

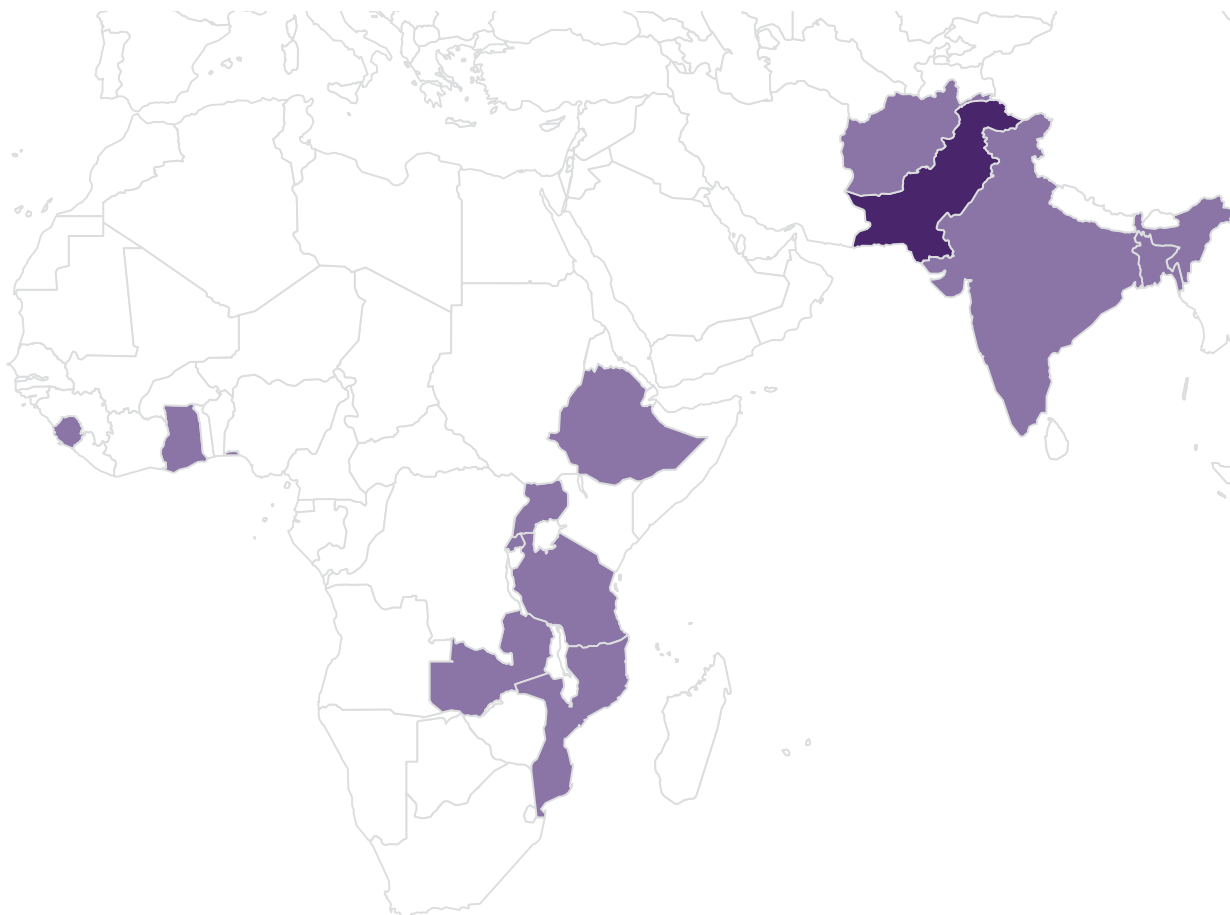
Economic Growth and Structural Change in South Asia: Miracle or Mirage?

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List of Abbreviations

- APP:** Associated Press of Pakistan
BoP: Balance of Payments
CENTO: Central Treaty Organization
EPW: Economic and Political Weekly
FDI: Foreign Direct Investment
GDP: Gross Domestic Product
ICT: Information and Communication Technologies
IIT: Indian Institutes of Technology
IMF: International Monetary Fund
ISI: Import substitution industrialization
IT: Information Technology
MAF: Million Acre-feet
MDG: Millennium Development Goal
MGI: McKinsey Global Institute
MOF: Ministry of Finance
NEG: New Economic Geography
NGO: Non-governmental organization
SAFTA: South Asian Free Trade Agreement
SEATO: Southeast Asia Treaty Organization
UP: Uttar Pradesh
WTO – World Trade Organization

Economic Growth and Structural Change in South Asia: Miracle or Mirage?

Executive Summary

An assessment of recent economic growth

Economic growth in India, Pakistan and Bangladesh, the three largest economies of South Asia, jumped from an average of 5 percent in the 1990's to well above that in 2000-2008. Shortly before the onset of the global financial crisis in 2008, India's growth rate was a staggering 9 percent and Pakistan, Bangladesh and Sri Lanka's around 7 percent. These growth rates were all the more impressive because they were accompanied by a substantial reduction in poverty. Over a 10 year period, poverty declined 10 percentage points or more in India, Pakistan and Bangladesh. Even Nepal saw a decline in poverty of similar magnitude despite relatively weak economic growth because of political difficulties.

The economic outcomes were remarkable considering that South Asia faced many of the development conundrums that countries in Africa had faced. India, Pakistan, Sri Lanka had large fiscal deficits, all of South Asia but especially Bangladesh, ranked high on corruption indices, civil conflict raged in much of South Asia, Maldives and Bhutan showed syndromes of enclave economies and macro-economic instability threatened several countries. And yet, South Asia managed to overcome the constraints. Bangladesh provided exemplary social services by encouraging domestic NGO's. Sri Lanka protected the Western Province from conflict and enabled it to enjoy the rewards of economic liberalization. Nepal opened up alternative, more lucrative, avenues of income earning via overseas migration. India kept a lid on inflation and interest rates despite the high fiscal deficits and Pakistan soared as soon as the credit crunch was relaxed in 2002.

The encouraging outcomes on growth and poverty fuelled optimism regarding South Asia's economic prospects. Growth scenarios ranged between the modest claims of meeting the millennium goals of human and economic development to the more self-congratulatory chest-thumping about this being South Asia's century. These, on the one hand, translated into the laudable objective of reducing poverty to single digits within a decade, and on the other, to assertions that the ancient wisdom of the region would show a new path of development to the rest of the world.

There were some lingering doubts, however. One was about growing regional inequality associated with the rapid growth of the previous decade. In India, seven states with per capita GDP less than the national average had income levels half those of the seven states with higher than national average GDP per capita. Population weighted average per capita GDP in the populous Indian states of Bihar and UP was about a third of the weighted average for the four southern states: Tamil Nadu, Karnataka, Andhra Pradesh and Kerala. Even more alarming was the fact that the income gap between the richer and the poorer states was widening; the richer states were growing at twice the rates of the poorer states. In Pakistan's Punjab, poverty incidence in the richer northern districts at 30

percent was considerably lower than in the poorer southern districts (40 percent). Furthermore, the significantly lower primary school enrolments in the southern districts (60 percent) compared to the northern districts (108 percent) implied that in the coming years regional income gap was likely to widen further.

Poor education outcomes give rise to other reasons to worry about sustaining Asia's growth. South Asia's gross education enrollment rates, average years of schooling, indicators of trainability of workers to enhance economy-wide productivity and international competitiveness are considerably lower than the East Asian countries (Sri Lanka being an exception). On infrastructure comparisons (for example, in electric power consumption per capita and container traffic), another driver of international competitiveness, also South Asia fared a lot poorer than East Asia. These, in part, not only explain the much lower share of trade to GDP ratio in South Asia compared to East Asia, but also highlight the much smaller proportion of high technology products in South Asia's merchandize exports compared to East Asia's.

Remittances and structural change

Clearly, South Asia's growth trajectory has been different from East Asia's manufactured export-led growth. One important difference is that in East Asia, growth was foreign investment driven while in South Asia worker remittances have been the largest source of external flows into the region (15 percent of GDP in Nepal, 10 percent in Bangladesh and Sri Lanka and 4 percent and 3 percent respectively in India and Pakistan). In all South Asian economies remittances are considerably larger than the combined financial inflows associated with foreign investment and concessionary official assistance.

Remittances have been a mixed blessing for South Asian economies. On the positive side, remittances have flown into depressed regions of South Asia and to the poorer households (for that is where migrants originate as they seek to improve living standards in employment overseas). This is mainly why poverty has fallen sharply throughout South Asia, even in Nepal which experienced low GDP growth rates due to political instability.

On the other hand, remittances have fueled a massive consumption boom in South Asia. In the mid-2000's the region ran up a trade deficit of \$50 billion annually. Associated with remittances and the bonanza in imported consumer goods has been the rapid growth of the domestic retail, financial services, telecommunications and construction activity. Put differently, the accumulation of reserves has prevented currency adjustments to wipe out the trade deficit. Instead, the adjustment has happened in terms of the evolving structure of the economy whereby services have become the dominant economic activity in South Asia.

In East Asia, foreign investment driven and merchandize export-led growth resulted in a large number of workers moving from low productivity, low wage agricultural jobs to higher productivity, higher wage manufacturing jobs. The share of agriculture in national

GDP and employment fell while that of manufacturing increased. In South Asia, on the other hand, rapid growth up to 2008 resulted in decline of agriculture in the economy but an increase in the share of services in GDP while manufacturing has shown little dynamism in terms of capturing international markets and creating employment opportunities.

South Asia's services-led growth: a new growth paradigm?

India's modern services sector is often cited as the harbinger of a new South Asian services-led growth paradigm. The implication is that modern services will drive productivity and employment growth in South Asia. And services-led sustained high growth will enable the region to eventually join the rank of middle-income countries and reduce poverty to single digits.

The composition of services in all South Asian economies has indeed improved with an increasing share of services now accounted for by "modern" services such as financial intermediation, communications and transport. This "splintering" of services made possible by information technology has created employment opportunities that are more productivity and command higher wages than employment in agriculture. This employment transition from agriculture to relatively modern services largely explains the recent high growth spurts in South Asian economies.

The central question, and one attempted in this monograph, is whether this services-led transition in employment can result in long term sustained high growth. This, in turn, depends on whether consumption-led growth, fueled by remittances, will sustain productivity growth and create enough employment opportunities in the services sector to absorb most of the working poor in South Asia over the next three to four decades. The burden thus is on continued high demand for modern services by households receiving remittances from members working overseas. This derived demand for services is subject to considerable uncertainty.

Alternatively, South Asia could export modern services in which case the South Asian growth paradigm is not all that different from East Asia's. The growth stimulus still comes from international trade but trade would be in modern services rather than in manufactured goods. India's recent phenomenal success in the export of IT services is cited as an example of how information technology enabled splintering of services has created a dynamic, internationally competitive growth node for the economy.

India's IT achievements are undoubtedly remarkable. Software production in India for the international market increased from US\$1.1 billion in 1996-97 to US\$23 billion in 2006. India now accounts for 60 percent of global outsourcing. Bangalore, Chennai, Hyderabad and increasingly New Delhi are at the center of the global "unbundling of the production process" whereby the parent firm located in the developed country unbundles its spatial value chain by outsourcing over great distances. Rapid technological change in telecommunications has allowed the validation of predictions of new economic growth models centered around economic geography.

None of the other South Asian economies, however, has achieved India's success in the export of computer and business services despite being as well endowed in terms of the enabling environment i.e. electrification rate, percentage of English speakers, broadband subscription etc. Furthermore, neither India nor the other South Asian economies have matched India's success in export of computer and business services in any other modern service.

In the context of the new South Asian services led growth paradigm, even India's success in global outsourcing falls far short of what is needed. Total employment in India's IT sector is still a small fraction of India's workforce. Growth in IT employment in the last decade does not promise the massive transition in the work force needed to sustain high transformational growth rates in the medium to long term.

A sectorally balanced growth framework

It is argued in this monograph that rather than being blind-sided by infatuation with South Asia specific growth paradigms, policy makers would do well to continue to give policy attention to all three sectors of the economy viz., agriculture, manufacturing and the services sector. Policy and institutional changes are needed in all three sectors, but especially in manufacturing, to reduce the glaring productivity gaps shown up in international comparisons. A sectorally balanced approach to development will ensure that growth is inclusive and resource efficient. This, in turn, will result in sustained high transformational growth in South Asia to reduce poverty to single digits and create a large and vibrant South Asian middle class.

Services

Services clearly have an important role in raising the overall productivity of the economy and thus contribute to sustained high growth. Demand side stimulus for productivity growth in most services (retail, transport, government services, banking etc) will come from income growth and to that extent services and income growth are inter-twined.

Further splintering of services, as in the case of IT services in India, will be needed for economy-wide productivity boost but that will require modernizing services by addressing supply side bottlenecks. This will require: a) better economic integration of low and high growth regions within countries by improving the flow of labor and capital across regions; b) upgrading of the skills of the workforce since modern services are human capital intensive; this, in turn, will require improving the quality of and enrollment in secondary and tertiary education; c) deepening of the telecommunication infrastructure to facilitate intensification of IT enabled services in the domestic economy; d) attracting investment, especially foreign investment, in domestic services to improve business practices; e) improving the quality standards in services such as tourism, health and education to attract overseas users; and finally, f) taking a more forward looking

stance on liberalization of services in international forums to make South Asia an important player in the global market for services.

Agriculture

However, services alone will not result in transformational growth rates. In 2007, on average, nearly 70 percent of South Asians lived in rural areas and nearly a third of them fell below the poverty line. Since half of those employed were engaged in agriculture, improving agricultural productivity and international competitiveness must remain an important policy focus to achieve sustained income growth and poverty reduction objectives in South Asia.

Agriculture's international competitiveness is driven by crop yields and in most international comparisons, crop yields in South Asia are substantially below those in comparable countries. Wheat yields in India and Pakistan are half those in China. Even in comparison with countries with similar ecological conditions, such as Indian and Pakistani Punjab and irrigated Egypt, crop yields are substantially lower in South Asia.

The rising trend in wheat and rice yields in India and Pakistan, but also other successful examples in South Asia, suggest however that considerable improvements in productivity and international competitiveness are possible. Bangladesh has strengthened food output that has helped reduce rural poverty and agricultural exports have responded well to policy reform. The Sri Lankan economy, in general, has responded well to policy reform but agriculture remains mired in a policy regime focused on autarky. In Nepal, oilseeds, potato, tobacco, sugarcane and jute yields increased significantly since 1991. Furthermore, South Asian farmers are beginning to find niches in potentially rewarding new crops. Examples are wine production in Maharashtra, India, and the export of Kinnow oranges from Sargodha, Pakistan. This evidence is indicative of the rich potential in South Asian agriculture.

The three critical challenges to realizing the agricultural potential are (i) water and land management, (ii) infrastructure development and crop research and (iii) intra-regional trade in agriculture.

Keeping in view future water shortages, South Asian governments have begun to formulate water management strategies. Government of Pakistan has produced a "Water Vision 2025" which is expected to increase water storage capacity by 64 million acre feet from the current 16 million acre feet. Water conservation that reduces the delivery losses through canals and water courses will increase water supply by 10-15 percent. The Government of Sri Lanka spent Rs 215 billion between 1980 and 1997 on irrigation infrastructure development including the Mahaweli River project and plans to do more.

Poorly defined land rights and inefficient landholding mean that land cannot be used collateral in the credit market to spur investment in agriculture. This needs to be addressed, especially in Pakistan, to allow land to be put to more productive use. In Sri Lanka, most land was state owned and was later transferred to agricultural laborers via

deed registration. This has resulted in equitable holdings but the holdings are too small and the deeds do not repose full ownership to enhance credit worthiness. This has discouraged the switch to efficient farming techniques.

Investment in infrastructure and research is essential to increase productivity of land. This includes farm-market roads, telecommunications, better functioning retail and wholesale markets and improved seeds. High yielding varieties are now being cultivated all over South Asia but recurrent problems such the mutation of pests to counter the immunity of genetically modified varieties requires that agricultural research stays abreast of field developments. This will require higher expenditure on research; the medium term target is an expenditure of 1-2 percent of GDP.

South Asia regional trade in agricultural commodities is a meager 4 percent of world-wide South Asia trade. India, by far the largest economy of the region, has the most protective agricultural trade regime. A lowering of trade barriers will result in a large increase in trade in agriculture and will spur agricultural productivity and incomes. With a more liberal trade regime for wheat and sugarcane, India and Pakistan would effectively manage their respective food security problems.

Manufacturing

Increase in productivity in agriculture and services will contribute to sustaining high growth and reducing poverty to single digits in South Asia. However, it is manufacturing that has the potential to create employment opportunities across a broad spectrum of technical skills corresponding to South Asia's workforce. Furthermore, export-led manufacturing creates investment and production linkages with potentially much larger and richer sources of world demand. This, in turn, generates opportunities for technical change in manufacturing that result in productivity and income growth for workers, and ultimately a transformational change in the economy.

By all accounts, manufacturing has not been the engine of growth it should be to enable South Asia to move to middle income status. Over three decades, between 1968 and 2001, manufacturing value added in Korea, Malaysia and Thailand increased by a factor of 40, 27 and 14 respectively. South Asian manufacturing, by contrast, was lackluster. In Pakistan, manufacturing value added in the same period increased by a factor of 7 and in India by a factor of 6. Furthermore, manufactures exports are dominated by one product group, textiles, despite that fact that the world demand for textiles is falling. Not surprisingly, therefore, the technology intensity of exports is low exposing South Asian products to intense competition from new entrants (e.g. Chinese textiles). The result is that employment in South Asia's manufacturing has stagnated.

It is encouraging that India is beginning to buck the South Asian trend in anemic performance in manufacturing. India's share of technologically intensive exports in total merchandize exports is five times higher than Pakistan and Sri Lanka's (but still six times lower than in China). Indian manufactured exports are beginning to be diversified as seen in the rising share of Indian pharmaceuticals, chemicals, iron and steel and

automotive parts in the international market. This trend needs to be strengthened by attracting more investment, especially, foreign direct investment in manufacturing, India's success will encourage other South Asian economies to emulate the example.

The policy framework

Attracting more investment in South Asian manufacturing will require addressing the overall policy framework that affects investment decisions. Key elements of that framework are: the exchange rate, credit allocation by banks, energy pricing, the quality of infrastructure, tax policies and labor market regulation.

High currency values and build up of reserves in South Asia, despite chronically large trade gaps, is explained by the inflow of remittances. Thus remittances result in a much higher equilibrium exchange rate than would be the case otherwise. This, in turn, results in loss of international competitiveness and discourages investment in manufactured exports, a variant of the well-known Dutch disease problem. The solution does not lie in devaluing South Asian currencies since the exchange rate is in equilibrium, albeit at a high value. But in ensuring that the rest of policy framework does not reinforce the Dutch disease problem associated with the exchange rate.

In varying degrees of success, South Asian economies have reformed their banking sector to inter-mediate more efficiently the large volumes of remittances inflows. None-the-less, Banks' lending portfolios are dominated by consumption and personal loans as opposed to lending to manufacturing and production.

Energy constitutes a significant cost of manufacturing. Its price and availability are thus important elements of competitiveness of manufacturing. The energy policy bias in South Asia is for protecting the residential consumer at the expense of manufacturing enterprises. The average power tariff paid by residential consumers in India, Pakistan, Sri Lanka and Nepal is substantially lower than that paid by industrial consumers. Furthermore, electricity rationing is more severe for manufacturing than for residential units. A similar bias is seen in the pricing and availability of natural gas.

The policy preference for consumption continues in the design of tax policy. Despite the fact that services have grown the fastest in South Asia and now account for the larger share of the economy, the bulk of tax is generated in the manufacturing sector. Furthermore, in India and Pakistan, the corporate income tax rate, treated here as a proxy for tax on manufacturing, is substantially higher than personal and sales tax rates. (In Thailand and China, on the other hand, the personal income tax rate is substantially higher than the corporate rate).

On infrastructure, the quality of passenger transportation, (railways and roads) is better and cheaper than the quality and cost of freight transport. Finally employment regulations inflict far greater employment rigidity on South Asian hiring enterprises compared to those in East Asia.

Addressing this broad policy framework is central to restoring competitiveness to manufacturing.

Strengthening internal security to support growth

Internal security poses serious challenges to South Asian economies and contributes to the loss of international competitiveness. Since the 1990's, there has been a sharp increase in violent incidents in the region. Iraq over took South Asia briefly as a result of the insurgency following US invasion. However since 2007, South Asia is again the most violent region in the world. In 1998, reported incidents of terrorist activity per capita were 0.6 and 0.7 per million in India and Bangladesh respectively. In 2007, they increased to 0.9 per million in India but doubled to 1.4 per million in Bangladesh. Pakistan, with its raging insurgency in the Northwest and Sri Lanka, with an escalation in incidents related to the civil war in the Northeast, saw dramatic increase in terrorist activity. In Pakistan, such violence shot up by a factor of 8 from 0.3 per 100,000 persons in 1998 to 2.4 in 2007. In Sri Lanka, the increase in the same period was from 0.8 per 100,000 to 1.8. The scale of increase in fatalities was similar.

The causes of violence are varied. In India, violence is ascribed to separatist movements, land distribution disputes and religious bigotry. In Bangladesh, violence has been spawned by religious fundamentalism and separatist movements. Sri Lanka has been subjected to virulent separatist violence and in Nepal its Maoist variety. Pakistan that has suffered the most in the region from internal insecurity is wracked by the religious/ethnic Pashtun insurgency in the North-West in sympathy with their cousins in Afghanistan and the separatist movement in Baluchistan.

Regardless of the nature of the conflict and its various manifestations, violence adds to the complexity of economic management in the region. In Sri Lanka, the loss of income associated with violence is estimated at 2 percentage points of GDP per annum. In Pakistan, the direct and indirect cost of terrorist activity in the five years 2002-3 to 2007-8, has been estimated at Rs 380 billion (US\$4.5 billion). Furthermore, there is evidence that increase in violent incidents is negatively correlated with foreign direct investment and exports and positively correlated, as in Pakistan, with remittances (to compensate from shrinking economic activity) and concessionary external flows (from partners in war on terror).

It appears therefore, that internal insecurity repels external flows that enhance international competitiveness (i.e. foreign direct investment) and attracts external flows (remittances and concessionary lending by donors) that retard international competitiveness, exacerbating the Dutch disease problem. In turn, this slows down productive employment generation that fuels insurgencies and internal insecurity. Thus, the arsenal for fighting terrorism must include a policy framework that corrects for these distortions and restores South Asia's international competitiveness for sustained growth and employment generation.

I. Introduction

For nearly two decades, until the onset of global financial crisis in 2008, South Asian economies enjoyed rapid growth and an impressive reduction in poverty. This fueled optimism about sustained high growth in the coming decade and the possibility of single digit poverty by the end of the period. It was stressed that policy reform would need to continue to strengthen governance, improve the business climate, upgrade education and attract investment in infrastructure. The fundamental growth paradigm, however, was deemed to be working well¹.

This paper re-examines the evidence on economic performance in South Asia and arrives at a different, more sobering, conclusion.

The rapid growth of South Asian economies in the last couple of decades has coincided with a surge in remittances. Although domestic remittances are substantial, it is remittances from nationals working abroad that have made the greatest impact on the economies. They constitute by far the largest form of external financial flows into South Asia and their impact on the balance of payments and the exchange rate is significant. They have also helped reduce poverty and improve income distribution. Importantly, they have spurred a huge consumption boom in the region.

South Asian economies have undergone a major structural change in the period coinciding with the surge in remittances and the consumption boom. The share of agriculture in the economy has fallen sharply. Manufacturing's share has increased but only modestly. Services, on the other hand, have soared and have now become the dominant sector in all of South Asia.

This structural change has profound implications for people employed in various sectors of the economy and their ability to climb out of poverty. The principal question to ask is whether this structural shift results in people moving from low to higher productivity and higher wage employment and whether this trend can be sustained over the next three to four decades.

This, in turn, raises questions about whether such a structural shift is accompanied by increase in international competitiveness of the economy. This is critical to generate international demand for the region's products to sustain high economic growth. This approach to thinking about development is influenced by the experience of East Asian economies that successfully tapped into international demand, thereby sustaining growth in worker productivity and wages for several decades. Such sustained international "vents" for growth were central to the region's transformation from low to the middle income status.

¹ Shanta Devarajan and Ijaz Nabi, *Economic Growth in South Asia: Promising, Un-equalizing, Sustainable?*, Economic and Political Weekly, August 19, 2006.

Part I of the monograph reviews the principal economic trend in the South Asia. Chapter II reviews the achievements and the vulnerabilities associated with South Asia's recent growth experience. Chapter III examines the trends in remittances, the accompanying consumption boom and the impact this has on the structure of South Asian economies. Part II focuses on sectoral issues that affect productivity and growth outcomes in the region highlighting the salient policy issues. Chapter IV reviews progress in the services sector and identifies the challenges in sustaining the international competitiveness of South Asians services. Chapter V does this for Agriculture and Chapter VI for manufacturing. The discussion on manufacturing critically examines the policy framework embedded in the region's development strategy that has retarded the growth of manufacturing.

Most of South Asia is deeply affected by internal security problems. Major insurgencies are raging in nearly all the countries. Thus no discussion of South Asia's economic outcomes and prospects is complete without a review of internal security and how it impacts economic performance. This is done in the Appendix to contextualize the assessments presented in the monograph.

Part I: Growth, Remittances and Structural Change in South Asia

II. Recent economic growth in South Asia

South Asian Growth Trends

In the 1990's, South Asia's economic average annual GDP growth ranged between 4 percent (Pakistan) and 5.5 percent (India). Other than in Pakistan, that experienced severe balance of payments difficulties in the 1990's and the consequent disruption in economic performance, these growth rates were substantially higher than the respective countries' historical rates. In India, in particular, the growth spurt in the 1990's generated much interest as it was seen to have allowed India to finally break out of the confines of the so called, "Hindu" growth rate of 3-4 percent.

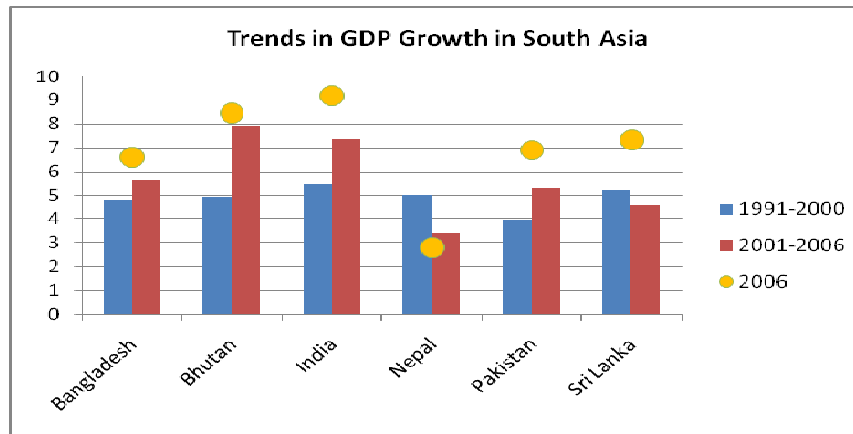
The following six years (2001-2006) further strengthened the trends of the 1990's. The growth in India for the period jumped by 2 percentage points to 7.5 percent. Pakistan too shook off the doldrums of the 1990's and experienced growth rate of 5.5 percent and higher and Bangladesh further consolidated its growth. Bhutan, a small economy, saw the most impressive increase in growth from 5 percent to nearly 8 percent. On the other hand, Sri Lanka and Nepal saw growth falter. In Nepal, growth fell to 3.5 percent from a respectable 5 percent in the 1990's. Sri Lanka also saw a weakening of growth from just above 5 percent in the 1990's to 4.5 percent in the latter period. Both Nepal and Sri Lanka were affected by seemingly intractable and vicious insurgencies.

Optimism about continued high growth in South Asia received another boost in 2006. India's growth rate jumped to the dizzying heights of 9 percent, Bhutan's to 8 percent, Pakistan and Sri Lanka's to over 7 percent and Bangladesh close to 7 percent. Only Nepal continued to falter due to increased political uncertainty.

A particularly promising aspect of South Asian economic growth in the 1990's was the impressive reduction in poverty (Figure 2). Other than in Pakistan, where growth was disrupted by the balance of payments crises in the 1990's (see box 1 below), and in Sri Lanka, due to the intensification of the ethnic conflict, most of South Asia experienced poverty reduction of 1 percent per annum or more.

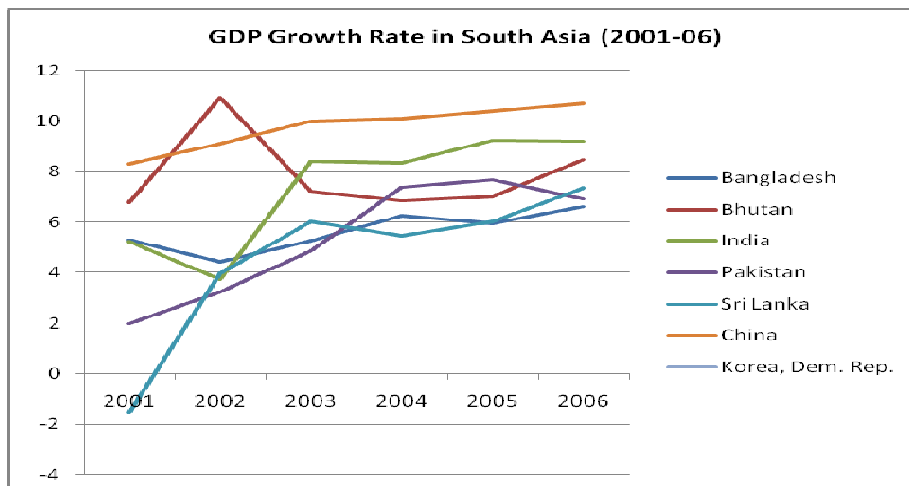
Thus it appeared that South Asia had finally arrived at the right formula for managing their economies. Not only was growth high and sustained, it was also reducing poverty. The stage was thus set for a spate of reports/papers predicting a future of prosperity for the region.

Figure II-1



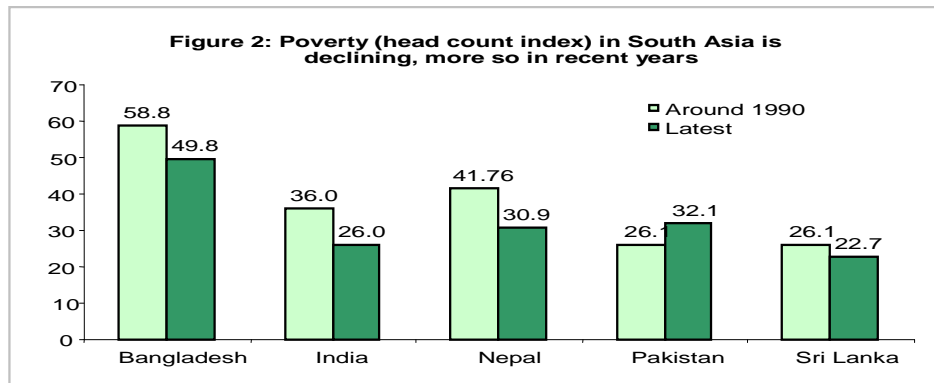
Source: World Development Indicators 2008

Figure II-2



Source: World Development Indicators 2008

Figure II-3



Source: Devarajan and Nabi (2006): “Economic Growth in South Asia: *Promising, Unequalizing, Sustainable?*”

Explaining South Asia’s Growth

South Asian surprises

South Asian growth has been explained in terms of overcoming the binding constraints to growth in other contexts and showing how the region overcame them (Shanta Devarajan, “South Asian Surprises”, EPW, August 2005). The binding constraints identified by researchers that have retarded growth in Africa are corruption (Nigeria saw a decline in per capita income as a consequence, Kaufmann, 2002), civil conflict (that retarded growth by 2-3 percentage points, Collier and Hoeffler, 2003), macroeconomic instability (as reflected in high fiscal deficits, Fischer 1993, Ames et al 2003), reliance on enclave natural resources (Gelb, 1988, Auty and Mikell, 2000) and the fixed exchange rate in the CFA zone (Devarajan and de Melo, 1991).

Devarajan argues that “For each of these growth-retarding factors, South Asia—the only other low-income region in the world—appears to have a counter example.” On *corruption*, Bangladesh, declared by Transparency International to be the most corrupt country in the world, has grown at 5 percent a year, with per-capita GDP growing at over 3 percent. Its GDP growth rate has been accelerating at one percentage point per decade over the last three decades.

On *conflict*, Sri Lanka has had a civil war for the last twenty years during which its per-capita GDP grew at over 3 percent a year. On *high fiscal deficits*, India, has had a fiscal deficit of 10 percent of GDP for the last twenty years, during which its GDP grew at 6 percent. As for the *natural resource curse*, the Maldives’ tourism industry leases out islands to tour operators, employs foreign labor, and uses imported materials, and yet the

country has averaged 9 percent GDP growth over the past two decades, with per-capita GDP tripling to \$2,300. Finally, on *fixed exchange rates*, Bhutan, a tiny kingdom of about 600,000 people, has a fixed exchange rate with India, a country of over a billion people and yet has grown at 6.6 percent, with per capita GDP growing at 4.4 percent.

The explanation as to why South Asia has over come the “binding constraints” requires going beyond conventional macroeconomics. In Bangladesh, the non-state sector has stepped up to provide basic services such as education and the private sector has provided entrepreneurial stimulus (textiles). In Sri Lanka, almost all of the growth during the conflict period occurred in one province--the Western Province, the region around Colombo that took advantage from trade reform and the country’s high literacy rate. In Nepal, the dramatic reduction in poverty comes mainly from a sharp increase in remittances, which in turn is due to an increase in migration to India, and now to the Middle East. India, despite fiscal deficits of 10 percent of GDP and debt-to-GDP ratio of nearly 90 percent, kept inflation and interest rates low, and growth was a healthy 8.5 percent last year. For the last two puzzles, namely why Maldives has not succumbed to the natural resource curse, and why Bhutan grows rapidly despite a fixed exchange rate, we can only speculate in the absence of any analysis. Unlike some of the African countries, Maldives has a homogenous population, with a single ethnicity, language and religion. This could have helped create a sense that everyone shared in the tourism sector’s prospects. Bhutan’s largest trading partner and aid donor is India and this has minimized the distorting effects of the fixed exchange rate.

Trying to make sense of all this, Devarajan argues.... “Clearly something is going on in South Asia. There has been substantial policy reform in South Asia. The pace of reforms has been slow but steady. As one observer puts it, South Asian policymakers “only chew what they can swallow.” There have been very few policy reversals in South Asia (unlike Africa). And the sequencing of reforms has been reasonable—most probably by accident, not by design. One reason for this is that India, Bangladesh and Sri Lanka are established democracies. Policies are formulated by consensus. The process is slow, but the outcomes are more durable.

The reforms have paid off better than expected in the sense that the underlying governance problems, conflicts, and macroeconomic imbalances would normally be expected to retard growth, as they have in Africa. It appears as if the people of South Asia have found ways of getting around these problems by seeking other ways of growing and reducing poverty, as with migration in Nepal, using NGOs in Bangladesh or concentrating on the industrial southwest in Sri Lanka.

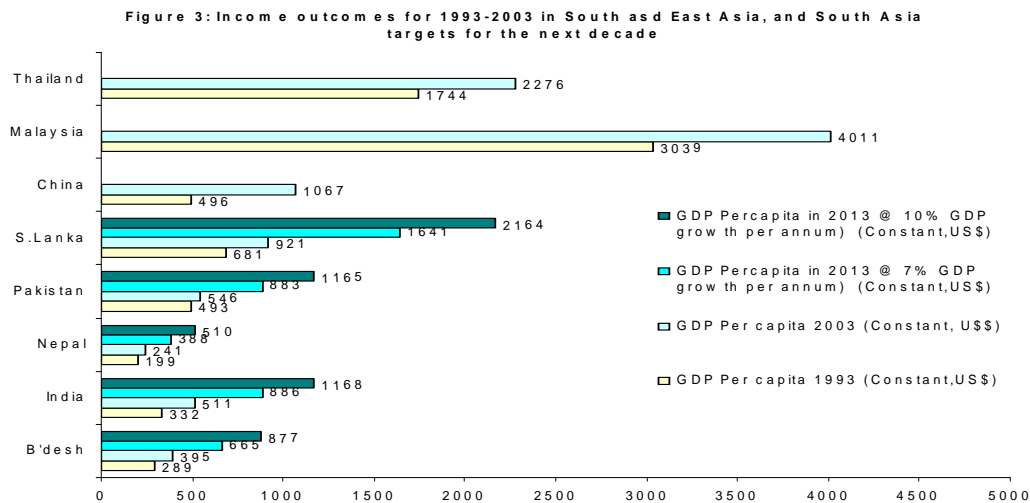
Rosy Predictions

Devarajan and Nabi (Economic Growth in South Asia: *Promising, Unequalizing, Sustainable?*, EPW August 19, 2006) assessed South Asia’s growth performance in detail and constructed optimistic scenarios about future growth and poverty outcome

trajectories. They asserted that if South Asia’s growth accelerates to 10 percent a year, the region could see single digit poverty rates by 2015.

Figure II-4

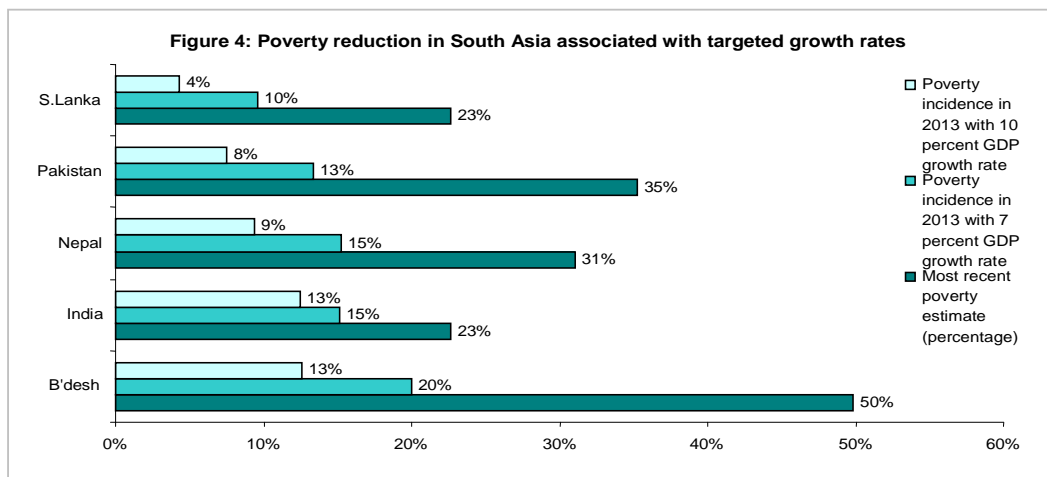
Income per capita would increase substantially with 7% and 10% GDP growth rates



Source: Devarajan and Nabi (2006): “Economic Growth in South Asia: *Promising, Unequalizing, Sustainable?*”

Figure II-5

Poverty would reduce substantially with 7% and 10% Growth rates



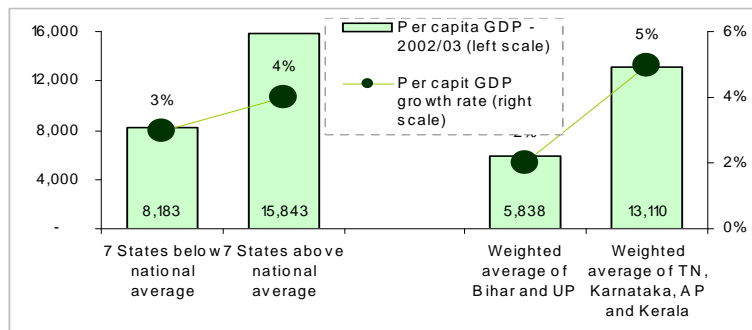
Source: Devarajan and Nabi (2006): “Economic Growth in South Asia: *Promising, Unequalizing, Sustainable?*”

To be fair, Devarajan and Nabi had identified the challenges that need to be addressed to sustain high growth. The two greatest challenges are (i) addressing the disparity in regional growth, (ii) strengthening the manufacturing sector and (iii) the much needed catching up on education and infrastructure deficits.

By the early 2000's, the evidence on intra-regional income disparity was beginning to mount in both India and Pakistan. These two largest federations in South Asia would be politically vulnerable to growth strategies that resulted in large differences across regions. In India, the difference in income per capita in the seven states below the national average and the seven above it was large (Fig II-5). It was feared that given the substantially higher growth rates of the richer seven states, this gap would increase further in the years to come. This could pressure on the Indian and could well result in erosion of political support to pursue pro-growth reform. This argument gained strength from the fact that there was a regional correspondence (North-South divide) that could further accentuate the political vulnerability.

Figure II-6

Rising regional inequality;
India's regional income outcomes

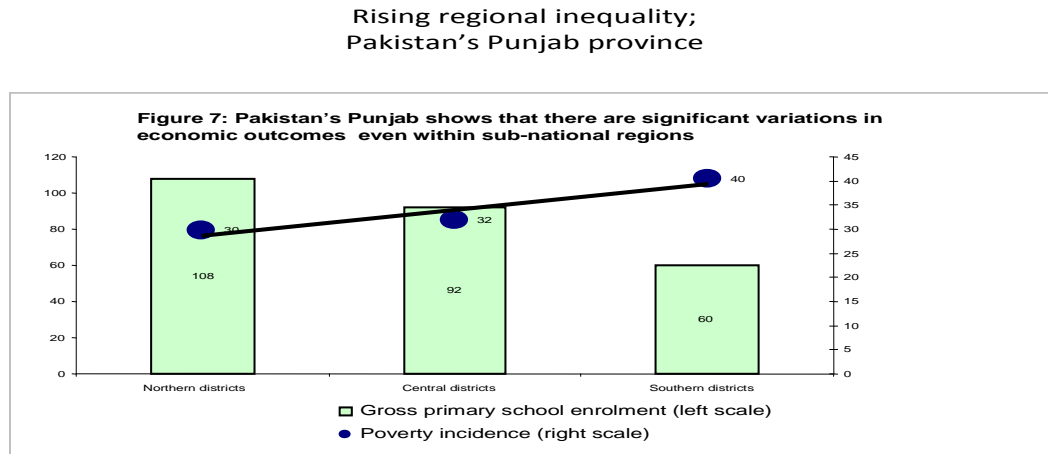


Source: Devarajan and Nabi (2006): "Economic Growth in South Asia: *Promising, Unequalizing, Sustainable?*"

Similar fault lines were emerging in Pakistan. The country's largest province, the Punjab, was beginning to show a widening gap in economic outcomes between central and northern districts on the one hand and the southern district on the other. The considerably poorer southern districts also had lower education outcomes. As is being feared now, these outcomes may well be associated with greater presence of extremist movements in

Southern Punjab that is violently challenging the political-economic framework of the state.

Figure II-7



Source: Devarajan and Nabi (2006): “Economic Growth in South Asia: *Promising, Unequalizing, Sustainable?*”

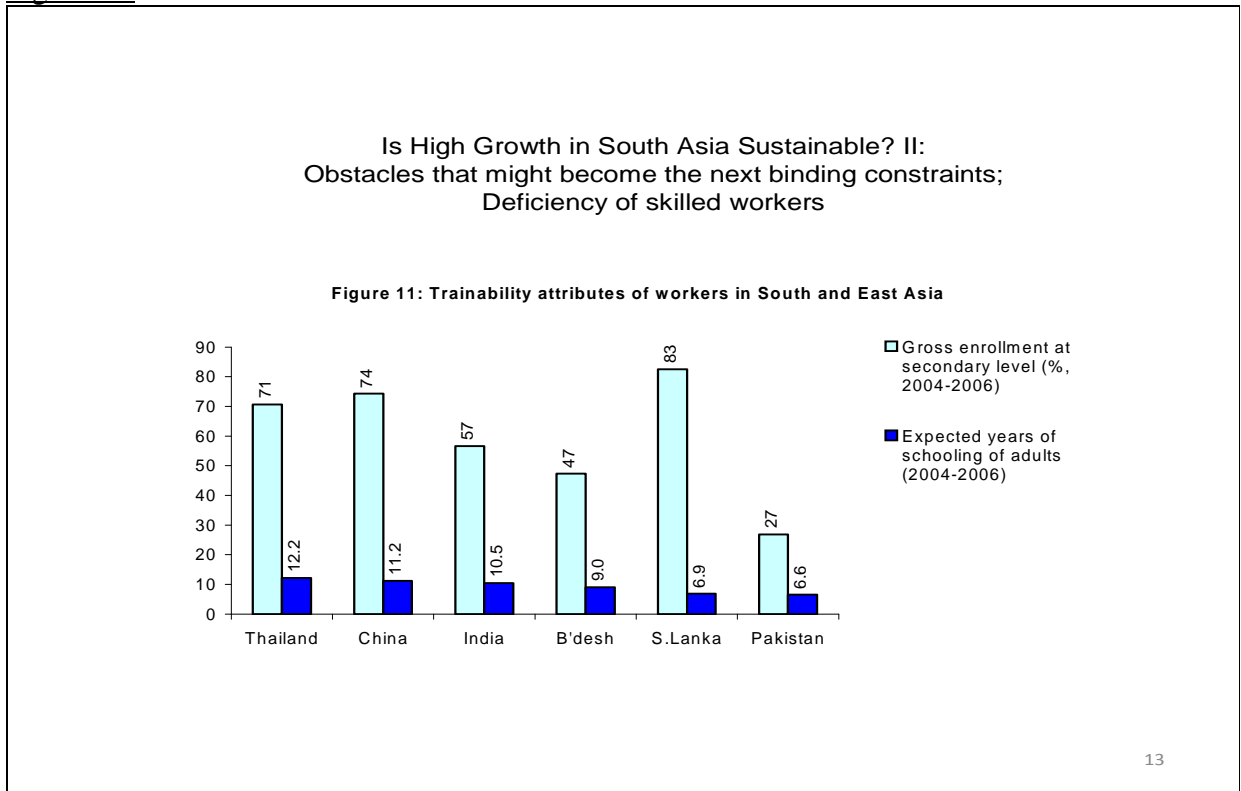
The second challenge identified by Shanta and Nabi, one that spurred the research presented in this monograph, was rooted in the structural weaknesses of the manufacturing sector in South Asia. Compared to East Asia, South Asian growth of manufacturing was much weaker and its export performance, in particular, was unimpressive.

The three decades spanning 1968-1997 was the period of miracle growth in East Asia. This is best captured in the substantial increase in manufacturing base of those economies. In South Korea, manufacturing value added increased by a factor of 40, in Malaysia by a factor of 27 and in Thailand by a factor of 17. Meanwhile, Pakistan and India in South Asia saw much smaller (multiples of 7 and 6 respectively) expansion of manufacturing.

South Asia's international competitiveness in manufacturing, best measured in term of technology intensity of manufacturing exports, was also unimpressive compared to East Asia. High technology content of Indian and Pakistani manufacturing exports, at 5 percent or less of total such exports, was well below that of East Asian economies' that ranged between 25-35 percent by the mid - 2000's. Figure II-8 brings this out clearly. Resource based exports dominated the export consignments from both East and South Asian economies compared to medium and high technology export content. By the year 2000, resource based content of export had declined sharply in East Asian economies but remained important in Pakistan and India. On the other hand high technology content increased sharply in East Asia but only marginally so in India, and not at all in Pakistan.

Although the challenges of weak international competitiveness default were recognized, Shanta and Nabi argued that South Asia should stay on course on the overall policy framework but should take corrective action as and where needed. The overall message regarding growth thus was one of optimism. South Asia's growth prospects and the regions' ability to reduce poverty to single digits in a decade were endorsed as an achievable objective.

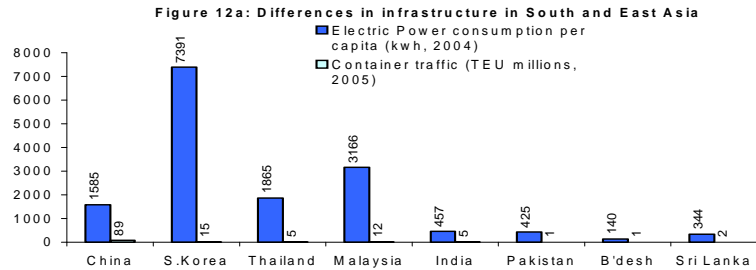
FigureII-8



Source: Devarajan and Nabi (2006): "Economic Growth in South Asia: *Promising, Unequalizing, Sustainable?*"

Figure II-9

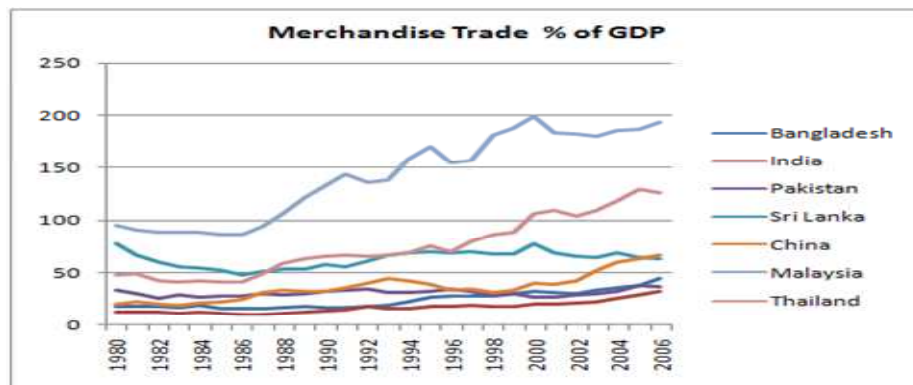
Is High Growth in South Asia Sustainable? II:
Obstacles that might become the next binding constraints;
Insufficient power and port facilities



14

Source: Devarajan and Nabi (2006): "Economic Growth in South Asia: *Promising, Unequalizing, Sustainable?*"

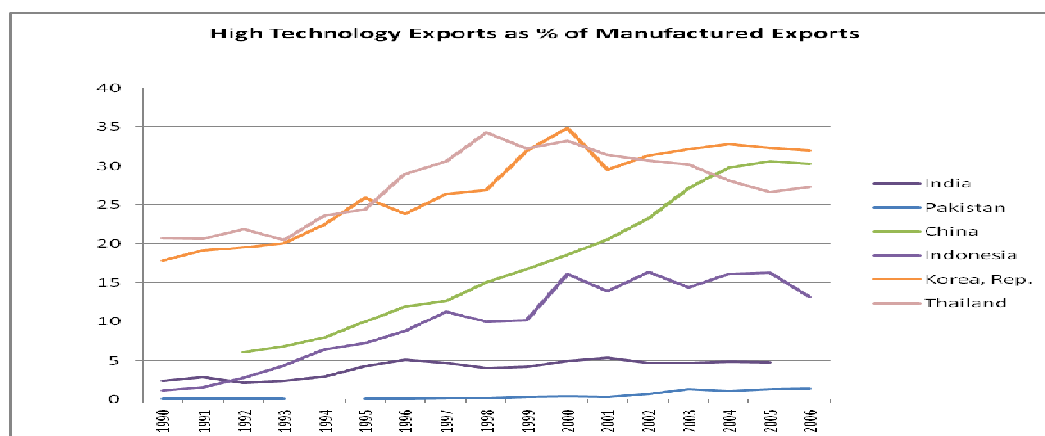
Figure II-10



10

Source: World Development Indicators 2008

Figure II-11



11

Source: World Development Indicators 2008

Weak performance of manufacturing may well be the outcomes of poor outcomes in education and infrastructure. As seen in secondary school enrollment and number of years of formal education, South Asian workers were less prepared for training required in skill intensive jobs than their East Asian counterparts. South Asia also lagged behind in energy consumption and port facilities.

Growth Sustainability and Economic Structures

Well before the onset of the global financial crisis and slow down in growth across the globe some observers, while agreeing that South Asia was beginning to emerge out of the slow growth trap, began to raise concerns about overly optimistic scenarios of sustained high growth in South Asia.

Given its size, India naturally dominates South Asian averages. Shankar Acharya, a sharp observer of India's growth performance and prospects, has identified strengths and weaknesses of the Indian economy in two important pieces of work². Contrasting his view with the more optimistic ones expressed in two previous studies on Indian growth

² Shankar Acharya, "Essays on Macroeconomic Policy and Growth in India", Oxford University Press, New Delhi, 2006.

Shankar Acharya, Isher Judge Ahluwalia, KL Krishna, and Illa Patnaik, *Economic Growth in India, 1950-2000*, in Kirist S. Parikh (edited), "Explaining Growth in South Asia", Oxford university Press, New Delhi, 2006

prospects³, he argues that much remains to be done for Indian growth to jump to 7 percent or more on a sustained basis. He arrives at this conclusion after a careful review of the underlying structural factors that will determine growth viz., weaknesses in the labor and capital markets, institutional decay, lukewarm commitment to reform, fiscal stress, anemic performance of agriculture and growing intra-regional disparities. These conclusions are similar to those of Devarajan and Nabi expressed in the broader South Asia context.

Taking a somewhat different approach, and similar to one in this paper, Arvind Panagariya⁴ has questioned the sustainability of India's rapid economic growth without addressing the institutional and policy bottlenecks that have stunted the growth of manufacturing the sector that has the ability to absorb a large number of workers promises at different levels of skills.

The collapse of Pakistan's growth in 2008, following the heady high growth years of 2002-2007, is a good example of how growth cannot be sustained without addressing the core structural weaknesses of the economy. The fact that manufacturing exports remained weak throughout the period of rapid growth was symptomatic of the balance of payments crisis that Pakistan faced in 2008⁵.

To better understand this discomfort with growth sustainability routed in the evolving structure of the economy, it is instructive to review a successful case of sustained economic growth and how the underlying structure of the economy evolved to support such growth.

In East Asia, sustained economic growth was the outcome of a large number of workers moving from low productivity poorly paid rural and informal sector jobs to more productive urban jobs. Such movement happened over three to four decades. What sustained this transformation in East Asia was its export oriented manufacturing sector. Investment in East Asian manufactures received a sharp boost after the signing of the Plaza accord. This resulted in Japan shifting its electronics manufacturing base to East Asia to take advantage of low wage but increasingly educated (and therefore productive) workers to export to the developed world. Such FDI (initially from Japan but subsequently also from the US and Europe) created a large demand for East Asian manufactures exports in rich developed markets. This, in turn, created the demand for East Asian workers in manufactures exports and thus facilitated their move from low productivity, low wage jobs to high productivity, high wage jobs. Furthermore, robust growth and improving living standards in the western destinations allowed improvement in the quality of East Asian manufactures. This increased productivity in East Asia and higher wage jobs for East Asian workers.

³ Vijai Kelkar, "India: On the Growth Turnpike", 2004. Narayanan Orientation, Australian National University, April, available at <http://rspas.anu.edu.au/papers/narayanan/2004oration.pdf>.

Dani Rodrik and Arvind Subramanian, 2004, "Why India can Grow at 7 percent a Year or More", Economic and Political Weekly, vol. XXXVIII, No. 16, pp.1591-6

⁴ Arvind Panagaria, *Transforming India*, in "Sustaining India's Growth Miracle", Columbia University Press, 2008.,

⁵ Ijaz Nabi, Dawn Article, 2008

The economic structure consistent with this virtuous cycle of East Asian growth was one where agriculture's share in the economy was declining and that of manufacturing increasing. The principal driver of growth and structured change was foreign direct investment (Thailand, Malaysia, China) and foreign borrowing (Korea, Thailand).

It would be useful to see how the structural composition of South Asian economies has evolved and whether this is consistent with sustained high economic growth and improved employment opportunities as in East Asia.

III: Soaring Remittances, Consumption Boom and Changing Economic Structure

Remittances and Their Impact

Uneven development of different regions is a basic fact of all South Asian economies. This is due to natural factors such as land quality, rainfall and other climatic features but also because of strategic choices in public investment such as the canal irrigation projects in the colonial period and subsequently.

This uneven income earning opportunity has contributed to significant internal migration in South Asia throughout the centuries and a flow of remittances associated with it. A rich popular culture of language, ballads and epics has been spawned by this two way flow. In Nepal, remittances receiving families are called “Lahoras” because in the British colonial periods the payments center for Nepali non-commissioned officers employed in the British army was located in Lahore now in Pakistan. In the Punjab, many folk songs speak of the tradeoff between income from remittances and the pain of parting.

Even though remittances and migration have been important part of South Asia economies for a long time, their scale, and therefore the development impact, has taken on a new significance in the last three decades because of migration to much richer markets overseas.

Although remittances constitute only 3 percent of GDP in South Asia overall, they are huge in Nepal (15 percent) and Bangladesh and Sri Lanka (10 percent). Significantly, for the region as a whole, remittances constitute the largest source of external finance, having outgrown Official Development Assistance and FDI combined.

While remittances have provided a stabilizing cushion of international reserves to South Asian economies and have helped lower poverty in the less developed sub-regions, they have also fueled high import of consumption goods, and have allowed the economies to sustain much larger trade deficits than would otherwise be possible. Collectively, South Asia ran up a trade deficit of \$ 50 billion in the mid 2000's.

Impact on consumption, inequality and poverty

Remittances are private, non-market income transfers by millions of individuals and are best analyzed through the economics of the family. The relationship between the migrant and the family is characterized by altruism, so that the utility of the migrant depends on the utility of his family members at home. Defining motives as altruistic implies that remittances will be sent in order to help family avoid hardships associated with a poor economy or bad luck. Simply put, remittances are compensatory transfers, which smooth out consumption of remitting workers' families in recipient economies.

At 3.6 percent in the period 1995-2004, the average of all developing countries ratio of worker remittances to GDP (Chami et al, 2008)⁶, thus is an important source of consumption smoothing. The evidence from Latin America (Fanzylber and Lopez, 2008)⁷ suggests that remittances help lower poverty and income inequality. Remittances also result in larger consumption of consumer durables by receiving households. Other studies (Stark & Levhari, 1982; Ahlburg, 1991) also stress the consumption enhancing consequences of remittances.

In South Asia Jongwanish reports that a 10 percent increase in remittances leads to a 2.8% reduction in measures of poverty suggesting that remittances can directly increase income of the poor and help smooth household consumption.

As reported above, in several South Asian economies the ratio of remittances to GDP is substantially higher than the world-wide country average and therefore the economic impact is likely to be significantly larger.

Impact on poverty

Bangladesh:

Bangladesh has seen impressive reduction in poverty incidence⁸ from 57 percent in the early 1990's to 49 percent in 2000 and then declining rapidly to 40 percent in 2005. Improvements were made on several MDGs, such as gender parity in primary and secondary schooling, child mortality, access to sanitation and the quality of housing in rural areas. This was made possible by a stable and robust GDP growth rate of above 5 percent between 2000 and 2005. Other contributing factors were reduced fertility rates that lowered the dependency ratio, greater participation by women in the labor force due to improvement in education, and rapid urbanization and increased productivity as people moved from farm to non-farm employment. A key factor was the substantial increase in remittances. However, challenges remain. The Eastern region (Sylhet, Dhaka, Chittagong) that has better connectivity and has been a substantial beneficiary of remittances has experienced a faster reduction in poverty than the Western region (Rajshahi, Barisal and Khulna) which is separated by a large body of water. Furthermore, the poor remain vulnerable to shocks such as floods and cyclones and the steep rise in food prices.

⁶ Ralph Chami, Adolfo Brajas, Thomas Cosimani, Connel Fullenkamp, Michael Gapen and Peter Montiel, 2008, Macroeconomic Consequences of Remittances, IMF Occasional Paper No. 259 (Washington: International Monetary Fund)

⁷ Pablo Fanzylber and J Humberto Lopez (edited), "Remittances and Development: Lessons from Latin America", The World Bank, Washington DC.

⁸ "Poverty Assessment for Bangladesh: Creating Opportunities and Bridging the East-West Divide", Bangladesh Development Series, Paper no. 26, Poverty Reduction, Finance and Private Sector Development Unit, South Asia Region, The World Bank, Dhaka, October 2008.

Nepal:

Nepal experienced remarkable reduction in poverty and improvement in human development between 1998 and 2003, despite conflict and overall poor economic performance⁹. The incidence of poverty in this period fell from 42 to 31 percent, and health and education outcomes improved, particularly for girls and people living in remote poor areas. This is attributed mainly to macroeconomic stability, higher agricultural wages, increased connectivity, greater urbanization and decline in the dependency ratio. The most important factor, however, was remittances that increased sharply from 3 percent of GDP in 1995-96 to 12 percent in 2003-04. More than one million Nepalese work abroad, mostly in India but an increasing number goes to the Persian Gulf and East Asia. Increased remittances accounts for up to 50 percent of the reduction in poverty. However, poverty incidence among families of rural wage workers, who do not benefit from remittances, remains high. Furthermore, poorly connected Western regions continue to have substantially higher poverty incidence (45 percent in mid-Western region and 41 percent in the far Western region).

Pakistan:

The incidence of poverty in Pakistan¹⁰ is highly sensitive to overall economic growth. In 1998-99, following nearly a decade of slow growth, the incidence of poverty was estimated at 31.1 percent. This deteriorated to 34.5 percent in 2000-01 as the economy continued to experience slow GDP growth. The events of September 11, 2001 prompted a restructuring of Pakistan's external debt and triggered additional external flows both in the form of remittances through official channels and also concessionary finance from donors. This alleviated the credit crunch and resulted in robust growth for the next 7 years. As a consequence, poverty fell sharply to 23.9 percent in 2004-05 and 22.3 percent in 2005-06. The reduction of 12 percentage points in poverty incidence in 6 years is attributed to the clustering effect: a large proportion of the population is clustered around the poverty line so that in times of slow growth a large number of people slip back into poverty while sustained high income growth has the opposite effect.

⁹ "Resilience Amidst Conflict: An Assessment of Poverty Reduction in Nepal, 1995-96 and 2003-04", Central Bureau of Statistics, National Planning Commission Secretariat, Government of Nepal, September 2006.

¹⁰ Pakistan Economic Survey, various years

Impact on economic growth¹¹

..... via the labor market

Remittances can lead to higher private expenditure on education and health by the receiving households resulting in greater human capital and therefore higher economic growth. However, such investments can also encourage further out-migration reducing the beneficial impact on remittance receiving country. Furthermore, remittances can result in higher preference for leisure and therefore may reduce participation in the labor force. Chami, Gapen and Cosimano (2006)¹³ show this to be the case using a dynamic general equilibrium. Kozel and Alderman (1990)¹⁴ find a significant negative impact of remittances on labor force participation of males in Pakistan.

.....via the capital market

The argument is that remittances improve the credit worthiness of households (domestic investors) which lowers the cost of capital in the remittance receiving economy and therefore increases the volume of investment. Furthermore, remittance flows may lower macro-economic instability which improves the investment climate in the receiving economy and thus encourages investment. This assumes, of course, that remittances are received by households who are investment constrained. However, given their compensatory nature, remittances go to households with high marginal propensity to consume. Also, if perceived to be permanent, household consumption will rise so that the impact on investment may be small.

..... via competitiveness and total factor productivity

The economy may become less efficient in the use of capital because of remittances if they are disguised capital inflows that go to households less well-positioned for making efficient investment choices compared to other financial intermediaries.

Importantly, there is considerable evidence that remittances result in appreciation of the equilibrium exchange rate (Acosta, Lartey and Mandelman, 2007¹⁵, and 2008¹⁶, Montiel,

¹¹ The discussion here is based on an excellent survey of the theoretical and empirical issues surrounding remittances in a recent IMF paper (Barajas et al, 2009)¹²

¹² Adolfo Barajas, Ralph Chami, Connel Fullenkamp, Micahel Gapen and Peter Montiel, "Do Worker Remittances Promote Economic Growth", IMF working Paper, WP/09/153, International Monetary Fund, Washington, 2009.

¹³ Ralph Chami, Thmoas F. Cosimano and Michael T. Gapen, 2006, "Beware of Emigrants Bearing Gifts: Optimal fiscal and Monetary Policy in the Presence of Remittances," IMF working paper 06/61 (Washington: International Monetary Fund).

¹⁴ Valerie Kozel and Harold Alderman, 1990, "Factors determining work force participation and labor supply decisions in Pakistan's Urban Areas", Pakistan Development Review, Vol.29, pp.1-18.

¹⁵ Acosta, Pablo A., Emmanuel K.K.Lartey, and Frederico Mandelman, 2007, "Remittances, Exchange rate Regimes and the Dutch Disease," Federal Reserve Bank of Atlanta Working Paper No. 2008-08 (Atlants: Federal Reserve Bank).

2008¹⁷). Also known as the Dutch disease problem, this impact of remittances on the recipient economy can be deleterious to the manufacturing sector that has the potential for generating employment and beneficial technological externalities.

The political economy affects of remittances can also be far reaching. Dependence on income outside the national economy reduces the incentive to monitor economic management performance of governments. Remittances also constitute resources for corruption thereby eroding recipient country institutions (Abdih, 2008)¹⁸.

The survey of theory shows that although there are conditions in which remittances can have a beneficial impact on economic via capital accumulation, the impact may also be negative. Furthermore, the economy may well become less efficient in the way its use of national resources, and therefore less competitive, because institutions and policy decision making may deteriorate.

Given that theory is inconclusive, what can be learnt from a survey of empirical findings? Using panel data from 84 countries in the period 1970-2004 and applying sound estimation techniques, Barajas et al (2009) conclude as follows:

“The findings of this paper echo the recent criticism of foreign aid presented by Rajan and Subramanian (2005) and others, who point out that there is very little evidence that decades of official transfers have contributed much to growth of developing economies. Similarly, our findings suggest that decades of private income transfers---remittances---have contributed little to economic growth in remittance receiving economies and may have even retarded growth in some. We find that when remittances are properly measured, and when the growth equations are well specified and instrumented, we cannot find a robust and significant positive impact of remittances on long-term growth, and often find a negative relationship between remittances and growth.”

¹⁶ Acosta, Pablo A., Emmanuel K.K.Lartey, and Frederico Mandelman, 2007, “Remittances, Exchange rate Regimes and the Dutch Disease: A panel data Analysis,” Federal Reserve Bank of Atlanta Working Paper No. 2008-12 (Atlanta: Federal Reserve Bank).

¹⁷ Montiel, Peter J., 2006, “Workers’ Remittances and the Long Run Equilibrium Exchange Rate: Analytical Issues”, Williams College, mimeo.

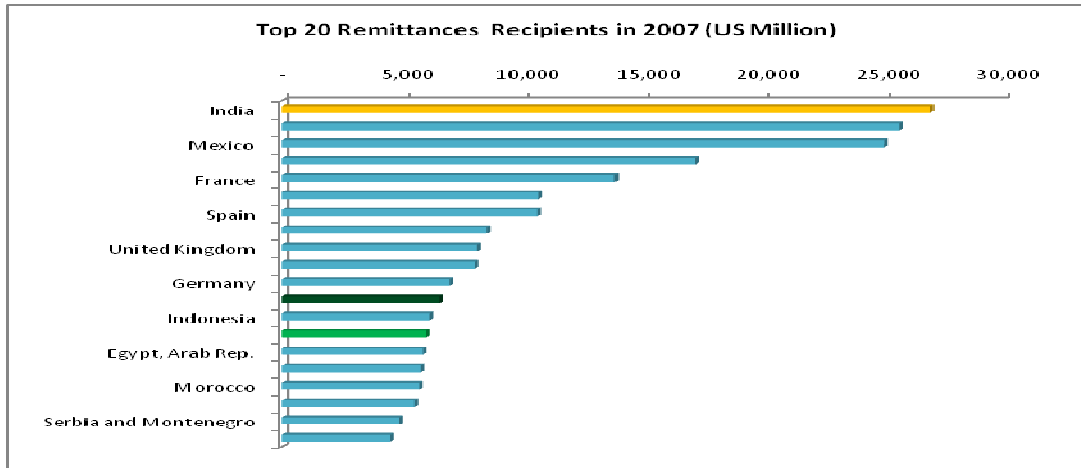
¹⁸ Yasser Abdih, Ralph Chami, Jihad Dagher, and Peter Montiel, 2008, “Remittances and Institution: Are Remittances a Curse?”, IMF Workign paper 08/29 (Washington: International Monetary Fund).

Table II. 1

Remittances	Impact on Poverty and Consumption	Impact on Growth
<p>Positive Impact</p>	<ul style="list-style-type: none"> Evidence from South Asia and Latin America shows that poverty is reduced sharply in receiving countries with increase in remittances. Evidence also shows that household consumption rises; in Mexico, consumption of durables by the richer households increased sharply as a result of remittances; household expenditure on education also rises implying that remittances result in increased human capital. 	<ul style="list-style-type: none"> Macro-economic stability (i.e. a higher trade deficit does not lead to balance of payments difficulties because remittances can finance the gap) with all its beneficial growth effects. Increase in investible funds and lower interest rate. Increased human capital increases skill content of the work force
<p>Negative Impact</p>	<ul style="list-style-type: none"> May increase preference for leisure and reduction of labor supply. Encourages premature consumerism Lower pressure on government to improve services Increased pressure on government to pursue consumption supporting policy framework (discussed later) 	<ul style="list-style-type: none"> Loss of international competitiveness (the Dutch disease problem) If financial markets are segmented, remittances may promote inefficient financial intermediation Increased human capital may result in greater out flow of educated, skilled, workers. Lower pressure on governments to pursue growth enhancing reforms. Promotes corruption and thus erodes institutions

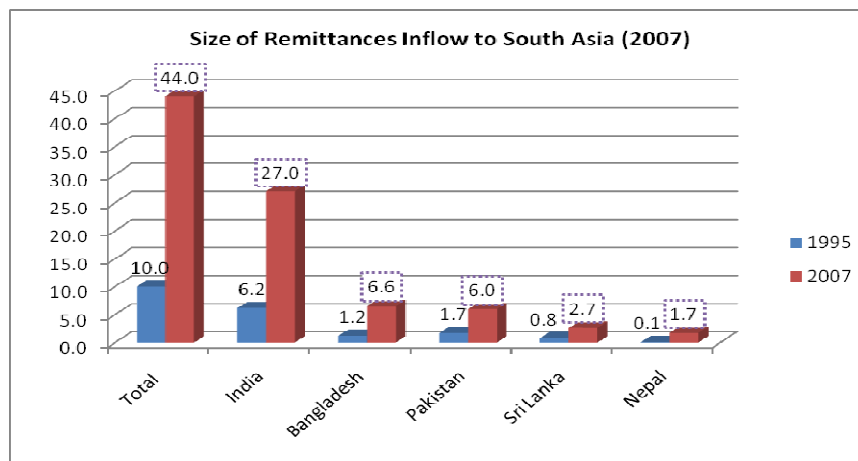
The discussion above shows that theory is ambiguous about the growth impact of remittances. Further more, the empirical evidence also does not provide strong support to the view that remittances are growth enhancing.

Figure III-1



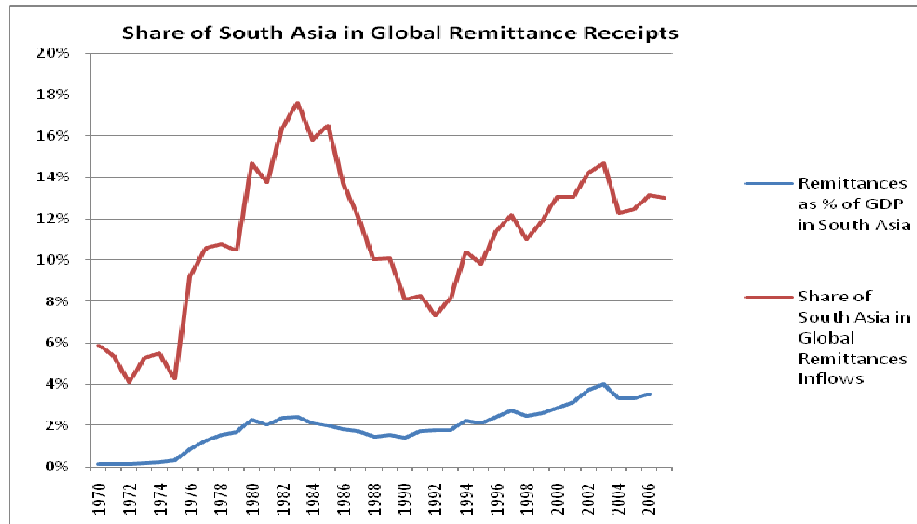
Source: World Bank's Global Economic Prospects/IMF BoP Statistics 2008

Figure III-2



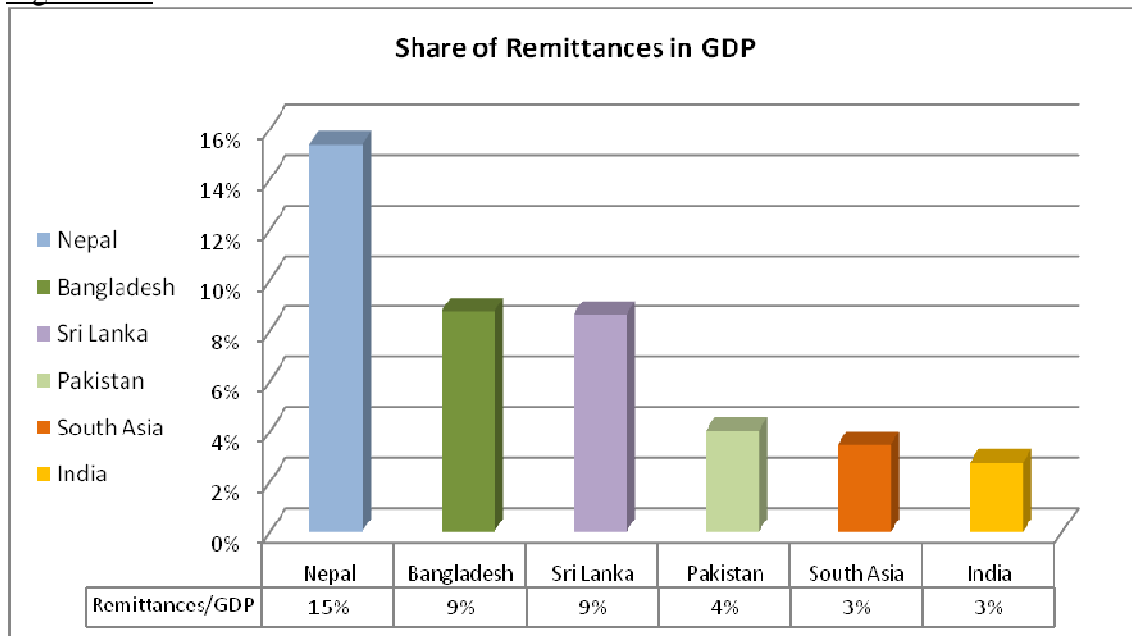
Source: World Bank's Global Economic Prospects/IMF BoP Statistics 2008

Figure III-3



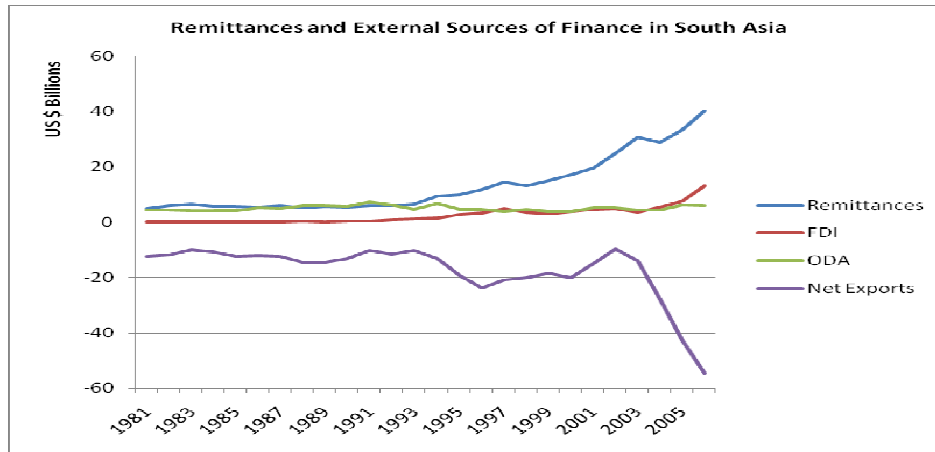
Source: World Bank's Global Economic Prospects/IMF BoP Statistics 2008 and World Development Indicators 2008

Figure III-4



Source: World World Bank's Global Economic Prospects/IMF BoP Statistics 2008 and World Development Indicators 2008

Figure III-5



Source: World Development Indicators 2008

The Consumption Boom

The anecdotal evidence of the consumption boom coinciding with the period of high remittances in South Asia is overwhelming. The rising South Asian middle class, well travelled internationally and exposed to world-wide television networks is now able to maintain an international standard of living. Western style shopping malls have sprung up in all South Asian capitals and major urban centers, well stocked with East Asia made consumer durables purchased by the well informed middle class, thanks to western mobile phone companies, via credit cards issued by European and US commercial banks.

Highway corridors radiating out of the large urban centers have the equivalent of strip malls sprinkled with glass and granite exterior shops that have improved access to consumption goods of the rural middle class. Even the lower middle class and the working poor are better clothed and better-fed than ever before.

Snapshots of the evidence of a consumption boom in South Asia

For all those global marketers who have missed the potential of India's billion plus people and their growing market power, here's a nudge from the McKinsey Global Institute (MGI). A new report released in May by the economics research institute at McKinsey predicts that India's much-touted middle class has finally taken wings and will soon embark on a consumption spree that could reshape global consumer markets. The country is also set to become the fifth-largest consuming economy (behind the US

India's economic growth has accelerated significantly over the past two decades and so too has the spending power of its citizens. With rising income, household consumption has soared and a new Indian middle class has emerged. And as the income growth rolls across Indian society, a huge shift is underway from spending on necessities such as food and clothing to choice-based spending on categories such as household appliances and restaurants". The report predicts that with growth rates of 7.3%, Indian income level will triple over the next 20 years lifting 291 people out of poverty to create, by 2025, 583 million strong middle class. This will create a consumer market of \$.5 trillion, four times the present \$380 million.

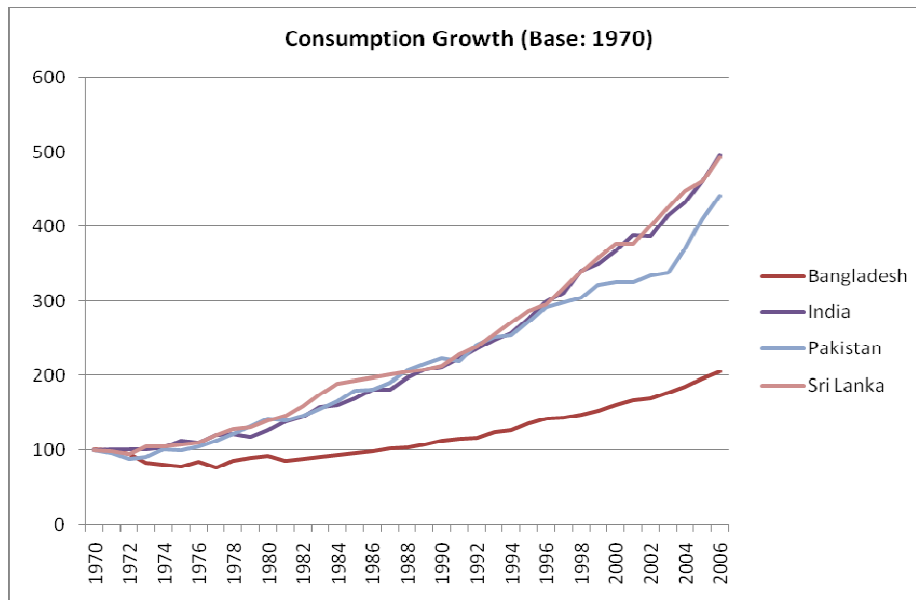
Asia Times, July 1, 2007 quoting "The Bird of Gold: The Rise of India's Consumer Market", McKinsey Global Institute.

US \$250 million package water business in India is growing at a whopping rate of 60 percent annually with rapid urbanization and a ballooning middle class which is giving a boost to (bottled water) Industry ...India is already the tenth largest water consumer in the world.

Sahara Times, 22 November 2008

This trend of rising consumption is captured well in national income accounts of South Asian economies. Figure III-7 shows that consumption in India and Sri Lanka increased five fold between 1970 and 2007 with the fastest growth registered since the 1990's. Pakistan's economy in the 1990's was relatively dormant because of macro-economic difficulties and so was the growth in consumption. However, income growth and consumption rebounded sharply in 2002.

Figure III-6



Source: World Development Indicators 2008

The Evolving Structure of the Economies

The sectoral composition of South Asian economies, measured in terms of shares in total GDP, has changed significantly in the period of substantially increased remittances, a form in consumption spending and rapid economic growth, 1980-2006. Agriculture's share in GDP has declined sharply by 17 percentage points from 38 percent to 21 percent. Strikingly, industry's share increased by just 3 percentage points in this period of rapid economic growth. The services sector, on the other hand, saw a significant increase of 13 percentage points in its share.

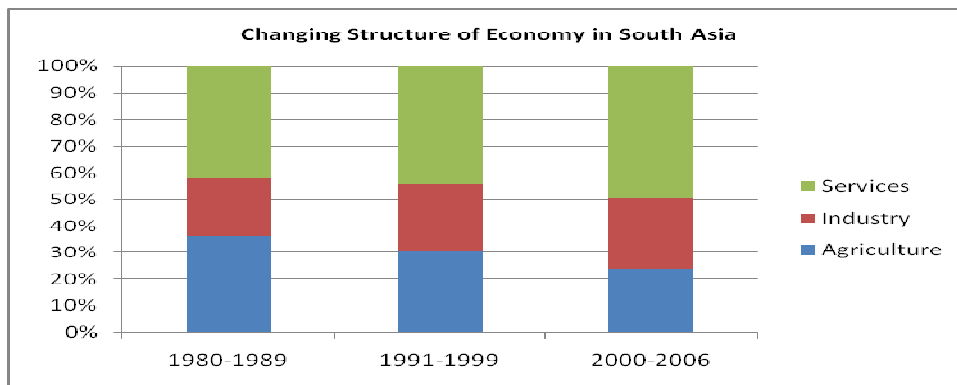
The pattern of agriculture's decline and growing importance of services in the national economy is repeated in all South Asian economies. However, there are some surprises with respect to the share of industry.

India, by far the largest economy in South Asia and one that grew the most rapidly, saw a halving of agriculture's share in GDP, a modest increase in industry's share and a substantial increase of 16 percentage points in the services sector's share. In Pakistan, the increase in the share of services was 7 percentage points, agriculture's share halved and industry's share increased by a modest 2 percentage points. Sri Lanka is striking in that the share of industry actually fell by 2 percentage points in the quarter century of consumption led boom. The sharp increase in the services sector and a sharp decline in agriculture's share was similar to the other three major South Asian economies.

Bangladesh, on the other hand, bucks the South trend at least with respect to Industry whose share increased by 8 percentage points while the services' share increased by a modest 4 percentage points. Agriculture's decline, however, was consistent with the South Asian pattern.

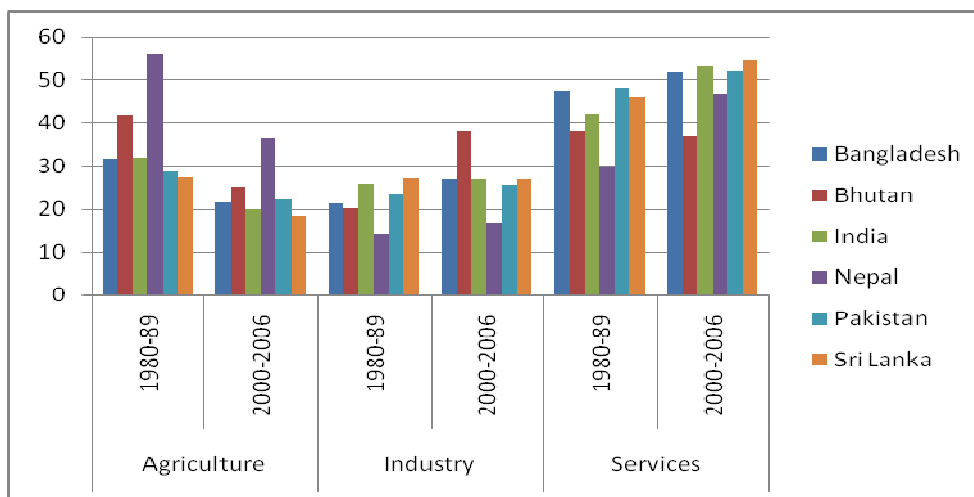
What does this evolving structure of South Asian economies, with services accounting for the largest and the fastest growing sector, imply for overall productivity and therefore economic growth?

Figure III-7



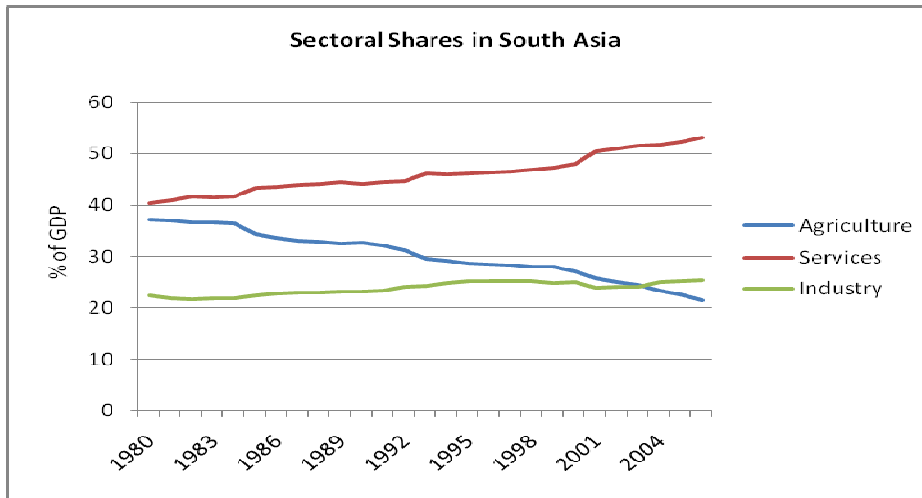
Source: World Development Indicators 2008

Figure III-8



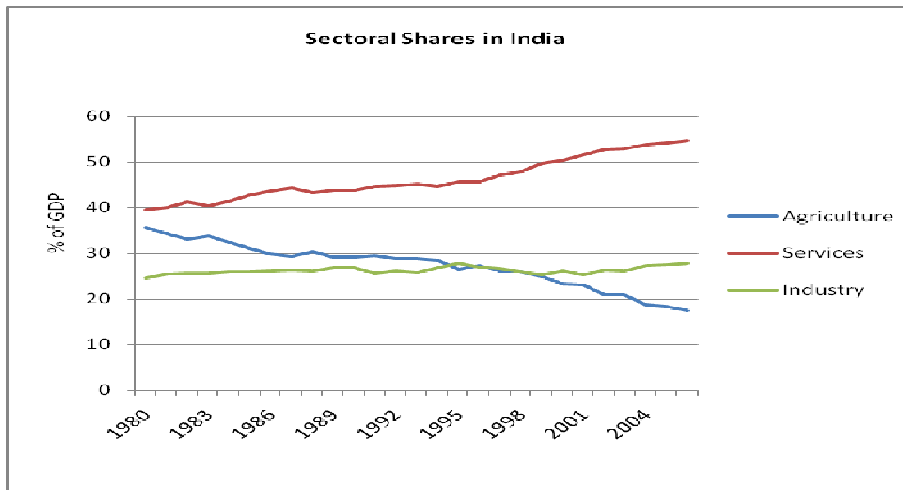
Source: World Development Indicators 2008

Figure III-9



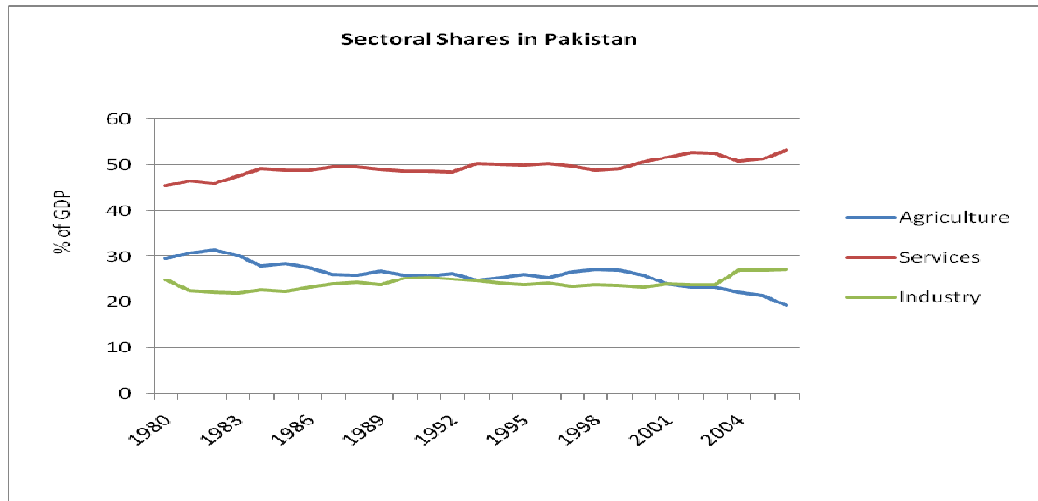
Source: World Development Indicators 2008

Figure III-10



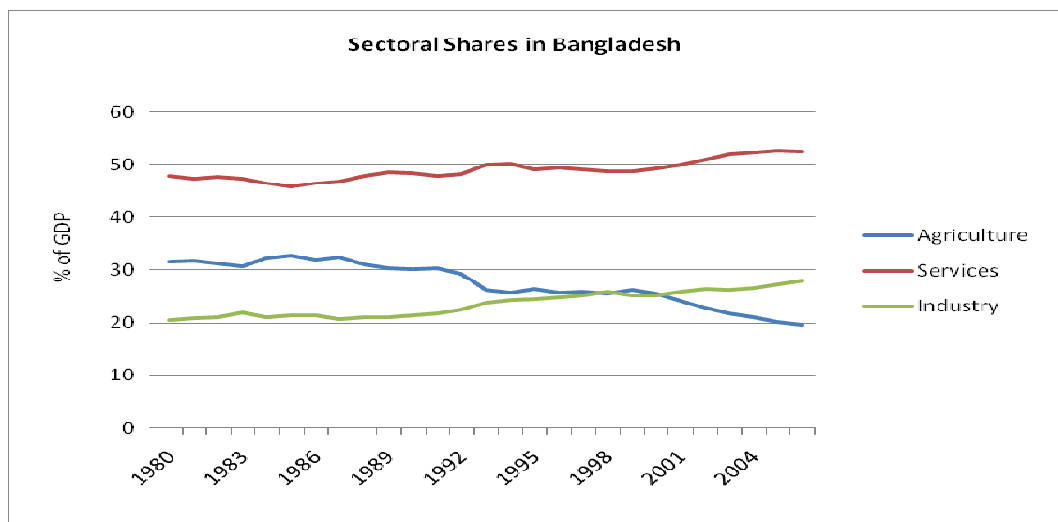
Source: World Development Indicators 2008

Figure III-11



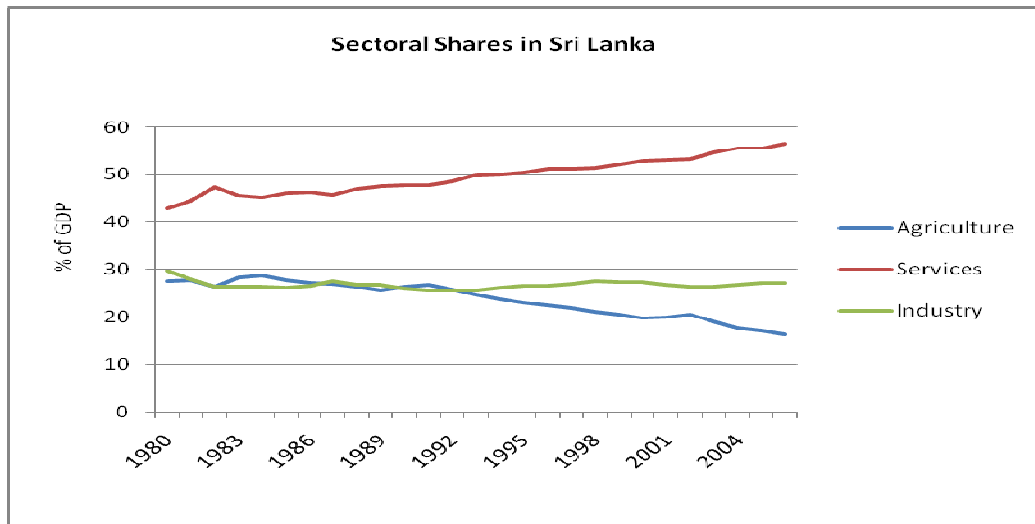
Source: World Development Indicators 2008

Figure III-12



Source: World Development Indicators 2008

Figure III-13



Source: World Development Indicators 2008

Role of Policy

Understanding the role of policy in the evolution of the economic structures in South Asia is important for obvious reasons. It is useful to be able to identify the policies that are likely to have the greatest impact on restructuring the economy. In low middle income South Asia, this is particularly attractive since it will help focus scarce resources on those triggers that will put the economies on the higher growth trajectory quickly and efficiently and thus facilitate achieving the objective of single digit poverty.

One approach to understanding the role of policy in South Asia's economic growth is to carry out detailed country case studies and examine growth experiences under broad categories of policy regimes that capture degrees of economic liberalization¹⁹. Each country's policy regimes are described as falling under one or the other six broad categories of liberalization and then economic performance is assessed in terms of industrial and overall GDP growth. The findings are reported in Table III.2. The problem with this approach is the difficulty of establishing causality because of extraneous factors. For example, Pakistan's record of liberalization has been quite good and yet economic performance has been highly varied. This is largely because geopolitical considerations (CENTO and SEATO alliances, Soviet occupation of Afghanistan and more recently the war on terror) have driven large inflows of concessionary external financing rather than reform. Such inflows have a stop-go

¹⁹ Kirit Parikh edited, *Explaining Growth in South Asia*, Oxford University Press, New Delhi, 2006.

character to them that dominates the economic reform impact. Similarly, Sri Lanka’s civil war would have repressed economic outcomes regardless of the policy regime. The recent escalation of terrorist activity in Pakistan has also adversely affected growth outcomes regardless of the pace of economic reform.

Contextualizing South Asia’s growth performance in the discussion on the role of policy in economic growth, it has been argued ²⁰ that the impressive development performance since the 1980s is the result sound policies - many of which are consistent with the “Washington consensus”²¹ and other more recent approaches to economic growth²². This policy framework, it is argued, has supported growth, improved human development, and helped reduce poverty. Thus South Asia’s good development outcomes, despite the weak institutions, is not as much of a “puzzle” or “surprise” as some might think, because a large number of good policies have prevailed despite overall weak institutions.

It is recommended that these policies be continued, but institutions also need to be strengthened to accelerate growth and achieve a faster pace of poverty reduction. The evidence on growing income inequality is highlighted and ascribed to policy and institutional failures that need to be addressed to make growth work better for the poor.

Table III.2²³:

Policy regime	Impact on industrial growth	Impact on GDP growth
Free market with passive policies	Sri Lanka: virtually no growth	Sri Lanka: Modest growth
Import substitution based industrialization with some controls on pricing and production and trade	Good industrial growth except in Bangladesh where disruption due to civil war; but impetus peters out, especially in small economies	Poor growth
ISI strategies with stricter control and regulation of production and trade along with nationalization and emphasis on the public sector	India, Pakistan, Sri Lanka pursue this in the 1970s and see little industrial growth	Poor growth
Regulated industries, trade restrictions but with export promotion	Sri Lanka saw growth rate of 9.91 percent; Bangladesh saw relatively modest growth in 1981-89.	6.6% in Sri Lanka
Deregulation of domestic industries and modest trade liberalization	Even with some import restrictions, healthy growth rate	6.6% in Sri Lanka

²⁰ Sadiq Ahmed (World Bank, 2006)

²¹ John Williamson Ed., “What Washington means by Policy Reform”, in *Latin American Adjustment: How much has Happened?* Washington DC: Institute of International Economics, 1990

²² See, for example, Michael Spence

²³ Summarized from Kirit Parikh, “Explaining Growth in South Asia”, Oxford University Press , New Delhi, 2006.

Policy regime	Impact on industrial growth	Impact on GDP growth
Deregulation and liberalized trade regime	A spurt in growth rates in all five countries but then slow down. In India industrial growth rise to 7.6 percent but then slows down to 4.8 percent. In Pakistan, also industrial growth slows down in the 1990's.	Indian GDP growth, 1992-96, shoots up to 6.7 percent but then slows down to 5.4 percent after 1997.

Perhaps the best known, and most criticized, view of the policies that matter in explaining growth is ascribed to Williamson. He was the first to put out a list of ten policy reforms, the elements of the co-called “Washington Consensus”:

- Maintain fiscal discipline as measured by low fiscal deficits
- Set public expenditure priorities that favor health and education expenditures rather than defense spending, general public administration, and subsidies
- Undertake tax reforms to increase revenues using a broadly based tax system with low marginal rates.
- Move to interest rates that are market based and are positive in real terms
- Maintain a competitive exchange rate to promote exports
- Base trade policy on import liberalization with moderate tariffs (10 to 20 percent with little dispersion)
- Encourage foreign direct investment
- Support privatization
- Promote competition through deregulation
- Define and ensure property rights

As discussed above, several South Asian economies have implemented, with varying degree of completion, policies encompassed by the Washington consensus and with varying success.

Devarajan and Nabi²⁴ have assessed (see earlier discussion in Chapter 2 above) recent economic performance in South Asia in light of the binding constraints to growth identified in other contexts. These include wide spread perception of corruption, civil conflict, high fiscal deficit, enclave economy characteristics and misaligned exchange rates. However, South Asian economies appear to have overcome their respective binding constraints. Devarajan and Nabi argue that while South Asia may well have overcome the binding constraints in the short run, they will come back to haunt them in the long run as they strive for higher growth rates of 8-10 percent.

²⁴ Shantayanan Devarajan and Ijaz Nabi, *Promising, Unequalizing, Sustainable*, EPW August 19, 2006

Part II of this monograph takes a sectoral perspective on the policy framework needed to sustain high growth in services, agriculture and manufacturing. The policy discussion for manufacturing will identify the policy framework that has stunted the growth of the manufacturing which, in turn, has adversely affected South Asia's ability to generate high productivity jobs to reduce poverty to single digits and improve the welfare of South Asian citizens.

Part II: Sustaining High Growth into the Future

IV: Modernizing Services

Services and Economic Growth

The Balassa-Samuelson Hypothesis²⁵ states that rich countries tend to have higher price levels than poor countries not simply because the rich countries have higher absolute productivity levels than poor countries, but because rich countries are *relatively* more productive in the *traded* goods sector. Non-traded goods tend to be more service intensive and there is much less room for establishing technological superiority. Historical data confirms that in most industrialized economies, technological progress in service intensive goods (education, health, insurance etc.) has been slower than for manufactures, which tend to be more traded.

A separate strain of literature²⁶ argues that with appropriate policies and by attracting FDI, the services sector in less well-off economies can experience sustained productivity growth. The structure and performance of the services sector in a sample of Eastern European economies for the periods 1997-2000 and 2001-2004 reveal that: i) while most service sub-sectors are characterized by strong productivity growth, there persist large disparities in labor productivity growth rates across countries and sub-sectors; ii) that services that produce or employ Information and Communication Technologies (ICTs), or utilize more skilled labor, show substantially higher labor productivity levels; iii) labor productivity is higher in countries that have achieved more progress in services sector reforms, particularly in financial intermediation; and iv) there is a positive and significant relationship between liberalization of services and labor productivity of downstream manufacturing sub-sectors.

Research on the East Asian experience²⁷ shows that when manufacturing is dynamic and export-led, the services sector follows suit. Since 1980, East Asian economies have experienced average growth rates of 8.1 percent in the services sector. Meanwhile, manufacturing GDP growth averaged 24 percent. Given the growth experienced in both the services and the manufacturing, it is argued that it is highly probable that the mutually reinforcing spillovers effects are real and significant.

The main conclusions on the role of services in growth from the literature thus are:

- Productivity growth is higher in tradable than in non-tradable sectors
- Services, typically, are non-traded and therefore would have lower productivity than trade goods
- Tradable services have higher productivity growth

²⁵ Bela Balassa, 1964. "The Purchasing-Power Parity Doctrine: A Reappraisal," *Journal of Political Economy*, University of Chicago Press, vol. 72, pg. 584; Samuelson, P. A. (1964), "Theoretical Notes on Trade Problems", *Review of Economics and Statistics* 46 (2): 145–154

²⁶ Ana M. Fernandes (2007)

²⁷ Clemes *et al* (2003)

- FDI in tradable services increases productivity in services
- Productivity in services increases with growth in manufactured exports.

A recent World Bank study²⁸ takes an uncharacteristically strong position in advocating that services will deliver high growth in South Asia. The three characteristics of services that are usually considered as hampering the sector's role in delivering high growth are i) typically, labor productivity is low in services, ii) they are skill intensive and, given education attainments, this poses a difficult supply constraint and iii) they suffer from geographic concentration that leads to unbalanced growth. It is then argued that all three constraints can be surmounted. The second constraint can be relieved via an aggressive program for expanding education and the third is not just restricted to services; manufacturing can also be similarly concentrated. Therefore, a proactive policy will be needed to address this constraint. The primary thrust of the World Bank study is on explaining why services have come to be so central in South Asia growth, how much they contribute to growth and why services led growth is likely to be sustained.

The virtuous cycle of economic growth requiring high economic density/population density, low distance/low transportation costs, and less division/more trade would suggest that the manufacturing traded goods will deliver sustained high growth²⁹. Services, on the other hand, usually considered to be bound by "time" and "proximity" entails higher transaction cost, are not easily traded. Thus they do not provide a hook into international demand and therefore do not deliver sustained high growth.

It is argued³⁰ that technology is changing this traditional view of services. Information communication technology has given us the three T's: technology, transportability and tradability, so that new services have emerged that are easily traded. Indeed, the technology has enabled countries such as India to overcome the binding constraint of poor infrastructure to enjoy a comparative advantage in international trade that would otherwise not be possible. High value exported services, responding to global demand, are thus a new variety of services that have little in common with the traditional services and can deliver sustained high growth.

The central role of services in economic growth also emerges out of the literature on New Economic Geography (NEG)³¹ that is grounded in the well known ideas of increasing returns to scale, trade costs and factor mobility that together produce comparative advantage via agglomeration³². It is argued that these advantages of economic geography come into play for services as opposed to manufactured goods, in whose context the NEG

²⁸ "Services-led Growth in South Asia", Poverty Reduction and Economic Management Unit, South Asia Region, World Bank, April 2009.

²⁹ World Development Report, 2009.

³⁰ "Is Services-Led Growth A Miracle For South Asia?" by Ejaz Ghani in "Services-led Growth in South Asia", Poverty Reduction and Economic Management Unit, South Asia Region, World Bank, April 2009.

³¹ "New Economic Geography, Services and South Asia" by Maarten Bosker and Harry Garretsen in "Services-led Growth in South Asia", Poverty Reduction and Economic Management Unit, South Asia Region, World Bank, April 2009.

³² Paul Krugman, "Increasing Returns and Economic Geography", *Journal of Political Economy*, 99: 483-499

theory was developed, once Information Communication Technology allows developing countries to overcome their infrastructure constraint.

Which view on services explains best the ongoing restructuring of South Asian economies requires an empirical examination of the evidence. Here it is important to point out at the outset that statistical information on services is poor compared to the data on manufacturing and agriculture. The emphasis in the development literature in the past has been on the importance of agriculture and manufacturing and data pertaining to these sectors is of reasonable quality. Services, on the other hand, are both ill-defined and poorly measured. This in itself is a good reason to avoid any sweeping conclusions about services and their role in the economy.

Notwithstanding the statistical difficulties, it is well-established that services now constitute the largest and growing segment of South Asian economies. Given per capita GDP, in all major South Asian economies i.e. Bangladesh, India, Nepal, Pakistan and Sri Lanka, value added in services is higher than for comparator countries. This is especially so with respect to the East Asian economies where GDP per capita is higher compared to South Asia but the share of services in the economy is smaller.

Current State of South Asian Services

Composition of services

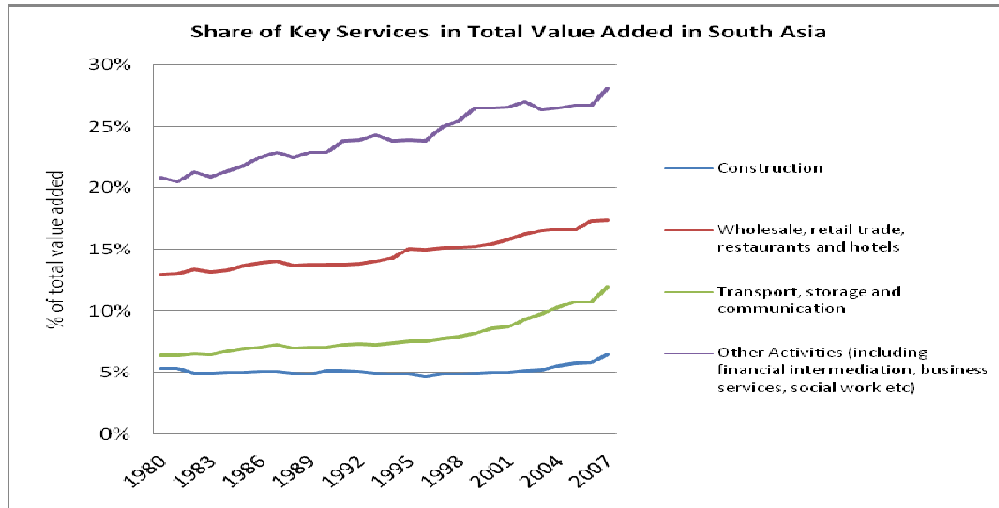
The four main categories of services are Construction (Con), Wholesale/retail trade, restaurants and hotels (wsh), transport, storage and communications (tsc) and other activities (financial intermediation, business services and social work (fbs). By far, the largest share in GDP is that of the last group of services whose share in total value added in the past 25 years has increased from 21% to 28%. The share of whole sale, retail, restaurants and hotels is up from 14% to 17%, transport, storage and communications services share doubled to 12%, and construction is up from 5% to 7%.

At the country level, financial intermediation and business services have grown the fastest and now account for 28% of total value added. Whole sale and retail trade, restaurants and hotels and transport, storage and communications have increased by about 5 percentage points. Construction's share is more or less flat.

In Pakistan all four major categories of services have grown relatively modestly between 0% and 3% growth, while the construction sector's share in total value added shows a slight decline.

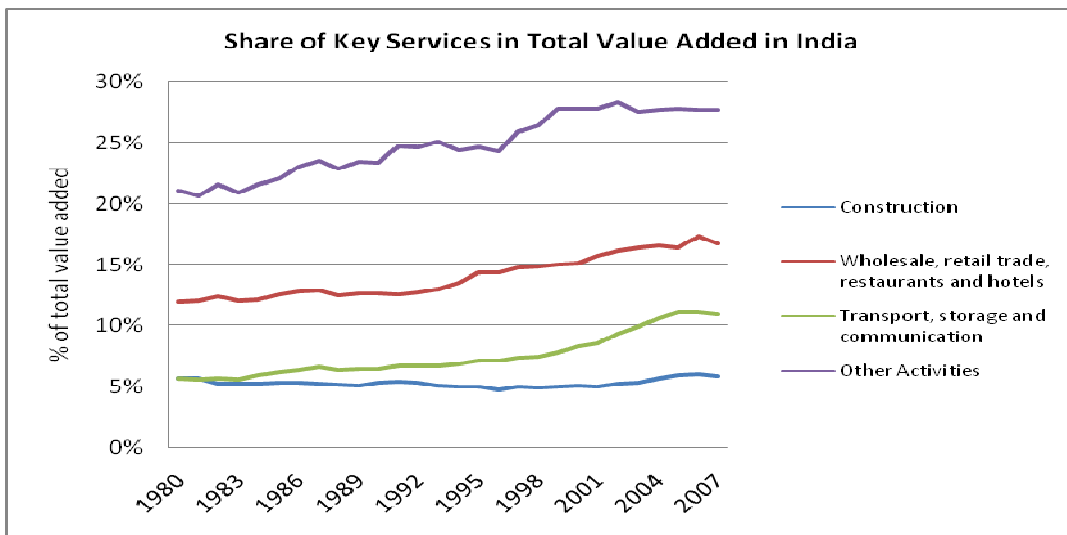
In Sri Lanka also the increase in the share of services in total value added is relatively modest across the four major category of services, none growing by more than about 3% (which is wholesale, retail trade, restaurants and hotels).

Figure IV.1.1



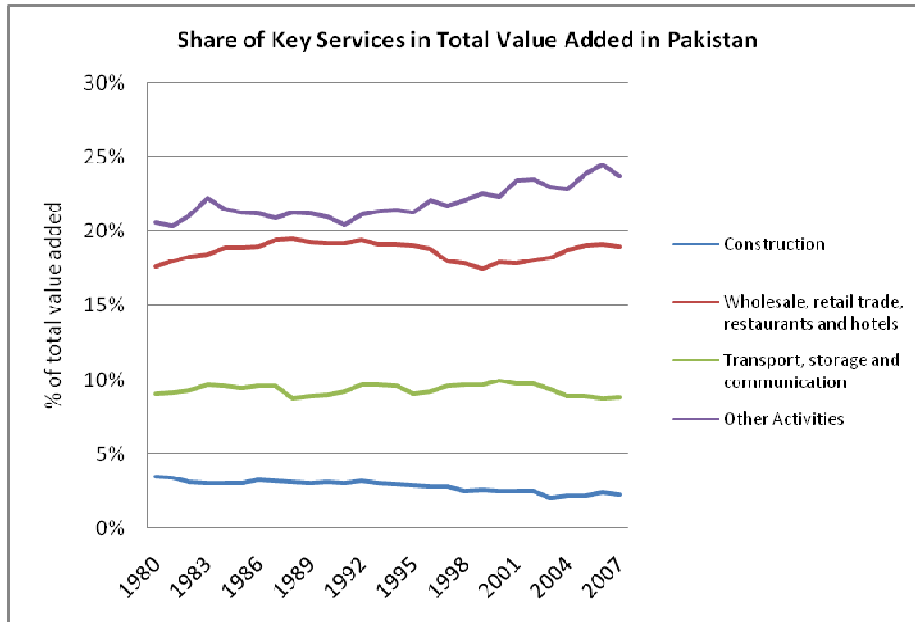
Source: United Nations Statistics Division, National Accounts Data 2009

Figure IV.1.2



Source: United Nations Statistics Division, National Accounts Data 2009

Figure IV.1.3



Source: United Nations Statistics Division, National Accounts Data 2009

Splintering of services

The case for services as the new engine of growth rests on the view that services are splintering into traditional services that are characterized by low technology and low productivity and the high technology, “information age” services that have high productivity and a large untapped international demand.³³

Modern services thus are tradable and enjoy the agglomeration effects previously associated with tradable goods only. This requires a better understanding of what constitutes modern services and their role in the economies of South Asia.

Consistent with the recent World Bank report, modern services comprise Banking, Insurance, Financial and Communication related services. Traditional services comprise Trade, Hotels and Restaurants, Personal, Cultural and Recreational, Community and Social, Transportation, Storage, Real Estate dwelling and Government and Public Administration services. Using this composition of traditional and modern services, in the

³³ Bhagwati, Jagdish. 1984a, “Splintering and Disembodiment of Services and Developing Nations”, *The World Economy* 7:: 133-134; 1984b, “Why are Services Cheaper in Poor countries?” *Economic Journal* 94: 279-86.; 1987, “Trade in Services and Multilateral Negotiations”, *World Bank Economic Review* 1: 549-69.

period 2000-06, most South Asian economies achieved substantially higher growth rates in modern services compared to traditional services. The difference in the growth rates ranged from 3% in Bangladesh to 13% in Sri Lanka. Only in Nepal the growth rates were the same for two types of services. Thus, it would appear that the splintering of services is going on.

Table IV.1.1: Difference in the Growth rates of Modern and Traditional Services

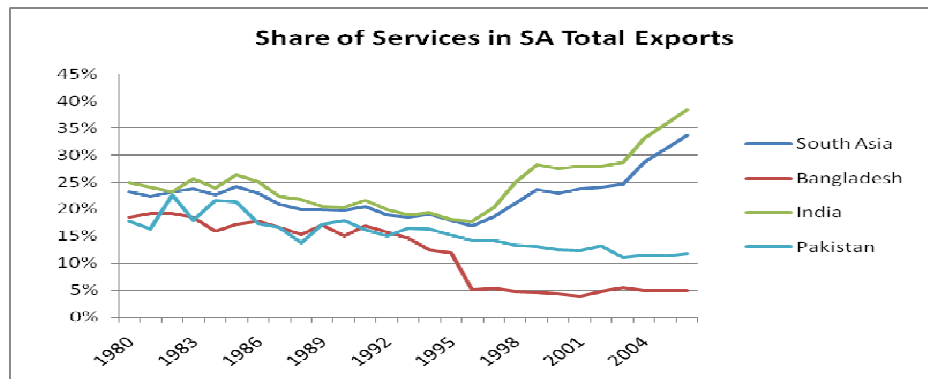
Bangladesh	3% higher
India	5.5% higher
Nepal	No difference
Pakistan	4% higher
Sri Lanka	13% higher

Adapted from Ghani, Ejaz.

Trade in services

Despite the rapid growth of modern services in South Asia, services, by and large, are not export oriented (Figure Iv.1.4). In Bangladesh, services have constituted less than 5% of total exports and there is little evidence of improvement. In Pakistan, the share in total exports is somewhat higher (12%) but is stagnant. The exception to this general South Asian trend is India where services share in exports had, by 2005, doubled from around 20% in the early 1990's.

Figure IV.1. 4



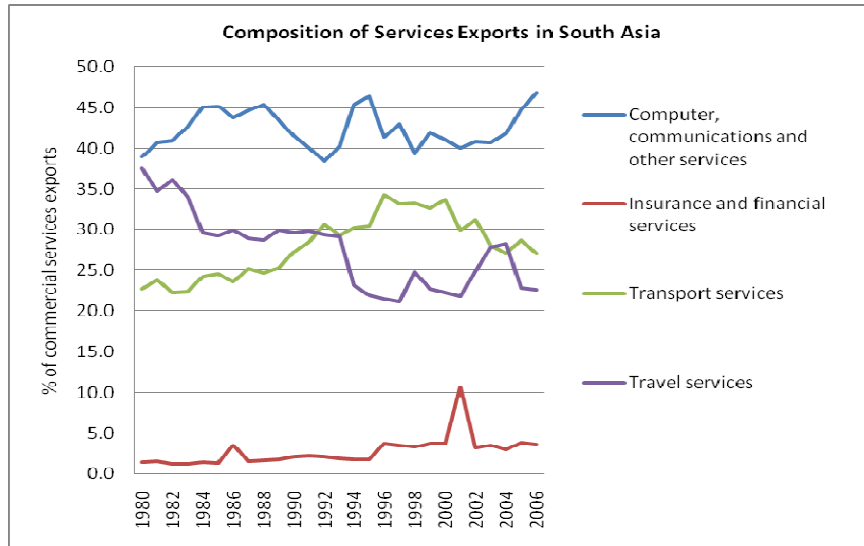
Source: WTO Trade Statistics 2008

The impact of services on South Asia's overall trade can also be viewed from the perspective of balance of payments³⁴. The traded services in South Asia are Transportation, Travel, Communications, construction, Royalties and license fees, Finance and insurance and computer and business services. Bangladesh, Nepal, Pakistan and Sri Lanka have run up an overall deficit in the services account of the balance of payments. Only India (\$11.7 billion or 1.3% of GDP) and the Maldives (\$240 million or a hefty 26% of GDP) have a surplus. In India, this is due to the export of computer and business services that generated \$52 billion in export earnings in 2006. In the Maldives, travel related services (tourism) generated \$434 million.

Services are also attracting an increasing volume of FDI into South Asia. Between 1990 and 2006, the stock of FDI increased from about US\$5 billion (1.2% of South Asian GDP) to US\$73 billion (6.5 % of GDP). India (from \$1.7 billion to \$50.7 billion) and Pakistan (\$2 billion to \$14.8 billion) accounted for most of the increase. Nearly 50% of the increase in FDI in India was in the services sector while in Pakistan it was 70%.

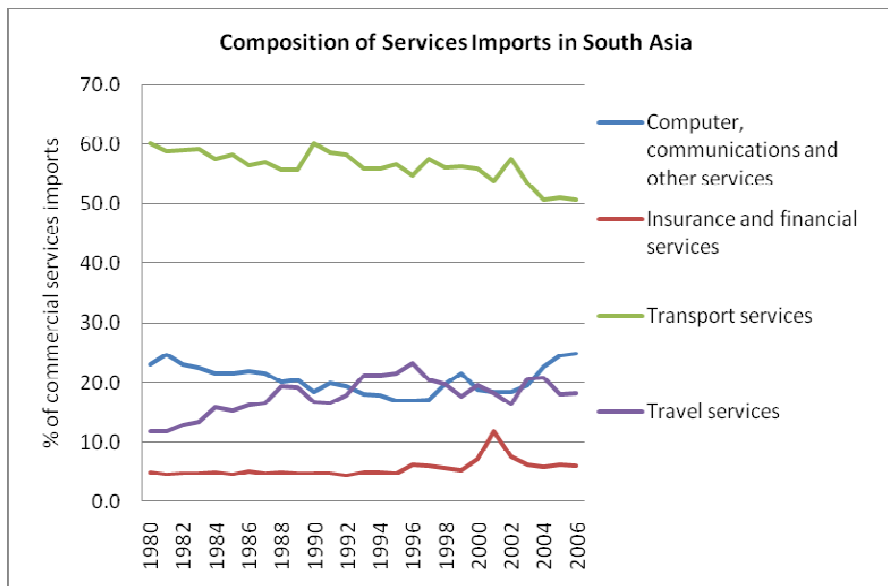
³⁴ Barry Bosworth and Annemie Maertens. "The Role of Services Sector in Economic Growth And Employment Generation in South Asia".

Figure IV.1.5.



Source: WTO Trade Statistics 2008

Figure IV.1.6



Source: WTO Trade Statistics 2008

*India's remarkable success*³⁵

Clearly, India is an outlier in South Asia in terms of growth of modern, export oriented service activity. Software production starting at \$1.1 billion in 1996-97 increased exponentially to US\$23 billion in 2006. India now accounts for 60% of global outsourcing. This is talked about as the second great unbundling of the production process whereby the parent firm unbundles its spatial value chain by outsourcing over great distances. The routine tasks are sent to low wage economies while the complex tasks are done in the high wage economy of firm's location³⁶. It is consistent with the predictions of the New Economic Growth models centered around economic geography.

Several factors account for India's emergence as a software giant. One is the sharp decrease in the cost of communications. The cost of a three minute call from South Asia to the US fell from \$6 in 1997 to \$2 in 2004. The cost of internet has fallen even more dramatically. But this factor alone is not enough since many countries could have benefited from it. The availability of a large number of low wage English speaking workers would also matter. But the success of Ireland shows that this alone is also not enough and that a gigantic low wage work force is not needed to succeed in software services. A comparison of India, Pakistan and Sri Lanka, the three relatively successful exporters of computer and business services in South Asia, is illuminating.

The likely determinants of success in these services would be the quality of infrastructure (electrification, availability of the internet and its bandwidth, telephony) and education (secondary and tertiary workers) and facility with English language. Table IV.1.2 shows that no country is an outlier in terms of these determinants. India is better placed compared to Pakistan and Sri Lanka regarding the number of internet users but Sri Lanka has a larger proportion of broadband subscribers. Pakistan and Sri Lanka have twice the number of telephone subscribers compared to India. Electrification rates in India and Pakistan are about the same and both are lower than Sri Lanka's. And yet India's export of computer and business services is a hundred times that of Pakistan and Pakistan's is twice that of Sri Lanka. Clearly, there is a missing story here!

The following story line is offered as a hypothesis to explain India's magnificent success. India's large diaspora based in California and other state-of-the-art clusters of computer and business services and their access to international networks at a time when the second great unbundling was starting probably gave India the initial advantage. The timing of deregulation of telecommunications in India made it an attractive destination, particularly in forward looking cities like Bangalore that had a critical mass of IIT graduates and entrepreneurs like WIPRO's Azim Premji looking for new global opportunities. The economies of scale and agglomeration effects then did the rest.

³⁵ This is based on Bosker Maarten and Harry Garretsen, "New Economic Geography, Services and South Asia" in E. Ghani World Bank report..

³⁶ Robert-Nicoud, F. 2008. "Offshoring of Routine Tasks and Deindustrialization: Threat or Opportunity and for Whom.?" *Journal of Urban Economics* 63 (2): 517-535.

The question is why Pakistan and Sri Lanka did not go the same route despite their advantage in having their respective diasporas in the right places and better infrastructure than India's? To some extent, the answer may lie in the acute internal security situation. Sri Lanka was in a protracted civil war that claimed most of policy attention. Pakistan was also faced with deteriorating external security combined with political and macro-economic instability that were a huge distraction. Given the importance of security concerns, it is not surprising that India's more peaceful South, especially Bangalore, was the first to attract international interest in computer and business services.

Table IV. 1. 2: Export of Computer and Business Services and Some Correlates

	India	Pakistan	Sri Lanka
Export of computer and business services	\$52.3billion	\$556 million	\$288 million
Electrification rate	0.56	0.54	0.66
Internet users per 1000 people	17.1	10.7	4
Broadband subscribers per 100 people	0.27	0.08	0.33
Telephone subscribers per 100 people	23	51	56
Secondary enrollment rate (%) Male (Female)	59 (49)	32 (25)	83 (89)
Tertiary enrollment rate (%) Male (Female)	13 (9)	5 (4)	- (-)
# of English speakers	90000	17000	1910
% of English speakers	10.7	10.4	9.9

Adapted from Bosker and Garretsen (2008) and Bosworth and Maartens (2008).

Services as the Engine of Future Growth

The review of the structure of the services sector in South Asia establishes that three countries where services have grown the fastest are: India, Pakistan and Sri Lanka. Services now comprise the largest sector in these economies. Furthermore, services are increasingly splintered into modern and traditional services and the modern services are growing faster than traditional services. In India, the modern services are dominated by computer and business services for which India has established itself as a world leader. This, especially the Indian experience has led to the view that South Asia has found its own, different, route to development: that South Asia's development will be services-led rather than manufacturing-led which is East Asia's path (and also the developed countries' in the past) to development.

It was argued earlier that for a sector to be the economy's engine of long term sustained growth, it has to satisfy two requirements. One is that it should create jobs of rising worker productivity that would lead to rising wages and improved standards of living. The other is that the sector should create lots of jobs so that more and more workers benefit from rising productivity and wages.

Is services the sector that will result in long term sustained growth of the kind outlined above? The three graphs (IV.1.7 to IV.1.9) attempt an answer. Figure IV.1.7 shows how the services sector has grown since the 1980's. India is clearly the outlier with consistent and increasing growth in services since the 1980's. In Pakistan, growth slipped in the 1990's as did the overall economy because of macro-economic and political uncertainties of that decade. Growth in Sri Lanka's services weakened in recent years as internal security deteriorated because of the civil conflict.

The evidence on growth in worker productivity is presented in Figure IV.1.8. Growth in output per worker has been robust in India, the most successful service sector South Asian economy, but is variable. It doubled between the decades of the 1980's and the 1990's but then tapered off. In Pakistan worker productivity growth in services has been impressive in the 1980's but has since fallen sharply. It has also weakened in Sri Lanka in recent years.

Employment growth in the three countries is presented in Figure IV.1.9. In both India and Pakistan, employment growth in services has been robust, more so in India than in Pakistan. However, in Sri Lanka, employment growth in services is less stable.

How do productivity and employment growth in services compare with agriculture and industry? This is seen for the three countries in graphs IV.1.10a to IV.1.12b. In India, worker productivity growth in industry was as high as in services in the 1990's.

Agriculture, on the other hand, has seen continuous decline in productivity. In Pakistan, worker productivity in industry was higher than for services in the 1980's and the 1990's but has fallen recently. Worker productivity in agriculture, that was robust in the past, fell sharply in 2000-06. In Sri Lanka, worker productivity in industry has continued to fall in

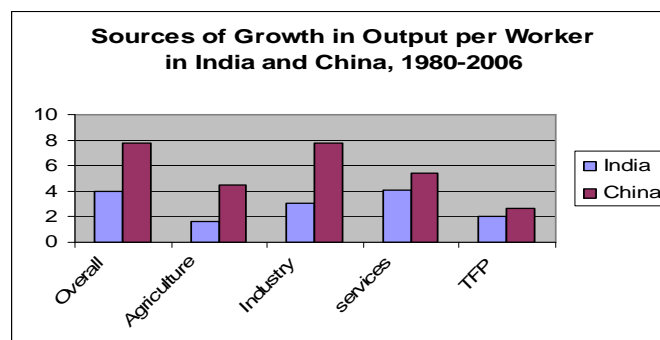
the last 26 years. Agriculture has also seen a decline in worker productivity in recent years.

Employment growth in India has been somewhat higher in industry than in services in recent years. In Pakistan employment growth in industry is quite strong and in recent years was stronger than in services. In Sri Lanka, employment growth in industry is the strongest of all sectors and has been so throughout 1990-2006.

Given the strong productivity growth potential in agriculture and the robust albeit episodic growth and employment potential in industry, it would appear that South Asia can ill-afford to focus only on the services sector. This is all the more important in view of the fact that 57 percent, 68 percent and 75 percent of the labor force in India, Pakistan and Sri Lanka, respectively, is employed in agriculture and industry (Table IV.1.3). Policy challenges in all three sectors of the economies need to be addressed for sustained high growth. In the following sections, employment and productivity challenges faced by South Asia's agriculture and manufacturing will be discussed. A brief summary of the challenges facing the services sector is presented in this section.

Box I.IV.1

Figure IV.1.13 below shows that China outperforms India in overall productivity and TFP growth and in labor productivity in all three sectors of the economy. Indeed, if India were to emulate China's performance in labor productivity growth in industry, the overall gain to the economy would be larger than pursuing the path of services-led growth. Thus it may be premature to declare the services sector to be the sole deliverer of South Asian economic growth.



Continued low productivity in agriculture, manufacturing and traditional services such as retail trade and construction should be a major concern for policy makers since the sectors will remain important for the vast majority of the 1.4 billion South Asians.

Figure IV.1.7

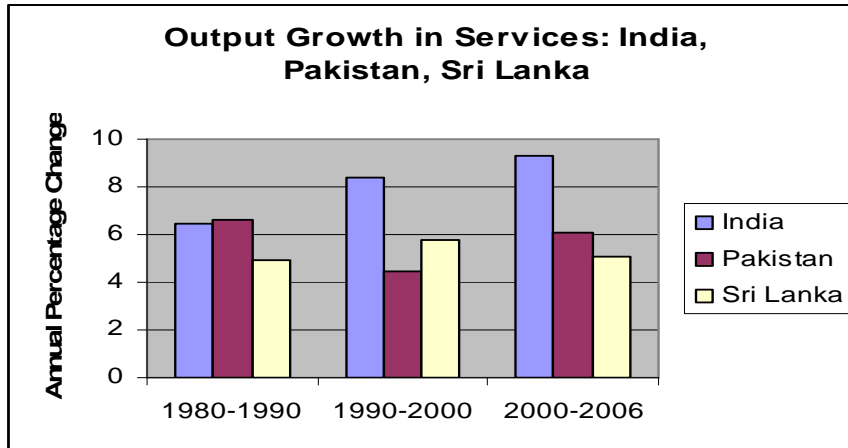


Figure IV.1.8

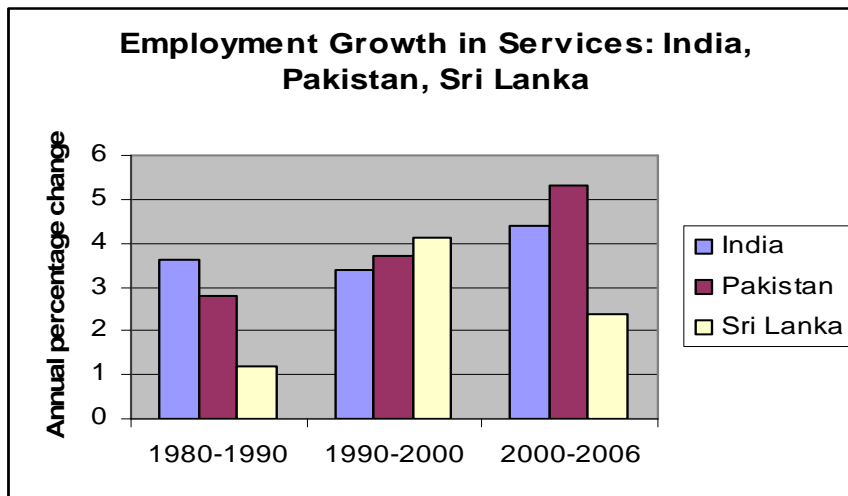


Figure IV.1.9

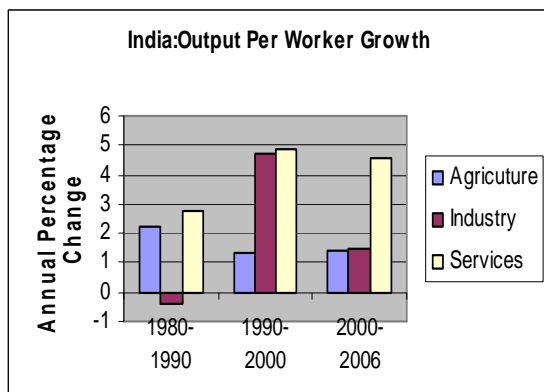
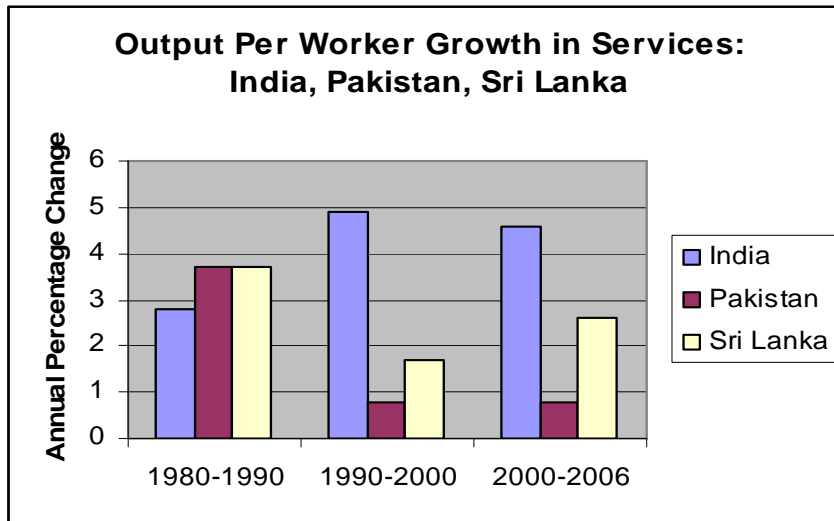


Figure IV.1.10a

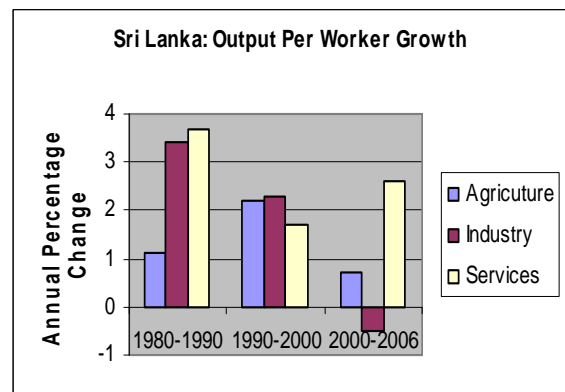


Figure IV.1.10b

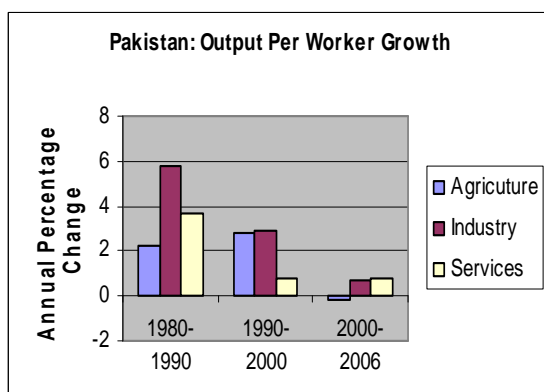


Figure IV.1.10c



Figure IV.1.10d



Figure IV.1.10e

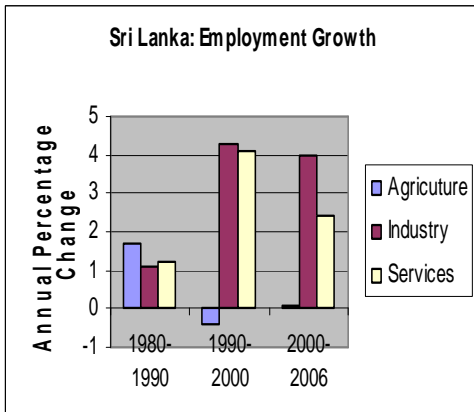


Figure IV.1.10e

Table IV.1.3

Percentage Share of Employment by Sector					
		1980	1990	2000	2006
Pakistan³⁷					
	Agriculture	52.72	47.45	42.09	43.37
	Industry	9.56	12.38	13.91	13.93
	Services	37.72	40.17	44	42.7
		100	100	100	100
Sri Lanka³⁸					
	Agriculture	49.8	47	40.3	41.2
	Industry	12.06	19.2	23.6	26.6
	Services	38.14	33.8	36	32.2
		100	100	99.9	100
India³⁹					
	Agriculture	68.82	67.2	56.67	58.17
	Industry	11.71	10.05	14.02	12.36
	Services	19.47	22.75	29.31	29.47
		100	100	100	100

³⁷ Computed from the State Bank of Pakistan's Annual Report 2006-2007

³⁸ Computed from the Sri Lanka Labor Force Survey – Final Report 2006-2007

³⁹ NSS 61st.Round 'Employment and Unemployment Situation in India- Part I, Report No. 515

Challenges Ahead

Services have an important role in raising the overall productivity level and wages in the economy and thus contribute to sustained high growth. But impediments to the growth of modern services will have to be removed and their capacity to generate jobs will need to be enhanced. Some of the areas of reform identified in the literature⁴⁰ include:

Better integration of areas with low productivity, traditional skills with those that have higher productivity modern skills. This will require removing impediments in the mobility of labor and capital between regions.

Since modern services are education intensive so that increase in the enrollment of secondary and tertiary education and improvement in the quality of education at all levels is essential for completing the transition to modern services.

The quality of infrastructure will need to be improved, in particular the communications infrastructure even in India that is the most advanced South Asian economy in modernizing services. While it is established that India's telecom reform helped the economy by-pass the infrastructure constraints faced by manufactured goods, by international standards, there is still a lot to be done to continue to increase returns in modern services. Data from WDR 2009 on international integration is summarized in Table 1.IV.4. India does better than other South Asian countries (but not Sri Lanka) in terms of band-width but there is a huge gap compared to Thailand, Malaysia and China. On international calls traffic and cost of calls also South Asia doesn't do too well and more investment will be needed to reduce costs.

Table 1.IV.4

	Internet bandwidth (bits per person)	Voice (international calls traffic in minutes per person)	Three minute call cost (US\$)
Bangladesh	8	6.4	2.02
India	24.3	3	1.19
Nepal	4.6	5.6	2.04
Pakistan	4.6	10.5	1.03
Sri Lanka	25.1	27.9	2.11
Thailand	156.2	14.1	0.67
Malaysia	124.5	87.9	0.71
China	195.7	7.3	2.9

⁴⁰ See, among others, "Trade in Services: Access to foreign markets, domestic reform and international negotiations", South Asia Region, The World Bank, 2003.

In addition to telecommunications infrastructure, electricity provision is also crucial for modernizing services since it facilitates the up gradation and speeding up of the processes in the services supply chain. Investment in telecommunications and electricity will make more services tradable and thus further strengthen services led export growth.

Modernizing the traditional servicing will require additional investment, both foreign and domestic. The overall quality of regulation that affects private investment in services needs to be improved, such as quantitative restrictions and limits on FDI. Furthermore, explicit discrimination against private foreign and domestic providers of services, statutory policies preventing consolidation of services and weakness in the qualification and licensing requirements also need to be re-examined.

The export markets for health and education services can be strengthened by improving the regulatory regime that affects the quality of services in the local regional market.

To take advantage of global trade in services, the region will need to take a more proactive, forward looking stance in international negotiations on traded services than the current defensive stance that protects the status quo. This will require some domestic liberalization of the services regime to ensure better access to international markets for the regions' traded services.

Table 1.IV.5: Rates of Growth, Total Economy and Major Sectors, South Asia Countries, 1980, 2006

Average annual percentage rate of change

Component	Total Economy Services						Agricultural Reallocation			Industry					
	1980-1990	1990-2000	2000-2006	1980-1990	1990-2000	2000-2006	1980-1990	1990-2000	2000-2006	1980-1990	1990-2000	2000-2006	1980-1990	1990-2000	2000-2006
Bangladesh															
Real Output Growth	3.7	4.7	5.6	2.5	3.2	2.8	5.8	6.9	7.8	3.7	4.5	5.8			
Employment	2.8	1.9	4.0	1.1	1.4	2.9	6.2	2.1	6.2	4.9	2.6	4.7			
Output Per Worker	0.9	2.7	1.6	1.3	1.8	0.0	-0.4	4.7	1.5	-1.1	1.8	1.1	1.0	0.3	0.7
India															
Real Output Growth	5.5	5.7	7.5	3.4	2.2	2.9	7.1	5.5	8.1	6.5	8.4	9.3			
Employment	2.0	1.6	2.9	1.2	0.8	1.6	3.6	2.2	5.2	3.6	3.4	4.4			
Output Per Worker	3.5	4.1	4.5	2.2	1.3	1.4	3.4	3.3	2.7	2.8	4.9	4.6	0.8	0.9	1.2
Maldives															
Real Output Growth	11.5	7.9	6.7	11.0	1.9	6.8	11.4	9.3	9.4	11.7	8.6	6.2			
Employment	N/A	4.4	4.2	N/A	-1.8	1.1	N/A	2.7	8.5	N/A	4.8	7.3			
Output Per Worker	N/A	3.3	2.5	N/A	3.8	5.6	N/A	6.4	0.8	N/A	3.6	-1.0	N/A	N/A	N/A
Nepal															
Real Output Growth	4.7	5.0	3.3	4.6	2.4	3.6	8.1	7.8	2.6	3.5	6.5	3.5			
Employment	0.7	1.8	1.9	-0.5	-0.1	-0.1	19.1	19.5	17.7	7.9	4.6	4.2			
Output Per Worker	4.0	3.1	1.4	5.1	2.5	3.7	-9.2	-9.8	-12.8	-4.0	1.9	-0.7	4.2	2.4	2.6
Pakistan															
Real Output Growth	6.1	4.4	5.4	4.0	4.4	2.1	7.7	4.2	7.3	6.6	4.5	6.1			
Employment	2.0	2.1	4.1	1.8	1.6	2.2	1.8	1.2	6.6	2.8	3.7	5.3			
Output Per Worker	4.0	2.2	1.3	2.2	2.8	-0.2	5.8	2.9	0.7	3.7	0.8	0.8	0.3	0.4	0.8
Sri Lanka															
Real Output Growth	4.2	5.1	3.8	2.8	1.9	0.8	4.5	6.8	3.5	4.9	5.8	5.1			
Employment	1.4	2.3	2.0	1.7	-0.4	0.1	1.1	4.3	4.0	1.2	4.1	2.4			
Output Per Worker	2.7	2.8	1.8	1.1	2.2	0.7	3.4	2.3	-0.5	3.7	1.7	2.6	0.0	0.8	0.4

Source: Bosworth and Maertens (2008)

V. Realizing Agriculture's Potential

The importance of the rural economy in South Asia cannot be overstated (Table V.1). More than two thirds of the region's population resides in rural areas (over 70% in India and Bangladesh and 85% in Sri Lanka). Agriculture continues to provide employment to a large proportion of the region's work force (55% and 60% in India and Nepal respectively). Importantly, nearly a third or more of the rural population in India, Pakistan, Bangladesh and Nepal consists of people living below the poverty line.

And yet, South Asia's high GDP growth appears to have by passed agriculture, whose share in GDP continues to decline without a commiserate increase in productivity and shedding of labor.

Table V.1: The continuing significance of agriculture in South Asia

	Rural Population (% of total)		Employment in Agriculture (% of total)		Agriculture Share in GDP (%)		Poverty Head Count, Rural (%)	
	1981	2007	1981	2006	1981	2007	Early 1990s	2000 and After
Bangladesh	85	73	62	48	32	19	55.2	43.8
Bhutan	89	67	94	56	42	21		
Nepal	94	83	90	60	61	34	43.3	34.6
Pakistan	72	64	53	43	31	21	33.4	35.9
Sri Lanka	81	85	47	32	28	12	27	7.9
India	77	71	69	55	34	18	37.3	30.2

Source: World Development Indicators 2009; Bosworth and Maertens (2008) and World Bank various reports.

Poor performance of agriculture has serious socio-economic implications. Enclaves of prosperity have emerged in and around mega cities like Delhi, Bombay, Karachi, Lahore, Colombo and Dhaka. Villages and towns located further away from the large cities have stagnated thus widening the income gap between the rural and urban populations. This dualistic development and the consequent rise in income inequality and persistence of rural poverty is one of the central challenges of maintaining sustained high growth in

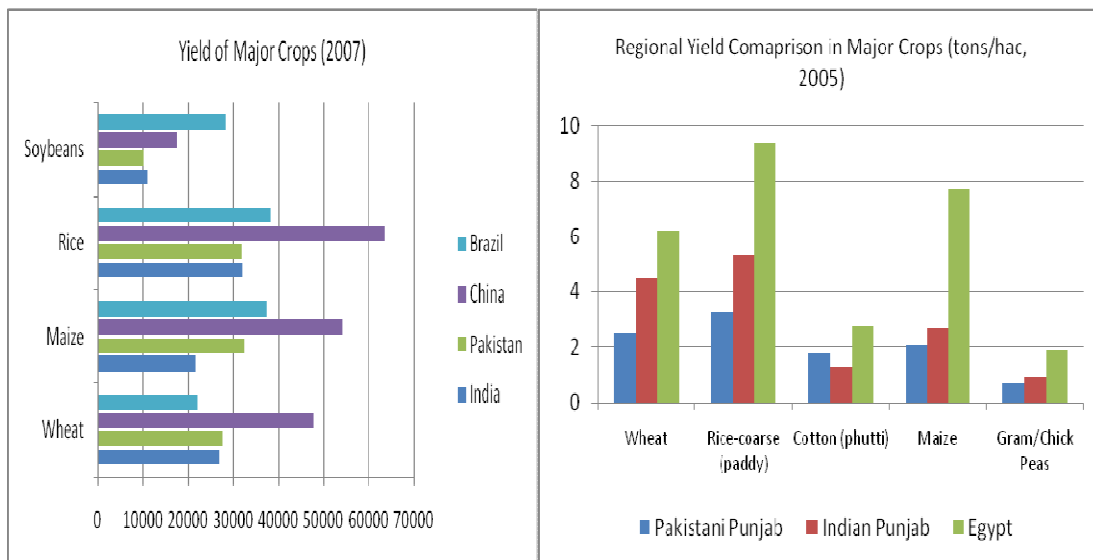
South Asia. The key for meeting this challenge is the rejuvenation of the rural economy, primarily agriculture.

Competitiveness of South Asian Agriculture

Agriculture’s international competitiveness is driven by crop yields or crop output per care. In most international comparisons, crop yields in South Asia are far below those in comparable countries. Figure IV.2.1 (left panel) shows this for important crops such as wheat, maize, rice and soybeans. Wheat yields in India and Pakistan are half those in China. It is more instructive, however, to compare yields across similar endowments. The right panel of Figure IV.2.1 thus compares yields of wheat, paddy, cotton, maize and chick peas in canal irrigated, rich soil endowed, Indian and Pakistani Punjabs with cultivation in similar conditions in Egypt. The figure shows Egyptian yields to be substantially higher for all crops. The challenge of international competitiveness thus remains to be addressed in South Asian agriculture.

Figure IV.2.1: Comparison of Agricultural Performance with Best Practice

(Source: Left panel:; right panel: Punjab Economic Report, World Bank, 2005)

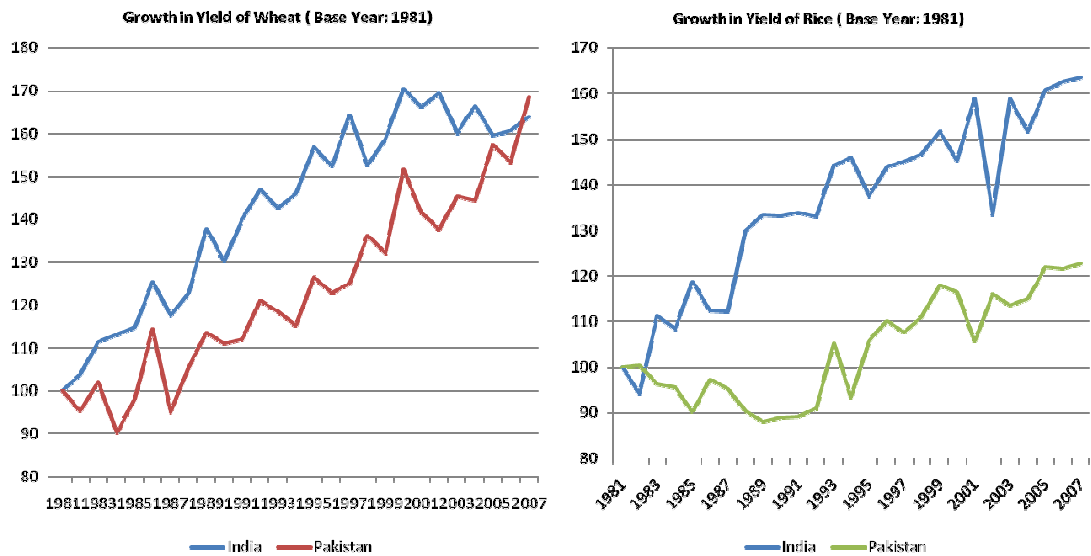


The evidence on yield performance over time (Figure IV.2.2) is encouraging and shows that improvements are possible. In the period, 1981-2007, wheat yields have nearly doubled in both India and Pakistan. In the same period, rice yields also increased

appreciably (up nearly 60% over 1981) on Indian farms and to a lesser extent in Pakistan (up 22%).

Figure IV.2.2. Trends in Yields of Wheat and Rice

Source: FAO Statistical Database

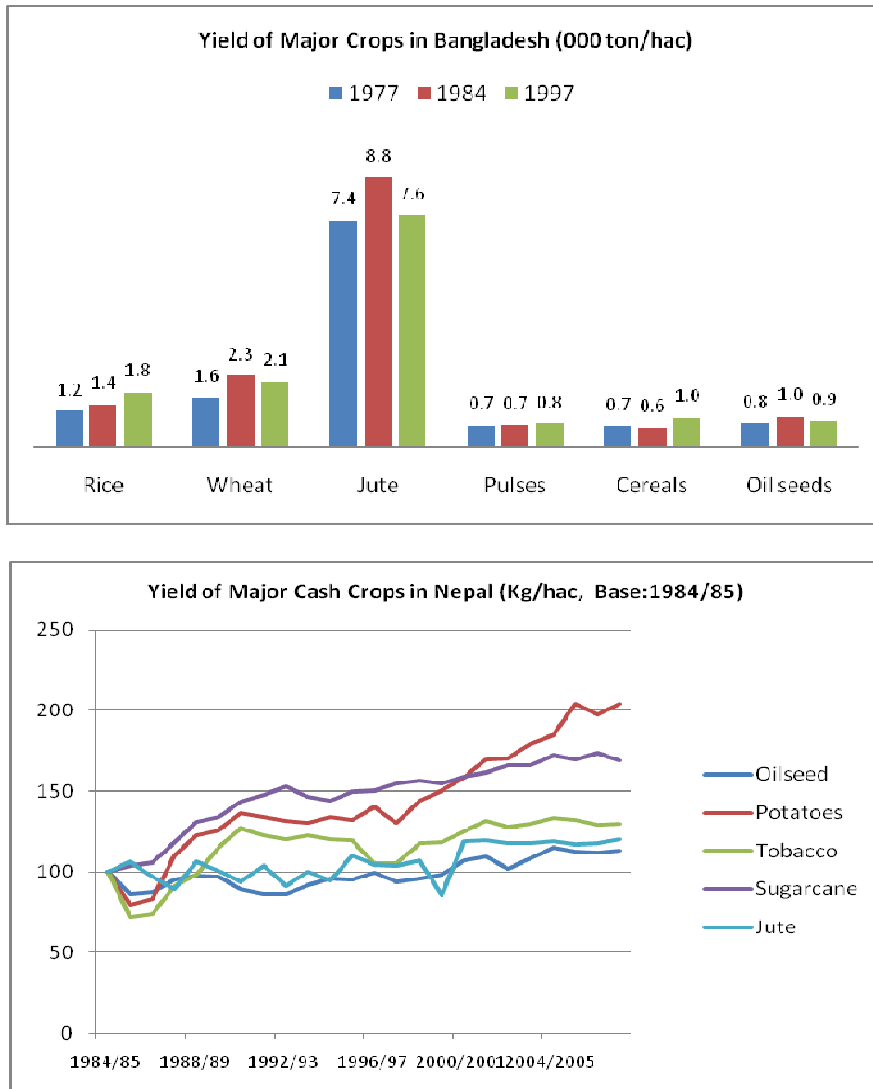


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Source: FAOSTAT: FAO Statistics on Agriculture 2009

Crop yield trends in Bangladesh and Nepal are mixed (Figure IV.2.3). In Bangladesh (left panel), rice and cereal yields increased in the period 1977-1997. For jute, wheat and oil seeds, yields increased between 1977 and 1984 but then declined in 1997. In Nepal (left panel), potato and sugarcane yields increased sharply in 1984/85 - 2004/05 but less impressively for oilseeds, tobacco and jute. This underscores the fact that crop yields, though improving compared to the past, are still significantly below potential.

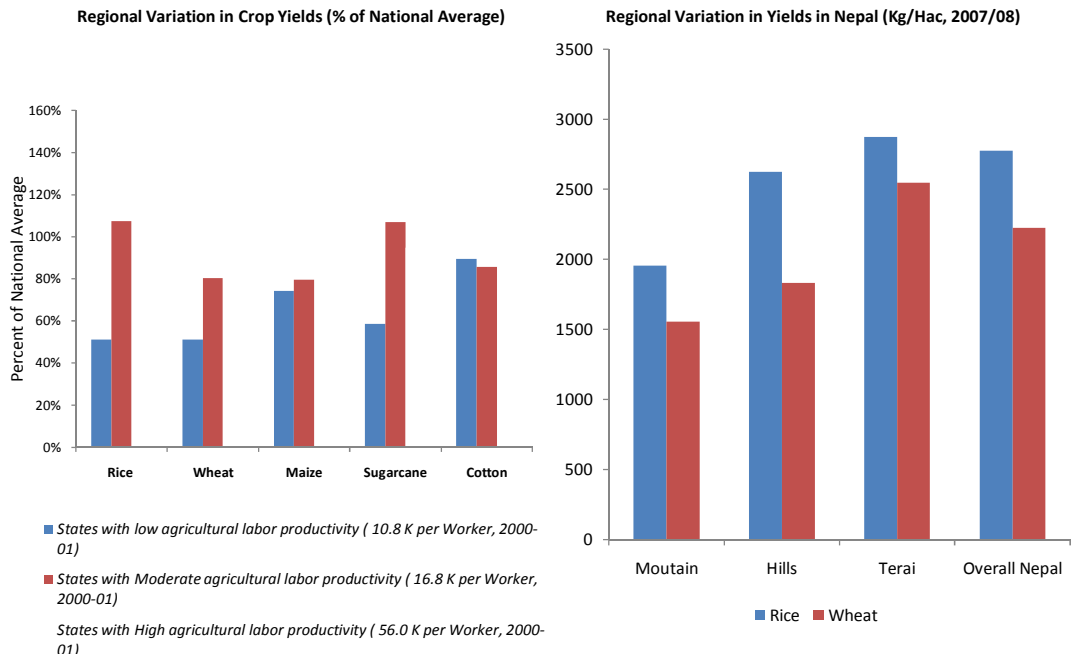
Figure IV.2.3. Trends in Yields in Bangladesh & Nepal
 Source: Ministry of Planning, Bangladesh; Government of Nepal



Source: Bangladesh Census of Agriculture and Livestock, 1977, 1984 and 1997, Bangladesh Bureau of Statistics (BBS), Ministry of Planning, Dhaka, Bangladesh; Government of Nepal

Continuing large gaps in crop productivity across regions is a major reason for overall below potential performance. For four major crops in India, rice, wheat, maize and cotton, states with high worker productivity in general have substantially higher crop yields compared to states with low worker productivity (figure IV.2.4, left panel). This points to the importance of raising farm worker productivity to increase country-wide yields to their potential. For Nepal, yield differences on account of soil and climate variation are captured in the right panel of Figure IV.2.4. To some extent, of course, such regional variation is unavoidable. Soil and climate conditions in the Terai are bound to be more conducive to rice and wheat cultivation than in the mountains and hills. This points to the need for crop specialization by regions based on comparative advantage to achieve the full potential in crop production.

Figure IV.2.4. Regional Variation in Agricultural Performance



Constraints and Opportunities:

Bangladesh

In Bangladesh, agriculture's share in GDP has dropped from around 30% in the 1990s to 20% in 2007. The growth rate picked up in the late 1990s and reached around 5% but fell to its average rate of 3% by the 2000s (Bangladesh Development Series, 2007). Agriculture contributes 23% to GDP, 54% to employment and 15% to the country's exports. The shares of individual sub-sectors are 13% for crops, 3% for livestock, 5% for fisheries, and 2% for forestry. The rural non-farm sector accounts for almost 33% of the GDP and 46% of all rural employment (Bangladesh Revitalizing Agriculture Report, 2005).

Bangladesh has managed to strengthen its food security and make a significant dent in rural poverty. Rice production, which makes up two-thirds of total value added by crops, has doubled since independence due to increase in investment and better policy incentives. Livestock has registered the highest growth rate during 2001-06 at 5.1%,

whereas fisheries grew slowly at 1.8%. In the period 2001-06, despite the decline in net sown area, value addition in the crop sector (at 1996 prices) has increased steadily.

The increase in agriculture value added comes mainly through increased productivity of individual crops, multiple cropping and shifting to high valued crop production. Although this increased productivity has aided Bangladesh in bridging the food-gap, growth in food grain production has slowed from FY 2002, going down to an average of 1.8% per year in FY 2002-06 from an average of 2.4%t over FY 1981-2001. This can be attributed largely to declining rice and wheat production.

After independence in 1971, the socialist model of cooperative farming was encouraged and implemented by the state. Procurement and distribution of inputs such as seed, fertilizers, and pesticides were controlled by the government managed Bangladesh Agricultural Development Corporation (BADC). In line with the import substitution model a protective umbrella was provided to the rural economy through the imposition of quotas, highly differentiated tariffs rates (0% to 400%), large subsidies, and an overvalued exchange rate. Protection of the domestic economy was further reinforced by market interventions in the form of credit ceiling, arbitrary licensing, and price controls. This policy regime had an adverse effect on production and productive efficiency resulting in a widening gap between demand for and supply of agricultural output (Salim, R and Hossain, M, Applied Economics, 2006).

Agricultural policy reforms that began in the 1980's included reduction in the role of government in input distribution, lowering of subsidies on agricultural inputs, liberalization of output markets with producers' price incentive, gradual elimination of the public food grain distribution system, price stabilization through open tender procurement policy and allowing the private sector in food grain importation (Salim, R and Hossain, M, Applied Economics, 2006).

During the first decade of reforms, 1985-94, after an initial slow down, agriculture exports increased by 25% in 1995, fell in 1996 and then increased again in 1997 (by 34%) and 1998 (by 11%).

Currently, Bangladesh's main agricultural exports comprise of raw jute and jute products, frozen shrimp and fish and tea. While the volume of agricultural exports (except raw jute and jute manufactures) has remained stable, frozen shrimp, frog legs and fish have emerged as significant export items. In the year 2004, agricultural imports amounted to \$1984 million and agricultural exports \$114 million. Food products comprise around 80% of agricultural imports, while jute and tea (non-food agricultural products) account for over 80% of all agricultural exports.

India

India's agriculture has not performed well. Growth in the sector has been far below GDP growth rates, turning negative in 2002-03 (-6.9%) and rising to a modest 2.3% in 2005-06 against GDP growth rate in that year of around 8.1%. Agricultural labor productivity is

low with poorer states performing worse than the richer ones. Furthermore, agricultural yields for major crops are also lower than those of comparable developing countries.

At the state level, Rajasthan is an example of where labor productivity is constrained by the weak linkages to input and output markets due to limited road connectivity and communication links (DPR 130). This discourages farmers from diversifying into higher-value perishable products.

In Punjab, employment in agriculture has declined from 53% in 1991 to 39.4 percent in 2001. The state has 3% of India's net sown area, 1.5% of its farming population and accounts for almost 20% of the country's wheat production. Growth in such an agriculturally important state has, however, been a low 2.6%, below the state average of 3.2% (RPP 24). Also, the total factor productivity growth rate has been extremely low, turning negative (-2.04%) in the southwest region.

Box V.1

A Case of Value Addition: Maharashtra Wine

The state of Maharashtra is home to almost 20,000 hectares of vineyards that grow more than one *lac* (0.1 million) tons of grapes a year. These grapes are used in the making of honey, crushes, jams, and wine. The latter value addition has tremendous scope in terms of generating future employment and earnings and can become a major export of the state and the country. There are some constraints, however, which are not allowing the sector to achieve its potential.

One of the factors constraining the industry is the high level of domestic excise duty (300 percent on each bottle) which added to the already high costs of production and packaging, makes manufacturing costs exorbitantly high. Furthermore, wine manufacturing and marketing requires aggressive brand-building campaigns requiring high advertising budgets. Therefore, financially constrained small and medium sized local enterprises might not be able to compete with larger well-established manufacturers. Another important reason holding back wine production is the scarcity of water in the wine producing regions because of the irregularity of rains.

The government of the state of Maharashtra has finally taken a step to encourage the retail end of the wine industry. Previously imposed license fee hikes of 200% to 400% have now been brought down to 150% to 200%. This was in response to protests launched by many hoteliers and wine wholesalers and retailers associations. Although this decision has been partly offset by the imposition of an additional sales tax on country-made liquor manufacturing units of Rs. 18 per box, the reduction in license fee is still an incentive for the growth of wine businesses.

The State Bank of India also took an initiative in 2001 to increase the wine yield in Maharashtra; the bank allocated almost Rs. 30 lacs (3 million) for the project, which is expected to be completed in 25 years. The aim of the project is to bring together farmers and scientists in an attempt for technological up gradation.

Liberalization of India's agriculture entailed the abandoning of government intervention in the export and import of agricultural produce, removal of quantitative restrictions such

as quotas and licenses and reduction of import tariffs. Trade liberalization and the devaluation of the currency gave a substantial impetus to India's agricultural exports, which increased substantially during the 1990's. Thus, although agricultural growth in India was unimpressive, agricultural commodities, in the recent past, have accounted for almost 20% of the country's total exports earnings. Some of the major agro-products exported are coffee, tea, tobacco, cotton, and rice, with milled rice being the most important, accounting for over 15% of the exports in 2003-2005. Soybean meal is a close second, accounting for around 10% of exports. Processed fruits exports make up the largest share of horticultural exports.

Nepal

In 2001, agriculture was 37.4 percent of Nepal's GDP, even though only 19 percent of the country's land can actually be cultivated. By the year 2005-06, agriculture's share in GDP had fallen to 33.59 percent and to 32.12 percent in 2007-08. The overall performance of agriculture has remained poor. The country's population growth (2.5 percent per annum) is outpacing agricultural sector growth, which for a number of years has remained virtually stagnant. A major constraining feature of Nepalese agriculture is the lack of transport and communication network between the different arable regions. Hence, although the country produces an overall exportable surplus of food grains, inability to transport these from surplus to deficit areas leads both export and import of the same products. Subsistence agriculture dominates, particularly in the hilly regions.

Rice is Nepal's most important cereal crop and is cultivated on more than half of the cultivated area. The output of rice and other cereal crops (wheat, maize etc) has increased from 1991 to 2007-08. Rice cultivation is concentrated in the Terai region, which contributes 71% of the total output. Almost 87 percent of the seeds used in rice cultivation are of an improved quality, which has resulted in the recent increases in output.

Oilseed, potato, tobacco, sugarcane, and jute comprise the main cash crops. Although the area under cultivation has not grown by much (land being a binding constraint in Nepalese agriculture), the production of these crops has registered a significant increase since 1991. This is due to an increase in the yield of all five crops, the most significant increase being that of potato which almost doubled from 6411 kg/hectare in 1984-85 to 13110 kg/hectare in 2007-08.

Since 1992, Nepal's trade regime has been liberalized substantially. Tariff rates were substantially reduced and restructured. Quota's and import licenses were also abolished along with state control of exports and imports. As part of the reform package, agricultural input subsidies have been gradually phased out. For reasons of food security, the only crop which still has some degree of state intervention in the form of price controls and government procurement is rice.

In 1981-82, the share of agriculture in total exports was almost 50%; since then it has declined to less than 12%. Vegetable ghee is the most important export. Most of the exports of Nepal fall under the category of primary agricultural products as most of the annual produce of sugarcane, jute, and tobacco are consumed domestically. The country's trade is centered in the Terai region, where farmers find it easier to transport goods across the border to India rather than to the less accessible mountainous regions of Nepal. In 2001, agricultural exports totaled \$57.7 million, while agricultural imports amounted to \$232.2 million.

Pakistan

Agriculture growth over the past few years has been steady at around 4%, except for the sudden decline in 2007-08 to 1.1%, attributed to natural factors (low rainfall, pest attacks etc) and their impact on wheat and cotton. Major crops that make up around 33.4% of the total value added of agriculture are estimated to perform relatively well during the year 2008-09, hence pushing up the expected growth rate of agriculture to a respectable 4.7% (Economic Survey 2008).

Major *Kharif* (June-November) crops include rice, cotton and sugarcane while wheat is the predominant *Rabi* (November-May) crop. These four major crops together make up 29.8% of the total value added in overall agriculture and comprise around 6.5% of the annual GDP. Besides these crops, the single largest contributor to Pakistan's agriculture is livestock, which comprises 51.8% of the total agricultural value added.

Cotton is the most important non-food cash crop in Pakistan and alone accounts for about 7.7% of the total value added in agriculture and 1.6% of the country's GDP.

Although provisional figures for 2008-09 show that the growth rates for yield and production are likely to turn positive, area under cotton is expected to go down by a further 7.7%. The main decline in cropped area mirrors the worldwide trends: with competing crops fetching higher prices, worldwide cotton production is projected to decline by 10% in the year 2008-09. Use of better quality seeds and better technology (such as the BT cotton variety) is however, expected to increase cotton production.

There have been significant structural changes in the system of livestock production. Traditional methods of production have been steadily replaced by intensification and commercialization, which in the future can lead the country to self-sufficiency in milk production. In fact, improvements in milk production and commercialization of the dairy industry has the potential of making Pakistan an exporter of milk to countries such as the Philippines, Malaysia, and Thailand (Z, Bashir, PDR, 2003).

At the sub-national level, in Punjab, as in the rest of the country, agriculture is the mainstay of the economy, providing employment to over 40 percent of the work force and contributing 28% to provincial GDP. The average growth rate of Punjab's agriculture over the past 20 years was 4-5%, higher than the South Asian average. This can be

attributed largely to adoption of high yielding crop varieties, technology, and better education opportunities. Total factor productivity accounts for almost half of the growth in output. Somewhat similar to the national trend, at 63.2% livestock is a major contributor to the total agricultural value added in the province second only to the share of major crops, which is at 73.6%. Punjab, however, is performing below its latent potential. Crop yields, particularly those of wheat, rice, sugarcane, and cotton are below those of Indian Punjab (Figure IV. 2.1). Thus, there is a lot that can still be achieved by appropriate technologies (Punjab Economic Report, 2005).

Box V.2

GM technology: The case of BT Cotton in Pakistan

Cotton is one of the most important cash crops of Pakistan. It is important, not only for the livelihood of millions of farmers but also as an input for the country's textile industry. In recent years, cotton production in Pakistan has been severely effected by pest attack. Moreover, the high cost of pesticide application, depressed market prices and removal of input subsidies have been a disincentive for farmers to grow cotton. Against this scenario, the Government of Pakistan took steps to adopt the use of biotechnology. The Biosafety Rules were passed in April 2005 that set up the legal requirements for the import, export, and handling of biological agents and genetically engineered organisms and vectors. Later in the same year, the Pakistan Atomic Energy Commission, distributed 40,000.00 Kg basic seed of BT cotton (insect resistant) varieties 'IR-FH-901', 'IR-NIBGE-2', 'IR-CIM-448' and 'IR-CIM-443'; which were grown over 8,000 acres of land in 2005-06.

Farmers who planted BT Cotton in the heart of the cotton growing regions of Punjab, in Bahawalpur, Multan, Karror Pakka and Muzaffargarh, evaluated the advantages of using the new seed. The cotton plant was found to be resistant to the chewing pests, including the American, Pink, Army, and Spotted bollworms. Also, no serious incidence of cotton leaf curl viral disease was reported in the BT Cotton variety. The resultant increase in yield was found to be almost 30 percentage. On average, the yield obtained with BT cotton was around 23-28 *maund* (1 *maund*=40 kg) per acre much higher than traditional cotton varieties which used to get farmers 17-20 *maunds* per acre. Furthermore, due to an increased number of cotton bolls per plant, the estimated economic gain by using BT Cotton is estimated to be more than Rs. 3000/acre. It was expected that cotton growers should have BT seeds of the above varieties for at least 75,000 acres of land in year 2006-07.

Biotechnology offers great benefits to the farmers of Pakistan but it needs to be implemented at the official level for it to have any major impact. According to the Economic Survey of Pakistan (2008-2009), the Ministry of Food and Agriculture has signed a letter of intent and a memorandum of understanding with the Monsanto Company for the provision of the latest BT Cotton seeds (bolgard-II) to maximize cotton productivity. In the absence of government regulation in the provision of seed there is a danger of seed adulteration, which can adversely affect the cotton yield of farmers across the country.

In the North West Frontier Province (NWFP), crop yields are even lower than in the Punjab. The region has suffered negative growth rates, especially since 1997-98, when following a period of severe drought, wheat yields fell by 10 percent a year till 2001-02. Hope for NWFP agriculture now lies in the growth of fruit production; apple production increased at 4 percent a year up to 2002-03 and peach production grew by an average of

over 14 percent annually over the same period. The trend towards crop diversification in the province is thus clear (NWFP Economic Report, 2005).

In accordance with WTO agreements, the government has reduced tariff rates across the board. For example, the simple average ad valorem tariff rate in the 2005-06 trade policy was just under 15 percent, compared to over 50 percent in 1995. Furthermore, quantitative restrictions, exchange controls, and other direct state interventions in trade have been largely eliminated.

Over the past 10 years, the government has gradually phased out almost all input subsidies. However, there have been a few exceptions such as the fertilizer subsidy, which has been given intermittently. In terms of pricing and procurement, most of the crops are out of the ambit of government control with the exception of wheat.

Pakistan's main agricultural exports in FY 2006-07 comprised of rice (\$1.13 billion), fruits and vegetables (\$234 million), fish and fish preparations (\$191 million), raw cotton (\$76 million), meat and meat preparations (\$55 million), oilseed nuts and kernels (\$22 million) and spices (\$16 million).

Box V.3

Export diversification: Sargodha *Kinnows*

Kinnow, a hybrid of two citrus cultivars, the 'King' and 'Willow Leaf' is classified as '*Kinnow* Mandarin' and was introduced in the subcontinent from California in 1943-44. Due to its easy-peel quality, high juice content and special flavor, its export demand has been constantly growing. Almost 95 percent of the area under citrus is located in the Punjab and *kinnow* accounts for over 75 percent of the area under citrus production. The *kinnow* industry is also responsible for substantial employment; employment generated from its production and marketing is currently estimated to be 23.48 million labor days.

As far as trade is concerned, more than 90 percent of citrus exports are made up of *kinnows* and Pakistan is amongst the top ten countries that export the hybrid mandarin. According to Food and Agriculture Organization of the United Nations (FAOSTAT) data, the total production of mandarin in Pakistan was at 434,000 MT, far exceeding that of Australia's 100,959 MT. Keeping in mind this potential for export, an Agriculture Sector Linkage Program (ASLP) has been introduced to transfer Australian knowledge and expertise as well as to enhance research and development by targeting, amongst other sectors, the *kinnow* production industry in Sargodha, Pakistan. This need for research is manifest in the fact that most developed countries demand seedless varieties, which are currently not grown in Pakistan, hence limiting its export market mostly to developing countries.

Also, the recently introduced Sanitary and Phytosanitary requirements by the WTO require *kinnow* growers in Sargodha to be more stringent as far as pest control and packaging quality is concerned. Most FAO studies show that Pakistan does have a comparative advantage in *kinnow* production. The *kinnow* producers of the Sargodha district are thus economically efficient. The adoption of new technology to ensure the meeting of international standards and the use of effective incentives for citrus growers in the district is what is needed to improve *kinnow* exports.

Sri Lanka

In Sri Lanka, the combined annual growth rate of agriculture, forestry and fisheries fell from an average of 1.9 percent in 1991-00 to 0.9 percent in 1998-02. The growth rate of agriculture alone fell from 1.6 percent to 0.4 percent over the same period. Agriculture's share in total employment has also declined to 30.5 percent in 2005. The impact of the agriculture's poor performance is magnified because Sri Lanka's rural areas are home to almost 80 percent of its population and the rural poor account for almost 95 percent of the country's total poor.

Rice is the single most important crop in Sri Lanka. The average yield and total production of rice has increased steadily from 3857 kg/hectare in 2000 to 4137 kg/hectare in 2006, and total output went up from 2860,000 MT to 3341,000 MT.

Tea, rubber and coconut are the three major commercial crops of Sri Lanka. However, the contribution of the commercial crops to gross domestic product has been declining; over the last 30 years, this has fallen from 11.5 percent (in 1970) to 5 percent in year 2000.

Economic liberalization started relatively early in Sri Lanka, with the first phase introduced in the year 1977, making Sri Lanka the most liberal South Asian trade regime. However due to the growing concerns of food security and livelihood of the rural economy, the Sri Lankan government is cautious about further reducing the tariff rates on agricultural trade.

Sri Lanka is famous for its black tea and is the largest supplier in the world. About 95 percent of all tea production was exported in the year 1999 bringing in export revenue of \$621 million. United Kingdom, Russia, and the Middle East are the major destinations of Sri Lankan tea exports.

Rubber exports are also a significant means of foreign exchange for the Sri Lankan economy. In 1999, 46% of the rubber produced was exported. The export earnings amounted to around \$33 million, with China being the major export partner.

Coconut, the third important commercial crop registered an output of 2828 million nuts in 1999, the highest output since 1986. After accounting for domestic consumption, 35 percent of it was exported and earned the country foreign exchange worth \$129 million; coconut and coconut milk are mostly used in food preparations but most of coconut exports are in the form of kernel products (desiccated coconut, coconut oil, copra).⁴¹

⁴¹<http://www.nationsencyclopedia.com/economies/Asia-and-the-Pacific/Sri-Lanka-AGRICULTURE.html>

Future of South Asian Agriculture

Agricultural growth in South Asia has been unimpressive. Given the significance of agriculture in South Asian economies, it is important to implement a comprehensive policy for improving the performance of the sector. Salient features of such a policy would include:

Water and Land Management

Timely and adequate availability of water has to be top priority in South Asian agriculture. In Pakistan, the canal irrigation network, fed primarily through snowmelt and monsoon rains, has deteriorated severely over the years. The irrigation network diverts 106 MAF of surface water and results in huge delivery losses through canals and water courses (Agriculture Perspective and Policy, 2004).

In order to counter the problem of water shortage, additional reservoirs would need to be constructed but importantly current water resources need to be conserved. In Pakistan, water conservation alone can improve water supply by 10-15 percent, essentially by improving the efficiency of the current irrigation system. Furthermore, according to the APP report, Pakistan will need approximately an additional 20 MAF of water by the year 2025.

South Asian governments have begun to formulate water management policies keeping the future water shortages in view. Government of Pakistan has produced a 'Water Vision 2025' which is to be completed in three phases and is expected to increase water storage capacity by 64 MAF; currently the storage capacity is around 16 MAF (APP 37). Similarly, the Government of Sri Lanka has spent Rs. 215 billion between 1980 and 1997 on irrigation infrastructure development, including the ambitious Mahaweli River (Sri Lanka Development Policy Review, 2004).

Land poses another major constraint to the development of South Asian agriculture. Land rights are poorly defined. Inefficient land holdings, the inability to use land as collateral and underdeveloped land and credit markets discourage private investment in agriculture. India is perhaps the only country where land reforms have been implemented successfully. In Pakistan, 'less than half of the land is held by a large number of small farmers while the remainder is held by a small number of large landowners' (Pakistan Agriculture Economy and Policy, 2009) reflecting small holdings and a large landless rural labor force. Several half-hearted attempts at land reform have yielded unimpressive results.

In Sri Lanka, most of the land was state-owned and was later transferred to the agricultural laborers by the method of deed registration. Although the land holdings are equitable, they cannot be used as collateral and are in most cases too small to allow the adoption of efficient farming techniques. Furthermore, the system of deed registration is insufficient to guarantee land ownership. People who want to quit farming must also lose

the land. This prohibits exit from agriculture into more profitable rural non-farm activities.

Infrastructural Development and Agricultural Research

Investment in infrastructure and research is essential to increase productivity of land. This includes farm-market roads, telecommunications, better functioning retail and wholesale markets and improved seeds.

Given the change in world demand and the increased prices of high value agricultural products such as fresh fruits and vegetables, South Asian agriculture needs to diversify away from traditional cereal and cash crops into high value added crops. However, many high value added crops are more perishable and therefore better rural transport networks are needed to attract investment. Improving communications and connectivity is part of the future agricultural policy of almost all South Asian countries. The India Development Policy Review highlights that non-farm linkages and agro-processing facilities will help in crop diversification and will boost international trade in agriculture. Bangladesh's agriculture, which is heavily reliant on paddy needs to diversify into non-rice crops but is held back by the lack of cold storage facilities, marketing and quality standards and transportation bottlenecks (Bangladesh Development Series 2007).

The recent WTO Sanitary and Phyto-Sanitary (SPS) requirements also call for increased investment in improving quality standards. This is also necessitated by the growing use of biologically modified, high yielding seeds. In Sri Lanka, initially restrictive SPS requirements discouraged farmers from using these varieties. However, the need for intensified agriculture that can help maximize production from limited amounts of land, led the Government of Sri Lanka to amend their Plant Protection Act in 1999 with revised SPS requirements scheduled for 2004. Similarly, Pakistan has also recently set up the National Animal and Plant Health Inspection Service (NAPHIS) in order to ensure compliance with WTO SPS regulations, which would otherwise restrict trade (Pakistan Agriculture and Economy Policy 2009).

Research and extension to promote competitive agriculture has assumed increasing significance. High yielding varieties are being used all over South Asia, but recurrent problems such as the mutation of pests to counter the immunity of genetically modified varieties requires that agriculture research stays abreast of field developments. This will require higher expenditure on research; the medium term target is an expenditure of 1-2 percent of GDP.

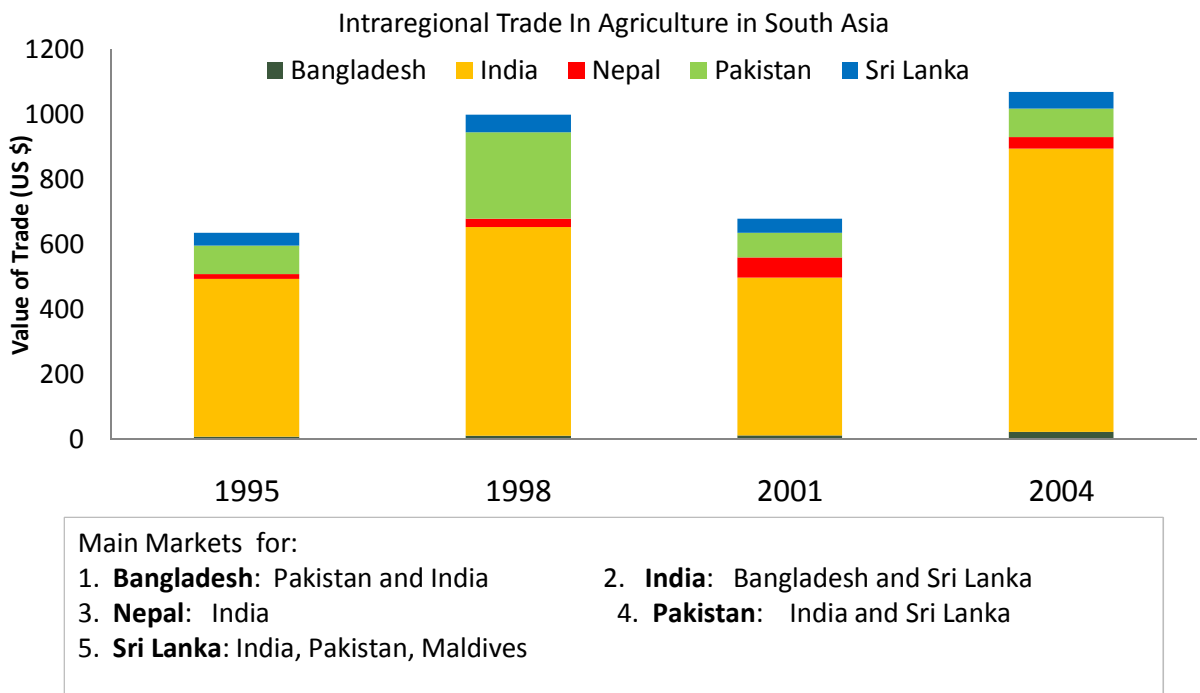
Intra Regional Trade

South Asia regional trade in agricultural commodities is a meager 4% of the worldwide South Asia trade. India, by far the largest economy of the region, has the most protective trade regime. While it is highly diversified in its exports, it is the least diversified in the region in its imports. A range of non-tariff barriers, along with a 40% average tariff rate on agricultural commodities, severely limit imports from the neighboring countries. A

lowering of these trade barriers as envisioned by SAFTA would result in a large increase in regional trade in agriculture.

Studies have shown that Pakistan and India can effectively manage their respective food security issues if trade in crops like wheat and sugarcane is allowed. In a deficit year, India could import wheat from Pakistan and vice versa resulting in stability of supply and hence price. Unfortunately, chronic instability in the political relations between the two countries has disrupted efforts to achieve the mutually beneficial outcome of improved trade flows.

Figure V.5. Intraregional Trade in Agriculture in South Asia



Source: World Bank (2004): Sri Lanka: Development Policy Review

VI. Towards Competitive Manufacturing

The anemic performance of South Asian manufactures was seen in a series of graphs in chapter 3 that showed that manufactures share in the economy was stagnant during a period of rapid economic growth. Figure below shows this more strikingly and in vivid contrast to the performance of East Asian manufactures.

The State of South Asian Manufacturing

Unimpressive growth

Over three decades between 1968 and 2001, Korea, Malaysia, and Thailand achieved remarkable growth in manufacturing value added that increased, respectively, by a factor of 40, 27, and 14. This implies a huge transformation of the society in terms of how people work, where they live and how they invest in themselves to become productive members of the society. It is this transformation that lies at the core of the East Asia's growth miracle.

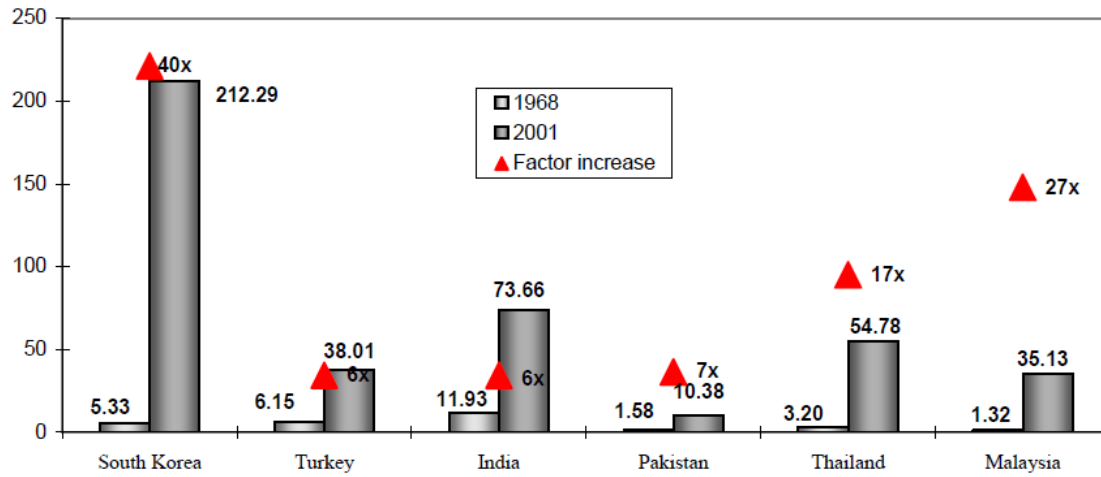
South Asian manufacturing, by contrast, was lackluster in the three decades when East Asia was galloping away. In Pakistan, manufacturing value added increased by a factor of 7, in India by a factor of 6. Value addition in manufacturing in more recent years, 2001-2007, shows some pick up, Figure VI.2.

Weak International Competitiveness

The evidence on how South Asia positions its manufactures in the world markets is not very encouraging. Figure VI.3 shows this. The vertical axis measures the growth in the export of product x, worldwide, as a share of total world exports. The horizontal axis measures the growth in the export of product x for a country as a share of total world export of product x. If the country's product lies in the right hand upper (the happy) quadrant, the country is gaining in international competitiveness. This is because its share in the export market for product x is rising at time when worldwide share of the product in total world exports is rising. The more products a country has in the happy quadrant the stronger its international competitiveness. Figure shows this for India and Pakistan.

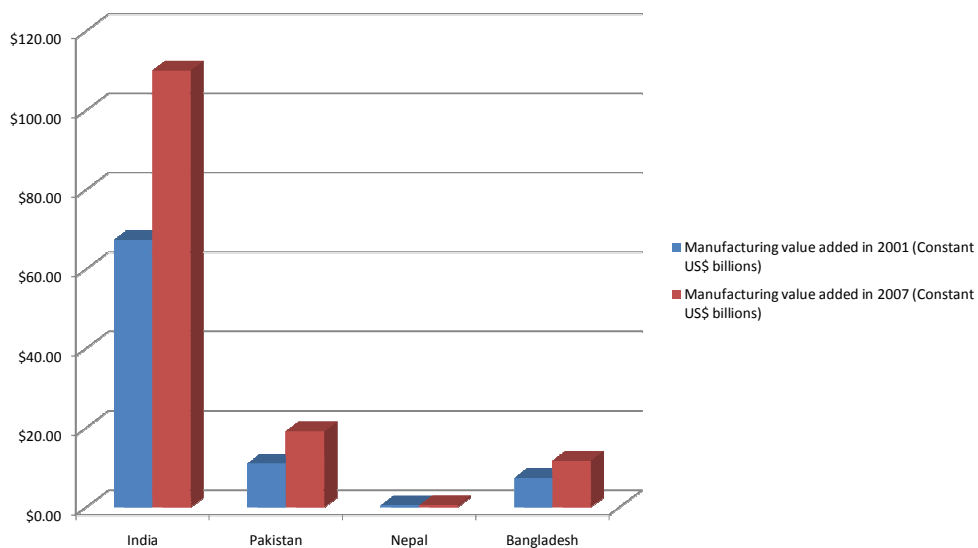
In 2007, India had three product groups (the colored blobs representing chemicals, iron and steel and pharmaceuticals; the size of the blob measures the product share in country's exports) in the happy quadrant. Together they comprise a fifth of India's exports. Thirty five percent of India's exports were growing in product categories whose share in worldwide exports is falling. This is not desirable since declining world demand will require painful adjustment down the road. Another feature of India's exports is that products are diversified as seen in the number of mid to large size blobs representing different product groups.

Figure VI.1: Characteristics of Recent Growth IV: South Asia growth not up to East Asia standards; slow growth in manufacturing value added



Source: Devarajan and Nabi (2006): "Economic Growth in South Asia: *Promising, Unequalizing, Sustainable?*"

Figure VI.2: Manufacturing Value Added in US\$ billions



Pakistan, by comparison, had only a tiny proportion of its exports in the happy quadrant i.e. chemicals at 2.6 percent. Although small to begin with, Pakistan's share in the worldwide pharmaceuticals markets was declining even though worldwide demand for pharmaceuticals is rising. Thus, the vast majority of Pakistan's exports are in products whose share is declining in the world market. Equally worrying is the fact that Pakistan's exports are dominated by one big (textiles) and one mid size (clothing) while the rest are tiny. This shows lack of product differentiation and high concentration in textiles.

International competitiveness indicators for Bangladesh and Sri Lanka (Figures IV.4), similar to those of Pakistan, are also not encouraging.

A more recent approach⁴², that combines insights from the literature on industrial clusters⁴³ and new economic geography, characterizes competitiveness as the country's ability to position itself in world industrial clusters that are dense, since greater density allows scale economies in new inter-related activities. The countries located in dense clusters enjoy longer and many more opportunities of productivity growth thereby pushing economies up the income ladder. This approach allows a fresh look at East Asia's success in transforming itself to a middle-income region. Hausman et al (2007) illustrate this for Malaysia. Figure VI.5a shows the Malaysian economy, represented by black squares, in 1975 in relation to the three important clusters of dense activity: capital-intensive industry (e.g. chemicals) in the middle, machinery manufacturing in the Northeast and labor intensive (textiles) industry in the Southwest. In 1975 (Fig VI.5a), Malaysia was mainly a primary goods exporter located in the sparse periphery areas and had little or no presence in any of the dense clusters.

By middle 1980's, Malaysia was on its way to realizing its development objectives of improving cross-ethnic distribution outcomes to gain political stability. It sought to achieve this by investing in human capital, pursuing a liberal trade regime and opening up to foreign direct investment. The resulting improvement in international competitiveness is captured well in Figure VI.5c. Malaysia began to make its presence felt in world markets as its exports began to gravitate towards all three clusters of dense activity.

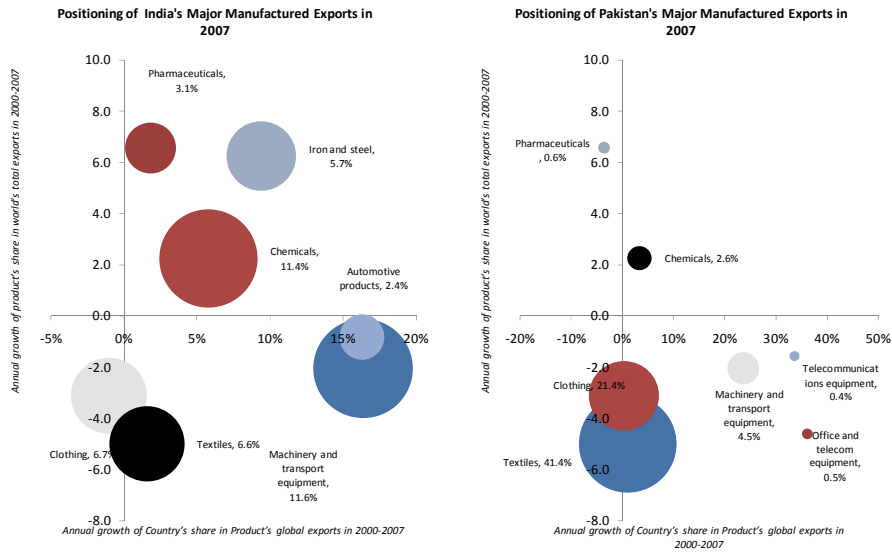
This trend continues as Malaysia steadily pursues its development strategy facilitated by improved ethnic harmony and political stability. By the year 2000, Malaysia was well-entrenched in the Northeast machinery manufacturing (mainly electronics) cluster.

Hausman et al (2007) did a similar analysis of evolving competitiveness for one country in South Asia region viz., Pakistan. As early as 1975, Pakistan had specialized in labor-intensive textiles and little has changed since then in terms of cluster location. This lack of dynamic competitiveness characterizing South Asia is worrisome.

⁴² Hausman & Klinger (2007): The Structure of the Product Space and the Evolution of Comparative Advantage, CID Working Paper;

⁴³ Hidalgo et al(2007): "The Product Space Conditions the Development of Nations", Science Volume 317, www.sciencemag.org

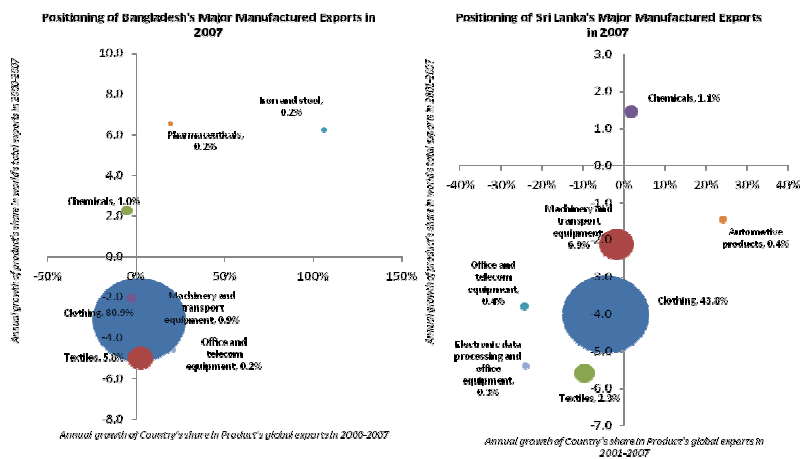
Figure VI.3: Performance of Manufactured Exports



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Source: WTO Trade Statistics 2009 and IMF DOT statistics 2009

Figure VI.4



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Source: WTO Trade Statistics 2009 and IMF DOT statistics 2009

Figure: VI.5a⁴⁴

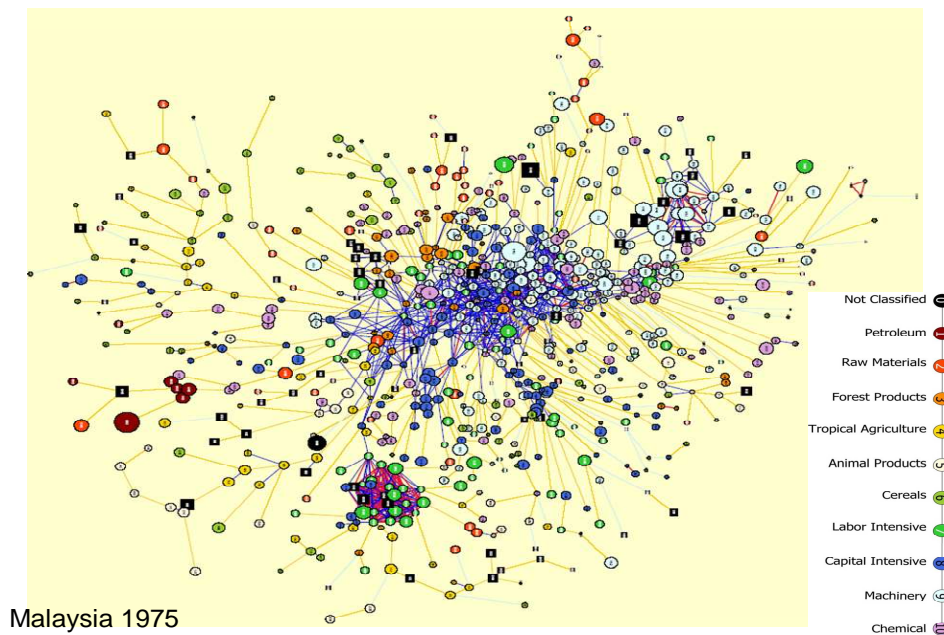
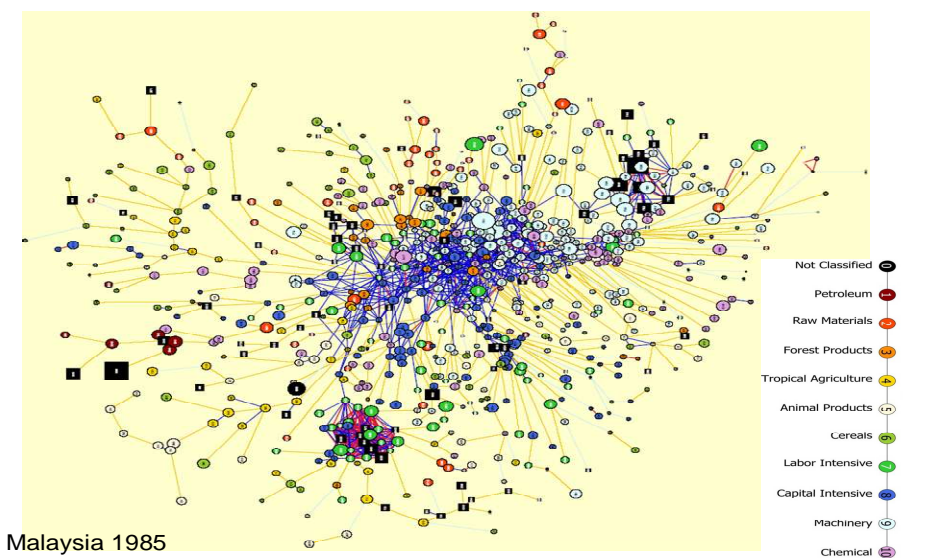


Figure: VI.5b



⁴⁴ Figure 5&6(a-c) are based on a presentation by Ricardo Hausmann (2009) entitled “Pakistan’s competitiveness & comparative advantage: Thinking about the road ahead”.

Figure VI.5c

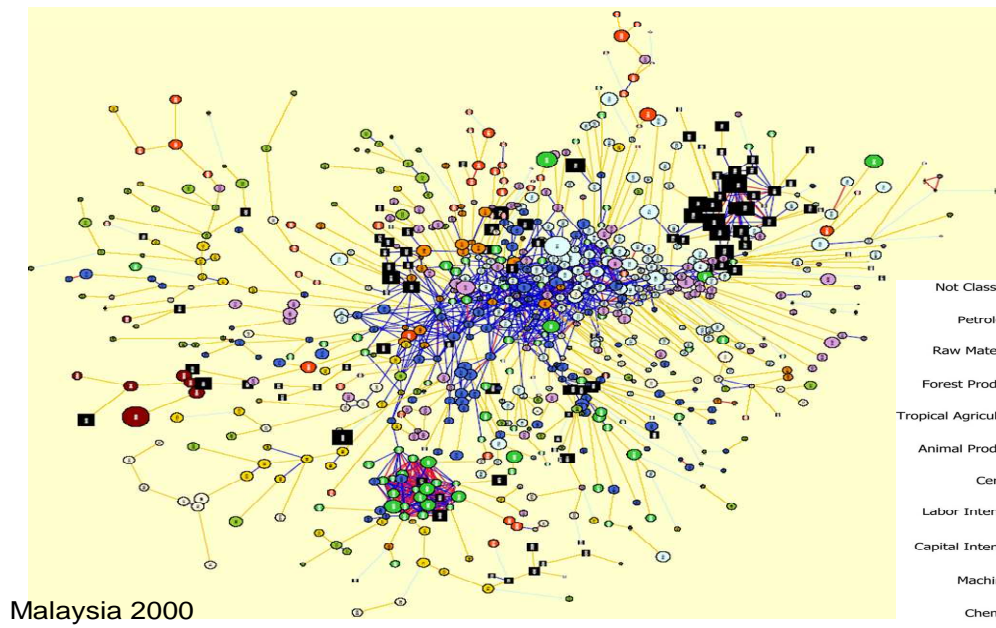


Figure: VI.6a

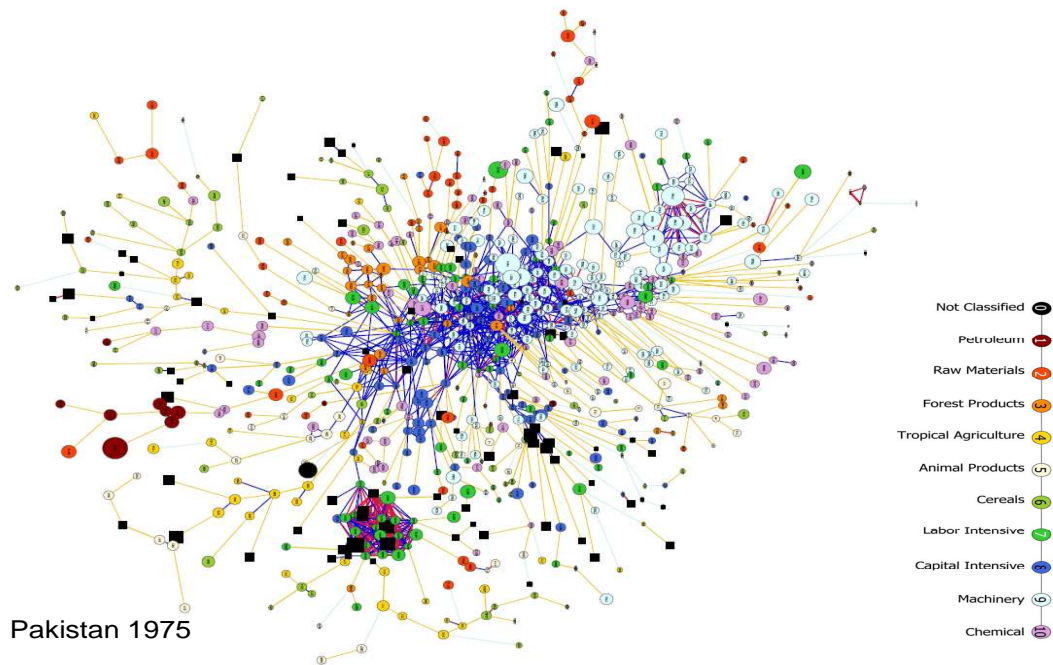


Figure: VI.6b

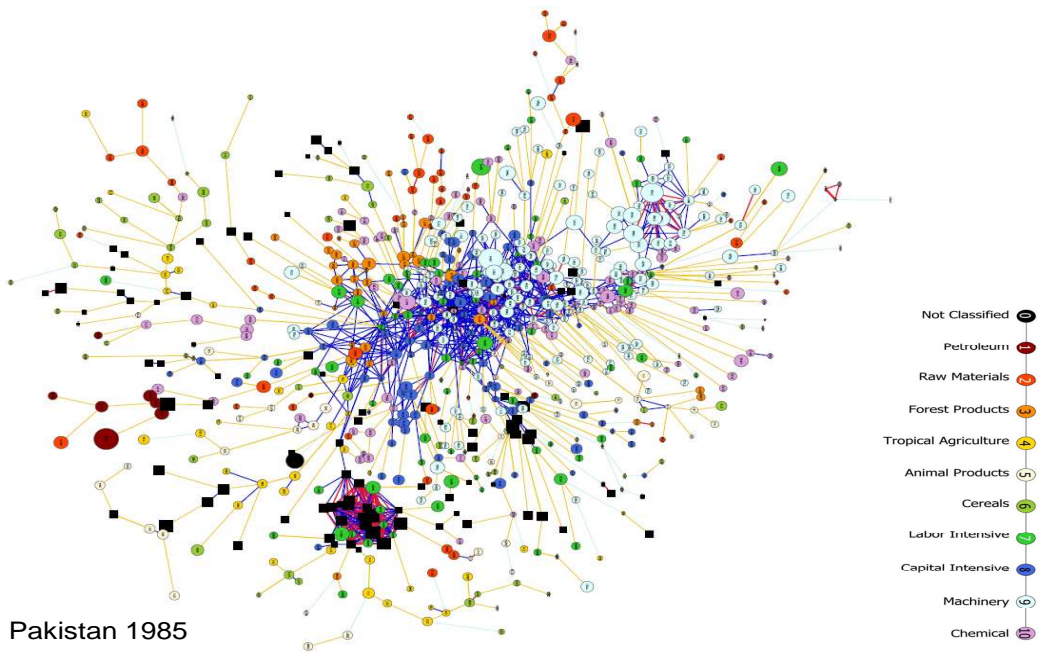
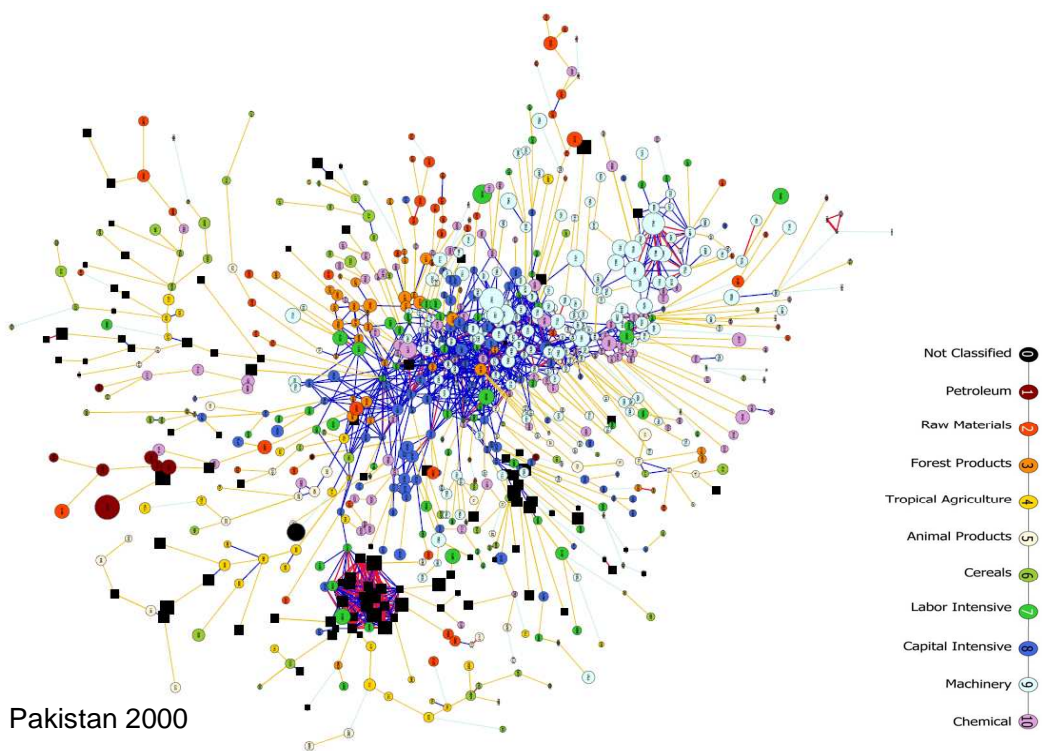


Figure: VI.6c



Rigidity in Export Destinations

Export diversification is captured in Figures VI.7a and VI.7b. Being in the happy quadrant now implies that a country's share in the imports of the destination country (whose share in total world imports is increasing) are growing. For both India and Pakistan, the happy quadrant destination is the UAE with growth rate of 6 and 7% respectively in that market. The vast majority of exports are still headed to traditional destinations for both India and Pakistan (i.e. the U.S., China, Hong Kong, Germany and the U.K). Imports from Pakistan by these traditional destinations, however, are falling compared to India. Similarly, Sri Lanka's share of imports in the traditional markets is also declining. This is a matter of concern since even though the share in world imports may be declining, they still account for the largest share of world imports.

Failure to Upgrade Technology

The failure to achieve dynamic competitiveness in South Asia is embedded in the failure to move up the technology ladder in production systems. Sanjaya Lall (2000) has shown this in his insightful analysis of evolving technological intensity in East and South Asian economies.

Sanjaya Lall (2000), groups exports in four broad technology categories: resource based exports (industrial raw materials), low technology embodying exports and medium and high technology embodying exports (Figure VI.8). The period over which technological change is assessed is 1981-2000. China, Malaysia and Thailand, representing East Asia are compared with Pakistan and India representing South Asia.

In resource based exports category, India increased its share while Pakistan decreased the share in keeping with the East Asian economies. In the next category, low technology exports, Pakistan increased its share while India and the three East Asian economies decreased theirs. In the medium technology category, India's share decreased while Pakistan's increased slightly. The share of the three East Asian economies, on the other hand, increased, Malaysia's significantly. The high technology group, the one that constitutes the 'big boys club' in terms of allowing economies of scale and competitiveness advantage, India and Pakistan have gained very little in the twenty year period. The three East Asian economies, on the other hand, are literally the new kids on the block, knocking loudly on the door of the high technology club of industrial countries. More recent evidence confirms this structure (Figure VI.9).

Unsatisfactory Employment Creation

An important consequence of the lack luster performance of manufacturing, especially manufacturing exports, is that manufacturing job growth in South Asia is unimpressive. The East Asian experience is that manufacturing jobs are critical in facilitating the move

to higher productivity better paid employment and therefore sustained improvement in the living standards of citizens. This has not happened in South Asia. Figure VI. 10 shows in recent years, employment in manufacturing (proxied by employment in industry due to data availability) has stagnated in Pakistan at around 20% of the total labor force and *declined* in India. Bangladesh shows a small increase albeit from a small base.

Two recent papers, one on India and the other on Pakistan, provide fresh evidence on the failure of employment generation in the non-agriculture formal sectors of the economy, especially in manufacturing.

A careful analysis of the impact of India’s development and reforms on employment in a recent paper by T.N. Srinivasan⁴⁵ shows that despite the state’s dominant role in the economy in the first sixty years of India’s independence, and the emphasis on capital intensive industry and on small scale industry (via a policy of product reservation), the structure of employment in the economy has changed little. This is clearly seen in table VI.1x: (Agriculture employed 7% of the workforce in 1977-78 and 66% in 2004-5). The paper argues further that the higher growth levels achieved since the liberalization of the economy in 1991 was led by the services sector and given unchanged structure of employment, the productivity gap between workers in the primary and secondary and tertiary levels has increased. While growth in services has brought about a welcome reduction in poverty, had the secondary sector also generated enough employment, the reduction in poverty would have been even more impressive. Going forward, India needs to capture more of the outsourcing in manufacturing than it does currently (i.e. replicate in manufacturing the success achieved in the outsourcing of services).

Table VI.1: Employment in the organized sector in India (millions).

	1981	1991	2001	2003	2004	2005	2006
Private sector total (millions)	7.4	7.7	8.7	8.4	8.2	8.5	8.8
of which manufacturing	4.5	4.5	5.0	4.7	4.5	4.5	4.5
Public sector total (millions)	15.5	19.1	19.1	18.6	18.2	18.0	18.2
Of which manufacturing	1.5	1.9	1.4	1.3	1.2	1.1	1.0
Private and public sector total	22.9	26.7	27.8	27.0	26.4	26.5	27
Of which manufacturing	6.0	6.4	6.4	6.0	5.7	5.6	5.6

Source: MOF (2007,200), Tables 3.1-3.3 Appendix, as cited in T.N. Srinivasan (2010), “Employment and India’s development reforms”, Journal of Comparative Economics

Pakistan’s recent experience of rapid economic growth in 2002-3-2007-8 also shows the failure of the non-agriculture formal sector to generate enough employment. Both male and female worker share in formal non-agriculture employment fell between 1999-2000 and 2007-08. Employment in the informal sector, however, increased much more so for male than for female workers.

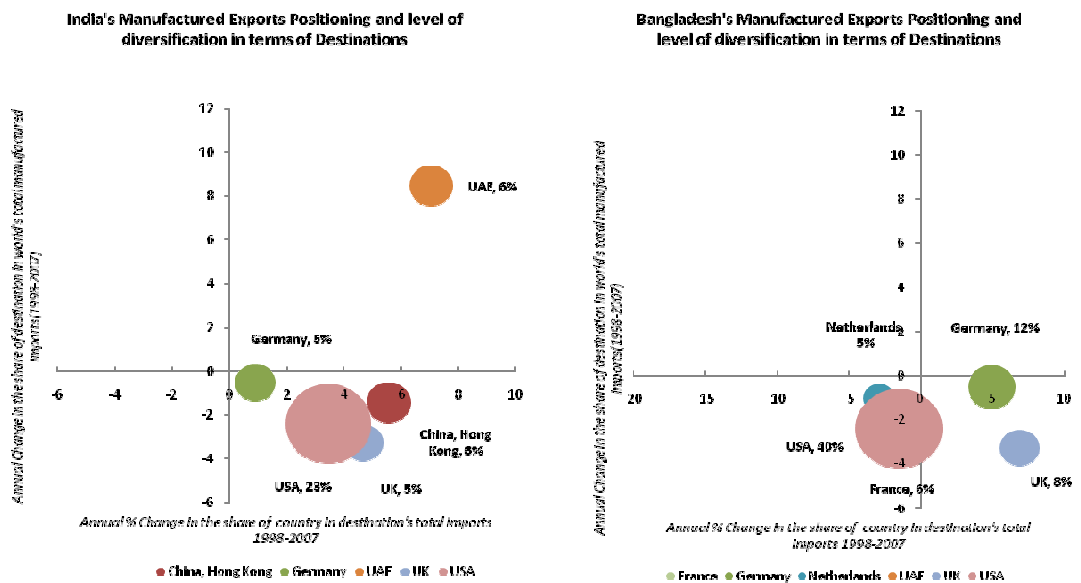
⁴⁵ T. Srinivasan (2010), “Employment and India’s development reforms”, Journal of Comparative Economics

Table VI.2 : Distribution of workforce by formal/informal sectors and by gender in Pakistan (percentages)

	Male 1999-2000	2007-08	Female 1999-2000	2007-08
Agriculture	44.3	36.87	72.93	74.98
Non-agriculture	55.56	63.12	27.14	25.07
Formal	19.01	17.15	9.29	6.86
Informal	36.55	45.97	17.79	18.22

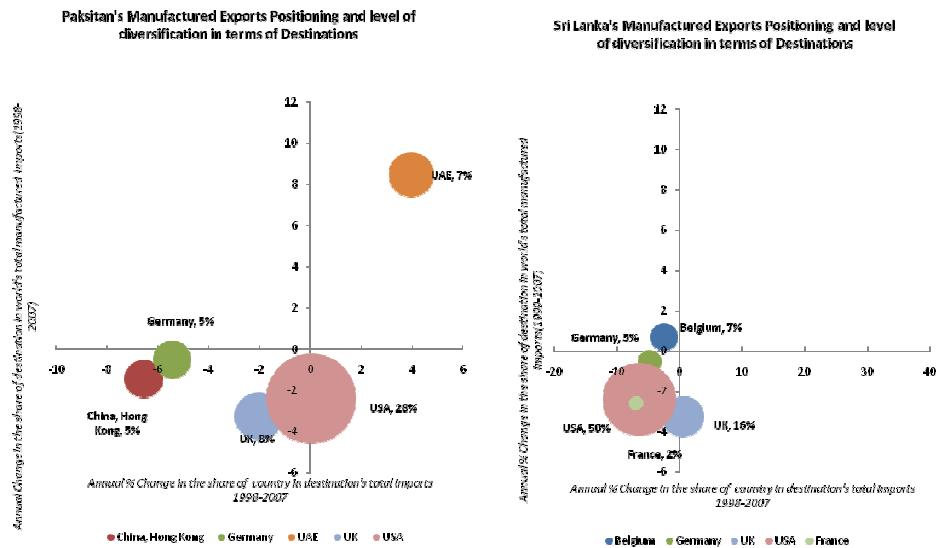
Source: Pakistan Labor Force Survey, various years

Figure VI.7a



Source: UN Comtrade 2009; WTO Trade Statistics 2009 and IMF DOT statistics 2009

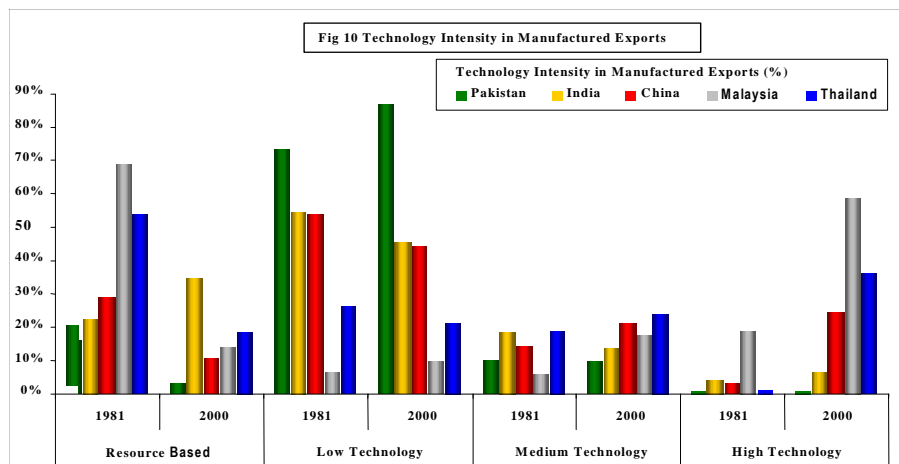
Figure VI.7b



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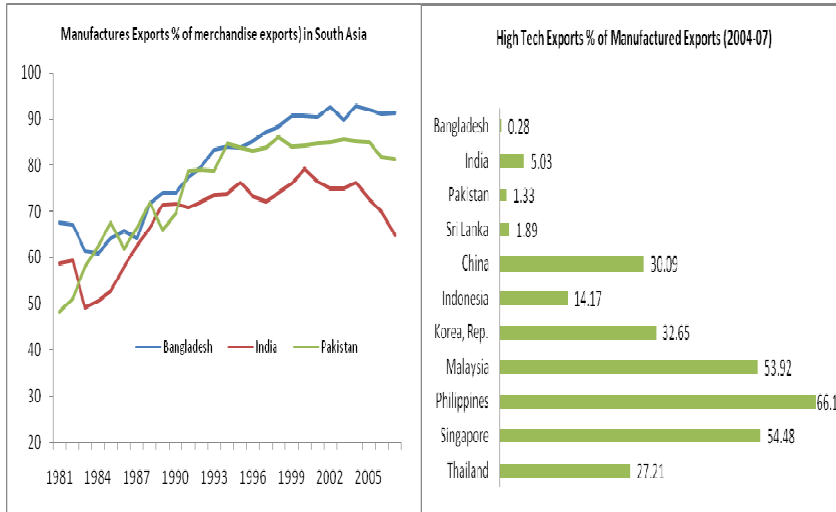
Source: UN Comtrade 2009; WTO Trade Statistics 2009 and IMF DOT statistics 2009

Figure: VI.8



Source: Devarajan and Nabi (2006): "Economic Growth in South Asia: Promising, Unequalizing, Sustainable?"

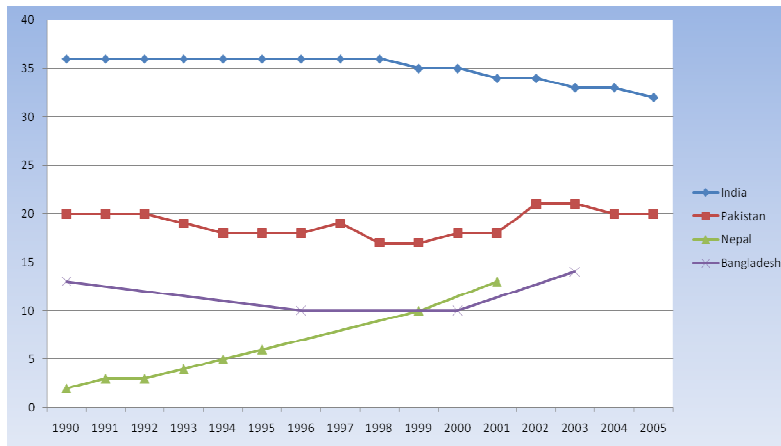
Figure VI. 9



Source: World Development Indicators 2008 & 2009

Figure VI. 10

**Employment in Industry
(Percentage of Total Employment)**



Fixing the Policy Framework

What is the policy framework that has resulted in the unimpressive performance of South Asian manufacturing, especially manufacturing exports? The discussion in this section provides some answers and suggests some remedial measures.

The Exchange Rate

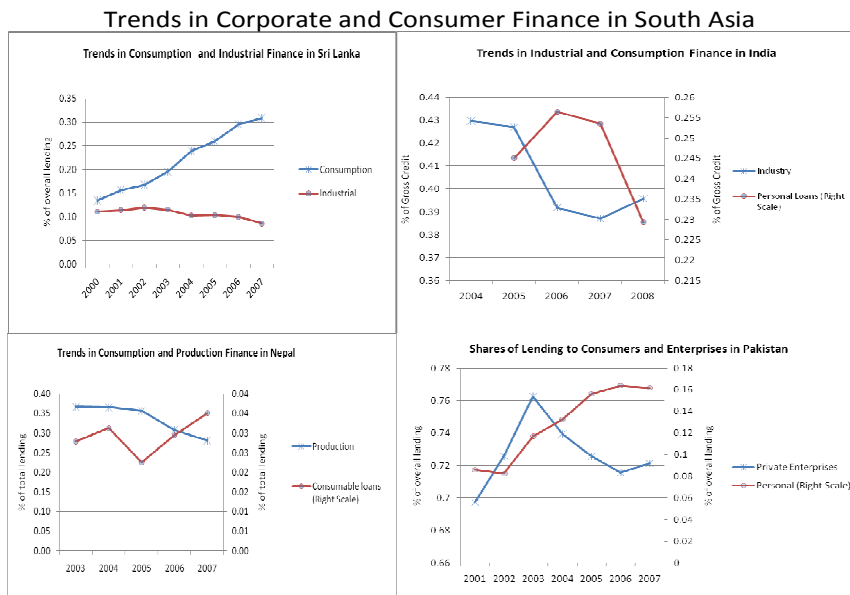
A good starting point for assessing the impact of the policy framework on the performance of manufacturing, especially manufacturing exports, is the exchange rate. The loss of competitiveness (Dutch disease) associated with remittances has already been noted. The argument is that the large and persistent trade gap in South Asian economies would imply much lower nominal exchange rates (weaker currencies) in South Asia than actually observed. The explanation for high currency values and build up of reserves, despite the large trade gap, lies in remittances: remittances result in a much higher equilibrium exchange rate than would be the case otherwise.

The solution to the high nominal exchange rate that erodes international competitiveness does not lie in policy intervention to devalue the currency, as several East Asian economies have done in the past (see the discussion in section 3). A sounder approach would be to ensure that the rest of the policy framework does not reinforce the exchange rate over valuation effect to erode the incentives for investing in manufacturing. The key policies considered are: credit allocation, energy pricing and tax and labor policies.

Credit Allocation

South Asia saw rapid expansion in credit in the period of high remittances and high-income growth. Banking sector reform that encouraged domestic and international private commercial banking helped in successful intermediation of the large volumes of remittances. However, the evidence below (Figure VI.11) shows that most of the new lending was for consumption. In Sri Lanka, the gap between consumption and industrial lending widened considerably in the period 2000-07. In India, personal loan advances by banks have been considerably higher than lending to industry in most recent years. In Nepal, the rate of growth of consumption loans has been higher than for production loans. Similarly, in Pakistan personal loans now far exceed loans to private enterprises.

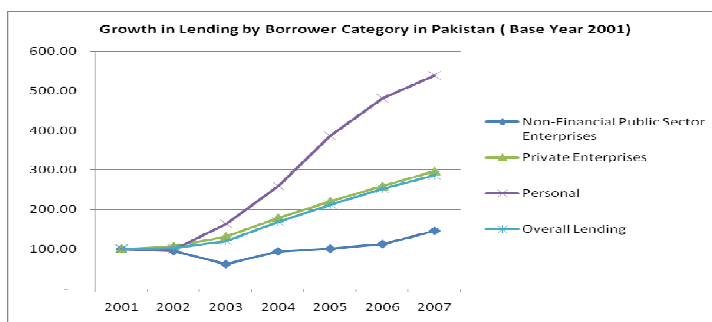
Figure VI.11



Source: Various Government Sources⁴⁶

A more detailed breakdown of lending categories in Pakistan supports the South Asia wide lending experience (Figure VI.12). The fastest growth in credit is in the category of personal loans. It has outstripped by far lending to private and non-financial public enterprises. In conclusion, the reformed banks of South Asia appear to have devoted much of their energy in expanding the personal loans portfolio rather than lending to private enterprises and industry.

Figure VI.12



Source: Banking Statistics of Pakistan, State Bank of Pakistan (2008)

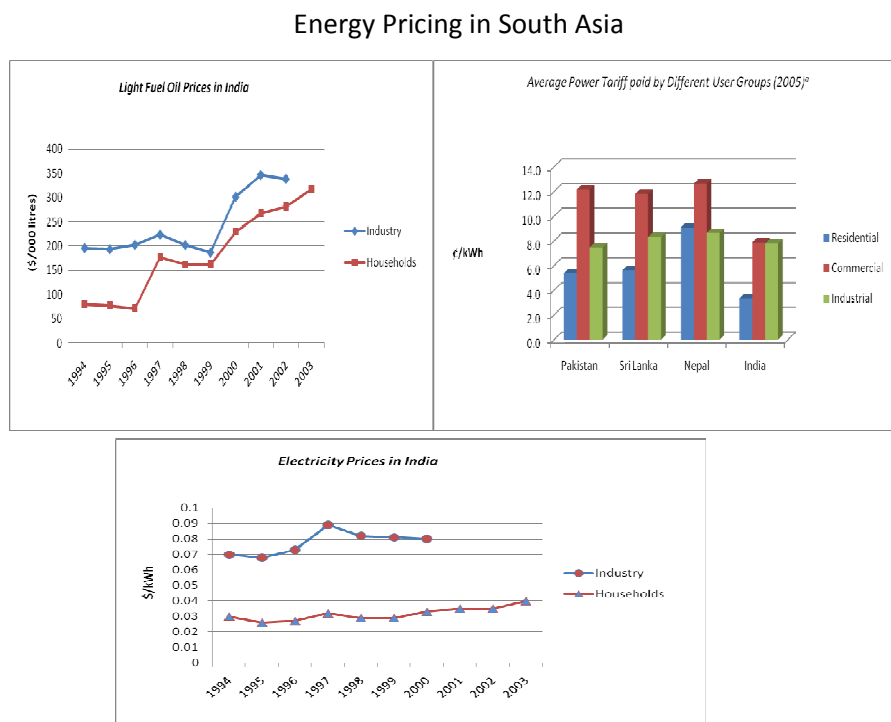
⁴⁶ Reserve Bank of India, Annual Reports (2006-07 and 2007-08); Banking Statistics of Pakistan, State Bank of Pakistan (2008); Central Bank of Sri Lanka, Annual Report 2007; Nepal Rastra Bank, Economic Reports (2004-05, 2006-07)

Energy Policy:

Unlike the banks, South Asia’s energy sector is riddled with inefficiencies and is largely unreformed. High line losses and reluctance to charge prices that reflect the true cost of delivering gas and electricity at the doorstep, have resulted in the energy sector becoming a fiscal drag on the state economies in India and the federal economy in Pakistan. Similar problems afflict the energy sector in Sri Lanka, Bangladesh and Nepal. The result is poor quality of energy and large gaps in coverage throughout South Asia.

Notwithstanding the fiscal problems associated with energy, the evidence on energy pricing is informative about policy makers’ sector preferences. The top left panel of Figure 6.3 shows the price of light fuel in India charged to industry and households. The price has been consistently higher for industry compared to households. In pricing electricity, top right panel of Figure VI.13 there is similar preference for the household consumers compared to industrial units in Pakistan and Sri Lanka and strongly so in India. Nepal is the exception with power tariffs are slightly lower for industry than for households. Finally, the lower panel shows that electricity tariff have been substantially lower for households compared to industry over a longish period.

Figure VI.13



Sources: International Energy Agency (IEA) “Energy Prices and Taxes”, Quarterly Statistics (3rd Quarter) 2005; Government Statistics for Individual Countries⁴⁷

⁴⁷ a Privatization of Faisalabad Electric Supply Company: Preliminary Information Memorandum (March 2006). Local currency rates converted at official exchange rate of Rs 59.51 /1 \$

Tax Policies

The policy makers' preference for the household sector over industry and manufacturing persists in the design of tax policies as well. The left panel of Figure VI.14 shows higher corporate tax rate in India, Bangladesh and Pakistan (strongly so) compared to the personal income tax. Only Sri Lanka shows no particular preference. The right panel reinforces this conclusion by comparing the tax structures of India and Pakistan in South Asia with that of China and Thailand in East Asia. The latter two clearly show the converse preference by policy makers in the successful export oriented economies of the East Asia: the corporate tax rate is considerably lower than the personal income tax rate, especially in China, the engine of export led growth in the region.

Figure VI.14



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Source: KPMG's Corporate and Indirect Tax Rate Survey 2008; b) KPMG Individual Tax Rate Survey 2008; c) National Board of Revenue Bangladesh

^b Ceylon Electricity Board: Statistical Digest 2005. Local currency rates converted at official exchange rate of Rs 100.50 Rs/1 \$

^c Nepal Electricity Authority: A Year in Review (Fiscal Year 2005/2006). Retail tariffs derived from the table on p23. Local currency rates converted at official exchange rate of Rs 71.37 Rs/1 \$

^d International Energy Agency: Electricity in India. Local currency rates converted at official exchange rate of Rs 44.94 Rs/1 \$

Pakistan's Sectoral Tax Incidence:

Labor Policy

A policy framework that is inclined towards allocating resources more favorably to households (consumption) than to industry (investment) spans the labor market as well. Various studies have highlighted the large number of labor market regulations that do not necessarily work to the advantage of workers but contribute to the high cost of doing business for firms. Figure VI.15 below captures the impact of such regulation on employment rigidity in several South and East Asian economies. It is clear that in general South Asian firms (in Nepal, Pakistan, India, Sri Lanka) face much more rigid employment conditions than do the export oriented East Asian firms (in China and Thailand). Employment rigidities restrict firm exit (and therefore firm entry) and thus erode competitiveness. The political underpinnings of employment rigidities pose the toughest challenges to labor market reforms that seek to raise both firm profitability and worker wages.

Figure VI.15



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Source: World Development Indicators 2008

Concluding Remarks

The following excerpt for Pakistan's Dawn newspaper sums up things well.

Thursday November 05, 2009



Cabinet decision for Punjab, NWFP
2-day closure for factories, CNG stations

ISLAMABAD, Nov 04: All industrial units and CNG stations will remain closed two days a week on a rotation basis in Punjab and the NWFP during winter, according to a gas load management plan approved by the federal cabinet on Wednesday.

Pakistan faces a critical shortage of natural gas. Rather than use the price mechanism for rationing the available gas, policy makers have opted for quantitative rationing imposed on industry and commercial use for transportation. Residential consumers will continue to burn gas in inefficient residential water and room heaters and cooking ranges since there are no incentives to conserve. The stated rationale of course is that poor consumers will be adversely affected if rationing is done through the price mechanism. Of course, this can be avoided by adopting a sliding scale pricing formula to charge lower price of gas for low consumption. Not taking this route suggests that the intent is to protect all consumers and not just the poor consumers.

So, why does manufacturing get a short shrift in South Asia? One reason could be that manufacturing received excessive attention in the past (the import-substitution phase of the 1960's and the 1970's) with overvalued exchange rates, tax holidays, high rates of protection via penalizing imports duties and subsidized credit. The perception is that manufacturing did not deliver in terms of growth and income enhancing employment. So, now that remittances have helped build up foreign reserves and strengthened the currencies, why not enjoy higher consumption standards directly (rather than via getting better paying manufacturing jobs, which was East Asia's route to development).

This attitude is also the result of export pessimism among policy makers shaped by the view that the East Asian tigers and China have saturated the world markets for goods and there is little room left for new players. Therefore, it is better to focus on developing the large domestic market for goods and focus on services export.

The adverse impact on local economies of the global recession is cited as evidence of the ill-consequences of globalization and the downside risks of being part of international supply chains.

Textiles manufacturing, of course, receives a lot of policy attention throughout South Asia. Most of this, however, is in the form of sector specific exemptions from the standard regime of sales, income and trade taxes. Textiles have also received attention in the form of lending targets of commercial banks set by the South Asian central banks. With so much attention focused on textiles, policy makers might feel that they have done enough for manufacturing. We have seen, however, that although this has resulted in growth in one specific sector, it has done little to bring about a diversified manufacturing base in South Asia.

Political instability and full-blown insurgencies in many South Asian economies may also have contributed to a pro-consumption policy stance. Investment in manufacturing is seen to be difficult since it entails long gestation periods, reliable logistics and stable policy regimes. These are hard to sustain in time of insurgency. Repeated failure to attract investment in manufacturing in these settings, and reap the benefits of sustained high productivity and high wage employment generation in manufacturing, may have contributed to the pessimism and shaped the policy bias.

These are conjectures suggestive of the need to carry out a thorough analysis of the political economy of policy making in South Asia to understand better the factors that have contributed to shaping this policy stance and what needs to be done to remove the disincentives faced by South Asian manufacturing.

References

- Abdih et al., (2008), "Remittances and Institution: Are Remittances a Curse?", IMF Workign paper 08/29 (Washington: International Monetary Fund).
- Achary, (2006) "Essays on Macroeconomic Policy and Growth in India", Oxford University Press, New Delhi, 2006.
- Acharya, Ahluwalia, Krishna, and Patnaik, (2006) "Explaining Growth in South Asia" Economic Growth in India, 1950-2000, Oxford University Press
- Acosta et, al, (2007), "Remittances, Exchange rate Regimes and the Dutch Disease," Federal Reserve Bank of Atlanta Working Paper No. 2008-08 (Atlants: Federal Reserve Bank).
- Ahmed, (2006): Explaining South Asia's development success: the role of good policies (World Bank)
- Balassa, (1964), "The Purchasing-Power Parity Doctrine: A Reappraisal," Journal of Political Economy, University of Chicago Press, vol. 72, pg. 584
- Bangladesh Census of Agriculture and Livestock, 1977, 1984 and 1997, Bangladesh Bureau of Statistics (BBS), Ministry of Planning, Dhaka, Bangladesh; Government of Nepal
- Banking Statistics of Pakistan, State Bank of Pakistan (2008)
- Barajas et, al.,(2009), "Do Worker Remittances Promote Economic Growth", IMF working Paper, WP/09/153, International Monetary Fund, Washington.
- Bhagwati, Jagdish (1984), "Why are Services Cheaper in Poor countries?" Economic Journal 94: 279-86.
- Bhagwati, Jagdish, (1984), "Splintering and Disembodiment of Services and Developing Nations", The World Economy 7:: 133-134
- Bhagwati, Jagdish, (1987), "Trade in Services and Multilateral Negotiations", World Bank Economic Review 1: 549-69.
- Bosker and Garretsen, (2009), "New Economic Geography, Services and South Asia" in "Services-led Growth in South Asia", Poverty Reduction and Economic Management Unit, South Asia Region, World Bank.

Cardenas, Maurocio and Rozo, (2008), "Does Crime Lower Growth? Evidence from Colombia", Commission on Growth and Development, Working Paper No. 30. The World Bank, Washington DC.

Central Bank of Sri Lanka, Annual Report 2007

Chami et, al. (2008) Macroeconomic Consequences of Remittances, IMF Occasional Paper No. 259 (Washington: International Monetary Fund)

Chami, et. al, (2006), "Beware of Emigrants Bearing Gifts: Optimal fiscal and Monetary Policy in the Presence of Remittances, " IMF working paper 06/61 (Washington: International Monetary Fund).

Devarajan and Nabi, (2006), "Economic Growth in South Asia: Promising, Unequalizing, Sustainable?", Economic and Political Weekly.

Devarajan and Nabi, (2006), "Promising, Unequalizing, Sustainable", EPW.

Fanzylber and Lopez (edited), "Remittances and Development: Lessons from Latin America", The World Bank, Washington DC

FAO Statistics on Agriculture 2009

Ghani (2009), "Is Services-Led Growth A Miracle For South Asia?" in "Services-led Growth in South Asia", Poverty Reduction and Economic Management Unit, South Asia Region, World Bank.

Global Terrorism Database

<http://www.nationsencyclopedia.com/economies/Asia-and-the-Pacific/Sri-Lanka-AGRICULTURE.html>

Ijaz Nabi, Dawn Article,(2008)

Institute of Public Policy, "State of the Economy: Emerging from the Crisis", 2009, Second Annual Report, Beaconhouse National University, Lahore.

International Energy Agency (IEA) (2005) "Energy Prices and Taxes", Quarterly Statistics (3rd Quarter)

Iyer, Lakshmi, (2009), "The Bloody Millenium: Internal Conflict in South Asia", Working paper 09-086, Harvard Business School.

James and Laitin (2003), "Ethnicity, insurgency and civil war", American Political Science Review 97, 75-90.

John Williamson Ed., (1990) "What Washington means by Policy Reform", in Latin American Adjustment: How much has Happened? Washington DC: Institute of International Economics.

Kelkar, (2004) "India: On the Growth Turnpike". Narayanan Orientation, Australian National University <http://rspas.anu.edu.au/papers/narayanan/2004oration.pdf>.

Kozel and Alderman, (1990), "Factors determining work force participation and labor supply decisions in Pakistan's Urban Areas", Pakistan Development Review, Vol.29, pp.1-18.

Krugman, (1990), "Increasing Returns and Economic Geography", Journal of Political Economy, 99: 483-499

McKinsey Global Institute: Asia Times, July 1, 2007 quoting "The Bird of Gold: The Rise of India's Consumer Market"

Montiel, Peter J., (2006), "Workers' Remittances and the Long Run Equilibrium Exchange Rate: Analytical Issues", Williams College, mimeo.

National Planning Commission Secretariat, Government of Nepal, (2006): Resilience Amidst Conflict: "An Assessment of Poverty Reduction in Nepal, 1995-96 and 2003-04", Central Bureau of Statistics, National Planning Commission Secretariat, Government of Nepal.

Nepal Rastra Bank, Economic Reports (2004-05, 2006-07)

Panagaria, (2008) Transforming India, in "Sustaining India's Growth Miracle", Columbia University Press

Parikh (2006) "Explaining Growth in South Asia", Oxford University Press , New Delhi.

Parikh, ed (2006), "Explaining Growth in South Asia", Oxford University Press, New Delhi.

Reserve Bank of India, Annual Reports (2006-07 and 2007-08)

Robert-Nicoud, F. (2008), "Offshoring of Routine Tasks and Deindustrialization: Threat or Opportunity and for Whom.?" Journal of Urban Economics 63 (2): 517-535.

Rodrik and Subramanian, (2004) "Why India can Grow at 7 percent a Year or More", Economic and Political Weekly, vol. XXXVIII, No. 16, pp.1591-6

Samuelson, P. A. (1964), "Theoretical Notes on Trade Problems", Review of Economics and Statistics 46 (2): 145-154

Sri Lanka Labor Force Survey – Final Report 2006-2007

State Bank of Pakistan's Annual Report 2006-2007

T.N. Srinivasan (2010), "Employment and India's development reforms", *Journal of Comparative Economics*

World Bank (2003): "Trade in Services: Access to foreign markets, domestic reform and international negotiations", South Asia Region.

World Bank (2004): Sri Lanka: Development Policy Review

World Bank, (2008): Poverty Assessment for Bangladesh: "Creating Opportunities and Bridging the East-West Divide", Bangladesh Development Series, Paper no. 26, Poverty Reduction, Finance and Private Sector Development Unit, South Asia Region

World Bank, April 2009: "Services-led Growth in South Asia", Poverty Reduction and Economic Management Unit, South Asia Region.

World Bank's Global Economic Prospects/IMF BoP Statistics 2008

World Development Indicators, 2008

World Development Report, 2009

WTO Trade Statistics 2008

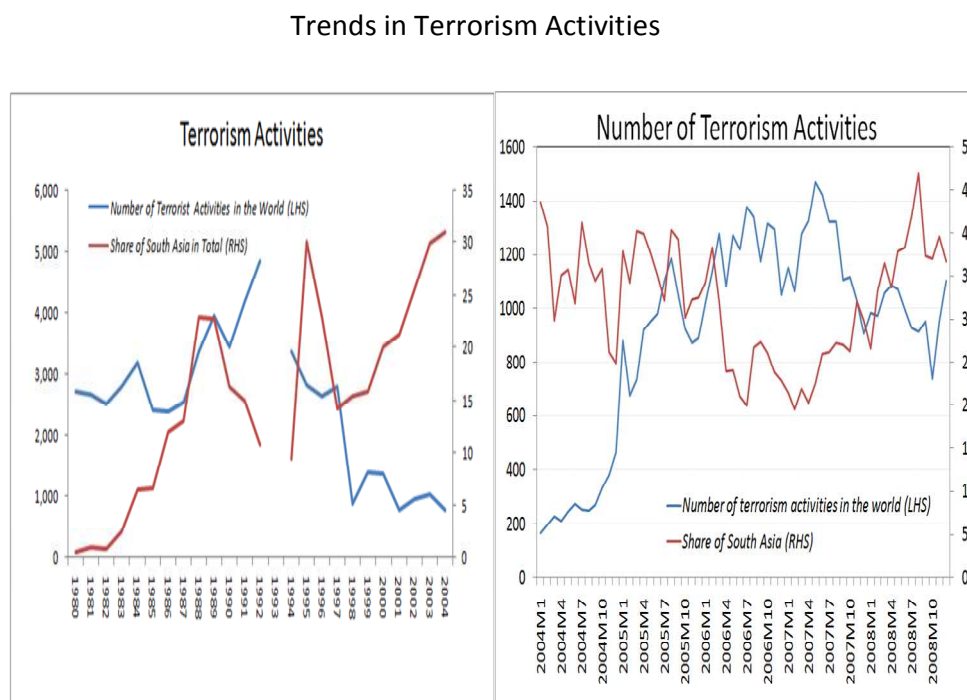
Appendix: Internal Security and its Impact on South Asian Economies

The Deteriorating Internal Security Environment

South Asia has seen a significant increase in internal security problems in the last couple of decades. Up to the mid 1990's (left panel, Figure A.1), even though the number of violent incidents was increasing, South Asia was less violence ridden than the rest of the world except for a brief peak in 1989-90. This changed in the mid 1990's since when South Asia experienced a sharp increase in violent incidents, well above the rest of the world.

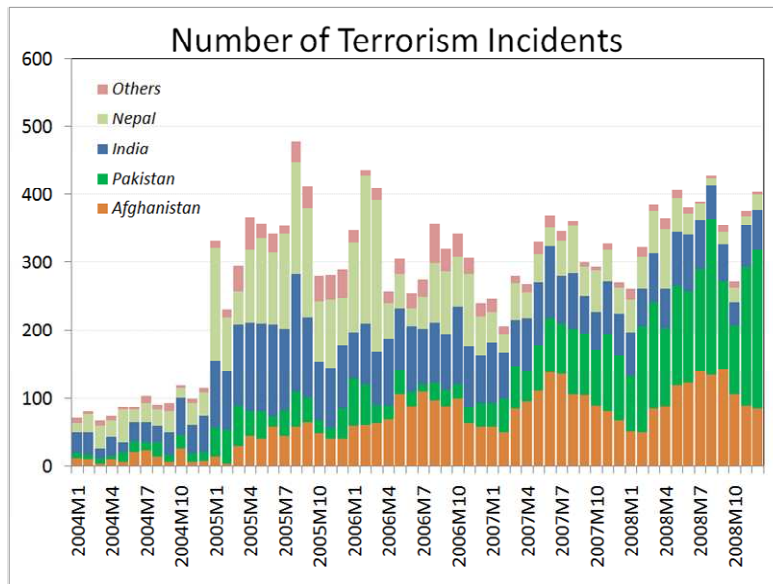
In more recent years (right panel, Figure A.1), the insurgency in Iraq and the related violence pushed the rest of the world above South Asia, but violent incidents in South Asia rose again in 2007-8, largely driven by Pakistan and Sri Lanka who are/were fighting their respective insurgencies. Measured in terms of incidents per capita, both Pakistan and Sri Lanka have seen much more violence than India and Bangladesh, especially in the latter half of this decade. Given this alarming profile of violence, it would be reasonable to expect that economic activity suffered.

Figure A.1



Source: Global Terrorism Database

Figure A.2:



The sources of violence in South Asia may be summarized as follows (based largely on Iyer (2009)⁴⁸ but with author's supplementary comments):

India

- The separatist movements in the North-eastern states (Assam, Manipur, Nagaland, Tripura) and in Kashmir in the Northwest;
- Violence perpetrated by the Naxalites in many states (in 2007, 194 districts and 18 states had Naxalite activity) focused especially on issues of land distribution;
- Terrorist activity in the cities (such as the bombings in Mumbai, Hyderabad, Ahmedabad, Jaipur and Bangalore) which Iyer ascribes to fundamentalist Islamic groups
- Communal violence especially against Muslims in Gujrat and Mumbai

Pakistan

- Terrorist activity arising from the insurgency in the Federally Administered Tribal Areas (FATA) and their sympathizers in the Northern districts of NWFP province but also in other parts of the country
- The separatist movement in Baluchistan

⁴⁸ Iyer, Lakshmi, "The Bloody Millenium: Internal Conflict in South Asia", January 2009, Working paper 09-086, Harvard Business School.

Nepal

- Nepal-Maoist led 'peoples war' unleashed in the Western districts initially but later spread to the whole country.

Sri Lanka

- The armed campaign by the Liberation Tigers of Tamil Elam (LTTE) for a separate homeland that began in the 1980's; recent escalation in this may have finally brought this to a close.

Bangladesh

- Rising terrorist incidents perpetrated by Islamic fundamentalist and by separatist groups in the Chittagong hills

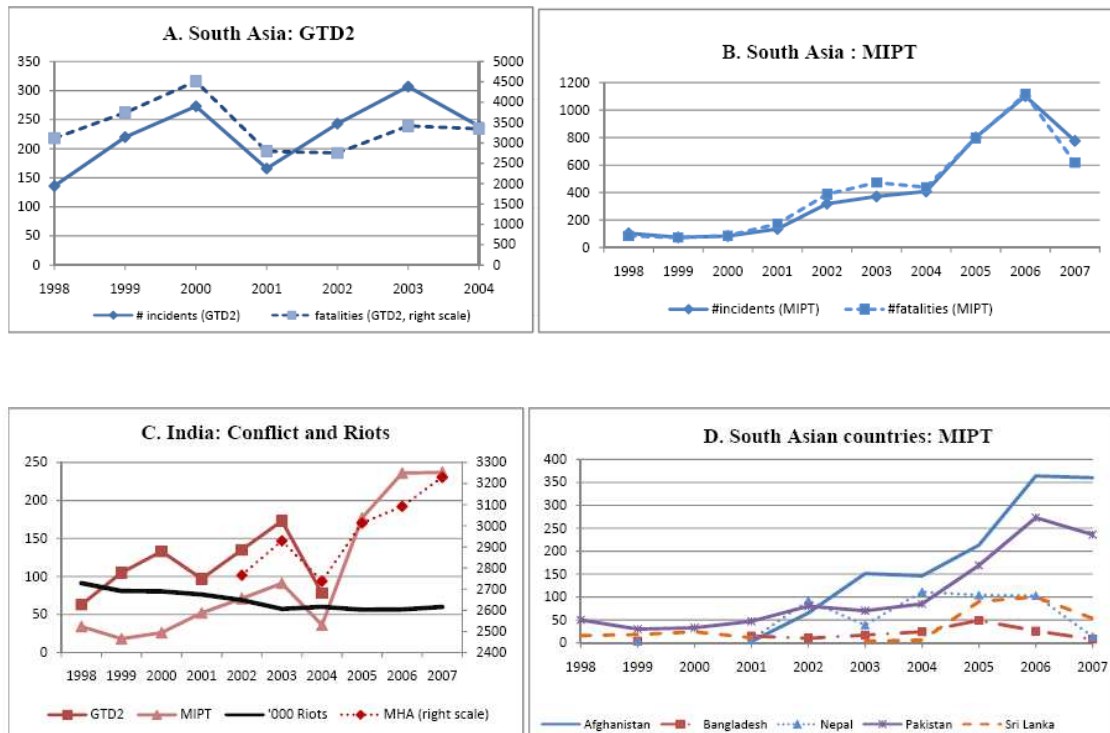
Internal Security and the Economy

The economic causes of terrorist activity in South Asia have been analyzed elsewhere⁴⁹. There has been an escalation of terrorist activity throughout South Asia but especially so in recent years in Pakistan and Sri Lanka. Reported incidents of terrorist activity per capita were 0.7 per and 0.6 per million in Bangladesh and India respectively in 1998. In 2007, they increased to 0.9 per million in India but doubled to 1.4 per million in Bangladesh. Pakistan, with its raging insurgency in the Northwest and Sri Lanka, with an escalation in incidents related to the civil war in the Northeast, saw dramatic increase in terrorist activity. In Pakistan, such violence shot up by a factor of 8 from 0.3 per 100,000 persons in 1998 to 2.4 in 2007. In Sri Lanka, the increase in the same period was from 0.8 per 100,000 to 1.8. The scale of increase in fatalities was similar.

⁴⁹ Iyer (2009)

Figure A.3

Figure 1: Number of terrorist incidents by year



Causes of Violent Conflict

The relationship between systemic violence and the economic activity has been examined in several countries. It is estimated that South Asian regions that are lagging in economic development experience more than three times the number of terrorist incidents per capita compared to leading regions, and almost twice as many people died in the lagging regions compared to the leading region as a result of such violence. This difference in violent incidents between lagging and leading regions holds across countries (i.e Nepal and Afghanistan are lagging countries as a whole) but also within countries (the lagging regions of Pakistan, India, Sri Lanka and Bangladesh experience more violence than the respective leading regions).

It may be argued that social factors such as high incidence of poverty and incidence of land disputes (because of poor property rights) and high concentration of socially disadvantaged groups (scheduled castes etc) would also be contributing factors to violence. However, disaggregated district level evidence from Nepal and India gives a mixed picture. Districts with high incidence of poverty do experience higher violence (which is consistent with the findings reported in several studies that root violence in poverty (for example, Collier and Hoeffler, 2004⁵⁰; Fearon and Laitin, 2003⁵¹) but land

⁵⁰ Collier, Paul and Anke Hoeffler (2004), "Greed and grievance in civil war", Oxford Economic papers, 56, 563-595.

disputes and social disadvantages of caste are not correlated with higher incidence of violence.

Among the causes of violent incidents in South Asia, the external environment also appears to matter. The escalation in violent activity from 1998 to 2007, especially in Afghanistan and the Pashtun belt of Pakistan (Northwest region) can be ascribed to the sharp deterioration in the global environment. This is particularly true for Pakistan that has borne the brunt of the Pashtun insurgency after NATO's invasion of Afghanistan. US led war on Iraq since 2002, and how it is perceived in Afghanistan and Pakistan may have further added to the resentment against the US. This is especially true in Pakistan where the government and the armed forces are seen by certain sections of the society to be allied with the US against local interests.

Impact of Violence on Economic Activity

The Colombian experience with generalized violence and deterioration in law and order due to drugs trafficking has been analyzed recently (Cardenas and Rozo, 2008)⁵². There was a structural downturn in economic growth starting 1979 when trade in drugs and the associated violent crime began to increase sharply. This lowered total factor productivity and economic growth was lowered by as much as 2 percentage points of GDP per annum.

Mexico has also experienced an escalation of drugs-related extreme violence in recent years. Indeed, it has been ranked close to Pakistan as the country most likely to fail because of growing violence. The impact of this escalation in violence on Mexico's economy appears to be less consequential⁵³.

In South Asia, Sri Lanka's economy has been long exposed to violent activity because of the war on LTTE. Several studies have been conducted to estimate the impact on various aspects of economic activity. The overall economic impact estimated by the Central Bank of Sri Lanka is estimated at around 2 percentage points of GDP per annum (similar to Columbia's experience).

For Pakistan, the cost of the war on terror has been estimated in some detail⁵⁴. The direct costs include value of human lives lost or of injuries, value of property or infrastructure destroyed or damaged and enhanced spending on defense, policing and private security. The indirect costs include costs to local economies (in terms of slow down of GDP growth, especially in NWFP and FATA) the cost of internally displaced persons and the cost of higher risk perception and uncertainty (that affects private investment, stock

⁵¹ Fearon James and David Iaitin (2003), "Ethnicity, insurgency and civil war", *American Political Science Review* 97, 75-90.

⁵² Cardenas, Maurocio and Sandra Rozo, "Does Crime Lower Growth? Evidence from Colombia", Commission on Growth and Development, 2008, Working Paper No. 30. The World Bank, Washington DC.

⁵³ "Despite Violence, Mexican Economy Pushes on." *Frontier Outlook*, Jan 9th, 2010.

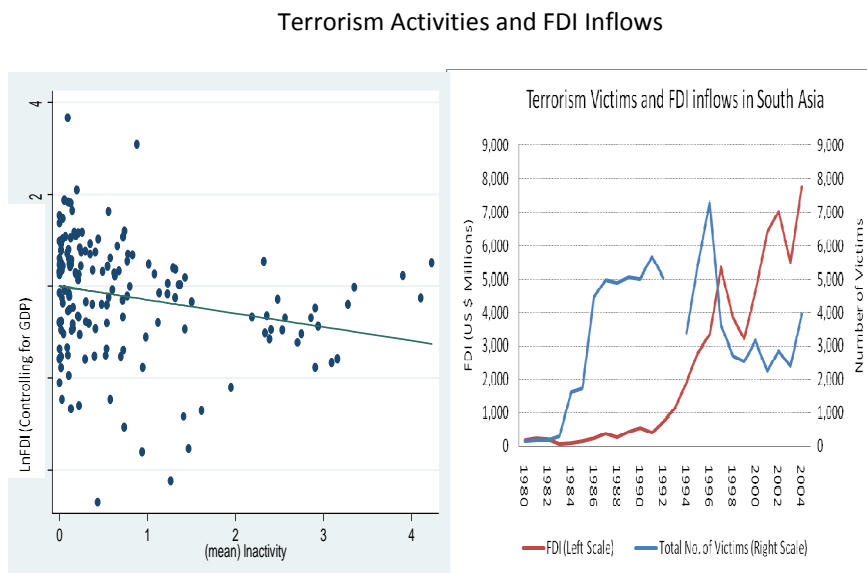
⁵⁴ Institute of Public Policy, "State of the Economy: Emerging from the Crisis", 2009, Second Annual Report, Beaconhouse National University, Lahore.

market capitalization, travel and tourism, hotel occupancy and insurance). The direct cost of terrorism in 2007-8 (since 2002-3) is estimated at Rs 150 billion and the indirect cost at Rs 230 billion. The total cost of terrorism in 2007-8 is estimated at Rs 380 billion or US 47 billion.

Terrorism's impact on South Asian economies can also be analyzed by examining the trends in foreign direct investment and export performances. If FDI affects risk perception negatively and raises uncertainty, foreign investors are likely to shy away. (The direct cost estimates for Pakistan reported above factor this in explicitly). Figure A.4 shows a declining trend in FDI as terrorist activity rises. Figure A.5 shows that export performance is also negatively correlated with heightened terrorism. In Pakistan for example, buyer representatives in the textiles sector do not travel to the country to place orders and/or ensure quality. This shows up in poor export performance.

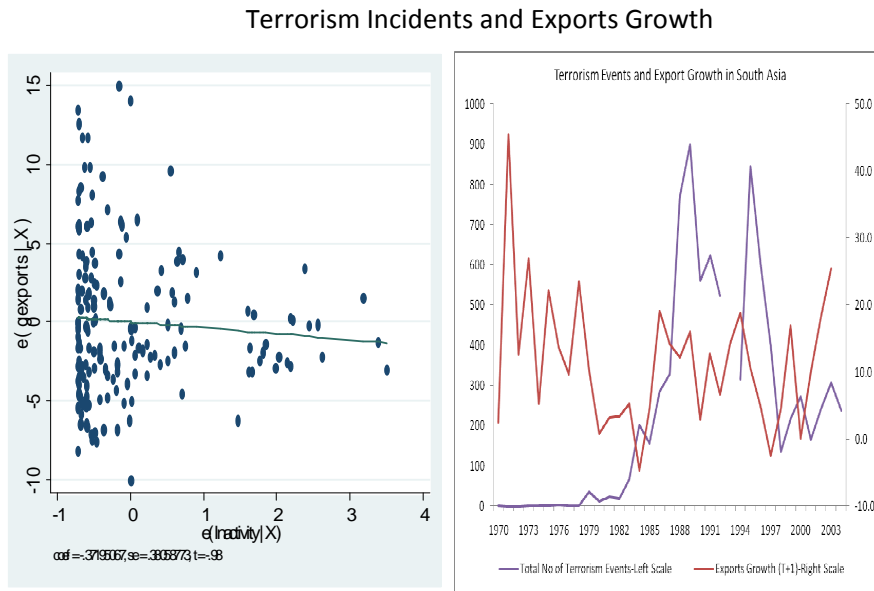
One form of foreign funds that actually increase with rise in terrorist activity is remittances (Figure A.6). This is because violent incidents reduce economic activity in the country thereby curtailing income generating possibilities. This lowers household income that, in turn, may trigger higher savings remitted back to the family from family members working abroad. In Pakistan, remittances peaked during heightened terrorist activity also because there was a clamp down on informal remittance channels that were feared to be potential funding sources for terrorists. Furthermore, remittances from the US increased sharply because Pakistani migrants in the US, facing uncertainty there following September 11 attacks, increased remittances to make a home in Pakistan in case things in the US get really bad for them.

Figure A.4: Terrorism Activity and FDI flows



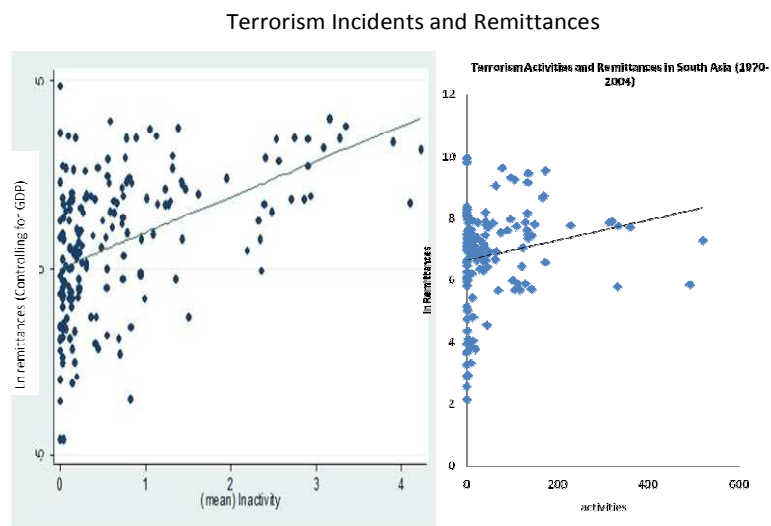
Source: Global Terrorism Database and WDI 2009

Figure A.5: Terrorism Incidents and Export Growth



Source: Global Terrorism Database and WDI 20

Figure A.6: Terrorism Incidents and Remittances



Source: Global Terrorism Database and WDI 2009

Table A. 1 Remittances to Pakistan by country, pre and post Sept 11 2001.

Worker Remittances by Country (Million US\$)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Totals for 2000-2009
USA	80	134.8	779	1237.5	1225.1	1294	1242	1460	1760	1740	10952.4
UK	73.3	81.4	151.9	273.8	333.9	372	439	430	460	610	3225.3
SAUDI ARABIA	309.9	304.4	376.3	580.8	565.3	627	750	1024	1250	1560	7347.7
UAE	147.8	190	469.5	837.9	597.5	713	716	866	1090	1690	7317.7
Other Gulf Countries	224.3	198.8	224.3	474	451.5	512	597	757	980	1200	5618.9
Others	78.3	112.2	339.8	786.8	652.9	634	843	954	910	1020	6331
TOTAL	913.6	1021.6	2340.8	4190.8	3826.2	4152	4587	5491	6450	7820	40793

Source: State Bank of Pakistan, Annual reports

Figure A.6: Remittances received by Pakistan

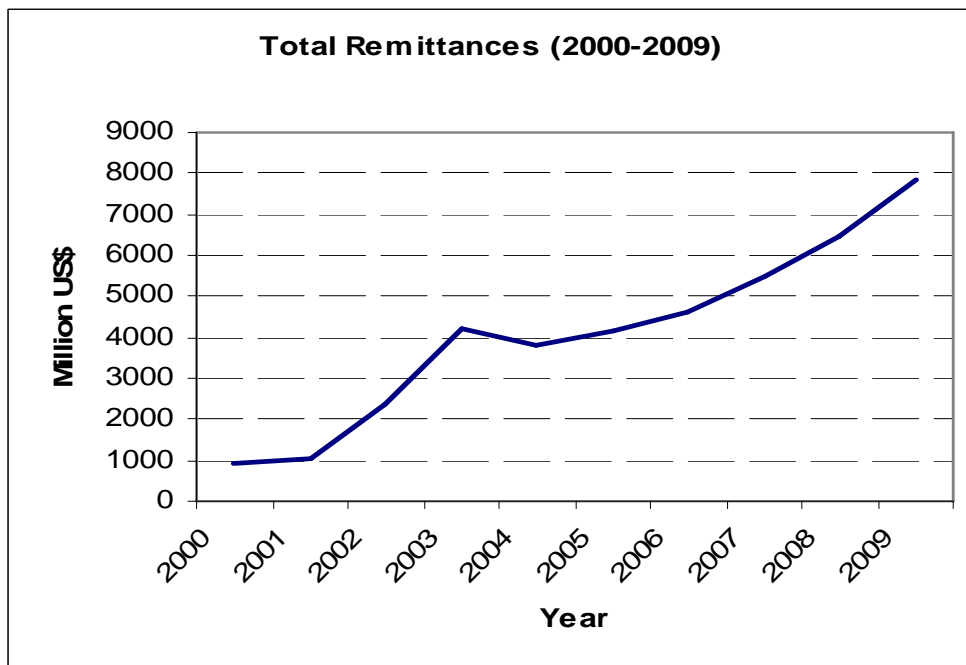


Figure A.7: Remittances to Pakistan by source country (US\$ millions)

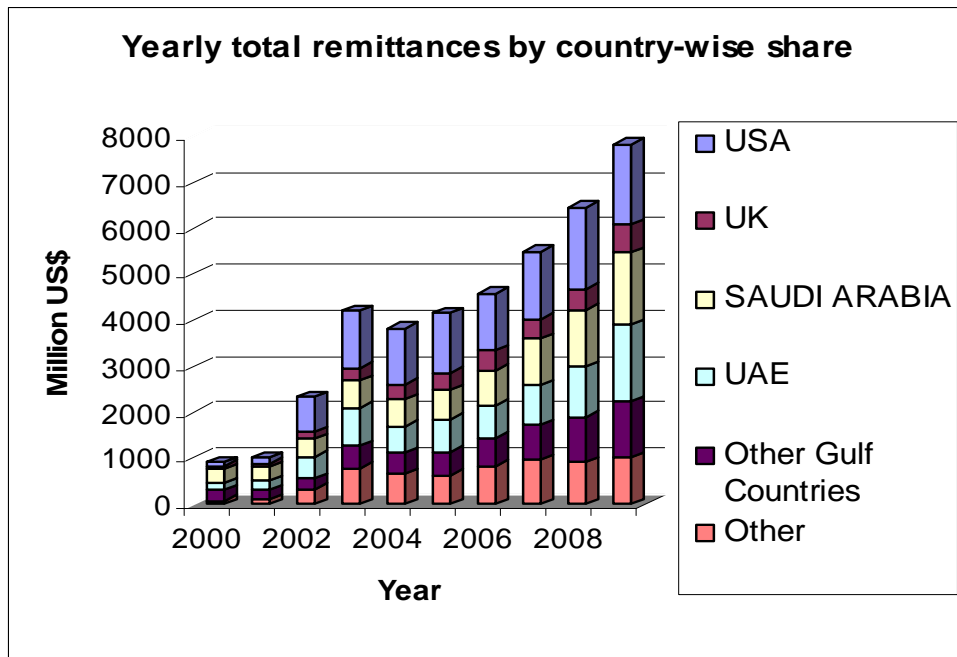
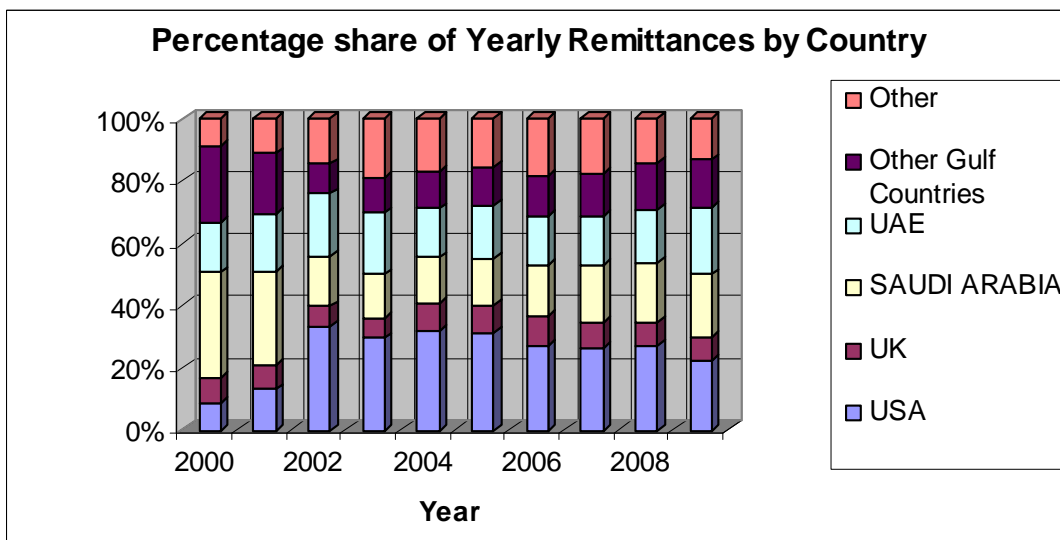


Figure A.8: Remittances source country share (percentages)



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The IGC offers independent advice on economic growth to governments of developing countries. Based at the London School of Economics and in partnership with Oxford University, the IGC is initiated and funded by the UK Department for International Development (DFID).

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