Pakistan's growth experience 1947-2007

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ARTICLE

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ABSTRACT

Pakistan’s growth experience over the past sixty years is both impressive and disappointing. It is impressive because rapid growth rate has resulted in a quadrupling of per capita incomes and reduction in poverty levels by one half despite fairly high population growth. Structural changes have transformed a predominantly agrarian economy to a more diversified production structure. Manufactures account for 80 percent of the country’s exports. But there is a sense of disappointment too. Social indicators are among the worst in developing countries. Pakistan ranks 134th among 177 countries in Human Development Index. Income Inequalities, Rural Urban disparities and Gender differentials have worsened over time. Pakistan has lagged behind East Asian Countries and more recently India is so far as integration into the world economy is concerned. Global Competitiveness Report ranks Pakistan 92nd while India’s rank is 48th.

This paper attempts to shed light on the determinants and sources of long term growth of Pakistan, the impact of growth on poverty and inequality and then offers some suggestions for sustaining the growth momentum in the future.

The paper is divided into five sections. Section-I present the growth accounting framework. Section-II documents Pakistan’s long term growth record and empirical evidence on the determinants of growth in Pakistan. Section-III summarizes the various studies on the sources of growth in Pakistan in the growth accounting framework. Section-IV traces the relationship between Growth, Poverty and Inequality while Section-V discusses the lessons to be drawn from this review and the proposals for sustaining the growth momentum in the future.

SECTION – I

GROWTH ACCOUNTING FRAMEWORK

The output of an economy is a function of its endowments (labor, physical capital, human capital) and the productivity with which these endowments are deployed to produce a flow of goods and services (GDP). The growth of per-capita output can, in turn, be expressed in terms of three proximate determinants (a) physical capital deepening (b) human capital accumulation and (c) productivity growth.

The growth accounting framework provides the analytical basis for understanding the sources of growth in a country or cross section of countries. This framework allows for an explicit modeling of growth in terms of contributions from underlying factors input and growth effects related to pure technological progress (captured by the residual Total factor productivity (TFP)). The basic neoclassical production function is given by:
Y = F(A, K, L)

Where Y is real output; A is total factor productivity; K is the Capital stock and L is the size of the labour force. More recent attempts have tried to isolate human capital from pure labour and a modified production function of the following specification is estimated:

Y = F (A, K, H, L)

Where H is a measure of human capital. Applying an economy of scale Cobb-Douglas production function the TFP is derived in the following manner:

Where \( \alpha = r \) Y is the share of capital in output (with r representing the remuneration of capital), \( \alpha = W \) H/Y is the share of human capital in output (with W representing the remuneration of skilled labour) and (1-\( \alpha \)) measures the share of labour in output. In this production function, capital, human capital and labour are observable from data while TFP is TFP is derived as:

Where \( \alpha \) is the growth rate of TFP, \( k \) is the growth rate of capital \( h \) is the growth rate of human capital and \( l \) is the growth rate of labor.

TFP is the residual and captures components of real GDP growth that are left unexplained by three factor inputs – capital, labour and human capital growth. It provides a measure of economic efficiency i.e the quantity of output that can be produced with a given quantity of inputs. In addition to technological progress, TFP also reflects, for example, political stability, economic policies or institutional changes which affect the efficiency of an economy.

All economic policies could potentially affect the level of TFP and its growth. This is explicitly recognized in the Endogenous Growth theory where the rate of productivity growth is not only endogenous but is in general not constant over time. In Solow model this rate is constant and exogenous.

DETERMINANTS OF GROWTH

Economic growth theory and empirical studies have by now provided some useful insights into the processes through which countries are able to achieve high
growth. Rapid growth, in turn, is necessary condition for poverty reduction and improvement in the living standards. What is the empirical evidence on the determinants of growth for developing countries in the last five decades or so? Although many studies differ in their conclusions there is some broad consensus on the main variables that affect the rate of growth of GDP and also on the estimates of contribution of inputs and productivity growth in various regions.

The main determinants of economic growth that have found empirical validity over a large number of countries over a sufficiently long period have been found to be initial conditions, investment in physical capital, human capital and labor quality, macroeconomic policy, quality of institutions and governance and external environment facing a country. Raising investment has the biggest impact on growth. Strong correlation is also found between growth and sound economic policies and the quality of governance institutions. Higher levels of educational attainment and better health indicators are also associated with higher real per capita growth rates. A World Bank study (2006) has concluded that what has been common to all successes is that four functions have been fulfilled: rapid accumulation of capital, efficiency of resource allocation, technological progress and sharing the benefits of growth. Countries that have been able to sustain growth over time have been able to progress along all four fronts.

Senhadji (2000) estimates production functions for a sample of 88 countries for the period 1960-94 using the data on levels of outputs and inputs and also using first differences. He found that most of East Asia’s growth on the level-based estimates came from physical capital accumulation. But if first difference based estimates are used productivity growth as well as high levels of investment explain East Asia’s growth over the same period. Africa and Latin America had negative growth of TFP South Asian TFP growth was also positive and significant.

Beauagrant lists seven key steps to promote entrepreneurship and growth. These include (a) a credible political system that ensures legitimacy and continuity (b) governance and the rule of law: enforce property rights, promote accountability, maintain law and order, weed out corruption and set up a credible judiciary system (c) mobilize support for economic and social reforms (d) economic incentives: adopt sound economic policies including hard budget constraints, allowing competition, while creating a level playing field (c) basic infrastructure: ensure the provision of basic public services such as power, roads & highways, dams, ports, canals (f) access to capital: develop an efficient financial intermediation system, mobilize external savings and (g) education: build up human capital, raise literacy and gain access to up-to-date knowledge.

Haussmann et al (2004) find that a country has one-in-life chance to experience a growth acceleration sometime during a decade, with an acceleration defined as real per capita growth of 2 percent or more lasting for at least 8 years. They also find that growth accelerations tend to be correlated with increase in investment and trade, with
real exchange rate depreciations and with political regime changes. But it was also found that not all accelerations are sustained. External shocks, for example, tend to produce growth accelerations that fizzle out, but economic reform is a significant predictor of accelerations that are sustained.

Rodrik (2003) finds that it often takes only small reform steps to stimulate. But it requires continued institutional reforms to sustain growth by improving resilience to shocks and maintaining productive dynamism. He emphasizes that there are a few first-order economic principles that need to be adhered to — protection of property rights, market-based competition, appropriate incentives and sound money — to maintain strong growth. These principles can translate into very different policy packages for individual countries. Reformers have substantial room for creatively packaging these principles into institutional designs that are sensitive to local opportunities and constraints.

SECTION – II

PAKISTAN’S GROWTH RECORD

Pakistan’s overall growth record (Table-I) has been quite impressive; on average, the economy grew at an average annual rate of slightly above 5 percent during the last six decades. In per-capita terms the growth rate was 2.5 percent annually (Table-II). The trends in sectoral GDP growth rates are presented in Table-III which shows that industry including manufacturing sector has been the most dynamic sector of the economy.

In the regional context, Pakistan grew faster than South Asia by an average 2 percent through most of the 1960s and 1970s and at similar rates during the 1980s. However, since 1993 Pakistan’s growth was below the regional average.

In the first 20 years after independence in 1947, Pakistan had the highest growth rate in South Asia. According to the World Bank (2002) Pakistan exported more manufactures than Indonesia, Malaysia, Philippines, Thailand and Turkey combined in 1965. By the 1990s Pakistan, however, become the slowest growing country in South Asia, an exact reversal of its previous role. The incidence of poverty, which declined from 46 percent in the mid-1960s to 18 percent in the late 1980s rose to 34 percent by the late 1990s. How did this happen? What are the factors responsible for this reversal?

The main explanatory factor for this reversal is the paradigm shift in the basic model of development brought about by Mr. Z.A Bhutto soon after assuming power in 1971. His regime nationalized all the major manufacturing industries, banking, insurance, education etc. and caused a major disruption to economy and an erosion of private investor confidence that persisted for the next 20 years. This experiment with socialism
had a negative impact on industrial development, export expansion, the quality of
education and gave an overarching role to the bureaucracy in economic decision making.
The substitution of a culture of entrepreneurship, risk taking and innovation by rent
seeking and patronage suppressed the private sector dynamism. The emergence of
bureaucrats as business leaders reinforced the new culture. Bureaucratic harassment,
problems of law and order, unreliable and expensive power and inadequate infrastructure
also discouraged investment and help explain why the private sector was reluctant to
make long-term commitments. The disintegration of the unified economy of East and
West Pakistan and the resultant formation of Bangladesh as an independent country
served from Pakistan also caused tremors in this period.

The opportunity to undo most of the damage done by nationalization was
missed by the Zia-ul-Haq regime (1977-88). Instead of taking proactive measures to
reverse the state-owned and dominated economy the regime maintained status – quo.
Although the path pursued by their immediate predecessor was not followed and the
process of nationalization was abandoned the preferential orientation towards public
sector did not diminish in any perceptible way. The economic performance was impressive
in this period not due to any fundamental policy or institutional reforms. The regime
benefited from the output that came on stream from large public sector investments
made in the 1970s, the most significant among them were the Tarbela Dam that added
considerably to irrigation water availability and hydel power capacity, the fertilizer and
cement factories. Macroeconomic imbalances in form of large fiscal and current account
deficits of the 1980s had repercussions on the economy in the subsequent period in form
of increased debt burden. Real Defence spending increased on average by 9 percent per
annum during this period while development spending rose 3 percent per annum. Defence
spending averaged 6.5 percent of GDP in this decade and contributed to large fiscal
deficits and a rapid build up of public debt. The neglect of development spending was
one of the contributory factors to slow growth in the 1990s.

Pakistan underperformed other countries with similar per capita income in just
about all of the social indicators – a phenomenon called the ‘social gap’. The discrepancies
are especially large for women i.e a ‘gender gap’ reinforced the social gap. These twin
gaps stunted the growth rate since no country can hope to make much progress in a
globalized world economy without an educated and healthy work force.

Although the Nawaz Sharif Government introduced major economic liberalization
reforms in 1991 both private investment and exports tended to stagnate or decline
through the 1990s. Macroeconomic sustainability was a serious problem. Financial
sector was dominated by inefficient state-owned banks and access to capital was limited.
The policy environment in relation to rules, taxes and import tariffs was unstable and
arbitrary use of Statutory Regulatory Orders (SROs) affected the level playing field
needed for investors to compete based on business fundamentals rather than their ability to secure special deals.

The inter-decade differences in economic performance halted the secular rise of the growth rate. The 1960s, 1980s and 2000s witnessed robust economic growth with average annual rates exceeding 6 percent while the 1950s, 1970s and 1990s were marked by a decline in the trend growth rate to 4 percent.

The 1950s were the initial years of formation of Pakistan in which the problems arising from the aftermath of the partition and the setting up of a new nation-state preoccupied the decision makers. The disintegration of the sub-continent’s economy and inheritance of poor human and financial resource endowments proved stumbling blocks in laying solid foundation of the economy in this period. A crisis mode prevailed throughout the decade.

After near-stagnation of agriculture in the 1950s, the ‘Green Revolution’ technology was introduced during the 1960s on a large scale. Industrial production was stimulated by import-substitution policies, encouraging private investment in this sector. The physical capital stock growth rate was 13.1 percent per year and levels of schooling improved significantly due to advances in basic education that resulted in an average human capital stock growth of 11.6 percent per year.

As discussed earlier the decade of 1970s saw the break-up of the country after a civil war, the nationalization of industries, finance and education, flooding, a sharp hike in petroleum prices and recession in world market. The stifling of private initiative and entrepreneurship and the control over all key decision variables by the Government were a major set back to the economy causing huge uncertainty and loss of investor confidence.

The lost growth momentum was partly recovered in the 1980s by a shift from the policies of state ownership and control and by reaping the benefits of large investments made by the public sector in the 1970s. Although macroeconomic management was not the best the external flows such as workers remittances and increased foreign assistance boosted economic growth rates. The structural problems faced by the economy were left untouched by the policy makers. Fiscal imbalances were not addressed causing problems for economic management subsequently.

Economic growth decelerated again in the 1990s with average trend GDP growth of 4.4 percent per year and stagnant TFP. Political instability, frequent changes in government, weak governance, poor macroeconomic management and unfavorable external environment were more dominant than the favorable impact of economic
policies of deregulation, liberalization and privatization introduced in 1991. These reforms and policies were pursued haltingly and sporadically.

The with-drawl of US aid after the end of the Afghan war and the nuclear imposition of sanctions by the western governments following the nuclear tests in 1998 accentuated the difficulties. The freezing of the foreign currency accounts of Pakistani residents and non-residents eroded investor confidence. The turnaround in the economy since 2000 did put Pakistan on a higher growth path but it is important to understand this phenomenon with reference to earlier episodes of growth acceleration.

Since 1960, Pakistan has experienced two earlier sustained growth accelerations with per capita real growth rates consistently exceeding 2 percent per year, one that started in 1961 and one in 1977 and lasting 10 and 12 years respectively. In both periods, growth resulted from an increase in capital inputs as well as an increase in TFP.

The two growth accelerations were preceded by or coincided with – a significant increase in the investment ratio. In the early 1960s, the investment ratio rose from just over 12 percent of GDP in 1960 to 22.5 percent in 1964. By 1971, when this ten year period of strong growth ended, the investment ratio had declined again to about 14 percent of GDP. Similarly, the investment ratio rose sharply to 19 percent of GDP in the two years preceding the 1977 growth acceleration. This second period ended in 1992, however, following a dip in 1993, growth was fairly strong again in 1994-96. Starting in 1993, the investment ratio started to decline, falling back again by 14 percent by 1998.

The recent growth acceleration has also been accompanied by a similar increase in the investment ratio from 15.5 percent of GDP in 2001-02 to 20 percent in 2005-06. The recent growth acceleration has come largely from an increase in TFP. The contribution of TFP to growth in the last few years is similar or even somewhat higher than in the earlier growth periods. To some extent, this may reflect the growing contribution of the services sector to growth which is likely to require less investment compared to manufacturing. It may also reflect that following the slump of the late 1990s there was considerable excess capacity in the economy and therefore less of a need for new investments to generate growth. The increase in capital utilization translates into higher productivity per unit of capital and is reflected in the higher-than-average contribution of TFP to growth. But with many sectors approaching full capacity, sustaining growth in the coming years would require an increase in the investment ratio as without new investment it might be difficult to continue to improve productivity at the same pace as in these last few years.

In the recent years, improved rainfall has been a significant contributor to the recent growth acceleration. The contribution of agriculture to the overall growth rate
in 2000/01 – 2004/05 improved by almost 2½ percentage points compared to a similar increase in the contribution of the services sector and an increase in the contribution of the industrial sector of 1½ percentage points.

An IMF study (2005) of Pakistani economy for 1960-2004 confirms the importance of investment and rainfall as key determinants of growth in Pakistan. Macroeconomic stability also appears to be a pre-condition for growth. Periods of sustained growth appear to have been preceded by a reduction in inflation from relatively high level. Prior to the 1977 growth spurt, inflation was reduced to 7 percent, down from a peak of almost 27 percent in 1974. Similarly, inflation was reduced to 4 percent in 1999 following a peak of about 12 percent in 1994-95. Inflation averaged 3.5 percent during the growth spurt of the 1960s, 7½ percent during the one starting in 1977 and 5 percent during 2003-04. By comparison, inflation averaged 15 percent during 1971-76 and 10½ percent during 1991-98.

A World Bank study (2006) on growth determinants of Pakistan reports that economic growth increases with improvements in education, financial depth, trade openness, and public infrastructure. It decreases when governments impose excessive burdens on the private sector. Economic growth decreases when governments do no carry out policies conducive to macroeconomic stability. An increase in the inflation rate, the volatility of the output gap, real exchange rate over valuation or probability of financial crises all lead to a significant reduction in economic growth. The deterioration of world growth conditions between the 1970s and 1980s led to a decrease in a country’s growth rate of about 1.5 percentage points.

Comparing the changes in average per-capita GDP growth between the first year of the current decade (2001-05) and the previous decade (1991-2000) the regression model estimated that the increase in growth was due to a mild improvement in stabilization policies and most importantly to structural reforms and cyclical reversion. Within the group of structural reforms, the strongest contributions came from the improvement in public infrastructure, the reduction of the government burden and the expansion of trade openness with some progress in financial depth. In the category of stabilization policies, there was marginal improvement in lowering macroeconomic volatility and real exchange rate overvaluation.

Muslehuuddin (2007) in his study of the period 1983/84 to 1987/88 and 2002/03 to 2005/06 during which the economy exhibited strong growth averaging about 7 percent finds that the striking similarities between the two growth experiences in these two periods were driven by an improved policy stance and a favorable external environment. However, growth in the current period differs from the eighties in that present growth took place due to better macroeconomic fundamentals, structural reforms, institutions and governance and private sector dynamism.
SECTION – III

SOURCES OF GROWTH IN PAKISTAN.

Before the empirical studies on the sources of growth in Pakistan are discussed a question that needs to be addressed is; What drives changes in total factor productivity? A number of studies have found that FDI can contribute to TFP growth by facilitating technology transfer as well as better managerial and production practices in domestic firms. Higher trade openness may benefit TFP growth through efficiency gains from specialization, by enlarging the interaction with modern economies and raising the scope for learning-by-doing. Higher educational attainment could have an impact on TFP by improving the organization and internal management of enterprises and incorporating the latest techniques and tools of production.

Several studies have been carried out on sources of growth including total factor productivity in Pakistan in the recent years. Almost all these studies show that TFP growth was associated with high GDP growth rates. The decades of 1960s, 1980s and 2000s had relatively high TFP growth rates compared with the 1970s and 1990s. The former were characterized by above average growth rates of GDP. Kemal, Muslehuddin and Qadir (2002) carried out an analysis for the entire period 1964/65 – 2000/01 and also for each decade separately. Their findings presented in Table-IV show that almost one-third of the growth in GDP can be accounted for by increases in productivity. This is one of the reasons that despite lower investment rates Pakistan’s growth has been above average that of developing countries.

The IMF study (2005) covered the period 1960-2004 and also each of the decades of 1960s, 1970s, 1980s, 1990s and the four years of 2000s separately. This study (Table-V) also confirms that TFP growth has contributed almost one third to the growth of GDP. This contribution was more pronounced in the 1960s and 1980s relative...
to the 1970s and 1990s. The IMF study further isolated the impact of rainfall from TFP and inputs and found that good rainfall enhanced the contribution of TFP.

A World Bank study (2006) concluded that since the early 1960s, TFP has been an important contributing factor in Pakistan’s overall economic growth. The macro-level quantitative analysis indicates that TFP growth explains over 20 percent of the long-term GDP growth rate with the rest attributable to capital accumulation and labor force expansion. The results also indicate that TFP growth itself has been particularly strong in sub-periods where both microeconomic and macroeconomic dimensions of business environment have improved and political instability diminished. The study found that TFP growth was particularly strong in the 1980s explaining 38 percent of the GDP growth rate; after a fall in the 1990s it has rebounded in the current decade, accounting for nearly 23 percent of growth between 2001-2005.

Research carried out by Qazi Masood Ahmed and Kalim Bukhari at Social Policy and Development Center (SPDC) (2007) came to similar conclusions. Their results show that the contribution of TFP in achieving high growth varies from 5.6 percent in 1973-77 to 67.6 percent during 2003-06. During this most recent period the economic growth was mainly driven by the enhancement of TFP and the lower growth during the 1970s and the 1990s was mainly due to a massive decline in TFP whereas the high economic growth during the 1980s was to an extent equally contributed by inputs availability and TFP.

A study focusing on manufacturing sector (Table-VII) also points in the same direction. Growth of value added in manufacturing varied with the growth in sectoral TFP. In the decades with higher growth of manufacturing the contribution of TFP was quite significant and vice-versa.

Table-VI compares the TFP growth rates of Pakistan with several developing countries. Except Thailand, Pakistan has done remarkably well.

Srinivasan (2005) rightly points out that all TFP growth estimates without exception are highly sensitive to the data used and above all to the methodology of estimation. For example, different authors use different real GDP growth data-some using constant domestic price based values and others who use purchasing power parity based data. Also strong maintained assumptions are made in the empirical analysis about production functions and the statistical properties of the disturbance terms that are essential components of the model used for estimation.

Errors of measurement can also lead to substantial errors in the estimated residual. The informal sector economic activity that is quite significant has not been fully accounted for and can cause measurement error. Similarly, the improvement in the quality of labor force over time is not captured in the labor input measure.
SECTION – IV

GROWTH, POVERTY AND INEQUALITY

How has growth affected incidence of poverty in Pakistan? The earliest published data on poverty incidence available pertains to 1963/64 and therefore it is difficult to estimate as to what proportion of population was living below poverty line at the time of independence. As the provinces constituting Pakistan were relatively backward compared to provinces inherited India and a large migration of refugees facing dire economic conditions took place in the early years of its formation it may be safe to guess-estimate that 50-60 percent of the population was living below poverty in 1950. The most recent survey carried out in 2004/05 indicates that this proportion has halved to 24 percent although the absolute number of the poor today exceeds the entire population of the country in 1947.

Table-VIII shows that income poverty levels in Pakistan have fluctuated widely. Although poverty declined from 40 percent in 1963/64 to 17 percent in 1987/88 it rose both in the decades of 1960s and 1990s. In the decade of 2000s there is once again a downward movement. The data limitations and the weaknesses of estimation methods for the 1960s have made it difficult to repose confidence in the intra-decade results which may be not strictly comparable. For example, a consistent time series constructed by Ali and Tahir (1999) on household count index rather than head count index contradicts the trend of increasing poverty for the 1960s and shows an unchanged level of poverty.

The results presented in this table should be taken with some caution. A consistent time series of changes in poverty measures for Pakistan is difficult to construct as there has been a major restructuring of Household and Income Expenditure Surveys (HIES) questionnaires sample sizes, and sampling methodologies. The surveys prior to the 1990s and the estimates derived from these surveys are not directly comparable.

While poverty levels may have declined the social indicators have not kept pace with income growth. Pakistan ranks 134th in Human Development Index among a group of 177 countries and the value of index is 0.539 – slightly above the Low Human Development Index cut off point. Almost one half of the population is illiterate and only one – third of female population is literate. More than one half of the population does not have access to decent health facilities. Infant mortality rate of 80 per thousand is still very high. The health status of women and children is particularly low. Female labour force participation rates are lowest among with South Asian countries. Table-IX shows the changes in Human Development Indicators between 1960 and 2004. The progress has clearly faltered in comparison to countries with similar per-capita incomes and growth rates. An above average growth in GDP and per-capita incomes was achieved with below average improvement in human development indicators.
Rapid growth has been found to be associated with poverty reduction in cross-sectional empirical studies of large samples of developing countries. The evidence in Pakistan for the 1980s and 2000s does corroborate this finding as high growth rates of over 6 percent in this period had resulted in decline in incidence poverty. What is surprising, however, is that the data shows a decline in poverty in 1970s when annual growth rate was 4.8 percent i.e. below the trend. In this period income inequality as measured by Gini co-efficient also increased. Considering the Growth-equity decomposition equation it seems odd that poverty is declining when both components – growth rates and income distribution are worsening. It may be argued that pro-poor policies pursued by the Bhutto Government in 1970s may have created conditions whereby the benefits of growth had reached the poor. Some of these who were previously marginalized- small farmers, small enterprises, labour – may have improved their incomes disproportionately to lift themselves out of poverty. Public policies of redistribution may have been successful in short term although it may have caused adverse impact on economic incentive structure in the long term.

Whereas the empirical evidence about the relationship between rapid growth and poverty reduction is quite clear the same cannot be said about growth and income distribution. A recent IMF study (2007) documents the rise in income inequality in most countries over the past two decades of fairly robust growth. The analysis found that technological progress has had a greater impact than globalization on inequality within countries. Whereas trade globalization is associated with a reduction in inequality, financial globalization and foreign direct investment in particular are associated with an increase in inequality.

The long-term trends of economic growth, poverty and inequality for Pakistan are presented in Table-X The picture is highly ambiguous as income inequality has declined and increased during periods of high growth. There is however a consistent pattern that shows income inequality does increase when the growth rates are low. Rural – urban income disparities have also risen in the 2000s a period of high growth. In the early 1990s the difference in poverty level between urban and rural areas was 8 percentage points which has widened to 13 percentage points by 2004/05 (Graph-II). Despite remarkable reduction in poverty – almost 10 percentage points in a relatively short period of time there has been an increase in income inequality as well as urban-rural disparities. Pakistan has the lowest rate of female participation in economic activity among South Asia Countries.

SECTION – V

LESSONS FROM PAKISTAN’S EXPERIENCE

There are several lessons that can be drawn from this review of Pakistan’s long term growth experience. These are:
First, high growth rates are associated with high growth in TFP and therefore explain the paradox of relatively low investment ratios and high GDP growth rates. The observed low aggregate Incremental Capital output ratios reflect this high productivity effect.

Second, Pakistan’s per capita income would have been much higher if the country had made adequate investment in human capital – education, literacy, health, population planning etc. The low female participation rates in labor force have also inhibited the full exploitation of the existing human capital.

Third, the episodes of high growth rates in Pakistan are also the periods during which the incidence of poverty declines while it resurfaces when the economy is growing below the trend line. Public policies can alter the pattern of growth to pre-poor.

Fourth, the income inequalities and urban-rural disparities have widened in Pakistan despite solid economic performance. A better income distribution can promote social cohesion and regional balance.

**SUSTAINING THE GROWTH MOMENTUM**

Pakistan is still a low income country and it would require at least next 14 years of 5 percent average annual per-capita income growth to double it to around $2000 (official exchange rate conversion). This growth rate should also be able to reduce the incidence of poverty by half and meet the Millennium Development Goal. How can this growth rate be achieved on a sustained basis in a non-inflationary way? Inflation hurts the poor more than other income groups and thus the pattern of growth matters. The main preconditions for sustaining growth momentum in the future are:

(a) favorable global economic conditions  
(b) successful integration of Pakistan into the global economy  
(c) Pursuit of sound, credible and consistent economic policies  
(d) strong institutional delivery and governance framework  
(e) investment in physical infrastructure and human development and  
(f) Continued political stability and peaceful security conditions.

Pakistan has made a lot of strides in turning around its economy since the beginning of this decade. The reforms initiated since 2000 had put Pakistan back on its historic growth trajectory, revived investors’ confidence and developed resilience to face exogenous shocks. While Pakistan did well but other countries did even better. Thus the catch up process for Pakistan is becoming tougher every day. The latest example is that of Viet Nam which has overtaken Pakistan in the race towards integration into the global economy.
Structural reforms in the areas of financial sector, tariff and tax administration, privatization of state-owned enterprises, creation of an enabling environment for private sector, liberalization of foreign exchange and foreign direct investment, market orientation and openness to the global economy have brought about at least 2 percentage point increase in total factor productivity. If this hypothesis is found to be empirically valid then the output potential of Pakistan’s economy should have risen from 5 to 7 percent annual growth. The cyclical fluctuations around this mean would either result in lower or higher actual outcomes depending on the agriculture production variability, external economic environment such as prices of oil and commodities or demand for Pakistani products, macroeconomic stability etc. It would therefore be fair to surmise that the growth rates should range between 6 to 8% annually in the next decade if Pakistan gets back to its growth trajectory sooner than later and all other things remained constant. Let us analyze the preconditions for future growth in Pakistan.

First, how far the global economic conditions would remain favorable for Pakistan? The global economy despite the recent financial turbulence in the US mortgage market remains buoyant at present and has never had such sustained high growth. Of course, the US is the main driver of the world economy but the relative share of emerging countries particularly China and India is on incline. The decoupling of the emerging economies from the US has not yet been fully tested and proven and therefore the risks to the global economy cannot be ignored. Most analysts, however, believe in soft landing and continuation of a benign environment from which emerging countries can derive benefits.

Second, the speed at which Pakistan successfully integrates into the global goods, services, financial and labor markets will determine the extent of benefits to the external sector. For the last two years exports have been stagnating showing a declining share in the buoyant world market. Diversification of exports in composition as well as markets is badly needed to capture the lost market share. Attention to labour productivity, efficiency within the firm and plant, aggressive marketing and research and development should replace the traditional mode of the private firms looking to the Government for concessions and subsidies. The business as usual, would be highly detrimental to inculcating private sector dynamism and innovation.

Third, the policy makers in Pakistan should steadfastly persevere in pursuing sound, credible and consistent economic policies. Fragmented, parochial and turf protecting decision making should give way to a more collegial and collaborative process. Fiscal Responsibility Law would certainly act as a safeguard against excessive borrowing but there are many other policy lapses or delayed responses which can do harm. For example, extra-budgetary and contingent liabilities of public sector corporations can create fiscal stress and should be carefully managed.
Fourth, the intermediation between good policies and their impact on the lives of the majority of citizens takes place through strong institutions and well functioning governance structure. Devolution of powers to local governments has been one of the significant hall marks of the recent times in Pakistan but the lingering reluctance to part with powers by the Provincial Governments, the absence of supporting infrastructure, lack of capacity building at lower levels, clogging of systems and outdated procedures are some of the constraints that have not made this tier of government effective so far. Civil Services have to be strengthened and made more responsive to meet the needs of the common man and carry out the basic functions of the State impartially, transparently and efficiently. Accountability for results has to be built in the system rather than extraneously enforced. Most of our key institutions have lost their way and have to be brought back to their original track.

Fifth, supply of critical infrastructural facilities such as power, natural gas, pipelines and storages, roads and railways, urban mass transit, water supply and sewerage, ports and civil aviation have not kept pace with the growing demands of the industry, commerce and general public. Government, despite increased development expenditure outlays, would not be able to meet this demand in any meaningful way. Public-private partnerships in both capital investment as well as operations and maintenance would have to be put in place.

The way the skills, technology and innovation are changing the competitive advantages of nations Pakistan would have to redouble its efforts in the fields of education, skill up-gradation, science and technology. Raising the average years of schooling received by Pakistan’s population of 15 years and older from 3.5 years to 5.5 years i.e to the levels of countries such as Thailand or Venezuela would result in real per-capita growth rate by ½ percentage points per year. Investing in human capital through better education and health care also benefits the poor directly by improving their current living conditions. Although a beginning has been made in higher education the state of scientific research organizations in the country is simply pathetic. The whole governance and incentive structure of these organizations needs to be revamped to bring them at par with at least China and India.

The pace at which Gwadar Port can be made fully operational and linked with the transport network of Central Asia Republics and Western China will determine the accrual of additional economic gains to Pakistan in the coming decade. The sooner this network becomes effective and the National Transport Corridor network is completed the economy should be able to extract benefits of at least another half to one percentage point of GDP. The on-going public and private investment projects such as construction of new dams and reservoirs, rehabilitation of canals, barrages and lining of water courses, new power generation plants, Iran – Pakistan gas pipeline, Liquefied Natural Gas, oil refinery at Khalifa point, extensive road network in Balochistan, new science and engineering universities, up-gradation of the quality of technical and vocational education,
mass transit systems in Karachi and Lahore, and other projects if completed on time would give a big boost to the economy overcoming some of the supply-demand gaps.

Sixth, the continuation of political stability and a predictable, orderly and constitutional transition of power from one regime to the other would add a lot of strength to Pakistan’s economic prospects. The risks associated with an uncertain political transition process would be mitigated if different political parties take over the reigns of the government at predetermined regular intervals of time through fair and transparent electoral process. Fortunately, the thrust of economic policies of all leading political parties in the country is much the same but this positive aspect has been lost in the loud noise of political bickerings, venomous rivalries and unwarranted accusations against each other. The links between political stability, economic growth and social cohesion are mutually reinforcing and need to be further nurtured and developed in Pakistan. The lessons of the 1990s should clearly teach us that the gains achieved so far can be reversed if we do not manage our political governance with tolerance, a healthy respect for dissent and differences of opinion, and reliance on institutions rather than personalities.

Pakistan is facing serious problems of internal and external security. Law and Order situation has worsened in some parts of the country more than others. A reversion to normalcy in the security conditions of the country would reassure the investor community and help the mobility of factors of production. Foreign buyers and technical personnel are reluctant to visit Pakistan at present. Improved security would allow their free movement in and out of the country.

Raising investment in physical capital particularly water and power management, better education and health care and improvements in institutional quality will have the largest pay off in terms of increased growth and reduced poverty. An increase in Pakistan’s investment ratio by 5-6 percentage points could result in an increase in the country’s annual real per-capita GDP growth of about 1 percentage point. The pace of economic growth can be raised by ½ percentage point further by improving the score of institutional quality by 1 point. Pakistan not only has to raise its investment rate but the quality of its institutions as well as health and education indicators to levels achieved by Malaysia, Thailand and Singapore if it wants to emulate the stellar growth performance achieved by these countries. To achieve the higher investment rate, tax revenue yield has to be raised to provide the fiscal space needed for social and infrastructure spending while reducing the debt to GDP ratio. Pakistan has a low revenue – GDP ratio compared to countries in the same per-capita GDP range. Base broadening and better taxation of agriculture and service income could yield more than 2 to 3 percent of GDP increase in revenues.

What are the downside risks and upside gains of the above scenario? The planners and policy makers should keep in mind that growth and integration in the world economy will create painful transitions, dislocations of the existing structures, losses
of jobs and increased pressures on urban centres through migration. There will be many losers who will resist implementation of some of these essential preconditions. If the policy makers give into these pressures the outcome will be disastrous.

In some intervening years, natural or manmade disasters may further exacerbate the situation and lower growth hurting the poor and vulnerable. On the other hand, peace and normalization of relations with the neighboring countries may provide some additional economic dividends. If this happens the spill over effects from the two neighboring giant economies – China and India – will have positive impact on Pakistan. Free trade agreements with China and SAARC countries could boost our domestic economy as well as our international trade. Pakistani firms will then be able to fit into the global supply chain of Chinese industry. However, continuation of tensions and sporadic or intermittent episodes of war or war like situations may strike a serious blow to this benign scenario and slow down the pace of economic growth and poverty reduction.

The future economic prospects of Pakistan look promising but their actual realization would depend upon a number of critical factors such as benign global economy, successful integration of Pakistan into the global economy, sound macroeconomic policies, strong institutional and governance framework, investment in infrastructure and human development and political stability. Under a constellation of these favorable conditions, it should be possible to add 2 to 5.5 percentage points to the current trend growth rate of 6.5-7 percent and for per-capita income to double to $ 2000 by 2020 and to reduce the incidence of poverty by half by 2015.

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The World Bank (2005), Economic Growth in the 1990s: Learning from a Decade of Reforms (Washington DC, World Bank)
## TABLE – I
### GDP GROWTH RATES

<table>
<thead>
<tr>
<th>Period</th>
<th>GDP growth rates</th>
<th>Change in Per Capita Income (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-51 to 1959-60</td>
<td>3.5%</td>
<td>$ 91 to $ 175</td>
</tr>
<tr>
<td>1960-61 to 1970-71</td>
<td>6.1%</td>
<td>$ 175 to $ 213</td>
</tr>
<tr>
<td>1971-72 to 1979-77</td>
<td>4.2%</td>
<td>$ 213 to $ 395</td>
</tr>
<tr>
<td>1977-78 to 1987-88</td>
<td>6.6%</td>
<td>$ 395 to $ 453</td>
</tr>
<tr>
<td>1988-89 to 1998-99</td>
<td>4.4%</td>
<td>$ 563 to $ 925</td>
</tr>
<tr>
<td>2001-02 to 2006-07</td>
<td>6.1%</td>
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</tbody>
</table>

## TABLE – II
### PER CAPITA GROWTH RATES

<table>
<thead>
<tr>
<th>Period</th>
<th>GDP growth rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960s</td>
<td>3.6</td>
</tr>
<tr>
<td>1970s</td>
<td>1.5</td>
</tr>
<tr>
<td>1980s</td>
<td>3.0</td>
</tr>
<tr>
<td>1990s</td>
<td>1.9</td>
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<td>2000-2007</td>
<td>4.0</td>
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## TABLE – III
### TRENDS IN GDP GROWTH RATES

<table>
<thead>
<tr>
<th>Period</th>
<th>GDP</th>
<th>Agriculture</th>
<th>Industry</th>
<th>Manufacturing</th>
<th>Services</th>
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<tbody>
<tr>
<td>1950s</td>
<td>3.5</td>
<td>1.7</td>
<td>8.2</td>
<td>7.7</td>
<td>3.1</td>
</tr>
<tr>
<td>1960s</td>
<td>6.8</td>
<td>5.1</td>
<td>10.9</td>
<td>9.9</td>
<td>6.7</td>
</tr>
<tr>
<td>1970s</td>
<td>4.8</td>
<td>2.4</td>
<td>6.1</td>
<td>5.5</td>
<td>6.3</td>
</tr>
<tr>
<td>1980s</td>
<td>6.5</td>
<td>5.4</td>
<td>7.6</td>
<td>8.2</td>
<td>6.7</td>
</tr>
<tr>
<td>1990s</td>
<td>4.6</td>
<td>4.4</td>
<td>4.3</td>
<td>4.8</td>
<td>4.6</td>
</tr>
<tr>
<td>2000-06</td>
<td>5.4</td>
<td>2.2</td>
<td>7.4</td>
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<td>5.9</td>
</tr>
<tr>
<td>1950-2006</td>
<td>5.2</td>
<td>3.7</td>
<td>7.3</td>
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## TABLE – IV
### TRENDS IN TFP
**1964-65 to 2000-01**

<table>
<thead>
<tr>
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<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Overall GDP</td>
<td>5.31</td>
<td>2.48</td>
<td>1.17</td>
<td>1.66</td>
<td>3.4</td>
<td>0.8</td>
<td>2.5</td>
<td>0.8</td>
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<tr>
<td>Agriculture</td>
<td>3.89</td>
<td>2.70</td>
<td>0.82</td>
<td>0.37</td>
<td>4.0</td>
<td>2.0</td>
<td>Neg.</td>
<td>1.5</td>
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<tr>
<td>Manufacturing</td>
<td>6.39</td>
<td>2.23</td>
<td>0.94</td>
<td>3.21</td>
<td>4.3</td>
<td>2.0</td>
<td>5.4</td>
<td>1.6</td>
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<tr>
<td>Aggregate growth</td>
<td>46.6</td>
<td>22.1</td>
<td>31.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture growth</td>
<td>69.3</td>
<td>21.1</td>
<td>9.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing growth</td>
<td>35.0</td>
<td>14.8</td>
<td>50.3</td>
<td></td>
<td></td>
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</table>

Source: Kemal, Muslehuddin and Qadir (2002)
### TABLE – V

**PAKISTAN: GROWTH ACCOUNTING**

<table>
<thead>
<tr>
<th></th>
<th>60-04</th>
<th>60.69</th>
<th>70-79</th>
<th>80-89</th>
<th>90-99</th>
<th>00-04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth</td>
<td>5.4</td>
<td>6.31</td>
<td>4.9</td>
<td>6.3</td>
<td>4.4</td>
<td>4.5</td>
</tr>
<tr>
<td>Capital</td>
<td>1.9</td>
<td>2.1</td>
<td>1.8</td>
<td>1.9</td>
<td>1.9</td>
<td>1.6</td>
</tr>
<tr>
<td>Labour</td>
<td>1.8</td>
<td>1.6</td>
<td>2.0</td>
<td>1.8</td>
<td>1.7</td>
<td>2.0</td>
</tr>
<tr>
<td>TFP</td>
<td>1.7</td>
<td>2.6</td>
<td>1.1</td>
<td>2.6</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Labour</td>
<td>1.7</td>
<td>1.5</td>
<td>1.9</td>
<td>1.6</td>
<td>1.6</td>
<td>1.9</td>
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<tr>
<td>TFP</td>
<td>1.6</td>
<td>2.9</td>
<td>0.9</td>
<td>2.5</td>
<td>0.7</td>
<td>0.6</td>
</tr>
<tr>
<td>Rainfall</td>
<td>0.2</td>
<td>0.1</td>
<td>0.4</td>
<td>0.2</td>
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</table>

Source: IMF (2005)

### TABLE – VI

**INTERNATIONAL TFP COMPARISONS**

<table>
<thead>
<tr>
<th>Country</th>
<th>TFP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>1.70</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>0.33</td>
</tr>
<tr>
<td>Srilanka</td>
<td>1.25</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.80</td>
</tr>
<tr>
<td>Malaysia</td>
<td>0.90</td>
</tr>
<tr>
<td>Philippine</td>
<td>0.40</td>
</tr>
<tr>
<td>Thailand</td>
<td>1.80</td>
</tr>
<tr>
<td>Korea</td>
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Source: Collins & Bosworth

### TABLE – VII

**TRENDS IN TFP IN MANUFACTURING**

<table>
<thead>
<tr>
<th></th>
<th>VALUE ADDED</th>
<th>K</th>
<th>L</th>
<th>TFP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964/65 to 2000/01</td>
<td>6.4</td>
<td>2.2</td>
<td>0.9</td>
<td>3.2</td>
</tr>
<tr>
<td>1964/65 to 1969/70</td>
<td>9.0</td>
<td>3.0</td>
<td>1.8</td>
<td>4.3</td>
</tr>
<tr>
<td>1970/71 to 1979/80</td>
<td>5.5</td>
<td>2.0</td>
<td>1.4</td>
<td>2.0</td>
</tr>
<tr>
<td>1980/81 to 1989/90</td>
<td>8.1</td>
<td>2.1</td>
<td>0.6</td>
<td>5.4</td>
</tr>
<tr>
<td>1990/91 to 2000/01</td>
<td>4.0</td>
<td>2.1</td>
<td>0.2</td>
<td>1.6</td>
</tr>
</tbody>
</table>
### TABLE – VIII
GROWTH AND POVERTY

<table>
<thead>
<tr>
<th></th>
<th>63/64-69/70</th>
<th>71/72-76/77</th>
<th>76/77-87/88</th>
<th>87/88-92/93</th>
<th>92/93-98/99</th>
<th>98/99-01/02</th>
<th>01/02-04/05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth rate of GDP</td>
<td>7.16</td>
<td>4.83</td>
<td>6.66</td>
<td>4.82</td>
<td>4.22</td>
<td>3.16</td>
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<tr>
<td>Growth rate of Labour</td>
<td>1.67</td>
<td>3.49</td>
<td>2.54</td>
<td>1.85</td>
<td>3.61</td>
<td>2.48</td>
<td></td>
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<tr>
<td>Force</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Growth rate of</td>
<td>1.49</td>
<td>3.37</td>
<td>2.49</td>
<td>1.52</td>
<td>3.40</td>
<td>1.61</td>
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<tr>
<td>employment</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes in Poverty level</td>
<td>46.53</td>
<td>30.68</td>
<td>17.32</td>
<td>22.40</td>
<td>32.6</td>
<td>32.1</td>
<td>24.0</td>
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</table>

Source: Kemal et al (2002)

### TABLE – IX
TRENDS IN HUMAN DEVELOPMENT

<table>
<thead>
<tr>
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<th>1960</th>
<th>2004</th>
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</thead>
<tbody>
<tr>
<td>Human Development Index</td>
<td>0.183</td>
<td>0.539</td>
</tr>
<tr>
<td>Life expectancy (years)</td>
<td>43</td>
<td>63</td>
</tr>
<tr>
<td>Gross enrolment ratio for all levels</td>
<td>19(1980)</td>
<td>38</td>
</tr>
<tr>
<td>Adult Literacy rate</td>
<td>21(1970)</td>
<td>50</td>
</tr>
<tr>
<td>Infant Mortality rate</td>
<td>139</td>
<td>80</td>
</tr>
<tr>
<td>Fertility rate</td>
<td>7.0</td>
<td>4.1</td>
</tr>
<tr>
<td>Under weight children (% under age 5)</td>
<td>47(1975)</td>
<td>38</td>
</tr>
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</table>

Source: Human Development in South Asia (2007)

### TABLE - X
ECONOMIC GROWTH, POVERTY AND INEQUALITY

<table>
<thead>
<tr>
<th>Decade</th>
<th>Economic growth</th>
<th>Poverty</th>
<th>Inequality</th>
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</thead>
<tbody>
<tr>
<td>1960s</td>
<td>High</td>
<td>Increased</td>
<td>Declined</td>
</tr>
<tr>
<td>1970s</td>
<td>Low</td>
<td>Decreased</td>
<td>Increased</td>
</tr>
<tr>
<td>1980s</td>
<td>High</td>
<td>Decreased</td>
<td>Declined</td>
</tr>
<tr>
<td>1990s</td>
<td>Low</td>
<td>Increased</td>
<td>Increased</td>
</tr>
<tr>
<td>2001-2006</td>
<td>High</td>
<td>Decreased</td>
<td>Increased</td>
</tr>
</tbody>
</table>

GRAPH - I
INCOME POVERTY: LEVELS AND TRENDS

Trends in poverty in Pakistan


GRAPH - II
RURAL - URBAN DISPARITIES

Trends in Urban and Rural poverty, 1992-2005
Based on official poverty lines
Source: MHDC 2007 “Human Development in South Asia 2006”

GRAPH - III
DISPARITIES AMONG PROVINCES

Provincial disparities in poverty

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
<th>Urban</th>
<th>Rural</th>
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</thead>
<tbody>
<tr>
<td>2000-01</td>
<td>32.2</td>
<td>23.2</td>
<td>35.8</td>
<td>20.1</td>
<td>45</td>
<td>41.3</td>
<td>29</td>
<td>43.4</td>
<td>35.5</td>
</tr>
<tr>
<td>2004-05</td>
<td>29.7</td>
<td>20.6</td>
<td>33.9</td>
<td>22.4</td>
<td>14.3</td>
<td>28.4</td>
<td>38.9</td>
<td>26.5</td>
<td>41.4</td>
</tr>
</tbody>
</table>

Source: Anwar 2006

- NWFP has highest poverty levels followed by Balochistan, Punjab and Sindh in 2004-05
- As compared to 2000-01, poverty incidence has improved both in urban and rural areas in all provinces. Poverty has declined significantly in rural Sindh.
KNOWLEDGE IS ALL

The next society will be a knowledge society. Knowledge will be its key resource, and knowledge workers will be the dominant group in its workforce. Its three main characteristics will be,

- Borderlessness, because knowledge even more effortlessly than money.
- Upward mobility, available to everyone through easily acquired formal education.
- The potential for failure as well as success. Anyone can acquire the “means of production,” i.e., the knowledge required for the job, but not everyone can win.

- Peter Drucker