

**PIDE WORKING PAPERS**

**No. 134**

**PAKISTAN INSTITUTE OF DEVELOPMENT ECONOMICS**



**Technology Acquisition, Catching Up  
and Competitiveness in Pakistan**

**Usman Qadir**

**February 2016**

**PIDE Working Papers**  
**No. 134**

**Technology Acquisition, Catching Up  
and Competitiveness in Pakistan**

**Usman Qadir**

*Pakistan Institute of Development Economics, Islamabad*

**PAKISTAN INSTITUTE OF DEVELOPMENT ECONOMICS**  
**ISLAMABAD**  
**2016**

*Editorial Committee*

Dr Abdul Qayyum  
Dr Durr-e-Nayab  
Dr Anwar Hussain

*Head*  
*Member*  
*Secretary*

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 Publications Division, Pakistan Institute of Development Economics, P. O. Box 1091, Islamabad 44000.

© **Pakistan Institute of Development  
Economics, 2016.**

Pakistan Institute of Development Economics  
Islamabad, Pakistan

*E-mail:* publications@pide.org.pk  
*Website:* <http://www.pide.org.pk>  
*Fax:* +92-51-9248065

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

## C O N T E N T S

	<i>Page</i>
<b>Abstract</b>	v
<b>1. Introduction</b>	1
<b>2. Theoretical Considerations</b>	3
<b>3. Pakistan's Economy at the Crossroads</b>	11
3.1. Economic Performance	11
3.2. Economic Challenges Facing the Economy	20
3.3. The Changing Political Landscape	22
<b>4. Framework of Analysis</b>	26
<b>5. Conclusion</b>	33
<b>References</b>	34

### List of Tables

Table 1. Technological Capabilities Development Effort Requiring Investment	9
Table 2. Decade-wise Annual Average GDP and GDP Per Capita Growth Rates	11
Table 3. Decade-wise Public Expenditure on Education in Selected Countries	12
Table 4. Major Social Sector Expenditure versus Military Expenditure Shares in Pakistan (1995–2011)	12
Table 5. Export Performance Licensing versus Export Bonus Schemes—Key Highlights	15
Table 6. Disaggregated Industrial Output by Decade (1960–2000)	18
Table 7. Disaggregated Export Data by Period	19
Table 8. Population Growth Rates by Decade	20

### List of Figure

Figure 1.1. Literature Tree	6
-----------------------------	---

## **ABSTRACT**

The growth trajectories of developed and developing countries are diverging rather than converging as expected from theory. Five policy areas have been identified that are crucial for ensuring development efforts succeed, of which a vital area is in innovation promotion and imitation and accelerated or sustained catching up policies. It is generally agreed that positive progress is required on all the five policy fronts highlighted above, for there to be sustained growth over long time horizons. Against this backdrop, a key concern for developing countries that merits further research in the context of learning by doing and innovation promotion is: what has been the country's performance with regard to technology acquisition for purposes of enhancing productivity? Has the country been effective in its efforts to acquire the appropriate technology needed to boost productivity levels? Has the country made effective use of the technology acquired? What market failure(s), if any, are constraining the country's ability to acquire the technology and make appropriate use of it? This research addresses these questions in the light of the experience of Pakistan's economy, focusing on the development of the domestic automotive industry. The research frames these issues in the context of rent-seeking, political settlements and firm-level efficiency and proposes a framework of analysis that allows for an assessment of technology acquisition efforts at the firm level.

*JEL Classifications:* O11, O30, O47, D72, O53

*Keywords:* Economic Development, Technology Acquisition, Productivity, Pakistan, Political Settlements, Rent-seeking

## 1. INTRODUCTION

Whereas developed countries have exhibited strong and fairly consistent growth performance historically, developing countries (including those in the South Asian region) have had a more chequered past. The crucial issue that confronts the international community is how to encourage growth and development in developing countries across the globe, to bring them at par with developed countries. The Commission on Growth and Development (2008) highlighted five areas where policy has historically been important for achieving sustained high growth<sup>1</sup> in economies. One vital area is in innovation promotion and imitation and accelerated or sustained catching up policies, while other areas include macroeconomic stabilisation, supporting high levels of accumulation, effective allocation of factors of production (land, labour and capital), and social inclusion in developmental goals. It is generally agreed that positive progress is required on all the five policy fronts highlighted above, for there to be sustained growth over long time horizons. Against this backdrop, a key concern for developing countries that merits further research in the context of learning by doing and innovation promotion is: what has been the country's performance with regard to technology acquisition for purposes of enhancing productivity? Has the country been effective in its efforts to acquire the appropriate technology needed to boost productivity levels? Has the country made effective use of the technology acquired? What market failure(s), if any, are constraining the country's ability to acquire the technology and make appropriate use of it? This research will address these questions in the light of the experience of Pakistan's economy, focusing on the development of the automotive industry.

For developing countries to converge with the developed countries in terms of their development and growth requires an increase in productivity.<sup>2</sup> This productivity growth is expected to result in an improvement in international competitiveness of the domestic economy and led to an increase in income levels, as well as demand for products, both imported and domestic. Johnson (1962) and

---

<sup>1</sup>A pre-requisite for poverty reduction, increased productive employment, education and health, and innovation.

<sup>2</sup>Numerous studies, by Denison (1967), Maddison (1970), Maddison (1972) and Denison and Chung (1976) to name a few, were founded on the classical belief of production functions and assumed Total Factor Productivity (TFP) as the sources of growth.

Boltho (1996) found that the increase in demand is expected to lead to further increases in domestic output and trade, as supply adjusts to the increase in demand. Such was the experience of Great Britain after the Green Revolution in agriculture and the introduction of the steam engine, in the United States when there was a quantum increase in manufacturing output as a result of mass production techniques being perfected and applied and in Japan when Just-in-Time production techniques were introduced.

Dahlman (2007) has presented strong arguments in support of the key role played by technology since the 1500 when key developments led to increasing per capita incomes despite corresponding increases in population. This role has persisted till now when production activity in virtually all industries has become dependent on technology in one form or another and in one way or another. Developing countries tend to have a weak technological base on which to build their productive activities, and technology tends to be of a dated origin where it does exist, necessitating the acquisition of new technology and techniques in an effort to raise productivity levels. In fact, Amsden (1990) has argued that late developers all managed to grow without any original indigenous technology present to serve as an asset to be monopolised. The successful experience of these late developers suggests they were able to procure technology from foreign sources, absorb it into the domestic economy and utilise it effectively. The physical technology required is one piece of the puzzle; the recipient developing country also requires workers and managers to have the knowledge and capacity to make the most effective use of this technology. Lall (1992) refers to these particular qualities as the technological and organisational capabilities that are required to increase productivity levels and also have to be built up and developed in these countries as part of the technology acquisition efforts. This is the part where developing countries tend to falter.

In contrast to the promising development outlook of the high growth economies (late developers) of South East Asia, the experience of many South Asian economies (including Pakistan) in catching up has been remarkably unimpressive, and as such development efforts in Pakistan warrant a closer look. As one of the latter countries, the development efforts of Pakistan are warranted a closer look. Since the time of independence in 1947, Pakistan has had to face multitudes of adverse conditions that have tempered its growth, with periods of growth spurts followed by periods of slow growth. High incidence of corruption and poor governance are two issues that are widely accepted as having marred Pakistan's development efforts over the years. However, other developing countries have successfully intervened in the economy to foster capability development in the presence of rent-seeking but without 'good governance' [a term first used in World Bank (1989)] so a deeper analysis of institutional failures in Pakistan is warranted. The discussion locates Pakistan's institutional choices and performance in the context of changes in its political settlement to assess weak performance at key points in the history of the automotive

industry. The focus is on the contests over rents, in particular potentially growth enhancing rents, given the distribution of power between different groups and organisations affected by policies. Policies were implemented under extensive political clientelism with increasing fragmentation signified by low levels of political stability and frequent changes in government. The research that follows will show that the increased fragmentation and multitude of clientelist groups compromised the ability of the state to direct long term economic growth in favour of ensuring its short term political sustainability.

The global automotive industry as it has evolved is currently characterised by global production networks and with the weak domestic technological capabilities that have developed Pakistan has found it a challenge to successfully enter the industry's global value chain. The domestic automotive industry is composed of a number of foreign OEM affiliated manufactures/assemblers supported by a component manufacturing industry that is itself struggling to enter the global automotive component market. That is not to say that domestic technological capabilities are absent; firms in two segments, motorcycles and tractors in particular have managed to successfully develop their technological and organisational capabilities. Two case studies<sup>3</sup> of relatively successful instances of technology acquisition and capability development within the automotive industry of Pakistan are proof that even in an adverse policy environment, intervention has borne fruit. The policy challenge now is to develop instruments that can enable and assist in capability development at a broader level in the context of the clientelist processes that characterise the prevalent political settlement. The discussion and analysis that follows will examine Pakistan's experience with acquisition of technology and the technological as well as organisational capability development for enhancing the competitiveness of its industrial sector, focusing on a case study of the automotive industry, under different policy regimes.

This paper sets the stage for a discussion and analysis of technology acquisition efforts in the context achieving competitiveness given prevailing political settlements at the time and is organised as follows. Section 2 brings to light the issues surrounding technology acquisition, strategies of catching up and the competitiveness of firms in developing countries. The economic performance of Pakistan since independence and myriad of economic challenges that face the country are covered in Section 3, as is the changing political landscape in the country. Section 4 links the theoretical discussion to the framework of analysis which can be employed in this context, while Section 5 concludes this.

## 2. THEORETICAL CONSIDERATIONS

In today's world, global competitiveness is considered a pre-requisite for achieving a high and sustainable level of growth; the greater the level of industrialisation and productivity of the economy, the higher the level of

---

<sup>3</sup>Millat Tractors and Atlas Honda Limited.



competitiveness of the economy.<sup>4</sup> Economies across the globe can thus be categorised according to the level of industrialisation of the economy and the degree of competitiveness they have achieved; more developed and advanced countries are considered to be highly competitive, while developing countries tend to have lower levels of industrialisation and are less competitive. Over the years developing countries have utilised several approaches for the purpose of catching up with the more advanced developed countries in terms of their level of industrialisation.

One approach for achieving this goal was pro-active intervention by the state through industrial policy with the aim of guiding and nurturing domestic industries to allow them to become globally competitive, as Japan and Korea did in more recent times. This policy stance was a variation of the ‘infant industry’<sup>5</sup> argument, first proposed by Hamilton (1790) and Daniel Raymond and in general abandoned after the lukewarm performance of numerous developing countries in the 1960s and 1970s. The strategy was over-shadowed by adoption of the liberal route promoting free markets and exposure of domestic producers to the global market in a do or die scenario. This liberal policy view has come to be accepted as the more common and preferred response for dealing with any short-comings; to engage in market-enhancing governance reforms across the board, in the hopes of making markets more efficient and rent-free and thereby removing any hurdles and obstacles to achieving a high and sustainable rate of growth.

In the 1950s and 1960s, a number of countries took off on the path to development guided by the belief that a swift and rigorous industrialisation process would put them on the convergent path with already developed countries. These countries implemented infant industry protection schemes that were at the heart of fairly ambitious industrial policies, and designed to promote domestic technological capabilities by subsidising imports, exports, credit, inputs and other components of the production process. Due to the mediocre and lack-luster performance of economies in response to these policies, as compared to the massive financial burden of financing these subsidies, developing countries entered into a phase of liberalisation across the board by the 1980s. The liberalisation process yielded promising results in a number of economies, but the pertinent question remains as to how much of this improvement was due to the liberalisation process in and of itself, and how much was due to the liberalisation process coupled with technological capabilities built up during the preceding rapid industrialisation process.

It is important to consider that if producers in developing countries are operating below the global technology and productivity frontier (as is likely to be the case given their lower level of industrialisation) when they enter the global market, this precludes the possibility of their receiving much, if any, support in competing globally when markets open up and can lead to a

---

<sup>4</sup>Based on a Kaldorian analysis of economic development in Kaldor (1967).

<sup>5</sup>See for example Chang (2002) for details.

collapse of any domestic productive capacity that already exists. With the widespread market failures that are known to exist in developing countries, the result can be catastrophic as these countries can become trapped in vicious cycles of low growth. These outcomes have also been referred to as *low-growth traps* [by Stokey (1991) and Redding (1999)] or lock-in [by David and Greenstein (1990), David (1985), David (1986a), David (1986b), David (1992), David (1993), Arthur (1986) and Arthur (1989)] in the literature. Essentially these countries will be unable to complete the transition to a situation where they can reap the benefits of producing high value added products, and instead can remain stuck or locked in a state of producing low value added products. The missing link in this equation is the indigenous technological and organisational capabilities required to push the domestic industry to the global technology and productivity frontier and beyond, but this is generally underdeveloped or even lacking in developing countries. The crucial role played by indigenous technological capabilities in mastering new technologies (adapting the technology to use in the local environment, diffusing the technology throughout the rest of the economy and even allow greater access to foreign markets) did not receive much attention in economic literature till the 1980s.

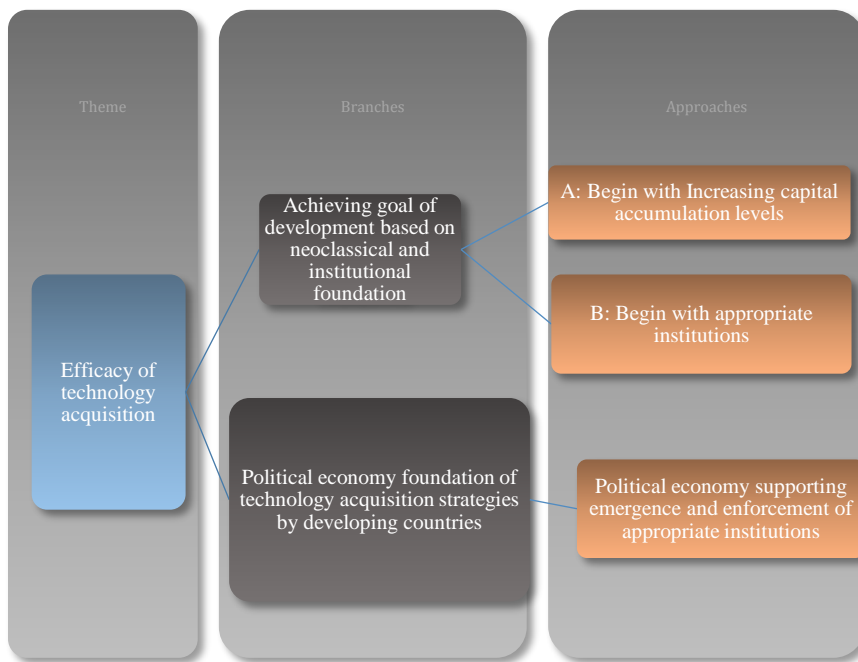
The theoretical underpinnings of catching-up industrialisation [as detailed by Suehiro (2008)] and the efficacy of technology acquisition and implementation in an economy for promoting growth have traditionally been focused along one of two branches. The first branch is concerned with the penultimate goal of achieving economic and social development and the competing approaches that can be used to achieve this goal. One approach (Approach B in Fig. 1.1) is to set up the appropriate institutions to guarantee and secure property rights to create the conditions necessary for economic growth, and the second approach (Approach A in Fig. 1.1.) supports increasing capital accumulation levels, and accelerating the pace of capability development, which leads to economic growth and eventually effective institutions can be set up for securing property rights. To increase capital accumulation in this fashion requires many institutions to be set up for this strategy to be effective, and the institutions for securing property rights are not the most essential. The latter may even be poorly defined in the early stages and are strengthened selectively as sectors become globally competitive. The second branch is concerned with the political economy of technology acquisition strategies in developing countries; and more specifically focuses on the political economy supporting the emergence or introduction and enforcement of appropriate institutions that is essential for technology acquisition strategies to succeed and this is where the current research is located.

The conventional or neoclassical approaches to industrial development, championed by Balassa (1982), Krueger (1983) and others, minimise the role of

technological activity in developing countries and by extension, the need for policies that nurture and promote such activity, according to Pack and Westphal (1986). The focus is on “getting prices right” and minimising the role of the state in industrial activity. Lall (1992) found that any interventions that necessarily have to be made in industry are limited to being neutral or functional in nature, as opposed to selective, discretionary and sector specific.

This traditional literature [in Nelson (1987) and elsewhere] has tended not to place any great emphasis on the demand for technological activity in developing countries; simply assuming that technology is freely accessible, countries opt for capital/labour intensities based on factor price ratios, all firms operate on the same production function and there are no complications in the acquisition and implementation of technology transfers, and so on. Developing countries are assumed to select and costlessly apply innovations in production (in other words movement of the production frontier rather than movement along it), and there is no role or need for state intervention. The political economy implications of this assumption are that it ensures stable property rights and encourages foreign investors to enter the domestic market bringing in foreign capital and technology to thus bolster economic development. In so doing it also sends a clear message to foreign investors that ownership of their investment will not be contested by the state.

**Fig. 1.1. Literature Tree**



Source: Author.

Having the institutions in place to protect property rights as a precondition for achieving growth is what prompted Montesquieu (1752) and Smith (1776) to suggest constraining government, and this notion was later highlighted in various historical accounts of European development.<sup>6</sup> Walras (1874) developed those ideas further along traditional lines while theoretical support from new institutional economics proponents such as Buchanan and Tullock (1962), North and Thomas (1973), North (1981) and North (1990) emerged more recently. Early empirical support for this hypothesis was provided by, among others, Long and Shleifer (1993) using data on urbanisation of European regions to find evidence of faster city growth under constrained governments. Knack and Keefer (1995) and Mauro (1995) initiated research along the lines of analysing the impact of good institutions on economic growth. Based on the work by researchers including Acemoglu, Johnson, and Robinson (2001), Rodrik, Subramanian, and Trebbi (2002), Dollar and Kraay (2003), Easterly and Levine (2003), Hall and Jones (1999), there appears to be an intellectual consensus that political institutions of limited government do cause economic growth. This suggests that economic growth can be achieved by having institutions that are market-promoting in developing countries; this will encourage technology to flow to these countries, and nothing more needs to be done. However, history has shown that this is not always the case.

When thinking of improved market access, it naturally begs the question of how useful is it to have open and free markets if the domestic economy does not have the capability, let alone the resources, with which to deliver competitive products in the market (be it international, or even domestic). The less popular response mentioned earlier favours growth-enhancing strategies that target specific market failures and focuses on building the productive capacity and capability of industries given that markets are imperfect, through technology acquisition and implementation. A more thorough examination of this issue coupled with an understanding of the underlying structure of the domestic economy will shed light on the debate of whether it is better to focus on market-enhancing strategies or growth-enhancing strategies. This will in turn allow for the formulation of an effective policy mix that takes into account the conditions prevalent in the economy at the time, as well as the limitations that exist and constraints on proper implementation of the policy.

A proposition put forward earlier was that technological competitiveness and capability are vital for an economy's survival in today's global market, and a pre-requisite for achieving a high, sustainable growth rate. It was also suggested that the productivity and performance or competitiveness of producers critically hinges on the level of capabilities that they possess—the ability to efficiently turn inputs into competitive final products. The popular route for achieving this goal

---

<sup>6</sup>Such as the account of the Norman d'Hauteville dynasty in Kantorowicz (1957) and Haskins (1915).

has been the introduction of free markets and exposing the domestic market to global competition (from developed as well as other developing countries) in a survival of the fittest sense. However, this approach does not address the more nebulous aspect of technological productivity, which is “capability”;<sup>7</sup> the ability to organise and produce effectively and efficiently.

Thus, a much more stimulating and far more noteworthy challenge to address is the acquisition of tacit knowledge and capabilities. It has been pointed out by Lall (1992) that neoclassical approaches ignore the “peculiar nature and the costs of technological learning in specific activities the externalities it generates and the complementarities” that can result, all can lead to market failures requiring selective policy intervention.

It is meaningful to think of ‘capability’ on two levels according to Sutton (2005); one level, the ‘revealed’ capability, is the unit variable cost of production as well as a measure of buyer’s willingness to pay for a unit of output; i.e. the perceived quality of the product. The second level is the ‘underlying’ capability or know-how and working practices by employees (or ‘tacit knowledge’). The technological and entrepreneurial capabilities to effectively utilise investments in capital and machinery are intrinsically linked to said investments. Lall (2000) points out that while developing countries are able to attract the initial investment with relative ease, and even to find well qualified workers to operate the machinery, they are often unable to make sustained progress in acquiring the requisite tacit knowledge. Without this knowledge, the machinery will be operating at less than optimal capacity and the industries will be hard pressed to compete in the global market. The popular response to this failure (described earlier as one that downplays the role of state in developing technology and the capability to use it effectively) is to enhance the markets, in an attempt to make them more efficient by reducing the inherent transaction costs and let market forces weed out the weak and inefficient firms. This market-enhancing approach, according to Stiglitz (1996), is not without its problems and suffers from a variety of issues, on account of which it does not appear to be the ideal solution for developing countries.

The alternative approach that acknowledges variation that exists between the operational levels of firms and the crucial role of technology and technological change [based on the evolutionary theory of technological change of Nelson and Winter (1982)] holds more water. Developing countries acquire matured technology (through various channels such as FDI, Joint Ventures and the like) from firms in the developed countries and the state implements policies and actions to assist in the absorption and assimilation of this technology in the domestic economy. According to Lall (1993a) the speed of absorption and assimilation of the technology is what depends on the level of capabilities (both revealed and underlying) in the domestic economy. These capabilities include

---

<sup>7</sup> Lall (1992), Kim (1999) and others.

technical and managerial skills and know-how that are lacking and more often than not need a long period of learning in the developing country, but that have already been developed in advanced countries. Development of these technological capabilities is not just a firm level effort, but a much broader social effort that involves substantial investment in a range of public goods by the state).

In a nutshell, and as laid out in Table 1, at the micro (firm-level), investments must be made by entrepreneurs that cover a host of activities that occur within a typical firm acquiring technology, all equally important and interconnected. First, labour (workers as well as management) will need on-the-job training to familiarise themselves with the new technology and new developments taking place in the industry. Second, the process of capabilities development is a dynamic phenomenon, not a static one, so investments will need to be made in the search for new technical and related information that the firm can absorb and utilise when a given level of capabilities have been developed. Third, spillovers from knowledge creation must be ensured by investing in an environment that encourages creating, communicating and diffusing any knowledge that has been acquired by the firm. Lastly, streamlining the production process requires prototyping of products and trial runs of the production process itself to identify any anomalies or issues with the final product, which in turn require substantial investment. Prototypes tend to be deficient in some fashion or the other and since they cannot be sold in the market, they represent a sunk cost for the firm that must be financed. Till workers are proficient in the use of production technology, production runs will lack the standard of quality the firm is aiming for, and again will represent a sunk cost that has to be financed if the firm is to continue production.

Table 1

<i>Technological Capabilities Development Effort Requiring Investment</i>	
Micro (Firm-Level)	Social (State-Level)
Trainings	Trainings
Search for new technical and related information	Enabling access to information
Creating, communicating and diffusing knowledge within the organisation	Education
Production trial runs and product prototyping	Promoting interactions between firms and institutions for research and learning, quality control

*Source:* Based on Lall (1993).

Industries are comprised of groups of firms operating independently but also collaborating in activities and benefitting from the public good nature of knowledge. It falls on the state to create an enabling environment for the industry and manufacturing sector as a whole that will facilitate access to information by any firm in the industry. As highlighted in the discussion earlier, capabilities cannot be developed independently of formal education, and the state is responsible for financing and investing in the education of society and its members. Finally, knowledge cannot be created in a vacuum, or by one firm alone, so it falls on the state to invest in and promote interactions and collaborations between firms and the various institutions that have been established for R & D, technical training and quality control.

Lall (2000) found that the period of learning that is essential to development of these capabilities will be risky as it is not guaranteed the firm will be able to absorb the technology and make efficient use of it. The costs incurred both in terms of financing as well as in terms of time, add to the risk. Developing countries will therefore depend on the incentive or return to firm. Moreover, the success of the endeavour will hinge on several factors, including the existing level of skills, and the complexity of the technology being acquired in relation to that which is already present in the economy and the firm. A conflict of interest may arise between the firm in the developing country and the provider of the technology if the developing country is aiming to expand its industrial base while retaining national ownership of technology and the capabilities developed. Such a goal will be perceived as a threat to the profitability of the provider and is likely to impact the outcome of the acquisition effort if the process is hindered.

Lall (1993b) pointed out that the complexity of the learning period points to the likelihood of market failures (externalities, lack of information, inability of the firm to finance the learning) occurring and disrupting the process in developing countries. The general response has been to finance the learning period by allowing the firm or industry to operate in a protected (closed) market free from international competition from firms that have already gone through the learning period, as was the case in a number of developing countries such as South Korea [see Kim (2001) for details]. At a very basic level this can lead to a market failure itself, since the absence of competition will remove the incentive to streamline operations and reduce costs by developing the requisite capabilities. However, Kim (1999) showed that the East Asian Tigers were able to successfully compensate for this market failure by the credible threat of opening up domestic markets to international competition after a specified period of time had elapsed.

### 3. PAKISTAN'S ECONOMY AT THE CROSSROADS

#### 3.1. Economic Performance

When Pakistan gained independence from British rule and partition from India under the Indian Independence Act of 1947, the nascent state was faced with the daunting task of legitimising itself with the migrant Muslim population while at the same time building up a viable economic base from the weak infrastructure it had inherited.<sup>8</sup> Compared to several neighbouring countries and a number of countries that started on the journey to development facing roughly similar initial conditions, Pakistan's performance (in terms of GDP growth) has been relatively unremarkable, as shown in Table 2 below.

Table 2

*Decade-wise Annual Average GDP and GDP Per Capita Growth Rates*

		(%)					
Variable	Country	1960s	1970s	1980s	1990s	2000s	2010s
GDP	Bangladesh	3.89	1.52	3.22	4.80	5.81	6.37
	India	3.91	2.93	5.69	5.73	6.93	6.70
	Nepal	2.52	2.60	4.09	4.84	4.06	4.44
	<b>Pakistan</b>	<b>6.79</b>	<b>4.84</b>	<b>6.86</b>	<b>3.98</b>	<b>4.64</b>	<b>3.56</b>
	Sri Lanka	4.67	4.23	4.15	5.26	5.00	7.56
	China	3.01	7.44	9.75	9.99	10.29	9.17
	Korea	8.25	8.29	7.68	6.25	4.39	4.02
GDP per Capita	Bangladesh	0.85	-0.65	0.50	2.57	4.34	5.16
	India	1.75	0.59	3.39	3.79	5.35	5.35
	Nepal	0.59	0.40	1.74	2.26	2.44	3.25
	<b>Pakistan</b>	<b>4.03</b>	<b>1.79</b>	<b>3.37</b>	<b>1.26</b>	<b>2.67</b>	<b>1.79</b>
	Sri Lanka	2.21	2.50	2.59	3.96	4.25	7.77
	China	0.89	5.34	8.19	8.75	9.62	8.64
	Korea	5.64	6.32	6.38	5.24	3.83	3.44

*Source:* World Bank (2014).

A commonly cited case [see Amsden (1989) and Rodrik (1999) for details] is that of South Korea, which also embarked on its development agenda in earnest in the late 1960s, but due to a combination of factors; including a strong developmental state, national cohesion and a favourable political settlement arrangement was able to leap frog ahead of Pakistan. Pakistan's neighbour India exhibited a more sluggish performance compared to Pakistan in the 1960s, but managed to surge ahead in the 1980s. Both South Korea and India invested

<sup>8</sup> This section draws on Kemal, Din and Qadir (2002).



heavily in human capital and infrastructure development, foregoing an immediate payoff in favour of reaping the benefits in later years from higher value added manufacturing output thanks to a solid technological capabilities base. However, Pakistan underinvested in education compared to India, as evident from the trends in Table 3 below.

Table 3  
*Decade-wise Public Expenditure on Education in Selected Countries*

Decade / Years	Share of Public Expenditure on Education (%)					
	in Government Expenditure			in GDP		
	India	Korea	Pakistan	India	Korea	Pakistan
1970s		18.73	4.88		2.95	1.97
1980s		24.57	6.03		3.94	2.29
1990s	12.64	17.34	7.34	3.56	3.61	2.66
2000s	11.14	15.34	10.51	3.43	4.37	2.45
2010-11	10.76		10.04	3.24		2.30

Source: World Bank (2014).

Historically, the national defense industry has overshadowed the social sectors in terms of government expenditure (31 percent versus 2.7 percent for Public Health and 7.3 percent for Education in Table 4) reflecting the priorities of the state. The trend has improved in recent years, with military expenditures falling to 17.6 percent while Public Health and Education have increased to 3.6 percent and 10.1 percent respectively.

Table 4  
*Major Social Sector Expenditure versus Military Expenditure  
Shares in Pakistan (1995-2011)*

Year	Military	Education	Public Health
1995	31.37	7.34	2.67
1996	28.20	7.12	2.86
1997	27.52	8.07	2.76
1998	27.19		2.41
1999	26.34		2.42
2000	23.42		2.40
2001	24.84		2.41
2002	24.95		2.95
2003	25.23		2.76
2004	28.49	6.42	3.00
2005	27.67	10.94	3.11
2006	24.69	12.18	3.47
2007	21.90	11.24	3.19
2008	18.39	11.15	3.16
2009	19.28	11.15	3.29
2010	18.53	9.93	3.42
2011	17.55	10.14	3.58

Source: World Bank (2014).

In terms of per capita income, Pakistan's economic performance over the years has been quite respectable, averaging an increase of 2.5 percent in annual GDP per capita income growth (at 2005 prices) from USD 220 to 802, but pales in comparison to the performance of a number of other countries in the region such as China, India and Sri Lanka. However, all countries in the South Asian region have exhibited a more consistent positive trend in the decade wise growth rate of per capita income.

The sectoral contribution to GDP growth in Pakistan has been strongest from the manufacturing sector, averaging 6.83 percent (1961-2012), even though Pakistan is primarily an agrarian based economy, with agricultural sector growth of 3.71 percent over the same period. The economy has undergone substantial structural transformation over the years, with share of agriculture in GDP falling from over 46 percent in 1960 to 20 percent in 2012. To put this in a regional perspective, consider the fact that the corresponding share in India has gone down from 43 percent to 17 percent, in China from 22 percent to 11 percent and in South Korea from 38 percent to only 3 percent. The share of manufacturing sector on the other hand, has increased from over 14 percent to almost 19 percent over the same period, a shift that suggests the economy has become more resilient in recent years; less vulnerable to the seasonality of agricultural output driving GDP growth. This shift away from the agriculture sector has also been mirrored in the structure of labour employment, though it appears that rather than moving towards the industrial and manufacturing sectors, surplus labour force from the agriculture sector is starting to find its way to the services sector instead. This is not a detrimental shift per se for the economy; rather it is worrisome in terms of the fact that spillovers of improved performance in the services sector are unlikely to have as great an impact on the general economy as that from the manufacturing sector, or even the agriculture sector.

At the time of independence, Pakistan inherited a very weak and limited industrial base, thanks in no part to being the agricultural hinterland of the British India. Considering this low starting point, the industrial sector as it stands today has managed to advance significantly, even though in comparison to other developing countries the performance has been less than stellar. The large scale industrial base was comprised of only a few industrial units producing sugar, vegetable ghee, tea blending, cement and cotton textiles at the time of independence and they contributed only 1.8 percent of GDP, which has increased to over 12 percent in recent years. Large scale industries have grown at a rate of 8.8 percent and the total manufacturing sector at a rate of 6.8 percent during the period. The small-scale industries however, contributed 4.6 percent of GDP at the time of independence, but the share has witnessed only a nominal increase to 5.3 percent lately. Except for the Seventies and Nineties, the manufacturing sector has attained a respectable growth rate of 8 percent.

The manufacturing sector witnessed growth averaging 7.7 percent during the Fifties, with large-scale industries growth registered at a very impressive 15.8 percent. Given the state of the industrial sector this is not surprising, but foretells a bright future for the economy if the growth impetus can be maintained in the coming years and decades. In an effort to capitalise on the rich natural resources available domestically, the industrial policy at the time was designed to encourage the manufacture of products based on indigenous raw materials such as cotton, jute, hides and skins, etc. The assumption was that there was an assured market at home and abroad for these products and supply of raw material would be easier to facilitate and less of a burden on the local economy. Demand in the home market for consumer goods was rising and the country was therefore heavily dependent on imports to satisfy this demand. The state opted to develop the domestic consumer goods industry at the same time to relieve the pressure on imports. The state played a highly active and interventionist role in the development of industrial activity at this time, and the policies implemented tended to feature direct controls on imports, investment, and prices; all designed to regulate and guide economic activity in the sector. A number of key industries were also set up by the state and turned over to the private sector (dis-invested) for profitable operations.

Growth of manufacturing sector accelerated to almost 10 percent during the Sixties. A number of initiatives helped in realising the high growth rate, including a liberal import policy, subsidies to encourage exports through a number of schemes such as Export Bonus Scheme (EBS), Export Performance Licensing Scheme (EPLS), tax rebates, tax exemption, Pay-As-You-Earn Schemes etc. Of these incentives, two in particular (EBS and EPLS) received much attention from the state and private sector alike. The Export Performance Licensing Scheme (EPLS) was designed to alleviate the bottleneck created from the absence of imported raw material by deliberately linking licensing (import) of raw materials directly to export performance.<sup>9</sup> The Export Bonus Scheme (EBS) was another export promotion scheme launched in January 1959 for the purpose of boosting Pakistan's foreign exchange earnings and remained in effect for over a decade, finally being abandoned in 1972 (Spring) with the devaluation of the Pakistani Rupee against the US Dollar (see Box 1 for details of the mechanics of the scheme). The efficient running of these schemes was contingent on well-functioning, able state machinery, and it appears the schemes did not achieve their intended goals to the full extent possible. For example, the former scheme turned into "an administrative nightmare of such horrendous complexity" [Child (1968), p. 176], which undoubtedly created many opportunities for rent-seeking behaviour.

---

<sup>9</sup>Ikram (1972).

**Box 1****Mechanics of Export Bonus Scheme and Susceptibility to Rent-seeking**

- i. Domestic exporter earns local currency equivalent of foreign exchange for sale of goods produced.
- ii. Foreign exchange is sold to SBP for local currency.
- iii. Domestic exporter also receives voucher entitling owner to purchase foreign exchange equal to 20 or 40 percent of amount initially earned by the exporter.
- iv. Vouchers issued for all exports except raw jute, raw cotton, hides and skins, raw wool, tea and rice.
- v. Transferable voucher can be sold at a market determined premium price.

EBS Vouchers entitle the bearer to import foreign goods (consumer goods and capital goods alike) which makes them highly sought after, and in much demand. As a result the premium price for these Vouchers in the market escalates and the original exporter can receive a windfall gain from the scheme by selling Vouchers in the market rather than using them to import raw materials and capital goods as intended by the EBS.

Source: Ikram (1970), Ikram (1972).

Where the allocation of resources under EPLS was administratively determined, under the EBS it was partially market-oriented and price determined (see Table 5 for a comparison of key highlights of the two schemes). EPLS coincided with Ayub Khan's more hands-on approach to development and was more selectively applied. This placed a greater burden on the bureaucracy and the state and created opportunity for rent-seeking behaviour among entrepreneurs. On the other hand, EBS reflected the more market-oriented and hands-off approach of the state, but the easy transferability of vouchers under the scheme created greater opportunities for rent-seeking and profiteering behaviour.

Table 5

*Export Performance Licensing versus Export Bonus Schemes—Key Highlights*

Key Highlight	Export Performance Licensing	Export Bonus
Operational Dates:	1961 (January) - 1968 (January)	1959 (January) - 1972 (May)
Allocation of Resources	Administratively determined	Partially market-oriented, price determined
Incentives	Exhortation, minor incentives, export quotas	Monetary
Import Licenses	Non transferable	Transferable
Rent-seeking	Considerable, but limited to licensees	Encouraged by scarcity of foreign exchange

Source: Hecox (1970).

The high protection rates afforded by these subsidy schemes meant that producers received excessive profits, which the state did not capitalise on, rather encouraged through provision of tax holidays and accelerated depreciation allowances that increased the post-tax profits in the production of manufactured products. According to Hecox (1970), there were well established opportunities for illegal transactions created by licensing that were even indirectly acknowledged by the state.

A sharp fall was witnessed in the growth of manufacturing sector in the Seventies, down to just 5.50 percent and for large scale manufacturing to only 4.84 percent. The policies pursued by state had a lasting impact on the industrialisation process in the country, including the initiative to nationalise heavy industry and reserving a number of sectors (including cement, fertiliser, oil refining, engineering, chemicals etc.) exclusively for public sector operations. The bias against private sector profiteering by the state was also reflected in the discontinuation of the policy of dis-investing profitable public sector units. Moreover, the private sector industrialists were also subjected to a number of restrictions under Profiteering and Hoarding Act designed to curb price fixing. These measures created considerable amount of uncertainty and tainted the outlook of the private sector regarding the role of the state as a facilitator and enabler of entrepreneurial activity in the country, resulting in a fall in private investment and flight of capital.

During the Eighties direct controls were replaced with market-oriented forces to correct the bias against the private sector; import policy was liberalised, tariff structure was rationalised, par value of rupee was brought nearer to its equilibrium value and it was made convertible on capital account. The requirement for investment licensing was abolished, prices were de-controlled, and performance of public enterprises improved due to signalling system. The market friendly policies did result in a marked recovery of industrial activity, with growth accelerating to 8.21 percent.

However, political uncertainty on the domestic front and economic slowdown on the international front in the Nineties contributed to the growth rate decelerating to 3.88 percent. Large scale manufacturing also mirrored this disappointing trend, falling to 3.54 percent. Even more worrisome is the fact that growth in this sector slowed down even further to an average of 2.26 percent per annum during the last four years of the decade. A whole host of adverse conditions manifested themselves during this time. Political instability, a worsening of the law and order situation, and poor cotton crop yield, on the one hand, and on the other hand insufficient industrial and infrastructure investment resulted in an energy generation infrastructure that was woefully inadequate at meeting industrial demand, and further compounded by bottlenecks in infrastructure provision all caused a virtual stagnation of growth in the sector.

In the early years of industrial development, the state opted to develop domestic production in a number of key industries and also focused on developing consumer goods production by encouraging import substitution, as evidenced by its contribution to manufacturing industries growth of 96.9 percent for the period 1951-52 to 1954-55. On the other hand, export promotion has not had as great an impact on manufacturing sector growth till the latter half of the Eighties.

It is clear that the manufacturing sector has grown since concerted efforts first got underway, but value added in this sector is over-stated and highly distorted. If value added in the manufacturing sector is evaluated at the world prices, its contribution to GDP is relatively much smaller, reflecting gross inefficiencies and/or excessive profits. For instance, though some distortions had been removed by early 1990s, more than 30 percent of value addition in the sector could be ascribed to protection. It has been observed by Kemal, Din and Qadir (2002) that since then a number of initiatives have been taken to reduce the level of protection further and maximum import duty was reduced to 45 percent by the end of century and to 30 percent in the following years.

The manufacturing sector has evolved in not only breadth but depth as well over the years and is today represented by a number of very promising industries; including textiles, surgical goods, leather and vehicles (automotive). Of these sub sectors, the automotive sector is of particular interest; the sector has shown itself to be quite resilient and has evolved to encompass a great deal of versatility. Pakistan's automotive sector has not limited itself by specialising in the production of a single automotive category; rather it produces virtually the whole gamut of automotive products, from two and three wheel vehicles to large buses and trucks and all manner of passenger cars as well. Domestic firms in the industry are attempting to break into production employing emerging technologies such as alternative fuel sources, with varying levels of success. Technology acquisition in the sector holds the greatest promise for yielding spillovers with the rest of the economy and the greatest scope for development of local capabilities and competitiveness.

For sustainable economic growth and development to be achieved through industrialisation, a diverse industrial base of the economy is required.<sup>10</sup> An analysis of disaggregated industrial output data from 1963 onwards suggests that though Pakistan established manufacturing capacity in a number of areas, the industrial structure remains concentrated in relatively few products. Three product categories; textiles, food and beverages and chemicals and chemical products (ISIC 17, 15 and 24 in Table 6) accounted for over 66 percent of total industrial output in the 1960s, and this share decreased to slightly over 61 percent by the end of 2000s. The remaining share was spread among 15 categories in the 1960s and 19 in the 2000s, primarily in comparatively low value added products. Of note is the share of automotive

---

<sup>10</sup>Kemal (2006).

products (ISIC 34 in Table 6), which has increased from 2.99 percent in the 1960s to 5.14 percent in the 2000s. This marginal structural transformation suggests Pakistan is making progress in diversifying its industrial base, and moving towards the production of complex products. However, what is not clear from the data, but will be apparent from the analysis of the automotive industry in later chapters, is that the increase in output shares is on account of assembly operations or production of basic products, rather than in movement up the value chain towards higher value added products.

Table 6

*Disaggregated Industrial Output by Decade (1960 – 2000)*

ISIC	1960s	1970s	1980s	1990s	2000s
D: Total manufacturing	100.00	100.00	100.00	100.00	100.00
17: Textiles	37.69	29.49	23.26	31.24	28.47
15: Food and beverages	21.62	23.03	20.64	18.29	20.40
24: Chemicals and chemical products	7.46	8.98	10.68	11.72	12.21
16: Tobacco products	6.09	5.41	4.57	2.44	1.90
23: Coke, refined petroleum products, nuclear fuel	3.44	7.77	11.57	6.85	9.11
27: Basic metals	3.43	3.81	5.98	4.98	2.79
31: Electrical machinery and apparatus	3.11	2.91	3.28	3.92	2.11
26: Non-metallic mineral products	3.06	3.35	4.53	4.33	4.37
34: Motor vehicles, trailers, semi-trailers	2.99	3.83	3.72	4.13	5.14
28: Fabricated metal products	2.23	1.61	0.95	0.79	0.86
18: Wearing apparel, fur	2.15	2.82	3.70	4.11	4.12
25: Rubber and plastics products	1.79	1.76	1.68	1.33	1.16
29: Machinery and equipment n.e.c.	1.45	1.79	2.51	2.08	1.94
21: Paper and paper products	1.29	1.32	1.10	1.48	1.90
22: Printing and publishing	1.16	0.88	0.86	0.99	0.32
36: Furniture; manufacturing n.e.c.	0.72	0.77	0.47	0.81	0.65
33: Medical, precision and optical instruments	0.23	0.33	0.26	0.30	0.39
20: Wood products (excl. furniture)	0.09	0.13	0.24	0.22	0.32
35: Other transport equipment	0.00	0.00	0.00	0.00	1.06
19: Leather, leather products and footwear	0.00	0.00	0.00	0.00	0.67
32: Radio, television and communication equipment	0.00	0.00	0.00	0.00	0.13
37: Recycling	0.00	0.00	0.00	0.00	0.01
30: Office, accounting and computing machinery	0.00	0.00	0.00	0.00	0.00

Source: UNIDO INDSTAT2 Industrial Statistics Database.

The previous analysis of disaggregated industrial output has revealed that Pakistan has made limited progress with diversifying its industrial base. A similar analysis of disaggregated export data reveals that Pakistan's export comprised primarily of textile yarn and fabrics in the early years of 1972-77 (38.42 percent in Table 7), and this level of specialisation increased by 1989-99 to over 50 percent. Articles of apparel and clothing accessories which comprised only 3 percent of exports in 1972-77 accounted for over 20 percent of exports in 1989-99.

As evident from the trends in Table 7, which presents the top ten export categories of Pakistan (by share), 7 categories in 1972-77 comprised 82 percent of all exports, while this share increased to 90 percent in 1989-99. By 1989-99 there were three new export categories (line 8-10) that accounted for 4 percent of all exports, while three categories that accounted for 5 percent of export in 1972-77 were not in the top ten export categories in 1989-99.

Table 7  
*Disaggregated Export Data by Period*

Sr. No.	SITC Code	Classification	1972-77	1978-88	1989-99
1	65	Textile yarn, fabrics, made-up articles, NES, and related products	38.42	38.72	50.37
2	84	Articles of apparel and clothing accessories	3.06	9.23	20.14
3	04	Cereals and cereal preparations	19.25	12.79	5.78
4	26	Textile fibers (not wool tops) and their wastes (not in yarn)	10.20	12.74	5.01
5	89	Miscellaneous manufactured articles, NES	3.30	2.38	3.79
6	61	Leather, leather manufactures, NES, and dressed fur skins	5.05	5.52	3.34
7	03	Fish (not marine mammals), crustaceans, molluscs and aquatic invertebrates, and preparations thereof	2.67	2.72	1.88
8	87	Professional, scientific and controlling instruments and apparatus, NES		1.01	1.49
9	06	Sugars, sugar preparations and honey	0.60	1.00	1.46
10	05	Vegetables and fruit	0.99	1.45	1.02

Source: UN COMTRADE Database, online access.

It can be concluded from the trends described above that even though Pakistan has made substantial strides in generating growth; it has been unable to sustain a high level of self-reliant growth due to a myriad of challenges faced over the years.

Pakistan is credited as being the 36th largest country in the world in terms of surface area, but it is also the sixth most densely populated country in the world, with an estimated population of 179.2 million in 2012, and among the highest growth rate in the region [see Table 8 according to World Bank (2014)]. If present trends continue unabated, the country is slated to become the fifth most densely populated country by 2050 (UN projections). It is generally accepted that the country is now in the midst of a demographic transition and it is on the threshold of a demographic dividend, which can yield immense benefits if state and society work together for the common good.

The age distribution of population has also been undergoing a transformation, with the population aged 0-14 years decreasing in number, while 15-64 year olds were also decreasing in number till the end of the 1980s, and on the upward trend since then. Finally, the proportion of 65 years +



individuals has also been increasing. Thus, overall population growth has been driven by the increase in the young and energetic 15-64 age group who represent almost 60 percent of the total population by the end of the 2000s. The rising number of youths will place an increasing strain on already scarce resources available for health care provision, while also requiring education and jobs to be productive.

Table 8  
*Population Growth Rates by Decade*

Country	1960s	1970s	1980s	1990s	2000s	2010s
Bangladesh	3.03	2.17	2.70	2.18	1.41	1.14
China	2.37	1.99	1.45	1.14	0.61	0.48
India	2.13	2.32	2.23	1.87	1.50	1.29
Korea, Rep.	2.46	1.85	1.22	0.96	0.54	0.55
Nepal	1.94	2.19	2.31	2.53	1.58	1.15
<b>Pakistan</b>	<b>2.67</b>	<b>2.99</b>	<b>3.38</b>	<b>2.68</b>	<b>1.92</b>	<b>1.75</b>
Sri Lanka	2.36	1.68	1.52	1.25	0.71	-0.18

Source: World Bank (2014).

### 3.2. Economic Challenges Facing the Economy

The discussion above has highlighted the trends in Pakistan's economy as it has evolved since the time of independence almost 65 years ago. Between 1949 and 2013, GDP growth has averaged 5.29 percent which compares quite favourably with other countries in the region. Despite a swift rise in population, per capita income has managed to more than triple since 1960, and the growth in GDP has been made possible due to substantial increases in output from the agricultural and industrial sectors. Production of wheat rose almost ten-fold from 2.4 million to 23.9 million tonnes, rice 0.83 million to 6.9 million tonnes, maize also witnessed a ten-fold increase from only 0.35 million to 3.5 million tonnes and cotton from 1.9 million to 12.9 million bales between 1953 and 2010. Industrial production began with only a textile mill and cement plant and has since then blossomed into a wide variety of food industries, cigarettes, fertilisers, engineering and automotive, electrical and mechanical engineering, metallurgy, pharmaceutical and even ship building industries.

Despite the quantum increases in agricultural crop yields, production in the sector is subject to weather conditions, and industrial firms are finding it difficult to break into the global market for their products. Unable to export products of any meaningful value addition means that import levels invariably exceed exports and this places an almost intolerable strain on the economy's foreign exchange reserves and has led to a mounting external debt. Traditionally debt servicing has

been the major component of the federal budget, second only to funds set aside for defense, with the result that only meagre amounts are set aside for investment in other areas considered crucial for successful development; infrastructure, health and education, to name a few. It can be concluded that the development of human capital is more of an afterthought, rather than a national imperative, and the fruits of economic growth are not in evidence in the lives of the ordinary populace of the country. Economic growth has clearly taken place, but the distribution of gains has been uneven, as evidenced by the persistent levels of poverty across the country. With a high growth rate of population, the country is on the brink of witnessing a demographic dividend; the proportion of able bodied, young persons is increasing by the day, and the pressure is mounting on the labour market which is ill-equipped to handle the increased levels joining the market. The state is faced with a new challenge of effectively managing this demographic transition, a challenge that can be met by focusing on industrial sector development, but the outcome will be determined by the nature of political settlements in the country, as will be further explored in the next section and following chapter.

Despite the bias towards promoting industrial sector development and the growing importance of the services sector, agriculture sector continues to be the mainstay of the economy to this day. This has implications for the consistency and sustainability of medium and long-term growth of the economy since it is painfully clear that agricultural output is subject to the vagaries of the weather. Traditionally the industrial sector is tapped as the engine of growth in developing countries; as the sector most suited to absorbing and utilising large pools of labour for productive means and generating the spillovers that will ensure productivity in the other sectors of the economy also increases. Even though the industrial sector has shown the potential time and again to drive growth of the domestic economy, the state has failed to put forward a meaningful ideology and vision for long term development of the sector.

The lack of investment in infrastructure development, especially power generation and affordable rail transport has meant that firms have to allocate resources towards meeting their needs from private sources, which tend to be more costly. Not only that, but the industrial sector as a result is unable to realise its full potential due to the infrastructure bottlenecks. Despite inheriting only a very meagre industrial sector at the time, the state had the foresight in the early years to make significant investments in building up the infrastructure required to industrialise successfully while at the same time directing the development of the local industrial sector and deepening of production capabilities through technology acquisition efforts. Both the internal and external environments since independence have not been truly conducive to promoting economic growth and development.

### 3.3. The Changing Political Landscape

Pakistan's political history since gaining independence has been colorful, to say the least, and quite turbulent at the best of times, being ruled by a powerful military for over half of its 64 years in existence, and by democratic parties that struggled to remain in power once they were elected, for the remainder of the time. Attempts at finding stability have been constrained by the disharmony between the provinces on the domestic front, and on the international front a fundamental conflict with its neighbour India. The powers that be have attempted to legitimise their rule by capitalising on secular policies or by taking on the mantle of "frontline state" [see Baxter (1985) and Hussain (2008)] in the Cold War or the war against terror.

The founding of Pakistan marked the largest ever migration of population between what is now known as India, Pakistan and Bangladesh; almost seventeen million Hindus, Sikhs and Muslims moved between India and the East and West Pakistan wings.

Despite having been founded on the idea of having a separate homeland for all Muslims to live freely without fear of persecution or prejudice, Pakistan has continued to struggle in establishing a national identity and settling on a political system capable of accommodating a diverse population. Officially the country has two main languages, English and Urdu however, unofficially provinces are partial to their own regional languages. This has led to regional tension, an inability to form a constitution and repeated contestation over allocation of scarce funds. The perception in the smaller provinces and the Eastern wing of the country was that the province of Punjab had a monopoly on power, patronage and profits and this has created further tension.

The All India Muslim League (AIML) under the leadership of Mohammad Ali Jinnah proposed that Indian Muslims should share the reins of power with Hindus and AIML should represent the interests of Indian Muslims in Muslim majority as well as Muslim minority provinces of India. Interestingly enough, the power base of the AIML rested with the Muslims in the minority provinces, and not the majority provinces as would have expected. This lack of support meant that AIML was unsuccessful in setting up effective political machinery in the majority provinces and lacked the ability to influence politicians or the population of those provinces in a meaningful way. A unified religious ideology was deemed to be the best option of bringing the disparate provinces and wings together, however the differing traditions and language preferences impeded this process, and AIML was unable to solidify its support to represent all Indian Muslims after rallying the population under the banner of religion. Thus, at the time of independence the main central political party (Muslim League) lacked a central administrative apparatus to govern the provinces and was weakened by politicians who did not have the support of the population. Millions of refugees within its

borders created a great strain on limited resources, while the lack of an industrial base meant that the administrative setup had to extract resources from the landed elite (who dominated the ML). All these factors combined to create conditions that would compromise the ability of the state in subsequent years in directing development efforts.

The years immediately following independence were chaotic and the country ran through a number of corrupt politicians who were more interested in remaining in power and forging closer ties with elites than ensuring the democratic process provided freedom and justice to all Pakistanis. All these factors combined to prime the economy for the first successful military coup led by General Ayub Khan. Under the authoritarian rule of General Ayub Khan, government functions were consolidated and a stop was put to unstable ministerial coalitions that had characterised the earlier political climate. Ayub Khan was of the view that the politicians in their quest for power were causing irreparable harm to economic development and needed to be replaced. All politicians were disqualified under an Elective Bodies Disqualification Order (1959) and a coalition of Punjabi army officials and civil bureaucrats, and a small influential group of industrialists and landed elites was formed to replace the existing admittedly flawed governmental setup with a Basic Democracy system. Only a limited number of voters or basic democrats were chosen to elect members of provincial and national assemblies to office. Ayub Khan had hoped to legitimise his rule by addressing the core grievance of the people of injustice, inequality and misrepresentation and giving the chosen few in bureaucracy a role in politics. The earlier corrupt system was deemed undemocratic and thus swept away; to be replaced by a new system that was supposed to embody democracy suited to the people, but in fact turned out to be flawed itself since the basic democrats could be bribed or coerced into voting for particular candidates. What actually transpired was a tightening of bureaucratic control by a state that implemented policies that widened the gaps between provinces and especially the two wings of the country, while productivity increases in West Pakistan were offset by rising inequalities in the agricultural sector and lack of representation, and mounting concentration of wealth with a handful of families.

Coupled with the war with India in 1965, Ayub Khan's authority was undermined and General Yahya Khan led the second successful military coup against the establishment in 1969. Things came to a head in the general elections of 1970 which revealed how authoritarian attempts at centralisation under Ayub Khan had resulted in politics in Pakistan coming to be dominated by regionalism and social conflict. The Awami League capitalised on discontent in the East Pakistan wing to capture all but one seat in East Pakistan and an absolute majority in the national assembly by promising a program of provincial autonomy. Zulfikar Ali Bhutto's Pakistan People's Party rose to the front in West Pakistan on a populist platform and managed to oust Muslim League. West Pakistani politicians

were naturally against the shift of power to East Pakistan under Awami League led by Mujibur Rahman as they feared loss of power that would inevitably followed, and conspired with the military to prevent the transfer of power. The result was an armed rebellion in East Pakistan against the injustices of the West wing and intervention by India to quell the disturbance led to Pakistan's third war with India since gaining independence only a few years earlier.

The aftermath of the war saw the creation of Bangladesh in 1971, and a severely crippled bureaucracy and military. PPP drew its political power from Punjab and Sindh only and used the state of affairs to wrest control from General Yahya Khan. However, lacking sufficient backing in the provinces of Balochistan and NWFP, Bhutto had to rely on support from the civil bureaucracy and military to maintain a working government. Despite losing credibility due to the events that led to the separation of Bangladesh in 1971, in the eyes of the public the military was still a crucial pillar of the state. The 1973 constitution was formed to provide a measure of national cohesion by granting substantial concessions to NWFP, Balochistan and even Sindh. Bhutto was only able to achieve a marginal modicum of success from implementing economic reforms which meant that he was unable to draw on support from all quarters of the economy and PPP did not emerge as a national party. The army once again intervened when charges of vote rigging were made against the PPP in the 1971 election and resulted in violent political unrest. Military rule was again established in 1977 under General Zia-ul Haq.

To solidify support for his rule and legitimise the role of the military in Pakistani politics, General Zia used religion as the justification for banning all political parties, and non-party elections were held while policies for Islamisation of society picked up speed. The Zia regime received support from the international community when Afghanistan was invaded by the Soviet Union in 1979 and the country became a front-line state bordering Soviet territory. Despite receiving substantial military and financial aid, discontent within the country started to rise again, no doubt fuelled by the exodus of Afghan refugees fleeing Soviet occupation and continuing disparities in the distribution of wealth. Martial law was finally lifted by Zia in 1985 after holding an "Islamic" referendum to confirm his own position and non-party elections of provincial and national assemblies.

What followed was a democratic era in the country's political history that proved to be just as turbulent and fraught with controversy as earlier attempts. Political parties boycotted the 1985 elections, but candidates and voters participated in the renewed attempt at democracy as hope for a brighter future was rekindled. To further consolidate his power, the newly elected President Zia implemented constitutional amendments that guaranteed his right to power would not be challenged or usurped by his subordinates. The President first exercised this power when he dissolved the National Assembly in 1988 on the charge of corruption and failure to enforce an Islamic way of life and removed sitting Prime

Minister Muhammad Khan Junejo from power on the pretext of conspiracy against the presidency.

President Zia attempted to hold non-party elections again, but this was challenged by the Supreme Court. The President responded by turning to religion again and attempted to mould the political system according to Islam, but this was met with skepticism and political confusion. These developments culminated in the death of the President in a plane crash and appointment of Ghulam Ishaq Khan as President till elections could be held in November of 1988 on a political party basis for the first time in fifteen years.

The political events that followed read like a game of catch between the two main political parties in the country, the PPP and the PML. Benazir Bhutto, the daughter of Zulfikar Bhutto was elected as Prime Minister when PPP secured the most seats in elections of 1988, but rather than working with the opposition led by PML, the two parties developed an antagonistic relationship. Politicians were bribed by either party to sway their allegiances and little to no progress was made in economic development. Benazir Bhutto was dismissed by the President on charges of corruption less than two years later, and the elections of 1990 saw Nawaz Sharif as leader of the PML being sworn in as the new Prime Minister. The political parties continued their squabbles unabated till Nawaz Sharif was dismissed in 1993 and the President was accused of conspiring with the leader of the opposition to oust the sitting Prime Minister Nawaz Sharif and the PML were reinstated to power by the Supreme Court, but the victory was short lived as allegations of incompetence against the Prime Minister surfaced in Punjab in 1993. Both the President and Prime Minister were forced to resign and new elections held with the PPP again securing more seats and Benazir Bhutto once more taking over as Prime Minister.

Benazir Bhutto was able to get the candidate of her choice elected as President, the expectation being that a sympathetic President would not oust her government from power. However, when governmental processes were again corrupted, the opportunity presented itself to President Leghari and the Chief Justice to solidify their own position and joined forces to dismiss Bhutto from power. In early 1997, the country was preparing to go to the ballot boxes and cast their votes for the fifth time in the short span of twelve years. This time the misconduct of the PPP had left a bad taste in the mouths of the public and PML headed by Nawaz Sharif came to power. The PML worked to limit the powers of the President (that had been expanded by Zia) and restored the parliamentary form of government. The PML government inherited a Pandora's Box of issues plaguing the economy and their time in power was not a resounding success as a result, but Nawaz Sharif appeared to be gaining power and support, which was a cause for concern for the military as they were being side-lined in important decision making. What ensued was a tussle between the Prime Minister and the

military headed by General Musharraf, which ended when the latter staged a successful coup to unseat Nawaz Sharif from power in 1999. There were ample reasons to justify leading a coup against the government that General Musharraf cited; chief among them being terrorism, factional disputes and a volatile situation in Kashmir that had led to a worsening law and order situation and merited action by the nation's military.

Public opinion has slowly been shifting, especially in the more urbanised, educated part of the population which is willing to accept a change that challenges the status quo. The coup led by General Musharraf held such a promise and meant that there was little, if any, public resistance to the shift in power. General Musharraf declared himself President in 2001 and agreed to hold elections in 2002 only after a deadline had been set by the Supreme Court. By allying himself with the US and the Western world at large in the "war on terror",<sup>11</sup> Musharraf strained relations with Afghanistan on the international front, and factions sympathetic to religious ideologies on the domestic front.

Thus, it can be seen that politics in Pakistan has evolved over time to include more interest groups and factions that are actively contesting power with the elected government, leading to frequent changes in the setup. These handovers are interspersed with military rule when the situation is deemed to have got out of hand. Moreover, it is apparent that the same two political parties have long held the majority votes despite being repeatedly charged with corruption and unfair practices.

#### 4. FRAMEWORK OF ANALYSIS

One of the frameworks which have been used to study technology acquisition and capability development builds on the importance of rents in creating the appropriate incentives, opportunities and compulsions required. In advanced countries the role of Schumpeterian rents in innovation is well known, and in developing countries there has been considerable research on the importance of rents in the '*learning*' process as referred to by Amsden (1989) and Khan (2000a). We begin with a general discussion of rents before discussing the specific issues relevant for technology acquisition in developing countries.

First, one needs to establish what is meant by a rent, and establish the role of rents in enabling the learning process in developing countries. According to Milgrom and Roberts (1992), a rent is "the portion of earnings in excess of the minimum amount needed to attract a worker to accept a particular job or a firm to enter a particular industry". This definition suggests that a rent is the amount over and above the minimum amount needed to attract an unemployed worker to accept a job (for example). In many developed countries the minimum amount needed is an unemployment benefit, but according to this definition it would not be

---

<sup>11</sup>A term first coined by US President George W. Bush after the September 11, 2001 attacks.

considered a rent. However, if the worker has no desire to re-enter the job market in the first place, then the benefit would be considered a rent. Therefore, this view appears to be a bit simplistic in nature and limited in its scope, and a more precise formulation has been given by Khan (2000a) describing a situation where an economic agent is the recipient of a rent if the agent earns an income higher than the minimum that agent would have otherwise accepted, the minimum being income from the agent's next-best employment opportunity. With this definition in mind, and quite contrary to the prediction of simplistic models, one comes to the conclusion that rents are a part and parcel of economic activity, and one even finds numerous examples of rents in developed as well as developing countries ranging from monopolistic profits to income accruing to ownership of scarce resources, and politically organised transfers of subsidies and rebates. This suggests that many rents can be useful to economic activity; that completely efficient, rent-free markets do not exist and rents, in one form or another, are part and parcel of the modus operandi of real world markets. The question then remains as to the impact of rents on economic activity and ultimately growth and development? Which rents are beneficial to economic activity and which rents are like a cancer eating away the healthy economic body?

If some rents can aid growth and development, while others can spur inefficiency and mis-use of scarce resources, then following the popular liberal policy prescription that all rents are bad and must be done away with, would likely cause more harm than good. Further investigation and a deeper understanding of the role of rents in a specific economic set-up is required to design reforms that will deal effectively with growth-retarding rents as well as enabling other rents to benefit the economy.

It is believed that developing countries that achieved, or came close to convergence with the growth paths of industrialised countries, did so by addressing the market failures in acquiring technology effectively and thereby boosting their technological productive capacity. These countries did so with arrangements that were uniquely suited to the conditions prevalent in individual countries and not by opting for a generic set of arrangements designed for developing countries. The infant industry protection of the 1950s and 1960s provided the revealed capability needed for the countries to grow, while the liberalisation policies allowed the underlying capability to be developed, and the growth process to be sustained in some cases. Addressing the hurdles in learning by doing and acquisition of tacit knowledge is the key to ensuring developing countries achieve and maintain high growth rates.

Learning by doing by its very nature requires a period of loss-making that needs to be financed by investors (be they private, or public, or both), and its success depends on the level of effort made by firms' employees. Market failures result when investors are unwilling or unable to finance the period of loss-making and the effort required to make the venture a success cannot be effectively



monitored and enforced. Understanding the nature of these two market failures is the main ingredient in formulation of an effective policy mix that will promote successful technology acquisition initiatives in developing countries.

Policy interventions that are designed to address market failures associated with learning by doing will create rents and encourage rent-seeking activity that can have the effect of completely off-setting any potential benefit correction of the market failure(s) achieved in the first place. Since rents can be value and welfare enhancing for the society or welfare reducing, as explained by Khan (2000a) and Khan (2007), a crucial element here is the management of rents to prevent the creation of new market failures while enhancing or increasing social welfare.

Keeping in mind the fact that a rent is the difference between the minimum amount needed to attract inputs to an industry and the payment necessary to induce the inputs to produce the good or service of interest, one can see that not all rents are damaging to economic activity. This fact, though glossed over in early neoclassical models that were based on hypothetical perfectly competitive markets, was later acknowledged in analysis as intrinsic to ensuring some measure of efficiency of resource use. Models of asymmetric information by Stiglitz (1996) and institutions analysis of Milgrom and Roberts (1992) that followed demonstrated a fundamental weakness of competitive market models, and allowed for the possibility that rents may be necessary or required to compensate for deficiencies in information generation and monitoring and ensuring markets function.

The theoretical discussion on rents in Khan (2000a) and elsewhere makes it clear that there are no clear cut growth and efficiency implications of rents. Moreover, an analysis of rents is incomplete without an understanding of the process(es) through which rents are generated and maintained. Without this insight we are unable to determine why rents that are designed to be welfare enhancing do not achieve their desired goals; especially in the context of learning rents in developing countries.

The process of rent seeking is the expenditure of resources to generate, sustained or transfer rents, a definition which does not limit the analysis to illegal rents only, but encompasses legal rents as well. The resources expended are a social cost on the economy in either case and as such warrant further study. From the given definition of rent seeking, it is apparent that the ability to generate and sustain or transfer rents depends not only on economic, but also socio-political factors as well. Rents are related to rights, and rights can only be changed through the process of institutional change. Determining the beneficiaries of rents (especially in developing countries) depends to a fair extent on political power and political settlements. Thus a meaningful approach to implications of rent and rent seeking activity must incorporate aspects of political and institutional

economics to explain how much effort is expended, and the types of rights and rents created in the process.

Rent seeking literature has its roots in the work of Krueger (1974) and Posner (1975), and others who showed that the costs involved in attaining monopoly rents were greater than the deadweight loss of the monopoly themselves. However, history has shown that when individuals have access to rents, considerable effort is made to secure this access and this in turn can lead to the creation of other rents, favouring particular individuals, and associated rights to maintain or change the status quo. Naturally then the overall effect of rent seeking activity depends on both the cost incurred and the rent created. Khan (2000b) considered it as analogous to the traditional production process. The rent seeking cost is equivalent to the cost of inputs used in production, and the rights and rents created are the equivalent to output. However, the literature on rent seeking has focused on social costs of the resources expended in rent seeking and not so much on the rents created by such activity in different contexts.

The net social benefit of rents varies, depending not only on the rent itself, but also on prevailing political and institutional conditions. History has shown that learning rents that do not generate any learning due to state inability or weakness in effective monitoring and allocation result in significant losses to the economy, while the same rents can deliver rapid technological development if they are managed effectively. In much the same way, the cost of rent seeking also varies.

The early rent seeking models Krueger (1974), Posner (1975), Buchanan (1980), Tullock (1980), etc. considered monopoly rents to be associated with high rent seeking cost, with high negative net effect, and represented by a high degree of intervention by the state in the market. Pro-market states were represented in these models as generating high positive net effect. Later models relaxed some assumptions and showed this was not necessarily the case. Congleton (1980), Rogerson (1982), Congleton (1980), Rogerson (1982) and others showed that not only could rent seeking cost vary significantly, but also that a rent being present did not necessarily imply high rent seeking costs.

Bhagwati (1982) showed that rent seeking could result in destruction of value reducing rents, rather than in their creation. This led eventually to the notion of rent seeking as a process through which the structure of rights in society can change by North (1990). Chang (1994), and others developed models arguing that institutions in the East Asian economies (at the time of the promising growth experience), were able to keep rent seeking cost low and coupled that with a combination of rents associated with substantial value enhancements to achieve growth. The differences in rent seeking cost across countries were not significant, but the types of rents sustained were significantly different. This suggests that more important than high rent seeking cost is the ability or failure to create and

maintain socially valuable rents to explain the success or failure of countries development trajectories.

Analysis of rent seeking costs and outcomes is not very meaningful unless it relates to a specific part of the rents process. It is virtually impossible to determine total rent seeking cost in an economy, or the structure of rights in the absence of any rent seeking activity. However, it is possible to look at the rent seeking process in the context of creation or reallocation of specific rights such as a particular type of import license or rent seeking activity in a particular sector in the context of policies promoting technology acquisition and learning by doing.

Given the importance of rent seeking activity in influencing economic development, it would be useful to look at the empirical evidence of this relationship. One approach, following Krueger (1974) was to estimate the input cost of rent seeking activity as a percentage of GDP, explaining differences in performance across countries in terms of their differential exposure to rent-seeking costs. However, according to Khan (2000b), it is not possible to accurately measure these costs in the manner prescribed nor will the magnitude of differences be sufficient to explain all the variations in performance observed across countries and periods.

Khan (2000b) looked at overall output and industrial growth rates and corruption indices in the South Asian region for the period 1970-2000, and found that while production increased after the 1980s, rent seeking expenditures had increased since the 1960s, as the contestation over ownership of rents had escalated. The liberalisation process which started in the late 1980s did not appear to have resulted in reduction of rent seeking expenditures, or in the subjective perceptions of corruption levels in the countries. Though rent seeking was present in South Asian countries as well as in the East Asian Tigers, "a subjective assessment of the balance of evidence suggests that over the 70s and 80s, relative rent seeking expenditures were greater in the Indian subcontinent and Thailand, less so in Malaysia, and least in South Korea." Some variations in rent-seeking expenditures were observed by the author in the sample countries; however, these were relatively small while the differences in cross country performance indicators were substantially more. This suggested that the types of rents that were created, and the subsequent management of the conditions governing the rents were significantly different in these countries, and this variation has implications for the growth experience of these countries.

Rent seeking outcomes have exhibited considerable variation across countries. In the case of South Korea, for example, the industrial policy of the 1960s was found to have created learning rents from subsidies that ensured recipients did in fact reap the benefits of the learning process. Furthermore, Amsden (1989), Chang (1994) and Kim and Ma (1997) found that these rents and rent-seeking activity were thus growth and value enhancing. Pakistan's experience was not so fruitful; rents created from barriers to entry for infant

industry protection did not encourage widespread learning, and technology acquisition was sporadic. A substantial portion of rent-creation activity in this case appears to have created rents that in the end turned out to be value reducing. Khan (2000b) found that the failure to allocate and manage the conditions associated with these rents meant that they (the rents) effectively took the form of redistributive rents (for competing groups and factions that protected them in the prevailing political settlements) rather than true learning rents.

This naturally begs the question of why the state in Pakistan and other developing countries was unable to effectively manage industrial policy and learning rents effectively. Opponents of industrial policy have argued that policy may fail if the state lacks sufficient information to “pick the winners” [Bruton (1989) and Grossman (1988)] or if state-created rents lead to “social waste” by diverting resources from productive activities towards unproductive activities such as lobbying [Krueger (1974) and Buchanan (1980)], or if state-induced rents are harder to remove once they have been implemented (as in the case of infant industries). According to Chang (1993), the information problem is not the real cause of such failures. Moreover, the existence of state created rents and therefore the opportunity of rent-seeking does not imply there actually will be social waste. Therefore, the key factor here is the unwillingness and inability of the state to withdraw support whenever performance has lagged.

Khan (1999) has argued that measures to encourage technology acquisition in Pakistan did two things that undermined the effectiveness of the policy initiative. One, the measures led to the exclusion of the middle class groups from the immediate benefits of development. Second, the measures were designed to discipline capitalist recipients of state subsidies. However, the mechanisms for disciplining of the subsidy recipients were inadequately developed and enforced which meant that those same recipients could buy protection from any of the strong political factions that had emerged. These political factions were interested in gaining access to the resources and subsidies the recipients had preferential access to, and the cost of protecting them from discipline by the state was insignificant in comparison. Due to the nature of the socio-political framework in South Asia, and Pakistan in particular, sustained exclusion of the middle class was not possible, and attempts to accommodate the demands of this class compromised the effectiveness of industrial policy when subsidies and licenses were allocated in response to political pressure, and not based on economic criteria such as the productivity growth that the recipients were potentially and actually achieving. Capitalists cultivated relationships with powerful political figures to protect their interests. Thus, India and Pakistan were unable to reap the benefits of East Asian industrial policies since they lacked the political settlements that would allow effective compulsion for high levels of effort according to Khan (2009). Well-connected firms were able to benefit from various types of “learning rents”, and at the same time secured protection through various factions to

circumvent threats of subsidy withdrawal from the state. Khan (2000b) found that the outcome was significant levels of industrialisation in the economy in the early stages, accompanied by slow growth of competitiveness that resulted in the growth eventually slowing down.

President Ayub Khan staged a coup and assumed leadership of Pakistan and was faced with the task of ensuring his political sustainability and legitimacy. This was accomplished in East Pakistan with the creation of a Bengali bourgeoisie that would ensure he had political support in the province. Educated Bengalis with powerful contacts in the bureaucracy were provided permits and licenses which could be sold to businessmen from West Pakistan in exchange for ready cash. According to Alavi (1973) this process created a parasitic group of individuals, the contactors, who capitalised on their contact with political figures(s) to attain power and accumulate resources to live large while contributing little to industrial development of the country. A second group of individuals, contractors were also courted by the Ayub regime through the Industrial Development Bank. These small businessmen were encouraged to setup industries by putting up a mere 10 percent of the investment funds required, and later provided generous loans and support to become industrialists.

In aligning themselves with the political leadership and reaping the benefits from Ayub Khan's bid to create an industrialist class, Pakistan's business community were victimised by the incumbent leadership of Bhutto, and lost access to their rents, Kochanek (1983) found that this community emerged as a small, fragmented, family-oriented group dominated by the state and unable to play a significant role in transforming the domestic economy.

Chibber (2002) has argued that as long as state agencies have to compete for access to limited resources, they are bound to employ non-cooperative strategies when dealing with rival agencies, and the various economic ministries tend to be in tension with development focused policies. These two factors can combine to create a state bureaucracy that will be at odds with state cohesion. This is precisely what was observed in India where the Indian state was well poised to embark on a promising industrialisation process, but it succumbed to a lack of state cohesiveness for policy design and implementation. As a result, the Indian state was unable to assert selectivity in resource allocation, and licenses were granted on the basis of technical feasibility rather than investment priorities. The South Korean state was able to successfully impose discipline within its ranks by giving the lead agency power over other agencies in the institutional setup and this kept state cohesiveness intact and also allowed discipline of domestic economic activity without fear of contestation.

In conclusion, we see that a number of explanations have been put forward to explain the promising performance of some economies in generating the requisite returns from learning rents, while other countries have had rather bleak

outlooks; with the traditional explanations lacking the insight on state control and disciplining capabilities based on historical or other factors. There were significant differences between the industrial policy of the 1960s and 2000s in Pakistan, both in terms of the instruments used and the political settlements in which the instruments were located. In the 1960s the instruments (given the political settlement) achieved horizontal growth but not much capability development in the final stages of reaching global levels of competitiveness. The instruments of the post 1980s industrial policy were very different, as was the political settlement.

## 5. CONCLUSION

The divergence of industrial development and by extension, overall economic growth trends between developed and developing countries, and even among various groups of developing countries is a disturbing trend. The expectation had been that when late developers would accelerate their growth efforts the growth trajectories of all countries would converge. However, this has not turned out to be the case; several developing countries managing to close the gap while the majority languished behind, and this has rekindled interest in trying to identify the reason for this gap. Earlier explanations did not give much weight to the role of technology and technological capabilities, their acquisition and development, in determining competitiveness of firms and thus growth of the economy. Instead, openness, free markets and a minimal role of the state were showcased as the driving force of the success stories of development in early mainstream explanations. Later explanations drew inspiration from the work on evolutionary theory to argue convincingly for the key role played by technological change and capabilities in driving competitiveness and growth. Research in this area, and in particular on the political economy reasons that can explain and account for the varied experience of developing countries in improving their competitiveness and successfully driving growth is still at a nascent stage. This paper seeks to contribute to this important area of research by setting the stage for an examination of the experience of a developing country in acquiring and absorbing foreign technology to develop its industry and competitiveness in the global market.

As a developing country, Pakistan has had a very turbulent history since gaining independence, managing significant growth of the economy, only to lose the momentum gained shortly thereafter with a change in political leadership and policies. Growth in the 1960s was achieved at the cost of high levels of inequality in the country and corruption, leading to a misplaced faith in the market enhancing growth strategies that were actually reaping the benefits of significant investments during the previous period in infrastructure and capacity building. Similar experiences by other developing countries have yielded positive results without 'good governance' [World Bank (1989)] and even in the presence of rent-seeking,

so analysis of institutional failures in Pakistan is required. The aim is to locate institutional choices and performance in Pakistan in the context of changes in its political settlements that will shed light on why performance is weak in the country's industrial sector, and specifically in the automotive industry.

The political landscape in Pakistan has become increasingly fragmented and unstable with frequent changes in power leading to extensive political clientelism and state policies had to be implemented in this unfavourable environment. Resources and opportunities were limited in Pakistan, and the distribution of power between various stakeholders affected by the development policies in the industry, led to contests over potentially growth-enhancing learning rents. Proliferation of clientelist groups has compromised the ability of the state to forsake long term economic growth and development in favour of actions to ensure its own short term sustainability.

Despite having built up substantial productive capacity in the early stages of the industry's establishment, only limited and fairly weak technological capabilities were built up in the industry. This has adversely impacted the industry's attempt to break into the global automotive value chains that symbolise the industry now. However, intervention even in an unfavourable policy environment can lead to capability development. The policy challenge that emerges is to develop the policy instruments that can enable capability development at a broader, industry wide level in the context of the clientelist political settlement that exists in the country today.

#### REFERENCES

- Acemoglu, D., S. Johnson, and J. A. Robinson (2001) The Colonial Origins of Comparative Development: An Empirical Investigation. *The American Economic Review* 91:5, 1369–1401.
- Alavi, H. (1973) Imperialism and Revolution in South Asia. In K. Gough and H. P. Sharma (eds.). New York: *Monthly Review Press*. p. 470.
- Alavi, H. (1973) The State in Post-colonial Societies: Pakistan and Bangladesh. In K. Gough and H. P. Sharma (eds.) *Imperialism and Revolution in South Asia*. New York: Monthly Review Press.
- Amsden, A. H. (1989) *Asia's Next Giant: South Korea and Late Industrialisation*. New York: Oxford University Press.
- Amsden, A. H. (1990) Third World Industrialisation: 'Global Fordism' or a New Model? *New Left Review* 182, 5–31.
- Baxter, C. (ed.) (1985) *Zia's Pakistan: Politics and Stability in A Frontline State*. Boulder, Colorado: Westview Press.
- Boltho, A. (1996) The Assessment: International Competitiveness. *Oxford Review of Economic Policy* 12:3, 1–16.
- Bruton, H. J. (1989) Handbook of Development Economics. In H. Chenery and T. N. Srinivasan (eds.) North Holland, Amsterdam, New York, Oxford, and Tokyo.

- Buchanan, J. (1980) Towards A Theory of the Rent-Seeking Society. In J. Buchanan, R. D. Tollison, and G. Tullock (eds.) Texas A & M University Press.
- Buchanan, J. M. and G. Tullock (1962) *The Calculus of Consent: Logical Foundations of Constitutional Democracy*. University of Michigan Press, Ann Arbor.
- Chang, H-J (1993) The Political Economy of Industrial Policy in Korea. *Cambridge Journal of Economics* 17:2, 131–157.
- Chang, H-J (1994) *The Political Economy of Industrial Policy*. London: Palgrave Macmillan.
- Chibber, V. (2002) Bureaucratic Rationality and the Developmental State. *The American Journal of Sociology* 107:4, 951–989.
- Child, F. C. (1968) Liberalisation of the Foreign Exchange Market. *The Pakistan Development Review* 8:2.
- Commission on Growth and Development (2008) *The Growth Report: Strategies for Sustained Growth and Inclusive Development*. Washington, DC: Commission on Growth and Development.
- Congleton, R. (1980) Towards A Theory of the Rent-Seeking Society. In J. Buchanan, R. D. Tollison, and G. Tullock (eds.) Texas A & M University Press.
- Dahlman, C. (2007) Industrial Development for the 21st Century: Sustainable Development Perspectives. In UND of Economic and S Affairs (eds.) United Nations Publications, pp. 29–83.
- Dollar, D. and A. Kraay (2003) Institutions, Trade, and Growth. *Journal of Monetary Economics* 50:1, 133–162.
- Easterly, W. and R. Levine (2003) Tropics, Germs, and Crops: How Endowments Influence Economic Development. *Journal of Monetary Economics* 50:1, 3–39.
- Grossman, G. (1988) Strategic Trade Policy and the New International Economic. In P. Krugman (ed.), *The M*, Cambridge, Massachusetts, pp. 47–68.
- Hall, R. E. and C. I. Jones (1999) Why Do Some Countries Produce So Much More Output Per Worker Than Others? *Quarterly Journal of Economics* 114:1, 83–116.
- Hamilton, A. (1790) State Papers and Speeches on the Tariff 1892. In F. W. Taussig (ed.) Augustus M. Kelley.
- Hecox, W. E. (1970) The Export-Performance Licensing Scheme. *The Pakistan Development Review* 10:1, 24–49.
- Hussain, Z. (2008) *Frontline Pakistan: The Struggle with Militant Islam*. Columbia University Press.
- Ikram, K. (1970) The Export Bonus Scheme and the Primary Commodities. *The Punjab University Economist* 8:2, 75–82.
- Ikram, K. (1972) The Export Performance Licensing Scheme Export Incentives and Net Value Added. *Pakistan Economic and Social Review* 10:1, 109–114.



- Johnson, H. G. (1962) Money, Trade and Economic Growth. In H. G. Johnson (ed.), George Allen and Unwin, London.
- Kemal, A. R., M. Din, and U. Qadir (2002) Pakistan Country Report. Pakistan Institute of Development Economics, PIDE, Islamabad.
- Khan, M. H. (1999) *Political Economy of Industrial Policy in Pakistan 1947-71*. London: Department of Economics, School of Oriental and African Studies.
- Khan, M. H. (2000a) Rents, Rent-Seeking and Economic Development: Theory and Evidence in Asia. In M. H. Khan and K. S. Jomo (eds.), Cambridge University Press, pp. 21–69.
- Khan, M. H. (2000b) Rents, Rent-Seeking and Economic Development: Theory and Evidence in Asia. In M. H. Khan and K. S. Jomo (eds.), Cambridge University Press, pp. 70–144.
- Khan, M. H. (2007) *Governance and Growth: A Preliminary Report*. London: Department of Economics, School of Oriental and African Studies, School of Oriental and African Studies.
- Khan, M. H. (2009) *Learning, Technology Acquisition and Governance Challenges in Developing Countries*. London: School of Oriental and African Studies, London, School of Oriental and African Studies.
- Kim, H-K and J. Ma (1997) The Role of Government in East Asian Economic Development: Comparative Institutional Analysis. In M. Aoki, H-K Kim, and M. Okuno-Fujiwara (eds.) Clarendon Press, Oxford, pp. 101–133.
- Kim, L. (1999) *Learning and Innovation in Economic Development*. Edward Elgar Publishing Inc. Cheltenham, UK.
- Kim, L. (2001) The Dynamics of Technological Learning in Industrialisation. *International Social Science Journal* 53:168, 297–308.
- Kochanek, S. A. (1983) *Interest Groups and Development: Business and Politics in Pakistan*. Oxford: Oxford University Press.
- Krueger, A. O. (1974) The Political Economy of the Rent-Seeking Society. *The American Economic Review* 64:3, 291–303.
- Lall, S. (1992) Technological Capabilities and Industrialisation. *World Development* 20:2, 165–186.
- Lall, S. (1993a) Understanding Technology Development. *Development and Change* 24:4, 719–753.
- Lall, S. (1993b) Promoting Technology Development: The Role of Technology Transfer and Indigenous Effort. *Third World Quarterly* 14:1, 95–108.
- Lall, S. (2000) *Harnessing Technology for Human Development*. United Nations.
- Milgrom, P. and J. Roberts (1992) *Economics, Organisation and Management*. Englewood Cliffs, NJ: Prentice-Hall.
- Montesquieu, C. S. (1752) *The Spirit of Laws*. McMaster University Archive for the History of Economic Thought.
- Nelson, R. (1987) Technology Generation in Latin American Manufacturing Industries. In J. Katz (ed.), Macmillan, London, pp. 78–93.

- North, D. C. (1981) *Structure and Change in Economic History*. New York: WW Norton.
- North, D. C. (1990) *Institutions, Institutional Change, and Economic Performance*. In D. C. North and J. Alt (eds.), Cambridge University Press, The Edinburgh Building, Cambridge CB2 2RU, UK.
- North, D. C. and R. P. Thomas (1973) *The Rise of the Western World: A New Economic History*. Cambridge University Press.
- Pack, H. and L. E. Westphal (1986) Industrial Strategy and Technological Change: Theory versus Reality. *Journal of Development Economics* 22:1, 87–128.
- Pakistan, Government of (Various Issues) *Economic Survey of Pakistan: Various Years*. Islamabad: Ministry of Finance.
- Posner, R. A. (1975) The Social Costs of Monopoly and Regulation. *The Journal of Political Economy* 83:4, 807–827.
- Redding, S. (1999) Dynamic Comparative Advantage and the Welfare Effects of Trade. *Oxford Economic Papers* 51:1, 15–39.
- Rodrik, D. A., A. Subramanian, and F. Trebbi (2002) *Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development*. National Bureau of Economic Research, National Bureau of Economic Research.
- Rogerson, W. P. (1982) The Social Costs of Monopoly and Regulation: A Game-Theoretic Analysis. *The Bell Journal of Economics* 13:2, 391–401.
- Smith, A. (1776) *An Inquiry into the Nature and Causes of the Wealth of Nations*. In R. Campbell and A. Skinner (eds.), Oxford: Clarendon Press.
- Stiglitz, J. E. (1996) *Whither Socialism?* The MIT Press.
- Stokey, N. (1991) Human Capital, Product Quality, and Growth. *Quarterly Journal of Economics* 106, 587–616.
- Suehiro, A. (2008) *Catch-Up Industrialisation: The Trajectory and Prospects of East Asian Economies*. Translated by Tom Gill, NUS Press in Association with the Kyoto University Press.
- Sutton, J. (2005) *Competing in Capabilities: An Informal Overview* London: London School of Economics.
- Tullock, G. (1980) Towards A Theory of the Rent-Seeking Society. In J. Buchanan, R. D. Tollison, and G. Tullock (eds.), Texas A & M University Press.
- World Bank (1989) *Sub-Saharan Africa: From Crisis to Sustainable Growth: A Long-Term Perspective Study*. World Bank, Washington, DC.
- World Bank (2014) World Development Indicators. Washington, DC.