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South Asia: A Development Strategy for the Information Age¹

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Introduction

Development strategies have gone through several major shifts. In this paper it is argued that another such shift is probably appropriate in the case of South Asia today.

Over the last 50 years, Asia has been the most successful region in the world in terms of rapid economic development. It has grown at a pace never seen before, nor matched by any other region during this period. It is in the context of the Asian experience, some development paradigms are briefly discussed.

In the 1950s and 1960s, the widely accepted development paradigm was the one in which the Import Substitution Growth Strategy (ISGS) was the key element. ISGS was a product of the distrust that most newly independent countries had for the laissez faire economic models they had been forced to follow under colonial rule, and their admiration for the rapid industrialization achieved by Soviet Union in between the two World Wars. Five-year development plans, the two gap model, big push theory, balanced and unbalanced growth models, infant industry argument, etc. were the staples of development economics during this period. However, the limitations of import substitution strategies began to become apparent by the late 1960s (a particularly influential study that highlighted the failures of ISGS was Little, Scitovsky, and Scott [1970]).

Around this time, the (Manufactured) Export-Oriented Growth Strategy or (M)EOGS was emerging as an alternative approach to development. (M)EOGS, modeled on Japan's postwar strategy, was successfully followed by the four "Asian tigers" (Hong Kong, China; Singapore; Republic of Korea; and Taipei, China). It was subsequently, adopted by a number of Southeast Asian countries (Indonesia, Malaysia, and Thailand), followed by the People's Republic of China (PRC) and, more recently, by Viet Nam. In the 1990s, (M)EOGS became the accepted development paradigm, which in its extended form is referred to as the Washington Consensus (Williamson 1990).

The question is: Will this process continue to extend to other countries in Asia, with South Asian countries ultimately becoming the manufacturing export power houses of the future? The answer to the first part of the question is probably yes, and to the second part, probably no—and therefore the need for an alternate strategy. In this paper we will look at some features of (M)EOGS in East/Southeast Asia, its limitations in the case of South Asia, and then present an alternative development strategy which may be more appropriate for South Asia.

¹ The paper is part of a report presented at the South Asia Department Economists' Annual Conference 2006 of the Asian Development Bank.

(Manufactured) Export-Oriented Growth Strategy, and why it may not be the one for South Asia

The key element in (M)EOGS was that a country adopted policies that provided a supportive environment for the export-oriented manufacturing sector (initially the focus of policies was to eliminate the anti-export bias, but over time the recommended policy package expanded to include trade and investment liberalization in general (fiscal discipline, financial liberalization, privatization, deregulation, good governance, etc.). Under this strategy, a country started by manufacturing and exporting labor-intensive products. As wages rose and domestic manufacturing capability improved, it moved up the technology/capital intensity ladder, while rising labor costs prompted manufacturers of more labor-intensive products to look elsewhere for a lower cost export base, hereafter referred to as the "spillover effect." In the case of the latter, neighboring countries generally benefited, as this allowed a firm to move the more labor-intensive parts of the process to a lower-cost location without placing too great a burden on its existing marketing and managerial infrastructure. Similarities in culture, institutions, and living conditions added to the "neighborhood advantage."

The experience of East/Southeast Asian countries has demonstrated that spillover effects and neighborhood advantage can play an important role in economic development (see box 1). Common culture, similar institutions, short distances, etc. reduce costs and risks for the first mover to a new country, and her success provides comfort to and encourages other investors. Also countries learn from and copy the successful initiatives of their neighbors. This is true for governments (with regard to economic policies, investment priorities, etc.), businesses (that move into sectors which are doing well in a neighboring country), and citizens and media (whose attitudes with regard to foreign ownership, to new ideas, tolerance for the vagaries of the market system, etc. change)—and thus become more attractive to firms looking to relocate production to another low wage country. Growth in intra-industry trade may further enhance the neighborhood advantage.

As a result in Asia, as one country moved out of the lower (labor-intensive) end of the export manufacturing sector, another country in the neighborhood took its place, and the process was repeated. This feature of the development process in East/Southeast Asia is also sometimes referred to as the "flying geese model" of Asian development. The early adopters (Republic of Korea, and Taipei, China) relied largely on domestic capital; but in Singapore, Malaysia, Thailand, Indonesia, PRC, and Viet Nam, foreign direct investment (FDI) played an important role in the growth of the manufactured exports sector.

The reasons (M)EOGS may not easily extend to the South Asian countries can be grouped into two categories. First, the emergence of the PRC, with its huge population and labor force, as the low-cost manufacturing workshop of the world has raised doubts on whether the flying geese model can continue as before. As wages in the coastal areas of the PRC rise, labor-intensive industry is thought to move inland—which should be much more cost effective than moving to another country. This process would continue until most of the "surplus" labor in the country is used. Given the size of PRC's labor force, this could take a long time.² But cost is not the only determinant of the investment/sourcing decisions of multinational corporations. To reduce risk, multinational corporations would tend to diversify their production/supply sources. Therefore, they will continue to invest in/source from other low-cost locations at the same time.

² There are reports of rising wages and growing shortages of skilled workers in the PRC, which indicate that the low labor cost advantage may be eroding faster than that assumed by this school of thought.

However, these are most likely to be countries in the neighborhood (i.e., Indonesia, Philippines, Viet Nam, Cambodia, Lao People's Democratic Republic, etc.).

Second, for historical reasons, a number of factors make South Asia not a very attractive location as a manufactured-exports platform. These include an anti market attitude of the bureaucracy and an overregulated business environment (which together exert a major influence on the fortunes of private businesses in most sectors of the economy in South Asia); an inadequate infrastructure and weak logistics base; and antiquated labor laws and strong trade unions. Also, given the sheer size of the labor force in South Asia, manufactured-exports driven development of South Asia may not be practical for a global economy struggling to cope

Box 1. Factors Underlying the Movement of Manufactured-Export Industry to Asia

The following factors have powered the move of labor-intensive manufactured-exports industry to developing countries, of which Asia has been largest beneficiary.

One, increasing trade liberalization under successive rounds of General Agreement on Tariffs and Trade (GATT)-reduced tariff and nontariff barriers to trade in the manufacturing sector.

Two, continuous reduction in transport and communication costs made it viable to move more and more of the labor-intensive manufacturing industry from developed countries to lower cost international locations. Improvements in telecommunications, information technology, and logistics facilitated growth of intra-industry trade and the development of sophisticated supply chains, and that further accelerated transfer of labor-intensive manufacturing tasks/activities to low wage countries.

These factors were applicable for all developing countries, but the next two were responsible for putting Asia in the forefront.

Three, countries in East/Southeast Asia were the first to see the opportunity opened up by these developments. While most other developing countries were still trying to industrialize behind high tariff walls, the East/Southeast Asian countries were shifting to the (Manufactured) Export-Oriented Growth Strategy—being in the neighborhood of Japan probably contributed greatly to their early adoption of this strategy. Not only did the East/Southeast Asian countries implemented export-oriented policies and supporting investment programs, but in many cases their leaders proactively sought foreign direct investment (FDI). For example, in the early days of the electronics (semiconductor) industry, leaders of Malaysia and Singapore aggressively courted firms such as IBM, Hewlett-Packard, Fairchild, and Texas Instruments to induce them to locate manufacturing/assembly facilities in their countries and provided many incentives. Once these ventures were successful, FDI in other industries followed.

Four, the electronics/semiconductor industry only started in the 1960s, and since no manufacturing setup existed in the developed countries, the investment decisions from the very beginning were taken with an international least-cost perspective. From the start, most of the labor-intensive activities in the electronics industry (microchip/motherboard assembly, manufacturing of components and peripherals, etc.) were located in East/Southeast Asia. The rapid growth of the international electronics industry and the success of the offshore facilities in East/Southeast Asia not only resulted in large inflow of FDI to these countries in the electronics sector, but also showed the way to other businesses in the developed countries, thus accelerating relocation of other more established labor-intensive industries to East/Southeast Asia.

In brief, declining barriers to movement of manufactured goods across national boundaries, falling costs (not only in monetary terms, but also in terms of time and reliability) of moving goods from one point to another and coordinating production supply chains, pro-export policies and investments of certain countries in Asia which established them as world leaders in the field, and the subsequent spillover effects and the neighborhood advantage were the major reasons for the rapid growth and concentration of the manufactured-exports industry in East/Southeast Asia.

with the trade imbalances resulting from PRC's (M)EOGS-driven development.

Therefore, there is a need to explore the possibility of an alternative development strategy for South Asia, a strategy that builds on the strengths of the South Asian countries and, at the same time, one that is initially not too dependent on eliminating existing attitudinal, institutional, infrastructure, and policy weaknesses. The strategy to be viable must, however, be capable of setting in motion a development process which results in broad-based growth and generates the demand and the resources needed to undertake the policy reforms and the physical and social infrastructure investments required to sustain the process over the longer term.

Services-Export-Led Growth Strategy

Just as declining transport and communication costs facilitated the move offshore of export oriented labor-intensive manufacturing industry, the revolution in information and communication technology (ICT) is resulting in similar developments in the services sector. The new technologies allow the service production process to be broken up into its subprocesses/tasks; the different tasks can be performed anywhere in the world and then put together again to produce the final service. This has made possible the increasing division of labor in the services sector and resulted in a fundamental change in the economists' view of this sector (see box 2).

Box 2: Commoditization of Services ³

Traditionally, economists have categorized goods as tradables and services as non-tradables. However, as Blinder puts it “at any point in time, the available technology—especially transport and communication technologies—largely determines which goods and services are easy to trade and which are hard or impossible to trade.” He goes on to add that because of constantly improving technology and falling transport costs “over time more and more items become tradable,” and “many more services are now tradable and many more will sure become so.” He predicts that the key distinction in international trade will no longer be between goods and services, but instead between “services that can be delivered electronically over long distance with little or no degradation of quality, and those that cannot.”

As it happened in the manufacturing sector, moving production to developing countries in the service sector also started with the outsourcing of labor-intensive and relatively simpler tasks (call centers, data entry, transcription services, etc.). But as the capability of the offshore services-export sector has improved, and the confidence of the businesses in developed countries in the ability of the sector to deliver in terms of quality, timeliness, and confidentiality has grown, more complex and sophisticated tasks have also begun to move offshore. With computing power, memory/storage capacity, etc. expanding exponentially, the sophistication and quality of software improving rapidly, and the cost of “transporting data over long distances

³ This box is based on Blinder (2005).

with no degradation in quality” approaching zero, the scope for international division of labor in the service sector will continue to grow.

This paper contends that the growth of the services-export sector can play a similar role in South Asia that the growth of manufactured-export industry played in the development of East/Southeast Asian countries.

The success of (M)EOGS in Asia was primarily because of the following reasons: (i) because of the export-oriented nature of the industrialization, the high growth rate is not constrained by balance of payments problems, as was the case under ISGS; (ii) growth of a modern export-oriented manufacturing sector sets in motion a process of change that spreads to other sectors of the economy that also adopt new technologies and management practices until the entire economy is transformed; and (iii) the expanding manufacturing sector (and the rapidly growing economy) generates employment and increasing incomes for a growing proportion of the population, which in turn promote domestic demand and sustains the high rate of economic growth.

SELGS can also have these three impacts on the economy:

(i) *Relaxing the Balance of Payments Constraint.* In this regard, the services-export sector can play the same role as the manufactured-exports sector has played in East/Southeast Asia. Globally, international trade in information technology (IT) and business process outsourcing (BPO) services, although from a small base, is expanding much faster than trade in commodities, and its FDI is the fastest growing component of total FDI. These two trends are expected to continue, and even possibly accelerate. If the services export sector is the driver of growth in a country, the increase in foreign exchange earnings and FDI should be sufficient to cover the cost of additional imports generated by the high growth in domestic demand. In India, for example, earnings from IT and IT-enabled services (ITES) exports are growing at about 30% annually and, in 2005, these totaled about \$25 billion (while the trade deficit was \$52 billion). Thus, expansion in services exports can ensure that the Indian economy can continue to grow at 8–10% per annum based on domestic demand, without an unsustainable current account deficit bringing the process to a halt.

(ii) *Dynamic Impact on Other Sectors of the Economy.* The growth of the services-export sector—by improving the management capability in the economy as a whole, creating new entrepreneurs and accumulations of capital, expanding the middle class, and boosting domestic demand—accelerates the development of other sectors of the economy. The strong IT sector provides products/technologies for better management and control in existing industry, i.e., there are spillover benefits for firms in the old economy. FDI in the services-exports sector also promotes FDI into other sectors producing for the domestic market, resulting in transfer of technology and management skills to these sectors as well. The more sophisticated demands of the middle class lead to improvements in retail infrastructure and growth of shopping malls, supermarkets, hypermarts, etc., which in turn help domestic producers develop expertise in mass marketing, meeting quality standards, ensuring timely deliveries, etc., and thus provide the experience and capabilities needed for selling in overseas markets. Domestic producers as a result are also able to compete successfully in international markets, thus accelerating exports of manufactured and agricultural products as well.

(iii) *Employment Generation.* It is widely believed that the employment generated by the services export sector cannot be very large and will be primarily limited to the highly educated workers. It may expand jobs for the middle class but cannot provide jobs on the scale needed to employ the expanding labor force and the surplus/underemployed workers in

the traditional sectors of the economy. Thus, the issue is both the extent of employment generation and the types of jobs created. In this regard, if both direct and indirect employment impacts are taken into account, the total employment generated could be very large as discussed below.

To accurately estimate the number of jobs that may be created in developing countries in the services export sector is difficult, but the process evidently has just begun and the actual number of jobs can be very large. According to Blinder “offshoring...is still largely a prospective phenomenon...[And] fewer than a million US service sector jobs have been lost to up to now.” Blinder’s rough guess is that “the number of current US service-sector jobs that will be susceptible to offshoring in the electronic future is two to three times the total number of manufacturing jobs (which is about 14 million).”⁴ If we add to this the jobs in other rich countries that would be susceptible to offshoring, the total could be very large.

Further, each job transferred from the developed country generates several jobs in the low-cost country. Because of lower wage costs, there is a tendency to employ more people to do the same work, and decline in the cost of the service will result in an increased demand for it (downward sloping demand curve). According to Dossani and Kenney, the general target backup ratio in India was 2:1, and they provide the example of medical transcription service where two persons transcribed the same material and a third person arbitrated the result in case of any differences (Dossani and Kenney 2005). They also provide examples of additional jobs created because of reduced cost resulting in increased demand, “as the lower cost permits rethinking of earlier cost benefit decisions, e.g., the Tax Department may decide to audit a larger percentage of returns.” Therefore, for the world as a whole, many more jobs are likely to be created than those lost in the developed countries as the result of offshoring.

Thus, the potential for direct job creation in services-export sector over the next 20 years or so is enormous. In fact, the employment and incomes generated in the developing world by the services-export sector could possibly be even larger than that from export-oriented manufacturing sector.⁵ Furthermore, the potential for indirect job creation from the expansion of the services-export sector is even larger. Most jobs in this sector are well paid by developing country standards, and the propensity to consume of this rapidly growing middle class, as seen in India, is high. The increased demand for housing, manufactured consumer goods, personal services, etc. of those employed in the services-export sector and the boost to aggregate demand provided by their consumption will result in a large increase in jobs in other sectors as well; and these jobs generally will not require a high level of education or skills.⁶

In a way, the process under SELGS is similar to that under (M)EOGS. However, in the latter, manufactured exports directly provide the increase in employment and demand for the industry, as well as facilitate the transfer of technology, which made possible the high rates of

⁴ Other estimates of jobs at risk are somewhat less, for example, Bardhan and Kroll (2003) estimate the number at 15 million. McKinsey and Company (2005) came up with an estimate of 12.4 million US jobs at risk. But in both cases, the authors only look at sectors/job categories where outsourcing is already taking place, while Blinder adopts a broader view, i.e., includes all services which are likely to become tradable in the future given the ongoing development trends in ICT. Van Welsum and Reif [2005] and Van Welsum and Vickory [2006] classify about 20% of the US workforce as being offshorable, which would be about twice the above estimates.

⁵ The problem of course will be the supply of the educated workers needed to fill these jobs, but that is policy and investment issue for the governments of developing countries and MDBs which we shall discuss in the last section of the paper.

⁶ Assuming a marginal propensity to consume of 0.75 (i.e., multiplier equal to 4) and an income-employment elasticity of 0.5, a 1% increase in GDP from the services-export sector would generate at least 2% increase in employment in other sectors. Thus, the increase in BPO and IT/Software sub-sectors share in the GDP in India from almost nothing in the mid-1990's to about 5% in 2005 implies that that the growth of this sector may have been responsible for as much as 10% increase in overall employment in the economy.

growth seen in East/Southeast Asia. In SELGS, the process is mediated through expansion in production for the domestic market. This difference is important for another reason, i.e., under SELGS, the South Asian countries are likely to continue to run trade deficits and thus will not add to the growing global trade imbalances associated with (M)EOGS and the emerging support for protectionist policies in developed countries.

Why South Asia?

While South Asia may not have all the conditions needed to become an export platform for labor intensive manufactured exports, it does have the favorable initial conditions for SELGS. Most important of these is that India is already established as the world leader in the field of IT and BPO services-export. The reasons for India's success are well documented—investments in the 1960s in Indian Institutes of Technology (IITs) and Indian Institutes of Management (IIMs), which turned out a large number of high quality graduates in engineering/computer sciences and management, many of whom, because of lack of opportunities at home, had gone to the US and did very well in the IT industry there, with a substantial number turning out to be extremely successful entrepreneurs; and existence of a large pool of young people with English language skills. These factors, though to a much lesser extent, also exist in other South Asian countries.

Just as in East/Southeast Asia one country after the other benefited from spillover and neighborhood effects in the development of export-oriented manufacturing industry in the region, so can South Asian countries benefit from the lead position of India. They can invest to create the endowments needed to attract services-export industry. As wages in the services-export sector in India rise, the less sophisticated services can relocate to other South Asian countries. Neighborhood advantage will work for them as Indian firms—a role played by Japanese firms in East/Southeast Asia—can conveniently locate facilities across the border. Also, buyers of services can reduce risk by diversifying outsourcing to countries other than India, but remaining close. Thus, a new flying geese pattern of growth can emerge for South Asia based on services exports rather than manufactured exports, with India as the leader. So far, the spillover effects of India's ICT-related services exports are not yet evident in the rest of South Asia (see Table 1).

Table 1: ICT-related service exports in South Asia

	Current million \$	% of commercial service exports	% of GDP
Afghanistan			
Bangladesh	256.9	61.1	0.45
Bhutan			
India	15,341.9*	66.4*	2.55*
Maldives	9.6	1.9	1.19
Nepal	92.9	26.1	1.38
Pakistan	541.0	31.5	0.56
Sri Lanka	318.9	21.2	1.59

GDP = gross domestic product, ICT = information and communication technology
 * 2003 data.
 Source: WDI online.

However, initiating this new flying geese pattern of development requires the concerted efforts of governments in the region as well as properly targeted and coordinated support of multilateral development banks (MDBs) (more on this in the succeeding section) to further develop the neighborhood advantage in service exports, particularly in outsourced business and

knowledge processes in South Asia. Since service exports are mostly in digital form and are transacted online, producing these services in general may not involve the usual value or supply chains observed in manufacturing exports. As such, relocation of less sophisticated processes to neighboring countries may not be as automatic under SELGS as in the previous experience with (M)EOGS since transport costs become unimportant and the marketing and managerial structure for online services may not require physical presence in the partner economy. Nevertheless, the spread of service exporting firms to other countries in the region can be facilitated by emphasizing their innate similarities with India, and improving on the other factors that ultimately matter to outsourcing firms. In short, South Asia can be promoted as the premier service export hub of the global economy.

Given relatively high levels of English proficiency as a result of the region's shared colonial history and the growing emphasis on tertiary education in other South Asian countries because of the influence of India, South Asia's young labor force should be its primary advantage. This can be further enhanced through properly designed and targeted programs that would equip workers with specific skills necessary for outsourced services. Also, the state of ICT infrastructure in the rest of South Asia, though generally lagging behind India's, is gradually improving with continuing investment. In 2005, IT technology expenditures in Pakistan and Sri Lanka compared favorably with that of India. Sri Lanka has also surpassed India in terms of international Internet bandwidth and the density of fixed and mobile phone subscribers as of 2004 (see Table 2).

Table 2: ICT infrastructure indicators

	IT technology expenditures per capita (% of GDP), 2005	Internet users (broadband subscribers); per 1,000 people, 2004	International internet bandwidth; bits per person, 2004	Fixed line and mobile phone subscribers; per 1,000 people, 2004
Afghanistan		0.9	1.0	22.7
Bangladesh	10.3 (2.4)	2.2	0.4	37.0
Bhutan		22.3	10.4	52.9
India	42.4 (5.9)	32.4 (0.6)	11.4	84.5
Maldives		59.2 (2.2)		450.7
Nepal		6.6		21.8
Pakistan	49.1 (6.9)	13.2 (0.04)	5.3	62.6
Sri Lanka	66.3 (5.5)	14.4	16.7	164.9

ICT = information and communication technology.

The potential of Pakistan to develop as an attractive outsourcing site is recognized in the Global Outsourcing Report 2005. Pakistan ranks 23rd in terms of the Future Opportunities

Index, which projects the relative competitiveness of countries in the global outsourcing market in the next 10 years. According to the report, by 2015 Pakistan is expected to be one of the major players in the outsourcing sphere with its abundant, low-cost, and English-proficient labor force and as a result of recently introduced reforms, such as a 15-year tax exemption on software exports, elimination of duties on technology imports, and simplification of the investment process (Minevich and Richter 2005).

Sri Lanka, with its limited population and labor force, may benefit more by developing niche outsourcing markets in basic corporate processes such as in accounting, finance, human resource management, legal services, and certain IT services, according to a recent World Bank report (Radwan and Fernando 2006). Labor and office rental costs that are among the lowest in the region remain as Sri Lanka's main competitive advantage in the global outsourcing market.

For the other economies of South Asia to benefit from India's lead, not only complementary investments for upgrading the labor force and ICT infrastructure must be made to enhance each country's capability to undertake outsourced business and knowledge processes, but also existing barriers to regional trade in services and investment in South Asia must be dismantled. In addition, reforms aimed at improving the business environment in South Asia must also be implemented to make the region as a whole a more attractive destination for service-export oriented FDI.

Implications for South Asian Countries and MDBs' Operations in the Region

If the above analysis is accurate, then it has important implications for the governments of the South Asian countries and MDBs, particularly the Asian Development Bank (ADB). They need to reevaluate the kind of investments and policies they should be supporting in South Asia. They should aim to enhance the competitiveness of South Asian countries in the services-export sector. This sector needs different types of infrastructure than the traditional sectors—i.e., besides investment in roads, ports, etc., there would be a need to invest in fiber optic highways, broadband connectivity, international gateways and uplink facilities, etc.; besides investing in primary education, there would be a need to invest in higher education, particularly in technical skills and English proficiency; and so on. Also, the policy analysis and lending operations may need to also address such issues as barriers to the growth of the ICT industry, lack of access to finance for the service sector, etc. In brief if the services sector, particularly services-export sector, is seen as the driver of growth, then investments and policies need to support this sector.

South Asia is currently home to about 410 million of the 720 million poor people in the Asia and Pacific region. The SELGS, through the mechanisms outlined in this paper, can provide the necessary stimulus for broad-based and self-sustaining economic growth. Since poverty reduction is best achieved by promoting rapid economic growth for a sustained period, ADB, by helping develop South Asia as the premier global outsourcing hub, can go a long way toward achieving its goal of an Asia and the Pacific region free of poverty.

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