452	2573	2700	2820	2746	2.4	3.5	0.69
Finance and Insurance	247	491	n.a	n.a	n.a	n.a	18.7	17.9	1.05
Public Administration and Community Services	7151	8405	6862	6725	5960	5815	-2.3	6.8	-0.34
Total	43286	46365	47650	49090	53210	53840	2.5	4.9	0.51

n.a = not available

Source: Labour Force Survey, PBS (various issues)
Pakistan Economic Survey (various issues)

Table A-6
Inflationary Trends

	Rate of Inflation (Consumer Prices) (%)	Rate of Inflation (Food Prices) (%)	Core Rate of Inflation (Non-Food Non-energy) (%)	Rate of Inflation in Import Prices (%)	Rate of Monetary Expansion less GDP Growth (%)
1999-2000	3.6	-	n.a	16.0	5.5
2000-01	4.4	3.6	n.a	15.2	7.2
2001-02	2.5	2.5	n.a	0.0	12.3
2002-03	3.1	2.8	n.a	3.7	13.3
2003-04	4.6	6.0	3.9	14.8	12.1
2004-05	9.3	12.5	8.8	10.4	10.1
2005-06	7.9	6.9	7.0	17.3	9.3
2006-07	7.8	10.3	6.9	7.6	12.5
2007-08	12.0	17.6	10.2	27.7	11.4
2008-09	20.8	23.7	19.2	25.1	7.9
2009-10	11.7	12.5	11.6	6.2	8.7
2010-11	13.7	18.0	9.4	20.7	13.5
Average	8.5	10.6	9.6	13.7	10.3

n.a = not available

Source: Pakistan Economic Survey (various issues)
SBP, Annual Report (various issues)
IMF

Table A-7
Fiscal Policy

(Percentage of GDP)

	Revenues ^a	Expenditure ^b	Non-Interest Current Expenditure ^c	Budget Balance ^d	Revenue Deficit/Surplus ^e
1999-2000	13.4	18.5	9.5	-4.6	-3.0
2000-01	13.1	17.1	9.4	-4.3	-2.2
2001-02	14.0	18.6	9.6	-5.5	-1.7
2002-03	14.8	18.4	11.4	-3.8	-1.5
2003-04	14.1	16.9	9.5	-2.3	0.3
2004-05	13.8	17.2	9.9	-3.3	0.5
2005-06	14.1	18.4	10.2	-4.3	0.5
2006-07	14.9	19.3	11.3	-4.3	-0.9
2007-08	14.6	22.2	13.1	-7.6	-3.5
2008-09	14.5	19.9	10.9	-5.3	-1.5
2009-10	14.2	20.5	11.7	-6.3	-2.1
2010-11	12.5	19.1	12.2	-6.6	-3.6
Average	14.0	18.8	10.7	-4.9	-1.6

Source: Pakistan Economic Survey (various issues)

SBP, Annual Reports (various issues)

Moff, Fiscal Operations

^a Total revenues of federal and provincial governments^b Revenue and development expenditure of federal and provincial governments^c Current expenditure minus interest payments^d Total revenue minus total expenditure^e Revenue receipts minus current expenditure of federal and provincial governments

Table A-8
Fiscal Policy

	Primary Balance ^a (% of GDP)	Total Government Debt ^b (% of GDP)	Effective Interest Rate on Domestic Debt ^c (%)	% of Deficit Financed by Bank Borrowing (%)
1999-2000	n.a	83.7	14.1	19.3
2000-01	1.3	88.8	11.3	-18.4
2001-02	0.1	81.4	12.4	7.4
2002-03	0.4	74.5	10.2	-30.5
2003-04	1.2	67.8	9.4	47.4
2004-05	0.0	62.9	8.5	27.7
2005-06	-1.2	57.3	10.2	21.8
2006-07	-0.1	55.4	13.8	37.5
2007-08	-2.6	59.0	13.7	80.5
2008-09	-0.2	60.0	12.9	54.2
2009-10	-1.9	60.1	12.4	32.8
2010-11	-2.7	59.3	10.5	51.5
Average	-0.5	67.5	11.6	27.6

n.a = not available

Source: Pakistan Economic Survey (various issues)

SBP, Annual Reports (various issues)

Ministry of Finance, Fiscal Operations

^a Estimated as revenue receipts minus total expenditure net of interest payments^b Includes domestic and external debt^c Defined as the ratio of domestic interest payment to outstanding domestic debt

Table A-9
Effective Tax Rates

(Tax Revenues as percentage of Tax Base^a)

	Income Tax (%)	Customs Duty (%)	Excise Duty (%)	Sales Tax (%)	Total FBR Taxes (%)
1999-2000	4.3	19.1	6.4	11.6	9.1
2000-01	4.2	17.8	4.7	13.1	9.3
2001-02	4.5	12.0	4.3	14.1	9.1
2002-03	4.4	14.8	3.6	14.8	9.4
2003-04	4.0	14.3	3.1	12.7	9.2
2004-05	3.8	11.2	2.9	10.0	9.1
2005-06	3.9	12.1	2.4	10.3	9.4
2006-07	5.0	10.5	2.7	9.9	9.7
2007-08	4.9	7.6	2.9	10.0	9.8
2008-09	4.6	6.0	5.7	9.9	9.1
2009-10	4.8	6.2	4.9	10.1	8.9
2010-11	4.4	5.4	4.5	9.6	8.6
Average	4.4	11.4	4.0	11.3	9.2

Source: Pakistan Economic Survey (various issues)

FBR (various issues)

^a Tax bases for various taxes are as follows:

Income tax: Non-agricultural GDP

Custom Duty: Value of imports

Excise Duty: Value of manufacturing

Sales Tax: Value of Imports plus value of manufacturing

Table A-10
Monetary Policy

	Net Foreign Assets (% Change of broad money)	Net Domestic Assets (% Change of broad money)	Private Credit Growth (%)	Interest Rate on Six Month Treasury Bill (%)	Broad Money Growth (%)	Interest Rate Spread ^a (%)
1999-2000	2.0	7.4	1.4	8.8	9.4	8.0
2000-01	5.1	3.9	4.0	10.4	9.0	8.3
2001-02	13.4	2.0	4.8	8.2	15.4	9.6
2002-03	17.5	0.5	18.9	4.1	18.0	7.8
2003-04	2.1	17.5	29.8	1.7	19.6	6.3
2004-05	2.2	17.1	33.2	4.7	19.3	7.4
2005-06	2.5	12.4	23.2	8.5	14.9	8.7
2006-07	8.1	11.3	17.2	8.9	19.3	9.0
2007-08	-7.8	23.2	16.4	11.47	15.3	8.4
2008-09	-3.2	12.8	0.7	12.0	9.6	9.8
2009-10	-6.9	0.8	3.9	12.3	12.5	9.3
2010-11	23.5	-2.4	4.0	13.7	15.9	9.0
Average	4.9	8.9	13.1	8.7	14.9	8.5

Source: State Bank of Pakistan, Annual Report (various issues)

IMF Article 4 Consultation's Press Releases

^a Difference between the interest rate on advances and deposits

Table A-11
Level and Pattern of Trade

	Merchandise Export Growth (US \$; %)	Extent of Product Diversification of Exports ^a	Extent of Market Diversification of Exports ^a	Merchandise Import Growth (US \$; %)
1999-2000	11.2	0.801	0.230	13.1
2000-01	12.5	0.798	0.221	14.3
2001-02	2.3	0.786	0.221	-7.5
2002-03	20.1	0.791	0.223	20.1
2003-04	13.5	0.782	0.232	21.2
2004-05	16.2	0.778	0.218	38.3
2005-06	14.3	0.769	0.229	31.7
2006-07	3.2	0.737	0.230	8.0
2007-08	16.5	0.722	0.190	31.2
2008-09	-6.4	0.709	0.160	-10.3
2009-10	2.9	0.717	0.199	-1.7
2010-11	29.3	n.a	n.a	14.5
Average	11.3	0.763	0.214	14.4

n.a = not available

Source: Pakistan Economic Survey (Various issues)

United Nations Conference on Trade and Development

^aThis is estimated by UNCTAD as the Herfindahl Index, which ranges from a value of 0 to 1. The greater the extent of diversification the lower the value of the index

Table A-11 (Contd.)
Level and Pattern of Trade

	Change in Terms of Trade (%)	Share of Essential Imports ^a (%)
1999-2000	-15.3	39.3
2000-01	-7.1	39.3
2001-02	-0.2	36.7
2002-03	-9.6	35.0
2003-04	-4.1	28.8
2004-05	-6.5	25.0
2005-06	-11.7	30.7
2006-07	-3.7	29.1
2007-08	-11.5	38.9
2008-09	2.8	41.9
2009-10	0.0	42.3
2010-11	2.8	42.7
Average	-5.3	35.8

Source: Pakistan Economic Survey (various issues)

State Bank of Pakistan, Annual Report (various issues)

^a Essential imports are of wheat, edible oil, fertilizers, medicines and POL products

Table A-12
Balance of Payments

	Current Account Balance (% of GDP)	External Debt as a % of Exports of Goods and Services	Net Reserves (US \$ Million)	Gross Reserves (In months of next years imports of goods and services)	Change in Value of Pakistani Rupee per US \$ (%)	Change in Real Effective Exchange Rate (%)
1999-2000	-1.6	322.1	908	0.9	3.0	-0.6
2000-01	-2.7	309.4	1679	1.7	12.8	-2.5
2001-02	3.9	282.0	4337	3.7	5.1	-2.6
2002-03	4.9	229.0	9529	6.5	-4.7	-0.1
2003-04	1.8	209.5	10564	5.0	-1.5	-1.8
2004-05	-1.4	183.7	9805	3.5	3.1	0.3
2005-06	-3.9	167.2	10760	3.7	0.8	5.3
2006-07	-4.9	169.2	13345	4.5	1.3	0.5
2007-08	-8.4	169.7	8577	2.7	3.2	-1.12
2008-09	-5.7	212.9	9118	2.8	25.5	-1.0
2009-10	-2.3	218.9	12958	2.9	6.8	1.0
2010-11	0.1	191.2	14784	3.6	2.0	6.5
Average	-1.7	222.1	8864	3.5	4.8	0.3

Source: SBP, Annual Report (various issues)
IMF Article IV Consultation's Press Releases

Table A-13
Trend in Income Inequality Growth in Real Household Income by Quintile
(Annual Growth Rate, percent)

	Q U I N T I L E					
	Total	1st	2nd	3rd	4th	5th
2001-02 to 2005-06						
Pakistan	7.8	4.8	6.0	6.7	7.7	9.6
Urban	4.4	0.5	1.7	3.0	2.1	5.0
Rural	9.3	5.7	7.2	8.0	10.6	14.2
2005-06 to 2007-08						
Pakistan	-1.4	-1.9	-1.1	-2.8	-2.4	-0.9
Urban	-0.3	5.6	3.2	-1.4	1.0	-0.6
Rural	-2.2	-3.3	-2.5	-3.4	-4.2	-1.0
2001-02 to 2007-08						
Pakistan	4.7	2.5	3.6	3.4	4.2	5.9
Urban	2.8	2.2	2.2	1.5	1.7	3.1
Rural	5.3	2.6	3.9	4.1	5.4	8.9
2007-08 to 2010-11						
Pakistan	-1.0	-1.3	-0.7	-1.8	-1.6	-0.6
Urban	-0.2	3.7	2.1	-0.9	0.7	-0.4
Rural	-1.5	-2.2	-1.6	-2.3	-2.8	-0.7
2005-06 to 2010-11						
Pakistan	-0.9	-1.8	-1.7	-1.5	-0.5	-0.4
Urban	0.0	-0.1	0.8	-1.5	2.3	0.1
Rural	-1.6	-2.1	-2.5	-1.5	-2.0	-1.0
2001-02 to 2010-11						
Pakistan	2.9	1.1	1.7	2.1	3.1	3.9
Urban	1.9	0.2	1.2	0.5	2.2	2.3
Rural	3.1	1.3	1.7	2.6	3.4	5.5

Source: Household Integrated Expenditure Survey, PBS (various issues)

Table A-14
Trend in Regional Inequality
Coverage of Education and Health Services

	1998-99	2001-02	2006-07	2007-08	2008-09	2010-11
Gross Primary Enrolment Rate						
Punjab	75	76	100	97	97	98
Sindh	64	63	79	80	84	84
K-PK	70	77	82	83	87	89
Balochistan	64	62	72	75	75	74
Max/Min Ratio	1.172	1.242	1.389	1.293	1.293	1.324
Net Primary Enrolment Rate						
Punjab	44	45	62	61	62	61
Sindh	41	40	50	51	54	53
K-PK	39	41	49	49	52	51
Balochistan	36	32	41	41	44	47
Max/Min Ratio	1.222	1.406	1.512	1.488	1.409	1.298
Gross Middle Enrolment Rate						
Punjab	43	45	55	59	57	58
Sindh	38	34	43	46	49	48
K-PK	37	38	53	52	54	57
Balochistan	29	33	34	35	36	35
Max/Min Ratio	1.483	1.364	1.618	1.686	1.583	1.657
Net Middle Enrolment Rate						
Punjab	19	18	20	19	22	23
Sindh	17	14	17	18	18	19
Khyber-Pakhtunkhwa	11	12	16	14	17	17
Balochistan	9	8	9	12	11	13
Max/Min Ratio	2.111	2.250	2.222	1.583	2.000	1.769
Gross Matric Enrolment Rate						
Punjab	37	44	51	54	57	61
Sindh	51	42	45	44	50	55
K-PK	36	41	45	48	51	54
Balochistan	41	29	33	34	34	38
Max/Min Ratio	1.244	1.517	1.545	1.588	1.676	1.605
Net Matric Enrolment Rate						
Punjab	12	12	11	13	13	14
Sindh	10	13	10	11	11	11
K-PK	6	10	6	6	8	7
Balochistan	3	6	5	5	5	6
Max/Min Ratio	4.000	2.000	2.200	2.600	2.600	2.333
Literacy Rate (10 +)						
Punjab	46	47	58	59	59	60
Sindh	51	46	55	56	59	59
K-PK	37	38	47	49	50	50
Balochistan	36	36	42	46	45	41
Max/Min Ratio	1.417	1.306	1.381	1.283	1.311	1.463
Full Immunisation						
Punjab	55	57	83	76	85	86
Sindh	38	45	65	67	69	75
K-PK	54	57	76	74	73	77
Balochistan	34	24	54	57	43	53
Max/Min Ratio	1.618	2.375	1.537	1.333	1.977	1.623

Source: Pakistan Social and Living Standard Measurement Survey, PBS (various issues)

Table A-15
Trend in Pakistan's Ranking
in Different Governance Indicators

		INDICATORS							
		EARLIEST YEAR ^a			LATEST YEAR ^b				
		Year	Number of	Ranking ^d (Quintile) ^c	Year	Number of	Ranking ^d (Quintile) ^c	Trend	
Countries	Countries								
1	Transparency International (TI)	Corruption Perception Index (CPI)	1995	41	39 (1st)	2011	182	134	↗
2	Freedom House (Freedom in the World)	Political Rights Score	2002	151	131 (1st)	2011	193	146 (1st)	↗
		Civil Liberties Score	2002	151	135 (1st)	2011	193	165 (1st)	↘
		Status	2002	Not Free	-	2011	Partly Free	-	↘
3	Freedom House (Countries at the Crossroads)	Civil Liberties	2004	30	28 (1st)	2011	35	28 (1st)	↗
		Rule of Law	2004	30	27 (1st)	2011	35	21 (1st)	↗
		Anticorruption and Transparency	2004	30	22 (2nd)	2011	35	24 (1st)	↗
		Accountability and Public Voice	2004	30	27 (1st)	2011	35	12 (1st)	↗
4	Freedom House (Countries at the Crossroads)	Voice & Accountability	1996	191	123 (1st)	2008	197	138 (1st)	↘
5	Freedom House (Press Freedom Survey)	Status	2002	Not Free	-	2009	Not Free	-	No Change
		Legal Environment	2002	187	172 (1st)	2009	195	174 (1st)	↘
		Political Environment	2002	187	177 (1st)	2009	195	178 (1st)	↘
		Economic Environment	2002	187	176 (1st)	2009	195	172 (1st)	↗
		Total Score	2002	187	172 (1st)	2009	195	175 (1st)	↘
6	World Bank Institute (Governance Matters)	Voice & Accountability	1996	194	139 (1st)	2009	212	174 (1st)	↘
		Political Stability and Absence of Violence	1996	180	162 (1st)	2009	212	211 (1st)	↘
		Government Effectiveness	1996	182	120 (2nd)	2009	212	162 (1st)	↘
		Regulatory Quality	1996	183	130 (2nd)	2009	212	145 (1st)	↘
		Rule of Law	1996	171	105 (2nd)	2009	212	176 (1st)	↘
		Control of Corruption	1996	154	127 (1st)	2009	212	167 (1st)	↘
7	World Bank - World Development Indicators [Country Policy and Institutional Assessment (CPIA)]	CPIA Building Human Resources Rating	2005	76	46 (1st)	2006	78	47 (1st)	↘
		CPIA Business Regulatory Environment Rating	2005	76	15 (4th)	2006	78	12 (4th)	↗
		CPIA Debt Policy Rating	2005	76	12 (4th)	2006	78	12 (4th)	↘
		CPIA Economic Management Cluster Average	2005	76	15 (4th)	2006	78	28 (3rd)	↘
		CPIA Efficiency of Revenue Mobilisation Rating	2005	76	40 (2nd)	2006	78	40 (1st)	↗
		CPIA Equity of Public Resource Use Rating	2005	76	38 (2nd)	2006	78	37 ((1st)	↘
		CPIA Financial Sector Rating	2005	76	1 (5th)	2006	78	1 (5th)	↗
		CPIA Fiscal Policy Rating	2005	76	41 (2nd)	2006	78	40 (2nd)	↗
		CPIA Gender Equality Rating	2005	76	75 (1st)	2006	78	77 (1st)	↘
		CPIA Macroeconomic Management Rating	2005	76	17 (4th)	2006	78	39 (2nd)	↘
		CPIA Policies for Social Inclusion/Equity Cluster Average	2005	76	54 (1st)	2006	78	52 (1st)	↗
		CPIA Policy and Institutions For Environmental Sustainability Rating	2005	76	22 (4th)	2006	78	24 (3rd)	↘
		CPIA Property Rights and Rule-Based Governance Rating	2005	76	41 (2nd)	2006	78	42 (2nd)	↘
		CPIA Public Sector Management and Institutions Cluster Average	2005	76	39 (2nd)	2006	78	39 (2nd)	↗
		CPIA Quality of Budgetary and Financial Management Rating	2005	76	34 (3rd)	2006	78	32 (3rd)	↗
		CPIA Quality of Public Administration Rating	2005	76	19 (4th)	2006	78	17 (4th)	↗
		CPIA Social Protection Rating	2005	76	55 (1st)	2006	78	53 (1st)	↗
		CPIA Structural Policies Cluster Average	2005	76	2 (5th)	2006	78	7 (5th)	↘
		CPIA Trade Rating	2005	76	37 (3rd)	2006	78	36 (3rd)	↗
			CPIA Transparency, Accountability, and Corruption In The Public Sector Rating	2005	76	63 (1st)	2006	78	64 (1st)

Table A-15 (Contd.)
Trend in Pakistan's Ranking
in Different Governance Indicators

		INDICATORS							
		EARLIEST YEAR ^a			LATEST YEAR ^b				
		Year	Number of Countires	Ranking ^d (Quintile) ^c	Year	Number of Countries	Ranking ^d (Quintile) ^c	Trend	
Source	Type								
8	UNDP Human Development Report	Gender Empowerment Measure	1996	104	101 (1st)	2007	109	99 (1st)	↗
9	Overseas Development Institute (World Governance Assessment)	Civil Society	1996	16	15(1st)	2000	16	16 (1st)	↘
		Political Society	1996	16	16 (1st)	2000	16	16 (1st)	No Change.
		Government	1996	16	15 (1st)	2000	16	16 (1st)	↘
		Bureaucracy	1996	16	14 (1st)	2000	16	12 (1st)	↗
		Economic Society	1996	16	15 (1st)	2000	16	13 (1st)	↗
		Judiciary	1996	16	16 (1st)	2000	16	16 (1st)	No Change.
		Total	1996	16	15 (1st)	2000	16	15 (1st)	No Change.
10	Human Rights Commitment (Danish Centre for Human Rights)	CPR Violations	2000	72	30 (3rd)	na			
		Formal Commitment	2000	72	15 (4th)	na			
		Social Commitment	2000	72	41 (2nd)	na			
		Gender Commitment	2000	72	42 (2nd)	na			
11	Data on Governance Indicators (IADB/DIFID)	Freedom of the Press	1993	92	80 (1st)	2008	211	180 (1st)	↘
		Political Rights	1993	92	85 (1st)	2008	211	162 (1st)	↘
		Political Stability and Absence of Violence	1993	92	72 (1st)	2008	211	195 (1st)	↘
		Voice and Accountability	1993	92	60 (1st)	2008	211	185 (1st)	↘
12	Center for Global Development	Commitment to Development Index	n.a	n.a	n.a	n.a	n.a	n.a	n.a
13	Democracy Index Economist Intelligence Unit (EIU)	Overall Score	2006	167	113 (2nd)	2008	167	108 (2nd)	↗
		Electoral Process and Pluralism	2006			2008			
		Functioning of Government	2006			2008			
		Political Participation	2006			2008			
		Political Culture	2006			2008			
		Civil Liberties	2006			2008			
14	Polity IV Country Reports (University of Maryland - Center for International Development and Conflict Management)	Polity	1972	154	112 (1st)	2007	163	145 (1st)	↘
		Democracy	1972	154	121 (1st)	2007	163	129 (1st)	↘
		Autocracy	1972	154	110 (1st)	2007	163	134 (1st)	↘
		Durable	1972	154	135 (1st)	2007	163	148 (1st)	↘
		Tentative	1972	Not	-	2007	Yes	-	↘
15		Business Environment Risk Intelligence (BERI)	Political Stability and Absence of Violence	1996	101	47 (3rd)	2008	101	92 (1st)
	Government Effectiveness		1996	101	84 (1st)	2008	119	87 (1st)	↘
	Rule of Law		1996	119	87 (1st)	2008	119	52 (3rd)	↗
	Control of Corruption		1996	119	59 (3rd)	2008	119	57 (3rd)	↗
16	Gallup International (Gallup World Poll)	Voice & Accountability	2006	122	80 (2nd)	2008	143	102 (1st)	
		Government Effectiveness	2006	122	61 (2nd)	2008	143	53 (3rd)	↘
		Rule of Law	2006	122	62 (2nd)	2008	143	94 (2nd)	↗
		Control of Corruption	2006	122	75 (2nd)	2008	143	62 (3rd)	↘
17	Index of Economic Freedom (Heritage Foundation and Wall Street Journal)	Business Freedom	1995	101	88 (1st)	2009	183	65 (3rd)	↗
		Trade Freedom	1995	101	87 (1st)	2009	183	140 (1st)	↗
		Fiscal Freedom	1995	101	63 (2nd)	2009	183	72 (3rd)	↘
		Government Size	1995	101	35 (3rd)	2009	183	23 (4th)	↗
		Monetary Freedom	1995	101	48 (3rd)	2009	183	125 (2nd)	↗
		Investment Freedom	1995	101	33 (3rd)	2009	183	118 (2nd)	↘
		Financial Freedom	1995	101	21 (4th)	2009	183	128 (2nd)	↘
		Property Rights	1995	101	32 (3rd)	2009	183	131 (1st)	↘
		Freedom from Corruption	1995	101	90 (1st)	2009	183	146 (1st)	↘
		Labor Freedom	1995	155	88 (2nd)	2009	183	122 (2nd)	↘
		Overall Index	1995	101	52 (2rd)	2009	182	102 (2nd)	↘

Table A-15 (Contd.)
Trend in Pakistan's Ranking
in Different Governance Indicators

		INDICATORS						Trend	
		EARLIEST YEAR ^a			LATEST YEAR ^b				
		Year	Number of Countires	Ranking ^d (Quintile) ^c	Year	Number of Countries	Ranking ^d (Quintile) ^c		
Source	Type								
18	Voter Turnout: Global Report	Vote to Registration Ratio, Parliamentary Elections	1945-2004	169	164 (1st)				
19	Inter-Parliamentary Union (Women in National Parliaments -Statistical Archive)	Lower or single House Upper House or Senate (Women's weight)	1997	102	95 (1st)	2008	136	46 (3rd)	↗
		Lower or single House Upper House or Senate (Women's weight)	1997	102	95 (1st)	2008	136	46 (3rd)	↗
20	The Opacity Index (Price Waterhouse Coopers)	Corruption	2004	48	42 (1st)				
		Efficacy of the Legal System	2004	48	36 (1st)				
		Deleterious Economic Policy	2004	48	44 (1st)				
		Inadequate Accounting and Governance Practices	2004	48	29 (2nd)				
		Detrimental Regulatory Structures	2004	48	19 (2nd)				
		The Opacity Index	2004	48	28 (2nd)				
21	Reporters without Borders (Press Freedom Barometer)	Press Freedom Index	2002	139	119 (1st)	2009	175	159 (1st)	↘
22	University of California Santa Barbara (Stohl)	Political Terror Scale Amnesty International	1977	101	89 (1st)	1977	152		↘
		US State Department	2008	111	96 (1st)	2008	179		↘
23	Governance-III (USAID)	Voice & Accountability	1996	192	151 (1st)	2002	199	168 (1st)	↘
		Political Stability and Absence of Violence	1996	186	165 (1st)	2002	186	157(1st)	↘
		Government Effectiveness	1996	180	108 (1st)	2002	195	123 (1st)	↘
		Regulatory Quality	1996	182	138 (1st)	2002	195	151 (1st)	↘
		Rule of Law	1996	167	104 (2nd)	2002	195	140 (1st)	↘
		Control of Corruption	1996	151	127 (1st)	2002	195	140 (1st)	↘
24	Bertelsmann Transformation Index (Bertelsmann Stiftung)	Voice & Accountability	2002	116	85 (1st)	2008	125	93 (1st)	↘
		Government Effectiveness	2002	116	53 (3rd)	2008	125	81 (1st)	↘
		Regulatory Quality	2002	116	61 (2nd)	2008	125	78 (1st)	↘
		Rule of Law	2002	116	80 (1st)	2008	125	97(1st)	↘
		Control of Corruption	2002	119	63 (2nd)	2008	125	86 (1st)	↘
25	Cingranelli-Richards (CIRI) Human Rights Database (CIRI Human Rights Data Project)	Voice & Accountability	1996	159	136 (1st)	2008	192	156 (1st)	↘
		Political Stability and Absence of Violence	1996	174	152 (1st)	2008	192	186 (1st)	↘
		Rule of Law	1996	159	109 (2nd)	2008	192	176 (1st)	↘
26	International Fund for Agricultural Development (IFAD Rural Sector Performance Assessments)	Voice & Accountability	2004	124	21 (1st)	2008	90	59 (1st)	↘
		Government Effectiveness	2004	124	27 (1st)	2008	90	68 (1st)	↘
		Regulatory Quality	2004	124	71 (2nd)	2008	90	28 (3rd)	↘
		Rule of Law	2004	124	106 (1st)	2008	90	62 (1st)	↘
		Control of Corruption	2004	124	45 (2nd)	2008	90	59 (2nd)	↘
27	Institutional Profiles (Institutional Profiles Database)	Voice & Accountability	2006	85	63 (1st)	2008	85	63 (1st)	No change.
		Political Stability and Absence of Violence	2006	85	81 (1st)	2008	85	81 (1st)	No change.
		Government Effectiveness	2006	85	75 (1st)	2008	85	75 (1st)	No change.
		Regulatory Quality	2006	85	59 (2nd)	2008	85	59 (2nd)	No change.
		Rule of Law	2006	85	69 (1st)	2008	85	69 (1st)	No change.
		Control of Corruption	2006	85	49 (2nd)	2008	85	49 (2nd)	No change.
28	International Budget Project Open Budget Index	Voice & Accountability	2005	59	19 (3rd)	2008	85	47 (2nd)	No change.
29	Global Insight Business Conditions and Risk Indicators	Voice & Accountability	1998	181	127 (1st)	2008	203	170 (1st)	↘
		Political Stability and Absence of Violence	1998	181	142 (1st)	2008	203	194 (1st)	↘

Table A-15 (Contd.)
Trend in Pakistan's Ranking
in Different Governance Indicators

		INDICATORS						
		EARLIEST YEAR ^a			LATEST YEAR ^b			Trend
		Year	Number of Countries	Ranking ^d (Quintile) ^c	Year	Number of Countries	Ranking ^d (Quintile) ^c	
Source	Type							
	Government Effectiveness	1998	181	157 (1st)	2008	203	176 (1st)	↘
	Regulatory Quality	1998	181	159 (1st)	2008	203	199 (1st)	↘
	Rule of Law	1998	181	133 (2nd)	2008	203	185 (1st)	↘
	Control of Corruption	1998	181	150 (1st)	2008	203	179 (1st)	↘
30 Country Security Risk Ratings (JET Country Security Risk Ratings)	Political Stability and Absence of Violence	2004	167	149 (1st)	2008	185	183 (1st)	↘
31 Cerberus Corporate Intelligence Gray Area Dynamics [Merchant International Group (MIG)]	Political Stability and Absence of Violence	2002	118	118 (1st)	2008	164	162 (1st)	↘
	Government Effectiveness	2002	118	118 (1st)	2008	164	145 (1st)	↘
	Regulatory Quality	2002	118	107 (1st)	2008	164	57 (3rd)	↗
	Rule of Law	2002	118	113 (1st)	2008	164	87 (2nd)	↗
	Control of Corruption	2002	118	118 (1st)	2008	164	148 (1st)	↘
32 Country Policy and Institutional Assessments (Asian Development Bank)	Government Effectiveness	2005	25	6 (4th)	2008	28	12 (3rd)	↘
	Regulatory Quality	2005	25	6 (4th)	2008	28	7 (4th)	↘
	Rule of Law	2005	25	16 (2nd)	2008	28	19 (2nd)	↘
	Control of Corruption	2005	25	19 (1st)	2008	28	16 (2nd)	↗
33 Brown University's Center for Public Policy	Government Effectiveness	2002	194	127 (2nd)	2008	196	109 (2nd)	↗
34 Trafficking in People Report (United States Department of State)	Rule of Law	2000	82	74 (1st)	2008	153	76 (3rd)	
35 World Economic Forum	Global Competitiveness Scale	2008	131	92 (1st)	2010	133	101 (1st)	↗

^a The earliest year denotes the year for which the data of the indicator is available

^b The latest year is the most recent year for which the data of the indicator is available

^c Note that the Pakistan's ranking is divided into quintiles. These are given in the braces against each indicator and measures the indicators performance as follows:

- the 1st quintile is the lowest quintile of the five quintiles, which means that the Pakistan's performance in that indicator falls in the lowest 20 percent of the countries
- the 2nd quintile is the second lowest quintile of the five quintiles, which means that the Pakistan's performance in that indicator falls in the 21 to 40 percent of the countries
- the 3rd quintile is the middle quintile of the five quintiles, which means that the Pakistan's performance in that indicator falls in the 41 to 60 percent of the countries
- the 4th quintile is the second highest quintile of the five quintiles, which means that the Pakistan's performance in that indicator falls in the 61 to 80 percent of the countries
- the 5th quintile is the highest quintile of the five quintiles, which means that the Pakistan's performance in that indicator falls in the 81 to 100 percent of the countries

^d The most we are away on the most bad in terms of performance in that indicator

Source: IPP estimates from the various international sources of governance indicators.

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CHAPTER 2

- 1 This is according to reported official figures adjusted only for the arrears of electricity bills of 0.9 percent of GDP only.
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CHAPTER 3

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CHAPTER 4

- 1 The Technical Appendix is available with the authors on request
- 2 Including hotels and restaurants
- 3 Results are available with the authors on request

CHAPTER 5

- 1 This chapter has been written after the workshop jointly organized by IPP and the World Bank on *Human Opportunity Index and Decentralization of Social Services in Pupter Punjab* held on 28 January, 2012.

CHAPTER 6

- 1 If Chiniot continues to be included in Jhang.
- 2 The analysis has also been undertaken at the district level.
- 3 Probably not in the short run because of large scale power shortage.

TECHNICAL APPENDIX

- 1 This includes the following indicators - major crop cash value, minor crop cash value, milk production and industrial value added per capita.