# **Doing Development Better**

11111

Nadeem ul Haque, Hanid Mukhtar, Nohman Ishtiaq and John Gray



**Pakistan Institute of Development Economics** 

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means—electronic, mechanical, photocopying, recording or otherwise—without prior permission of the author and or the Pakistan Institute of Development Economics, P. O. Box 1091, Islamabad 44000.

© Pakistan Institute of Development Economics, 2020.

Pakistan Institute of Development Economics Quaid-i-Azam University Campus P. O. Box 1091, Islamabad 44000, Pakistan

 E-mail:
 publications@pide.org.pk

 Website:
 http://www.pide.org.pk

 Phone:
 +92-51-9248137

 Fax:
 +92-51-9248065

Designed, composed, and finished at the Publications Division, PIDE.

# **Doing Development Better**

Nadeem Ul Haque Hanid Mukhtar Nohman Ishtiaq *and* John Gray

#### PAKISTAN INSTITUTE OF DEVELOPMENT ECONOMICS ISLAMABAD

### **CONTENTS**

		Pages
Preface		v
Abbrev	iations	vii
Executi	ve Summary	1
1.	Introduction	7
PART I	: MACRO ANALYSIS OF INVESTMENT IN PAKISTAN	
1.	History—the Evolution of PIM in Pakistan since Independence	9
2.	The Role of Investment in the Pakistan Economy	22
3.	Aggregate Analysis of PIM Efficiency in Pakistan	26
PART I	I: DRIVERS OF INEFFICIENCY IN PUBLIC INVESTMENT	
1.	Sources of Inefficiency of Public Investment	39
PART I	II: MISSING PIM FUNCTIONS: ASSET MANAGEMENT AND	
	PROGRAMME EVALUATION	71
PART I	V: THE PIM CHALLENGES OF THE COMING DECADES	
1.	The Challenges Facing PIM in Future	75
PART	V: REFORMING THE PIM SYSTEM	
1.	A Proposed PIM Reform Strategy	87
ANNEX	XES	
1.	Technical Analysis of PIM Efficiency	105
2.	Draft PIM Law	105
3.	Integrating the Recurrent and Development Budget Management	
	Systems	105
4.	Examples of National Wealth Funds	105
5.	Learning from Chile	105
Referen	ices	139
	List of Tables	
Table 1.	Pakistan's Borrowing from the IMF	20
Table 2.	Key Macroeconomic Indicators for Selected Asian Countries—	
	1970-2016	25
Table 3.	Sectoral Growth and Investment Rates-2001-2017	26

(i)

Pages	

Table 4.	Efficiency of Lagged Public Investment—Pakistan and	
	Comparators	29
Table 5.	Econometric Estimates of Impact of Public Investment on Growth	36
Table 6.	List of Projects in the 2018/19 PSDP with Gross Under-allocation	
	of Funds	48
Table 7.	Public Investment Management Index—Pakistan vs LDCs	50
Table 8.	Unapproved Projects in the PSDP—FY15 to FY19	51
Table 9.	Number of Completed and Abandoned Projects-FY01 to FY18	55
Table 10.	Average Amount per Project Cost Change	58
Table 11.	Operations and Maintenance Needs and Allocations	60
Table 12.	Rehabilitation Projects in PSDP 2018-19	60
Table 13.	Summary of Impact of Weak Procedures on Public Investment	
	Efficiency	62
Table 14.	Examples of Project Cost Overruns	67
Table 15.	Public Investment Management Reform Strategy	90

## List of Figures

Figure 1.	The Evolution of Growth of GDP-1951 to 2017	11
Figure 2.	The Evolution of Remittances—1976-2017	14
Figure 3.	The Development Budget as a Percentage of GDP	15
Figure 4.	Pakistan—Trends in Investment and Growth	23
Figure 5.	Output Efficiency of Public Capital—Regression Results	30
Figure 6.	Trends in the Growth Efficiency of Public Investment	31
Figure 7.	Trends in Infrastructure Development Efficiency of Public	
	Investment	32
Figure 8.	Trends in Human Development Efficiency of Public Investment	33
Figure 9.	Trend in "Crowding-in" Efficiency of Public Investment	34
Figure 10.	Efficiency of Development Expenditure in the Provinces	35
Figure 11.	Development Expenditure Index by Province	35
Figure 12.	Public Investment Management Index for Selected LDCs	41
Figure 13.	Public Investment Management Index—Pakistan vs LDCs	

(ii)

		Pages
Figure 14.	Different Components of Investment in Pakistan	42
Figure 15.	Composition of Federal Development Expenditure	45
Figure 16.	Size of the Public Sector Development Programme 2000/01 and 2018/19	45
Figure 17.	Throw-forward of the Development Portfolio-2014/15 to 2018/19	47
Figure 18.	Number of Unapproved Projects with Incurred Expenditure FY15-FY19	51
Figure 19.	Cost Overruns on a Selection of Projects	53
Figure 20.	Number of Projects by Number of Cost Changes	58
Figure 21.	Costs of a Poor Public Investment Process	69

#### List of Boxes

Box 1.	Growth Efficiency of Public Investment in the Provinces	35
Box 2.	The Formal PIM System in Pakistan	40
Box 3.	The Throw-forward	52
Box 4.	Implementation Issues—Case Study of a Mountain Road Project	
Box 5.	OECD Principles for Better Governance for Public Investment	77
Box 6.	Infrastructure Needs are Huge Going Forwards	78
Box 7.	Inspirations (Sublimes) in Public Investment	79
Box 8.	Why Mega-projects require Special Attention	80
Box 9.	Checklist of Criteria for On-going Projects	99

**Boxes in Annexes** 

(iii)

#### PREFACE

This study was undertaken in 2017-18 within the scope of the Public Financial Management—Support Programme for Pakistan (PFM-SPP), financed by the European Union. The study is now published under the auspices of the Pakistan Institute of Development Economics (PIDE) in view of the importance of the analysis and issues addressed for the development and reform of planning and public investment management in Pakistan. In the period since the preparation of the study some important progress has been made in the field of study, notably the enactment of the Pakistan Public Financial Management Act in August 2019 that has already given legal backing for many of the recommendations for legal reform set out in this report.

The study was prepared by a team assembled by Oxford Policy Management Ltd, the implementing agency for the PFM-SPP project.

February 2020, Islamabad.

#### ABBREVIATIONS

CDWP	Central Development Working Party
CPEC	China-Pakistan Economic Corridor
GFCF	Gross Fixed Capital Investment
GWMES	Government-Wide Monitoring and Evaluation System
IMF	International Monetary Fund
O&M	Operations and Maintenance
NEC	National Economic Council
p.a.	Per annum
PBS	Pakistan Bureau of Statistics
PBB	Programme Based Budgeting
PC	Planning Commission
PIE-X	Public Investment Efficiency Index
PIM	Public Investment Management
PKR	Pakistan Rupee
PMR	Performance Monitoring Report
PW	Projects Wing (of the Planning Commission)
R&M	Repair and Maintenance
Rs	Rupees
SDEC	Strategic Development and Evaluation Council
T-Bill	Treasury Bill
USD	United States Dollar
WB	World Bank

#### **EXECUTIVE SUMMARY**

This is a study of public investment management (PIM) in Pakistan. The principle objective of the study is to assess the efficiency of public investment, to identify the factors or processes which are limiting the efficiency of public investment and to define a reform programme aimed at improving the efficiency of public investment over time.

The study was undertaken on the instruction of the Finance Secretary, Ministry of Finance and was completed during the period May-July 2018.

The study progressed in the following stages:

- (i) Review of the history of the planning and public investment in Pakistan since the 1950s
- (ii) Assessment of the role of investment, both public and private in economic growth
- (iii) Assessment of the efficiency of public investment using a range of established methodologies
- (iv) Identification of the factors impacting negatively on the efficiency of public investment
- (v) Formulation of a structured strategy for the reform of public investment over the coming years.

#### MAIN FINDINGS

#### (i) Evolution of the Planning Process

The processes of planning and public investment have gone through several important stages of evolution since the 1950s. Initially Pakistan was highly successful in creating a planning system which contributed substantially to a public sector led acceleration of economic growth. Indeed, in this period Pakistan was heralded as a model of effective planning and public investment in developing countries.

However, in the ensuing decades the planning system has become increasingly ineffective. Major reasons for this decline include the progressive emergence of fiscal and budgetary constraints which meant that the 5-years plans were not implemented as planned. A second problem was the increasing politicisation of investment resource allocations decisions which progressively undermined the technical management systems and procedures established for the identification and appraisal of appropriate investments. The breakdown of the proper sequencing of the project cycle of project identification, appraisal, technical approval and entry to the budget led in recent years to the acceptance in the Public Sector Development Programme (PSDP) of projects which had not been subjected to the required quality control procedures embedded in the planning and investment procedures. Given these developments it is to be expected that there has been a decline in the efficiency of public investment.

#### (ii) Assessment of the Efficiency of Public Investment at the Aggregate Level

The study applied a range of established methodologies for assessing the overall efficiency of public investment. These methodologies include the use of the IMF's Pubic Investment Efficiency Index (PIE-X), which uses cross country data to compare a given country with the best performing comparator countries; a regression analysis which is also used to make cross-country comparisons of efficiency, and a methodology, which uses the tie series data from Pakistan to compare each year's efficiency performance with the historical best year. The study also drew on existing econometric studies of Pakistan's public investment.

The overall finding from these assessments is that there is a wide and growing gap between the efficiency performance of public investment in Pakistan and the better performing countries. This finding has the implication that that there is a very substantial scope for improving the efficiency and value for money of public investment in Pakistan through appropriate reforms.

#### (iii) The Sources of Inefficiency in Public Investment

In order to identify the sources of inefficiency in public investment the study took a critical look at each and every stage of the public investment cycle, from the planning stage, through project identification, appraisal, entry to the budget, implementation, utilisation, monitoring and evaluation and asset management. While this review started from the 8 "must-haves" for sound PIM utilised in the World Bank approach to PIM assessment, the present study went beyond these in a more comprehensive coverage of the complete cycle.

The results from this review of processes and procedures are very clear: while in many (though by no means all) areas there are well-defined procedures for PIM there is a massive problem of non-compliance with the mandated procedures, which are mostly set out in the Planning Commission's Manual for Development Projects. As a result, the actual practices of PIM bear little relation to the mandated procedures. Key points of concern include:

- The lack of sectoral plans to guide the selection of appropriate public investments. There is currently no requirement for ministries to prepare and follow sector plans;
- The breakdown of a quality-controlled process for project identification, design, preparation, and appraisal;
- The failure to observe the correct sequencing of the investment cycle, whereby all public investments should have completed technical analysis, appraisal and approval prior to consideration for entry into the budget

- The failure to control the number of projects entering into the budget, leading to an excessive number of often small and poorly prepared projects, the inclusion of unapproved projects in the budget, the absence of control on the growth of the public investment throw-forward, and the frequent delays and cost escalation of investments included in the PSDP.
- The lack of a medium term budgetary framework sufficiently robust to provide a firm indication of the future availability of recurrent operating costs for the utilisation of completed projects.
- The almost total absence of systems to ensure proper maintenance and routine rehabilitation of completed public assets.
- Lack of any evaluation process to guide the planners and implementers on successful solutions to problems that arise during various stages of project cycle and in delivery of public services to the citizens.

The number and depth of these short-comings provide ample validation for the findings of the aggregate analysis that public investment in Pakistan is highly inefficient.

#### (iv) The Politicisation of Public Investment

There has been a steady process of increasing politicisation of the public investment system over thephast decades. Significant steps have included the granting of investment funds to parliamentarians by President Zia-ul-Haq, the erosion of the independence of the civil service spearheaded by President Zulfikar Bhutto, and the increasing tendency in the past decade for major new project initiatives to be issued, often in mid-year, from the Office of the Prime Minister ay the federal level and Chief Minister and Governors in provinces.

It is, of course recognised that the direction of the allocation of public financial resources should be matter for political control, however such control should not extend to the choice of project and a determination of the technical and financial details of the project. The principle should be that such control should be exercised at specific strategic stages of the planning investment cycle.

#### The Challenges Facing Future Public Investment in Pakistan

Looking to the future the study identifies a critical need for an effective and efficient public investment system in Pakistan. Specific challenges will arise from:

• The resource constraint for public investment in the face of the prevailing inadequate systems for the management and control of recurrent public expenditures, including debt service, personal emoluments and pensions. Measures will need to be taken which fall outside the realm of PIM to address this fundamental constraint on fiscal space.

- The burgeoning requirement for mega public investment projects to provide the infrastructural underpinnings for a modern and fast-growing national economy. At present the country lacks the expertise for the design of such mega-projects and for their implementation;
- In view of the two points above, it will be essential to clean out and limit the scope of the PSDP to allow concentration on the main strategic requirements of public investment major infrastructural networks.

The review of challenges also focuses on two fundamental aspects which have received little attention to date:

- (i) The need for a fundamental reassessment of the overall architecture of the national planning and public investment system. Within a framework of indepth consultation on this issue the proposal is made for consideration of the case for the creation of a Strategic Development and Evaluation Council (SDEC) oriented towards qualitative improvement of the PIM system.
- (ii) The need for major institutional development to create an appropriate framework for greatly enhanced management and utilisation of public sector owned assets.

#### **Recommendations for Reform of Public Investment**

The fundamental recommendation of this study is that there is an urgent need for a comprehensive reform of the existing system of PIM to address the existing deeprooted problems which are rendering public investment to be highly inefficient and offering limited value for the use of public monies.

In support of this recommendation the study presents a PIM Reform Programme built around the following 5 pillars:

- Pillar 1: The legal Basis for Planning, Public Investment Management and the Management of Public Sector Assets.
- **Pillar 2:** Reform of the detailed PIM Procedures to ensure completeness and effectiveness.
- Pillar 3: Reform of the overall budget management system to provide real integration across the development and recurrent dimensions of the budget.
- **Pillar 4:** Institutional Reforms to strengthen the planning function in government as the basis for sound PIM.
- Pillar 5: Institutional and Individual capacity development for a modern PIM system.

The principal reform actions to be undertaken under each pillar are set out in the table below.

Public Investment Management Reform Strategy

Pillar	Objective	Major Innovative Reform Actions	Timeframe	
1. Enactment of a PIM	Establish a mandatory set of principles	Consultation	Dec. 2019	
law	and greatly enhanced compliance	Approval and enactment		
2. Strengthened and more comprehensive PIM procedures	To eliminate the gaps in the present planning and PIM system and	• Requirement for sector plans to drive investment identification in all ministries/departments/agencies	Dec. 2019	
procedures	procedures	• Mandatory independent quality review of all proposed public investment above a given threshold		
		• Strict adherence to the proper sequencing of project identification, appraisal, approval and entry to the budget		
		• Discontinuation of token allocations for projects and limiting the use of block allocations		
		• Establishment of open access project data bank covering all proposed investments at all stages of the project cycle published on institutional websites		
		• Decentralisation of approval and budgeting of sector projects below defined threshold to sectors as part of their integrated budget		
		• Establishment of a mega-projects preparation and management unit		

Continued—

Continued—		
3. Integration of the budget system across the development and	Establish a system in which public resource allocations to recurrent and investment spending are planned in an	• Revision of budget demands/grants to provide for single grants to cover the recurrent and investment costs of each major line of public service delivery (programme)
recurrent budgets	integrated manner	• Establishment of system for managing the growth of the throw-forward based on a strengthened MTBF and enhanced project costing
		• Establishment of powerful planning and budget management committees in each ministry/department to supervise all stages of an integrated budget management system
		<ul> <li>Strengthen and publish the existing annual Performance Monitoring Report prepared by MoF</li> </ul>
4. Institutional reforms for an effective PIM system	Create an appropriate institutional framework for the oversight of the PIM system	• Review and redefinition of the role of the Planning Commission and other agencies involved in planning
		• Establishment of an apex Institution for overseeing evaluation of the strategies ad achievement of sectoral and public investment goals as part of a Government-Wide M&E System (GWMES)
		• Establishment of legally created Federal and Provincial Wealth Funds for management of completed public sector assets
5. Capacity development for a modern PIM system	To ensure that the capacities exist in all relevant institutions for the implementation of the proposed reformed PIM system	• Training on the operations of the reformed PIM system and institutional and individual responsibilities

#### 1. INTRODUCTION

This is a study of public investment management in Pakistan. The principle objective of the study is to make an assessment of the efficiency of public investment, to identify the factors or processes which are limiting the efficiency of public investment and to define a reform programme aimed at improving the efficiency of public investment over time.

What is public investment?

We start with a misleadingly simple question—what is public investment? The answer may appear to be obvious—Pakistan's public investment is the investment financed through the development budgets of the federal and provincial Governments? However two major objections can immediately be raised against this definition: (i) the development budget contains many elements which cannot properly be classified as investment, but are in reality expenditures of a recurrent nature; and (ii) on a broader view of investment, including investment in human capital, much investment takes place through funding provided through the recurrent budgets. This study concentrates on investment as defined in the Manual of Development projects of the Planning Commission, which essentially equates investment to the National Accounts (NA) concept of Gross Fixed Capital Formation (GFCF). In the preparation of the annual National Accounts, the Pakistan Bureau of Statistics estimates public GFCF based on the projects financed through the Public Sector Development Programme (PSDP), but after the elimination of projects which cannot properly be classified as GFCF.

#### **Structure of the Report**

This report is structured as follows. The report falls into 3 main parts:

Part I provides a macro perspective on investment (public and total) in Pakistan. A historical narrative of the evolution of the planning and public investment process provides an overview of the important evolution of planning and public investment which has occurred since the 1950s. Comparative statistics are presented which demonstrate that in comparison to other countries in the region Pakistan has a low level of both national savings and investment. In spite of these low levels a healthy rate of economic growth was achieved in the early decades.

Finally. Part I presents an assessment of the efficiency public investment based on several alternative methodologies and concludes that public investment in Pakistan displays a large efficiency gap when compared to well-performing comparator countries. This has the important implication that there is very substantial scope for improving the efficiency of public investment through a PIM reform programme. Part II provides a detailed analysis of the likely drivers of reduced efficiency in the PIM system through an exhaustive review of the existing procedures, compliance and implementation issues at each and every stages of the investment cycle from the planning and conception of projects to the delivery of public services using newly created assets and the maintenance and utilisation of those created assets. The basic finding is that there are (i) important gaps in the existing procedures for project identification, selection, budgeting and implementation, (ii) a lack of coordination between the development and recurrent budgetary requirements for projects to be successful in achieving their objectives, and (iii) a virtual absence of systems for the maintenance and routine rehabilitation of existing assets. In the light of these shortcomings, the findings on the overall efficiency of public investment as presented in Part I of the report are judged to be highly plausible.

The analysis of PIM processes and procedures also identifies a pervasive problem of the politicisation of the drivers of public investment at the level of the project or transaction which has contributed profoundly to the reduction in the quality of technical design and oversight of public investments. Chapter 5 in Part II provides a historical review of the evolution of the present highly politicised system of management of public investment.

Part III reviews the challenges facing public investment in the coming decades, faced with the problem of lack of fiscal space, a huge requirement for public investment in the nationan's network – water, energy, transport etc; and te need for the development of capacity to design and manage the megaprojects of the future.

Part IV sets out a comprehensive programme for the reform of the PIM system, including legal initiatives, procedural changes, creation of incentives for enhanced compliance with procedures, and the development of systems for public asset management

#### PART I: MACRO ANALYSIS OF INVESTMENT IN PAKISTAN

#### 1. History – the evolution of PIM in Pakistan since Independence (NH)

This section traces the evolution of the planning and public system in Pakistan since the late 1950s and identifies the major stages in the evolution of thinking by the development community about the function and role of planning and public investment in the development process.

#### 2. History of Planning

#### (a) Independence—A Mandate for Development

Pakistan was born out of colonialism a poor agrarian economy (Per Capita income in 1950 of 360 USD at 1985 prices and poverty incidence of over 60 percent), with limited infrastructure and lacking an industrial or financial base.<sup>1</sup> Partition fractured the economic linkages—trade, public goods, financial connections as well as markets—mainly to the detriment of Pakistan.

With independence came the pressure to provide a better life to the population. Yet illiteracy stood at 15 percent and Pakistan, schooling infrastructure underserved a growing population. Domestic savings—2 percent in 1950--were too low to provide for the demand for infrastructure. Even with foreign saving of 2 percent of GDP investment stood at 4 percent of GDP, too low to provide for development needs and expectations of independence.

Most important, Pakistan lacked the governance infrastructure that India inherited from retreating colonialism. Administration and key institutions such as central bank, banking institutions had to be built from scratch. Capacity was an issue and was mainly filled by the educated migrants (Naseem (2000)). The development of policy and planning as well as ownership and comprehension of policy among the populace has remained an issue to date.

Capacity issues as well as immediate large financing needs made Pakistan deeply dependent on external sources soon after its independence. While India under Nehru struggled to develop indigenous policies and plans for development often at odds of the advice of the development world, Pakistan became the favourite of the development world obtaining large sums of aid and later in the 60s was shown as a role model for development.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> "At the time of Partition, the new state was without a central bank and a proper banking system was almost non-existent. Most of the banks had their head offices in India. Out of 3,496 branches of the scheduled banks, only 631 were situated in Pakistan. To complete the picture of misery, the entire banking structure was dominated by Hindus. With the announcement of the Partition Plan of June 3, 1947, Indians started to withdraw their deposits from the banks located in Pakistan. As a result, many banks had to close down their operations." http://www.sbp.org.pk/about/history/Origins.pdf

<sup>&</sup>lt;sup>2</sup> Nehru's advisor Mahalanobis got advice from the Russians as well as international advisors yet tried to develop an indigenous economic approach to development planning which became quite popular among development economists of the day. See Engerman (2014) and Shah (2000).

By 1950, Pakistan had become a part of the Colombo Plan, established by the Commonwealth countries, the Economic Commission for Asia and the Far East (ECAFE, now ESCAP), and the World Bank for financial aid and development advice (See Haque and Khan 1998, Naseem (2008)). The Planning commission was formally established in 1953 with the Harvard Advisory group (HAG) officially became its coach soon after.

#### (b) Post-war Development Thought

Development economics was born immediately after the second world war with the birth of the Breton Woods international financial system to facilitate development and eradicate poverty in the countries that where emerging out of colonialism. The subject was heavily influenced by the prevailing thought of the time characterised by the following themes:

- Post Second World War world was enamoured of socialism even though NATO led by the US was committed to limiting the spread of communism and even trying to defeat it.
- Market failures were seen to be pervasive in post-colonial countries and would require extensive government intervention,
- Traditional and uneducated people were not considered sufficiently perceptive to accept modernisation relatively quickly without external (government or aid) leadership (Ellis 2001)
- Development would not happen without large amounts of external finance (given low savings and lack of financial development) and development advice (given limited domestic capacity).

Early development models were therefore designed to let the government take the lead to modernise the economy, through building infrastructure and an industrial base. Armed with new models and taken up with the apparent success of Soviet Planning at that time, government led planning models backed by international consultants and development aid was considered the best way to modernise fast.

Government controls and directives would build markets determine sectors and regions where returns would be high and direct activity there. The top priority would be the development of much needed physical infrastructure for the new state which had broken away from India.

#### (c) Harvard Advises Planning

New mathematics of growth based in national income accounting empowered governments to develop accounting frameworks to determine investment requirements that would be available in a given macro-framework.<sup>3</sup> Given low domestic savings and

<sup>&</sup>lt;sup>3</sup> The accounting framework consisted of a simple investment GDP growth relationship based on historical incremental capital ratio, historical savings rate,

large infrastructure requirements foreign aid or borrowing requirements could be determined (Haq (1964)).

Based on this methodology, the country introduced formal 5-year planning in 1955 which with periodic interregnums continues until today. The evolution of the planning process was midwifed by the World Bank and the Harvard Advisory Group (HAG). A consultative process across ministries would be led by the Planning Commission to select high return investment projects to maximise growth in a five-year framework. Cost-benefit analysis and a review process would help identify high return projects. Based on this investment requirement, domestic savings and available foreign investment a 5-year macro-framework is developed to see the consistency between growth inflation and the expected path of the budgets. The Plan then is a five-year macro-framework with detailed plans for investment projects for development. Several shortcomings later became apparent in the planning approach and eventually led to its downfall.

- (i) The 5-year plan projects were cumulated into a development budget known as the PSDP and managed by the Planning commission (PC) while the current budget was managed by the ministry of finance (MOF).
- (ii) As the Soviet Union learnt in the nineties the planning approach was rigid and unable to adapt to changing market conditions. It was difficult to adhere to the 5-year numbers when external and internal shocks hit the economy. Quite often the plan numbers were hard to adhere to by the third year and beyond.
- (iii) The Plan required the MOF to remain within the 5-year macro framework requiring current expenditures to bear the brunt of adjustment when required. Yet current expenditure commitments such as wages, education, health and various transfer payments are hard to cut given the number of people who would be hurt.

#### (d) Growth accelerates with Planning!

Figure 1 below illustrates the evolution of GDP growth over the period from 1951 to 2017 set against key defining political events and external economic shocks.



#### Fig. 1. The Evolution of Growth of GDP—1951 to 2017

Source: Faheem Jahangir.

The government-led planning model initiated in the 1950's sharply restricted capital movements, directed all bank credit at subsidised rates, set agricultural prices below international prices and severely restricted imports especially of textiles and 'luxuries.' Policy was seeking imports-substituting industrialisation while taxing agriculture and curbing consumption and exports (see Haque (2006)). Industrial growth picked up as a result as did profits and reinvestments. Since policy adopted an anti-agriculture bias, annual growth rate of agriculture remained about 2 percent during this period.

The second five-year plan (1960-65) was the most successful plan that Pakistan developed and implemented. Backed by generous aid inflows (mainly USAID and World Bank) and with advice and planning help from HAG, the plan set out to develop heavy industry hoping to achieve growth in excess of 7 percent by the end of the plan period. Projects for development of railways, communications, transport, energy and financial services were conceived and implemented to support the envisaged industrialisation by the private sector.

The second Plan also rebalanced the economy by making significant investments in water resources, increasing incentives for farmers, introducing mechanisation of agricultural production processes, increasing usage of fertilisers and pesticides, and introducing high yielding varieties of rice and wheat. The large-scale manufacturing grew at a rate of 16 percent per annum during 1960/61-1964/65 thanks to continued protection.

The Second Plan was a major success surpassed and was even hailed as a model for economic planning in the developing world. It surpassed almost all its goals achieved a growth acceleration that lasted through 1965 (see chart 1). The success was however achieved in the context of a tightly controlled economy and substantial dependence on foreign aid. Later events changed both the ability of the government to control the economy as well as the availability of aid as vicissitude of international events made aid increasingly volatile, the "HAG/Haq model" of growth through aid financed public sector infrastructural investment became ingrained in Pakistan economic thought. Since then both dictators and elected leaders have considered defining projects and seeking aid as the only policy for driving growth and employment.

#### (e) Planning Faces Exogenous Shocks

Following the second plan's success, the third plan (1965-70) was carefully crafted with considerable expectations for both infrastructure development especially energy, financial market development and further private investment in industry. However, the 1965 war with India interrupted progress as foreign aid declined while financing constraints increased at home to meet the cost of war. The plan was virtually abandoned in its 3rd year as the Ayub Regime was toppled through popular protests and a new martial law was imposed.

Despite this setback, PC developed a fourth plan (1970-75). Thus, plan was virtually stillborn as the country split after the 1970 election and a populist government was installed in the now truncated new Pakistan. Though Bhutto the new leader was a socialist, he had no time for planning which might interfere with his agenda for nationalisation, development government owned heavy industry and a push for a clandestine nuclear programme.

The Bhutto government officially dropped 5-year plans from 1973-78 and made the PC a wing of the MOF. There were nominal annual plans but largely the development budget was used at the whims of the Prime Minister. The planning system with cost benefit principles and approval and planning processes were put under severe pressure and easily bypassed.

The Bhutto years saw large expansion of the public sector following the nationalisations of 73 and 75 and the development of a large number of public sector companies (e.g. Roti corporation, Heavy mechanical complex, Heavy industry complexes, Nespak etc.) to perform a variety of functions in the market place. The government also had to face adverse external shocks such as the large oil price increase in 1973, global stagflation, pest attacks on the cotton crop as well as massive floods in 1973, 1974, and 1976-77. All these factors contributed to an expansion the fiscal deficit which, averaged 8.1 percent of GDP during 1973-77. As a result, inflation remained high--15 percent per annum--over 1972-77 and the current account and reserves began to come under pressure. The country continued to struggle with balance of payments difficulties through this period signing almost continuous adjustment programmes with the IMF. From here on the country was beset with the problem of adjustment which to date has never been completed despite almost continuous engagement with the IMF.

#### (f) Reversing Socialism: Liberalisation Begins

With the change of regime in 1977, planning was revived by the new government with a promise to embrace an agenda for liberalisation and deregulating the economy as well as privatisation of the large number of state enterprises that had been created, i.e., reversing the agenda of the previous regime. Through most of this period both the MOF and the PC were led by a group of civil servants who worked together. However, MOF was clearly in the lead.

The 5th 5-year plan (1978-83) was quickly overtaken by exogenous events. *Soviet invasion of Afghanistan* in December 1979 forced a huge number of refugees into Pakistan. In the same year saw a global oil price shock that adversely impacted the BOP of an oil-importing country like Pakistan. These negative shocks were balanced off by the remittance inflow that picked up in 1976 following the migration that had taken place in the early 70s responding to the opportunities in the middle east building boom as well as the provision of USAID to Pakistan for being a frontline state (see Figure 2).



Fig. 2. The Evolution of Remittances—1976 to 2017

Source: Estimates from official sources.

Thanks to these inflows, growth did pick up in this period averaging well over 6 percent. However, given the expansion of the public sector in the previous regime, the pickup in inflation as well as the deteriorating reserve situation, policy continued to struggle with stabilisation. In the context of IMF programmes, licensing arrangements and some price controls were liberalised or abolished which did contribute to a pickup in both agriculture and manufacturing.

However, the <u>balance of payments</u> and inflation remained under pressure as many of the structural issues were not addressed.<sup>4</sup> Private savings continued to remain below target and private investment did not respond to the liberalisation and deregulation initiatives probably because the memories of nationalisation were still too fresh.

From here on infrastructure shortages—particularly in energy, telecommunications water and transport—would become key factors in plans as would the challenges of the social sectors and productivity. While all subsequent plans tried to target these issues and a growth rate of over 6 percent, the economy continued to grow sporadically and remained plagued with the issues arising from macroeconomic adjustment.

<sup>&</sup>lt;sup>4</sup> It may be worth mentioning here, that BOP and public finances came under pressure, at least in part, because of inappropriate sequencing of trade and tariff and financial sector reforms undertaken under the IMF programme. Import tariffs were lowered without reforming the domestic taxes to recover revenue losses; and interest rates on government borrowing were raised without lowering public debt of fiscal deficits.

The 6th plan 1983-88 saw growth declining and the onset of a BOP crisis that has lasted more or less till today. The plan was essentially a continuation of the 5<sup>th</sup> plan with ambitious targets for economic sectors, savings and investments and public-sector projects for putting in place physical infrastructure. Once again key targets were not met in plan implementation. However, the fiscal situation worsened (7.1 percent of GDP from 1977-1988) given continuing subsidies in several sectors and the losses of the public sector leading to a continuing pressure on both the PSDP and domestic credit. The current account deficit, too, remained at 4.5 percent of GDP while inflation averaged 7.5 percent (see Nasir 2012). As can be seen from figure 1 above, growth declined over this period and the continuing domestic and internal imbalances led Pakistan into a 3-year structural Adjustment Facility of the IMF. This was the beginning of a long period of adjustment that the country is yet to complete despite being in IMF programmes in the last 21 out of 30 years (see Table 1).



Fig. 3. The Development Budget as a Percentage of GDP

Source: MOF.

One important initiative taken in the context of the 6<sup>th</sup> plan which damaged the planning process and the control of the PSDP was the introduction of politicians into the public investment process. It began with the members of parliament being given dedicated funds from the PSDP to spend in their constituencies. Thereafter roughly 10 percent of PSDP was spent without due diligence on the direction of politicians.

#### (g) Politics Invades Planning

The civilian governments (1988-99) that followed Zia's dictatorship continued to open out the economy, liberalise and deregulate and seek more imaginative solutions to grow the economy. Though plans were made and even a fifteen years perspective (1988-2003), to set up targets for growth and improving the quality of life on the other, most important policy decisions, including mega-project development began to happen beyond the technical purview of the Planning Commission. The driver of economic reform and strategy was now mainly the Fund programme while infrastructure projects driven by political needs and agendas.

Two plans were prepared in this period—the 7<sup>th</sup> (1988-93) and 8<sup>th</sup> plan (1993-98) --supposedly in keeping with the perspective plan.<sup>5</sup> The motions of planning were observed, and goals and targets fixed for all sectors, however, the largest project of the decade, the M2, Lahore to Islamabad highway, was initiated regardless of the plan. In this era, the political governments also began a major drive road-building with a special emphasis on urban underpasses and overpasses. This was a departure from plans for political reasons but without the necessary planning procedures.

#### (h) The Washington Conesus comes to Pakistan

Meanwhile development thinking in the west moved away from planning to more open and market-oriented policies. In the context of IMF adjustment programmes, several important steps were taken to adapt the economy in line with the Washington Consensus. Privatisation was begun in 1991 with the sale of some of the businesses that Bhutto had nationalised such as Muslim Commercial Bank and almost all of public sector manufacturing units, including some of the Bhutto created PSEs like the Roti plants, etc. Since then Privatisation has been a major theme in policy to reduce government involvement in the economy and reduce the fiscal burden of public enterprises. Privatisation sales have however, been sporadically implemented for many reasons including the lack of capacity in government as well as occasional pushbacks from court and civil society. Nevertheless, in this period a significant step was taken in the reversal of the Bhutto nationalisation and build-up of public sector enterprises.

Following the Washington Consensus, attempts were made to reduce the role of the state. Liberalisation of domestic prices and licensing regimes improved domestic investment environment though Pakistan still languishes in the bottom quartile of the Competitive and Ease of Doing Business rankings. More important were the financial reforms that dismantled controls on foreign transactions completely

<sup>&</sup>lt;sup>5</sup> The Perspective Plan was never really taken seriously. In 1997, the PMLN government took out a vision 2010 which too was forgotten following the coup. Various PC initiatives for vision and longer term have been developed Vision 2030 (2006) and Vision 2025 (2014) but they remain documents with little serious impact.

deregulating current account while almost opening out the capital account. At the same time interest rate controls and all credit controls were also deregulated.

Energy continued to remain a major constraint for growth despite it being highlighted as a goal in earlier plans. 2 important projects for energy development were completed in the 7th and 8th plans—Ghazi-Barotha hydel with World Bank and PSDP financing and Hubco with private sector financing.<sup>6</sup> The latter was developed as part of the 1994 Independent Power producer (IPP) on advice of the World Bank to invite private sector into power production backed by sovereign guarantees. The IPP policy was considered to be an important cornerstone in the policy to create more space for the private sector and push the government back.

This policy certainly helped develop a comfortable energy situation in the domestic economy in the short run, but the sovereign guarantees would have long term consequences for sustainable BOP as well as energy supply. The advent of this policy did end the era of cheap energy which was fuelling growth in the earlier period. With large private sector commitments, the government needed to create a deregulated energy market that would allow some of its sovereign risk to be shared. Unfortunately, the government which was used to working with controls did not have the capacity to undertake the deeper reform of setting up an energy market and working with IPPs with sovereign guarantees. This system festers with debts and deficits, known as the circular debt, that the government has to deal with.

PC had little role in the development of this policy, nor did the plans take the IPP policy into account. By now PC had been marginalised and had been losing human capital. It was virtually side-lined by the MOF.

#### (i) Austerity Replaces Planning

The PC and the planning approach had peaked in Ayub's time. Thereafter it never regained centre stage in economic policy. Plans were seldom taken seriously to frame policy. The revival in the Zia years never gave the Planning commission or the Plan the centrality in the economy that it used to have. However, the onset of the almost continuous IMF programme from 1988 onward meant that growth policy, planning and PSDP were now subject to the needs to adjustment policy.

The alignment of the budget to the medium-term needs of the plans had already stopped in Bhutto years. Now the IMF programmes had their own medium-term budget policies and no effort was ever made to align them with plans. Plans too seemed to be unaware of the ongoing adjustment. IMF regarded MOF as its focal point for negotiating adjustment policy, disregarding the PC.

<sup>&</sup>lt;sup>6</sup> This also underlines that the basic problem was rigidity of planning process. After the early "success" of IPPs, the government decided to vacate thermal generation solely to the private sector and focus exclusively on hydel power. The system remained stuck on this decision despite emergence of acute power shortages.

Deeper structural reform, despite many pronouncements, proved harder to do. Several pushes for revenue increases failed and attempts at the detailed public expenditure review were never seriously implemented. Expenditure cuts therefore relied on periodic cuts in PSDP, wage and hiring freezes and across the board cuts (i.e., every department/agency will cut a certain percentage of its budget). The quality of governance as well as public service began to decline as a result. Assets like railways and bus systems were not maintained and showed remarkable depreciation. Public sector efficiency declined affecting productivity as well as the budget.

Despite the desire expressed in every plan to see an increase in public investment, PSDP showed a constant decline as a percentage of GDP from 1991 to 2002 because of the required fiscal adjustment (see figure 3).<sup>7</sup> With public investment declining productivity and fiscal situation being adversely affected, growth showed a declining trend in this period (see figure 1). Pakistan was now in the midst of *austerity* defined as the starving of funds to maintenance of assets and public service delivery.

Planning was given another nudge with the programme under the Poverty Reduction and Growth Facility (PRGF) in 1997. Access to that facility required the government to make a Poverty Reduction and Growth Strategy Paper (PRSP) which would form the basis of IMF lending. The PRSP was a 3-year growth and distribution framework. MOF prepared this paper in a specially created donor-funded cell through consultant bypassing the body that was created for managing medium term development—the PC. Yet the PRSP was never seriously followed by the government. Meanwhile the PC continued to develop Planning documents regardless of the PRSP.

#### **Plans Without Ownership**

Although the PC continued to go through the motions of Planning even spending time and resources developing plans. The 9th five-year plan (1998-2003) was never approved by the National Economic Council or the parliament and hence never reached the stage of implementation. While the plan was at its finalising stage, the nuclear test in May 1998 changed the external environment and several of the precepts on which the 9<sup>th</sup> Plan was made. Soon after, the 1999 military takeover changed the political dispensation and overtook the plan.

Geopolitics and austerity virtually dried up funds available for the PSDP from 1998-2002. With less than 2 percent of GDP available for public investment, planning and PC were totally marginalised. In any case, country was struggling with the adjustment and austerity.

With 9/11, Pakistan became a frontline state one again, this time in the 'war on terror.' Sanctions that were put in place at the time of Pakistan's nuclear test were removed and aid to Pakistan was increased. This changed geopolitical scenario also paved the way for a rescheduling of Pakistan's debt in late 2001 which substantially

<sup>&</sup>lt;sup>7</sup> In 2002 the size of the PSDP had reached about 1% of GDP from over 7% in 1992.

reduced the debt service obligations of the country. This cleared up some fiscal space for investment funds to grow. Though PSDP funds started growing after 2003, they seldom crossed 4 percent of GDP unlike the earlier years when it was mostly above 6 percent of GDP.

With some fiscal space country started to revive public investment and growth. However, the themes that were picked up were mostly not developed by the PC. By then the MDGs were in place and resources were guided by the MDGs to the extent that of the capacity and ownership within government. But the government had also started 3 other major initiatives that were taking up resources that were available for investment. In 2002 the Higher Education commission was formed with a mission to expand higher education. At first phase it took upon itself the task of building new universities and sending large number of students on overseas scholarships. The government also initiated the development of Gwadar a deep-sea port in the south in 2001. Finally, following on from the 'success' of the M2, road-building became a priority, perhaps the top priority for the country. Sadly, energy remained low priority which later brought huge shortfalls that plagued the country for 10 years.

PC which became independent of MOF after a long time in 2003, worked on a plan which it called a Medium-Term Development Framework. This plan essentially was built around the MDGs and the 3 initiatives of the government. However, given ongoing fiscal retrenchment, the plan was not to invest envisaged amounts. But it was able to build substantial number of roads and universities.

#### (j) Elusive Stabilisation

In 2008 civilian rule returned to Pakistan through an election. By then IMF programmes had achieved price and tariff liberalisation, opening out of the economy and a fair amount of privatisation. Country had reached high rates of growth in the last 4 years and there was optimism in the air.

One area where both reform and investment lagged was energy. Prices were never fully liberalised, nor were adequate investments made in this area over the last decade. Instead the 1994 IPP policy was extended and more private power was generated with sovereign guarantees of offtakes and fuel. The oil price spike of 2007-14 returned Pakistan to the IMF with large fiscal deficits and depleting foreign exchange reserves.

PC marginalisation continued in this period as did adjustment under IMF programmes. A 3-year adjustment programme was initiated in 2008 which put in regulatory duties on imports beginning the process of reversing the earlier tariff liberalisation. Fiscal retrenchment chose to again cut public investment. Yet public investment, which was not growing, continued to build roads and some education but had acquired one additional imperative to expand energy generation.

In 2010, the 18th amendment of the Constitution achieved decentralisation of federal powers to the provinces. This was accompanied by the 7th National Finance

Commission award, which gave a large chunk of revenues to the provinces. Over time a larger share of development funds is now going to the provinces.<sup>8</sup> In the context of the 18th amendment an Interprovincial Coordination Ministry was also set up to coordinate issues including economic and resource sharing with provinces. One major function of PC that of coordinating on key development issues was now no longer its domain.

With an election in 2013, the PC began anther phase of independence from the MOF with a full federal minister heading it. Quickly the Framework for Economic Growth (2011-14) that had been approved in 2011 and 12 was discarded, as was the Vision 2030, that was prepared by the Musharaf Government--both without due process and Vision 2025 developed.

An 11<sup>th</sup> 5-year plan was developed and approved in 2015. But while the 11<sup>th</sup> plan was being developed, the Chinese One Belt One road project extended into Pakistan in the form of the Chinese-Pakistan Economic Corridor (CPEC) which would allow china access to the Arabian sea through Pakistan and Gwadar. CPEC also envisages the development of power generation and several economic zones. It represents FDI of about 56 billion USD in about 15 years. Excited by this PC and government policy and pronouncements shifted to CPEC which PC and the government calls the game changer. It is unclear how the announced vision and plan gel with CPEC which now in the eyes of the leadership appears to have priority.

Tal	ble	1

Pakistan's Borrowing from the IMF

Pakistan: History of IMF Lending Arrangements

		Date of	Initial Date of	Actual Date of	Amount	Amount	Percent
	Facility	Arrangement	Expiry	Expiry	Agreed	Drawn	Undrawn
1	SBA	Dec 8 1958	Dec 7 1959	Sep 22 1959	25,000.00	0	100
2	SBA	Mar 14 1965	Mar 15 1966		37,500.00	37500	0
3	SBA	May 18 1958	May 17 1973		100,000.00	84000	16
4	SBA	Aug 11 1973	Aug 10 1974		75,000.00	75000	0
5	SBA	Nov 11 1974	Nov 10 1975		75,000.00	75000	0
6	SBA	Mar 9 1977	Mar 8 1978		80,000.00	80000	0
7	EFF	Nov 24 1980	Nov 23 1983		1,268,000.00	1079000	15
8	SAF	Dec 28 1988	Dec 27 1991	Dec 15 1992	382,400.00	382410	0
9	SBA	Dec 28 1988	Mar 7 1990	Nov 30 1990	273,150.00	184480	29
10	SBA	Sep 19 1993	Sep 15 1994	Feb 22 1994	265,400.00	88000	67
11	ESAF	Feb22 1994	Feb 21 1997	Dec 13 1995	606,600.00	172200	72
12	EFF	Feb22 1994	Feb 21 1997	Dec 13 1995	379,100.00	123200	68
13	SBA	Dec 13 1995	Mar 31 1997	Sep 30 1997	562,590.00	294690	48
14	PRGF	Oct 20 1997	Oct 19 2000		682,380.00	265370	61
15	EFF	Oct 20 1997	Oct 19 2000		454,920.00	113740	75
16	SBA	Nov 29 2000	Sep 30 2001		465,000.00	465000	0
17	PRGF	6-Dec-01	5-Dec-04		1,033,700.00	861400	17
18	SBA	24-Nov-08	30-Dec-10	30-Sep-11	7,235,900.00	4936000	32
19	EFF	4-Sep-13	3-Dec-16	3-Sep-16	4,393,000.00	4393000	0

<sup>8</sup> In 2017-18 provincial PSDPs were a total of Rs 1.112 trillion while the federation was Rs 1 trillion.

#### **Evolving Development Thought**

Development as a subject has been growing over the last 65 years of the Planning Commission and the PSDP. Learning from crises in poor countries and the gnawing persistence of poverty as well as other deprivation indicators, this young but well-funded subject has scrambled for policy to support aid flows directed toward solutions. Roughly 5 turning points in development thinking can be identified (see, Yusuf (2009)]).

- stage 1. Aid: In the early stages, there were 2 lacks that were identified: capital and infrastructure. An aid establishment was created to first provide Capital and investment and then develop policy frameworks based on central planning and import substitution through a new breed of development professionals trained in the west. If the traditional world could be moved from its dependence on agriculture to industry through a big push by government which had better information and advice, development would happen. (Todaro (1970), Gerschenkron (1962)). The PC was founded by this school for this purpose.
- **stage 2. Poverty and distribution:** By the eighties several developing countries had developed bloated public sectors, uncompetitive industries and agriculture as well as deep regulatory and price controls that were impeding growth. Meanwhile poverty remained resistant to aid inflows, capital formation and investment. 'Trickle-down' was not working. Development thinking shifted focus first to Basic Needs and then directly to Poverty reduction although the means to achieving these ends still remain unclear. However, disillusionment with growth had set in and poverty was being directly targeted.
- **stage 3. Structural Adjustment:** While the development community was trying to set up the agenda for poverty reduction, it was clear that planned and directed economies that had been set up in the first stage of development were leading to large macroeconomic imbalances and slowing down growth and increasing poverty. Structural Adjustment programmes of both the IMF and the World Bank were initiated in the eighties to dismantle state interventions in markets and reduce the role of the state to allow competitive forces more room. Macro stabilisation, rightsizing the state and liberalisation were the themes of this era (Washington Consensus).
- stage 4. Reform, institutions and governance: The earlier failures of development policy led to the search for theories beyond the standard models which focused on capital inflows. Increasingly, institutions

and governance have been shown to be the key determinants of investment, technology and then both growth and welfare (Lucas (1988) and Acemoglu and Robinson (2010).

stage 5. Results based: MDGs and SDGs are now accepted across developing countries as goals. These are concerned with setting detailed development targets from a welfare point of view to commit all countries to provide a wide variety of welfare goods to their children. This is virtually a UN-determined Results based system.

Where is Pakistan in all this? Pakistan is somewhere between stage 1 and 3. Policy and thinking continues to think that the path to development is more money and megaprojects with the state taking the lead. Progress on structural adjustment remains slow despite 21 out of last 30 years in an IMF programme. Public sector still remains large and financial losses remain beyond the control of MOF. Deficit financing requires that the once liberalised tax and tariff policies continue to be distorted imposing large cost on business and slowing down growth. Exchange rate policy continues to periodically overvalue the exchange rate so that reserve losses pile up to precipitate a crisis. Instead of keeping with the spirit of the float, policy has sought controls and tariff distortions.

One reason Pakistan cannot compete its structural adjustment because domestic political considerations do not allow it to move to stage 3—institutional and governance reform. PSDP management and the role of PC is part of this reform that is necessary. Such a reform requires a fair amount of research, debate and thought. It requires a fundamental rethinking about the architecture of policymaking and the policy process.

#### 2. The Role of Investment in the Pakistan Economy

Public investment serves as a key catalyst for economic growth. By supporting delivery of key public services and creating public infrastructure, it reduces cost of production thus creating opportunities for private sector to expand its involvement and investment in the economy leading to higher economic activity. On the other hand, public investment is financed mainly through taxation, which can have a damping effect on private investment. Hence, the net impact of public investment on growth depends critically on efficiency of public investment.

It has been amply demonstrated by research studies that having a wellfunctioning public investment management (PIM) system significantly enhances the efficiency and productivity of public investment. An IMF study finds that countries with stronger PIM institutions have more predictable, credible, efficient, and productive investments. Also, strengthening key institutions of PIM in low efficiency countries can narrow the efficiency gap by as much as 67 percent.<sup>9</sup>

<sup>9</sup> IMF (20xx) "Investing in investment",

During the period between 1960-1990, Pakistan managed to achieve respectable rates of economic growth. The strangest feature of this growth experience was that it was achieved when all economic fundamentals were against this sustained high growth. Compared to other countries, Pakistan's investment levels were quite low; human development lagged other countries by considerable margin; and fiscal and current account deficits were much higher than in comparable countries. The only factor that supported this respectable level of economic growth was Pakistan timely and significant public investments in some critical areas like agricultural research, hydroelectricity, irrigation network and energy.

Throughout its economic history, the level of investment in Pakistan has been very low. During the last 57 years, Pakistan's total fixed investment exceeded 30 percent of GDP only once, and that was back in 1964 (Figure 1). Since then the investment/GDP ratio has been on a steady decline, although with significant fluctuations. Presently, Pakistan's fixed investment is close to 15 percent of GDP, placing Pakistan at 160<sup>th</sup> position among the 170 countries for which data on investment are available in World Development Indicators (February 2018 edition). This low level of investment not only leads to the present low rate of economic growth (compared to other regional countries) but also augers poorly for a marked acceleration in economic growth in the immediate future.



Fig. 4. Pakistan: Trends in Investment and Growth

Figure 1, also shows that overall fixed investment fell sharply after the 1965 war and has remained around 20 percent of GDP during the period between 1965-66 1988-89. Since then investment has averaged around 17 percent p.a. but since 2008-09, this average has dropped further to about 14.5 percent of GDP. An important feature of this investment trend is that since 1988-89, private investment has remained more or less constant at about 11 percent of GDP. The decline in overall investment has been solely due to a sharp decline in public investment, which fell from 6.4 of GDP in 1998-99 to only 2.8 percent by 2011-12; owing mainly to the need of reducing fiscal deficit to sustainable level, coupled with Pakistan's proverbial inability to raise revenue and the high levels of defense, interest and wage expenditures, which makes Pakistan's current expenditure very rigid, thereby putting the burden of consolidation squarely on public investment. Nonetheless, in the last couple of years, public investment recovered somewhat to reach 4.3 percent of GDP in 2016-17.

While poor policies and adverse geopolitical factors have contributed, the inadequate level of savings remains the most important reason behind low investment in the country. For a greater part of its existence, Pakistan domestic saving rates had remained in single digits.<sup>10</sup> After increasing to about 15 percent in the 1990s and 2000s, the domestic saving rate has declined to an average of only 8.6 percent during 2010-16. In comparison, Bangladesh, which had a domestic saving rate of less than 2 percent in the 1970s, has raised its saving rate to almost 22 percent in recent years. There is no surprise that the investment rate in Bangladesh is much higher than in Pakistan.

Among seven comparable Asian economies, Pakistan has performed the worst on all of four macroeconomic indicators over the last seven years. In fact, among these countries, Pakistan is ranked last on level of investment and economic growth for over last 27 years (Table 1).

Table 1 also shows that Pakistan has relatively low incremental-capital-outputratios, which implies that Pakistan has been better able to convert its meagre investment resources into economic growth than other comparable Asian economies. This apparent efficiency of investment, however, needs a more in-depth analysis to better guide economic policy. More specifically, it is important to determine whether this relative efficiency is an outcome of relatively low levels of investment or whether this "efficiency" is due to better distribution of investment among higher growth

<sup>&</sup>lt;sup>10</sup> Many factors are responsible of this low rate of saving. The continued high rate of population growth which increases the dependency rate and increases consumption at every level on income. Low level of tax revenue and high level of government's recurrent spending implies negative public saving; which has been the case in 9 out of last 10 years. Preemption of private savings by the government through National Saving Schemes and other instruments to finance its consumption. Economic and political instability and high rates of inflation makes households to value present consumption more than future consumption (i.e. savings). Very low bank deposit rates lead to negative real returns to investment, especially in periods of high inflation.

sectors (allocative efficiency); whether it is due to better use of technology (technological efficiency); whether the public or private sector (or both) responsible for this "efficiency".

As mentioned earlier, past growth in Pakistan could be partly attributed to allocative efficiency of public investment, i.e. investment in high growth sectors and activities. More recently, Pakistan's growth is driven by sectors which have low investment requirements, e.g. commerce, banking and finance, general services, etc. (Table 2).<sup>11</sup>

1970 - 2016									
	Decades	Bangladesh	China	India	Indonesia	Malaysia	Pakistan	Sri Lanka	Pak Rank
	1970-79	1.5	7.4	2.9	7.2	7.7	4.8	4.2	4.0
Crowth	1980-89	3.5	9.7	5.7	5.8	5.9	6.9	4.1	2.0
(%)	1990-99	4.7	10.0	5.8	4.3	7.2	4.0	5.3	7.0
(70)	2000-09	5.6	10.4	6.9	5.1	4.8	4.5	5.0	7.0
	2010-16	6.3	8.1	7.3	5.6	5.4	3.9	6.2	7.0
	1970-79		26.9	17.0	17.4	24.5	14.9	16.1	6.0
Investment	1980-89	16.1	29.8	22.0	22.2	29.8	17.0	25.9	6.0
(% of CDP)	1990-99	19.4	32.0	25.0	25.3	36.3	17.0	24.6	7.0
(% 01 ODF)	2000-09	25.3	38.8	30.6	21.8	22.6	16.3	23.5	7.0
	2010-16	28.2	44.6	31.3	32.1	24.9	13.5	27.2	7.0
	1970-79	5.5		21.4		26.6	20.8	6.9	3.0
National Saving	1980-89	15.6	36.7	21.5	17.3	25.1	24.8	20.3	3.0
(% of GDP)	1990-99	21.8	40.2	27.2	19.9	34.7	21.3	21.2	5.0
(/0 01 0 01 )	2000-09	32.3	45.9	34.7	19.5	35.7	23.0	22.0	5.0
	2010-16	37.9	49.1	33.9	32.0	30.5	22.0	29.0	7.0
	1970-79	1.9	34.1	19.1	18.7	28.6	8.2	13.7	6.0
Gross Domestic	1980-89	7.6	36.0	20.7	27.3	30.6	8.3	12.9	6.0
Saving	1990-99	13.8	40.7	26.1	29.4	40.6	15.1	16.0	6.0
(% of GDP)	2000-09	19.9	45.5	32.1	28.6	43.0	14.1	16.7	7.0
	2010-16	21.5	49.4	31.9	34.5	35.5	8.6	23.4	7.0
	1970-79		3.6	5.8	2.4	3.2	3.1	3.8	2
	1980-89	4.6	3.1	3.9	3.8	5.1	2.5	6.2	1
ICORs	1990-99	4.1	3.2	4.3	5.9	5.0	4.3	4.7	3
	2000-09	4.5	3.7	4.4	4.3	4.7	3.6	4.7	1
	2010-16	4.5	5.5	4.3	5.8	4.6	3.5	4.4	1

Table 2Key Macroeconomic Indicators for Selected Asian Countries,

<sup>11</sup> Average rate of growth over the last 18 years has been highest for the manufacturing sector, this was mainly in the 2003-2008 period and was an outcome of utilisation of excess capacity in the sector than because of high level of additional investment.

Table	3
1 aore	~ ~

	Investment		
	Growth (%)	Rate (%)	ICOR
Agriculture	2.2%	16%	7.27
Mining	2.7%	16%	5.88
Manufacturing	4.6%	18%	3.93
Electricity and Gas Distribution	0.0%	40%	830.09
Construction	3.7%	65%	17.28
Wholesale and Retail Trade	3.9%	2%	0.40
Transport and Communication	3.6%	20%	5.49
Finance and Insurance	4.0%	7%	1.85
Housing	3.3%	40%	12.10
Others	5.7%	33%	5.77
GDP	3.5%	18%	5.33

Sectoral Growth and Investment Rates (Average for 2001-2017)

Since 1990, economic growth in Pakistan slowed down considerably. While a host of geo-political and policy induced factors can be attributed for this slowdown, one critical factor which contributed to this slowdown was the falling level of public investment. As large fiscal deficits of the past pushed the country towards a debt crisis, the government was forced to consolidate its finances to avoid a full-blown fiscal crisis. With public revenue remaining stagnant, and large rigidities in government's recurrent expenditure, public investment has to bear the brunt of this consolidation. Public Sector Development Programme, which is the most important component of public investment, declined from over 5 percent of GDP in 1985-86 to 2.5 percent in 1998-99. Infrastructural shortages aggravated leading to decline in country's productivity and competitiveness.

For accelerating economic growth, Pakistan requires substantial investment. In this regard, the Chinese investment under China-Pakistan Economic Corridor (CPEC) would be big motivating factor. However, even getting the most out of CPEC investment, supporting investment would be required in local infrastructure. Similarly, human capital development through investment in health, education and skills would require considerable scaling up of public investment. In view of present fiscal situation, such a scaling-up may not be possible without worsening the debt situation even further. Enhancing the efficiency of public investment will not help meet some of the investment needs but will lead to higher return when improved fiscal scenario would help an increase in public investment.

#### 3. Aggregate Analysis of PIM Efficiency in Pakistan

This chapter presents evidence relating to the assessment of the efficiency of public investment in Pakistan and how this has changed over time. From the outset it must be recognised that the assessment of efficiency of public investment is a complex task, There are several reasons for this: (i) public investment can be oriented to several

distinct types of result or outcome-- accelerated economic growth, social development; infrastructure creation and facilitation of private sector investment—"crowding-in", to name but a few—so that efficiency must be measured in respect of the achievement of those distinct results/outcomes;. (ii) the impact of investment is not achieved immediately but is typically spread over several years after the completion of the investment. This calls for complex measurement methodologies.

The approach taken in this study to assessment of the efficiency of public investment is to apply multiple methodologies drawing on existing approaches developed in recent years. Specifically, the study applies the following methodologies:

- (i) Application of the Public Investment Efficiency Index (PIE-X) methodology developed by the IMF as an element of its Public Investment Management Assessment (PIMA) methodology. The PIE-X uses cross country data on pubic investment and national GDP to create a "Data Envelope" in which the "envelope" is formed by linking the best performing countries graphically. This methodology permits a crude assessment of the extent to which a given country falls short of best practice in respect of both the quantity of public investment and the efficiency of public investment measured relative to the best performing countries. Essentially the same methodology can be applied using single country time series data to assess efficiency in each year relative to the best year of performance.
- (ii) Comparative country regression approach. In this methodology regressions are undertaken for each of a set of comparator countries which seek to explain the contributions to growth of national GDP over a time period from the main factors of production, including labour, private investment and public investment. The results for Pakistan are then compared to the other countries on the basis of an index.

The study applied both the above methodologies and reached broadly common results which can be summarised as indicating that Pakistan falls substantially short of the best performing counties, with the implication that there is substantial scope for improving the efficiency of public investment in Pakistan through reforms of the PIM system.

Finally, the plausibility of the results obtained through the quantitative analysis methodologies outlined above was assessed through a detailed review of all the stages of the PIM process to identify likely existing sources of inefficiency. This analysis is presented in Chapter ... below.

#### Assessment of Efficiency of Public Investment based on the IMF PIE-X Methodology

*Methodology—estimating efficiency from cross-country data:* To estimate efficiency of public investment in Pakistan, IMF's PIE-X (Pubic Investment Efficiency Index) methodology was used. The PIE-X methodology is simply the Data Envelopment

Analysis (DEA) applied to public capital (or investment) data using GDP (or GDP growth) as the dependent (or "output" indicator). (For complete description of the methodology and its positives and negatives aspects see Annex I.) However, promoting economic growth may be only one of many "outputs" that public investment may want to target. The other "outputs" may include overall level of development, infrastructural development, human development or even "crowding-in" private investment, etc. To determine efficiency of public investment in Pakistan, all five of these "output" indicators were used (for calculation of these additional output indicators, see Annex I).

Finally, public investment is undertaken mainly through implementation of development projects. These projects, especially the larger and more important ones, takes a relatively long period to complete. As such, the impact of public investment on growth and other "output" indicators could be delayed by a few years. For this reason, the efficiency of public investment is assessed using lagged (by 5 years) values of public capital (or public investment) data.<sup>12</sup> The efficiency is estimated using cross-country data,<sup>13</sup> which could show efficiency of Pakistan's public investment in comparison to "international best practices". For this, a sample of 35 low and middle-income countries was selected.<sup>14</sup> As calculation of efficiency through DEA is highly sensitive to extreme positive values, care was taken to exclude the "outlier" countries where a small change can show a very large growth.

#### **Results Obtained**

The results of PIE-X exercise are given in Annex II, but are summarised in Table 3. This table shows that efficiency of public investment in Pakistan is consistently below the average for low and middle-income countries. The highest difference between Pakistan's level of efficiency and the sample average is for output (GDP/Labour) which is almost 22 percent while it is only 12.5 percent below the sample average for efficiency in infrastructure development.

The tables also show some interesting results, some of which may be counterintuitive, or at least against the commonly held perceptions. For example, the following propositions have been established by previous research:

<sup>&</sup>lt;sup>12</sup> Theoretically there is a reason to believe that public investment should impact output indicators over a period of time (i.e. can have a distributed lagged effect). However, in our analysis, the investment and output variables are constructed by using 5-year moving average to smoothen out the exogenous spikes in data. As such, the lagged investment (capital) in some way does capture the distributed lag effect.

<sup>&</sup>lt;sup>13</sup> Data on GDP and GDP growth were taken from the World Development Indicators (February 2018 edition); data on public and private investment were obtained from IMF website as were the data on public and private capital. Infrastructure development, human development and overall development indices were constructed using data from Global Competitiveness Index of the World Bank and Human Development Report of UNDP.

<sup>&</sup>lt;sup>14</sup> One country got dropped in calculation of output and crowding-in efficiency and two in calculation of development indices because of incomplete data.
- (i) Through its economic history, Pakistan has done well in generating relatively high economic growth, but has performed poorly in converting this growth into socio-economic development.<sup>15</sup>
- (ii) Pakistan does well in provision of infrastructure but very poorly in improving the social indicators.<sup>16</sup>

Table 4 however, shows that at least for the public capital (investment) the efficiency in generating socio-economic development is significantly than that for producing output (i.e. GDP or GDP growth). Similarly, the table also shows that efficiency of public capital (investment) is somewhat better for human development than that of infrastructure development. This second apparent contradiction is resolved by considering that: (i) viewed from international perspective, Pakistan makes much smaller investment in human capital than in infrastructure; and (ii) social sectors are labour intensive and thus require more recurrent expenditure than investment to show results.

### Table 5

Efficiency of Lagged Public Investment in Pakistan—Low and Middle-Income Countries

Output Indicators	Pakistan's Efficiency	Best Performing Countries	Average Efficiency	# of Countries
		Azerbaijan, Chile, Turkey,		
GDP/Labour	28.0%	Iran	50.6%	34
Overall Development	69.8%	Azerbaijan, Chile, Malaysia	81.1%	33
Infrastructure Development	68.6%	Chile, Malaysia	77.2%	33
Human Development	69.2%	Chile, Iran	81.0%	33
Crowding-in Private Investment	43.4%	Azerbaijan, Chile, Brazil	61.5%	34

In is interesting to note that one country, Chile, appear as one of the best performers on expenditure efficiency, irrespective of the choice of development indicator. Chile is one country in South America which made a conscious effort to enhance efficiency of public expenditure through Public Financial Management (PFM) reforms.

# Regression-Based Analysis of the contribution of Public Investment to Economic Growth

Given that IMF methodology for calculating efficiency of public investment has some problems (see Annex I), there will always be a scope for doubt over

<sup>&</sup>lt;sup>15</sup>See Easterly, W. " The Political Economy of Growth Without Development: A Case Study of Pakistan", World Bank , June 2001.

<sup>&</sup>lt;sup>16</sup>See for example, World Bank "Public Expenditure Review: From Increasing Expenditure to Spending for Results".

efficiency estimates obtained by using PIE-X. As such a regression model was also used to calculate efficiency of public investment. In this model, logarithm of GDP was regressed on logarithms of employment, public capital and private capital for each of 25 low and middle-income countries using World Bank and IMF data. The coefficients obtained through these regressions were used to construct an efficiency index, which is presented in Figure 2.<sup>17</sup>



Fig. 5. Output Efficiency of Public Capital (Estimates from Regression Analysis)

Figure 5 shows that despite a change in sample size, the estimate of Pakistan's output efficiency obtained for the second (regression) methodology is fairly close to that obtained from PIE-X. Unfortunately, data limitation prohibited us to verify the efficiency estimates for other output indicators using the second methodology.

The results show that Pakistan's efficiency of public capital (or investment) is only one third of best performing country in our sample (i.e. Argentina). In short, there is considerable room for improving the technical and/or allocative efficiency of public investment.

<sup>&</sup>lt;sup>17</sup> Nine countries from our original sample were dropped due to insufficient data. The production functions was assumed to be of Cobb-Douglas type, i.e.  $log(GDP = \beta 0 + \beta 1 log(Labour) + \beta 2 log(Govt. Capital) + \beta 3 log(Priv. Capital)$ . After estimating this production function for 25 countries, the efficiency index for any country (say country i) was calculated as  $\beta 2i/\beta 2max$ , where  $\beta 2max$  is the largest coefficient for Govt. Capital among 25 countries in the sample.

# Efficiency Trends—Using Pakistan Time Series Data

A methodology similar to the one adopted for estimating efficiency of public investment from cross-country sample is applied to Pakistan's time series data to get estimates of efficiency vis-à-vis the "best years" in the time-series sample.<sup>18</sup> There two fundamental advantages of this time series estimation:

- (i) With annual estimates of efficiency of public investment, we can identify and see if efficiency has been increasing, declining or has remained constant over time.
- (ii) With efficiency benchmarked to Pakistan's past (best) performance, it is easy to establish the reasons for that performance and hence assists in framing a menu of process reengineering and institutional reforms which would help achieve, at the minimum, that best performance.

Figure 6 provides the trends in efficiency of public investment in generating economic growth. The average for the sample (1964-65 to 2016-17) is 55.1 percent indicating that on an average year, efficiency of public investment is a little more than half of the efficiency achieved in the best years. Although the efficiency estimates fluctuated substantially from year to year, there is definite underlying declining trend. On the average, efficiency declined by 50 basis points (i.e.by 0.5 percent) every year. The two worst years in terms of efficiency coincide with the 1971 war and the global economic crisis of 2008 which led leading to very high increases in the cost of production.



Fig. 6. Trends in Growth Efficiency of Public Investment

<sup>18</sup> In cross-country sample, each country represents a Decision-Making Unit (DMU) for which efficiency could be calculated using the best performing DMUs. In time-series, one country (Pakistan) is seen as a different DMU in different years. Hence, efficiency could be calculated for each DMU (year) using best performing DMUs.

Figure 7 presents the efficiency of public investment in fostering overall development. With average efficiency for the sample period estimated at 42.8 percent, the development efficiency has a similar trend as growth efficiency with an average decline of 66 bps per annum. In terms of development efficiency, 2011-12 came out to be the worst year. A sharp drop in efficiency in this year is mainly on account of Pakistan Railways, the performance of which declined by 21 percent. A decline in efficiency of port services (by 1 percent) also contributed to the decline in development efficiency.



Fig. 7. Trends in Infrastructure Development Efficiency of Public Investment

Trends in infrastructure development efficiency are shown in Figure 4. The average efficiency (at 26.9 percent) is the lowest among all output indicators. The trend also indicates a much steeper decline in efficiency over time (by 120 bps per year). It may also be pointed that almost all indicators of infrastructure development (electricity, roads, railways, telecommunication, et.) performed quite poorly in the last quarter of our sample period, low infrastructure efficiency is mainly on account of poor performance by Pakistan Railways.

Human development has been one of the most and passionately debated subject in Pakistan and among international experts (Nancy Birdsal, and Willian Easterly). It is generally believed that Pakistan has done significantly better is infrastructural development than in human development. However, our estimates of public investment efficiency, both from the cross-country and time series data, indicate a significantly higher efficiency in human development (an average of 38.2 percent) than for infrastructure development (Figure 8). This result, is somewhat surprising, as human development is a sub-national responsibility in Pakistan and the PIM systems are much weaker at provincial level than in the federal government. At least a part of the reason why public investment has a higher efficiency in human development (as compared to infrastructure development) is the way human development index (HDI) is calculated. Our analysis adopted the UNDP methodology for calculating HDI, which includes indicators of health and education services. However, also included is the per-capita income. As such, our human development indicator includes economic growth as a component. It is this latter component which boosts the efficiency of public investment in human development.



Fig. 8. Trends in Human Development Efficiency

The human development efficiency has also been declining, except for a period in the early-2000s when the trend was briefly reversed. However, since 2004-05, the trend has started falling all over again.

The "crowding-in efficiency" is defined as the ability of public investment to mobilise private investment against the best performing benchmark. The crosscountry analysis indicated that Pakistan performs quite poorly in mobilising private investment trough public investment. The time series data reveal that the "crowdingin" efficiency of public investment in Pakistan is not only low, but has been falling for the greater length of sample period (Figure 6). This is partly an outcome of the channels through which public investment evolved in country. Nationalisation of the 1970s, led the public sector to view private sector as a competitor; competing for inputs, outputs and markets. Despite the subsequent shift in economic management emphasis form a public sector to a private led economy, many public-sector entities, both at the federal and provincial level, have continued to view their role as producers and deliverers of public infrastructure and services. As such, part of the public investment goes towards "competing" with private sector, <sup>19</sup> leading to lower "crowding-in" efficiency of public investment.



Fig. 9. Trends in "Crowding-in" Efficiency of Public Investment

Summary of Results: The key messages of the foregoing discussion are:

- (i) Pakistan has been underinvesting in its economy. In the past, Pakistan managed to get higher growth from its limited investment by channelling this investment to high return areas. At present, however, a low level of public investment gets dispersed over a much broader set of government activities, with some having very low returns.
- (ii) Public investment has played a critical role in Pakistan's growth process and continues to occupy an important position in overall investment framework. At least a part of recent economic slowdown could be attributed to falling rates of public investment.
- (iii) Efficiency of public investment in Pakistan is higher than the international average. This is partly because Pakistan established a well-functioning PIM system early, and partly because of low level of investment, the size, which at least theoretically is easy to manage and handle.
- (iv) Despite that the growth and human development efficiency of public investment in Pakistan lies within satisfactory ranges, efficiency of infrastructure investment is very low. As majority of public investment continues to be channelled towards infrastructure development, high returns can be obtained by focusing on improving efficiency of this investment.
- (v) In general, efficiency of public investment in Pakistan has declined over time. This may be because the PIM system has fallen into disuse and disrepair.

<sup>&</sup>lt;sup>19</sup> One major aa rea where this competition is starkly pronounced is low cost education. By raising the teacher salaries to levels (six to seven times the salaries in the private sector), the public education system has practically deprived the low cost private schools of qualified and experienced teachers.

(vi) Pakistan has to make serious efforts to substantially scale-up investment in the country. Public investment could be used as a catalyst in this process. However, in a situation where the PIM system has some serious shortcomings and/or has developed some major faults (see next section), scaling up public investment is unlikely to yield desired results unless efforts are also made to mend and update PIM system.

# Analysis of Efficiency of Public Investment in the Provinces

The PIE-X methodology was also applied in the context of the provinces. The results of this analysis are presented in Box 1 below

# **Box 1: Growth Efficiency of Public Investment in Provinces of Pakistan**

Modified IMF methodology was also applied to assess the efficiency of provincial development expenditure. Growth in provincial GDP (PGDP) was plotted against the ratio of development expenditure to PGDP for all provincial for each of the year between 2000-01 and 2014-15. The outer points (while moving in the north-western direction) were used to estimate the growth envelope function (Figure B1).

As is apparent from **Figure A1**, development expenditure in Sindh had higher efficiency than other provinces in the earlier years of the sample period. However, since 2007-08, efficiency in Sindh has noticeably declined. In the latter half of the sample period, no province has been able to give a performance that could be used as a benchmark for efficiency purposes.



The PIE-X methodology was used to get average efficiency for each province over the entire sample period. These averages are given in figure A2, which shows that, on the average, Punjab has the highest growth efficiency of development expenditure (54 percent), followed by Sindh (45 percent), KPK (39 percent) and Balochistan (27 percent). Although it was higher than efficiency of development expenditure in Balochistan and KP, it was almost 9 percentage points lower than Punjab, which itself has an efficiency level of only 54 percent.



Fig. 11: Development Expenditure Efficiency Index

# Academic studies of Investment in Pakistan

The analysis presented above was undertaken by the study team. It is noted that there is also a body of previous academic studies of the impact of public investment in Pakistan. In general these academic review come to an even less favourable view of the role of public investment as a driver in the Pakistan economy. Table 5 below summarises the conclusions of the main academic econometric studies published on this topic since 2000.

Public investment as a percentage of growth in recent years has been growing and has now reached almost 5 percent of GDP (see figure 3). Perhaps because of the weaknesses in the planning and PSDP management process growth does not appear to be picking up at a fast pace See figure 1. Studies have shown that the relationship between public investment (PSDP) and growth is negative or insignificant (see Table 5). Evidence on crowding out of private investment has also been presented in some of these studies.

# Table 5

# Econometric Estimates of the Impact of Public Investment on Economic Growth

Table: Estim	ated Impact of Public Inve	stment Growth from Recent Research
Papers	Result	

$\mathbf{D}^{\prime}$	((T <sub>1</sub> ),, '1,, (1,, 1, 1,, ', 1,, 1, 1')				
Bint-e-Aijaz, Maryam and	"It is evident from the table that in long run public				
Nazima Ellahi (2012)	nvestment exerts negative impact on the growth rate				
	of GDP. This is because government is mainly				
	investing in the sectors, which are unproductive and				
	inefficient."				
Ghani, Ejaz and Musleh-	"Public investment has a negative though				
ud-Din (2006)	insignificant impact on output, and this raises some				
	concern about the efficiency of public investment"				
Khan, M. Tariq Yousuf	"The average contribution of different inputs in total				
and Komei Sasaki. (2001)	growth of the economy over the time indicates that the				
	public capital's contribution in growth has been				
	sufficiently large during early periods of the sample				
	and that it decreases over time"				
Elahi Nazima and Adica	Here we observed that growth is driven by the				
Kiani (2011)	performance of private investment while the role of				
Kiam (2011)	public investment is negligible due to its inefficiency.				
	public investment is negligible due to its metriciency,				
	the findings are in line with the findings of Ghani				
	(2006) for Pakistan.				
Saghir, Rabia and Azra	Government development expenditures must be				
Khan (2012)	improved, to minimise the cost of production of				
	private sectors				

This evidence and the repeated and confirmation of it in studies is worthy of thought and debate. Clearly, this combined with evidence of politicisation of the PSDP, large cost overruns, undue delays in completion, poor utilisation of assets, increasing number of projects beyond technical analysis and the erosion of planning processes all point to what has been econometrically indicated in the studies in Table 7.

Public investment is very necessary in every country. Infrastructure is the glue of modern civilisation. Infrastructure (or public capital stock) is hard (brick and mortar), soft (governance and management) and social (underpinning society and community). Pakistan's many difficulties may be arising from the inadequate development of the public capital stock. Excessive focus on brick and mortar and poorly-developed projects that lack operating resources and many other factors are impeding the development of public capital.

Reviewing the history of planning we see that 5-year plans were last taken seriously in 1960.<sup>20</sup> Planning processes now clearly mean little. Perhaps it is time to consider alternative approaches to managing public investment and creating meaningful high-yielding public assets to facilitate growth and society.

# Conclusions

It will be evident from the preceding sections that there is a considerable range of views between different analysts and methods of analysis on the effectiveness and efficiency of public investment in promoting economic growth. Application of the IMF methodology (PIE-X) points to a positive relationship between public investment and growth even though it also indicates that the level of efficiency attained in Pakistan falls substantially short of best international practice of comparator countries. However, the IMF PIE-X methodology falls far short of an econometrically rigorous approach to analysis, though its broad findings are supported by the regression-based analysis undertaken by the study team, which itself is a relatively basic approach in terms of econometric methodology.

The negative findings of the academic studies itemised in Table 7 above are believed to derive primarily from the inherent difficulty in separating the respective impacts of private and public investment on the growth process exacerbated by the high level of correlation between these variables and the complex structure of lags likely to be involved in the specific impact of public investment.

The conclusion drawn is, accordingly, that public investment in Pakistan probably does contribute positively to economic growth and wider social and economic development, but that there is very great scope for increasing its impact through measures to promote its efficiency. The next chapter analyses the drivers for public investment to be efficient or otherwise.

<sup>&</sup>lt;sup>20</sup> Even the PC website seems to not think much of the 5-year plans since it has removed all past plans from its website.

# PART II: DRIVERS OF INEFFICIENCY IN PUBLIC INVESTMENT

#### 1. Sources of Inefficiency of Public Investment

#### Introduction and Overview

The previous chapter has presented evidence based on multiple methodologies for the view that there is very substantial scope for improving the efficiency and hence the value for money achieved in public investment. This analysis was conducted at the aggregate level and does not provide specific explanations for the sources of inefficiency underlying the overall conclusion. To understand the sources of inefficiency it is necessary to review all the stages in the public investment process across the complete investment cycle with a view to identifying gaps and weak points in the processes and procedures actually followed in the implementation of public investment. The identification of weak points in the PIM process will also point to the most appropriate areas for remedial actions or reforms.

# Potential Drivers of Efficiency—A Review of the Procedures Applied in the PIM System

Pakistan was one of the first countries in the developing world to establish a well-functioning PIM system. This system served well the needs of the country in early stages of development and helped it achieve a healthy growth for about 30 years. Over time, however, the system developed a number of problems which remained unaddressed. These problems eventually eroded the effectiveness of the system. Presently, Pakistan's PIM system is mere shadow of its past, in capacity, influence and effectiveness.

For evaluating any PIM system, the World Bank has identified 8 characteristics that the system should have. These "must haves" (shown below) cover all stages of the project cycle. On paper, PIM in Pakistan has all these desired characteristics (see Box 2). However, in practice some of the desired components of PIM have fallen into misuse, while others have developed serious defects.



For a quantitative evaluation of a PIM system, the IMF has designed a Public Investment Management Index (PIMI), which is an average of four sub-indices, one each for four important areas of PIM system (i.e. appraisal, selection, implementation,

# Box 2: The Formal PIM System in Pakistan

*Guidance:* Since the late 1950s, the strategic guidance for identifying a development project has come from the Five-Year Plans (or other medium-term development strategies of the government). Theoretically at least, the line ministries prepare project which are consistent with Five-Year Plans in terms of its contents and location.\* Guidance on nuts and bolts of preparing a development project is provided in the "Manual for Development Projects" prepared by the Planning Commission.

**Project preparation and appraisal:** Once a project is identified, its preparation process starts with line ministry preparing a PC-I form, which along with highlighting the need for the project presents its tentative features, including its completion date. It also provides an estimate of stream of recurrent resources that would be required to make the project operational after its completion. Planning Commission (planning department at provincial level) reviews the PC-I and suggest changes. PC-I is approved in forum where other interested ministries are also invited to comment on the need and content of the project. PC-I approval is a green signal to the line ministry to start preparing the project (i.e. technical design, feasibility studies (for which the ministry has to prepare a PC-II form, etc.). The prepared project is presented to Planning Commission (planning department) for economic and technical appraisal. Irrespective of the size and complexity of the project, each appraisal has to be completed within 45 days of its submission to the Planning Commission.

Selection and budgeting: After a satisfactory appraisal, the project is submitted for approval. There is a hierarchy of approving mechanisms, which are mandated to approve development projects up to a particular size. The highest project approving body is the National Economic Council (NEC), which is the top most decision-making body on all economic issues. Once the project gets an approval from the relevant forum, it qualifies for inclusion in the development budget -- Public Sector Development Programme (PSDP). Budgetary allocation for each project is decided by the Priorities Committee, which is jointly chaired by Secretary Finance and Secretary Planning. NEC gives the final approval to each year's PSDP.

**Project Implementation:** Project implementation is the responsibility of the sponsoring line ministry. However, as number of other public institutions are involved at every level of project implementation. These include: Planning Commission, Ministry of Finance (especially the finance advisor), Pakistan Procurement Regulatory Authority (PPRA) and the Account General for Pakistan Revenue (AGPR).

**Project Monitoring and Changes:** The basic monitoring responsibility for each project rests with the line ministry, which has to provide a quarterly monitoring report (PC-III) to the Planning Commission. However, Projects Wing of the Planning Commission undertakes independent monitoring of larger and important projects, both through information received from line ministry and other sources and through field visits. The problems are identified through this monitoring process and responsibility assigned to relevant authorities to address these problems. If the project requires any change in design or its scope, the line ministry has to prepare a revised PC-I to the Planning Commission and revised design and scope to the relevant approving authority.

**Project Completion and Service Delivery:** At the completion of the project, the project management, through its line ministry, submits the project completion form (PC-IV). Submission of PC-IV signals the transfer of the project from the development to recurrent budget. The recurrent allocations for the project are in-line with the estimates provided in original or revised) PC-I.

**Project Evaluation:** All projects have to undergo an evaluation process within 4-5 years of its completion to determine if it is meeting the objectives laid down in the PC-I. The evaluation report (PC-V) is to be prepared jointly by the line ministry and the line department.

• As noted above 5 year plans no longer have the significance of the earlier days nor are they implemented carefully.

and evaluation). Performance of each area is measured by looking at some desirable characteristics for each area and measuring how well the system functions on these characteristics. Each characteristic is scored on a scale of 1-4, according to higher strength of the characteristic. The characteristic indices are averaged to get area-wise indices, which are then averaged further to get overall PIMI. Using 2010 data, PIMI

was calculated for a number of developing countries. Figure 7 shows PIMI for a select number of LDCs, which reveals that at the aggregate level, Pakistan's PIM system performs worse than most of its comparators.

To determine areas of PIM where Pakistan needs significant improvement, the PIMI score for each PIMI area and characteristic is summarised in Figure 12. The table shows that Pakistan scores much lower than the average for other LDCs in overall PIMI and three out of four areas of PIM. Even in the area (Strategic Guidance and Project Appraisal) where Pakistan scored better than the average, the situation may have deteriorated substantially in recent years (see below). The weakest area of Pakistan's PIM system, *vis-à-vis* other LDCs is "Project Evaluation and Audit" where Pakistan scores less than half of the average score of other LDCs.



Fig. 12. Public Investment Management Index for Selected LDCs

The Federal Government Public Sector Development Programme (PSDP) has always been one of the most important component of public investment. (See Figure 8 for the relationship between public investment and PSDP). With a special emphasis on the federal PSDP, the remaining part of this section attempts to identify problems with each area of PIM system in Pakistan, to trace the consequences arising from these problems and to show how they can lead to a decline in efficiency of public investment.

# (A) Guidance and Screening

*Identification and screening components of PIM are badly compromised due to atrophy of economic planning*: As mentioned earlier, Pakistan was one the very few developing countries to establish a well-functioning planning system early in its development process. This system worked well for a number of years.



Fig. 14. Different Components of Public Investment in Pakistan

However, over time, the planning system weakened considerably leading to a sharp decline in its performance and effectiveness. Four broad factors were mainly responsible for the waning performance of the PIM system:

- (a) *Rigidities of the PIM system:* The structure of the economy changed from a public sector led to a private sector led economy. This structural changed called for a different role of the planning system, in general, and particularly, the Planning Commission. This required different skills and competencies than what were available with the Planning Commission. Moreover, partly because of its early successes, the planning system has developed a strong internal resistance to any change, and despite some marginal changes in management, the overall structure and working of planning system remain more or less unchanged since the early-1960s.
- (b) *Dominance of crisis management over economic management:* As economy started to slowdown and as BOP problems became chronic, economic policy and planning adopted firefighting mode. Longer term

planning as well as public investment became casualties of the crisis mode which has preoccupied the government for the last 40 years.<sup>21</sup>

- (c) Increasing influence of provinces in the development process: As successive NFC Awards devolved greater fiscal resources, provincial role in development process has increased. Until the 1990s, almost entire development budget of the provinces was financed through grants and loans (including external loans) from the federal government. As such, the federal government was able to control at least the size, if not the composition, of provincial development programmes. With increased fiscal prosperity and autonomy, the provinces started to finance an increasing proportion of their development programme from their own resources. This new found fiscal autonomy led provinces to largely ignore the directives, suggestions and even the "agreements"<sup>22</sup> with the federal government, making implementation of any medium-term development plan very difficult.
- (d) A sharp decline in the capacity of the PIM system: Due to above mentioned problems, the influence of the PIM establishment in economic management declined,<sup>23</sup> along with that declined the overall technical capacity of the establishment. With rapidly increasing size of development portfolio, the erosion in capacity of PIM system created scepticism within the government about the need to retaining the system.

The "Manual for Development Projects" is quite categoric on how to get the guidance for identifying any development project. The Manual states that "*The very rationale of the projects to be undertaken should be clearly maintained and supported by well-designed development programmes, which must be in consistent in-line with the short, medium and long-term perspective plans of the country. With no medium-term plan or strategy available to define the sectoral and sub-sectoral priorities of the government, the project identification process became largely ad-hoc, with identified projects reflecting more the priorities of bureaucratic and political leadership than* 

<sup>&</sup>lt;sup>21</sup> Although planning process had lost much of its importance since the mid-1970s, it was largely abandoned in the early-1990s, when Ninth Five Year Plan was prepared but was never implemented. During this period, the government experimented with a number of instruments (Three-Year Rolling Plans, Medium-Term Development Framework, etc.), their implementation remained incomplete. The next (11<sup>th</sup> Five Year Plan) was prepared in 2013 but too was not implemented.

<sup>&</sup>lt;sup>22</sup> Every year, the National Economic Council, which includes all Chief Ministers of all four provinces as its members, decide on the volume of provincial development programmes. Since, 2010, provinces have been preparing their development programmes which exceeded the "agreed" level by substantial margin.

<sup>&</sup>lt;sup>23</sup> With economic planning largely abandoned, the main task for the Planning Commission (and provincial planning and development departments is approving development projects.

those established through a well thought out plan. In addition, lack of plan also compromised the challenge function of the Planning Commission, as "consistency with the Five-Year Plan" was one strong filter used by the planning establishment to reject politically motived projects.

The void left by abandonment of the planning process is largely filled by the politicians, especially at provincial level, where a large number of projects are identified by politicians, or by the line-ministries on directives of the politicians. Ironically, the Planning Commission manual, provides ample room for such interventions be the politicians—"*Projects are also identified as a result of special policy directives of the Government. Projects initiated under such directives should be taken up on priority, even by postponing/ superseding other projects, if availability of funds is the constraint."* 

# (B) Project Preparation and Appraisal

In the beginning, the quality of project preparation and appraisal has been quite satisfactory. However, over time, these functions weakened, mainly due to the following reasons:

- (i) With mounting fiscal difficulties, the line ministries faced an increasing squeeze on their operational (recurrent) budget. Inclusion of a project into the PSDP therefore became a mode of getting additional fiscal resources for the line ministries, from which it can finance some of operational needs left unmet by inadequate recurrent budget. There was therefore a big enough incentive for the line ministries to get as many as possible projects into the PSDP as soon as possible. This forced them to cut corners on project preparation and pull all strings and levers to get project approved. Figure 15 demonstrate that quite adequately. A little less than two-third (63 percent of federal development expenditure goes towards grants and transfers<sup>24</sup> and loans and advances.<sup>25</sup>. Only 3 percent of development expenditure goes to create or acquire physical assets, where as 31 percent is spent of operation expenditure.
- (ii) The size and complexity of ministries' and overall development portfolio increased sharply (see Figure 10). On the other hand, the capacity of line ministries and planning and development establishment did not increase, in numbers, and in quality may have declined.

<sup>&</sup>lt;sup>24</sup> An important factor leading to this strange composition of federal development expenditure is that the government classifies Cash Transfers under Benazir Income Support Programme as (non-PSDP) development expenditure.

<sup>&</sup>lt;sup>25</sup> These are development loans given to federal corporations and Passover of donor loans to provinces.



Fig. 15. Composition of Federal Development Expenditure



Fig. 16. Size of PSDP, 2000/01 and 2018/19

- (iii) Despite the erosion of technical capacity and the increased volume of work, the government continued to impose unrealistic deadlines (completion of appraisal by Planning Commission within a maximum of 45 days, irrespective of the size and complexity of the project).
- (iv) Political intervention in the development process increased adversely affecting the quality of project preparation and the moral of development-related staff in the ministries and P&D Division.
- (v) There never has been any tradition in Pakistan of undertaking ex ante or ex-post independent reviews of the preparation and appraisal process even for important projects. One attempt by the Sindh government to start third party review of these process got off to a good start, but was quickly discontinued as being politically too sensitive.

"Games" in the project preparations and approval processes: Limited capacity of the Planning Commission to properly appraise projects has given rise to some "gaming" behaviour within the line ministries to get whatever they want from the project approving authorities. A former senior staff of federal health ministry admitted that his ministry will deliberately include unwanted expenditure items (e.g. a large number of vehicles) in the project design just to distract the Planning Commission's appraisal team to focus on these items, leading to a less than required focus on other areas and costs of the project. Similarly, a review of PSDP projects indicates that the project entities in line ministries have realised that due to variety of factors, some outside their control, the chances are high that the project staff to overstate the cost of the project so as to avoid the tedious process of project revision when faced with cost escalation. There is also a tendency to fragment projects into a number of smaller projects to avoid a more thorough scrutiny and to get the project approved from a lower level forum (e.g. DDWP), where the ministry has a greater say and influence.

The end result is that projects selected for implementation have poor quality and some not even adequately prepared. All the problem with design of the project or anticipated problems with implementation which should be addressed, or, at the minimum, identified during the preparation and appraisal process, surface in full force at the time of implementation. Leading to implementation delays, changes in scope and design of the project, cost overruns (see below) and consequently loss in benefits from the project.

# (C) Project Selection and Budgeting

From the beginning, Pakistan adopted an approach where projects are evaluated for approval solely on their technical merits and need. Whether funds exist to finance the project has never been part of the approval process. In theory this makes a lot of sense, because if the project has high enough returns, it can always be financed through borrowing, with returns from the project helping to meet the future debt servicing needs. However, this also creates a number of practical problems:

- (a) Once a project is approved in principle, administrative and political wheels start moving to get the project into the PSDP, irrespective of whether funds for the project are available or not. This leads to a number of projects making into the PSDP with insufficient (at time a "token" allocation). This allocation is usually not even enough to pay for the salaries of the project staff. Moreover, this also leads to thin-spreading of resources across other PSDP projects. As such, many projects get under-financed, which cause implementation delays. (see Table 5 for the list of projects in 2018-19 PSDP with gross under-allocation of funds).
- (b) A corollary to the above problem is that this process leads to build up of the throw-forward of development portfolio, compounding rigidities in the development budget.<sup>26</sup> Despite some improvement in recent years, the federal development portfolio in Pakistan has a large throw-forward (see Figure 11). The figure shows, that in 2014-15, federal government development portfolio had a throw-forward of Rs 11.2 trillion. This implies that at the 2014-15 size of PSDP, it would have taken 17 years to complete all the projects in the portfolio, provided no new project is included in the portfolio. By 2018-19, the throw-forward declined to Rs 6.8 trillion, which implies that it will take 5.7 years to complete the portfolio at 2018-19 level of PSDP allocation (provided no new project gets included in future PSDPs). Although this is a considerable improvement from 2014-15, yet it may be somewhat higher given the government's intention of completing a large majority of development projects within 5 years of their commencement. Also, new projects will get included in the development programme, increasing the period of completion beyond 5.7 years.





<sup>26</sup> A throw-forward is the amount of funds required to complete the project. At the aggregate level, it is the claim of the present portfolio of development projects over future development resources

48

# Table 6

Projects in the 2018/19 PSDP with Gross

Under-allocation of Funds

S			New/	Project	Throw	Alloca	Vears to
No	Project Name	Sector	Ongoing	Cost	Forward	tion	Complete
140.	Strengthening of Forly Worming System of	Sector	Oligonig	COSt	Forward	uon	Complete
13	Bakistan Mataorological Department	Aviation	Now	12 042	12 042	100	120.4
	Conduction of Water from Indus Pivor	Aviation	INCW	12,942	12,942	100	129.4
22	System of Tarballa Dam for Islamabad and						
23	Pawalpindi	CADD	New	75 030	75 030	500	151.0
175	Construction of Southern humass Bashawar	NHA	New	10,000	10,000	100	100.0
175	Mirpur Mangla Mugaffarabad Manaabra	NIIA	INCW	10,000	10,000	100	100.0
192	Road (CPEC)	NHΔ	New	142 000	142 000	1.000	142.0
209	Sukkur - Hyderabad Section (296 km)	NHA	New	175,000	175,000	1,000	175.0
207	Zhoh to Kuchlak Road including Land	111/1	110.00	175,000	175,000	1,000	175.0
215	Acquisition CPEC	NHA	New	52 750	52 750	500	105.5
	Procurement / Construction of 06 x Maritime		11011	02,700	02,100	200	100.0
218	Patrol Vessels (MPVs for PMSA)	Defense	Ongoing	16.281	12.944	76	170.3
	Construction of State Guest House and		011801118		,,		
296	Conference Centre Islamabad	Foreign	New	10.000	10,000	70	142.9
	Infrastructure Development of Gwadar	8					
560	Export Processing Zone	Industries	New	5,400	5,400	50	108.0
	Phase-II of Pak-China Project for						
	Establishment of Cross Border OFC Network						
606	(Khunjrab-Gwadar-Karachi) along CPEC						
	Ro	IT	New	29,000	29,000	100	290.0
757		Gilgit-					
151	30 MW Hydro Power Project Ghowari	Baltistan	New	7,986	7,986	50	159.7
019	Nuclear Fuel Enrichment Plant (NFEP)						
910	(Mianwali)	PAEC	Ongoing	14,248	12,656	100	126.6
1001	Procurement of 150 New Diesel Electric						
1001	Locomotives for Pakistan Railways	Railways	Ongoing	55,488	55,485	1	55,484.0
	Feasibility Study (PC-II) for Construction of						
1023	New Rail Link from Havelian to Pak China						
	Border (682 K.M) (CPEC)	Railways	New	474	474	1	474.0
	Power Distribution Enhancement						
1157	Project(Tranch-III) (STG-ELR-DOP-						
	Rehabilitation Capacitor Installation &	_					
	Energy Efficiency.	Power	Ongoing	21,041	182	183	103.9
1199	Dargai Malakand District KPK	Power	New	3,769	3,769	30	125.6
1233	Gomal Zam Dam D.I Khan/South Waziristan		. ·	20.626	2 007		2 007 0
	Agency	Water	Ongoing	20,626	3,897	1	3,897.0
1264	Construction of Feeding Canal to Manchar			15 000	15.000	100	150.0
1200	CRPC 1 at 11th any Constitute Project D I. Vil	Water	New	15,000	15,000	100	150.0
1269	Lining of K D Eagder Unner Cough for Water	water	INEW	119,000	119,000	100	1,190.0
1277	Lining of K.B Feeder Upper Canal for Water	Water	New	20,000	20,000	100	200.0
1279	National Flood Protection Plan IV	Water	New	20,000	20,000	100	200.0
12/8	Pababilitation and Modernisation of Sublum	w ater	INCW	552,240	332,240	100	3,322.3
1280	Remain and Modernisation of Sukkur Barrage (90% WB 10% federal)	Water	Now	16 163	16 163	100	161.6
	Darrage (70% WD, 10% reucial)	water	THU W	10,105	10,105	100	101.0

(c) The large throw-forward is also associated with a political economy problem. A large throw-forward leaves little room for the incoming new government to implement its development agenda with full vigour. This

has created a number of implementation issues (see below) undermining the efficiency of public investment.

(d) Finally, even if we attribute much more discipline to the government than it has so far exhibited in including projects in the development budget, the current procedures governing the development process will continue to impact the quality of development portfolio. Let's assume that authorities have approved 10 projects with a project cost of Rs 100 billion on May 1, 2018. However, there are not enough funds available in the 2018-19 PSDP to finance any of these projects, and these projects were not included in PSDP. By the time of formulation of 2019-20 PSDP, these projects will get an automatic consideration for inclusion, despite the fact that the appraisal parameter for all these projects have now been outdated. There is no requirement in the present procedures asking for updating of those parameters. Hence, if included in the PSDP, these projects will be implemented with some parameters not consistent with present day realities.

#### (D) Recent Distortions in Selection and Budgeting Processes

**Unapproved projects:** For the last number of years, the established PIM system has been circumvented by bringing a number of distortions into the system. One such distortion which in many ways have reversed the sequencing of project preparation, approval and budgeting is inclusion of unapproved projects into the PSDP. These unapproved projects constitute a sizeable and increasing proportion of the PSDP portfolio (See Table 7), with 79 percent of new projects included in the 2018-19 PSDP being unapproved. Even more worrisome feature is that some of the on-going projects are also unapproved.

The inclusion of unapproved projects in PSDP defies all logic, as one is unable to find any genuine reasoning for this inclusion. As per government rules, no development project could be implemented (i.e. incur expenditure) unless it is approved. Hence, including an unapproved project in the PSDP is not likely to accelerate the pace of implementation. On the other hand, such inclusions have many potential negatives for the PIM system:

- (a) Inclusion of unapproved projects in PSDP imposes a lot of pressure on the approving authorities to approve the project even if there are strong reservations about its need, design or even the project is not fully prepared. As per Planning Commission authorities, 99 percent of included projects are eventually approved.
- (b) While project entities try to prepare the project, and put it up to relevant authorities for approval, a process which take as much as three quarters or more of the fiscal year, its allocation continues to remain in the PSDP unused. This allocation cannot be utilised by either projects or for other purposes despite the need.

Т	abl	e 7
_		

		Other		Dalt Va
		LDCs	Pakistan	
		(Average)		LDCS
	Overall PIMI	1.78	1.57	+
1	Strategic Guidance and Project Appraisal	1.78	2.67	
1.1	Nature of strategic guidance and availability of sector			
	strategies	2.12	2.00	-
1.2	Transparency of appraisal standards	1.24	2.00	
1.3	Observed conduct of ex ante appraisals	1.78	2.00	<b></b>
1.4	Independent review of appraisals conducted	1.89	0.00	-
2	Project Selection and Budgeting	1.77	1.20	+
2.1	Existence of medium term planning framework and its			<b></b>
	integration to the budget	1.35	2.00	
2.2	Inclusion in budget (or similar) for donor funded			_
	projects	2.19	2.00	+
2.3	Integration of recurrent and investment expenditures in			
	budget	1.46	0.00	
2.4	Nature of scrutiny and funding supplied by legislature,			<b></b>
	including its committees	1.73	2.00	-
2.5	Public access to key fiscal information	2.11	2.00	+
3	Project Implementation	2.04	1.73	-
3.1	Degree of open competition for award of contracts	2.88	2.67	-
3.2	Nature of any complaints mechanism relating to			
	procurement	2.08	2.00	
3.3	Funding flows during budget execution	1.57	0.00	-
3.4	Existence and effectiveness of internal controls, such as			<b></b>
	commitment controls	0.97	2.00	-
3.5	Effectiveness of system of internal audit			-
		1.76	0.00	
4	Project Evaluation and Audit	1.56	0.67	+
4.1	Degree to which ex-post evaluations are conducted	1.95	0.00	+
4.2	Degree to which external audits are produced on a timely			<b></b>
	basis and scrutinised by the legislature	1.75	2.67	
4.3	Maintenance of an asset register or inventory of public			
	sector property, equipment, and vehicles	1.77	1.20	

Public Investment Management Index—Pakistan vs LDCs

(c) Once the project is approved, there is pressure on the project management to utilise as much of the budget allocation as possible in the remaining duration of the fiscal year. This leads to compromises on quality of procurement and hastily done contracts, which lead to problems in future implementation of the project.

*Circumvention of procedures:* As per government's rule no expenditure should be incurred on unapproved projects. However, there has been some significant circumvention of this rule, with quite a few unapproved projects in PSDP showing incurred expenditures (see Figure 12). Most of these projects belong to Water Ministry

Table	8
-------	---

Unapproved Projects in PSDP					
	FY15	FY16	FY17	FY18	FY19
Number of Projects					
Total	217	247	256	382	433
New	176	179	198	243	426
Ongoing	41	68	58	139	7
Percentage of the Total					
Total	19%	24%	25%	33%	34%
New	67%	67%	76%	74%	79%
Ongoing	5%	9%	8%	17%	1%

napproved Projects in PSDP

and government corporations in Power (WAPDA) and Road (NHA) sectors. This puts additional pressure of the system to approve these projects.



Fig. 18. Number of Unapproved Projects with Incurred Expenditure

Even a cursory review of the PSDP allocation makes it abundantly clear that "equity" considerations play an important role in the selection of projects. As mentioned earlier, the ministries try to include projects in PSDP just to get additional fiscal resources to meet their operational expenditures. Every Ministry and Division wants to have their projects in PSDP whether there is any development need or not. To satisfy the ministries, the Planning Commission finds itself compelled to admit projects, even when some of these projects do not appear to have high economic or social returns.

# (E) Project Implementation

Though not particular to development projects, implementation has been a weak area in economic management, whether that be economic policies, development plans for projects and programmes. For PSDP projects, shortcomings in project identification, preparation, appraisal and approval processes make implementation very difficult. In addition, projects are usually managed by staff taken form regular cadres of government, with limited project management skills. At times project management is assigned as an "additional responsibility" along with the person's normal work. Moreover, procedures governing project financing, procurement and contracting are overly cumbersome (see Box 3 for an implementation case study a road project.).<sup>27</sup> Hence, implementation delays and the consequent cost escalations are a norm rather than an exception for PSDP. Figure 13 shows that a significant proportion of the portfolio reports some cost overrun. On the average, cost overrun (for these projects) varies for 20 percent of the original cost (for projects included in the 2018-19 PSDP) to 45 percent in (2017-18 PSDP).

# Box 3: The Throw-forward

The presence of a throw-forward is an intrinsic element of a multi-annual public sector investment programme since any project with an implementation plan extending beyond the current budget year will involve a throw-forward. However, any throw-forward involves a claim on financing from future years' budgets. So guidelines and procedures are required to ensure that the financing of the throw-forward in future years will be viable without causing disruption to the overall investment portfolio. Two major aspects of the throw-forward need to be managed:

- (i) The planned aggregate throw-forward and its allocation across future years should be compatible with the expected resourcing for the public investment budget. This should normally be provided through the existence of a robust Medium Term Budgetary Framework (MTBF).
- (ii) The planned throw-forward should not be subjected to unplanned changes (especially increases arising from contingencies such as delays in project implementation, under-budgeting of the annual requirements of projects, and the entry of new projects into the budget in mid-year.

These considerations can be summarised by distinguishing between the "warranted" throw-forward which results from soundly planned and budgeted multi-annual projects, and the unwarranted component of the throw-forward arising under (ii) above which should be minimised as a matter of policy.

<sup>&</sup>lt;sup>27</sup> A world Bank study (2008) discovered that it takes about 50 signatures (approvals) on a financing request filed by the project management to get funds and make payments to contractors/suppliers.



Fig. 19. Cost Overruns



To fully understand the issues involved in at least the financial implementation of PSDP projects, we selected a random sample of 100 projects from the 2000-01 PSDP and followed their year-by-year implementation through the PSDP documents over the next 18 years.<sup>28</sup> A number of interesting issues came up during this analysis. However, we will report here only the ones which have a direct bearing on efficiency of public investment.

**"Sabbatical" Projects:** There were two projects<sup>29</sup> in the sample which were implemented for one or more years and were then dropped from PSDP for one year or more, only to make a comeback in the PSPD in later years. The main reason for this off-on implementation is the change in mode of financing (from local to donor). However, with some skilful negotiations with the donors, the government could have ensured smoother implementation and early completion of the project by agreeing to finance these projects during the gap years from

<sup>&</sup>lt;sup>28</sup> In selecting the sample, we considered three options; (i) To select a sample of limited number (say 20) of important (large projects); (ii) select a limited number (say 50) of new projects; and (ii) to select a limited number (100) of new and ongoing, small and large projects. We chose third option as it the other two options introduce a system sampling bias in analysis.

<sup>&</sup>lt;sup>29</sup> The Indus Right Bank Irrigation and Drainage Project, which got dropped in 2001-02 but was reinstated in 2002-03; and Project for Improvement of Financial Reporting and Audits (PIFRA), which had a two year and a four year gap.

its own resources, only to claim reimbursement from the donors once the donor financing became available. The interrupted implementation process leads to a host of potential problems, including in changes in project management staff, time delays and cost overruns.

"Permanent" Projects: The Planning Commission Manual for Development Projects define a development project as "projects are unique in their output, having a definite starting and ending point, are temporary in nature, carried out to manifest an organisation's strategic objectives." However, PSDP has always included "projects" and programmes which are not temporary. Our sample of 100 projects included two such programmes (the Extended Programme for Immunisation and the National Programme for Family Planning and Primary Health Care). While both these programmes could be defined as development projects because they help create human capital. However, as per Planning Commission's definition, and for other operational reasons, both these programmes are not development projects and expenditure incurred on them could easily (and perhaps preferably) be classified as recurrent expenditure. The biggest operational problem of defining these programmes as development projects is the status of project staff. Both these programmes are social sector programmes and employ a large number of employees to deliver services. Being classified as development projects, the staff associated with these programmes is treated as temporary project staff and has an employment duration coinciding with the life of PC-I. Although PC-I gets revised or renewed every few years, the creates uncertainty for the staff, affecting their morale and hence the service delivery. Moreover, being "temporary" the staff is deprived of some benefits given to permanent staff, including pensions.

*"Abandoned" projects.* A former Finance Minister (FM) of Pakistan once stated that "Pakistan is a graveyard of incomplete projects". Our interviews with various experts and practioners confirms that there is at least some truth in FM's statement. Development projects are included in the PSDP, but quite a few of them get "abandoned" before being completed.<sup>30</sup> Change in government and the resulting change in political, administrative and development priorities is the biggest reason behind abandoning these projects. Although no PSDP gives any information on completion or abandonment of a project. However, looking at the financial implementation of projects one finds that a number of projects exit the PSDP when the cumulative expenditure incurred on them was well short of their project cost. This could be for two different reasons:

<sup>&</sup>lt;sup>30</sup> In the books of Planning Commission (and provincial departments) projects are never "abandoned" only their implementation is stopped. Technically, the government can come and restart the implementation. This however is done only to avoid scrutiny by the audit authorities.

- (i) A sharp reduction in the scope, and hence the cost, of these projects. In other words, the exit of these projects for PSDP was due to completion under revised scope.
- (ii) Abandoning of these projects for change in government priorities, unsurmountable problems faced by the project or for any other reason.

In order to distinguish between these two types of exits, we adopted a simple (although fairly liberal) yardstick. Any project which made an exit from PSDP when cumulative expenditure on it was less than 60 percent of the project cost is considered an abandoned project. Projects where cumulative expenditure exceeds 60 percent of the project cost were considered as completed. No matter how liberal or conservative the yardstick that could be applies, there would always be real possibility of making an error of classifying completed projects as abandoned, and vice versa.

	Number of Completed and Abandoned Projects					
	No. of Projects	No. of Projects	No. of Projects			
Year	Exiting from PSDP	Completed	Abandoned			
FY01	32	8	24			
FY02	19	13	6			
FY03	15	8	7			
FY04	6	3	3			
FY05	7	6	1			
FY06	4	3	1			
FY07	4	3	1			
FY08	1	1	0			
FY09	1	1	0			
FY10	2	2	0			
FY12	3	3	0			
FY13	2	2	0			
FY15	1	1	0			
FY18	1	1	0			
Total	98	55	43			

Table 9

From 2000-01 until 2017-18, 98 of the 100 projects in the sample left PSDP. By our criterion (of project incurring an expenditure of 60 percent of the total cost to qualify as completed), 55 of these 98 projects were completed, while the other 43 were abandoned (Table 8). Moreover, these projects were not dropped immediately after their implementation. On the average, an abandoned project stayed more than two years in the PSDP (since 2000-01) before it was abandoned.<sup>31</sup> The total cost of these

<sup>&</sup>lt;sup>31</sup>The maximum stay in PSDP was 7 years (by one project).

abandoned project was Rs 176 billion,<sup>32</sup> whereas expenditure incurred on these abandoned projects was Rs 27 billion,<sup>33</sup> which could be taken as "sunk cost" as there is no procedure of tradition in the government to: (i) use private of non-government sectors to complete these part-built structures so that services could be available to the public; (ii) liquidate these structures to minimise the losses.

# (F) Public Procurements

Weak procurement practices remain one of the major reasons for inefficiencies in public expenditure, including public investments. Total public-sector procurements are estimated to be between 5-8 percent of GDP. Poor and weak procurement practices point to a significant loss to the government, in terms of wastage of time and financial resources. Improvement in procurement system can easily yield a saving of 1-2 percent of GDP, which in the present constrained fiscal environment can lead to substantial improvement in public services delivered to the people.

Over the last 15 years, Pakistan has made substantial progress in reforming its public procurement system. Public Procurement Regulatory Authority (PPRA), which was established in 2002 an autonomous body, has the responsibility of prescribing regulations and procedures for public procurements of the federal government and its corporations and autonomous bodies with a view to improve governance, management, transparency, accountability and quality of public procurement of goods, works and services. It is also responsible for monitoring all these procurements.<sup>34</sup>

The new legal and regulatory framework is more transparent, comprehensiveness and competitive compared to the past, yet there is sufficient room for improvement. More importantly, compliance with the new procurement rules and regulation is weak and adversely impact the efficiency of public procurement.

Competitiveness of procurement is compromised due to varied interest of the government. For example, the inherent bias in the procurement system to award contracts, on competitive and non-competitive basis, at times even with better prices, to public sector entities (FWO, NLC, NESPAK, etc.). This bias is caused by a perception about the overall cost effectiveness of the process ("monies remain within the public sector leading to budgetary savings"). However, this perception is ill founded as bulk of the work undertaken by the public sector entities is through sub-contracting the tasks to smaller firms. As such, the quality of work is compromised and without compensating economic gains to the government.

<sup>&</sup>lt;sup>32</sup>Evaluating the minimum value of services (which these projects could have generated after their completion) at the average T-Bills rate of 9%, the public lost services of Rs 16 billion p.a.

 $<sup>^{33}\</sup>mathrm{This}$  implies that on the average these projects were 15% to 17% complete when they were abandoned.

<sup>&</sup>lt;sup>34</sup> Each of the four provinces has established its own procurement regulatory authorities with their own set of rules (except Balochistan, which uses federal rules). In some case, particularly in Sindh, public procurement reforms have progressed better than at federal level. However, compliance with the established laws and rules remain as much a problem in provinces as it is at federal level.

Similarly, absence of an independent grievance redressal system adds an element of unfairness in the procurement system. As per procurement law, PPRA cannot be directly involved in grievance redressal, despite serving as a front-office for it. It simply receives complaints, but then forward those to the same procuring agency to take redressal action against which the complaint is made.<sup>35</sup>

Despite significant improvement is transparency of procurement process, it could easily be improved. Although PPRA post all bids on its website, yet the system does not provide any information on government's procurement plans, award of contracts and on resolution of complaints.

One factor which has continued to affect the efficiency of public procurements is the huge 'human resource gap' in the government to manage procurement. Procurement is a highly technical subject. In addition, the volume of public procurements is huge, both in size and number. There are not enough skilled procurement specialists within the government to manage all these procurements. Moreover, weak accountability and defective bidding and contract documents have given rise to corrupt contracting procedures and practices<sup>36</sup> which directly undermine the efficiency of public expenditure in general, and particularly public investment.

# (G) Monitoring and Project Revision

Despite being a function mandated to both the line ministry and the Planning Commission, project monitoring requires considerable improvements. The function has never been fully internalised either by the line ministries or the Planning Commission. The Projects Wing (PW) in Planning Commission was created with the sole objective of monitoring implementation of PSDP projects, identifying implementation problems for the decision-makers to take timely remedial actions. However, PW relies mainly of quarterly reports submitted by the project entities for its periodic monitoring of projects, despite this information may be presenting only the ministry's view, no effort is made to triangulate this information or undertake third party monitoring. The only effort that the Projects Wing make to gather some independent information on implementation (of selected large projects) is through its own field visits. Still no effort is made to analyse this information to identify systemic problems in project implementation and PIM system. To date, most of monitoring that is undertaken relates to inputs and compliance with procedures and processes, output monitoring continues to be considered as outside the purview and mandate on monitoring entities.

<sup>&</sup>lt;sup>35</sup> The procuring agency is required committees to address the complaint, yet the process remain internal to the procuring department/agency.

<sup>&</sup>lt;sup>36</sup> See World Bank "Pakistan Infrastructure Implementation Capacity Assessment" Report. World Bank, 2007.

Gauging form changes in project costs, project revision occurs more often than optimum. In our sample of 100 projects, there is no information available on changes in project cost prior to 2000-01. Moreover, 32 projects left the PSDP after the first year, i.e. before any change in project cost could be observed. Out of the 68 projects which remain in PSDP after the first year, 51 underwent changes in project cost – some of them multiple times, of which some saw changes in successive years. The maximum number of cost changes that a project experienced was 28 (see Figure 20). Interestingly, 89 percent of all changes (i.e. 98 of 110 changes) were more than 5 percent of the project cost – the limit after which the revision is cost has to be approved by the competent authority.



Fig. 20. Number of Projects by Number of Changes in Project Cost

Moreover, these cost changes have been both positive (i.e. cost escalation) and negative (reduction in project cost). Of the total 110 cost changes made—64 positive and 46 negative, with average positive changes exceeding the average negative change by Rs 1.3 billion, implying a net cost escalation (Table 10).

Table	10
	<b>- -</b>

No. of Changes	Net	Negative	Positive
1	-780	-1,658	879
2	812	-195	1,007
3	-2,700	-6,207	3,506
4	5,979	-7,891	13,869
5	-3,923	-19,096	15,173
6	0	0	0
7	44,301	-35,727	80,029
8	32,278	-34,993	67,271
Overall	1,337	-4,968	6,305

$\mathcal{A} = \mathcal{A} = $	Average Amount	Per	Project	Cost	Change	(Rs M	)
--	----------------	-----	---------	------	--------	-------	---

#### (H) Project Completion and Service Delivery

The growth and developmental impact of a project is realised only once it becomes operational. Although procedures for completing a project and soliciting operational resources are well laid out, yet they are hardly ever followed. Project completion report (PC-IV) is filed only in cases where the project requires recurrent expenditure allocation to be operational. The bifurcation of ministries establishment into that which implement the project and that which operate the project diffuses accountability of both in case the project fails to deliver adequate service to the people.

However, bifurcation of staff and non-compliance with procedures are not the biggest obstacles in the way of service delivery. The greatest obstacle lie in financing. Paucity of operational allocations leads to less than optimum quantity and/or quality of services generated through a completed project. There are several reasons for inadequate allocation of operational budget to a newly completed project:

- *Overall fiscal crunch*. With not enough revenue being mobilised and debt servicing, defence and wages pre-empting a large portion of this revenue, there is hardly any room in the budget for O&M allocations.
- Weak estimates of operational resources: While preparing the PC-I, the line ministries deliberately understate the recurrent expenditure implications of the project. This is done to improve the chances of getting the project approved and included in the development budget. The finance authority takes these estimates very seriously when making operational allocation after completion of the project.
- Implementation delays not only lead to escalation in project cost, but also in recurrent expenditure required to make the project operational.

A major impact reducing the developmental impact of projects, and hence public investment, lies in the under-allocation of repair and maintenance (R&M) budgets. Inadequacy of f R&M allocations lead to deterioration in quality of service delivered by the projects, while faster than normal erosion of capital stock created through the project reduces the effective life of project.

In Pakistan, R&M budgets have been grossly inadequate, both at the federal and provincial levels. To elaborate this point, we consider the IMF estimates of capital stock generated through public investment. IMF estimated that in 1960, the real value of public sector capital stock was US\$ 47.6 billion, or 15.2 times the value of public investment that year. This translates into Rs 54.3 trillion (in 2005-06 prices). The IMF also estimates the effective depreciation rate which averages (between 1989-90 and 2016-17) to 3.5 percent of the capital stock. The R&M allocation by the federal (averaging to less than 1 percent of federal government non-interest, non-defense recurrent expenditure) and provincial (averaging to 2.2 percent of the estimated depreciation of the capital stock (see Table 10). Technically, the remaining part of

depreciation is financed through public investment.<sup>37</sup> On the average, only 39 percent of investment leads to augmentation in capital stock while the remaining 61 percent goes to maintain the capital stock at last year's level. However, it is only the former which leads to economic growth and socio-economic development, while the latter merely protects growth from becoming negative.

Т	abl	le	1	1
_			_	-

O din Neeus unu Milocuilons							
					Deprecia	atio	
		Rs Bi	llion		from	Inv	
	Average Value						
	of Public	Total		R&M	Rd		
	Capital Stock'	Investment	Depreciation	Allocation	billion		
989-90	4,292	333	140	6	134		

402

333

224

333

510

347

5,360

6,176

6,483

7,160

7,724

6,318

**O&M** Needs and Allocations

178

212

230

262

298

221

7

9

9

11

20

10

171

203

221

251

278

211

n to be met estment

percent of Investment 40%

43%

61%

98%

75%

54%

61%

Avg. 1990-2017 Source: ??IMF.

1994-95

1999-00

2004-05

2009-10

2016-17

Meeting of deferred repair and maintenance from the development budget has been an on-going process in the PSDP, undertaken through inclusion of rehabilitation projects. The 20118-19 federal PSDP includes 56 rehabilitation projects with a total cost of Rs 531 billion and the 2018-19 allocation of Rs 87 billion (see Table 11). In other words, 7 percent of 2018-19 federal PSDP is allocated towards reviving the capital stock created in the past.

## Table 12

Rehabilitation H	Prot	iects	in	2018 -	19	PSDP
------------------	------	-------	----	--------	----	------

	5		
	Rehab	Overall	Rehab as a
Rs Billion	Projects	PSDP	% of PSDP
No. of Projects	56	1,285	4%
Cost	531	9,776	5%
TF	344	7,176	5%
Expenditure	168	2,581	7%
FY 19 Allocation	87	1,193	7%
Source:			

<sup>37</sup>That does not mean that public investment is used for repair and maintenance of exiting projects, but that while investment creates new structures (capital stock), the existing capital stock is eroded and becomes incapable of delivering services. The addition to overall capital stock is significantly less than the level of investment.

# Overview of the Sources of Inefficiency in the PIM System

Table 13 below provides a summary overview of the identified sources of reduced efficiency arising from the different stages of the PIM cycle and identifies the manner in which specific shortcomings at each stage of the cycle or procedure impact on efficiency of public investment.

# **Discussion of Findings on Sources of Inefficiency**

This section provides a review of the sources of inefficiency in public investment based around a limited number of themes. These themes include (i) the shortcomings of the PSDP management system; (ii) the presence of too many projects in the PSDP; (iii) the lack of systemic thinking about investment and failure to learn from past mistakes; and (iv) the absence of systems to ensure effective utilisation and management of public sector assets.

# (a) **PSDP Management**

The history outlined in Part I above has shown:

- PC and its plans started being marginalised after 1968 (Ayub regime). Plans were made but seldom seriously implemented.
- Political whims and desires entered the PSDP spending starting from Bhutto's time. Despite push-back in later years, technical planning supported by cost-benefit and rates of return to maximise growth never returned. Instead in the 1980s all members of parliament were given discretionary funds to use in their constituencies as they saw fit.<sup>38</sup>
- Subsequently mega-projects motorways and metros have become more political in nature. It is not quite clear if the funds used in these mega-projects are well utilised. For example, construction of motorways has been accorded priority over energy and schooling. Urban centre car traffic management has been a priority over social sector development. The requisite evaluation systems have not been developed to undertake a rigorous assessment of the appropriateness of such prioritisations.
- External shocks have been large in Pakistan ranging from wars on the borders or in the region, to frequent floods to political upheavals. PC has not evolved mechanisms to make plans and planning flexible enough to adapt to such shocks. Plan abandonment rather than plan adaptation has become the norm.
- The economy was opened out and liberalised through the 1990s and 2000s making direct planning for creation of productive capacity nearly impossible. The PC did not evolve revised planning mechanisms for this new age and adapted itself to be a PSDP approval body. The *Framework for Economic growth (2011-14)* was developed as an institutional reform agenda but was never mainstreamed within government.

<sup>&</sup>lt;sup>38</sup> Many projects have in the last few decades been approved by PM or president's directive.

# Table 12

# Summary of Impact of Weak Procedures on Public Investment Efficiency

	Publ	$\iota c$	Invesi	tment	Eff	tcienc
--	------	-----------	--------	-------	-----	--------

	PIM Procedure	PIM process shortcoming	Impact on efficiency	Examples
1.	Planning	Inadequate or non-existent planning at the	Projects are poorly identified as the sectoral	Across all Federal and provincial
		sector or national level.	requirements and priorities have not been clearly	ministries/departments, with a few notable
			identified	exceptions
		Inadequate planning for major complex		
		projects	Frequent major re-designs lead to cost escalation and implementation delay	The major delayed water and energy projects
2.	Investment project	Failure to consider the full range of	Loss of efficiency relative to the hypothetical best	Metro projects for which alternative approaches
	identification	options for achieving a given sectoral objective	option which may not have even been considered	to achieving the overall objective were not analysed
3.	Project preparation	Lack of application of rigorous	High likelihood that projects will be selected which	Almost universal failure to apply existing and
		procedures of assessing net cost and social benefit of identified projects	actually have low or negative financial cost benefits	well-tested methods of project profitability assessment (e.g. project cost-benefit analysis)
	<b>D</b>			
4.	Project appraisal	conducted by independent parties	benefits in response to pressure for politically driven projects to be approved	currently no system for independent QA or proposed public investments
		Lack of clarity of expected impact of		
		project at the outcome level (service delivery)	Subsequent inability to assess whether the investment was worthwhile	
5.	Technical project	Projects approved with unproven net	If projects are approved which have not been	In the absence of routine cost benefit analysis
	Approval	benefits	subjected to the required identification, preparation and appraisal processes there is a high probability that inappropriate projects will be adopted	most projects budgeting in the PSDP have unknown net benefits
	Service delivery	Emphasis on construction not use of	Projects completed and not utilised or underutilised	Expensive projects (eg Stadiums, training
	and returns to citizens	assets for returns. Citizens/civil society not involved at any stage to get ownership and better management	No planning for maintenance	academies (rural in ISB) lying underutilised with limited or no returns

Continued—

# Table 12—(Continued)

6.	Transparency of	Very limited information on	Lack of detailed information on proposed	Even the pargest mega-projects are not currently
	proposed public	proposed projects to be included in	investments means that interested parties and on-	transparent in a manner to facilitate public debate on
	investments	the budget	governmental stakeholders are not able to provide	their design and appropriateness
_	<b>D</b> 1		appropriate comments	
7.	Budgetary	Budgeted allocation for investment	Over optimistic overall fiscal policy leads to	It has become routine to cut the development budget
	procedures for	(PSDP) consistently cut during	persistent need to cut the investment budget, Leads to	during the year to help meet fiscal deficit targets
	investment	budget implementation	project completion delays and abandonment of some partially completed investments	
		Outer years of the MTBF are not	Prepared projects make unrealistic assumptions	There is currently no system for regulating and
		robust and provide inadequate	relating to the future availability of recurrent funds	restricting changes to the outer year MTBF
		guidance for availability of	for operation of completed assets. Leads to	estimates, which are reworked annually
		recurrent operating costs	delivery	
		Absence of commitment control in	Project managers engage contractors for work for	The commitment control systems built into the
		budgetary management	which budgetary funds are not available to meet	IFMIS system are currently not applied or
			payments on a timely basis. Leads to delayed	supervised opening the door to abuse
			implementation and eventually general cost	
		Separate budget planning processes	escalation.	There is no requirement for ministries/departments
		for investment ("development" and	Generalised failure to plan in an integrated manner	to plan their recurrent and development budget
		recurrent budgets	for the investment (asset creation) and recurrent	submissions in an integrated manner
			future service delivery	
8	Entry into the budget	(i) Acceptance into the budget of	Poorly designed projects will enter the hudget	A substantial proportion of new projects included
0.	Endy into the budget	projects which have not been	Implementation delays of projects in the PSDP while	into the PSDP are unapproved. This is true of both
		properly prepared	approval is sought (and PC1 prepared)	federal government and the provinces (See tables in
		(ii) Acceptance of unapproved	Where resources are constrained (as always) new	the text below)
		projects into the budget	projects mid-year will be financed through cuts to	
		(iii) Entry of new projects into the	other projects in the portfolio	Major projects have entered the budget mid-year in
		budget mid-year	Inadequately budgeted investments lead to increased	recent years, including some very large projects
		(iv) Practice of including projects	throw-forward and delays on project completion	displacing many originally budgeted investments
		with token budgets	which reduce the net benefits of investments	
			Delays in commencement and timeframe of project	The practice of providing token budgets is
			implementation	widespread

Continued—

Table 12—(Continued)

9.	Project Implementation	Poor quality of project management,	Increased delays in implementation, in	Project managers are typically Grade 20 and are
		especially for the large complex	many cases leading to complete	civil servants. They lack professional training in
		public investments	standstill for several years	project management. Most do not have the skills
		Huge delays and cost overruns that	100% efficiency loss for the funds and	and experience to manage large complex projects
		impact negatively	efforts expended up to the point of	effectively
		Abandonments of projects for	abandonment	
		technical reasons or because of change	Excess cost due to non-competitiveness	A significant proportion of investment projects are
		in political priorities	in tender wards	simply abandoned (see text table)
		Inadequately robust procurement	Delays in project completion leading to	
		procedures	loss of bet value;	A large proportion of public investments are
		Reparation of the re	Excess cost as contractors pay bribes to	delayed during implementation
		Delays in release of funds	obtain payment and these excess costs	
			impact on tender bid prices	
10.	Monitoring and evaluation	Incomplete monitoring of investment	Failure of management to take timely	
		project implementation	corrective action where problems are	
			encountered	
		Absence of public investment impact	No learning from the lessons of	
		assessments	completed (or abandoned) investment	There is almost complete absence of preparation
			projects	of the required PC5s
1.	Operationalising completed	Recurrent budgets for staffing and	Severe impact on the net benefits of the	Many examples of investments only partially
	projects	other operating costs not forthcoming	investment if not fully operationalised	staffed several years after completion of
			immediately on completion of assets.	investment (e.g. new universities)
2.	Asset Maintenance	Inadequate funding and attention to	Reduced lifespan of assets of increased	Railway stations and idle offices that can be developed
		the maintenance of completed assets	need for early rehabilitation – reduce	for revenue and employment generation
			the net benefits anticipated from the	Offices like Staff college in Lahore or TV station
			project	in Lahore that can relocate and develop real estate and stop drawing from PSDP
13.	Asset management for revenue	Failure to exploit the full income-	Reduced efficiency of the original	Many stadium projects which have typically failed
	generation	generating potential of completed	investment compared to its true	to exploit their revenue generating potential
	5	assets	potential	University land huge asset for academic
			1	development lying idle and subject to qabza
	No one reviewing the state of	Past experience shows poor planning	Private investment not being catalysed	
	public investment in the country	and public investment procedures are	by public investment	
	to review productivity and returns	leading to very weak impact on	Productivity should be improved by	
	inpace.	growth and productivity.	infrastructure development and public	
	-		investments. Not showing up in	
			evidence	
PC has thus become a PSDP project approval body where most of the projects were not identified on the basis of technical considerations or as part of a shared approach to maximising growth and welfare. These developments adversely impacted both the growth and the efficiency of public investment.

At all stages of the project the PC is supposed to keep track of performance. However, this tracking is now not happening to maximise project performance. At the project initiation, the PC1 form requires a full cost-benefit and economic analysis of the project to be presented to the approval body--the Central Development Working Party, after careful scrutiny by members. The required analysis can now be by-passed if there is sufficient political pressure and hence projects are initiated that may not meet required financial or technical standards.

When the project is complete the sponsoring agency must send a completion report, the PC4. Seldom is this report completed and hence there is little evaluation of the work done and its proper costing. After 5 years of the completion of the project, an evaluation report, PC5, reports on the performance of the project comparing it to the stated expectations set out in the PC1. Once again, these reports are seldom if ever completed.

The question arises whether the missing PC4s and PC5s suggest that sponsoring ministries do not have results that are good enough to be showcased? Is it because the projects were poorly designed? Or poorly managed or both? Or could it be that the sponsoring department was only interested in the construction and not in the operation of the project? Or is it that the government does not have project management, execution and operating capacity? These are all questions that need to be addressed.

### **Too Many Projects, Too Little Return**

The 2017-18 PSDP has 1148 projects listed at the federal level at a cost of about Rs 865 billion and another 130 billion of public investment on schemes outside the PSDP. Of the PSDP, apparently 272 billion is allocated to special funds that are beyond PC scrutiny and subject to PM directive. In the outgoing year, 153 new projects were added. The total size of the ongoing projects is 9 trillion rupees.

No mechanisms have been set up to replace the deficiencies of the planning system to coordinate and deliver critical aspects of development projects and policy. The technical details of policy and projects such as basis of evidence, cost-benefit, rates of return and rigorous feasibility or sensitivity analysis have gradually been withdrawn from senior policymaking forums.<sup>39</sup> Looking strictly at the project development and management system, several weaknesses have crept into the system lowering their impact and rate of return. These are:

<sup>&</sup>lt;sup>39</sup> PC was supposed to whet and coordinate policymaking as well but was no longer doing so. Policies have proliferated without much coherence and can even be contradictory and confusing. Most of the policies also tend to be transactional and giveaways and hence against the spirit of policymaking.

- (i) Projects are approved without due diligence. Feasibilities, cost-benefitanalysis, spatial determination and several other details are often subject to political or other considerations. Approvals are pushed through with executive fiat (see Planning Commission (2011)).<sup>40</sup>
- (ii) Projects are seldom completed on time. Projects are delayed for a number of reasons but perhaps the 2 most important are a) obsolete management systems that do not allow competent management to autonomously run projects (see Planning Commission (2011)) and inadequate funding flows as MOF attempts to stay within budget and finds cutting funds for projects to be an easier target. Some projects like Neelum-Jehlum and Islamabad Airport were substantially delayed primarily because of inadequate technical preparation.
- (iii) Projects frequently have large cost overruns. As table 2 shows using a selection of PSDP projects overruns are frequent and can be quite large. This is a combination of poor project management, infrequent delays leading to cost escalation as well as poor initial preparation.<sup>41</sup>
- (iv) Excessive focus on brick and mortar. Figure 3 shows that the bulk of the investment is in hard infrastructure and of this road has for the last 3 decades been the biggest component. Even in the social sectors and other sectors, departments are interested in brick and mortar and even the approval process favours that. There is an inordinately high pressure from politicians to connect all constituencies through the building of high quality roads (See figure 4). Often the technical solution is overlooked to the detriment of the economic return. This is why despite roadbuilding being the most important component of the PSDP for more than a decade, GDP growth and productivity have not visibly improved (see Planning Commission 2011a)
- (v) Projects completed but not maintained. Because of the hurry to get the project up and running maybe for reasons other than technical, not enough attention is paid to how the project will operate to confer intended benefits. At planning stages, proposing departments or ministries often do not plan well to provide for operating costs. In several cases, even salaries of some programmes and projects have been financed by the PSDP. Quite often the room for operating costs is taken away by MOF to meet the requirements of fiscal retrenchment. The continuing struggle with fiscal sustainability is also a contributing factor in the utilisation of the project for the intended returns. Although it needs to be stressed, sponsoring department and agencies

<sup>&</sup>lt;sup>40</sup> The lack of due diligence and political approvals means several projects end up in court and are even stopped with some work have been imitated. http://www.supremecourt.gov.pk/web/user\_files/File/const.p.20\_2013.pdf

<sup>&</sup>lt;sup>41</sup> The frequent transfer policy in government has resulted in a high turnover in many ministries and agencies which also affect project delivery in all its aspects.

processes and capacities are probably more important factors in poor project preparation, management and operation.

(vi) Assets built but returns low: On the positive side, PSDP has built a large number of hard assets. Among the assets that have been built are several large water and energy projects that have been enormously valuable to growth. Shortages and financial losses in both areas are now manifesting themselves because of subsidies as well as poor management. As planning eroded, political pressures stretched gas and electricity grids way beyond efficiency and at a huge cost to the economy and the budget as leakages increased.

	Examples of Troject Cost Over-tun	
	Project	% Recent estimate/original
1.	Islamabad-Peshawar Motorway	47
2.	Lowari Tunnel	193
3. 4.	Widening & Improvement of N-85 Rehabilitation, Improvement and Widening of Karakoram Highway	49 67
5.	Nandipur Power plant	265
6.	Neelum Jehlum	3000.5
7.	New Islamabad Airport	270
8.	National Programme for Family Planning & Primary Health Care	415
9.	Expanded Programme for immunisation	392
10.	Raising the Mangla Dam (including resettlement)	62
14.	Lower Indus Right Bank Irrigation & Drainage	235
15.	Right Bank Out fall Drain from Sehwan to Sea	109

Table 14	
Framples of Project Cost Over-r	un

More recently, responding to social demands, more than 100 large public-sector university campuses, many schools, about 30 large stadiums, numerous training facilities, a convention centre in Islamabad and expo centres in 4 cities are among the things that have been built. Because of poor management, inadequate pricing and in some cases simple inertia, most of these assets are underutilised. For example, stadiums, expo and convention centres have been built without growing sport, exhibition or entertainment industry. University pricing cannot adjust in relation to costs making it difficult to hire staff to operate at capacity. Inadequacies in operating budgets and in pricing and management pervade the system so that when hard assets are created, there is no pressure to maximise returns.

# (i) There is a lack of systemic and long-term thinking and learning from past experience

#### The problem of the inadequate quantity of public investment

The preceding sections have concentrated on the efficiency or quality of pubic investment. However as was clear from the analysis of investment and growth at the macro level in Chapter 3 above, there is an equally pressing problem of the overall volume of investment, both public and private, measured as a proportion of GDP.

Based on the experience of the past decades it can be argued that Pakistan is in the grip of a vicious circle of declining investment, declining trend in economic growth and the emergence of infrastructural bottlenecks with negative feedback linkages creating a downward spiral. The downward trend may be punctuated by periods of relatively rapid growth, but these are followed by a slow-down generated by fiscal unsustainability and the need for stabilisation measures which lead to slowdown in investment and growth.

Figure 5 shows graphically how a spiral of declining growth and productivity sets in when eroded, broken or outmoded systems corrode public investment as well as asset management, the ensuing efficiency losses lead to slowing growth and bottlenecks (such as energy shortages, low quality human capital) and eventually lead to growing imbalances and recourse to adjustment programmes with the IMF. In the context of adjustment programmes, inability to make deep reform leads to austerity which further weakens systems of public investment and asset management.

The sources of Pakistan's low investment/GDP ratio are not difficult to find. The following factors stand out:

- The national savings/GDP rate is exceptionally low and represents a mere fraction of the savings performance of fast-growing Asiana countries.
- For a variety of reasons Pakistan has a poor record of attracting foreign investment (a generalisation to which the recent CPEC is an evident exception), which mean that limited domestic investment is not substantially supported by foreign direct investment (FDI);
- The persistence and progressive deepening of issues of fiscal management and sustainability have led to a secular decrease in the availability of public finances to finance public investment.



Fig. 21. Costs of a Poor Public Investment Process

It is beyond the scope of the present study to attempt to identify the set of economic policy management reforms which would be required to address the persistently low savings and investment performance of the country. Suffice it to say that such a package would need to include elements addressing (i) the low national savings performance; (ii) the business environment and judicial reforms to attract substantially larger volumes of FDI; and (iii) reforms of the system of fiscal and budgetary management to enable the country to shift permanently away from fiscal and debt unsustainability. 

# Part III: MISSING PIM FUNCTIONS: ASSET MANAGEMENT AND PROGRAMME EVALUATION

## **Monitoring and Evaluation**

Monitoring and Evaluation (M&E) is an essential element within a wellfunctioning Public Investment Management system. However, it is largely absent in thein the implementation of e existing PIM system in Pakistan.

Monitoring and evaluation are distinct but linked functions. PIM monitoring is the tracking of the implementation of the stages of the investment cycle for individual projects and for the public sector investment portfolio as a whole. It is emphasised that there should be a monitoring system covering all stages of the project cycle. For the pre-implementation stages of the project cycle the main function of monitoring is to track the compliance with established procedures in the development of public investment projects from initial project identification and formulation to entry into the budget. Such monitoring is thus primarily concerned with ensuring compliance with the rules and regulations government project development. During the project implementation stage the monitoring function should concentrate on the progress achieved in the implementation of the project implementation plan, Such monitoring should cover (i) the degree of achievement of pre-investment activities, such as procurement of contractors, the acquisition of land required for the project, the organisation of the project implementation, (ii) the tracking of financial releases, commitments to contractors and final expenditures compared to the project implementation plan; (iii) the progress towards the achievement of time-bound targets for physical implementation of the project; and (iv) the post -investment utilisation and budgeting for the completed public assets for public service delivery. The purpose of monitoring at all stages is to provide the opportunity for early identification of problems in the implementation of the project cycle and the identification of remedial actions during implementation.

At present, the monitoring of public investments is largely confined to the physical implementation of projects, and even this is undertaken only on a selective basis.

By contrast, the purpose of evaluation is to provide an assessment of whether a given project or programme is successful in achieving the objective for which it was established. As such, evaluation is usually undertaken late in project implementation or after the completion of the public investment. Evaluation is important in providing lessons on the effectiveness and efficiency of past programmes which can be used to define improved projects, programmes and procedures for the future. In the absence of evaluation there is a high likelihood that such lessons will not be learnt and the bad habits of the past will be perpetuated in the future.

Even though monitoring and evaluation are distinct activities with distinct purposes, they are closely linked. In practice evaluation rests heavily on the effective performance of prior monitoring, as conclusions concerning the final effectiveness and efficiency of a project or programme can only be drawn where the detailed stages of the project are properly documented at the time of implementation.

It is useful to distinguish four major interests which should underlie the design of an M&E system:

- The **Financial Interest**: have public duns been spent in public investment programmes in accordance with the approved budget and the rules pertaining to budget execution. A secondary, but equally important question is whether public financial resources applied to public investments have been utilised in an Economical, Effective and Efficient manner (the "3 Es") leading to good value for money. The financial interest is primarily concern of the financial authorities, namely the Ministry of Finance in the Federal Government and the Finance Departments in the provinces;
- The **Political Interest** addresses the question of whether completed on on=going public investments are managing to delivery on political commitments undertaken by the current and previous governments. This interest is of prime concern to the Office of the Prime Minister and the Cabinet Secretariat;
- The **Development Interest** addresses the effectiveness of the allocation of public resources (both recurrent and development budgets) in contributing to the achievement of national goals and priorities established in the high level national and sectoral development plans. This interest is of paramount concern to the authorities responsible for national and sectoral planning.
- The **Processes and Procedures Interest** is important for the identification of weaknesses in the systems used for PIM and the identification of needs for adjustment or reform. This interest is common to all the central ministries of government.

The implications of the above discussion of the various elements and interests in the M&E system are important and can be summarised as follows:

- (i) M&E is a critical function, without which the PIM system is unlikely to be effective or efficient, especially over time;
- (ii) Several important central ministries of government have a strong interest in there being an effective M\*&E system and should be expected to participate both in the design of the M&E system (to ensure that it meets their requirements) and in having access toi the results of M&E reporting systems.

To address these requirements, in recent years many countries have taken steps to establish nationwide system of M&E to provide the required feedback on the development programmes under implementation and completed. These national M&E systems go by a variety of names, including Government-Wide M&E System (GWMES), National Monitoring and Evaluation System. Evaluation Council etc but the basic aim is the same—to achieve feedback on the effectiveness of ongoing and completed government programmes across the 4 interest areas reporting to the major central interested bodies.

Some of the elements of a National M&E system are already in place in the Federal Government. These elements include:

- The provision of detailed financial information on actual spending against project budgets trough the IFMIS system managed by the Controller General of Accounts in the MoF;
- The system of reporting on project physical implementation progress undertaken by the Planning Commission; and
- The Annual Performance Monitoring Report (PMR) prepared by Budget Wing of MoF on the results achieved by federal ministries against their output and outcome targets and KPIs as set out in the budget Green Book which has been tabled in Parliament since 2009.

However, these elements of a National M&E system fall far short of what would be required od=f a comprehensive system of M&E with the capability to provide reliable assessments of the efficiency and effectiveness of existing and past programmes in delivering on stated national development objectives. 

# PART IV: FUTURE CHALLENGES FACING PUBLIC INVESTMENT MANAGEMENT

## (1) The Challenges for PIM in Pakistan in the Coming Decades

Looking to the future the study has sought to identify the main challenges if the PIM system is to deliver what is required of it in the future. The following 5 specific areas are highlighted which will pose problems for the existing PIM system and create a requirement for substantial reforms:

# **Challenge No. 1: The Fiscal Crunch**

• The resource constraint for public investment in the face of the prevailing inadequate systems for the management and control of recurrent public expenditures, including debt service, personal emoluments and pensions. Measures will need to be taken which fall outside the realm of PIM to address this fundamental constraint on fiscal space.

Resolution of the problems arising for public investment from the persistent problems encountered with fiscal sustainability and inadequate fiscal space will be critical determinants of the success of future PIM, they fall outside the scope of this study.

#### Challenge No. 2: A strengthened Institutional Architecture for Planning

• The need for a strengthened institutional architecture for strategy formulation, planning and evaluation of the results and lessons of development efforts.

## **Challenge No. 3: The Requirement for Mega-projects**

• The burgeoning requirement for mega public investment projects to provide the infrastructural underpinnings for a modern and fast-growing national economy. At present the country lacks the institutional and human capacities for the efficient and effective design and implementation of complex megaprojects, and this deficiency is reflected in massive implementation delays and cost over-runs

# Challenge No. 4: Systems and Institutions for the Management and Full Utilisation of Public Assets

• Although much effort and significant scarce public financial resources are put into the creation of public assets, the existing systems for ensuring full utilisation of those assets for service delivery, for maintenance and routine rehabilitation of assets and for maximising the potential returns (whether service delivery or financial) generated by public assets, are totally inadequate.

The remainder of this chapter addresses Challenges 2-4 above.

#### **Challenge 2: A Strengthening Institutional Architecture for Planning**

The planning exercise as it is conducted is fairly rigid. There has never really been a review of the planning process partly because there is no capacity for research in the government and partly because government is always in a rush to build and never has time or inclination to review processes. Hence the process remains unchanged. It requires a few formal perfunctory meetings at a senior level, at best one presentation to the cabinet and one to NEC to pass a lengthy plan document that has been prepared by consultants or people who mostly are not a part of government. Ownership within the government is limited.

The plan has no 'plan' for possible changes in assumptions. No simulations or scenario analysis is included to deal with possible eventualities. Nor are any mechanisms put in place to deal with possible shocks to the economy. So, when things out differently from what was in the plan, changes are not easy to make nor are they understood by all ministries and implementing agencies.

The planning methodology needs serious review. It attempts to set targets and calculate investments that are made. The framework still is fairly mechanical and mainly input based. There is little understanding of productivity and its determinants, nor any analysis or means for making reform even though the ministry has adopted the name reform.

Even the annual development plan seems to be a collection of PSDP expenditures with little coherence and idea of how these investments will impact productivity and growth. Besides there are a large number of projects with an increasing throw-forward which implies longer delays going forward.

If the downward spiral of inadequate planning, poor efficiency of public investment and reducing resourcing of public investment is to be broken, a twin track reform for asset creation and management must be undertaken.

- Reform the planning process to make better investment choices for creation of wealth and move away from poorly thought out brick and mortar projects with a heavy influence of politics, and
- the concept of understanding national wealth in order to manage it and leverage it for the best possible return.

Major reforms required to the public-sector management system to address the shortcomings of the planning system could include:

• Addressing the PSDP/current budget divide: In the early days of central planning, when the economy was more controlled, and the country was scarce, perhaps it made sense to have an agency as the custodian of the PSDP. Indeed, the system has been vindicated by the creation of assets. But now assets have been created but the weaknesses that have emerged are clearly not leading to growth and wealth that has been created is not managed very well nor is it generating the possible returns. Besides the structure of society and governance is much more complicated than it used to be.

# Box 5: OECD Principles for Better Governance for Public Investment

**"OECD** Report on Getting Infrastructure Right: A Framework for Better Governance that recognises that poor governance of infrastructure is an important bottlenecks to achieving long-term development objectives

#### Strategy:

- Establish a national long-term strategic vision for the use of infrastructure that helps to create activities that generate welfare and increase the nation's productive capital stock.
- Integrate infrastructure policy with other government priorities, such as education, poverty reduction, and urban development, and link it with related policies that support infrastructure development, such as logistics and infrastructure services, trade regulations, or customs procedures.
- Coordinate infrastructure policy across levels of government in such a way that investment decisions by central and subnational governments are coherent.
- Implement appropriate standards to provide resilient infrastructure systems that are resistant or adaptive to shock events.

#### Affordability and value for money:

- Guard affordability and value for money by using and applying cost-benefit and other methods rigorously and consistently.
- Establish clear criteria and processes to guide the choice of delivery mode, such as Public-Private Partnership (PPPs), concessions or other forms of public procurement.
- Explore to which extent and under which conditions projects with private participation can lead to better outcomes.

#### Management:

- Ensure the appropriateness of skills, procedures and processes to manage infrastructure projects over their life cycle.
- Integrate mechanisms to monitor and evaluate performance of the asset throughout its life and consideration of options for better use of existing infrastructure.
- Establish good regulatory design and maintain a predictable regulatory framework for investment.

#### Stakeholder engagement and consultation:

 Make use of consultations and structured engagement in infrastructure policy formulation and project delivery.

• Generate, analyse and disclose useful data to increase transparency and ensure accountability." Summarised from World Bank Blog:

http://blogs.worldbank.org/ppps/getting-infrastructure-right-oecd-framework-better-governance

The possibility of consolidating the PSDP and the current budget into one should be seriously considered. It will have the advantage of allowing the departments to control all their resources and focus on delivering results according to plans they have developed in their rolling strategies. With the SEDC (see below) in place, the focus will be on the bigger picture of productivity of efficiency of welfare delivery to the people. Investments will have to be made with a clear purpose and used in this new framework.

#### • Reform of the planning procedures. Potential measures include:

**a.** Aggregating rolling plans for systemic longer-term thinking: The fixed 5-year length of a plan and a national plan may not suit the country although many countries are still doing it perhaps because it has the advantage of focusing the government on a united agenda for a fixed period of time. Perhaps Pakistan can think of rolling plans and not necessarily of a fixed length and not necessarily national. The MOF has an MTBF in place. That should be now become the planning process. The 3-year rolling framework of the MTBF is the fiscal planning framework. All project and planning work should conform with it or impact it to bring the system into much-required medium term fiscal discipline.

# Challenge No. 3: The Requirements of Mega-projects in Infrastructure Development

Experience both in Pakistan and internationally point clearly to two important considerations: (i) the magnitude of the national requirement for investment in infrastructure in Pakistan will be very large in the coming decades. This requirement will arise across the infrastructure sectors including water, energy, transport (road, rail and aviation). An indication of the magnitude of this requirement can be gleaned from recent estimates of the likely costs of meeting global and regional infrastructure requirements, which are measured in trillions of US dollars. (See Box 6 below)

### **Box 6: Infrastructure Needs are Huge Going Forward**

Global infrastructure investment needs are 96 trillion USD 2015-25 according to Mckinsey's

"The findings show that the South Asia region needs to invest between US\$1.7 trillion and US\$2.5 trillion (at current prices) to close its infrastructure gap. If investments are spread evenly over the years until 2020, the region needs to invest between 6.6 and 9.9 percent of 2010 gross domestic product per year, an estimated increase of up to 3 percentage points from the 6.9 percent of gross domestic product invested in infrastructure by countries in the region in 2009." World Bank

"The world economy could grow by some 3% per annum to 2030 as many experts forecast, and the performance of developing countries should outstrip that of the developed countries by a wide margin–4% per annum versus 2.4% per annum." <u>OECD</u>

"We estimate global infrastructure investment needs to be \$94 trillion between 2016 and 2040." Oxford Economics

"Around 7 trillion USD a year is the investment requirement in infrastructure over the next 15 years." <u>Brookings</u> Megaprojects (larger than a billion or 5 billion USD) are a subject that must be considered more carefully and as a special category because of their complexity and possible cross cutting nature of work which may lie beyond one agency. Megaprojects are also seen as specially challenging. Research has shown that megaprojects need special attention and management for several reasons Box 7 summarises key characteristics and principles of megaprojects from Flyvbjerg's research on this area.

Pakistan's experience with megaprojects has revealed weaknesses of the sort Flyvbjerg talks about; cost overruns, benefit shortfalls and delays (Gwadar, Kacchi Canal, highways, metros, Neelum-Jehlum etc.). Yet it is easy to see that if Pakistan is to build the required infrastructure and manage the national, regional and city wealth, capacity to develop and manage megaprojects will need to be created. Flyvbjerg's 4 sublimes (see Box 7) point to how several stakeholders are invested in key megaprojects. We have seen in Pakistan how megaprojects have become an election issue and how they are valued by citizenry on the lines of Flyvbjerg's 4 "sublimes".

Going forward we should assume that like all countries Pakistan will have more and more megaprojects if our national wealth is to be properly exploited. For example, large energy, water, city regeneration, transit and rail connectivity all can be envisaged in the coming years. The latest issues in the Peshawar metro point to the difficulties with managing mega projects. In any rethinking of public investment management and implementation should involve some consideration on how to handle mega projects.

Some key principles can be identified.

- (a) Such projects will need to be insulated from negative influences of both political and administrative structures. Yet monitoring and accountability systems will have to be built. Greater citizen partnership at all stages should be allowed.
- (b) Projects must be guided by a clear and well-articulated goals and a vison but based on good research. Implementation should be preceded by widespread sharing of the vision and a debate on alternatives.

Type of Sublime	Characteristic
Technological	The excitement engineers and technologists derive from pushing the envelope for what is possible in the "longest-tallest-fastest" types of projects.
Political	The personal satisfaction politicians get from building monuments to themselves and their causes, and from the visibility this generates with the public and media.
Economic	The prestige business people and trade unions get from making lots of money and creating jobs from megaprojects, including for contractors, workers in construction and transportation consultants, bankers, investors, landowners, lawyers, and developers.
Aesthetic	The pleasure designers and people who love good design derive from building and using something very large that is also iconic and beautiful, such as the Golden Gate Bridge in San Francisco, California.

- (c) Management capacity for such projects will need to be created and a market for such managers will be needed.
- (d) Yet the project must have ownership and oversight from the requisite level of leadership and citizenry. But this should not mean as in the past that the line ministry-controlled project.
- (e) Perhaps the government could set up a research outfit for collecting data, researching and monitoring these projects. Each additional project could contribute to the financing of this research outfit. Unless secrecy is required, all of the research work should be freely available. This outfit could also hold periodic informative debates on the ongoing and proposed megaprojects. This centre should have strong links with universities and over time open up centres there to take development, design and monitoring work closer to projects.

#### Box 8: Why Megaprojects Require Special Attention.

Cost overruns, delays, and benefit shortfalls occur because of the inherent in the nature of megaprojects because of the difficulty of planning complexity involved. By their very nature, they have to be This problem tends to lead to challenges for implementation—as problems need to be fixed while "flying the plane." Overall, this is a fundamental management problem that often leads to fragile megaprojects—megaprojects falling apart because of lack of direction and common ground. Flyvbjerg principles and characteristics on megaprojects are:

- (i) Megaprojects are often complex projects that have long planning horizons and several departments and agencies and are inherently risky.
- Megaprojects are complex and may require innovative management, risk taking and a lot of learning. Finding such management and not curbing it with excessive bureaucratic process is key.
- (iii) Megaprojects involve multiple stakeholders with diverse and conflicting institutional backgrounds.
- (iv) Megaprojects often break new ground and must be developed and implemented with careful and flexible, research and M&E to learn and evolve.
- (v) Decision-making at strategic and design levels must not be subject to lock ins leaving no room for considering alternatives.
- (vi) Like all big organisations, including big business, megaprojects will have layers of principal-agent problems and more importantly optimism bias.
- (vii) Megaproject scope and ambition levels will change significantly during the life of the project.

Because of the innovation required, megaprojects experience rare and improbable events occur more often than originally thought.

From FlyvBjerg (2014) And Soderland (2018)

#### **Challenge No. 4: Managing Assets Better**

The PC experiment has not been a failure in that it has created asses as required. Yet in the coming years, like the rest of the world, Pakistan must prepare itself for more public investment. The needs in the coming years are likely to be huge (See Box 6). In the coming 10-30 years global infrastructure needs are likely to be huge—as much as a 100 trillion USD. So, we must consider how we can deliver this large investment going forward. Additionally, the government must consider how it can ensure that the money is well spent so that delays and cost overruns are minimised while the returns are maximised. Rethinking public investment policy and procedures is thus an urgent need. Here we present some ideas to consider. This is a starting point for a debate and discussion to evolve a system on OECD guidelines (see Box 3).

#### Leveraging National Wealth

As noted above, Pakistan continues to run with the Haq/HAG planning model which focused on building hardware with a huge reliance on aid. More recently as foreign financing needs grew beyond available aid, MOF acquired considerable commercial debt to find itself once again staring at BOP crisis.

However, given the change in circumstances, there is an urgent need to review the model and change the way assets are created and managed for better and more inclusive development. The PC project design, preparation implementation and management has changed significantly. PSDP has been politicised and poorly managed so that cost overruns are large, and delays are frequent and long. Moreover, once assets are created, their maintenance and management often are not utilised or maintained for maximum returns.

It is important that assets such as infrastructure be created but it is equally important that such investments are managed well at every stage for maximising returns and contributing to growth and welfare. It is time to reinvent the process of creating, managing and maintaining national wealth for the people of the country.

It would be advisable for the incoming elected government to put in some time and effort to review the planning paradigm in its detail and devise a new system that is more in keeping with the Box 4.

### Managing National Wealth for Growth and Development

"The single largest owner of wealth in nearly every country is not a private company; nor is it an individual like Bill Gates, Carlos Slim, or Warren Buffet. The largest owner of wealth is all of us collectively, otherwise known as "taxpayers."

What is more, most governments—including the many nations caught in the grip of debt crises—have more wealth than they are aware of. Many of these troubled countries own thousands of firms, land titles, and other assets that they have not

bothered to value, let alone manage for the common good. Public wealth is like an iceberg, with only the tip visible above the surface.

For decades, a phony war has raged between those in favour of public ownership and those who see privatisation as the only solution. We argue that this polarised debate is partly to blame for neglect of a more important issue: the quality of public asset governance. Only through proper management can public wealth yield proper value to its owners, the citizens. Even public assets that are privatised can achieve widely differing outcomes depending on the quality of government regulation, the privatisation process, and the competence of private owners. The costs of the phony war between privatisers and statists have been enormous: lack of transparency, financial waste, and underperformance in the public sector. The only winners are vested interests on both sides of the debate.

The most visible public assets are government-owned corporations, often called state-owned enterprises (SOEs). According to one study, over 10 percent of the world's top firms are SOEs—and their combined sales are equivalent to 6 percent of the world's GDP.

Beyond the corporations owned by governments at different levels lie vast stretches of productive real estate—by far the largest component in public wealth portfolios. More than two-thirds of all public wealth ownership remains opaque. Many assets are owned by local and regional governments or quasi-governmental organisations that, while formally independent, actually work at the behest of the politicians who sit on their boards.

We argue that the professional management of public commercial wealth among central governments around the world could easily raise returns by as much as 3.5 percent, to generate an extra \$2.7 trillion worldwide. This is more than the total current global spending on national infrastructure — the combined amount we spend on transport, power, water, and communications, according to a <u>study</u> by McKinsey Global Institute.

Many cities and states in rich countries have similarly mismanaged land holdings that could be an integral part of public finance and used to lower taxes or pay for vital infrastructure. In many cities managing public commercial assets more professionally could help close the housing gap.

As things stand, the vast bulk of public wealth in many countries is in the hands of civil servants inside the government bureaucracy. They manage state-owned firms, real estate, and other holdings with minimal public oversight. This is, at best, a bureaucratic system designed for handling the allocation of tax money. At worst it is an arena for political meddling and, occasionally, downright profiteering. Public commercial assets could also constitute a significant fiscal risk, as well as an outright cost for the government. The cost could sometimes be in the double digits of GDP, as is probably the case in many former Soviet states.

Those who profit from shady accounting will always argue that revealing the monetary value of public assets places economic agendas over social aims. We show

the opposite to be true. When the value of public assets is revealed, and managers are told to focus on value creation, a government can make informed, transparent choices about how much to pay SOEs for achieving social aims. Without such transparency, interest groups with selfish agendas will all too often succeed in interfering with sound management by exaggerating the social benefits of their demands.

As long as politicians are directly responsible for governing SOEs, they will be hesitant to demand better performance on behalf of consumers, because such demands would call their own management into question. Freeing governments from having to run public firms changes politicians' mission and focus. This goes to the heart of a well-functioning democracy: accountability, transparency, and disclosure.

In our view, the best way to foster good management and democracy is to consolidate public assets under a single institution, removed from direct government influence. This requires setting up an independent body at arm's length from daily political influence and enabling transparent, commercial governance. Examples include Austria's state holding company <u>ÖIAG</u> (now undergoing reforms), Singapore's <u>Temasek</u>, and Finland's <u>Solidium</u>.

A similar international trend has been to outsource monetary and financial stability to independent central banks. This was initially very controversial in many countries. Over time, however, experience with independent central banks has been positive and has been widely copied.

Similarly, independent governance of public wealth can bestow significant economic and democratic benefits. We use the term National Wealth Fund (NWF) for these institutions, which independently govern public commercial assets. As with independent central banks, such organisations do not offer a watertight guarantee of better governance in countries with kleptocratic leadership. Vietnam set up its NWF, the SCIC, in 2005 as a holding company for some 400 SOEs — but it still has some way to go to reach private sector levels of returns. Nevertheless, setting up NWFs would help most countries that are trying to make their democratic institutions more robust.

Despite the successful examples, only a small percentage of global public commercial assets are managed in these independent and more transparent NWFs – that is, at arm's length from daily politics. In particular, the vast real estate portfolios held by governments around the world would benefit from a more professional approach removed from short term political influence. Just as large corporations separated their real estate from their operations starting in the 70s and 80s to improve transparency and the value of their shares, governments are now discovering the importance of managing their assets for value. After the financial crisis of the 90s, Sweden created several real estate holding companies under corresponding ministries, such as <u>Vaskronan</u>, <u>Vasallen</u> and <u>Akademiska Hus</u>, while Finland established <u>Senate Properties</u> and Austria established <u>BIG</u> as consolidated real estate holding companies.

Our proposals extend beyond the governance of just commercial assets. NWFs with sufficient independence from government control could be allowed to rebalance its portfolio and not only help finance infrastructure investments, but also act as the professional steward and anchor investor in newly formed infrastructure consortia. Managed in this way, NWFs can encourage investment in much-needed infrastructure.

At the same time countries own huge portfolios of commercial assets. Even heavily indebted countries like Greece and Ukraine are often asset-rich. This is why we should start looking at the other side of the public-sector balance sheet and ask:

"What can public wealth do for our economy and for democracy?"" From Detter and Folster (2015)

As Detter and Folster argue, national wealth is never measured, never managed or properly used (see Box 4). National wealth is made up of national assets that often are never regarded as assets and held beyond economic use. Development economics has confined itself to thinking along the lines of the earlier Lewis and Harris-Todaro models where the 2 sectors agriculture and manufacturing were the main drivers of growth. The point was to get the country into more manufacturing which was considered to be highly productive and profitable while also improving agricultural productivity. <sup>42</sup> Later to deal with poverty 'inclusiveness' distribution became important and giving the poor livelihoods but mainly within the confines of the Lewis and Harris-Todaro models.

Little thought is given to infrastructure and public goods that have been built. How will they be managed for maximum return? How will they be maintained? There are other forms of national wealth that policy can unlock that currently remain hidden. Wealth accounting could become a very important driver for change, productivity enhancement, and investment. We can think of the following forms of wealth that needs to be accounted for and managed.

- Public goods and infrastructure that has been developed.
- State owned enterprises which are not privatised accepting the fact that there will always be some that are not going to be privatised or the state will develop until they are privatisable.
- Social infrastructure like sports complexes, community centres, schools, universities hospitals, that have been developed and whose assets can be better managed to fund their activities or develop industry around them.
- Most private wealth too remains hidden as regulatory policies remain oblivious to how they prevent movement of assets to more productive uses.

<sup>&</sup>lt;sup>42</sup> Till today development policy in Pakistan is focused on pushing industry and improving agricultural productivity. The USAID programme in Pakistan is focusing mainly on agriculture. The latest PTI manifesto is also thinking along these lines.

• Natural capital such as minerals water and the environment.

Systems have to be developed to manage this wealth better. First step is to have an inventory and an initial evaluation and determine how and which level of government will manage the asset. For example, most social infrastructure will be managed at the local level. But then cities should be motivated into managing their city level wealth.

The second step would be to set up various mechanisms to do this staffed by professionals and autonomy from political processes yet with transparency and accountability.

Then of course there have to be all manner of laws, reporting and open processes that have to be set up to support this new architecture.

But this is a large systemic change that could take decades.

# PART V: REFORMING THE PIM SYSTEM

### (1) Drivers for Reform of the PIM System

This chapter reviews the need for reform of the PIM system in terms of identifying the core problems which any reform programme should be aiming to address. The following core problems with the existing system are identified:

- (i) Compliance and discipline: There is a major problem of lack of compliance with existing mandated PIM processes and procedures which derives both from a failure in the bureaucracy to performed required stages of the PIM cycle, but which also reflects a deeper problem of lack of discipline in the management of the PSDP, epitomised by the entry of unapproved projects into the budget and the frequent mid-year changes in the composition of the PSDP.
- (ii) Gaps in the PIM System: important gaps in the existing PIM system include (a) the virtual absence of sector planning required to drive the sound identification of proposed investments/projects. (b) the is no system to ensure the effective management and full utilisation of public sector assets, leading to failure to maintain assets, rehabilitation undertaken through new projects and lack of return to crated assets; and (c) there is no integrated monitoring and evaluation system capable of providing feedback on projects under implementation and evaluation and lesson-learning from completed projects.
- (iii) The Budget System is not Integrated: the systematic divide between the development budget and the recurrent budget is acting as a barrier to the sound allocation of scare financial resources between the provision of current public services and asset creation through projects aimed at improving the quality or quantity of future public service.
- (iv) Institutional shortcomings: the existing institutional breakdown of functions in the PIM system is flawed and calls for reform in three main respects: (a) a process of decentralisation of the PIM system for small and medium sized projects to the line ministries; (b) a redefinition of the role of the Planning Commission to wards playing a more strategic role in the national development strategy, the provision of support for the sectors in performing their enhanced decentralised PIM functions, and (c) taking prime responsibility and oversight of the proposed Federal Monitoring and Evaluation System.

Table ,,, below provides a very broad overview of the major reforms proposed to address the four core problems identified above:

Core PIM System Problem	Major Reform Initiative
1. Breakdown of compliance and discipline	Enact a Public Investment Management Law which gives legal force to the key process and procedural requirements for a sound PIM system
2, Gaps in the PIM System	Establish a Federal Monitoring and Evaluation System including an apex organisation representing the major distinct areas of interest M &E Address the shortcomings in public asset management through institutional developments including the creation of sovereign asset management funds
	Establish the required capacity for the design and implementation of mega- projects
3, Lack of Budget Integration	Move to a unified system of budget preparation by sectors
<ul> <li>4, Misalignment of institutions and PIM functions</li> <li>4, Misalignment of institutions and PIM functions</li> <li>4, Misalignment of institutions and PIM through decentralisation of functions for all but the largest project Recasting of the Planning Commissis focus on strategic oversight; oversig mega-projects, and responsibility management of the MTBF and proposed Federal Monitoring Evaluation System</li> </ul>	

 Table ,,

 Overview of Core PIM Problems and Proposed Reforms

Chapter ... below sets out the detailed st of proposed reforms and their associated justification and objectives.

# A Proposed PIM Reform Programme

The previous chapters of this report have demonstrated that, while an effective and efficient system of public investment is critically important for the future of the country the present system for Public Investment Management has become highly inefficient and essentially unable to meet the challenge of accelerated economic growth and social development called for in the Vision 2025.

Part IV of this report sets out a proposed programme of reforms which, taken together, aim to address the sources of weakness in the existing PIM system.

It must be appreciated from the outset that, given that the weaknesses of the existing PIM system derive from a broad range of factors and drivers, so too, the reforms required to produce a truly effective and efficient PIM system require initiatives and reforms which span across several important dimensions of the PIM governance system. The previous chapters of this report have demonstrated that, while an effective and efficient system of public investment is critically important for the future of the country the present system for Public Investment Management has become highly inefficient and essentially unable to meet the challenge of accelerated economic growth and social development called for in the Vision 2025.

Part III of this report sets out a proposed programme of reforms which, taken together, aim to address the sources of weakness in the existing PIM system.

The PIM Reform Strategy outlined below builds around sets of specific reforms in 5 major areas/pillars:

Pillar 1:	Creation of a legal basis for planning, Public Investment
	Management and the management of public sector assets
Pillar 2:	Reform of the detailed PIM Procedures to ensure completeness
	and effectiveness with a high degree of compliance
Pillar 3:	Reform of the overall budget management system to provide
	real integration across the development and recurrent
	dimensions of the budget
Pillar 4:	Institutional Reforms to strengthen the planning function in
	government as the basis for sound PIM
Pillar 5:	Institutional and Individual capacity development for a modern
	PIM system

Table 15 below provides a summary Results Framework for the proposed PIM Reform Strategy. The Results Framework identifies, for each Pillar of the strategy the main objectives, the most important instruments of reform and the indicative timetable for reform implementation.

Table 15

Pil	lar	Objective	Major innovative reform actions	Timeframe
1.	Enactment of a PIM law	Establish a mandatory set of principles and procedures for more effective PIM and greatly enhanced compliance	Consultation Drafting Approval and enactment	Dec 2019
<ol> <li>Strengthened and more comprehensive PIM procedures</li> <li>Strengthened and more comprehensive PIM procedures</li> <li>To eliminate the gaps in the present planning and PIM system and strengthen the implementation of procedures</li> </ol>	To eliminate the gaps in the present planning and PIM system and strengthen the implementation of present down	<ul> <li>Requirement for sector plans to drive investment identification in all ministries/departments/agencies</li> </ul>	Dec 2019	
	procedures	the implementation of procedures	• Mandatory independent quality review of all proposed public investment above a given threshold	
	• Strict adherence to the proper sequencing of project identification, appraisal, approval and entry to the budget			
			• Discontinuation of token allocations and limiting the use of block allocations	
			• Establishment of open access project data bank covering all proposed investments at all stages of the project cycle published on institutional websites	
			• Decentralisation of approval and budgeting of sector projects below defined threshold to sectors as part of their integrated budget	
			• Establishment of a mega-projects preparation and management unit	

PIM Reform Strategy

Continued—

Table 15—(Continued)

3.	Integration of the budget system across the development and recurrent	Establish a system in which public resource allocations to recurrent and investment spending are planned in an integrated manner with a focus on service delivery	• Revision of budget demands/grants to provide for single grants to cover the recurrent and investment costs of each major line of public service delivery (programme)
	budgets		• Establishment of system for managing the growth of the throw-forward based on a strengthened MTBF and enhanced project costing
			<ul> <li>Strengthen and publish the existing annual Performance Monitoring Report prepared by MoF</li> </ul>
4.	Institutional reforms for an effective PIM system	Create an appropriate institutional framework for the oversight of planning, budgeting, implementation and evaluation the investments undertaken through the PIM system	• Review and redefinition of the role of the Planning Commission and other agencies involved in the planning system
			• Establishment of powerful planning and budget management committees in each ministry/department to supervise all stages of an integrated budget management system
			• Establishment of an Apex Institution for overseeing achievement of sectoral and public investment goals as part of a Government-Wide M&E System (GWMES)
			• Consideration of the case for establishing legally enacted Federal and Provincial Wealth Funds for management of completed public sector assets
5.	Capacity development for a modern PIM system	ent for a To ensure that the capacities exist in all relevant institutions for the implementation of the proposed reformed PIM system	• Training on the operations of the reformed PIM system and institutional and individual responsibilities
			• Establishment of dedicated capacities for the design and implementation of mega-projects

## **Rationale for the Proposed Reforms**

This section sets out the rationale for each and every element of the proposed PIM Reform Programme (PIM-RP).

# Pillar 1: Enactment of a Dedicated PIM Law

The present legal/regulatory framework for PIM rests largely on the Rules of Business, which define the functions and responsibilities of individual ministries/department, and the Manual of development Projects prepared and issued by the Planning Commission. A recent development is that the provinces are increasingly issuing their own planning manuals which are involving a degree of differentiation from the PC' Manual. The present regulatory framework has two basic problems: (i) there are some key gaps in the procedures established; and (ii) it has failed to provide a sufficient basis for ensuring compliance with the established procedures. This lack of compliance is one of the most important reasons for the shortcomings of the present PIM system.

Under the PIM-RP a dedicated PIM law will be prepared and enacted initially by the Federal Government. The PIM law will provide a legal statement of the principles to be followed in the implementation of PIM, will define the role of the major categories of institutions involved in the implementation of the PIM system, and will establish on a mandatory basis the key procedures which must be followed.

Annex 3 below provides an initial draft of a possible Public Investment Administration Act

# **Pillar 2: Strengthened and More Comprehensive PIM Procedures**

In most areas the existing PC Manual on Development Projects provides a systematic and well-prepared statement of the procedures to be followed at each stage of the PIM system. So, the objective under this pillar of the PIM-RP will not be to replace the Manual of development Projects, but rather to fill the gaps on the system and to introduce a number of innovations aimed at ensuring tighter quality control on the identification, appraisal, selection and entry to the budget of proposed investments. The Manual of Development Project will; of course, be updated to provide full coverage of the requirements of the new PIM law.

Specific areas for the strengthening of procedures are set out below.

**Revive planning through sectoral plans**: Although the Five-Year Plans have become only a paper exercise, which is never put into implementation, the government remain fully cognizant about the need for a medium-term growth or development strategy. Federal government's New Growth Framework and Vision 2025 are testimonies to that need. Similarly, most provinces have prepared their own growth strategies or such plans (or are in the process of doing so). These plans and strategies

provide ample guidance on the development priorities of the government. The need is to put these priorities into sectoral perspective so as to make them operational. The government would therefore be well served by asking the line ministries to prepare sectoral plans, which are consistent with the basic document (i.e. Vision 2025 or growth strategy) but at the same time provide sectoral and sub-sectoral priorities; the sectoral objectives and the path selected to achieve these objectives. These sectoral plans would guide the process of identification of development projects and programmes for the duration of the plan.

*Strengthen project preparation and appraisal*: Given its importance in overall PIM process, project preparation and appraisal have to be significantly strengthened. Preparing a good project needs resources—financial, technical and time. The government should seriously consider:

- (i) Establishing a Project Preparation Fund (PPF), which would finance preparation of all important and mega projects. Being a dedicated fund with professional management, PPF would have many advantages over the present PC-II process, including ease of access and speed of processing financing applications.
- (ii) Setting up a Project Preparation and Implementation Unit (PPIU) in the Planning Commission, which will guide the line ministries not only on the processes and procedure required in preparing and implementing a project but to assist them on technical issues during the preparation and implementation stages of project cycle.
- (iii) Instituting a system of third-party review of project design and appraisal. This could be done through designated peer reviewers which could be taken from academia, private sector or better still by mobilising services of retired government officers who have good technical knowhow and good knowledge of the working of the system.

Project appraisal and selection process has to go beyond simple evaluation of technical and economic parameters of the project. It should also ask the following important questions:

- Is the problem that the problem is expected to address amenable to a project solution? Could it more effectively be addressed through alternative policy measures?
- Could the proposed investment be undertaken by the private sector?
- Is the project consistent with government policy objectives and strategies and with, public expenditure priorities for the sector and sub-sector? Does the project fit within sectoral and sub-sectoral-resource ceilings?
- How important and urgent are the objectives which the project is designed to achieve? If successfully implemented, would the project lead to achievement of these objectives?

- Is the project soundly conceived? Does it appear feasible in terms of content, scale, location, and phasing? Does the division/department have the technical and managerial skills to implement the project successfully?
- Has the maximum economy been exercised in all aspects of the project? Are the proposed .design solutions appropriate, or could simpler ones be adopted? How realistic are the cost estimates?
- Is the project consistent with the recurrent expenditure framework for the sector or sub-sector?
- Is the project competitive? How does it compare with similar projects already established, or with alternative ways of achieving the same result?
- What problems must be overcome or additional steps taken before implementation of the project can go ahead? Are the necessary measures being undertaken? How long will they take?

*Improve Project Implementation Performance*: A range of specific measures which could be taken to improve project implementation performance include:

- (i) Strengthening Project Staffing: Ineffective delegation of authority, delayed recruitment, and shortages of key project skills were previously identified as critical factors adversely affecting project implementation performance. Measures to address these weaknesses should include:
  - establishing a pool of project management staff, including project director and other key project management positions. The projects will be assigned to this dedicated staff on the basis of qualification and competencies of the team and their past track record in project management;
  - There will be no joint project director and line management positions.
  - preparing a clear statement setting out the authority, responsibilities, and accountability of project directors;
  - delegating all the authority of managing the project to the team with line ministry having only the facilitation and oversight functions;
  - tapping private sector resources to provide project management, procurement, and accounting services, when the competencies required for the project are either unavailable for the dedicated pool; and
  - the inclusion of regular performance audits in the design of major projects in order to ensure the accountability of project management teams for implementation performance.
  - (ii) Improving the Flow of Funds: Greater realism in the resource frameworks for the PSDP/ADPs and rationalisation of the PSDP to reduce the throwforward of investment demands will be crucial to ensuring more timely flow of funds to the PSDP/ADPs. Other measures to be taken to ensure more timely release of project funds include:

- streamlining procedures for the release of project funds to cut out unnecessary steps;
- establishing deadlines for receipt of notification of project funding releases by project implementation units, and monitoring compliance with these deadlines; and
- where budgetary cutbacks are necessary, implementing them through programme spending limits, with implementing divisions/departments determining the allocation of cuts between individual projects.

# Update Monitoring and Evaluation Systems

Building an effective national M&S system in Pakistan will require progress in several important areas, including:

- Strengthening of the planning system so that the results sought in terms of the outputs and outcomes of national spending are more clearly articulated, especially at the sectoral level;
- The establishment of an institutional framework for the National M&E system which spans the main three central institutions which must be the leading stakeholders in the NM&ES, namely the Office of the President, the Ministry of Finance and the Planning authorities.
- The establishment of a mandatory legal/regulatory framework which sets out the objectives institutional responsibilities and major processes and procedures of the NM&ES.
- Establishment of routine reporting of the results and findings of M&E of effectiveness of the sector programmes to the Cabinet and Parliament.

# The Planning Foundations for a Federal M&E System

An M&E system can only operate where there is clarity on the objectives and expected results from government programmes. This clarity derives from clear articulation of the planned outputs and outcomes of each line of government activity with associated time-bound Key Performance Indicators (KPIs). Some progress in the establishment of such a system has been made through the development of the Medium Term Budgetary Management (MTBF) budget Green Book. This is prepared annually by each and every one of the 72 Principal Accounting officers in the Federal Government, The Green Book specifies the planned inputs, financial allocations, staffing, outputs, outcomes and KPIs for each major line of service delivery. At the end of each year the MoF oversees the preparation of a Performance Monitoring Report (PMR) in which all the PAOs report on the results achieved for the previous year against their stated plans, This covers financial, staffing and the level of achievement of planned outputs and outcomes and performance against KPIs. This system includes specific mention of major public investments (projects) planned by the sector. While the Budget Green Book is in the public domain and is tabled in Cabinet and Parliament, to date the annual performance Monitoring Report (PMR) has not been released by the MoF.

The budget Green Book and the PMR form the initial foundations for the M&S system which needs to be completed and strengthened. The main steps required to bring this nascent M&E system to fruition are:

- The formulation of the Green Book in terms of the definition of outputs, outcomes and KPIs needs to be strengthened through the preparation of sector plans by all sectors in the Federal Government. In the absence of clearly articulated performance based sector plans, the defined outputs and outcomes will continue to be lacking in clarity and liable to change from year to year;
- Working of a performance-based monitoring and evaluation system can be summarised in following nine steps:
- (i) undertake a baseline survey to assess the prevailing situation;
- (ii) define a set of final and intermediate outputs expected from the project;
- (iii) determine the inputs required to achieve these outputs;
- (iv) set measurable targets for these outputs for various stages of project implementation;
- (v) review whether present process and procedures as adequate to facilitate achievement of project outputs;
- (vi) define output indicators which could be quantified and measured;
- (vii) undertake ex ante surveys to determine changes in output indicators;
- (viii) highlight problem areas were the outputs are falling (or expected to fall) short of the target and suggest ways of remedying the situation;
- (ix) undertake ex post survey and solicit stakeholders and beneficiary feedback to determine failure or success of the project in meeting its outcomes.

The result-based monitoring and evaluation system must therefore be made an integral function of line ministries and Planning Commission/Planning department.

- The Performance Monitoring report needs to be published to attract public awareness of the effectiveness of on-going public service delivery programmes;
- A more comprehensive sectorally based reporting system needs to be put in place in which each and every sector would produce at east annual reports on their performance against planned objectives and targets;
- The institutional structure for the upwards reporting from sectors to an apex M&E institution needs to be put in place, providing the basis for routine reporting on performance of sectors to the Cabinet.

#### Within-sector M&E Requirements

Within sectors there is a need for routine and standardised monitoring and evaluation of progress. The main function of such monitoring is to support effective management of the use of funds, the implementation of projects and service delivery. Typically the information required within sectors will be much more detailed that the information required for upwards reporting to agencies outside the sector. However, sound systems of internal M&E and reporting within sectors will provide the basis for and facilitate the reparation of reports to feed into, for example, the sectoral contribution to the annual PMR and the preparation of annual sector performance reports.

#### Institutionalisation of M&E in the Federal Government

An effective federal M&E system must be based on a robust institutional structure, the underlying purpose of which is to provide regular and authoritative feedback on the progress, effectiveness and efficiency of all government programmes to the highest levels of government, namely the central agencies (MoF, Planning, Office of the Prime Minister, Cabinet Office and Cabinet itself).

As noted above the major central agencies have distinct areas of interest in terms of the results reported on through the M&E system. However, all their interests are legitimate. So the M&E system needs to be built around an institutional structure which serves the set of interests.

The reform proposals detailed in Part V of this report relating to M&E are based on the following fundaments:

- An institutional structure for the implementation of the federal M&E system should be created which addresses the requirements for reporting against the four categories of interests outlined earlier. This requires participation, at the minimum of the office the Prime Minister, the MoF and the MoPDR
- The M&E institutional structure should include an apex M&E body, to be designated the Federal Evaluation Council which would receive and analyse M&E reports emanating from the sector ministries and agencies, and prepare reports to be tabled in the Cabinet on a regular basis
- The Federal Evaluation Council should be housed in the Planning Commission and fall under the supervision of the Planning Commission Board.

**Rationalise PSDP:** Lack of a strategic review has led to many anomalies getting introduced into the PSDP, including a large throw-forward, a large number of unapproved projects, projects with grossly inadequate allocations; significant number

of block allocations, etc. The time has come for a more fundamental and wide-ranging rationalisation of the investment programme, which should be a prelude to the introduction of a programme framework approach to public investment planning. This will need to involve the following steps:

- *Removal of projects from PSDP which have received near zero or token funding*: As shown above, a significant number of projects in the 2018-19 PSDP have received allocation which is less than one percent of the project cost (or throw-forward), implying that at present level of funding, these projects will take more than 100 years (some even thousands of years) to complete. These projects contribute significantly to the PSDP throw-forward. The funds allocated for these projects are so little that no meaningful development work could be undertaken. It would be sensible to drop these projects as that would not adversely impact the development but would reduce the throw forward significantly. These projects could be brought into the PSDP at some later stage when there is enough room in the PSDP to make adequate allocations for them.
- *Grouping of similar projects*: many projects in the PSDP (and provincial ADPs) represent small site-specific investments such as a school or rural water supply facility. By grouping together such projects, for example into a primary school or water supply development programme for a particular district or group of districts, it would be possible to substantially reduce the number of projects in the PSDP and ADPs. This would not only help improve the strategic focus of the PSDP/ADPs, it would also facilitate greater delegation the management of sub-sector programmes and would encourage projects to address broader institutional and management issues necessary for the successful realisation of investments and achievement of their intended economic impact.
- Review of Ongoing Projects: The third step in rationalising the investment
  programme would involve reviewing the ongoing projects in each sector in
  order to identify where there is a need for restructuring, downsizing, or
  curtailment. Such a review should form part of the "annual housekeeping" of
  the PSDP and could be incorporated into one of the quarterly PSDP/ADP
  review meetings conducted by the Planning Commission/ P&DDs. Ideally, it
  should occur early in the fiscal year in order to identify issues to be addressed
  before the next PSDP/ADP is prepared. Box X suggests possible criteria to
  be used in reviewing ongoing projects.

# Box 9: Checklist of Criteria for Review of Ongoing Projects

A number of projects in the PSDP/ADPs have been under implementation for many years and continue to consume resources even though it may be unclear whether their original objectives are still appropriate or achievable. Other projects may face implementation problems and difficulties that require action to restructure their operations. Unfortunately, too often decisions to close down or restructure projects are not confronted, and projects are allowed to continue operating poorly, tying up resources which could be used better elsewhere.

Effective management of the PSDP/ADPs requires that sector programmes should be subject to regular review. The aim of such reviews, which should be conducted by the PC/PDDs in collaboration with line divisions/departments, should be to identify projects requiring restructuring, curtailment, or cancellation. The exercise should start with the largest projects first, since generally the potential resource savings will be greatest for these projects. The results of the review should be used as a basis for determining budget allocations in the coming year, for follow-up discussions with donor agencies, and for identifying priorities for; more detailed project review and evaluation studies.

The issues to be addressed in a review are seldom clear-cut, and decisions have to be made on the basis of incomplete information. Primarily, the review requires rigorous questioning and common-sense judgement:

- 1. <u>Appropriateness</u>. Are the project's objectives still relevant and its design appropriate? Does it represent a priority use of scarce resources? Is it consistent with the mediumterm expenditure framework for the sector?
- 2. <u>Performance</u>. How adequately has the project performed? Has implementation proceeded on
- schedule and within estimated costs? If not, to what extent have these implementation problems been solved? How good is the current management of the project? What are the scope and requirements for restructuring the project
- 3. <u>Nearness to Completion</u>. How near is the project to completion? What are the remaining costs involved? Is it worth scaling down an almost completed project?
- 4. **Financing**. Is the financing secured sufficient to complete the project? Has additional finance been identified? Can the counterpart funding requirements be met? What is the scope for reducing counterpart funding needs? What are the prospects/arrangements for meeting the operational and maintenance recurrent costs on completion of the project?
- 5. <u>Termination Costs</u>. What would be the costs involved in restructuring or shutting down the project? Would contracts need to be cancelled, and, if so, would there be penalty charges to pay? How do these costs compare with the potential savings?
- 6. <u>Economic Justification</u>. Is the project still economically justified? Has its economic analysis been updated? If past costs are considered sunk, what is the return to the investment required to complete the project? What is the opportunity cost of the funds required to complete the project?

Based on the answers to these questions, the reviewer should be able to form a view of the appropriate action to take. It is better not to try to rate or "score" projects against each criterion, however, since often one or two criteria will assume overriding importance for a particular project.

# Pillar 3: Integration of the Budget System Across the Development and Recurrent Budgets

The budget management system is characterised by an extreme division between the recurrent and development budgets. This is true at both federal and provincial levels. The division of the two sides of the budget in terms of documents tabled in Parliament is reflected institutionally in the allocations of budget management responsibilities for the Planning Commission (or Planning and development department in the provinces) and the Ministry of Finance (Finance department in the provinces).

This dichotomisation of the budget has extremely serious negative effects on the system of PIM:

- There is no integrated system of planning for final service delivery across the twin requirements for Investment funds and recurrent operating budgets required to operationalise completed investments. Although the Manual of Development Projects does indeed require that the designers should make adequate provision for the recurrent costs of the operationalisation of development projects, this system does not work in practice. This is for several reasons: (i) the lack of firmness of the outer year estimates of the MTBF, which do not provide a reliable basis for ascertaining the affordability of proposed investments in terms of their required operating budgets; (ii) the uncertainty as to the actual completion dates of projects; and (iii) a tendency for operating costs to be underestimated to allow easier process of project approval.
- In a more basic sense relating to planning, the ministries/departments should be basing their planning on targets for service delivery. The delivery of a flow of public services which increases in quantity and quality over time can only be planned effectively if the ministry /department has the tools to make judgements as to the optimal allocations of given resources over time across the planned period. The separation of the budgetary processes effectively prevents this type of planning within the ministries.

Contrary to a widespread perception that the adoption of an integrated budget system will be a very complicated reform process, it is noted that many countries, and most advanced countries, operate an integrated budget system. This is not to say that the level and content of investment ("development" expenditure) is not recorded; it is simply that major capital expenditures are recorded as separate line entries within an otherwise integrated budget. Often this is broken down into programmes based on the major areas of planned service delivery.

Annex 4 below elaborates on the operational aspects of an integrated budget management system and identifies the accompanying reforms which are required to make a successful transition to an integrated budget system.
### Pillar 4: Institutional reforms for an Effective PIM System

The objective of this pillar is to create an appropriate institutional framework for the oversight of planning, budgeting, implementation and evaluation the investments undertaken through the PIM system.

It must be recognised from the outset that the design and implementation of changes to the institutional framework within which the PIM system is operated can only proceed on the basis of an in-depth process of consultation on the deficiencies in the existing structures and systems which generate the need for institutional reforms and an equally lengthy process of consultation on the appropriate institutional changes. At this stage the present study is, accordingly confined to identifying some reasons why there may be a need for institutional reforms and to provide some pointers of possible directions those reform efforts might take. The following areas have been identified:

- Review and redefinition of the role of the Planning Commission and other agencies involved in the planning system
- Create a Strategy Development and Evaluation Council (SDEC). Under this proposed institutional development, each ministry or a group of ministries and agencies at the national, the provincial and the local (say social sectors, Energy, water and agriculture) would develop clear objectives and activities and policies in the coming period to constitute what can be called sectoral action plan going forwards. Such plans would identify very clearly what the outcomes will be for productivity, growth welfare employment and what investments, policies reforms will be necessary to make these happen. There should be some agencies at both federal and provincial levels who should be in charge of whetting these plans or programmes. Let us call it the Strategy Development and Evaluation Council (SDEC). They should be comprised of independent professional researchers and competent professionals. See Box 2 on how the conceptual basis of the SDEC. OECD principles are similar. The following is suggested approach on how this will work.
- Each area or sector will be required to prepare in consultation with the SDEC plans along with evaluations of past actions and targets on a regular basis.
- (ii) Each plan or strategy will have to be cleared by the MOF and its mediumterm budget framework to see if it is financeable.
- (iii) Every quarter there will be one such plan or strategy or its evaluation will be presented in federal or a provincial cabinet. This will mean that the cabinet will be discussing one such departmental or an agency review of strategy and plans on almost a frequent basis. This is required because without it the effort will never attain the seriousness it deserves.

- (iv) At each meeting there will be a report from the concerned department or agency as well as an independent review by an agency such as the SDEC. This will ensure continuous monitoring and reporting to the concerned cabinet and the Public on agreed upon benchmarks.
- (v) An annual report of the process presented by the SDEC to a parliamentary subcommittee and then published. The SDEC will need to present a national picture of the impact of the ongoing efforts, developing a systemic picture and impact assessment.
- (vi) Each unit will have to develop research, planning and M&E capacity and the SDEC will have to have serious capacity to deal with the many issues it faces. This will mean that R&D will have to be developed across the government and the cabinet will have to have some serious strategy exercises in the context of determining development policy. It will also allow a more dynamic development policy to emerge rather than a fixed 5-year plan. All financial releases will be tied into the cabinet approval of progress.

This reform involved in the creation of the proposed SDEC will mean serious revision of the architecture of policymaking. It will also mean the development of a thinking government through mainstreaming research and debate everywhere.

It is important to note that the cabinet and senior leadership has to be engaged in economic development, public investment and growth issues directly. The current policy of the cabinet only being involved in the budget and politically determined (not scientifically determined) projects has led to waste and inadequate development. Resources can be used better but through senior engagement but with scientific management.

• Establishment of powerful planning and budget management committees in each ministry/ department to supervise all stages of an integrated budget management system.

This proposed area for institutional reform arises from the desire to achieve a closer harmonisation between the requirements for financing which currently derive from the separate planning and budgeting streams of the recurrent and development budgets. If the reform of the budgeting system proposed under Pillar 2 (Integration of the recurrent and development budgets) is adopted, there will be a requirement for institutional changes both at the level of the central institutions (oF and MoPDR) but also within the line ministries. The basic idea is to establish a requirement for each and every line ministry to have a permanent senior level Planning and Budgeting Committee (BPC). Key aspects of the role of this PBC are: (i) the PBC would be responsible for coordinated oversight of all stages of the annual and multi=annual budget cycle, including planning, budgeting, budget execution, and monitoring and evaluation); (ii) the BPC should meet on a regular basis, at least quarterly, kin order to be fully abreast of progr6ess made in each stage of the budget cycle.

• Establishment of an Apex Institution for overseeing achievement of sectoral and public investment goals as part of a Government-Wide M&E System (GWMES)

Existing systems of monitoring and evaluation of government efforts to support development and economic growth are incomplete, fragmented and focused on input measurement only. These include the monitoring of the progress of implementation of [projects undertaken by the MoPDR, the routine preparation of ministry/departmental report prepared by line ministries under the requirements of the Rules of Business, and the Annual the federal line ministries in their respective section of the budget Green Book. In addition, it will enable the budget and planning to focus on service delivery.

Apart from fragmentation these existing M&E systems do not add up to providing an effective system for assessing progr6ess in the implementation and results achieved by government programmes. Key missing features are

- (i) the lack of an overarching design of the M&S systems; and
- (ii) the lack of an apex organisation charged with receiving the various reports and preparing consolidated findings relating to government programmes.

This proposed reform action would involve the preparation of the design for an integrated and comprehensive M&E system for the Federal Government, including the design of a suitable institutional locus for the M&E apex organisation.

• Consideration of the case for establishing legally enacted Federal or Provincial wealth Funds

The case for policy makers to turn their attention to reforms aimed at strengthening the management and utilisation of public sector assets has been made at length in Part IV of this report. The initial activity would involve a review of the objectives and case for institutional development in this area, a process of learning from good international experience, and the preparation of specific proposals for implementation in Pakistan following an appropriate process of consultation.

But to begin with in terms of restructuring the development budget we can think of the following alongside setting up the SDEC.

- Set up a national wealth fund NWF(S) to own, manage and privatise SOEs. They, rather than ministries and politicians, should manage SOEs for maximum gain for the government and plan on giving dividends every year.
- Set up another fund to manage the infrastructure NWF(I) that has been created and see how that can be levered for better management and to eke out the returns that were participated.
- For the future, assets created by the development process will be monitored by the NWF(I). Going forward budget funded assets will be seen as loans. Policy will determine the subsidy of the grant if there and the amount that is

a loan that has to be returned. NWF(I) will present an annual report on this activity to parliament and people. On an annual basis the NWF(I) will give the government a dividend based on the performance of the portfolio.

• These 2 funds can advise and catalyse such funds at the provincial and local level to manage their wealth better.

These agencies should be professionally staffed, tenured and autonomous with no politicians or their nominees/relatives on board. They are to maximise national wealth and not to use it for any political ends. They should of course be subject to both public and parliamentary scrutiny but not their workings or administration.

Like any responsible public corporation, they should have extensive R&D and M&E work developed continuously that should be made available to the public. They should make new investments a divest companies that their strategy requires. Of course, all this will happen within the confines of transparency, due process and accountability (See Box 5 and 6 for some examples of NWFs which should be viewed differently from sovereign wealth funds of the oil exporting companies where surpluses are invested around the world. Although with growth and development the difference fades.

## Pillar 5: Capacity Development for an Effective and Efficient PIM System

The aim of this pillar is to provide a comprehensive approach to the massive requirement for capacity development which will be required to give effect to the reforms outlined in Pillars 1-4 above.

#### ANNEXES

- 1. Technical analysis of PIM efficiency
- 2. Draft PIM Law
- Guidelines for integrating the recurrent and development budget management systems
- 4. Learning from Chile's PIM system
- 5. Examples of National Wealth Funds

## ANNEX I

#### Methodology for Estimating Efficiency of PIM System in Pakistan

The methodology used to estimate relative efficiency of investment is what has been used by IMF in many countries. This methodology focuses on calculating a Public Investment Efficiency Index (PIE-X) by applying data envelopment technique to a cross-country data on GDP and public capital.

The fundamental relationship behind the PIE-X technique is a production function which postulates:

$$Y = f(K_g)$$
 ... ... ... (1)

Where: Y is the output (GDP) and  $K_g$  is the input (public capital).

Under certain conditions equation (1) could be rewritten as:

 $\Delta Y/Y = f(\Delta K_g/Y)$  or  $\acute{Y} = f(I_g/Y)$  ... (1')

Where  $\acute{Y}$  is GDP growth and  $I_g/Y$  is the ratio of public investment to GDP.

The PIE-X methodology involves finding the growth envelope (frontier) for equation (1') and then evaluating efficiency of public investment for any country by comparing it against this envelope.

This is illustrated in Figure A1 where data on GDP and public capital are plotted against each other. The contour of maximum output (GDP) for every level of public capital defines the *growth envelope* for public capital). In Figure A1, the output envelope is defined by the curve OAB. Efficiency of any level of public capital is calculated by measuring the vertical distance of that point and comparing that to the distance for that level of public investment to the growth envelope. In Figure A1, efficiency of public capital at level OD is defined as the ratio DP/DB.



However, IMF methodology is somewhat limited as it defines efficiency of public capital only in terms of its ability to impact GDP. Economic growth maybe the ultimate (i.e. long-term) objective (or impact) of public investment, however, there may be other short- to medium-term objectives, e.g. infrastructure or social development, crowding-in private investment etc. This section will compare Pakistan's standard investment efficiency indicators, e.g. Incremental Capital Output Ratios (ICORs) with comparable countries to highlight these indicators could be quite misleading due to different levels of investment ratios and the structure of the economy. These factors also indicate that economic growth may not be the best indicator to evaluate efficiency of investment and alternative indicators may also be used.

To introduce other elements in the efficiency analysis, following development indices were calculated.

*Human Development Index (HDI)*: UNDP calculates HDI for a large number of countries every year. The process involves calculating an average (geometric mean) of three indices -- an education index, a health index and an income index.<sup>43</sup>

- (i) The health index (HI) is calculated from life expectancy at birth.
- (ii) Income index (II) is calculated for logarithm of per-capita income
- (iii) Education index (EI) is calculated as simple average of two indices: an index of Mean Years of Schooling (MYS) and an index of Expected Years of Schooling (EYS).

Fig. A1: Public Investment Efficiency Envelope

<sup>&</sup>lt;sup>43</sup> For details see http://hdr.undp.org/sites/default/files/hdr2016\_technical\_ notes\_0.pdf

Index for any (say X) of these "dimension" is calculated as follows:

 $I_x = (X - Minimum (X))/((Maximum(X)-Minimum(X)))$ HDI = (HI\*II\*EI)<sup>1/3</sup>

*Infrastructure Development Index (IDI)*: A methodology similar to the one used for calculating HDI using indices. These uses following indices:

- Transportation Index (TRI)
- Communication Index (COI)
- Energy Index (ENI)

The Transport Index is calculated from data on:

- Road Index using data on length of roads
- Railways Index using data on passenger and goods traffic

The Communication index—calculated using data on subscribers for fixed phones and mobile phones

The Energy Index - using data on generation of electricity

 $IDI = (TRI*COI*ENI)^{1/3}$ 

The Overall Development Index (ODI) is calculated as geometric mean of HDI and IFI.

 $ODI = (HDI*IDI)^{1/2}.$ 

Finally, public sector investment (as an index for crowding-in) is used to calculate crowding-in efficiency of public investment.

In short efficiency of public investment is estimated using public investment (as a percentage of GDP) as the "input" variable and the following "output" variables:

- (1) GDP growth
- (2) Growth in HDI
- (3) Growth in IDI
- (4) Growth in ODI
- (5) Private Investment

Using data from World Bank data (World Development Indicators (WDI) April 2018), efficiency is calculated for each of the above outputs for two sample of countries:

- A larger world sample (all the countries in WDI for which data were available.
- A smaller sample of low and middle-income countries.

Finally, PIE-X is also calculated using Pakistan's time series data where the "decision-making units" (DMUs) are not countries but the same country (Pakistan) in different years.

The results are shown in following figures:





# I. Overall Development Index























#### **Regression Mode for Estimating Efficiency of Public Capital/ Investment**

Efficiency of public capital or investment could also be measured by using regression analysis. By explicitly including other variables, labour (or employment) and private capital into the analysis, this mode avoids a number of problems associated with PIE-X. However, this methodology is relatively much more data intensive and in many instances data may not be available to undertake this analysis.

Fortunately, cross country data for most of the variables needed to undertake this analysis were available from the World Bank (World Development Indicators) and IMF (Date of Investment and Capital Stock). These data were compiled for 35 low and middle-income countries. Unfortunately, a number of countries have to excluded from the analysis as long enough time series were not available to run a meaningful regression.

The regression model used for the analysis was a Cobb-Douglas type production function of the following type"

$$Log(GDP) = \beta_0 + \beta_1 log(Employment) + \beta_2 log(Government Capital) + \beta_3$$
$$log(Private Capital) \qquad \dots \qquad \dots \qquad (1)$$

In Equation (1),  $\beta_2$  defines the impact of Government Capital on GDP. Higher the value of elasticity coefficient ( $\beta_2$ ), higher is the impact. In other words, the value of  $\beta_2$  for any country defines the absolute efficiency of public capital.

Equation (1) was estimated separately for each of the 25 countries for which data were available. Regression results are given below:

Differentiating equation with respect to time gives:

GDP growth =  $\beta_0 + \beta_1 \log(\text{Employment Growth}) + \beta_2 \log(\text{Government Capital} Growth}) + \beta_3 \log(\text{Private Capital Growth}) \dots (2)$ 

As Government Capital Growth = Government Investment/Government Capital (-1),

=  $\beta_2$ / Government Investment/Government Capital (-1), is the measure of growth efficiency of public investment.

An index for output efficiency of public capital is then defined as"

Where  $\beta^{\max}_2$  is the higher value of  $\beta_2$  among all countries included in the sample.

PAKISTAN			MOROCCO		
LOG(GDP)	Coef.	t-Value	LOG(GDP)	Coef.	t-Value
LOG(EMPLOYMENT)	0.359508	6.91	LOG(EMPLOYMENT)	0.031928	0.62
LOG(GOVT. CAPITAL)	0.312043	5.61	LOG(GOVT. CAPITAL)	0.036386	1.93
LOG(PRIV. CAPITAL)	0.632633	9.27	LOG(PRIV. CAPITAL)	0.85201	20.26
CONSTANT	-5.5557	-9.89	CONSTANT	-0.42623	-0.67
Adj R-squared	=	0.9968	Adj R-squared	=	0.94074
INDIA			EGYPT		
LOG(GDP)	Coef.	t-Value	LOG(GDP)	Coef.	t-Value
LOG(EMPLOYMENT)	0.169024	1.74	LOG(EMPLOYMENT)	0.021972	0.44
LOG(GOVT. CAPITAL)	0.534871	10.54	LOG(GOVT. CAPITAL)	0.131877	2.75
LOG(PRIV. CAPITAL)	0.4474	25.74	LOG(PRIV. CAPITAL)	0.667057	16.16
CONSTANT	-2.99572	-1.88	CONSTANT	1.558603	1.99
Adj R-squared	=	0.9983	Adj R-squared	=	0.9961
BANGLADESH			JORDAN		
LOG(GDP)	Coef.	t-Value	LOG(GDP)	Coef.	t-Value
LOG(EMPLOYMENT)	-0.40584	-4.69	LOG(EMPLOYMENT)	-0.69349	-2.11
LOG(GOVT. CAPITAL)	0.346588	1.67	LOG(GOVT. CAPITAL)	-0.09847	-1.21
LOG(PRIV. CAPITAL)	0.508486	2.59	LOG(PRIV. CAPITAL)	1.934862	4.58
CONSTANT	8.337599	6.04	CONSTANT	6.176299	1.97
Adi R-squared	=	0.9807	Adi R-squared	=	0.9663
SRI LANKA			KENYA		
LOG(GDP)	Coef	t-Value	LOG(GDP)	Coef	t-Value
LOG(EMPLOYMENT)	0 585917	4 12	LOG(EMPLOYMENT)	0 628268	13
LOG(GOVT CAPITAL)	0 190148	2.28	LOG(GOVT CAPITAL)	0 520138	4.83
LOG(PRIV CAPITAL)	0.657399	5.69	LOG(PRIV CAPITAL)	0.06854	0.69
CONSTANT	-8 35525	-4 51	CONSTANT	-7 92689	-14 26
Adi R-squared	-	0 9954	Adi R-squared	-	0.9933
NFPAL	-	0.7754	UCANDA	-	0.7755
I OG(GDP)	Coef	t-Value	LOG(GDP)	Coef	t-Value
LOG(GDF)	0 264302	3 56	LOG(GDI)	-0 35491	-3
LOG(EMILOTMENT)	0.1204302	2.16	LOG(COVT CAPITAL)	0.228007	-5
LOG(DDIV CADITAL)	0.577038	-5.10	LOG(DOVI. CAPITAL)	0.338097	8.01
CONSTANT	2 26006	2.17	CONSTANT	5 178066	2.09
Adi P squared	-2.30900	-2.17	Adi P squared	-	0.9677
	-	0.9951		—	0.9077
	Coof	4 Volue	SOUTH AFRICA	Coof	4 Volue
LOG(GDP)	1 072701	1- v aiue	LOG(GDP)	0 420205	1- v alue
LOG(EMPLOTMENT)	0.246721	2.00	LOG(EMPLOTMENT)	0.430393	9.55
LOG(GUVI. CAPITAL)	0.246/31	2.09	LOG(GUVI. CAPITAL)	-0.02777	-0.74
LOG(PKIV. CAPITAL)	0.545224	3.05	LOG(PKIV. CAPITAL)	0.740679	12.10
CONSTANT A di D. concert	-10.109	-/./9	CONSTANT Adi D. amand	-5.50922	-13.19
Adj K-squared	=	0.9885	Adj K-squared	=	0.9843
MALAYSIA	<i>c</i>		AZERBAIJAN	<i>a</i> . (	
LOG(GDP)	Coef.	t-Value	LOG(GDP)	Coef.	t-Value
LOG(EMPLOYMENT)	1.719954	6.5	LOG(EMPLOYMENT)	0.976439	1
LOG(GOVT. CAPITAL)	-0.1057	-0.88	LOG(GOVT. CAPITAL)	-0.1464	-0.97
LOG(PRIV. CAPITAL)	0.27609	3.86	LOG(PRIV. CAPITAL)	1.129437	1.59
CONSTANT	-22.9351	-6.32	CONSTANT	-13.9512	-1.12
Adj R-squared	=	0.9937	Adj R-squared	=	0.9008

Continued—

Continued—					
MEXICO			HONDURAS		
LOG(GDP)	Coef.	t-Value	LOG(GDP)	Coef.	t-Value
LOG(EMPLOYMENT)	0.001091	0.01	LOG(EMPLOYMENT)	0.039344	1.01
LOG(GOVT. CAPITAL)	0.417526	5.61	LOG(GOVT. CAPITAL)	0.34387	4.84
LOG(PRIV. CAPITAL)	0.501644	5.59	LOG(PRIV. CAPITAL)	0.543495	15.68
CONSTANT	0.509124	0.22	CONSTANT	-0.3965	-1.07
Adj R-squared	=	0.9836	Adj R-squared	=	0.9881
VIETNAM			GHANA		
LOG(GDP)	Coef.	t-Value	LOG(GDP)	Coef.	t-Value
LOG(EMPLOYMENT)	1.358149	20.95	LOG(EMPLOYMENT)	0.336829	2.04
LOG(GOVT. CAPITAL)	-0.20163	-2.49	LOG(GOVT. CAPITAL)	0.808256	3.22
LOG(PRIV. CAPITAL)	0.580513	6.27	LOG(PRIV. CAPITAL)	0.097023	0.54
CONSTANT	-20.391	-19.97	CONSTANT	-4.63912	-2.06
Adj R-squared	=	0.9977	Adj R-squared	=	0.9573
ARGENTINA			LAO		
LOG(GDP)	Coef.	t-Value	LOG(GDP)	Coef.	t-Value
LOG(EMPLOYMENT)	0.514108	3.57	LOG(EMPLOYMENT)	-0.13286	-0.91
LOG(GOVT. CAPITAL)	0.944743	4.16	LOG(GOVT. CAPITAL)	0.906595	4.27
LOG(PRIV. CAPITAL)	-0.79196	-2.66	LOG(PRIV. CAPITAL)	-0.01603	-0.1
CONSTANT	-1.62101	-0.63	CONSTANT	2.671608	1.32
Adj R-squared	=	0.9434	Adj R-squared	=	0.9901
PERU			PHILIPPINES		
LOG(GDP)	Coef.	t-Value	LOG(GDP)	Coef.	t-Value
LOG(EMPLOYMENT)	0.124842	2.34	LOG(EMPLOYMENT)	0.039956	0.22
LOG(GOVT. CAPITAL)	-0.20843	-4.19	LOG(GOVT. CAPITAL)	0.84602	2.63
LOG(PRIV. CAPITAL)	1.362375	13.14	LOG(PRIV. CAPITAL)	-0.12672	-0.25
CONSTANT	-3.02073	-4.92	CONSTANT	1.87213	1.08
Adj R-squared	=	0.9555	Adj R-squared	=	0.9267
ALGERIA			TURKEY		
LOG(GDP)	Coef.	t-Value	LOG(GDP)	Coef.	t-Value
LOG(EMPLOYMENT)	0.212885	1.4	LOG(EMPLOYMENT)	0.221838	1.01
LOG(GOVT. CAPITAL)	0.566965	3.35	LOG(GOVT. CAPITAL)	0.631279	4.87
LOG(PRIV. CAPITAL)	0.153355	1.53	LOG(PRIV. CAPITAL)	0.432045	13.49
CONSTANT	-1.72471	-0.95	CONSTANT	-3.90495	-1.34
Adj R-squared	=	0.973	Adj R-squared	=	0.9242
VENEZEULA					
LOG(GDP)	Coef.	t-Value			
LOG(EMPLOYMENT)	0.737889	8.45			
LOG(GOVT. CAPITAL)	0.363035	1.59			
LOG(PRIV. CAPITAL)	-0.84976	-3.31			
CONSTANT	-3.23808	-6.99			
Adj R-squared	=	0.9161			

## ANNEX 2

## Public Investment Administration Act (Draft)

**Purpose of the Act:** The objectives of the Public Investment Administration Act are:

- to ensure that all public investments provide the best return to society and the country.
- To define sound planning at federal, sectoral and sub-sectoral levels
- to define the legally required categories of economic and social planning documents
- to establish a legal requirement for identification and rigorous technical, economic and social appraisal of all public investments
- to establish a legal requirement for independent quality assurance of all major public investment project prior to their technical approval
- to ensure that only proposed investments which have completed the required stages of appraisal and technical approval are considered for entry into the budget
- To ensure that public investments involving development of infrastructure are complemented by assured recurrent budgetary provision for staffing, operational costs and regular maintenance
- Ensure that projects included in the budget are provided with fully adequate budgetary provision (no "token budget projects")
- to establish a data "bank" of technically approved projects as a basis for prioritising projects to be included in the budget
- to streamline the essential political direction of the public investment process
- to limit the use budgetary block grants for public investments
- to ensure accountability, efficiency and transparency in public investment management

## **Chapter I: Classification of Public Investments**

## 1.1. Objectives of public investment

- 1.1.1 The overall objective of public investment is to enhance the social and economic development of the nation through the provision of enabling infrastructure and public services and networks
- 1.1.2 Public investment is complementary to private investment and should normally be confined to the provision of infrastructure and other investments which are unlikely to be provided by the private sector

1.1.3 Public investment is not an end in itself and therefore should not be taken as a substitute or conduit to public policy. It is of value only to the extent that it enables enhanced delivery of public services and/or plays an enabling or facilitating role for development of the private sector of the economy.

## 1.2. The Scope and Forms of Public Investment

## 1.3. Classification of Public Investments

- 1.3.1 For the purposes of this Act, public investment is classified into the following categories
  - Core investments in national infrastructure requiring complex planning, design and implementation procedures. The designation of a proposed investment as a core investment shall be determined by the minister responsible for planning in accordance with established criteria
  - Sectoral investments investments undertaken by specific sectors, ministries, departments or agencies, which are required to enhance the development of that sector and do not fall under the above category of core investments.

# Chapter II: Planning as the basis for Public Investment and Public Service Delivery

#### 2.1. Public Investment Shall be Based on Well-articulated Plans

2.1.1 No public investment shall be undertaken or provided for in the budget unless it is derived from, and consistent with, a well-articulated sectoral or multi-sectoral plan.

# 2.2. Categories of Plan

2.3. Each democratically elected government will announce its 5 year vision to guide economic policy and planning. The Planning Commission will oversee the translation of that 5 year vision into

The Planning Commission will oversee the translation of that 5 year vision into sectoral targets and requirements.

2.4. Each sectoral ministry will, in accordance with this vision, prepare 3 year rolling plan that is consistent with the Medium Term Budget Framework These plans will include details of how planned investments will improve service delivery with measurable goals.

The preparation of sector plans shall be undertaken in a transparent manner with full consultation processes involving interested stakeholders both within and external to the government.

Sector plans shall be subject to quality review by the ministry responsible for planning.

## Chapter III: Principles of Management of the Public Investment Cycle

### 3.1. Identification of Possible Public Investments

- 3.1.1 The responsibility for the identification of sector investment projects lies solely with the ministry or agency and autonomous agencies. responsible for that sector. Stakeholders wishing to promote public investment proposals falling within a specific sector shall engage with and through the responsible authorities within that sector ministry or agency.
- 3.1.2 Sector ministries and agencies shall only identify public investments which are derived from, and is compatible with, their respective sector plans
- 3.1.3 The responsibility for the identification of major investment projects as defined in Section 1.3.1 above which are cross-sectoral or multi-sectoral in nature lies with the concerned sector ministries and agencies working in close with each other and in collaboration with the ministry responsible for planning.

# 3.2. Analysis of the Appropriate Mode of Investment (Public, Private, Public Private Partnership)

3.2.1. In considering a possible public investment, a review will be undertaken first about the need for that investment (i.e. whether the objective desired from the said investment could be met through changes in public policy or by undertaking this investment) and then of the appropriate mode for development of the proposed investment (public investment, private sector investment or Public-Private Partnership).

## 3.3. Investment Project Preparation

- 3.3.1 All investment project shall be prepared in conformity with procedures, processes and templates defined by the ministry responsible for planning.
- 3.3.2 All investment project proposals in excess of a threshold size to be determined by the ministry responsible for planning shall include an economic and social cost-benefit analysis and a risk assessment (including financial, operational and political risks) compliant with international best practice.

## 3.4. Project Appraisal

#### 3.5. Quality Assurance of Proposed Projects

3.5.1 Investment project proposals which exceed in their total cost thresholds defined by the ministry responsible for planning shall be subject to quality assurance. Such quality assurance is to be undertaken by an individual/body which is independent of the sector ministry which has initiated the preparation of the investment proposal

# 3.6. Technical Approval of Proposed Investments

- 3.6.1 All investment project proposals shall be subject to a technical approval process. Technical approval shall only be granted to projects which are compliant with the standards set by the ministry responsible for planning in regard to economic and social profitability and environmental acceptability. Technical approval for sector public investments shall be undertaken by the responsible sector ministry, taking full account of the findings and recommendations of the independent quality assurance report on the design and costing of the proposed project.
- 3.6.2. Core investment projects, as defined in Section 1.3.1 above shall be subject to technical approval by the Central Development Working Party, taking fully into account the findings and recommendations of the independent quality assurance report on the proposed major investment.

#### 3.7 Entry of Approved Investments into the Medium Term Budget

3.7.1 Technical approval of proposed public investment projects does not provide any form of guarantee that a technically approved project will be entered into the budget either in the current budget year or any future budget years.

# 3.8. Entry of Approved Projects into the Annual Budget

- 3.8.1 No investment project shall be considered for inclusion in the annual budget which has not be granted technical approval
- 3.8.2 No investment project shall be considered for inclusion in the annual budget unless it is provided with a budget allocation for the coming year which fully reflects the programmed project cost for each year
- 3.8.3 No investment project shall be considered for inclusion in the annual budget unless the sector ministry/agency responsible is compliant with respect to the provision of funding for maintenance of its existing assets as set out in Chapter V below.
- 3.8.4 Subject to the above provisions, sector investment projects as defined in Section 1.3,1 shall be entered into the proposed budget by the responsible ministry or agency in compliance with indicative budget ceilings for budget preparation issued by the Ministry of Finance.
- 3.8.5 Core investment projects, as defined in Section 1.3.1 should be entered into the budget only through decision of the CDWP and subsequent endorsement by the National Economic Council (NEC).
- 3.8.6 Sector investment projects, as defined in Section 1.3.1, should enter the budget only through the decision of DDWP.

## 3.9. Multi-annual Investment Projects

- 3.9.1 Multi-annual investment projects, which require budgetary allocations under two or more annual budgets shall not be considered for inclusion in the coming annual budget unless:
  - Their full estimated annual costs up to project completion as set out in the project document are fully reflected in the medium term budget for the sector concerned; or
  - They constitute continuation of projects which are already under implementation in the current year.

# 3.10. Implementation of Investment Projects

- 3.10.1 The implementation procedures for sector projects as defined in Section 1.3.1 shall be determined by the responsible sector ministry or ministries.
- 3.10.2 The implementation procedures for core public investments as defined in Section 1.3.1 shall be in accordance with rules to be established by the minister responsible for planning. Such rules shall be designed to ensure that appropriate professional skills and capabilities both for project design and the management of implementation of such projects shall be brought to bear, including, where appropriate the appointment by competitive tender of dedicated project management contractors

# 3.11. Procurement for Investment Projects

3.11.1 All procurement required for the successful design, appraisal and implementation of public investment projects shall be in accordance with the provisions of dedicated legislation and PPRA rules (or in case of donor-assisted projects, with donor's procurement guidelines, if any).

## 3.12. Modification of Projects

3.12.1 The procedures for the modification of public investment projects after the commencement of implementation shall be subject to regulations to be issued by the minster responsible for planning.

## 3.13 Cancellation of Investment Projects

- 3.13.1 An investment project for which budgetary provision is included in the current budget year shall be cancelled if
  - Project is not consistent with the priorities of the latest 5-Year Plan.
  - No expenditure has been incurred on the implementation of the project for a period of 12 months or more

• Evidence comes to light that the design of the project was faulty and that the economic and social costs of cancellation of the project are less than the economic and social costs of continuing with the implementation of the project

Evidence has come to light of significant irregularities in the management of the project implementation, including corrupt practices of procurement which threaten the economic and social viability of the project

- 3.13.2 The government will formulate a policy on how to use or dispose the structures (if any) already created under a cancelled project.
- 3.13.3 A cancelled project may be revived and reintroduced into the budget in a subsequent budget year in accordance with procedures established by the minister responsible for planning.

## 3.14. Monitoring and Evaluation of Public Investments

3.14.1 The monitoring and evaluation of investment projects will form one component of the wider monitoring and evaluation of the performance sector development and service delivery plans in terms of their achievement of targeted goals and outcomes.

Public investment projects shall be subject to the following forms of monitoring and evaluation:

- Monitoring of progress during implementation
- Evaluation of the project on completion against internationally acceptable criteria
- In the case of projects with a total cost exceeding a threshold to be set by the ministry responsible for planning, an independent impact assessment to be conducted 3-5 years after the completion of the project.
- 3.14.2 The law, rules and regulations, process and procedures, and mandatory documents governing public investments, shall be subject to a review every 5 years with the objective of keeping them abreast with international best practices.

## **Chapter IV: Roles of Institutions and Agencies in Planning**

## 4.1. The Ministry of Planning

- 4.1.1 The minister responsible for planning shall:
  - Be responsible for creating and where necessary updating all regulatory instruments guidelines and manuals required by this Act

- Prepare the National Long Term Plan
- Prepare the Federal Rolling 5-year Plan
- Be responsible for the maintenance and development of the Medium Term Budgetary Framework as the comprehensive basis for the application of results based budgeting and systematic monitoring and evaluation across the Federal Government and prepare the annual budget Green Book
- Monitor sectoral plans and, in conjunction with the respective line minister, present reports to Cabinet on each sector
- Prepare an annual report on the performance of government programmes for submission to cabinet and for tabling in Parliament
- Support the development of capacity within the sector ministries and agencies to prepare sector plans of a high quality
- Quality assure the sector plans prepared by the ministries and agencies
- Support the ministries and agencies in the undertaking of rigorous technical, economic and social cost benefit of all [proposed public investments
- Establish and maintain the Public Investment Data Bank provided for in Chapter 6 of this Act
- Supervise the technical approval of major investment projects as eligible for consideration for entry into the budget
- Supervise the preparation of public investments to be proposed for inclusion in the medium term and annual budgets
- Ensure that on-going Core public investment projects are given priority in the proposed set of public investments to be included in the annual budget
- Undertake reviews at least every two years of the public sector investment portfolio and identify projects to be discontinued or cancelled
- Ensure that the programmes for monitoring and evaluation of projects as required under this Act are fully complied with
- Lead the preparation of sectoral and complete public investment portfolio impact reviews in accordance with a timetable to be established through a regulatory instrument.

# 4.2. Sectoral Line Ministries and Agencies

- 4.2.1 Every minister responsible for line-ministries and agency in the Federal Government shall establish a 5-year rolling plan relating to the objectives policies, planned services and investments planned to be undertaken in the sector falling under its mandate.
- 4.2.2 Where appropriate to achieve coherence, two or more agencies or ministries may prepare a joint sector plan.
- 4.2.3 The specific coverage and requirements of sector plans will be established through regulations issued by the minister responsible for planning.

### 4.3. The Ministry Responsible for Finance

- 4.3.1 The minister responsible for finance shall:
  - Provide indicative budget ceilings for investment expenditure for each federal ministry and agency for the coming year and two years thereafter
  - Ensure that no investment project is included in the annual or medium term budget which has not completed the mandatory preparation, appraisal and approval procedures provided for in Chapter 4 below
  - Ensure that with respect to any public investment included in the budget, the proposed provision is adequate for the planned execution in the coming year and subsequent years.
  - Establish policies for the release of funds for the financing of public investments consistent with prudent fiscal management
  - Establish, maintain and implement procedures for the release of budgetary funds in support of the implementation of investment projects in conjunction with the minister responsible for planning

## 4.4. The Controller General of Accounts

- 4.4.1 The Controller General of Accounts (CGA) shall maintain the financial records of each public investment and make up to date information on project financial status is available at all times for all projects, including information in real time on an open access basis on the financial status of all public sector investment projects.
- 4.4.2 Ensure that all commitments for expenditure on public investments are reflected fully in the IFMIS at the correct stage

## 4.5 The Auditor General of Pakistan

4.5.1 The Auditor General of Pakistan may undertake performance or value for money audits of selected public investment projects either during implementation or on completion as provided for in its governing Ordinance. Such performance reports shall be published following their tabling in Parliament.

#### 4.6 The Public Procurement Regulatory Authority (PPRA)

4.6.1 Shall ensure that all procurements undertaken from the federal development budget are in line with the PPRA rules; or in case of donor-assisted projects, with the donor's project guidelines, if any.

# **Chapter V: Maintenance of Public Infrastructure**

# 5.1. The Requirement for Budgetary Provision for Maintenance of Existing Assets

- 5.1.1 Every ministry and agency shall maintain a comprehensive register of the physical infrastructural assets under its supervision.
- 5.1.2 Every ministry and agency shall include in its annual budget allocation adequate funds dedicated for operation and maintenance of the physical infrastructure under its supervision. The ministry responsible for planning shall define the adequacy requirements for different categories of physical infrastructure expressed as the ratio of the annual provision for maintenance and the current market value of the asset.

## Chapter VI Public Investment Data Bank

- 6.1.1 The ministry responsible for national planning shall establish and maintain a data bank of all proposed public investments and all public investments under implementation, to be known as the Public Investment Data Bank (PIDB).
- 6.1.2 The PIDB shall be a repository for information on all investment projects at each and every stage of the preparation, budgeting, technical approval, entry to the budget, execution, monitoring and evaluation cycle for that public investment
- 6.1.3 The required documents to be submitted for inclusion in the PIDB will be subject to regulations to be issued by the minister responsible for planning
- 6.1.4 The contents of the PIDB shall be accessible to the general public in their entirety via the internet.

### ANNEX 3

## Moving to an Integrated Budget System

# 1. The Problems Arising from of Bifurcation of Recurrent and Investment Expenditures

# The Bogus Distinction between "Development" and "Non-development" Spending

Public discussion about the budget makes frequent reference to a distinction between "development spending" and "non-development spending". The distinction is used to refer to the Development budget and the Recurrent budget respectively. Development spending is presumed to be good, while non-development spending is bad. The underlying assumption is usually that spending on the development budget is investment and therefore building for the future of the nation, while recurrent spending is wasteful and of no use for the future. This simplistic view of the budgetary system is severely at fault:

- In the first place the Development budget is not all investment, or at least not all Gross Fixed Capital Formation (GFCF). The Pakistan Bureau of Statistics attempts to separate out the GFCF from other categories of spending on the development budget as part of its calculation of investment in the national accounts. Typically, this involves an assessment that of the order of 30 percent of the PSDP is not GHFC. This includes items such as the subsidy programme Benazir Income Support programme (BISP) and other forms of recurrent spending (e.g. Lady Health Workers salaries);
- Secondly, the PSDP includes many projects which are of a research nature. Many of these include elements of operational budget for minor equipment and office purchases for which adequate provision is not made in the recurrent budget. The setting up of projects with this motivation in mind is believed to be quite common.
- The distinction ignores the important element of public investment which relates to human capital development, notably activities falling under the education and health sector budgets, In this context is can plausibly be argued that the real investment in human capital through education takes place through the imparting of skills and knowledge by teachers to pupils in the schools and colleges. In this sense, the complete education and health sector budgets should be seen as investment in the future of the nation. Similar arguments can be applied to public involvement in research and development through activities of ministries and departments relates to Science and technology Higher Education etc.

- Viewed more critically, public investments which genuinely take the form of GFCF, i.e. investments in buildings, physical facility-es and networks, can only be viewed positively as investment in the future of the country if they have a positive economic rate of return. If this condition is not met, the money would have been better spent elsewhere. Herein lies a problem, as there are many reasons for believing that the rate of return on many GCFC projects in the PSDP actually have a negative rate of return. Reasons for believing this include:
  - There is only very limited ex-ante quality cost-benefit undertaken for projects in the PSDP and virtually no ex post assessment of realised rates of return and the degree of achievement of stated developmental objectives;
  - The implementation of the PSDP is replete with problems of delayed implementation (often as the required budget releases to support timely implementation are not forthcoming), Delayed implementation is usually accompanied by cost-over-runs, which are likely to have an adverse impact o the ex post assessment of a project's cost benefit ratio.
  - There is a system wide problem in relation to the provision of adequate recurrent budgets to support the full planned utilisation of assets after their completion. Failure to make full use of assets on completion has a similar effect in reducing the ex post cost-benefit ratio of the project.

Faced with all the above problems the widespread assumption that development budget spending is of higher social value than recurrent spending is very suspect. That is not to say that there are no quality problems associated with the spending under the recurrent budget—indeed they are manifold, arising from over-staffing in many ministries and department, to poor planning of the use of limited resources, wasteful spending on activities and minor equipment of very limited value etc. etc.

## The Lack of Objective-driven Planning

The pervasive separation of the recurrent and development budgets, conceptually, financially and institutionally, creates an environment in which there is an almost complete lack of planning based on objectives, such as the achievement of high level national goals, or the delivery of specified quantities and qualities of public services. Actual practice is for the recurrent and development budgets to be planned in virtual isolation from each other. Planning for the development budget in so far as there is any planning, is based on the physical investment constituting an end in itself, but a means to the achievement of better or more public service delivery. Planning for the recurrent budget, is even more divorced from higher level objectives, and is mainly concerned with meeting the need to pay the salaries for the historically accumulated staff of the ministry or department, and, at the central level of the MoF, to cope with the apparently irreversible and immutable demands to meet the requirements of the

military establishment, service and amortisation of national internal and external debt and provision for the payment of pensions on civil and military personnel. Given the pressures on the recurrent budget to meet these basic requirements, there is little or no scope for provision in the recurrent budget of adequate operating budgets to ensure that public assets are fully utilised, that quality of public service is enhanced over time, and that the inherited public physical infrastructure is adequately maintained.

# The Breakdown of PIM Investment Faced with Constrained Recurrent Budget Resources

Public investment will only realise its intended benefit for the nation if it is accompanied by adequate recurrent operational financing. However, the past 2 decades has seen a steady erosion of the federal government budget to make adequate provision for the requisite operating costs to enable the fully utilisation of completed investments in service delivery. The response of the planning authorities to this quandary is typically to blame the MoF for the failure to raise adequate revenues, or to control other forms of expenditure in a manner which would create fiscal space on the recurrent budget for the operational costs of investments. It is argued, correctly, that the PC1 form, which is required or all PSDP projects, states very clearly the recurrent budgetary implications of each proposed investment. However, while that is correct, there is still a breakdown in planning:

• At present the Medium Term Budget Framework (MTBF) provides forward estimates of the likely resources and budget ceilings for each ministry over the coming 3 years, However, very little attention is paid to the forward estimates, especially for the recurrent budget. Indicative forward ceilings are highly likely to be changed when the time comes. The result is that, in the absence of robust forward estimates of likely recurrent budget allocations, the requirements for recurrent budget set out in PC1 forms are simply statements of hope that the requisite operating budgets will be forthcoming. There is no system in the project planning process to address what is probably the normal situation – that the required operational funding will be either totally unavailable or not available at the required time. This problem cannot be overcome except through the establishment of a much more robust set of planning procedures, and one which, in particular requires the closest integration of planning across the two sides of the budget

#### 2. How an Integrated Budget System Works

A key recommendation of this report is that Pakistan should launch a significant reform to address the problems cited in the previous sections. That reform consists of the integration of the historically bifurcated budget. Since this is a major reform, which will have repercussions throughout the public finance management system, the present section takes the trouble to outline how an integrated system would actually work in practice.

Under the proposed reform to integrate the budgetary system, the budgets of the federal and provincial governments would make no distinction between the recurrent and development budgets. Rather ministries and agencies would prepare their budgets on a unified basis, making provision for expenditures of both a recurrent and non-recurrent nature. A second major element of the proposed reform is that the federal and provincial governments should move to the adoption of an explicitly programme-based budgetary system. In the Federal Government the foundations for the adoption of programme Based Budgeting (PBB) have already been laid through the preparation of the budget Green Book, which is organised around high level outputs based on service delivery. Key features of the proposed system are:

- The budget programme is the basic unit for defining the goals and objectives of the ministry within a specified field of service delivery. The programme is also the basic unit for the system of budgetary demands/grants. The strength of the programme-based system is that there is great clarity on the purposes for which funds are requested for appropriation in the annual budget.
- Although there will be no distinct national development programme under the proposed reform, this is not to say that there will be no public investment. Rather the system will identify specific investment required to provide the infrastructural basis for the planned quality and quantity of public service delivery in each area, the requisite operating budgets to ensure full and timely utilisation of public investments, and the provision of adequate financing for maintenance of existing and planned public assets. The PBS would continue to make estimates of the magnitude of public sector Gross Fixed Capital Formation (GFCF).
- The principal responsibility for definition of public investment requirements and priorities within a given sector will lie with the sectoral ministry or department. Of course, cross-sectoral prioritisation of public resources allocation should be achieved through the high level national plans, such as the Vision 2035 currently in force.

#### Planning for Service Delivery, not Just for Investment

The proposed reforms require a major strengthening of planning procedures, to ensure that all public investment is grounded in the need for assets to support public sector service delivery. At present there are large gaps in the planning system which invalidate the principle that planning should be oriented towards service delivery. Although the highest level of national plan, the Vision 2025 is explicitly based on a vision of progressive enhancement of the quantity and quality of public services in support of accelerated national economic and social development, this is not reflected in the subordinate planning processes. Specifically, there is a huge gap in the overall planning system, since there is no legal or regulatory requirement for the sectoral ministries agencies and departments to undertake any form of planning whatsoever. As a result, kin most cases there simply do not exist at present any sectoral plans which can form a basis for the rational allocation of budgetary resources to public investment and to the operating costs of service delivery. This is true of both the federal government (with the notable except if a few major agencies) and the provincial governments (again with some important exceptions, especially in the Punjab).

Not only are there no or few sectoral plans to b=guide the budget, but the ministries, departments and agencies in most cases lack the capacity to prepare such plans, at least in conformity with internationally accepted standards of planning and public investment design. So that the introduction of across-the-board sectoral planning in line ministries will require a substantial investment in capacities for planning.

#### Medium Term Budget Should Plan across Both Recurrent and Capital Spending

As noted above, effective planning across the recurrent/ investment divide can only be achieved in a context where there is a credible MTBF, in which the forward indicative ceilings are close to what will eventually be released through the annual budgets. This is necessary to provide a framework within which sector ministry managers can be confident that their requirements for operational budgets to support the commissioning and utilisation of newly-completed assets, will in fact be forthcoming. This is best achieved by endowing them with a high degree of responsibility for the setting of priorities for the forward budget within well-defined overall budget ceilings, Specifically, it should be incumbent on sector managers not to pursue public investments for which they are unable to see their way through to the provision of adequate supporting operational budgets. In a severely budgetconstrained environment, this will, of course, often require that otherwise attractive public investments will need to be rejected before entry to the budget, or at least delayed until the prospect of operational funding is more secure. The mechanism for such rejection should be the preparation of cost-benefit analysis with realistic assumptions on the timing of provision of operational support budgets.

### The Medium Term Operational Plan for Service Delivery

Sector ministries should base their budget requests on a carefully formulated medium term operational plan for service delivery. Such a plan is designed to reconcile several elements:

• The key sectoral and sub-sectoral objectives of the ministry or agency, which will typically be designed to be supportive of high level public service targets set out in high level national planning documents such as the Vision 2025

- The expected budgetary constraint on their overall spending in the next 3 years, and
- The appropriate breakdown between recurrent expenditure in favour of current service delivery targets, and the requirement for investments to support the raising of the quantity (access) of services delivered and the quality of future services.

#### **Budget Submission and Approval**

Under the reformed budgetary system, sectoral line ministries will prepare their budgets on a programme-based mode, with an integrated presentation of the budget within each programme. The programme will be presented at the Budget Priorities Committee in terms of its recent history, objectives, expected service delivery outcomes, and its requested total cost, with an itemisation of investment expenditures in excess of a specified threshold. It is noted than many of the elements of such a format are already practised in the Budget Priorities Committee within the federal Government. What is lacking primarily is the explicit programme-basis of the budget structure.

#### Budget Books

Under the reformed budgetary management system there will be 2 principal budget books: (i) the detailed breakdown of approved spending based on the entity and economic classifications, which is used as the basis for budget control. This document will not be circulated to Cabinet and parliament, but will be publicly available on the MoF website; (ii) a modified version of the present budget Green Book, which provides the breakdown of the budget by programme within ministries (as well as the 4 other summary classification breakdowns), This book will be tabled both in Cabinet and in the Parliament to provide an opportunity for the legislature to make a judgement as to whether the proposed allocations of resources is in line with national priorities and offers value for money in public service delivery.

#### Appropriation and the Structure of Demands/Grants

The current breakdown of the budget demands/grants in the Federal Government, which provide the basis for the appropriation of funds by Parliament, are a hotch-potch of clusters of expenditures which have merged through sequential decisions over a long period relating to individual demands in the absence of any overall conceptual framework for what should be the conceptual basis driving the definition of a budget demand. As a result of this historical evolution demands/grants are neither necessarily confined to a single ministry or principal accounting officer and frequently include elements falling under quite distinct areas of government as defined by the COFOG functional classification of government spending.

The introduction of an explicitly Programme-Based Budgeting system (PBB) provides an opportunity for the recasting of budget demands/grants to arrive at a system where each demand/grant relates to a single budgetary programme. Such a reform would lead to much greater transparency in the budget documentation tabled in Parliament, as the allocation of the total budget across different functions and areas of service delivery would be immediately clear.

It might be considered to be a difficult task to redefine all the budget grants, but in fact, given the progress which has been achieved in clarification of the functions of the Federal Government through the development of the budget Green Book, the redefinition of demand/grants is actually a rather straightforward matter. Appendix 1 below illustrates the proposed results-based vision of the structure of demands/grants for a single important federal ministry.

#### The need for Increased Revenue Mobilisation

It will be evident that Pakistan's inadequate public resource mobilisation lies at the heart of the present unsatisfactory state of public investment. This is occurring for two distinct reasons: first. fiscal constraints have led to a situation where the investment budget is progressively squeezed, where the quality of public investment is reduced over time as a proportion of GDP. Second, inability of the government to provide the requisite financing in support of the operationalising of completed investments, a problem which, as noted above, severely limits the benefits which can be expected from expensive public investments.

The conclusion is clear: any efforts to enhance the public investment process must start with a thoroughgoing reform of revenue mobilisation (at both federal and provincial levels) to bring Pakistan in line with the norms for the revenue/GDP ratio observed in rapidly growing comparator countries, This requires a roughly 70 percent increase in the revenue/GDP ratio from the present 15 percent to around 25 percent.

#### 3. Institutional Reforms to Support an Integrated Budgeting System

Reforms to the budgetary management on the lines set out above need to be complemented by far-reaching reforms of the institutional structures responsible for preparation and implementation of the budget. Such reforms are required at all levels of government, including the ministerial and departmental structures of the federal and Provincial structures. In addition reforms will be required in the internal structure of ministries and departments.

#### Federal Level—Merger of MoF and MoPDR?

The apex of the national planning and budgeting system is occupied y the two major ministries, the Ministry of Finance (MoF) and the Ministry of Planning, Development and Reform (MoPDR). The combination of the differentiation of functions along the divide between the recurrent and development budgets, combined with the long-standing absence of the required mechanisms of coordination between these two ministries has led to a severely dysfunction planning and budgeting system. It should be noted that this evolution is by no means confined to Pakistan. On the contrary, many developing and emerging countries have met this problem, and have typically addressed it through a merging of the two ministries. At the heart of the problem is the allocation of responsibilities across the two ministries based on the division of responsibilities for the two budget streams, development and recurrent. The main systemic failure arising from this allocation of responsibilities has been the lack of appropriate planning processes and procedures across the recurrent-investment divide. A more appropriate division of responsibilities would be for MoPDR to be responsible for planning, covering both sides of the budget, and for MoF to be responsible for the financing of the budget and exercise of budget control across both sides of the budget. This improved allocation of responsibilities is set out in the Table below

Table	1
	-

	A Kejormea Allocall	on of Kesponsibil	illes for mor and r	MOFDK	
	Planr	ning	Financial Management		
	Recurrent	Capital	Recurrent	Capital	
	spending	spending	Spending	Spending	
MoF					

A Reformed Allocation of Responsibilities for MoF and MoPDR

The allocation of responsibilities set out in Table 1 would critically involve the MoPDR in the oversight of planning of the entire budget across the division between development and recurrent spending. This would provide for addressing the breakdown in planning for the appropriate balance between operating and investment budgets and the approval in the budget of investment projects for which there is no realistic prospect of the required operating budgets becoming available on completion of investment implementation.

In considering the options for institutional reform at the highest level of government, the opportunity should be taken to question whether the country is best served by retaining two antagonistic ministries at the heart of the system, or whet=her a merger between MoF and MoPDR would be more appropriate. This issue should also be addressed in the context of the devolvement of the important responsibilities for sectoral planning to the line ministries, which currently constitute a gap in the overall planning systems and processes. Where such devolvement is successfully implemented it is evident that the remaining role for

MoPDR

the central planning function would be more limited, constituting in (i) the preparation and oversight of high level national plans; (ii) the identification and development of larger projects of a multi-sectoral and multi-regional nature; and (iii) the provision of capacity-building support to the line ministries, agencies and departments. This revised role could be undertaken by a Planning Commission which is fully embedded within a unified Ministry of Finance and Planning. An alternative option adopted by several countries is for the central planning function to be located directly under Prime Minister, with a mandate to provide overarching and longer-term perspective planning for the nation.

#### **Restructuring of Federal Ministries and Agencies**

The organisation of federal ministries has been created to mirror the institutional structure of the central ministries discussed above with an extensive separation of functions within individual ministries based on the division between responsibilities for the development and recurrent sides of the budget. This established structure brings with it all the weaknesses noted in the earlier sections of the paper, in terms of lack of integration in the planning of recurrent and investment spending. There is. Accordingly, a need for a major institutional structuring of federal ministries to address this problem.

In the context of the introduction of explicit progr6amme based budgeting, the appropriate way forwards is to redesign the organisational structure of ministries to provide a structure which is conducive to the effective delivery of services by programmes. This will require several important elements of reform:

- The establishment of service delivery programmes as units within the institutional structure of ministries. There is very extensive international experience on the best approaches to the definition of programme structure.
- The elaboration of the rules for the delegation of financial powers to permit the assignment of an important degree of discretion to the newly created Programme Managers
- The establishment of a high-level Planning and Budgeting Committee within each ministry to provide oversight of the complete budget cycle across all the programmes included in a ministry. Programme managers should be held accountable in two domains – the application of financial resources within their programmes in accordance with the financial regulation and (ii) the for delivery of services to the public in their specific area of service delivery covered by their programme.
- The establishment or refinement of monitoring system to provide the necessary information to permit programme managers to perform their functions effectively.

# Provincial Level Restructuring of Planning and Financial Management Functions

The provincial governments mirror the federal government to a large degree, with the separation of the Finance Department and the Planning and Development Department. As in the Federal Government. This division is also reflected within the line departments in terms of their organisational structure – with the same adverse implications in terms of a lack of planning across the development/recurrent budget divide.

The reforms appropriate to the provincial governments are essentially the same as those proposed for the Federal Government.

#### **Public Administration Reform**

The reforms in the budgetary management system outlined in this paper require a significant process of empowerment of the line ministries/departments who will become responsible for implementing the improvements in planning procedures (notably sector strategies and operational Plans for Service Delivery) and for the establishment and maintenance of service delivery based on programmes. This process of empowerment can only be expected to operate smoothly if there is strong leadership from the top of the respective ministries and departments. Unfortunately, under existing public sector management procedures such strong management cannot be relied upon, although there are evidently cases where it already exists. The stumbling block arises from the erossion of professional management systems for the civil service. Two key features may be noted in this respect: first, many secretaries are appointed at the very end of their careers, often with a short period till their retirement date. This system is inimical to the establishment of a sound medium term framework for budgeting and service delivery within the ministries and departments, as the incumbents at secretary level know that they will not be present in post in the outer years of the planning period. Second, the frequency of transfers of the most senior staff in the public service has the same effect of eroding the required continuity of top level management in any given ministry.

While the reform public administration is a wider topic than the reform of public financial management processes, it must not be ignored if the proposed reforms to the budgetary system are to have any chance of success. A comprehensive reform of the relevant aspects of the system for recruitment and promotions to the top level of administrators in the civil service would require very important changes, notably appointment to top level positions based on merit, not seniority; the establishment of at least 3-years as the normal terms of service at the level of secretary; and finally, the opening up of the top positions to competition from the private sector to attract outstanding individual on fixed term contracts.

## ANNEX 4

#### **Examples of National Wealth Funds**

#### Box 5: Malaysia: Khazanah Nasional

"Khazanah Nasional Berhad is the sovereign wealth fund of the Government of Malaysia.

Khazanah holds and manages selected commercial assets of the Government and undertakes strategic investments on behalf of the nation. It is involved in sectors such as power, telecommunications, finance, healthcare, aviation, infrastructure, leisure and tourism, and property, amongst others. The fund is a member of the International Forum of Sovereign Wealth Funds, which maintains and promotes the Santiago Principles on best practices in managing sovereign wealth funds.

Khazanah was incorporated under the Companies Act, 1965 in Malaysia on 3 September 1993 as a public limited company and commenced operations a year later. Khazanah is owned by the Malaysian government and administered by the Minister of Finance.

Khazanah is governed by an eleven-member Board of Directors comprising representatives from the Government and the corporate sector with diverse professional backgrounds and expertise.

In 2016, Khazanah registered a proforma profit before tax (PBT) of RM1.55 billion; a 32% increase over the previous year. Its portfolio decreased 3.4% to RM145.1 billion in terms of its realisable asset value (RAV), and declined 6.4% to RM101.9 billion in terms of net worth adjusted (NWA). Khazanah also made investments totalling RM8.7 billion and 13 divestments with proceeds amounting to RM4.7 billion, with a gain on divestments of RM2.9 billion for the year. Khazanah Nasional opened a regional office in The Shard, London - The world's financial capital in 2016 to support the fund's investment activities in Europe

Khazanah's portfolio cuts across various sectors and industries. its companies comprise some of the most significant companies in Malaysia, as measured by their strategic importance to the nation. They include Government-Linked Companies (GLCs) in sectors such as aviation, financial services, power and telecommunications.

Khazanah also invest in new sectors and geographies to support the transformation of the Malaysian economy. Via these investments, we hope to build new industry linkages and help boost national growth and development.

Long-term value creation requires a clear strategy in every industry sector and geography in which Khazanah invests. Khazanah adopts an active and collaborative macromanagement stance with our investee companies, via an investment approach that aims to generate transformative results. Khazanah assists our investee companies to venture into new fields and work with public and private sector entities to help catalyse Malaysia's growth and development."

From http://www.khazanah.com.my/Home and https://en.wikipedia.org/wiki/Khazanah\_Nasional

#### Box 6: Temasek in Singapore

**Temasek Holdings** Private Limited (abbreviated as **Temasek**) is a state-owned holding company that can be characterised as a national wealth fund owned by the Government of Singapore. Incorporated in 1974, Temasek owns and manages a net portfolio of \$275 billion (as of 31 March 2017), with S\$18 billion divested and S\$16 billion invested during the year, and 68% exposure to Asia – 29% Singapore and 39% Asia ex-Singapore. It is an active shareholder and investor, and its investments are guided by four key themes –

- Transforming economies
- Growing middle income populations
- Deepening comparative advantages
- Emerging champions.

Its portfolio covers a broad spectrum of sectors including financial services, telecommunications, media and technology, transportation and industrials, life sciences and agribusiness, consumer and real estate, energy and resources, as well as multi-sector funds. Temasek has a multinational team of 630 people, in 10 global offices including in Singapore, New York, and most recently, San Francisco.

Temasek has credit ratings of "AAA/Aaa" by Standard & Poor's Global Ratings and Moody's Investors Service respectively since their inaugural ratings in 2004. Temasek has also attained perfect quarterly scores on the Linaburg-Maduell Transparency Index, a measure of the openness of government-owned investment funds.

In 1974, Temasek was incorporated under the Singapore Companies Act to hold and manage the assets previously held directly by the Singapore government. The goal was for Temasek to own and manage these investments on a commercial basis, allowing the Ministry of Finance and the Ministry of Trade and Industry to focus on policymaking. Temasek's established mission was to contribute to Singapore's economic development, industrialisation, and financial diversification by nurturing effective and commercially driven strategic investments in and around Singapore.

Temasek is a company incorporated in Singapore, and operates under the provisions of the Singapore Companies Act. It is neither a government agency nor a statutory board. Like any other commercial company, Temasek pays taxes that contribute to government revenue in the countries it operates in, distributes dividends to its shareholder and has its own board of directors and a professional management team. Its sole shareholder is Singapore's Ministry of Finance.

Temasek's initial portfolio of S\$354 million comprised shares in the following companies, startups and joint ventures previously held by the Singapore Government.

Apart from Singapore, it invests in across the globe.

From https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=107637 and https://en.wikipedia.org/wiki/Temasek\_Holdings
## ANNEX 5

## Notes on Possible legal framework on PIM – Learning from Chile

Chile implemented a major reform of its PIM system from 1975 aimed at improving the quality and efficiency of public investment. The PIM system has legal foundations and its centrepiece is a mandatory set of procedures for the identification, pre-feasibility, feasibility, appraisal prioritisation execution and monitoring and evaluation stages of the budget cycle. The Ministry of Social Development (formerly the Ministry of Planning), has a central role in the oversight and implementation of this system. The details of the system are set out in "Rules, Instructions and Procedures for the Process of Public Investment (NIS), The core function of the NIS is to ensure that all public investments are subjected to the same rigorous identification and appraisal process and that no projects are admitted to the budget unless they have been subjected to the complete process and approved as such by the MoSD. Central aims of the NIS are to screen out "white elephant projects, and to prevent hastily conceived projects from being abruptly entered into the budget process without completing the required rigorous preparation and scrutiny.

The MoDS is legally required to maintain a comprehensive data bank of all public investments, including all projects at whatever stage of preparation or execution (BIP). The BIP is legally mandated to be accessible to the public under Art. 4 of the MoDS Act 2011.

There are many potential lessons for Pakistan to learn from the Chile experience, including:

- The need for a comprehensive legal and regulatory base for PIM
- Clarity on which institutions can initiate investment projects
- Standard technical and economic analysis to be applied to all proposed projects
- The establishment of a comprehensive database of all public investment, irrespective of stage of development
- The need for the project database to be publicly accessible
- Legal constraints on the introduction into the budget of projects which have not completed the mandated preparation and scrutiny process
- The requirement for comprehensive training and capacity development of all institutions involved in the PIM system

## **Box 1: Public Financial Management Reforms in Chile**

Public sector modernisation continues to be a top priority in Chile's development agenda aiming at further enhancing the probity, transparency, efficiency and modernisation of Chile's public sector with a view of increasing efficiency in public sector management, reduce wasteful public spending .In addition, financial management would be increasingly decentralised with enhanced municipal financial management is of particular importance given their prominent role in the provision of services under the strategy of decentralisation. A system of incentives and sanctions was introduced so that municipalities can have more autonomy in financial management, based on a system of risk classification. Likewise, steps were taken to improve the timely and accurate reporting of municipal financial information. To help achieve these objectives, in 2002 the Government introduced an integrated financial management system (*Sistema de Information para la Gestion Financiera del Estado* - SIGFE). The main thrust was to fully adopt the International Public Sector Accounting Standards (IPSAS) in the central government and then their phased expansion to all public sector entities and municipalities. The phased approach involved:

- Step I: National legislation based on cash and accruals
- Step II: Development of a strategy and timeline for the transition
- Step III. Official adoption of IPSAS and IPSAS-gap analysis

Step IV: Implementation: preparation of IPSAS accounts for different layers of government

Key changes introduced in the PFM system are highlighted in table below:

Previous Situation (Pre-SIGFE)	Current Situation (Post-SIGFE)
Financial management systems were	At the sector level, information on budget
unable to provide real time data and	execution is available on the Internet in real time.
adequate information for performance	Aggregated information on budget execution across
monitoring.	the board is made available to Congress and to the
	public with a lag of only 30 days.
The formulation and supervision of	Aggregated information from SIGFE is being used
macroeconomic policy and public	increasingly to support not only reporting requirements
investment suffered from organisational	but also decision making by various government
overlaps, gaps in information, and	entities, including the Ministry of Finance, sector
insufficient coordination especially	ministries and other government entities.
between economic and social sector	The process of implementing SIGFE has encouraged
ministries and on inter-temporal decisions.	coordination between key government entities.
There was no modem human resource	The development of a Human Resources Information
management information system linked to	and Management System for the Civil Service
financial management.	(Sistema de Information y Administration de Persona)
	which was fully integrated with SIGFE.
There was no modem procurement system	SIGFE was effectively linked to the newly
linked to financial management.	implemented electronic system of public
	procurement ( <i>Chile Compra</i> ) and to the data bank
	of public sector investment projects.
The financial and human resources units in	The implementation of SIGFE was accompanied by
public entities were weak.	an extensive technical support for entities within
	the central government. In addition to providing
	information and communication technology (ICT)
	equipment, SIGFE has been supported by an
	extensive training programme, reaching over 9,000
	public managers and government officials.
The government lacked a broadly	The Evaluation Division of DIPRES has developed
disseminated and robust system to evaluate	a system of programme evaluation with qualitative
budget execution.	and quantitative programme indicators based on
	information from Store. Programme evaluations
	institutions

## REFERENCES

- Bint-e-Aijaz, Maryam and Nazima Ellahi (2012) Public-Private Investment and Economic Growth in Pakistan: An Empirical Analysis. *The Pakistan Development Review* 51:4, 61–78.
- Detter, Dag and Stafan Folster (2015) Getting a Handle on National Wealth Foreign Policy.
- Elahi, Nazima and Adiqa Kiani (2011) Investigating Public Investment-Growth Nexus for Pakistan 2011. International Conference on E-business, Management and Economics IPEDR Vol.25 (2011) © (2011) IACSIT Press, Singapore.
- Ellis, Frank and Stephen Biggs Evolving Themes in Rural Development 1950s-2000s *Development Policy Review*, 2001, 19 (4): 437-448. http://www.elml.uzh. ch/preview/glopp/B1/en/multimedia/B1\_1\_pdf3.pdf
- Engerman, David C. (2014) Mission from Moscow: Soviet Advisers and the Second Five-year Plan. (NCEEER Working Paper). https://www.ucis.pitt.edu/ nceeer/2014\_828-04\_Engerman.pdf
- Bent, Flyvbjerg (2014) What You Should Know about Megaprojects and Why: An Overview. *Project Management Journal*, vol. 45, no. 2, April-May, pp. 6-19, DOI: 10.1002/pmj.21409
- Ghani, Ejaz and Musleh-ud-Din The Impact of Public Investment on Economic Growth in Pakistan The Pakistan Development Review 45 : 1 (Spring 2006) pp. 87–98
- Haque, Nadeem Ul and Mahmood Hasan Khan, (1998) The Economics profession of Pakistan: a historical Analysis Pakistan Development Review. https://www. academia.edu/18102259/The\_Economics\_Profession\_in\_Pakistan\_A\_Historical\_ Analysis?auto=download
- Haque, Nadeem Ul (2006) Beyond Planning and Mercantilism: An Evaluation of Pakistan's Growth Strategy. *The Pakistan Development Review* 45:1, 3–48.
- Haque, Nadeem Ul (2017) *Looking Back: How Pakistan became an Asian Tiger in 2050*. Kitab Publishers.
- Ikram, Khalid (n.d.) *Revitalising the Planning Commission: Some Recommendations*. http://eprints.lse.ac.uk/36383/1/Revitalizing\_the\_planning\_commission.pdf
- Kanbur, Ravi (2005) The Development of Development Thinking V.K.R.V. Rao Chair Public Lecture at the Institute for Social and Economic Change. http://www. arts.cornell.edu/poverty/kanbur/ISECLecture.pdf
- Khan, M. Tariq Yousuf and Komei Sasaki Roles of public Capital in Pakistan's Economy: Productivity, Investment and Growth Analysis RURDS Vol. 13, No. 2, July 2001 http://unpan1.un.org/intradoc/groups/public/documents/apcity/ unpan047085.pdf
- Lahore School of Economics (n.d.) *Ayub Khan's Decade of Development*. http://faculty.lahoreschool.edu.pk/Academics/Lectures/ayeshaa/PH%202%20HO. pdf

- Mamoon, Dawood and M. R Ahsan (n.d.) Short Term versus Long Term Economic Planning in Pakistan: The Dilemma. http://www.kspjournals.org/index. php/JEL/article/view/1158/1232
- Naseem, S. M. (2008) From Think Tank to University PIDE. Pakistan Institute of Development Economics, Islamabad. (PIDE History Series). https://www.pide. org.pk/pdf/Books/Series-1.pdf
- Nasir, Jamil (2012) IMF Programmes in Pakistan (1988-2008)—An Analysis Criterion Quarterly November. http://www.criterion-quarterly.com/imf-programsin-pakistan-1988-2008—an-analysis/
- Planning Commission (2011a) framework for Economic Growth. https://www. theigc.org/wp-content/uploads/2016/08/Planning-Commission-2011-Final-Report.pdf
- Planning Commission Report on PSDP Monitoring (2011). http://pc.gov.pk/uploads/ psdp/psdp\_brochure\_16-05-2011.pdf
- Planning Commission (2017) Structure and Working of the Planning Commission. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=10&ved =0ahUKEwiSy7Wl4vLaAhUjApoKHW0ODK0QFgiRATAJ&url=http%3A%2F %2Fwww.npo.gov.pk%2Fdownloads%2FPQI\_Presentations%2FMoPDR.pdf&us g=AOvVaw1nMInc16jTFAWvCX4cbdox
- Saghir, Rabia and Azra Khan Determinants of Public and Private Investment An Empirical Study of Pakistan International Journal of Business and Social Science Vol. 3 No. 4 [Special Issue - February 2012] http://ijbssnet.com/journals/ Vol\_3\_No\_4\_Special\_Issue\_February\_2012/23.pdf
- Shah, Parth (ed.) (2000) *Freidman on India*. http://ccs.in/sites/all/books/ com\_books/friedman-on-india.pdf
- Söderlund, Jonas, Shankar Sankaran, and Christopher Biesenthal (2018) The Past and Present of Megaprojects. *Project Management Journal*. January.
- Waterston, Albert Waterston, C. J. Martinand and Fritz A. Steuber (n.d.) Planning in Pakistan: Organisation and Implementation World Bank. http://documents. worldbank.org/c