



# ASIA-PACIFIC DEVELOPMENT JOURNAL

Vol. 19, No. 1, June 2012

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with Pakistan: a comparative analysis**

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**Performance of financial institutions in Bhutan**

**The challenges of implementing Millennium  
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# ASIA-PACIFIC DEVELOPMENT JOURNAL

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## **Explanatory notes**

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Two dots (..) indicate that data are not available or are not separately reported.

An em-dash (—) indicates that the amount is nil or negligible.

A hyphen (-) indicates that the item is not applicable.

A point (.) is used to indicate decimals.

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## THE ECONOMIC RELATIONS OF CHINA AND INDIA WITH PAKISTAN: A COMPARATIVE ANALYSIS

Pravakar Sahoo\*

*In recent years China has taken several steps to improve trade and investment relations with Pakistan, including, among others, the signing of a bilateral free trade agreement (FTA) in 2006. Trade between the two countries has increased manifold, which, in turn, has resulted in a huge gap between the amount of trade China engages in with Pakistan compared with India. This slowing of India-Pakistan economic relations vis-à-vis China-Pakistan coupled with strained and uncertain political relations is a cause for concern. In this context, the present study examines trade and investment relations between China and Pakistan and analyses factors that have led to the growing presence of China in Pakistan vis-à-vis India. India has lost out to China in many important industries due to non-tariff barriers and non-economic factors. In addition, China scores over India in scale economies, price competitiveness and trade complementarity.*

*JEL Classification:* F14, F18.

*Key words:* Trade, investment, comparative advantage, trade complementarity, trade barriers.

### I. INTRODUCTION

In recent years, China has taken several steps and initiatives to improve its trade and investment relations with Pakistan. China and Pakistan have signed a FTA (2006), a memorandum of understanding (MoU), a bilateral investment treaty (BIT) and many other agreements to increase trade and investment. China has been given

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several incentives by Pakistan which include access to the Pakistan market, cheap raw materials and use of Pakistani ports for trade. Pakistan, in return, has gained access to Chinese markets through preferential treatment under the FTA and moved closer to becoming a hub in the region, which may lead to significant transit revenues. The closer relationship between the two countries has also helped China build a “trade and energy corridor” through Pakistan (Aneja, 2006; Kumar, 2006).

Another reason behind the growing Pakistan-China ties is the expanding influence of India (because of the presence of the United States of America) in Afghanistan, and the increasing presence of the United States in general in the region (Kumar, 2006). Historically, China has been a major partner to Pakistan in its nuclear and fuel missile technology, but recently, there has been a shift in the relationship. Apart from collaboration on the political and defense front, the basic objective of the closer ties, is to nurture and strengthen economic relations between the two countries, furthering the interests of both countries in the region. Though the economic relations are yet to reach their full potential, military cooperation between the two countries is at a high level, with the strategic location of Pakistan being of particular interest to China as the former is the main route between China and the Middle East and China and Central Asia (Kumar, 2006; Sahoo, 2010). According to Rahman (2011), Pakistan-China relations are at their highest level given the layers of interactions between two countries. Over the years, Pakistan and China have developed a clear vision of their economic relations based on frequent exchange of ideas and high-level consultations between two countries (Memon, 2009).

Normality in political and economic relations between India-Pakistan is essential for a peaceful and prosperous South Asia. However, this has not been achieved because trade is restricted between the two countries mostly due to non-economic reasons. The trade restrictions have consequently resulted in, among other things, large-scale smuggling and third party trade and an increase in the prices of commodities for consumers (Ashraf, 2009; Khan, 2009). Other factors limiting trade between the two countries are lack of information on tradable items, India-Pakistan trade compliance regulations, facilities and high trade and transaction costs (Taneja, 2006). Though it has been recognized by both sides that the potential benefit from economic cooperation is immense, trade has suffered due to fluctuating political relations between the two countries (CUTS, 2011). However, it is believed that improved trade relations can significantly enhance political ties between the two countries (Malhotra, 2009; Khan, 2009).

Trade between India and Pakistan is limited even though they are both members of the South Asian Free Trade Agreement (SAFTA). Pakistan currently does not provide most favoured nation (MFN) status<sup>1</sup> to Indian exports despite the fact that both countries are members of World Trade Organization (WTO). However, India has extended this privilege to Pakistan. In addition, Pakistan allows only some trade routes for transportation of goods listed in its positive list to and from India. On the contrary, China has become an important trading partner of Pakistan in the region. The country has been investing and giving bilateral development assistance to Pakistan. In this context, the present study analyses economic relations between India-Pakistan vis-à-vis China-Pakistan within the framework of bilateral trade and investment arrangements. As economic cooperation is one way of breaking the deadlock between India and Pakistan, a comparative study of China-Pakistan economic relations vis-à-vis India-Pakistan will be useful to policymakers and academia. The focus of the paper is to analyse the economic relations of China, in terms of both trade and investment, with Pakistan vis-à-vis the economic relations of India for the period 1992-2007. The emphasis is on the period 2000-2007 when China improved its position substantially and gained a large foothold in many industries in Pakistan. The study tries to answer some pertinent questions, such as (a) why India has lost market share to China in Pakistan and (b) whether non-tariff barriers and the focus only on the positive list of Pakistan is responsible for the loss. The study is based on data from secondary sources including United Nations Comtrade<sup>2</sup> and insights received from experts and policymakers.

### **India-Pakistan and China-Pakistan trade relations**

Pakistan is the only country in South Asia in which trade with China, in terms of both exports and imports, has been more than trade with India during the study period. Since 2000, exports from China to Pakistan have accelerated (figure 1). The figure shows that exports from India were 1 per cent (\$52.2 million)<sup>3</sup> of the total exports to Pakistan in 1992 and increased to 6.2 per cent in 2007, amounting to \$1.9 billion while exports from China increased from 9 per cent in 1992 (\$421.1 million) to 23 per cent of total exports in 2007, amounting to \$6.4 billion. The sharp rise in exports from China was partially due to the acceleration of economic cooperation between the two countries since 2000. Another spurt in trade and economic relations between China and Pakistan has occurred since 2006 following the successful completion of the FTA, though it is difficult to capture this impact as the analysis ends

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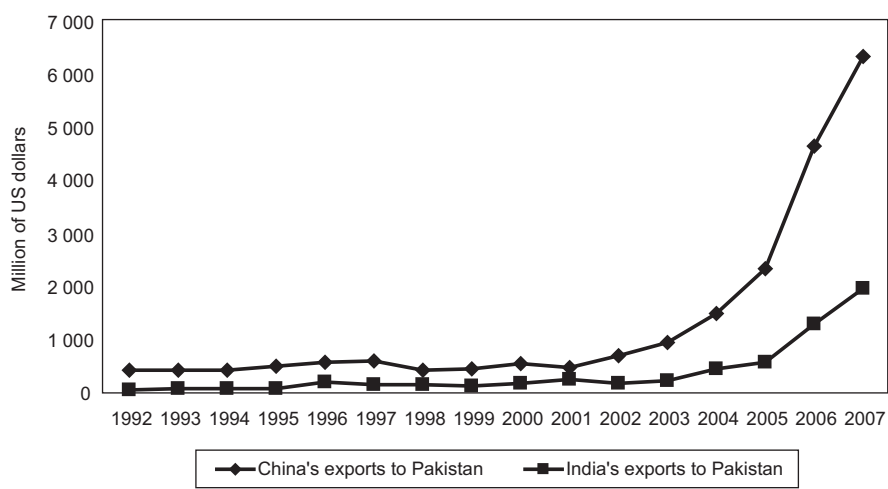
<sup>1</sup> However, Pakistan agreed to give MFN status to India in March 2012 in bilateral trade negotiations.

<sup>2</sup> United Nations Commodity Trade Statistics Database.

<sup>3</sup> The source of all trade data is WITS COMTRADE HS 1988/92.

at 2007.<sup>4</sup> With respect to imports from Pakistan, those to India from Pakistan (\$135.5 million) were about 2.5 times those of China (\$53.7 million) in 1992.<sup>5</sup> Though Indian imports from Pakistan have been increasing since 2004 and amounted to \$269.7 million in 2007, the total was still far behind Chinese imports, which stood at \$1.0 billion.

Figure 1. Exports to Pakistan from India/China



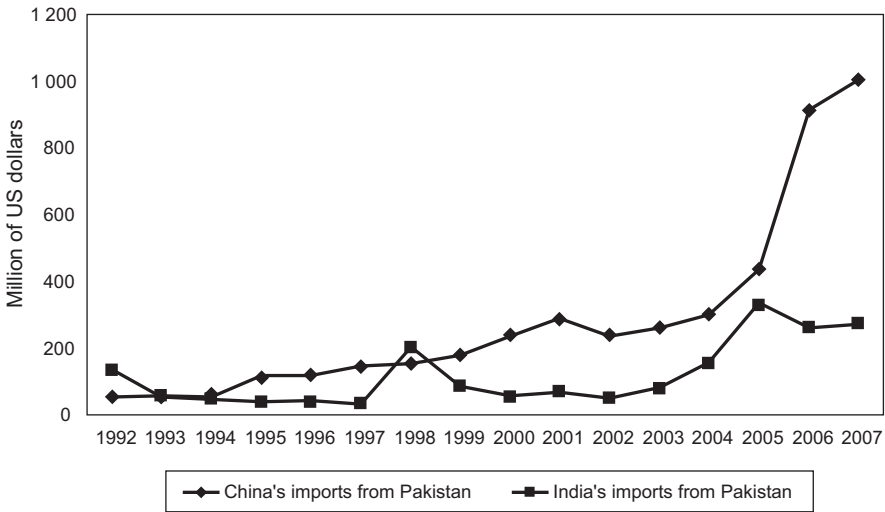
Source: United Nations (2009).

Overall, trade between India and Pakistan (figures 1 and 2) has improved since 2002, though the level of trade has been substantially lower compared to trade between China and Pakistan. Two reasons behind the spurt in trade are the inclusion of more Indian goods in the positive list of Pakistan and the opening up of a few more trade routes to India (see Taneja, Prakash and Kalita, 2011). The share of Chinese exports to Pakistan increased from 10.1 per cent in 2000 to 22.8 per cent in 2007 whereas the share of Indian exports increased to 6.2 per cent in 2007 from 2.9 per cent in 2000 (see annex table A.1). Given the similarity in export baskets of China and India to Pakistan, discussed later, Chinese exports are gradually replacing Indian

<sup>4</sup> The chart for exports, however, does indicate this spurt in growth as the final tail of the Chinese exports graph sees a steep rise reflecting annual growth of 36.6 per cent.

<sup>5</sup> We could not explore the data before our reference period, as China (and Pakistan) reported data were missing in the years before 1992. However, it seems possible that imports into China from Pakistan were less than what India imported from Pakistan earlier.

Figure 2. Imports into India/China from Pakistan



Source: United Nations (2009).

exports. Similar to exports, the share of imports from Pakistan to China is higher than that of India (7.3 per cent in 2007 compared to the share of India of around 2 per cent in recent years). The balance of trade was in favour of China (for trade with Pakistan) in 1992 and began to decrease thereafter between 1998 and 2000. The trade balance was favourable (positive) for India in some years, particularly post 2000. Along with protection of domestic industries and other non-economic reasons, this is probably one of the reasons why Pakistan complains of a trade deficit with India and bans Indian goods. In recent years, the normalized trade balance<sup>6</sup> is almost the same for both countries (see annex table A.1).

<sup>6</sup> We use the normalized trade balance ratio between two countries which is defined as: normalized trade balance ratio =  $100 \times (X - M) / (X + M)$ ; where X is the total Exports from country 1 to country 2 and M is the total Imports into country 1 from country 2. If this percentage measure is positive, then the trade balance is in favour of country 1 (trade deficit for country 2) because this implies that country 1 exports more to country 2, than it imports from it. In our calculations country 1 is one of China or India, and country 2 is Pakistan.

## II. REVEALED COMPARATIVE ADVANTAGE

### Comparative advantage in exports to the world and share in Pakistan market

Export competitiveness is an important determinant of successful integration of a country with the world economy. A high degree of comparative advantage reflects relative cost advantages, superior product attributes and lesser trade restrictions.<sup>7</sup> In this study, the revealed comparative advantage (RCA) of exports from China and India to the world economy was analysed using the Balassa index (Balassa, 1965)<sup>8</sup> for the period 1992-2007. We also calculated an index derived from the Balassa index to suit the bilateral context<sup>9</sup> for the reference years. The sectoral comparative advantage is an important indicator of a country's export prowess.<sup>10</sup> The international revealed comparative advantage (IRCA) and bilateral revealed comparative advantage (BRCA) of Chinese and Indian exports and their respective share<sup>11</sup> in world trade and share in the Pakistan market as well is reported in annex tables A.2 and A.3. The goods that show a revealed comparative advantage as measured by their IRCA for China have a greater share of the market in Pakistan than that of India. This can be understood by the shares of both Chinese and Indian RCA products, at the 2-, 4- and 6-digit levels in 1992, 2000 and 2007, respectively, as reported in annex table A.2. Even in the case of BRCA, China has an edge over India in the Pakistan market (annex table A.3). Overall, China has a higher market share in Pakistan in the commodities it has IRCA than India in the same categories. This indicates that non-tariff barriers exist between Pakistan and India. In addition, China has a comparative advantage (both in terms of IRCA and BRCA) in a greater number of commodities than India, and the numbers have been increasing.

<sup>7</sup> The determinants of export competitiveness include price-related factors, such as domestic wages or material costs; availability of labour; exchange rate; foreign direct investment (FDI) and management; and reduced cost of communication and transportation (Adams, Gangnes and Shachmurove, 2006) as well as qualitative attributes.

<sup>8</sup> In order to analyse IRCA of Indian and Chinese exports, we use the Balassa index as follows:  $IRCA_i = (X_i/X_j)/(X_{iw}/X_{jw})$ ; where  $i$  is the product/industry of interest for calculation of comparative advantage,  $j$  is the country of interest whose comparative advantage is being calculated, and  $w$  is the set of all countries in the world. Therefore, the index is the ratio of the share of  $i^{th}$  product/industry in the exports of country  $j$  as a proportion of  $i^{th}$  product/industry in world exports.

<sup>9</sup> See Pascha (2002).

<sup>10</sup> This expectation, however, assumed that nothing other than comparative advantage affects bilateral trade, which in practical international trade does not hold. We, therefore, encountered various products/industries in the trade of which other factors supersede the comparative advantage effect. We tried to explain the deviations from these expected patterns in the context of trade arrangements and trade policies.

<sup>11</sup> Though we calculated RCA for all the years from 1992-2007, we only reported three time points, 1992, 2000 and 2007 due to space constraint.

Major industries having comparative advantages for both countries and the respective share of these industries in the world market and as well as in the Pakistan market are reported in annex table A.4. Both China and India have several common export items to Pakistan in which both countries enjoy IRCA, such as footwear and headwear, textile and textiles articles, hide and skins, and base metals, and articles, though China has a higher market share than India for those items. China exports much more than India in these industries to Pakistan and Chinese exports constitute a major portion of world exports in these industries. Even industries in which India has a high IRCA, their presence in Pakistan is negligible. For example, industries, such as pearls, precious stones and metals, and footwear and headwear, have witnessed negligible and fluctuating growth during the study period as a majority of the items in these industries are banned in Pakistan (not part of the positive lists). Another example is the industry of hide and skins, in which India enjoys a high comparative advantage in the world market but has zero presence in Pakistan. On the contrary, China exports 40 per cent of the total world exports in this industry to Pakistan. This reflects the non-tariff barriers mainly through the positive list approach, which included nine items in 2000 but increased to 45 items in 2009. This ad hoc approach of positive lists, which fluctuates every year and sometimes in a few months, creates uncertainty about the market for Indian exports and also dependency of Pakistan importers on India.

### **Comparative focus in exports to Pakistan**

The BRCA measures for Chinese and Indian exports to Pakistan are summarized in table 1. The highest BRCA measures are seen in arms and ammunition, parts and accessories; chemical products; plastic and rubber; and base metals and articles in which BRCA>1 in all three years, 1992, 2000 and in 2007. At the 4-digit level, nuclear reactors, fuel elements, machinery and apparatus (HS 8401) show a comparative advantage before 2007 while lead waste and scrap (HS 7802) show the maximum bilateral comparative advantage in 2007. Indian exports show a bilateral comparative advantage consistently in all three years in chemical products; plastic and rubber; vegetable products and prepared foodstuff. The share of top exports for both China and India and their respective BRCA is reported in annex table A.5. Notably, vegetable products (HS 14) and sugars and sugar confectionary (HS 17) are the top focus for Indian exports to Pakistan in the last 10 years.

Chinese and Indian exports both show BRCA (in all three years) in chemical products and in plastic and rubber. However, Chinese exports exceeded Indian exports in both these industries. In the plastic and rubber industry, neither Indian nor Chinese exports reveal IRCA whereas Indian exports only reveal an advantage in chemical products. India is doing well in both these industries as Pakistan has

included increasing numbers of products in its subsequent positive lists since 2000. For example, the chemical industries included 308 more items between 2000 to 2009, taking the total items to 568, which is almost a quarter of the total items in the positive list. Exports in vegetable products are higher from China despite the fact that Indian exports revealed a comparative advantage as measured by IRCA in these goods. Here also, it appears that Pakistan has blocked many products through positive lists and allowed imports only on the basis of local demand requirement. However, the measures of comparative advantage do not always indicate the success of Chinese/Indian exports of those goods to Pakistan. There are bilateral issues other than comparative advantage that affect trade which we explore in section V. Factor Causing High China-Pakistan Trade.

**Table 1. Bilateral RCA**

Industry	India			China		
	1992	2000	2007	1992	2000	2007
Animals and animal products	0.0	0.0	0.8	0.0	0.0	0.0
Vegetable products	3.1	1.7	1.3	0.4	1.5	2.0
Animal/vegetable fats	0.2	0.2	0.2	0.3	0.0	0.2
Prepared foodstuff	4.9	17.1	4.0	0.5	3.5	0.2
Mineral products	1.6	0.4	0.6	0.1	0.4	1.4
Chemical products	2.7	2.9	2.9	2.4	4.4	2.7
Plastic and rubber	2.4	5.0	3.2	1.0	1.5	1.4
Hides and skins	0.0	0.0	0.0	0.0	0.2	0.4
Wood and wood products	0.0	0.0	0.0	0.0	0.0	0.3
Wood and pulp products	6.1	0.9	0.8	2.4	0.7	1.3
Textiles and textile articles	0.1	0.0	1.5	0.0	0.2	1.4
Footwear, headwear	0.0	0.0	0.5	0.0	0.1	0.8
Articles of stone, plaster, cement, asbestos	1.9	0.1	0.3	0.6	1.6	1.2
Pearls, precious/semi precious stones/metals	0.0	0.0	0.0	0.0	0.0	0.1
Base metals and articles thereof	0.8	0.4	0.5	1.9	1.3	1.0
Machinery and mechanical appliances	1.6	0.2	0.2	2.7	1.0	0.7
Transportation equipment	0.1	0.0	0.0	2.6	1.6	0.7
Instruments-measuring, musical	0.6	0.2	0.2	0.6	1.1	0.8
Arms and ammunition; parts and accessories thereof	1.1	0.0	0.0	6.2	17.0	0.0
Miscellaneous	1.5	0.3	0.1	0.1	0.2	0.3
Works of art, collectors' pieces and antiques	0.0	0.0	0.2	0.0	0.0	0.0

Source: United Nations (2008).



### III. TRADE COMPOSITION AND INDUSTRY WISE ANALYSIS

#### Concentration

The composition of exports reveals that Indian exports to Pakistan were more diversified than Chinese exports in the years under study other than 2007 (see Herfindahl indices<sup>12</sup> in annex table A.6). The findings from the  $C_4$  ratio,<sup>13</sup> however, contradict the Herfindahl index results. They show that Indian exports had a higher concentration as the share of the top four industries was higher than 75 per cent (over time) in all three years whereas Chinese exports had a concentration of 71 per cent or less in its top four industries in all three years (see table 2). This implies that most of the Indian exports were concentrated in four industries beyond which Indian exports to Pakistan were not concentrated sectorally, unlike Chinese exports. These products in which Indian exports were very high (sometimes temporarily) were usually essential items demanded by Pakistan.<sup>14</sup>

**Table 2. Top four industries in exports to Pakistan**

Share in total exports from India (per cent)				Share in total exports from China (per cent)			
Industry	1992	2000	2007	Industry	1992	2000	2007
Chemical products	18.5	27.3	28.9	Machinery and mechanical appliances	37.2	28.6	31.9
Textiles and textile articles	..	..	21.7	Textiles and textile articles	..	..	19.2
Mineral products	9.9	..	13.6	Chemical products	11.6	20.4	11.4
Prepared foodstuff	24.4	40.2	10.8	Base metals and articles thereof	10.2	8.4	9.3
Plastic and rubber	..	11.9	..	Prepared foodstuff	..	7.2	..
Vegetable products	25.4	11.9	..	Transportation equipment	6.5	..	..
$C_4$ ratio	78.2	91.3	75.0	$C_4$ ratio	65.5	64.6	71.8

Source: United Nations (2008).

<sup>12</sup> Herfindahl Hirschman Index =  $\sum (X_i/X)^2$ ; where  $X$  denotes total Exports and  $X_i$  denotes Exports of  $i^{\text{th}}$  firm. The range of this sum therefore is 0 to 1; and if this sum is near 1, it is interpreted as the market being owned by a single firm, and therefore indicating, high concentration in the market. On the contrary, a low sum of squares indicates low concentration in the market.

<sup>13</sup> The concentration ratio is the percentage of market share owned by the largest  $n$  firms in an industry, where  $n$  is a specified number of firms. Four is the most used value for  $n$  and therefore the ratio is termed  $CR_4$ .

<sup>14</sup> The essential items are analysed in detail one by one in later sections.

## Industry components

The most important items of export to Pakistan from China are machinery and mechanical appliances and those from the textiles and textile articles industry (table 2). These two categories comprise about 51 per cent of all exports from China going to Pakistan. Machinery and mechanical appliances maintained the top position while textiles and textile articles replaced chemical product in the number two position in 2007, accounting for about one fifth of the total exports from China.<sup>15</sup> Regarding Indian exports to Pakistan, vegetable products, which used to be the most important industry in the early 1990s, lost a large portion of its share of total exports from India by 2001, with prepared foodstuff emerging as the most important industry. However, chemical products replaced prepared foodstuff in 2007 as the largest component. The textiles and textile products industry has grown in terms of export volume to occupy the second largest component position. In fact, the textile industry has grown in relative share for both Chinese and Indian exports to Pakistan. In this context, some important export industries of India and China are explained below.

### *Prepared foodstuff*

Indian exports to Pakistan in the prepared foodstuff industry are generally unprocessed, such as cane or beet sugar and chemically pure sugar (HS 1701) and oil cake and other solid residue (HS 2304).<sup>16</sup> In 2007, this industry accounted for 10.5 per cent of total Indian exports to Pakistan. However, there have been huge fluctuations in exports of cane or beet sugar from India to Pakistan in the last few years.<sup>17</sup> We explored the positive list that allows items from India into Pakistan for justifications of these fluctuations. In fact, according to a notification by Pakistan on 6 August 2005, imports from India of raw cane and beet sugar (without added flavouring/colouring) and white crystalline cane or beet sugar (four tariff lines at the 8-digit) were allowed into Pakistan effective from that date.<sup>18</sup> This is the reason why imports from India have risen starting in 2005 after being close to zero in 2004. In

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<sup>15</sup> In the following sections, the concessions that China receives according to the FTA is examined while keeping in mind these important industries.

<sup>16</sup> India uses International Trade Centre (ITC) codes and Pakistan uses Pakistan Custom Tariff codes. All trade data are in international HS 1988/92 codes because our period of data begins in 1992, but the concession lists are in the codes of the declaring country. Differences with respect to HS codes are very small.

<sup>17</sup> For example, sugars and sugar confectionery (HS 17) became the most important product category for Indian exports in 2006 (with cane or beet sugar (HS 1701) which alone was about 26 per cent of Indian exports to Pakistan in 2006) but this was a random spurt. Exports of the same item were close to 0 per cent of Indian exports to Pakistan in 2004 and around 30 per cent in 2000 and 2001.

<sup>18</sup> Pakistan, Ministry of Commerce, Order S.R.O. 788 (I)/2005, 6 August 2005.

addition, the share of oil cake and other solid residues (HS 2304) exports from India to Pakistan fell from about 23 per cent in 1992 to 5.6 per cent in 2007. It can be said that a lot of the fluctuations in goods moving from India to Pakistan are a function of the importables allowed from India at that point in time to satisfy local demand.<sup>19</sup> Following in a similar pattern was the trend of Chinese exports to Pakistan of cane and beet sugar, which was a reflection of the fluctuation in the production of sugar in the domestic market and the resulting wide changes in import demand.

### ***Animals and animal products***

In the animals and animal products industry, the bulk of Indian exports to Pakistan is frozen meat of bovine animals (HS 0202) and concentrated or sweetened milk and cream (HS 0402). These items, which were included in the positive list around 2003 also constituted the largest component of exports to Pakistan in this industry in 2007 (accounting for 64 per cent of the local demand within this industry in 2007). Regarding animal or vegetable fats, Indian exports in 2007 were heavily concentrated in soya bean oil and fractions (HS 1507), coconut, palm kernel and babassu oil and fractions (HS 1513), animal and vegetable oils and their fractions (HS 1516), and wool grease and fatty substances (HS 1505). Regarding mineral products, Indian exports to Pakistan in 2007 were concentrated in petroleum oils, etc., excluding crude (HS 2710). Exports of soya-bean oil and its fractions and petroleum oils excluding crude are important demand items from Pakistan in this industry. Indian exports fared better in the Pakistan market than Chinese exports in the products category in which imports were allowed from India, particularly in essential items such as those found in the food category, iron ores, and petroleum oils. Pakistan imports these essential items from India partially because of the low cost factor and high domestic demand. Despite large items in the animals and animal products industry being banned by Pakistan, Indian exports to that country performed better than Chinese exports in this industry. Moreover, Chinese exports did not show a higher IRCA than India in most of these products in this industry. Therefore, Indian exports did better in the Pakistan market than China in products/industries where imports are allowed from India.

### ***Textiles and textile articles***

A large number of textiles and textile articles, which make up an important exports industry for both India and China, were added to the positive list of Pakistan after 2006. This industry, which is very important for Pakistan's exports, accounting for about 68 per cent of total exports in 2007, mainly consists of ready-made

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<sup>19</sup> Sometimes for few months.

garments (RMG) (HS 61+62), carpets, blankets, awnings and cotton textile (HS 52) exports. Data on the important exports from Pakistan to China and to India indicate that China was a more popular destination for Pakistan RMG. Similarly, Chinese imports of made ups (which includes RMGs) from Pakistan were about three times the same items being imported into India in 2007. The case is similar for cotton textiles imports, in which Chinese imports of those goods in 2007 was 15 times higher than the amount imported by India. Similar to a number of Indian exports to Pakistan, cotton exports for the reference period largely depended on the domestic demand of Pakistan.<sup>20</sup> Since cotton is an important item of exports for Pakistan, imports from India are only allowed in order to meet a production shortfall or to fill in for excessive exports from the country.<sup>21</sup> On the contrary, China exports cotton textiles, especially that of cotton fabrics, in significant numbers and imports these same items from Pakistan. As a result, China can be viewed as being a more important trade partner for Pakistan than India with regard to textiles.

In addition to Chinese exports of cotton yarn and fabrics, RMG and made ups to Pakistan are important items of exports for the country, thereby posing serious competition to domestic industries in Pakistan. Since these goods are shipped from China in large volumes and more frequently as compared to India, trade with China in these categories is more of a problem for Pakistani exporters and producers of RMG and made ups than with India.<sup>22</sup> However, another important item in this category imported by Pakistan from China is man-made filaments, yarn and fabrics. Indian exports had a high global comparative advantage in the cotton and cotton thread category and was thus exported more than China in this product category. Overall, China did well in this industry because of its price competitiveness and due to the open access of Pakistan markets. India performed better in products in which it was competitive and allowed to export. A large number of items from the textiles industry were added to the positive list (around 60) over the previous 10 years but the products and items changed frequently, creating uncertainty for Indian exporters.

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<sup>20</sup> There was earlier a ban on cotton in which only long staple cotton was allowed to be imported from India.

<sup>21</sup> Just to cite the fluctuations in cotton demand from the Pakistan textiles industry it may be worthwhile to note that around the summer of 2008, Pakistan textile industry was demanding a ban on the exports of cotton due to its high prices, and very recently, in February 2009, the Kissan Board Pakistan demanded that cotton imports from India be banned, citing imports to be the cause of local stocks going to waste. See [www.yarnsandfibers.com/news/index\\_fullstory.php3?id=17979&p\\_type=General](http://www.yarnsandfibers.com/news/index_fullstory.php3?id=17979&p_type=General).

<sup>22</sup> Large volumes of Chinese exports in carpets, blankets, etc., also contributed to this. These Chinese goods coming in categories that are important for exports of Pakistan should be a threat to local Pakistan industries.

### ***Machinery and mechanical appliances***

At the 2-digit product category level, the top exports from China to Pakistan are electrical machinery, equipment and parts (HS 85) and nuclear reactors, boilers, machinery appliances (HS 84), which make up for the entire machinery and mechanical appliances industry. The exports of machinery and mechanical appliances comprised a 32 per cent share of total Chinese exports to Pakistan in 2007, amounting to \$1.9 billion. This is an industry in which China enjoys a global comparative advantage (IRCA of 1.7 in 2007) whereas Indian exports do not reveal a comparative advantage. From the point of view of Pakistan, the machinery and mechanical appliances industry is very important, with 25.7 per cent of exports to Pakistan in 2007 being in this industry alone. The largest components of exports in this industry to Pakistan in 2007 were electrical telephonic, telegraphic and fax apparatus (HS 8517); transmission apparatus for radios or televisions (HS 8525); electric generating sets and rotary (HS 8502); and air or vacuum pumps, compressors (HS 8414). China was a larger supplier of these important items of demand in Pakistan than India in 2007, with shares of 46.2 per cent, 28.7 per cent, 13.8 per cent and 15.3 per cent, respectively. In the case of textile machinery, another important demand item in Pakistan, China exported more than India and accounted for 22 per cent of total exports. Regarding items of the machinery and mechanical appliances industry, Chinese exports constituted 31.9 per cent of total exports in 2007 whereas Indian exports were a mere 1.6 per cent.

China has, in fact, been dominating India as well as the world markets in the export of items from the machinery and mechanical appliance industry due to its very high IRCA. Even though a substantial number of products in this category from India were added to the positive list (around 2,000 during the last 10 years), the country had not been able to compete with China in the price-sensitive Pakistan market. There are also issues of post delivery services, logistical follow-up and the trust factor, which make Pakistan importers prefer Chinese over Indian products in this category.

### ***Chemical products***

The most important Indian export product at the HS 2-digit level is organic chemicals (HS 29). Though at the industry level, Chinese exports exceeded Indian exports, India exported more organic chemicals than China. India supplied about 31 per cent of the total exports of organic chemicals to Pakistan, which comprised 13.3 per cent of total exports to the country in this category. Another significant item imported by Pakistan in this industry is mineral or chemical fertilizers (HS 3105). Notably, China supplied 36 per cent of the total exports to Pakistan of this product. The chemical industry is one of the few industries in which India fares better than China in the world market. However, in Pakistan, it outpaces China only in a few

products, such as organic chemicals. Therefore, China exports more than India as a whole in this industry. The better performance of China in this industry is mainly due to non-tariff barriers imposed on Indian exports by Pakistan.

### ***Mineral products***

Indian exports of mineral products to Pakistan have also been important, having a share of 13.6 per cent of total Indian exports to Pakistan. This industry accounts for about 6.6 per cent of total exports to Pakistan and India exports more than China in this industry. The most important product of demand for Pakistan within the industry is petroleum oils, etc., excluding crude (HS 2710) for which India is an important source. This is another industry India has a higher IRCA in the world market than China (see table 4). In fact, China does not reflect comparative advantages during our study period. Indian exports do well in Pakistan as it is competitive in this industry and Pakistan has been progressively adding products from this industry in successive positive lists.

### ***Base metals and articles thereof***

In this industry, Indian and Chinese exports show RCA in iron and steel (HS 72) and articles thereof (HS 73) categories. Chinese exports at the industry level as a whole as well as in these two commodity categories are substantially higher than Indian exports. For example, Chinese exports of iron and steel and articles in 2007 accounted for about 58 per cent of world exports to Pakistan in this industry while Indian exports were a mere 6 per cent. The basic reason behind the large gap was that these products were not included in Pakistan's positive list (except for two to three items in HS 72) until November 2006. The inclusion of these items in 2006 has boosted exports from India to Pakistan recently and it is expected that the gap between Indian and Chinese exports in these categories would fall in the future.

### ***Trade complementarity***

According to trade complementarity (TC) indices (annex tables A.6), Chinese exports were more in line with demand in Pakistan than Indian exports throughout the given period. Not only was China's trade more compatible with Pakistan demand, the difference between the trade complementarity index for Indian exports and that of Chinese exports has widened since 2006. The results of the analysis hint that the reason for this could be the FTA between Pakistan and China enacted in 2006, which made Chinese exports even more complementary to import demand of Pakistan. With respect to goods being exported from Pakistan to China and India, the matching trade complementarity indices are higher in the case of China as a destination than they are in the case of goods destined for India. This is in line with the observations

that China is a more accessible destination for important exports of Pakistan than India.

#### IV. TRADE ARRANGEMENTS OR PREFERENCES RECEIVED FROM (OFFERED TO) PAKISTAN

##### China and Pakistan trade arrangements or preferences

China and Pakistan signed a FTA in 2006, which came into force in early 2007. In the China-Pakistan FTA, Pakistan offered tariff concessions for Chinese goods across all industry slabs and margin of preference (MOP) reduction rates at different levels. The FTA has a provision for the elimination of tariffs or the reduction of tariffs to 0 to 5 per cent within the first five years. The industries that received concessions on more than 100 tariff lines at the 8-digit level are listed in table 3. Therefore, tariff duties applicable on Chinese exports in the particular tariff lines in these industries will be almost eliminated by 2012.

**Table 3. Chinese exports receiving concessions >100 tariff lines in categories I and II from Pakistan**

Industry	Number of tariff lines in categories I and II
Animals and animal products	152
Vegetable products	204
Mineral products	186
Chemical products	919
Textiles and textile articles	133
Base metals and articles thereof	427
Machinery and mechanical appliances	776
Instruments – measuring and musical	252
Miscellaneous	110

Source: United Nations (2008).

China struck a good deal with Pakistan in tariff concessions in its major exports to Pakistan, such as machinery and mechanical appliances, textiles and textile articles, chemical products and base metals and articles thereof (see annex table A.7 for Pakistan's tariff concessions to China according to the FTA). Though the full effects of these concessions are yet to be seen, the annual growth rate of Chinese exports in these industries has improved as a result of the FTA. For example, from

2006 to 2007, the exports of animals and animal products increased by 114 per cent, mineral products by 103 per cent and measuring and musical instruments by 120 per cent.

The top 10 Chinese exports to Pakistan at the HS 2-digit level (table 4 below) were granted concessions in category I (except man-made filaments, fertilizers, and art of apparel and clothing accessories) with the understanding that tariffs on them were to be eliminated by 2010. In fact, 3 of the top 10 products have received category I concessions on very large numbers of tariff lines. For example, organic chemicals received these tariff concessions on 445 tariff lines, and all machinery (HS 84 and 85) on 622 tariff lines at the 8-digit level. Garments and clothing accessories, another important item of Chinese exports, were ignored in the category I, but were awarded tariff concessions in category II in which tariffs were reduced to 0 to 5 per cent within five years beginning 2007. Chinese exports in these items were to get a further boost and possibly give tougher competition to Indian exports by the end of three years, by 2010, when duty on the tariff lines in category I were to be fully phased out. Major Indian exports, such as organic chemicals and iron and steel articles, may face stiff competition from China and the advantages of the new items being listed in the positive list of Pakistan may not be realized.

In turn, China gave tariff concessions (awarded to tariff lines at the 8-digit level) to imports from Pakistan (see annex table A.8 for details). Table 4 below shows the industries in which Pakistan exports received concessions on greater than 100 tariff lines in categories I and II from China under the Pakistan-China FTA. Textiles and textile articles and other top exports industries of Pakistan, such as base metals and articles thereof, and mineral products, have received substantial concessions on significant numbers of tariff lines in categories I and II. These generous tariff concessions from China are a factor behind the good deal China obtained from Pakistan in the FTA. The most important singular item of import from Pakistan after cotton yarn is unrefined copper and copper anodes (HS 7402), which received concessions in category I on the entire 4-digit category (HS 74020000). The same is the case with another important item of import into China from Pakistan, namely chromium ores and concentrates (HS 2610).



**Table 4. Pakistan exports receiving concessions >100 tariff lines in categories I and II from China**

Industry	Number of tariffs lines in categories I and II
Animals and animal products	169
Vegetable products	257
Mineral products	195
Chemical products	1 080
Plastic and rubber	208
Wood and wood products	128
Textiles and textile articles	743
Base metals and articles thereof	619
Machinery and mechanical appliances	1 105
Transportation equipment	161
Instruments – measuring, musical	188

Source: United Nations (2008).

### India and Pakistan trade arrangements or preferences

India and Pakistan are both members of SAFTA, according to which members are supposed to bring down tariffs on all goods in a phased manner other than those on their respective negative lists. However, Pakistan does not honour this obligation due to non-economic reasons. Pakistan allows only a list of items to be imported from India under its positive list. The 2008 positive list (according to the Import Policy Order 2008) allows 1,938 items for imports. The positive list is changed frequently,<sup>23</sup> either to satisfy local demand or to bring down prices or due to political conflicts.

A large number of items were added to the positive list of Pakistan in 2006 in the following industries: chemical products; base metals and articles and machinery and mechanical appliances. Consequently, the export of many items from India increased as the list included 302 more items of importables from India.<sup>24</sup> Many items placed on the positive list are from the following property categories: nuclear reactors, boilers, machinery and mechanical appliances, textile industry, electrical machinery, equipment and parts, sound and television equipment and chemical products (see

<sup>23</sup> Even sometimes for a few months temporarily.

<sup>24</sup> Pakistan, Ministry of Commerce, Order S.R.O. 1100 (I)/2006, 3 November 2006.

annex table A.8). Given the importance of the textile industry for Pakistan, this move was important for local textile producers as it would make available more mechanized options within the textile industry. As a result, Indian exports of machinery and mechanical appliances increased by 100.8 per cent, with nuclear reactors, boilers, machinery and mechanical appliances recording 65 per cent growth, and electrical machinery, equipment and parts, sound and television equipment increased by 739.6 per cent between 2006 and 2007. Exports of iron and steel articles and chemical products grew by 36.0 per cent and 42.8 per cent, respectively, in the same year. Within chemical products, 21 items were added in organic chemicals alone. This in fact is the product category which India exports in bulk. It is expected that the positive trend in exports from India would continue with these new additions to the positive list. Most of the industries have not performed well compared to Chinese exports because only 20 tariff lines were allowed in 2006 (table 5). However, some industries, such as animals and animal products and prepared foodstuff, did comparatively well despite bans on large items by Pakistan.

The meagre Indian exports in some industries may be attributed to the positive list that blocks goods coming from India. Though this list widened on average in the following two years, there were a number of industries in which only about 20 (or less than 20) tariff lines at the 8-digit level were allowed in as imports from India in 2006. In 2008, industries such as animals and animal products, vegetable products, mineral products, wood and pulp products and textiles and textile articles were increased substantially in the positive list when a number of tariff lines were doubled. Subsequently, a large number of items in these industries have been included in the positive list in line with substantial liberalization from the Government of Pakistan. A short set of tabulation shows (table 5) these industries, as well as the increase in the positive list between 2006 and 2008.

As a result of the Import Policy Order 2008 of Pakistan, more items were added to the permissible list. The industries that received maximum additions to the list of imports granted permission included vegetable products, mineral products, chemical products, textiles and textile articles, and instruments-measuring and musical. More recently, under the Trade Policy 2008/09 of Pakistan, diesel and fuel oil were added to the positive list and given a concession (0 per cent custom duty) to the import of compressed natural gas (CNG)<sup>25</sup> buses from India (see annex table A.9). In addition, the Economic Coordination Committee of the Cabinet of Pakistan allowed the Ministry of Commerce to start trade with India through the Wagah-Attari road

**Table 5. Industries wherein tariff lines allowed  $\leq$  20**

2006	2008
Animals and animal products	–
Animal or vegetable fats	–
Prepared foodstuff	Prepared foodstuff
Wood or pulp products	–
Footwear, headwear	Footwear, headwear
Articles of stone, plaster, cement, asbestos	–
Pearls, precious/semi precious stones and metals	Pearls, precious/semi precious stones and metals
Transportation equipment	Transportation equipment
Miscellaneous	Miscellaneous
Arms and ammunition; parts and accessories	Arms and ammunition; parts and accessories
Works of art, collectors' pieces and antiques	Works of art, collectors' pieces and antiques

Source: United Nations (2008).

route and to increase the number of importable items in a phased manner<sup>26</sup> in March 2009. This is a much awaited positive move towards improving bilateral trade between the two countries.

India, according to SAFTA, had agreed to bring down all tariffs, other than those on the negative list of India to 20 per cent or below by 2008 and then further decrease in phases of MOP to 10 per cent each year such that all tariffs are down to 0 to 5 per cent by 2013. The negative list does include some of the top 10 import items from Pakistan, such as edible fruits and nuts, and some cotton textiles tariff lines. For example, the largest components of imports from Pakistan are petroleum oils excluding crude (HS 2710) and fresh or dried dates, figs, pineapples, avocados, guavas, fresh or dried (HS 0804). From that list, about five tariff lines at the 6-digit level are included in India's negative list. Consequently, Pakistan does not receive any tariff concessions on the exports of these items to India. Within cereals, wheat and durum is an important import from Pakistan which is on the sensitive list of India. Similarly, some of the important items in the textile industry, such as carpets and sacks have been placed in the Indian sensitive list (189 tariff lines at the 6-digit level). However, SAFTA concessions apply to cotton, a fabric which is imported from Pakistan in bulk (11.5 per cent in total imports from Pakistan in 2007) and it does not

<sup>26</sup> News reports from Pakistan. Available from [www.india-server.com/news/pakistans-ecc-approves-bilateral-trade-6616.html](http://www.india-server.com/news/pakistans-ecc-approves-bilateral-trade-6616.html).

see any tariff lines in the sensitive list. Overall, trade between India and Pakistan is languishing because of banned trade from Pakistan and lack of tariff liberalization from India.

## **V. FACTOR CAUSING HIGH CHINA-PAKISTAN TRADE**

The most important industries in which China holds dominant positions in the Pakistan market pertain to machinery and mechanical appliances and textiles and textile articles. In machinery and mechanical appliances industry, China dominates the Pakistan market in two products, namely RMG, and machinery and mechanical appliances. Meanwhile, Indian exports of these products are negligible. Limited Indian exports in some industries areas may be attributed to the positive list that blocks goods coming from India. On the contrary, in the China-Pakistan FTA, tariff concessions were given by both countries to each other country's exports. Some of the major factors responsible for the success of Chinese exports in Pakistan are discussed below. Firstly, the Government of Pakistan is extending a helping hand in every possible way by supporting Chinese business activities and trade. Moreover, Chinese traders do not face visa problems or antagonism in Pakistan as is case for Indian traders. Secondly, China's trade with Pakistan, particularly exports, has not faced any barriers in Pakistan in recent years, particularly after the implementation of the China-Pakistan FTA. China is doing well in Pakistan as the tariffs are almost zero in most of the exports from China. Thirdly, China is performing well in the textile industry as this industry enjoys the economies of scale and price competitiveness. It is successful in Pakistan because of its low price and lack of competitors. Fourthly, China finds it easier to do trade and invest in Pakistan due to the cooperative attitude of the people of Pakistan. In addition, China is encouraging the business houses from Pakistan to participate in their exhibitions and more detailed information about the Chinese products is available in Pakistan, helping to boost Chinese imports. Lastly, trade and transaction costs are lower with China than with India (Taneja, 2007).

## **VI. INVESTMENT IN PAKISTAN: INDIA AND CHINA PERSPECTIVES**

### **Investment flows between China and Pakistan<sup>27</sup>**

Pakistan and China signed a bilateral investment treaty in February 1989. A major reason for Chinese interest in Pakistan is the trade and energy corridor from the Gwadar (in Balochistan) port of Pakistan to the western regions of China. Pakistan

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<sup>27</sup> For details of FDI Policy, flows, pattern in South Asia, see Sahoo (2006) and Sahoo and Nataraj (2008).

provides the shortest possible route from Gwadar through the Karakoram highway to the western regions of China. Apart from being short and secure, this route can serve as an alternative to the sea route that passes through the piracy-prone Straits of Malacca, which is currently used to carry most of the Chinese crude oil imports. Therefore, Chinese investors have supported infrastructure projects in Balochistan. The Government of Pakistan, on the other hand, would like to turn Gwadar into a regional hub of commercial activity as the port is near the Straits of Hormuz through which large volumes of the world's oil supplies flow. Pakistan would, in turn, earn transit revenues (Aneja, 2006).

Another project, the Karakoram highway, which is planned to span about 90 kilometres, is in progress. China supported this project with funding and by providing technical assistance for the Gwadar deep sea project which started in 2002 and was inaugurated in 2007. Notably, the port is being operated by a Singaporean company. Another large project in Pakistan supported by Chinese investment is the Chashma Nuclear Power Plant in 2004-2005. In addition, some joint ventures between the private sectors of these countries have been set up, such as the Special Economic Zone in Pakistan involving Haier (China) and Ruba group (Pakistan). China and Pakistan also launched an equal joint venture in July 2007 called the Pak-China Investment Company Limited (PCICL) with support from the Government of Pakistan (through Ministry of Finance) and Government of China (through China Development Bank CDB) to undertake financially viable projects and facilitate Chinese investment in Pakistan.

The two countries are also cooperating on setting up the first Chinese overseas economic zone in Pakistan. In an additional agreement, which entailed amending the protocol to the FTA, the two countries have established China-Pakistan economic zones in Pakistan. The Government of Pakistan is providing various incentives to projects/ventures which receive at least 40 per cent of the funding from Chinese investors. In addition, China and Pakistan will consider the reduction or elimination of tariffs for goods produced in these economic zone and even elsewhere to support trade between the two countries.<sup>28</sup> More recently, the two countries have issued some investment-related joint statements and communiqués<sup>29</sup> including a decision to establish working links between the China Investment Promotion Agency and Pakistan Board of Investment.

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<sup>28</sup> Text of the Amending Protocol to the FTA between China and Pakistan.

<sup>29</sup> <http://pk2.mofcom.gov.cn/aarticle/bilateralcooperation/bilateralagreement/200706/20070604805796.html>, <http://pk2.mofcom.gov.cn/aarticle/bilateralvisits/200804/20080405489467.html>.

Chinese FDI inflows into Pakistan are mainly in the following industries: communication; financial business; and oil and gas exploration. Chinese firms in Pakistan are operating industries related to oil and gas, information technology, telecommunications, power generation, engineering, infrastructure and mining. China has recently started to help Pakistan develop industries related to hydro power generation, science and technology, minerals, services, and to invest in the finance and banking sector. Also a large part of Chinese FDI in Pakistan is linked with the mining of natural resources in important projects, such as (a) the Saindak Copper-Gold deposits, (b) the Duddar Lead-Zinc deposits and (c) the Thar and Badin Coal deposits. In all of these projects, Chinese companies gain a generous share of the minerals.

Similarly, the report of Five Year Development Programme on Trade and Economic Cooperation (2006) between Pakistan and China includes a list of priority projects (in various stages of completion) that have been jointly undertaken (public/private sectors). Projects involving investments are mostly in the communication and telecommunication, infrastructural development and petroleum and natural resources field. China had also steadily been assisting Pakistan with aid and assistance in response to the natural disasters that have destroyed property in the country, such as floods and earthquakes. External debt from China increased to \$568 million in 2005 from \$53 million in 1975.

### **Investment flows between India and Pakistan**

A closer look at the FDI inflows data shows that there is hardly any direct investment outflows from India to Pakistan. Since there is a ban on FDI from Pakistan into India as India still has Pakistan in its negative list according to the Foreign Exchange Management Act,<sup>30</sup> there is a reciprocal discouragement regarding Indian FDI into Pakistan, though no official ban has been set.<sup>31</sup> In fact, the very low yet positive level of Indian FDI into Pakistan in some years is exactly reflective of the informal prohibition on Indian FDI into Pakistan. However, it was proposed in 2009 that FDI from Pakistan would be allowed through the Foreign Investment Promotion Board (FIPB) route on a case-by-case basis. A positive move for Indian investments was also seen in the latest Trade Policy of Pakistan (Trade Policy 2008/09), in which the country opened the prospect of Indian investments in CNG buses manufacturing

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<sup>30</sup> RBI Master Circular – Foreign Investment in India, 1 July 2008. Available from [www.bilaterals.org/article.php3?id\\_article=9799](http://www.bilaterals.org/article.php3?id_article=9799).

<sup>31</sup> It is difficult to get proper official information about cross border investment between two countries. For example, Secretariat for Industrial Assistance (SIA), the official Indian sources and Ministry of Finance, report Indian overseas project approvals to Pakistan but do not report incoming FDI from Pakistan.

in Pakistan.<sup>32</sup> India, on the other hand, because of political mistrust with Pakistan, has missed out on the opportunity of investing in that country. The basis of the mutual ban on investments between the two countries is purely political in nature and it is likely to continue until the Kashmir issue is fully resolved. Due to the bilateral political conflict, India is unable to take advantage of the liberal investment policy set in Pakistan while, on the other hand, China is using it to its utmost advantage.

## **VII. CONCLUDING REMARKS**

Pakistan is the only country in South Asia in which trade with China, in terms of both exports and imports, has been greater than with India throughout the reference period 1992-2007. The goods that show a comparative advantage for China have accounted for larger shares of the market in Pakistan than that of Indian exports having a comparative advantage. The most important industries in which China dominates in the Pakistan market are machinery and mechanical appliances and textiles and textile articles. The most important industries which constitute Indian exports are chemical products, textiles and textile products and prepared foodstuff. Some bulk exports of India to Pakistan are cane or beet sugar and chemically pure sugar; oil cake and other solid residue and prepared foodstuff, which are included in the positive list of Pakistan. However, we observe huge fluctuations in exports of these products depending upon local demand in Pakistan. Indian exports are doing better in the Pakistan market than Chinese exports in the products category in which imports are allowed from India, particularly in essential items, such as food category, iron ores and petroleum oils. Therefore, the meagre Indian exports in some industries may be blamed on the positive list that blocks goods coming from India.

Overall, Chinese trade has been more compatible with the demand of Pakistan and the difference between the trade complementarity index for Indian exports and that of Chinese exports has widened since 2006. Trade between China and Pakistan has been substantially higher and it appears that it will proceed forward at a faster pace after the implementation of the FTA. On the other hand, trade between India and Pakistan is languishing because of banned trade from Pakistan's end and lack of tariff liberalization from India's end. China has also been investing and steadily assisting Pakistan with aid. India, on the other hand, due to the political mistrust with Pakistan, has missed out on the opportunity of investing in that country. Thus, China is using the liberal investment policy of Pakistan and the fact that India is losing out on this to its utmost advantage.

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<sup>32</sup> Given a firm commitment from the Indian party following which Pakistan would allow special dispensation for import of 10 buses per each possible investor by road via Wagah as test consignments (Pakistan Trade Policy 2008/09).

In this context, the priority for India is to negotiate with Pakistan to abandon its policy of the positive lists approach for Indian exports and ask for MFN treatment as soon as possible which would give it market access to Indian exporters in all products. As a reciprocal measure, India should also reduce all kinds of non-tariff barriers, a move that would create confidence among Pakistani traders. Other factors adversely affecting India-Pakistan trade are underdeveloped trade infrastructure and logistics and complicated bilateral protocols. It is time to explore more trade routes rather than depend only on the Mumbai-Karachi sea link and Attari-Wagah land route. More rail and road routes and reducing trade and transaction costs would certainly improve India-Pakistan trade flows directly rather than going through the indirect channels through a third country.



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## APPENDIX

Annex table A.1. Trade between China/India and Pakistan

	Chinese exports to Pakistan (growth rate) (per cent)	Chinese imports from Pakistan (growth rate) (per cent)	Chinese share in total imports of Pakistan (per cent)*	Pakistani exports to China as percentage in total exports*	Normalized trade balance ratio in favour of China	Indian exports to Pakistan (growth rate) (per cent)	Indians imports from Pakistan's (growth rate) (per cent)	Indian share of total imports of Pakistan (per cent)*	Pakistan exports to India as percentage in total exports*	Normalized trade balance ratio in favour of India
1992	..	..	9.3	2.2	0.72	..	..	1.0	3.5	-0.44
1993	36.4	5.8	11.2	1.9	0.77	12.9	-69.9	1.0	0.9	0.19
1994	-19.4	68.0	8.7	2.7	0.58	-10.7	21.1	0.8	0.9	0.04
1995	30.2	37.7	9.2	3.1	0.56	33.8	-14.7	0.9	0.6	0.26
1996	-21.0	53.4	7.2	4.4	0.29	105.3	-19.7	1.8	0.5	0.63
1997	10.6	10.8	8.8	5.0	0.29	-8.9	22.8	1.8	0.6	0.53
1998	-24.1	2.6	7.7	5.0	0.15	-25.9	383.6	1.6	2.8	-0.34
1999	10.9	0.2	9.2	5.1	0.20	-11.8	-68.0	1.5	0.9	0.15
2000	15.5	26.2	10.1	5.7	0.15	102.9	-5.1	2.9	0.8	0.49
2001	21.6	18.2	11.9	6.3	0.17	-23.3	0.5	2.1	0.7	0.38
2002	52.4	-4.2	15.1	6.0	0.38	40.9	-31.8	2.5	0.5	0.64
2003	49.3	3.1	15.7	5.5	0.53	38.1	27.6	2.4	0.5	0.67
2004	32.9	3.4	16.4	4.9	0.61	78.2	61.4	3.4	0.8	0.69
2005	39.0	40.1	16.0	6.5	0.61	37.0	96.1	3.2	1.4	0.59
2006	23.7	20.9	16.6	6.9	0.62	94.7	79.0	5.3	2.2	0.61
2007	36.6	9.6	22.8	7.3	0.68	17.6	-11.1	6.2	1.9	0.69

Source: United Nations (2008).

Note: \*All our reporters are India/China or the World.

Annex table A.2. International revealed comparative advantages (IRCA)

## Revealed comparative analysis: China

	Total number of commodities having IRCA >1			Share in the world market (percentage in total world exports of these commodities)			Share in the Pakistan market (percentage in world exports of these commodities going to Pakistan)		
	1992	2000	2007	1992	2000	2007	1992	2000	2007
Commodities having comparative advantages at 2-digit level	46	47	46	12.5	9.0	17.6	5.6	13.8	32.6
Commodities having comparative advantages at 4-digit level	472	493	500	13.1	11.6	24.8	17.7	20.1	45.0
Commodities having comparative advantages at 6-digit level	1 804	1 895	1 886	15.6	14.4	27.3	23.4	23.3	50.5

## Revealed comparative analysis: India

	Total number of commodities			Share in the world market (per cent)			Share in the Pakistan market (per cent)		
	1992	2000	2007	1992	2000	2007	1992	2000	2007
Commodities having comparative advantages at 2-digit level	36	43	39	3.2	2.5	2.6	3.7	5.6	14.9
Commodities having comparative advantages at 4-digit level	288	365	364	4.6	3.4	4.9	3.7	8.2	20.0
Commodities having comparative advantages at 6-digit level	1 027	1 354	1 394	6.8	4.5	5.6	5.1	9.7	21.6

Source: United Nations (2008).

Annex table A.3. Bilateral revealed comparative advantages (BRCA)

Revealed comparative analysis: China

	Total number of commodities having BRCA >1			Share in the world market (percentage in total world exports of these commodities)			Share in the Pakistan market (percentage in world exports of these commodities going to Pakistan)		
	1992	2000	2007	1992	2000	2007	1992	2000	2007
Commodities having comparative advantages at 2-digit level	24	30	31	1.6	2.7	5.2	10.3	12.3	26.0
Commodities having comparative advantages at 4-digit level	287	320	385	1.6	2.7	8.6	13.8	16.2	32.4
Commodities having comparative advantages at 6-digit level	842	973	1 212	1.7	2.6	8.8	19.1	20.1	36.5

Revealed comparative analysis: India

Commodities having comparative advantages at 2-digit level	19	18	24	0.7	1.0	1.6	5.1	9.0	17.8
Commodities having comparative advantages at 4-digit level	100	132	146	1.1	1.0	1.6	7.0	11.7	23.7
Commodities having comparative advantages at 6-digit level	191	302	402	1.5	1.4	1.7	9.6	14.1	29.3

Source: United Nations (2008).

Annex table A.4. International revealed comparative analysis

Industries having comparative advantage in 2007	Revealed comparative analysis: China					
	International revealed comparative advantage having IRCA >1		Share in the world market (percentage in total world exports of these commodities)		Share in the Pakistan market (percentage in world exports in these industries going to Pakistan)	
	1992	2000	2007	1992	2000	2007
Footwear, headwear	6.8	6.6	4.0	23.7	27.8	38.7
Textile and textile articles	4.6	3.6	3.2	16.1	15.0	31.1
Miscellaneous	3.4	3.6	3.0	11.7	14.9	28.9
Hides and skins	4.2	4.4	2.4	14.8	18.5	23.9
Machinery and mechanical appliances	0.5	1.0	1.7	1.8	4.0	16.4
Articles of stone, plaster, cement, asbestos	1.4	1.5	1.5	5.0	6.1	14.3
Instruments-measuring and musical	0.7	1.0	1.0	2.6	4.2	10.2
Base metals and articles thereof	0.8	1.0	1.0	2.8	4.3	10.3
	Revealed comparative analysis: India					
	1992	2000	2007	1992	2000	2007
Pearls, precious/semi precious stones, metals	12.6	9.6	6.7	10.7	7.3	7.9
Textile and textile articles	4.4	4.7	3.4	3.7	3.6	3.9
Hides and skins	6.1	4.6	2.7	5.2	3.5	3.1
Works of art, collectors' pieces and antiques	0.0	0.0	2.6	0.0	0.0	3.0
Vegetable products	2.5	3.3	2.3	2.1	2.5	2.7
Footwear, headwear	2.6	2.1	1.7	2.2	1.6	2.0
Base metals and articles thereof	0.9	1.1	1.2	0.8	0.8	1.4
Mineral products	0.8	0.6	1.7	0.6	0.4	1.9
Animal and animal products	1.4	2.1	1.1	1.2	1.6	1.2
Chemical products	0.9	1.2	1.1	0.8	0.9	1.3

Source: United Nations (2008).

Note: \*Top industries showing highest IRCA.



**Annex table A.6. Trade indicators between China/India and Pakistan**  
(USD million)

	China				India			
	Trade complementary index for Chinese exports (per cent)	Trade complementarity index for Pakistan exports (per cent)	Sectoral Herfindahl Index	Concentration ratio C <sub>4</sub> (per cent)	Trade complementary index for Indian exports (per cent)	Trade complementarity index for Pakistan exports (per cent)	Sectoral Herfindahl Index	Concentration ratio C <sub>4</sub> (per cent)
1992			0.17	65.6			0.18	78.2
1993			0.27	71.2			0.21	89.5
1994			0.11	57.2			0.19	86.6
1995			0.15	63.6			0.23	89.9
1996	46.26		0.20	74.5	39.29		0.48	94.2
1997	45.81		0.17	67.7	40.05		0.22	80.0
1998	43.91		0.20	76.5	39.51		0.21	82.6
1999	47.28		0.17	70.0	41.35		0.22	85.5
2000	47.19		0.15	64.5	41.17		0.27	91.4
2001	49.47		0.15	62.3	44.17		0.23	89.1
2002	53.1		0.13	58.4	44.84		0.18	76.0
2003	57.26	18.94	0.12	58.3	48.69	15.69	0.24	80.9
2004	58.31	19.36	0.16	66.7	45.47	16.33	0.26	83.0
2005	65.39	20.59	0.17	67.1	44.75	18.09	0.19	71.8
2006	55.07	19.4	0.18	70.9	57.4	17.46	0.20	81.8
2007	58.22	20.34	0.17	71.8	52.28	18.59	0.18	74.9

Source: United Nations (2008).

Annex table A.7. Pakistan's tariff concessions to China according to the FTA

Category I Elimination of tariff in 3 years	Category II Tariff down to 0-5% in 5 years	Category III Margin of Preference reduction 50% on tariffs in 5 years	Category IV Margin of Preference reduction 20% in 5 years
<ul style="list-style-type: none"><li>• 2 423 Tariff lines at 8-digit level</li><li>• 116 Animal and animal products</li><li>• 99 Vegetable products</li><li>• 3 Animal or vegetable fats</li><li>• 12 Prepared foodstuff</li><li>• 124 Mineral products</li><li>• 702 Chemical products</li><li>• 50 Plastic and rubber</li><li>• 49 Hides and skins</li><li>• 32 Wood and wood products</li><li>• 46 Wood and pulp products</li><li>• 3 Textiles and textile articles</li><li>• 10 Articles of stone, plaster, cement, asbestos</li><li>• 52 Pearl's, precious or semi precious stones, metals</li><li>• 231 Base metals and articles thereof</li><li>• 622 Machinery and mechanical appliances</li><li>• 51 Transportation equipment</li><li>• 212 Instruments-measuring, musical</li><li>• 4 Miscellaneous</li><li>• 5 Works of art, collectors' pieces and antiques</li></ul>	<ul style="list-style-type: none"><li>• 1 338 tariff lines at 8-digit level</li><li>• 36 Animal and animal products</li><li>• 105 Vegetable products</li><li>• 6 Animal or vegetable fats</li><li>• 32 Prepared foodstuff</li><li>• 62 Mineral products</li><li>• 217 Chemical products</li><li>• 48 Plastic and rubber</li><li>• 14 Hides and skins</li><li>• 17 Wood and wood products</li><li>• 12 Wood and pulp products</li><li>• 130 Textiles and textile articles</li><li>• 37 Footwear, headwear</li><li>• 53 Articles of stone, plaster, cement, asbestos</li><li>• 8 Pearl's, precious or semi precious stones, metals</li><li>• 196 Base metals and articles thereof</li><li>• 154 Machinery and mechanical appliances</li><li>• 13 Transportation equipment</li><li>• 40 Instruments-measuring, musical</li><li>• 52 Arms and ammunition, parts and accessories thereof</li><li>• 106 Miscellaneous</li></ul>	<ul style="list-style-type: none"><li>• 157 tariff lines at 8-digit level</li><li>• 22 Animal and animal products</li><li>• 14 Vegetables products</li><li>• 13 Prepared foodstuff</li><li>• 50 Chemical products</li><li>• 6 Plastic and rubber</li><li>• 1 Wood and pulp products</li><li>• 24 Textiles and textile articles</li><li>• 26 Articles of stone, plaster, cement, asbestos</li><li>• 1 Base metals and articles thereof</li></ul>	<ul style="list-style-type: none"><li>• 1 768 tariff lines at 8-digit level</li><li>• 1 Animal and animal products</li><li>• 57 Vegetable products</li><li>• 11 Animal or vegetable fats</li><li>• 146 Prepared foodstuff</li><li>• 7 Mineral products</li><li>• 120 Chemical products</li><li>• 66 Plastic and rubber</li><li>• 15 Hides and skins</li><li>• 36 Wood and wood products</li><li>• 79 Wood and pulp products</li><li>• 596 Textiles and textile articles</li><li>• 7 Footwear, headwear</li><li>• 38 Articles of stone, plaster, cement, asbestos</li><li>• 278 Base metals and articles thereof</li><li>• 236 Machinery and mechanical appliances</li><li>• 1 Transportation equipment</li><li>• 24 Instruments-measuring, musical</li><li>• 50 Miscellaneous</li></ul>

Source: The Economic and Commercial Counsellor's Office of the Embassy of the People's Republic of China in Pakistan.



Annex table A.8. Chinese tariff concessions to Pakistan according to the FTA

Category I Elimination of tariff in 3 years	Category II Tariff down to 0-5% in 5 years	Category III Margin of Preference reduction 50% on tariffs in 5 years	Category IV Margin of Preference reduction 20% in 5 years
<ul style="list-style-type: none"> <li>• 2 681 tariff lines at 8-digit level</li> <li>• 51 Animal and animal products</li> <li>• 173 Vegetable products</li> <li>• 2 Animal or vegetable fats</li> <li>• 46 Prepared foodstuff</li> <li>• 159 Mineral products</li> <li>• 499 Chemical products</li> <li>• 22 Plastic and rubber</li> <li>• 25 Hides and skins</li> <li>• 89 Wood and wood products</li> <li>• 34 Wood and pulp products</li> <li>• 541 Textiles and textile articles</li> <li>• 22 Articles of stone, plaster, cement, asbestos</li> <li>• 45 Pearls, precious or semi precious stones, metals</li> <li>• 253 Base metals and articles thereof</li> <li>• 462 Machinery and mechanical appliances</li> <li>• 66 Transportation equipment</li> <li>• 106 Instruments – measuring, musical</li> <li>• 84 Miscellaneous</li> <li>• 2 Works of art, collectors' pieces and antiques</li> </ul>	<ul style="list-style-type: none"> <li>• 2 604 tariff lines at 8-digit level</li> <li>• 118 Animal and animal products</li> <li>• 84 Vegetable products</li> <li>• 40 Prepared foodstuff</li> <li>• 36 Mineral products</li> <li>• 581 Chemical products</li> <li>• 186 Plastic and rubber</li> <li>• 22 Hides and skins</li> <li>• 39 Wood and wood products</li> <li>• 7 Wood and pulp products</li> <li>• 202 Textiles and textile articles</li> <li>• 13 Footwear, headwear</li> <li>• 71 Articles of stone, plaster, cement, asbestos</li> <li>• 13 Pearls, precious or semi precious stones, metals</li> <li>• 366 Base metals and articles thereof</li> <li>• 643 Machinery and mechanical appliances</li> <li>• 95 Transportation equipment</li> <li>• 82 Instruments-measuring, musical</li> <li>• 5 Miscellaneous</li> <li>• 1 Works of art, collectors' pieces and antiques</li> </ul>	<ul style="list-style-type: none"> <li>• 604 tariff lines at 8-digit level</li> <li>• 53 Animal and animal products</li> <li>• 63 Vegetable products</li> <li>• 16 Prepared foodstuff</li> <li>• 8 Chemical products</li> <li>• 3 Plastic and rubber</li> <li>• 9 Hides and skins</li> <li>• 227 Textiles and textile articles</li> <li>• 19 Footwear, headwear</li> <li>• 18 Articles of stone, plaster, cement, asbestos</li> <li>• 30 Base metals and articles thereof</li> <li>• 82 Machinery and mechanical appliances</li> <li>• 30 Transportation equipment</li> <li>• 16 Instruments-measuring, musical</li> <li>• 21 Arms and ammunition; parts and accessories thereof</li> <li>• 5 Miscellaneous</li> <li>• 4 Works of art, collectors' pieces and antiques</li> </ul>	<ul style="list-style-type: none"> <li>• 529 tariff lines at 8-digit level</li> <li>• 44 Animal and animal products</li> <li>• 35 Vegetable products</li> <li>• 49 Prepared foodstuff</li> <li>• 21 Chemical products</li> <li>• 13 Plastic and rubber</li> <li>• 15 Hides and skins</li> <li>• 88 Textiles and textile articles</li> <li>• 6 Footwear, headwear</li> <li>• 36 Articles of stone, plaster, cement, asbestos</li> <li>• 5 Pearls, precious or semi precious stones, metals</li> <li>• 24 Base metals and articles thereof</li> <li>• 88 Machinery and mechanical appliances</li> <li>• 7 Transportation equipment</li> <li>• 76 Instruments-measuring, musical</li> <li>• 20 Miscellaneous</li> <li>• 2 Works of art, collectors' pieces and antiques</li> </ul>

Source: The Economic and Commercial Counsellor's Office of the Embassy of China in the Islamic Republic of Pakistan.

Annex table A.9. Positive list of Pakistan for imports from India

Positive list (3.11.2006)	Positive list according to Import Policy Order 2008
<ul style="list-style-type: none"> <li>• 1 075 items (note not tariff lines. Tariff lines ~ 1 440 at 8-digit level)</li> <li>• 14 Animal and animal products</li> <li>• 77 Vegetable products and oil seeds from codes 1201.0000 – 1207.0000</li> <li>• 20 Animal or vegetable fats</li> <li>• 7 Prepared foodstuff</li> <li>• 29 Mineral products and metal ores from codes 2601.0000 – 2615.0000</li> <li>• 466 Chemical products and respective headings under pharmaceuticals and dyes raw materials; medicines and vaccines for Thalassaemia, cancer, HIV/AIDS</li> <li>• 48 Plastic and rubber</li> <li>• 29 Hides and skin</li> <li>• 57 Wood and wood products</li> <li>• 18 Wood and pulp products and pulp from codes 4701.0000 – 4702.0000</li> <li>• 38 Textiles and textile articles</li> <li>• 1 Footwear, headwear</li> <li>• 17 Articles of stone, plaster, cement, asbestos</li> <li>• 5 Pearls, precious or semi precious stones, metals</li> <li>• 206 Base metals and articles thereof, and metal for packing from codes 8105.0000 – 8113.0000</li> <li>• 320 Machinery and mechanical appliances</li> <li>• 16 Transportation equipment and respective headings under export houses, manufacturing bonds and exporters</li> <li>• 68 Instruments-measuring, musical and respective headings under laboratory instruments</li> <li>• 6 Miscellaneous</li> </ul>	<ul style="list-style-type: none"> <li>• ~ 1 935 tariff lines covered at 8-digit level</li> <li>• 32 Animal and animal products</li> <li>• 156 Vegetable products</li> <li>• 22 Animal or vegetable fats</li> <li>• 11 Prepared foodstuff</li> <li>• 74 Mineral products</li> <li>• 570 Chemical products</li> <li>• 91 Plastic and rubber</li> <li>• 45 Hides and skins</li> <li>• 52 Wood and wood products</li> <li>• 37 Wood and pulp products</li> <li>• 103 Textiles and textile articles</li> <li>• 2 Footwear, headwear</li> <li>• 27 Articles of stone, plaster, cement, asbestos</li> <li>• 5 Pearls, precious or semi precious stones, metals</li> <li>• 227 Base metals and articles thereof</li> <li>• 355 Machinery and mechanical appliances</li> <li>• 18 Transportation equipment</li> <li>• 102 Instruments-measuring, musical</li> <li>• 5 Miscellaneous</li> <li>• 1 Work of art, collectors' pieces and antiques</li> </ul>

Also respective heading under raw materials, dye intermediates, inputs for export houses, and under the Duty and Tax Remission for Export (DTRE) scheme.

Annex table A.9. (continued)

Positive list (3.11.2006)	Positive list according to Import Policy Order 2008
<ul style="list-style-type: none"><li>• 1 Arms and ammunition; parts and accessories thereof</li></ul>	<p>In addition to above, import of blankets and tents falling under HS codes 63.01 and 63.06 respectively shall also be importable from India as relief goods for earthquake victims via land route as well.</p> <p><b>The Trade Policy of the country for 2008-2009</b> is India friendly. It has enlarged the list of importable items from India: allowing import of <i>diesel and fuel oil</i> from India, and giving <i>concession (0 per cent custom duty) to the import of CNG buses</i> from India. Also, facilitation is provided for Indians wanting to set up manufacturing units of CNG buses in Pakistan; and import of <i>rice farm machinery</i> will be allowed from India through Wagah by road. For mineral extraction, Pakistan has allowed import of <i>machinery/equipment for mining/quarrying and grinding of minerals</i>, from India. Inputs in DTRE will also be importable from India and stainless steel and cotton yarn which were earlier importable from India by train will now also be allowed by road through Wagah border to reduce cost. Earlier, only technical and professional books were importable from India; now <i>academic, scientific and reference books</i> will also be importable.</p>

Source:

Pakistan, Ministry of Commerce and Industry, Department of Commerce.

Notes:

Inclusion of some tariff line may not imply the entire description is included in the list; it may sometimes be specific to only one good in a tariff line. Also because the positive list is a mixture of items at 4-, 6- and 8-digit levels the number of tariff lines in itself is not as significant as the change/additions from one time period to another.



## AN OVERVIEW OF ACCESS TO AND INEQUALITY IN THE EDUCATION SYSTEM OF VIET NAM

Vu Hoang Linh\*

*This paper studies trends in education in Viet Nam in the 2000s. It focuses on access to education, inequality in the education system and education financing and provides an assessment of the effectiveness of educational activities supported by public spending. The first part of the study presents an overview of the education system in Viet Nam and the reform process of the public provision of education services. The next section focuses on access and inequality in education in Viet Nam, analysing disparities among different population groups and between urban and rural population groups, women and men, ethnic minorities and the ethnic majority and poor and non-poor households. The following section covers the issue of education financing in Viet Nam. The study assesses the trend in family contributions to children's education over time and whether education is a burden on the poor. A model to assess the determinant to lower-secondary, upper-secondary and tertiary enrolments was applied in order to find the factors influencing enrolments. Finally, in the conclusion, we summarize our findings and propose some policy implications for further reforming the country's education system with a view to enhancing accessibility and making it more equitable.*

*JEL Classification:* I21, I22, O15.

*Key words:* Viet Nam, education, access, disparities, financing.

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## I. INTRODUCTION

Since the launch of *Đổi Mới* (Renovation) in 1989, Viet Nam has experienced significantly high economic growth and remarkable poverty reduction. During the period 2000-2008, the economy expanded about 7 per cent annually. Meanwhile, the country has made great strides in reducing the poverty headcount, which fell from 58 per cent in 1993 to 16 per cent in 2006 and 14 per cent in 2008.

Education has always played a prominent role in Vietnamese society. Despite being poor country, the country has made significant achievements compared with those countries with similar economic development. One may conclude that the system has been undergoing many reforms. However, the results of these reforms are still debated. Thus, determining whether education reforms in Viet Nam have helped to improve the education system in terms of being accessible and equitable is essential in order to understand the country's education achievements and challenges.

Numerous studies have been conducted on the disparities in and access to education in Viet Nam. Using the country's household survey data in 1993 and 1998, Nguyen (2004) observed that from 1993 to 1998, school enrolment in Viet Nam increased dramatically at all levels, but especially at the higher education levels. The increase occurred for all expenditure groups and regions. In terms of financing, Nguyen (2004) found that private financing to education was a burden for poor children and helped widen the gap in terms of access and quality between poor and better-off children.

Using data from the Viet Nam Housing and Population Census 1999, Holsinger (2009) found that the education Gini coefficient of Viet Nam was 0.23. This coefficient reflects the distribution of education attainment in the labour force. He considered the Gini coefficient of Viet Nam as "relatively equal", similar to such countries as Japan, New Zealand and the Republic of Korea. In his study, the provincial education Gini coefficient ranged from 0.16 in Thai Binh to 0.31 in Ha Giang. Holsinger (2009) argued that concentrating public spending on primary and lower secondary education would benefit the poor and improve the distribution of education in Viet Nam.

Rew (2009) also calculated the provincial education Gini coefficient for Viet Nam using the same data as Holsinger (2009). However, to calculate the Gini coefficient, Rew (2009) included all individuals aged five and above while Holsinger (2009) included individuals aged 15 and above. Therefore, the results from Rew (2009) are slightly different from those of Holsinger (2009). He found that the country's national education Gini coefficient was about 0.26, which was relatively equal. Yet,

considerable variation existed within the country with the education Gini ranging from 0.18 (Thai Binh) to 0.53 (Lai Chau). Rew (2009) also found that substantial disparities existed across ethnic and gender groups.

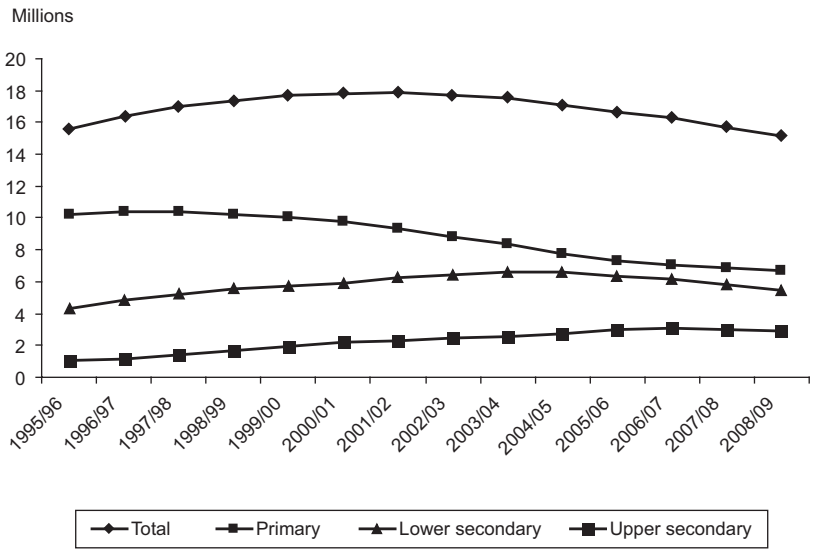
The purpose of this paper is to document and analyse changes in the education system in Viet Nam during the period 2002-2008 in terms of access, inequality and financing. During the period, substantial education policy reforms were implemented. The structure of this paper is as follows. The first section provides an overview of the education system and policies in Viet Nam. Section II discusses access to and disparities in education. In particular, we assess the recent changes in school enrolment and completion, focusing on primary and lower secondary education since the Government of Viet Nam has explicitly stated their goal of universalizing enrolment at these levels. We also examine differences in educational quality received by different population groups, such as urban and rural population groups, women and men, ethnic minorities, urban migrants and persons with disabilities as well as for low income families. Section III discusses education financing. Finally, we examine education financing in Viet Nam, in particular, the effectiveness of the “socialization policy” in increasing access to and the quality of education.

## **II. OVERVIEW OF THE EDUCATION SYSTEM IN VIET NAM**

Viet Nam has change dramatically since 1986, the year the Communist Party and the Government of Viet Nam adopted the economic renovation policy, namely *Đổi Mới*, to replace the centrally planned economy with a regulated market economy. The changes have placed various pressures on the education system in general and the higher education system in particular, in which the unification and restructuring process, including the establishment of semi-public and non-public educational institutions, are embraced. The country’s current education system is divided into five categories: pre-primary, primary, lower secondary, upper secondary and higher education.

Viet Nam universalized primary education by 2000 and lower secondary education by 2010. Figure 1 shows that the absolute numbers of students attending primary schools increased significantly from 1995 to 1998. From 1998, a downward trend was observed for primary schooling due to a demographic change of the population. On the other hand, the number of enrolled pupils at both the lower secondary and upper secondary levels increased at a rapid rate during the period 1995-2005 before a downward trend was observed due to a demographic change.

Figure 1. Enrolments in Viet Nam 1995-2009 (million)



Source: Viet Nam, General Statistics Office (various years).

During the last decade, Viet Nam experienced a substantial shift in the composition of the education system. Figure 1 indicates that the tertiary system expanded while the share of primary schooling declined. From 2000 to 2008, the number of tertiary students increased by 120 per cent, from 732,000 students to 1.66 million students. At the same time, the number of enrolled primary students fell by 32 per cent from 10.1 million to 6.9 million people. Thus, there were 13.7 primary pupils per each tertiary student in 2000 as compared to 4.2 in 2008.

There are at least two reasons for this substantial change in the composition of the country's education system. First, during the last decade, reduced birth rates led to a fall in the population of primary school age students while the population of tertiary school aged children increased. Second, Government policies had shifted in recent years with an aim towards expanding the country's higher education system.

The Government focused heavily on education during the last 20 years. In 2001, it approved the National Strategy for Education Development 2001-2010, which aimed to ensure access to education for all people. The Law on Education was passed four years later, creating a basic framework for activities in the sector. In addition, many directives, decrees and regulations were issued by the Party, the Government, the National Assembly or the Ministry of Education and Training in order



to improve the system, and targets in education were included in the Millennium Development Goals that Viet Nam committed to fulfill. With an aim of expanding the Millennium Development Goals, Viet Nam has committed to (a) consolidate universal primary education, (b) universalize lower secondary education and (c) gradually expand upper secondary education.

Viet Nam is making good progress in meeting both the Millennium Development Goals of universal primary education and gender equality in access to education and the targets of the National Strategy for Education Development 2001-2010. The net enrolment rate (NER) at the primary school level increased from 96 per cent in the 2006/07 school year to 97 per cent in the 2008/09 school year while at the lower secondary school level, it increased from 78.3 per cent in the 2006/07 school year to 84.4 per cent in the 2008/09 school year (Viet Nam, MOET, 2009a; 2009b).

### **III. ACCESS TO AND INEQUALITY IN EDUCATION**

Viet Nam made impressive progress in enhancing access to basic education for its entire citizens during the 1990s, with primary school being universalized by 2000. In 2000, the country began to focus on universalizing lower secondary education and expanding upper secondary education. According to the Ministry of Education and Training (MOET), Viet Nam has basically universalized lower secondary education nationwide and upper secondary education in major cities by 2010.

Table 1 shows the changes in the gross enrolment rates (GERs) and NERs in Viet Nam between 2004 and 2008. GERs at both the lower and the upper secondary levels increased during the period 2004-2008, from 92.5 per cent in 2004 to 96.9 per cent in 2008 at the lower secondary level and from 69.9 per cent to 74.4 per cent at the upper secondary level. The increase in the GERs at the tertiary education was even more impressive during that period, rising from 18.3 per cent to 30.2 per cent. In contrast, the GERs at the primary level decreased from 120.2 per cent in 2004 to 116.2 per cent in 2008. Since the GERs at the primary level were calculated as the ratio between the number of children attending primary schools to the number of children at the right primary school age, the decrease in GERs shows that children in Viet Nam are increasingly going to school at their right age and fewer primary pupils are repeating classes. However, GERs are still very high, especially in rural areas and among the poorest quintile, such as the 20 per cent of the population who are the poorest.

NERs followed a similar trend. They increased from 92.8 per cent in 2004 to 94.5 per cent in 2008 at the primary level and from 73.6 per cent in 2004 to 79.0 per cent in 2008 at the lower secondary level. However, NERs experience the largest

increase in the upper secondary and tertiary levels during that period, rising by 6.3 percentage points at the upper secondary level and by 7.7 percentage points at the tertiary level.

As shown in table 1, the inequality in education enrolment between the rural and urban population is considerable, particularly at the upper secondary and tertiary education. NERs of the rural population and urban population at the tertiary education were 16.7 per cent and 33 per cent in 2008, respectively. The gap between the rich and the poor is substantial, with it being very wide at the higher levels of education. In 2008, differences in NERs between the richest and the poorest quintile were 6.2 percentage points at the primary level, 23.3 percentage points at the lower secondary level, 47.2 percentage points at the upper secondary level and

**Table 1. Gross and net enrolment ratio in Viet Nam, 2004 and 2008 (per cent)**

	Primary		Lower secondary		Upper secondary		Tertiary	
	2004	2008	2004	2008	2004	2008	2004	2008
<b>GER</b>								
Viet Nam	120.2	116.2	92.5	96.9	69.9	74.4	18.3	30.2
Rural	121.3	117.7	91.8	96.4	65.1	69.8	12.1	23.2
Urban	115.7	111.5	94.8	98.4	87.1	89.2	35.0	49.5
Poorest quintile	120.4	122.4	79.3	83.3	30.5	39.9	0.5	2.5
Lower-middle quintile	120.9	115.0	89.4	99.1	67.4	73.0	3.3	10.6
Middle quintile	123.9	115.2	101.3	103.5	71.3	76.2	8.5	22.0
Upper-middle quintile	121.0	109.8	99.4	103.6	86.9	93.7	23.8	40.1
Richest quintile	112.1	114.1	98.7	101.3	97.6	98.7	47.1	69.6
<b>NER</b>								
Viet Nam	92.8	94.5	73.6	79.0	48.3	54.6	13.3	21.0
Rural	92.4	94.0	71.7	77.4	44.6	50.5	8.8	16.7
Urban	94.4	96.1	80.5	84.1	61.7	67.9	25.5	33.0
Poorest quintile	89.5	91.9	58.6	65.7	18.9	29.3	0.4	1.9
Lower-middle quintile	94.3	93.9	72.5	79.3	42.8	50.6	2.1	7.9
Middle quintile	92.8	95.7	78.4	82.5	52.0	56.5	7.0	17.5
Upper-middle quintile	95.6	95.7	81.2	86.6	59.8	68.2	16.6	28.3
Richest quintile	94.7	98.1	84.6	89.0	71.8	76.5	34.5	45.1

Source: Author's calculations based on data from Viet Nam Household Living Standard Surveys (VHLSSs) 2004 and 2008.

43.2 percentage points at the tertiary level. Therefore, increasing access to lower-income families at upper secondary and tertiary education would be important to reduce inequality in access to education.

Compared to other countries in South-East Asia, the enrolment rates in Viet Nam are relatively high. For example in 2008, GER at the lower secondary level was 97 per cent in Viet Nam compared to 58 per cent in Cambodia, 53 per cent in the Lao People's Democratic Republic, 89 per cent in Indonesia and, 99 per cent in the Philippines and in Thailand. NER at the primary school level in Viet Nam stood at 94.5 per cent in 2008, compared to 89 per cent in Cambodia, 82 per cent in the Lao People's Democratic Republic, 96 per cent in Indonesia, 92 per cent in the Philippines and 89 per cent in Thailand.

Table 2, which summarizes the matching between age and grade in 2004 and 2008, shows that there was a significant improvement in age-grade matching in 2008 at the primary and secondary levels. In 2004, about 17.4 per cent of students attending primary schools were older than 10 years, 18.1 per cent of students attending lower secondary schools were older than 14 years, and 26.8 per cent of students attending upper secondary schools were older than 17 years. In 2008, the corresponding proportions were 12.5 per cent, 16.4 per cent, and 23.6 per cent, respectively.

**Table 2. Age and grade matching, 2004 and 2008**  
(percentage of total enrolled in level)

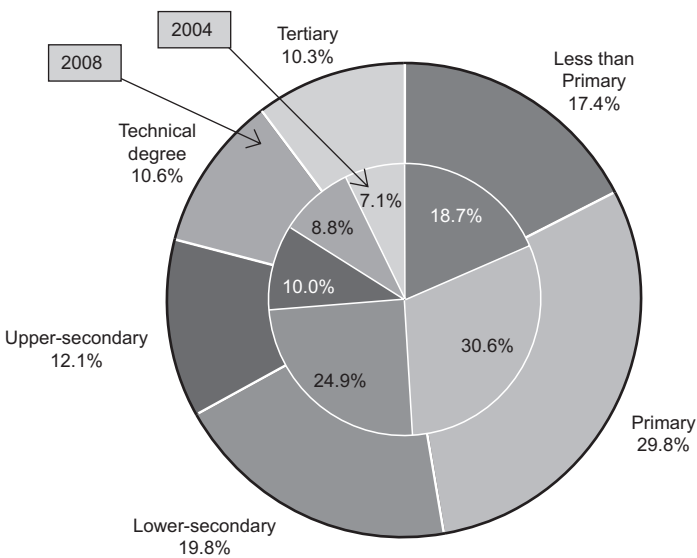
	<6	6-10	11-14	15-17	18-22	>22	Total
<b>2004</b>							
Primary	1.3	81.3	16.8	0.4	0.1	0.1	100
Lower secondary	0.0	2.4	79.6	17.0	0.9	0.2	100
Upper secondary	0.0	0.0	4.1	69.1	25.4	1.4	100
Technical school	0.0	0.0	0.2	5.8	74.8	19.2	100
Tertiary	0.0	0.0	0.0	0.1	72.7	27.1	100
<b>2008</b>							
Primary	1.1	86.2	12.4	0.2	0.1	0.0	100
Lower secondary	0.0	2.1	81.5	15.7	0.6	0.1	100
Upper secondary	0.0	0.0	3.4	73.4	23.0	0.3	100
Technical school	0.0	0.0	0.2	5.4	72.2	22.3	100
Tertiary	0.0	0.0	0.0	1.4	69.7	28.9	100

Source: Author's calculations based on data from VHLSSs 2004 and 2008.

However, the age-grade matching at technical schools and the tertiary level seems to suggest that the average ages of students at technical schools and at colleges and universities were increasing. In 2004, 19.2 per cent of technical school students and 27.1 per cent of college/university students were older than 22 years. In 2008, the corresponding ratios were 22.3 per cent and 28.9 per cent, respectively. The increase in the percentage of students older than 22 years in higher education institutions may reflect the recent increase in the proportion of students attending Master and PhD programmes, other types of training, such as distance learning, or pursuing second degrees.

Figure 2 summarizes the change in education attainment between 2004 and 2008. The proportions of people having finished lower secondary schools, technical schools and colleges and universities increased while those of people having no degree, a primary education or lower-secondary education degree decreased. In 2004, in the 25-to-34-year-old group, 30.6 per cent completed primary education, 24.9 per cent completed lower secondary education, 10.0 per cent completed upper-secondary education, and 7.1 per cent had a tertiary degree. In 2008, the corresponding proportions were 29.8 per cent, 19.8 per cent, 12.1 per cent and 10.3 per cent, respectively.

Figure 2. Education attainment in 2004 and 2008 (per cent)



Source: Author's calculations based on data from VHLSSs 2004 and 2008.

Notably, there was still disparity in education attainment between urban and rural areas and between the rich and the poor during the period 2008-2012. Table 3 summarizes education attainment in 2008. In rural areas, 54.4 per cent of the population aged from 25 to 34 years had only a primary education or lower. In contrast, in urban areas, the proportion was only 30.3 per cent. The difference in tertiary degrees was even more markedly: more than 25.3 per cent of the population aged from 25 to 34 years in urban areas had tertiary degrees while the corresponding proportion among rural population was less than 3.9 per cent.

**Table 3. Education attainment of the 25-34 age group in 2008 (per cent)**

	Less than primary	Primary	Lower-secondary	Upper-secondary	Technical degree	Tertiary
Viet Nam	17.4	29.8	19.8	12.1	10.6	10.3
Rural	21.3	33.1	22.1	10.8	8.8	3.9
Urban	8.1	22.2	14.5	15.2	14.7	25.3
Poorest quintile	40.2	33.2	18.0	5.6	2.8	0.4
Lower-middle quintile	20.6	38.8	24.5	8.2	6.1	1.9
Middle quintile	14.9	36.9	23.5	10.7	9.7	4.2
Upper-middle quintile	7.4	27.5	22.7	15.4	17.2	9.8
Richest quintile	2.6	13.3	11.2	20.7	17.6	34.6

Source: Author's calculations based on data from VHLSS 2008.

The difference in education attainment across expenditure groups is also notable. Among the poorest quintile, more than 73 per cent had primary degrees or lower while that percentage was just 16.1 per cent among the richest quintile. Nearly 35 per cent of the richest quintile of the 25-to-34-year-old group had a tertiary degree while a mere 0.4 per cent of the poorest quintile had that.

These trends have important implications for Viet Nam. Even though enrolment in all levels of education have been increasing in the poor and the rural areas, the inequalities between the rich and the poor, and between the urban and the rural areas remain large and persistent. In addition, the gaps are widening at higher levels of education. This suggests that better efforts should be made to remove constraints to poor and rural children in pursuing education.

Table 4 shows that Viet Nam has achieved gender equality in terms of enrolments to education. In 2008, some 94.1 per cent of school-age girls went to primary schools, compared with 94.9 per cent of school-age boys. At the lower

secondary level, NER of girls was slightly higher than that of boys. At the upper secondary level, there was a significant difference between NER of girls and boys in favour of girls while at the tertiary level, NER of females was also higher than that of males, implying that girls are more likely to enrol in higher levels of education than boys. It is interesting that the boys' GERs are higher but their NERs are lower than girls' at the primary and lower secondary levels. This difference implies that boys repeated classes more often than girls. It is also possible that over-aged girls were less likely to stay at schools than over-aged boys.

**Table 4. Gender and ethnic differences in GERs and NERs, 2004 and 2008 (per cent)**

	Primary		Lower secondary		Upper secondary		Tertiary	
	2004	2008	2004	2008	2004	2008	2004	2008
<b>GERs</b>								
Female	119.4	117.1	88.9	95.0	68.9	79.2	18.3	30.9
Male	121.0	115.4	95.8	98.9	70.8	70.0	18.4	29.5
Kinh and Hoa	118.6	115.7	93.5	97.8	73.5	78.8	20.2	33.8
Minority	128.2	118.9	86.1	92.0	46.8	48.9	5.5	9.1
<b>NERs</b>								
Female	93.3	94.1	73.4	79.1	50.0	59.5	14.5	22.4
Male	92.3	94.9	73.7	78.9	46.8	50.2	12.3	19.8
Kinh and Hoa	94.0	95.5	76.8	81.1	52.0	58.9	14.7	23.8
Minority	86.8	89.4	54.4	67.8	24.7	29.8	3.9	5.4

Source: Author's calculations based on data from VHLSSs 2004 and 2008.

A positive development observed in the findings is that the gap between the minority groups and the majority group in basic education had narrowed. In 2004, the gap in NERs was 7.2 percentage points at the primary level and 22.4 percentage points at the lower secondary level as compared to 6.1 percentage points and 13.3 percentage points, respectively, in 2008. However, this success was not achieved at the secondary level and in tertiary education. The gaps in NERs at the upper secondary level and tertiary education widened from 27.3 percentage points in 2004 to 29.1 percentage points in 2008 at the upper secondary level, and from 10.8 percentage points in 2004 to 18.4 percentage points in 2008 at the tertiary education level.

Despite overall improvements in enrolments, inequality among the regions in the country remained high. Table 5 shows that the North-West remained the region with the lowest NERs at all levels of education. More importantly, its NER was even lower in 2008 than in 2004. However, the North-West had considerable success in increasing enrolments at the lower and upper secondary levels. In 2008, its NERs at the lower secondary and upper secondary levels were 16.4 percentage points and 13.2 percentage points higher, respectively, than in 2004, compared with the national increases of 5.4 and 6.3 percentage points, respectively.

**Table 5. Regional NERs, 2004 and 2008 (per cent)**

	Primary		Lower secondary		Upper secondary		Tertiary	
	2004	2008	2004	2008	2004	2008	2004	2008
Viet Nam	92.8	94.5	73.6	79.0	48.3	54.6	13.3	21.0
Red River Delta	93.9	95.9	79.7	85.6	59.9	68.8	16.9	32.2
North-East	93.6	93.4	77.2	83.0	48.1	47.9	10.8	16.0
North-West	87.5	83.8	50.1	66.5	18.3	31.5	2.6	4.7
North Central Coast	92.0	95.6	77.7	79.8	57.1	57.4	15.5	26.9
South Central Coast	96.5	94.7	80.0	81.9	56.3	59.3	15.7	25.4
Central Highlands	90.5	93.9	64.9	74.3	39.3	50.5	10.3	22.1
South-East	92.9	95.6	74.9	79.4	52.1	57.7	17.2	19.7
Mekong River Delta	91.9	94.2	63.1	70.4	28.6	42.2	7.5	10.6

Source: Author's calculations based on data from VHLSSs 2004 and 2008.

#### IV. FINANCING FOR EDUCATION

This section examines education financing in Viet Nam. This was done by taking a close look at the role of public and private financing for education. The data on public expenditure for education were taken from the official source while that on private expenditure for education was calculated from the VHLSSs of 2004 and 2008. The latter was disaggregated by regions, expenditure groups, ethnic and gender groups to assess the disparity of financial burden of education, especially to the poor.

## Public expenditure for education

The Government of Viet Nam has directed a lot of attention to the education system, increasing its budget share from 4.1 per cent of gross domestic product (GDP) in 2001 to 5.6 per cent of GDP in 2008. Table 6 shows that the proportion of education expenditure to total government expenditure increased during the 2001-2008 period from 15.5 per cent in 2001 to 20 per cent in 2008. In 2009, despite the economic crisis, the Government maintained education spending at about 20 per cent of the State budget. The Government's commitment to education has brought positive results. The total enrolments at general education have declined in recent years due to demographic changes, but the number of schools and classrooms has increased significantly. From 2000/01 to 2008/09, the number of school enrolments in general education decreased by 14.9 per cent, yet the number of teachers, schools, and classrooms increased by 21.9 per cent, 13.9 per cent, and 27.9 per cent, respectively (figure 3).

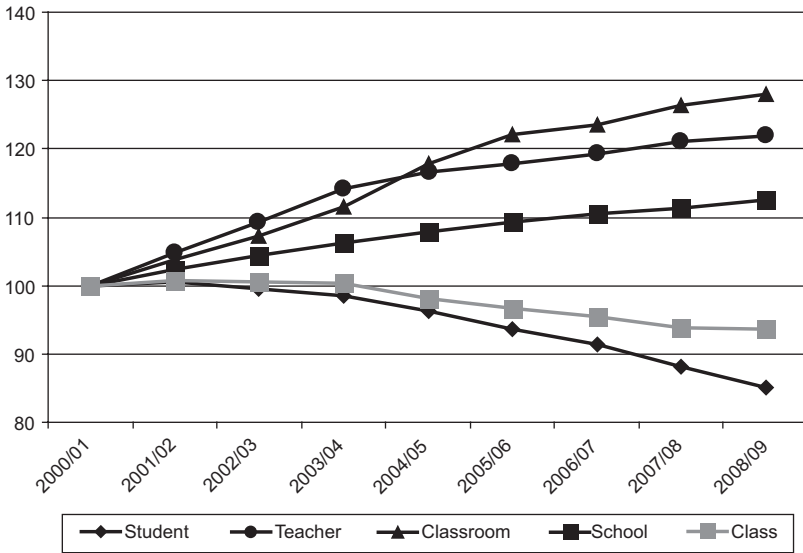
**Table 6. Trends in Government expenditure on education**

	2001	2003	2005	2006	2007	2008
GDP (at current prices, billion Viet Nam dong)	481.3	613.4	839.2	973.8	1 269.1	1 453.9
Total State budget (billion Viet Nam Dong)	127.7	181.2	239.5	297.2	367.4	407.1
Budget expenditure for education (billion Viet Nam dong)	19.7	29.0	42.9	54.8	69.8	81.4
<i>Percentage of GDP</i>	<i>4.1</i>	<i>4.7</i>	<i>5.1</i>	<i>5.6</i>	<i>5.5</i>	<i>5.6</i>
<i>Percentage of total State budget</i>	<i>15.5</i>	<i>16.0</i>	<i>17.9</i>	<i>18.4</i>	<i>19.0</i>	<i>20.0</i>

Source: Viet Nam, MOET (2009a).



**Figure 3. Growth of selected education statistics 2000/01-2008/09**  
(2000/01 = 100)



Source: Viet Nam, General Statistics Office (various years).

The composition of education spending has also changed in recent years. Table 7 shows that during the period 2001-2008, the budget share of primary education was reduced while the budget share of lower secondary education, vocational and training, and tertiary education was increased. This is understandable given that Viet Nam announced in 2000 that it had universalized primary school education but it may create difficulties in improving the primary school enrolments at remote and mountainous areas, where ethnic minority children live.

In order to analyse the disparities in public education spending, table 8 summarizes per capita public spending for education by region. It shows that during the period 2001 to 2008, public education spending per capita increased by 3.8 times (in nominal terms). Public spending increased the most in poorer regions such as the North-West (5.5 times), the North-East (4.7 times) and the Central Highlands (4.3 times). This change reflects the Government’s target in lowering the disparity in access to education among regions.

**Private expenditure on education**

Although the contribution of the non-State sector in providing education services is fairly small, the role of private financing is significant, especially at higher

**Table 7. Budget shares by education level, 2001-2008 (per cent)**

	2001	2004	2006	2008
Pre-primary	6.9	7.3	7.5	8.5
Primary	32.3	29.4	31.2	28.5
Lower secondary	21.3	21.7	21.6	23.5
Upper secondary	10.9	10.4	10.3	11.2
Vocational and training	8.1	8.4	9.3	13.6
Tertiary	9.1	9.5	8.9	10.8
Others	11.5	13.4	11.2	4.0

Source: Viet Nam, MOET (2009a).

**Table 8. Per capita public spending for education, by region (thousand VND) (per cent)**

	2001	2002	2003	2004	2005	2006	2007	2008
Viet Nam	161	183	234	253	307	383	487	611
Red River Delta	154	172	210	224	265	335	427	513
North-East	193	231	306	348	418	511	691	915
North-West	211	260	328	394	469	607	852	1 155
North Central Coast	175	198	262	277	340	434	506	683
South Central Coast	160	177	230	244	300	386	485	588
Central Highlands	186	212	255	304	375	465	638	796
South-East	145	156	195	205	259	313	385	463
Mekong River Delta	135	152	199	219	266	323	405	496

Source: Author's calculations based on data from General Statistics Office (GSO) of Viet Nam.

levels of education. Table 9 provides an indication of the role of public and private spending on education. We estimated public spending per pupil using MOET data on public spending and GSO data on the number of pupils in 2004 and 2008. Private spending was estimated using the VHLSSs 2004 and 2008. Finally, average public spending per pupil was added with the private spending share to obtain estimated total education spending and to calculate the public and the private shares.

Table 9 shows that private spending was substantial: accounting for 17.5 per cent of total spending at the primary level; 21.7 per cent at the lower secondary level; 35.9 per cent at the upper secondary level; and 52.2 per cent at the tertiary level in 2008. Overall, the State budget financed 64.6 per cent of overall education expenses

in 2004 and 73.0 per cent in 2008 (excluding the pre-primary and technical levels) while the rest was contributed by the private sector. Compared to the year 2004, the share of private financing on total financing decreased thanks to a large increase in public education spending.

**Table 9. Public and private education spending**

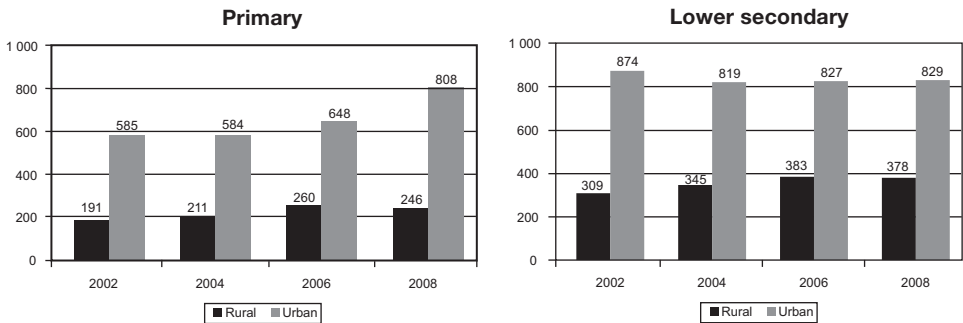
	Public spending (billion Viet Nam dong)	Number of pupils (million)	Public spending share (per cent)	Private spending share (per cent)
<b>Year 2004</b>				
Primary	9.6	7.7	79.4	20.6
Lower secondary	7.1	6.6	65.7	34.3
Upper secondary	3.4	2.8	53.6	46.4
General education	20.1	17.1	67.3	32.7
Tertiary	3.1	1.3	39.0	61.0
<b>Year 2008</b>				
Primary	23.2	6.7	82.5	17.5
Lower secondary	19.1	5.5	78.3	21.7
Upper secondary	9.1	2.9	64.1	35.9
General education	51.5	15.1	75.8	24.2
Tertiary	8.8	1.7	47.8	52.2

*Sources:* Private spending data were calculated from the VHLSSs 2004 and 2008; public spending data from Viet Nam's MOET (2009a); number of students from Viet Nam's GSO Annual Statistics.

Figure 4 shows that household education expenditure increased from 2002 to 2008, particularly at the primary level in which education expenditure rose in both rural and urban areas but the rate of increase was higher in urban areas (38.1 per cent) than in rural areas (28.8 per cent). At the lower secondary level, household education spending increased among rural households but not in urban households. The figure also indicates that the disparities in education expenditure at basic education, such as the primary and lower-secondary levels, between the rural and the urban areas is notable. Furthermore, these disparities do not seem to have declined during the 2002-2008 period.

Table 10 further decomposes private education costs in 2008 into items as a percentage of total household education costs. It shows that tuition costs and school fees account for about 16.3 per cent, 17.5 per cent, and 23.5 per cent of total education spending at the primary, lower secondary and upper secondary levels,

**Figure 4. Total household expenditure for education  
(thousand Viet Nam dong constant 2002 price)**



Source: Author's estimates based on data from VHLSSs 2002, 2004, 2006 and 2008.

respectively, and about 42.5 per cent at the tertiary level. At the primary and lower secondary levels, textbook and school supplies were the largest item in total education spending, 24.3 per cent and 25.2 per cent, respectively, but at the upper secondary, private tutoring became the largest item, 27.2 per cent. In Viet Nam, private tutoring includes both the after-school extra classes taught by school teachers as a source of supplementary income and the private lessons offered by private tutors.

Table 10 reveals a substantial difference between the composition of costs between the urban and the rural areas. In rural areas, textbook and school supplies were a major spending item, accounting for 37.5 per cent of total education costs at the primary level and 32.3 per cent at the lower secondary level. In contrast, in urban areas, households tended to spend more on private tutoring. It amounts to 22.4 per cent of total education costs at the primary level, 33.2 per cent at the lower secondary level and 36.7 per cent at the upper secondary level.

A comparison between the poorest and the richest quintiles yields useful results: textbook and school supplies were a financial burden to the poorest children. The poor also devoted a larger proportion of their education spending to school contributions and uniforms than the rich. In contrast, the rich spent more on private tutoring and such costs as transportation, food and lodging.

The finding that the best-off households spent as much as one-third of their education spending on private tutoring at the lower and upper secondary levels, while the poorest households spent just 12 per cent on the same item implies that access to higher-quality education is biased against the poor. It also means that access to

**Table 10. Composition of education costs in Viet Nam, 2008 (per cent)**

	<b>Tuition and fees<sup>a</sup></b>	<b>School contribution</b>	<b>Uniform</b>	<b>Textbook and school supplies</b>	<b>Private tutoring</b>	<b>Other spending<sup>b</sup></b>
<b>Primary level</b>						
Viet Nam	16.3	16.0	11.3	24.3	20.6	11.5
Rural	2.1	18.3	15.2	37.5	18.4	8.6
Urban	28.1	14.1	8.2	13.4	22.4	13.8
Majority	17.0	15.5	11.2	23.1	21.5	11.7
Minority	1.1	25.1	13.6	47.4	5.0	7.8
Poorest quintile	1.3	22.5	13.9	43.1	12.2	7.0
Richest quintile	32.7	10.7	7.3	11.0	23.7	14.7
<b>Lower secondary level</b>						
Viet Nam	17.5	13.7	11.3	25.2	24.9	7.4
Rural	13.1	15.0	13.1	32.3	17.8	8.7
Urban	22.8	12.1	9.3	16.8	33.2	5.9
Majority	18.1	13.2	11.2	24.2	26.0	7.4
Minority	6.7	22.9	13.2	44.0	5.0	8.3
Poorest quintile	11.2	19.7	12.5	39.6	11.7	5.4
Richest quintile	22.9	11.0	8.7	14.7	34.3	8.4
<b>Upper secondary level</b>						
Viet Nam	23.7	9.9	8.6	18.9	27.3	11.6
Rural	20.8	11.2	9.8	22.9	19.8	15.4
Urban	27.4	8.3	7.2	13.8	36.7	6.7
Majority	24.2	9.7	8.5	18.3	28.1	11.3
Minority	12.6	15.9	11.5	31.7	9.6	18.7
Poorest quintile	22.3	15.6	10.6	30.2	12.3	9.1
Richest quintile	24.9	6.9	6.5	12.6	38.9	10.2
<b>Tertiary level</b>						
Viet Nam	42.5	4.7	0.9	10.7	5.0	36.2
Rural	37.2	4.4	1.0	11.2	3.8	42.4
Urban	48.7	5.0	0.9	10.2	6.3	28.9
Majority	43.0	4.6	0.9	10.7	5.1	35.6
Minority	29.2	6.8	1.0	10.6	1.0	51.3

Table 10. (continued)

	Tuition and fees <sup>a</sup>	School contribution	Uniform	Textbook and school supplies	Private tutoring	Other spending <sup>b</sup>
Poorest quintile	27.5	8.2	3.1	19.4	2.2	39.6
Richest quintile	44.4	4.7	0.9	10.5	6.1	33.4

Source: Author's estimates based on data from VHLSS 2008.

Notes: <sup>a</sup> Primary education is tuition-free at all public schools by law. However, parents may still have to pay certain required school fees.

<sup>b</sup> Including lodging, transportation, food, etc.

tertiary education, which is based on results from entrance exams, will be more limited to the poor. That may explain the huge gap between the rich and the poor households in tertiary education: less than 2 per cent of the people aged between 18 and 22 in the poorest quintile went to a college or a university in 2008 compared to more than 45 per cent of the same group in the richest quintile.

In addition, rich households also spent much more than poor households on tuition and school fees. For example, at the primary level, rich households spent 32.7 per cent of their education expenditure on tuition and school fees while poor households spent just 1.3 per cent. At the lower secondary level, the corresponding proportions were 22.9 per cent for rich households and 11.2 per cent for poor households. This may reflect two things: first, children from well-off households may attend better and more expensive schools than those from poor backgrounds; and second, in some cases, the “tuition and school fees” item might have already included the expenses for extra classes organized by the schools to supplement the teachers’ income.

Table 10 also shows that at the tertiary level, other spending was the second largest cost item besides tuition and fees, accounting for 36.3 per cent of total education spending. This is because most universities and colleges in Viet Nam are concentrated in a few large cities and consequently, many students, especially those from rural areas, must spend a large proportion of their education-related expenses on lodging, transportation and food. On average, a tertiary student from rural areas spent 35.6 per cent of his/her education expense on this item while the corresponding percentage of a student from urban areas was 28.9 per cent.

Table 11 summarizes net education cost per student as a percentage of household per capita expenditure. To obtain net education cost, we deducted from

total household education all education benefits, such as grants and scholarships. The table shows that the share of household spending on education increased during the period 2004-2008. In 2004, net education costs per student were 8.1 per cent of household per capita expenditure at the primary level, 13.2 per cent at the secondary level and 44.8 at the tertiary level. In 2008, the corresponding proportions were 9.8 per cent, 13.2 per cent, 22.2 per cent and 51.4 per cent, respectively. The largest increase was at the tertiary level, perhaps contributed by the increase in autonomy at the colleges as well as an increase in the number of newly founded universities and colleges, especially the more expensive private ones. From 2004 to 2008, the number

**Table 11. Net education cost per student  
(as a percentage of per capita expenditure)**

	Primary		Lower secondary		Upper secondary		Tertiary	
	2004	2008	2004	2008	2004	2008	2004	2008
Viet Nam	8.1	9.8	13.2	13.2	21.7	22.2	44.8	51.4
Rural	7.9	8.5	13.1	12.0	22.7	21.4	54.8	57.7
Urban	8.7	14.1	13.6	16.7	18.9	24.4	35.7	43.1
Red River Delta	9.5	12.2	13.7	16.4	21.4	24.0	41.0	44.8
North-East	6.4	8.0	9.8	11.1	16.0	18.7	40.4	51.3
North-West	3.5	2.8	7.7	0.8	15.5	12.7	26.7	33.0
North Central Coast	10.4	12.0	15.5	14.1	26.1	24.0	53.0	59.9
South Central Coast	7.0	8.0	14.3	12.2	23.6	23.4	53.1	51.6
Central Highlands	8.4	7.5	14.7	11.0	23.6	17.2	53.1	49.7
South-East	8.8	14.3	13.9	16.1	22.2	26.0	37.8	50.8
Mekong River Delta	6.6	6.5	12.0	10.7	19.4	19.3	54.3	61.8
Female	8.1	9.8	13.4	13.5	21.2	22.2	43.0	52.7
Male	8.1	9.8	13.0	12.8	22.1	22.3	46.6	50.3
Majority	9.0	11.0	14.1	14.4	22.5	23.4	44.8	51.5
Minority	3.6	4.2	7.1	5.7	12.8	11.3	45.0	49.9
Poorest quintile	7.8	9.0	14.1	12.6	23.1	24.4	63.3	41.4
Lower-middle quintile	8.8	9.1	14.5	13.1	26.2	23.9	63.5	78.5
Middle quintile	8.3	10.5	13.0	12.7	24.0	22.4	72.4	63.5
Upper-middle quintile	7.5	9.4	12.2	13.2	20.6	21.7	49.7	57.0
Richest quintile	7.7	12.4	11.5	14.5	15.6	19.7	36.1	40.0

Source: Author's estimates based on data from VHLSSs 2004 and 2008.

of colleges increased by 71 per cent from 230 to 393, of which the number of private higher institutions increased by 145 per cent from 29 to 71.

As seen in table 11, education spending is clearly a financial burden. Assuming there is a family of four with a husband, a wife, one child at a lower secondary school and the other child at an upper secondary school, the average education expenditure in that household would amount to 35.4 per cent of household expenditure per capita, or 8.9 per cent of total household expenditure in 2008. The financial burden would be even heavier for a student attending higher education as the education expense at that level comprises more than half of household per capita expenditure. Thus, a family of four people with two children attending college would need to spend as much as 25.7 per cent of their household expenditure on children's education.

It is interesting to compare the disparities between population groups. In 2008, urban households spent relatively more on education than rural households, except at the tertiary level. Two reasons behind this are (a) on average, rural households are poorer than urban households and (b) even though there are large differences between urban and rural households in the education expenditure per student at the lower level, the gap at the tertiary level is small. Regarding the latter, at the primary level, education spending of an urban pupil is four times as much as that of a rural pupil. At the lower secondary level and the upper secondary level, the gaps in education spending were 2.6 times and 1.9 times, respectively. However, at the tertiary level, the gap was only 1.1 times.

Geographically speaking, residents from the South-East, the North Central Coast and the Red River Delta regions paid more for education as a percentage of total expenditure per capita than the other regions at all levels of education. On the other hand, the proportion of education expenditure by residents of the North-West region was merely 2.8 per cent of total expenditure per capita at the primary level and 0.8 per cent at the lower secondary level. This result is reasonable because the North-West is the country's poorest region, which receives a lot of assistance from the Government in order to universalize basic education. Similarly, the ethnic minority groups spent much less than the majority group on education spending, except at the tertiary level, in which an ethnic minority student spent a similar proportion of expenditure as an ethnic majority one.

At the basic education (both the primary and the lower secondary) levels, the rich quintiles (quintiles 4 and 5) spent relatively more on education than the poor quintiles (quintiles 1 and 2). However, that changed at the upper secondary and the tertiary levels, in which education spending was more a financial burden to the poor than to the rich. At the tertiary level in 2008, education spending shares were 41.4 per



cent for the poorest quintile and 78.5 per cent for the lower-middle quintile. In contrast, the shares were 57 per cent for the upper-middle quintile and 40 per cent for the richest quintile.

## V. DETERMINANTS OF SCHOOL ENROLMENTS

In this section, we investigate the determinants of school enrolments in 2008, using the VHLSS of 2008. As primary school enrolment is compulsory and nearly all children at the primary school-age attended primary schools, it is not necessary to examine the determinants at this level. Instead, we examine the determinants of school enrolments at the lower secondary level, the upper secondary level and the tertiary level, using a logistic regression model. In the logistic regressions, the dependent variable is school enrolment. The explanatory variables include household size, household composition, father and mother's education, father's age, head of the household's occupation and ethnicity, household per capita expenditure and dummies for geographical regions and urban areas.

Table 12 shows the results from the regressions. The model seems to fit well. It should be noted that there is no direct equivalent of R-squared for logistic regression. However, to evaluate the goodness-of-fit of logistic models, several pseudo R-squareds could be developed. They are called "pseudo" R-squareds in the sense that they are on a similar scale, ranging from 0 to 1 with higher values indicating a better model fit. However, they cannot be interpreted as strictly corresponding to OLS<sup>1</sup> R-squared. In table 12, the pseudo R-squareds (McFadden's  $R^2$  and Count  $R^2$ ) show that the goodness-of-fit is better for the model of tertiary and upper-secondary enrolments than that of lower-secondary enrolments. We also check for multicollinearity in table 12 using variance inflation factor (VIF). A rule-of-thumb for VIF is that if  $VIF > 5$ , multicollinearity could be high. Table 12 shows that multicollinearity is not a problem in the models as the mean VIFs are less than two.

Results from table 12 show that parents' completed education level has a significant positive effect on children's enrolment. At the lower secondary level, the effect is only significant for the father having a lower secondary degree and upper secondary degree. The mother's education has no effect on children's enrolment at the lower secondary level. However, both father and mother's completed education levels have a significant effect on their children school enrolments at the upper secondary level and the tertiary level. The effects of the father's education are higher and stronger than the mother's education, indicating that in a typical Vietnamese family, the father has a larger influence on children's education than the mother.

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<sup>1</sup> Ordinary least squares.

Table 12. Determinants of school enrolments

	Lower secondary		Upper secondary		Tertiary	
	Coeff.	z	Coeff.	z	Coeff.	z
Urban	0.01	0.08	0.10	0.71	-0.07	-0.60
Minority	-0.15	-0.92	-0.35	-2.12 **	-0.71	-2.95 ***
Female	0.04	0.31	0.35	2.97 ***	-0.09	-0.68
Father's age (log)	-0.50	-1.58	-0.17	-0.52	0.61	1.56
Per capita expenditure (log)	0.76	6.12 ***	0.78	6.78 ***	1.26	10.52 ***
<b>Father's education</b>						
Lower secondary	0.40	2.77 ***	0.74	6.22 ***	0.59	3.86 ***
Upper secondary	0.61	2.51 ***	1.20	5.77 ***	0.96	4.88 ***
Technical education	0.36	1.44	0.83	4.41 ***	0.72	3.83 ***
Tertiary education	0.40	0.83	1.18	2.85 ***	1.37	5.14 ***
<b>Mother's education</b>						
Lower secondary	0.19	1.25	0.22	1.75 *	0.47	3.29 ***
Upper secondary	-0.14	-0.56	0.98	4.33 ***	0.68	3.33 ***
Technical education	-0.39	-1.18	0.51	1.99 **	0.80	3.89 ***
Tertiary education	-0.08	-0.15	0.79	1.82 *	0.79	2.81 ***
Female head	0.18	0.86	0.06	0.32	0.19	1.19
Household size (log)	-0.54	-2.60 ***	-0.51	-2.43 **	0.06	0.26
Proportion of elderly	0.53	0.88	1.97	3.31 ***	0.04	0.08
Proportion of children	-1.23	-3.25 ***	-0.26	-0.70	-1.51	-3.07 ***
Proportion of females	0.16	0.43	0.67	1.81 *	1.68	4.27 ***
<b>Head occupation</b>						
Skilled labourer	0.34	2.06 **	0.04	0.29	0.04	0.26
Agriculture	0.10	0.71	0.01	0.07	-0.26	-1.83 *
North-East	0.28	1.25	-0.20	-1.07	-0.25	-1.39
North-West	-0.21	-0.81	-0.25	-0.97	-1.05	-2.55 **
North Central Coast	0.14	0.68	0.06	0.32	0.17	0.99
South Central Coast	-0.02	-0.11	0.17	0.88	0.38	2.03 **
Central Highlands	-0.06	-0.27	-0.04	-0.18	0.22	1.05
South-East	-0.37	-1.77 *	-0.22	-1.18	-0.34	-1.89 *
Mekong River Delta	-0.64	-3.30 ***	-0.24	-1.37	-0.48	-2.54 **
Constant	-2.18	-1.30	-6.17	-3.68 ***	-16.29	-8.61 ***
Number of observations	2 721		2 430		3 380	
LR chi2 (27)	272.5		569.5		871.4	

**Table 12. (continued)**

	Lower secondary		Upper secondary		Tertiary	
	Coeff.	z	Coeff.	z	Coeff.	z
Prob > chi2	0		0		0	
Log likelihood	-1 279		-1 395		-1 282	
McFadden's R <sup>2</sup>	0.096		0.17		0.254	
Count R <sup>2</sup>	0.798		0.705		0.822	
Mean VIF	1.62		1.35		1.65	
School age	11-14		15-17		18-22	

Source: Author's estimates based on data from VHLSS 2008.

Notes: Default value for dummies: Red River Delta for regional variables; low skilled non-farm labourer for head occupation; primary or less than primary education level for education variables.

\*, \*\*, \*\*\*: significant at 90%, 95% and 99% confidence of interval respectively.

Household size has a negative effect on school enrolments, except at the tertiary level. Thus, smaller-sized households tend to send their children to schools more than large households. An explanation behind this is that in a large-sized household, education spending per child is often smaller than in a small-sized household as the household must spread out their resources to more household members. That explanation also explains the negative coefficient of the proportion of children.

Household well-being, indicated by per capita expenditure, is strongly correlated with school enrolments at all levels of education. Yet, the effect is higher at the tertiary level than at the upper secondary level, and higher at the upper secondary level than at the lower secondary level. This indicates that financial resources are a constraint to poor children to attend school, in particular at the upper secondary level and at the tertiary level.

Ethnically speaking, while ethnicity does not significantly explain the difference in enrolments at the lower secondary level, there is a large gap between the ethnic minority groups and the majority group at the upper secondary level and the tertiary level. Some of the reasons behind this may be the following. Firstly, there might be a problem of education quality. If the quality of education provided to ethnic minority children is low, the ethnic minority children may have difficulties in competing with the children from the ethnic majority groups in the entrance examinations to the upper secondary and the tertiary levels. Secondly, ethnic minority students may have more difficulty with the popular Viet language, which inhabits their education performance. Thirdly, there may be existing prejudice against the ethnic minority

students at schools and in the society, which creates further difficulties for them to overcome.

It is interesting to note that the “urban” variable has no explanatory power. In other words, other things being equal, an urban child is not more likely to enrol at the lower secondary, the upper secondary, or the tertiary level than a rural child. Among eight administrative regions, the Mekong River Delta and the South-East have significantly lower enrolments than the Red River Delta at both the lower secondary level and the tertiary level. There are a number of possible explanations for that. Culturally, the Red River Delta has a long tradition of learning which emphasizes the values of education and learning. Thus, households in the Red River Delta may be more willing to pay for children’s education than those in the Mekong River Delta and the South-East. In addition, this region may also receive more resources for education than the Mekong River Delta and the South-East regions. Table 8 indicates that per capita public spending in the Red River Delta region is higher than in both the Mekong River Delta and the South-East regions.

## **VI. CONCLUSION**

During the last decade, Viet Nam achieved remarkable success in improving enrolments in education at all levels, particularly at the higher education levels. That improvement occurred at all expenditure groups, ethnicity, gender and regions. Yet, there are still substantial disparities in access to education. While gender equality in education access has basically been achieved, the gaps in education access between rural and urban areas, ethnic minorities and ethnic majority, and poor and rich households are still large. Therefore, more efforts must be placed on improving access to education, especially at the higher education levels, for the disadvantaged groups.

The Government of Viet Nam has focused heavily on improving the education sector. Budget spending for education currently accounts for 20 per cent of total budget spending, implying the high priority given to education. In 2008, education spending was about 5.6 per cent of GDP, which is higher than in most developing countries. For example, in 2006, world average education spending was 4.3 per cent of GDP and the average education spending in East Asia and the Pacific was only 2.8 per cent of GDP (UNESCO Institute of Statistics, 2007).

In recent years, as a result of demographic changes, there has been a decreasing trend in enrolment at the primary and lower secondary levels but an increasing trend in enrolment at the tertiary and technical degree levels. The changes in enrolment require a change in the allocation of public education financing. Public

education spending has been changing at slow pace. Consequently, there has been a shift in the allocation of finance per pupil in the system. In 1998, public spending per upper-secondary student was 1.5 times that of a primary student and public spending per tertiary student was 6 times that of a primary student (Nguyen, 2004). In 2008, public spending per upper-secondary student was 98 per cent that of a primary student and public spending per tertiary student was 1.5 times that of a primary student. While it shows that the Government pays much attention to primary students, this trend may lead to under-financing at the upper-secondary and the tertiary levels. As a result, poorer students may have little accessibility in pursuing the higher education level. A more nuanced policy in allocating public spending would be needed to ensure that the upper levels of education receive enough funds from the Government.

In the meantime, the private sector provided education to 15 per cent of enrolled students and contributed 27 per cent of total education finance in 2008. The role of the private sector in providing education is quite small, suggesting the socialization policy is not very effective in encouraging the private sector to provide education services. In recent years, the shares of the private sector in the lower secondary and the upper secondary levels are even smaller in 2008 than in 1998. Therefore, a policy towards expanding the private lower and upper-secondary schools could be helpful in creating a more diversified and competitive environment for students as well as to share the financial burden of the Government with the private sector. Furthermore, existing studies, such as Vu and others (2011), Dang (2010) and World Bank (2011), indicated a widening gap in terms of both access and quality for ethnic minority children and those living in remote areas. Therefore, there should be more attempts by the Government in increasing the learning conditions of schools and improving school quality, especially in remote and mountainous areas.

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## THE FUTURE OF FINANCIAL LIBERALIZATION IN SOUTH ASIA

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*This paper overviews financial liberalization in three South Asian countries — Bangladesh, India and Pakistan — in order to derive lessons for future reforms. It investigates how freeing domestic financial markets, improving capital account convertibility, and restructuring regulations have impacted the process of financial liberalization in South Asia. The paper shows that the capital account was most liberalized in Pakistan, and that Bangladesh had the least market development of the three countries under consideration. The study also reveals that of the two similar-sized countries (i.e. Bangladesh and Pakistan), Pakistan had experienced several financial crises that had required “external rescue”. Bangladesh, in contrast, needed external rescue only once. India did better than Pakistan and Bangladesh, most likely because it followed a strategic plan according to which full capital account liberalization followed the deepening of domestic markets and improvements to government finances. The experience of the global crisis validated the Indian strategy and demonstrated that foreign entry, while beneficial, cannot resolve all issues. We conclude that deepening domestic markets and better domestic and international regulation are necessary prerequisites for full convertibility, and that these preconditions will be best met if future liberalization is adapted to domestic needs such as financial inclusion, infrastructure finance, and market deepening.*

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## I. INTRODUCTION

Financial liberalization, in broad terms, means giving a greater role and more freedoms to markets. International institutions such as the International Monetary Fund (IMF) that pushed for liberalization in the 1990s, defined it as removing government controls on the pricing and allocation of credit, and on the movement of international capital (Pill and Pradhan, 1997).

Before the start of the reform period in the 1990s, South Asia was characterized by severe financial repression. Financial markets had little freedom, and the aim of a plethora of controls was to make funds available for different government programmes. The government fixed most interest rates and the exchange rate. There was scarcity and rationing of foreign exchange. Neither the current nor the capital account of the balance of payment was convertible.

The fiscal reforms were expected to increase the availability and reduce the cost of finance, especially to the private sector. While the direction of reform was accepted, there was an active debate on its pace and content. In India, for example, those who advocated for faster reform wanted more market-led innovation, an end to distortions that raised costs, and the chance to develop India as a centre for financial services, given its skilled manpower (Rajan, 2009). In contrast, those who favoured a slower pace were concerned about asset bubbles in narrow domestic markets, crises from volatile flows, fiscal vulnerability, Dutch disease and appreciation hurting exports (Nachane, 2007; Sen, 2007). In general, preconditions for free capital movements included improvements in government finances, balance of payments and market institutions. With regard to India, two government committees were responsible for establishing these preconditions (see RBI, 1997; 2006).

This paper argues that the path to successful financial liberalization involves (a) freeing domestic financial markets and deepening them, (b) increasing capital account convertibility, and (c) restructuring regulation. As controls are withdrawn, effective regulation has to replace them. Since the pace and content of reforms varied across South Asian countries, evaluating South Asian financial reforms on these three strategic variables offers useful lessons for the ongoing process of financial liberalization, which are detailed in this paper. Lessons are also drawn from the development of the South-East Asian financial sector, and the ongoing rethinking of regulation after the global financial crisis (GFC).



The paper shows that reforms freed markets and developed underlying institutions in South Asia, and that the reform process was gradual with graded restrictions on foreign entry. Neither the countries with the maximum foreign entry nor those with the least market development were the most successful. India, with a balanced combination of domestic market/regulatory development and opening out avoided domestic crises, and survived the global financial crisis with minimal impact. India's policy strategy of "muddling through" involved a sequence whereby full capital account liberalization followed the deepening of domestic markets and the realization of better government institutions and finances.

The India experience shows that opening out can be "too little or too much". More openness created more volatility, which was generally beneficial. If one accepts that position, the future path of financial reform will require the strategic removal of controls according to domestic requirements and in step with continuous development of domestic markets. This paper points out the implications of that perspective for the further reform of India's financial sector, and in the structure of regulation.

In what follows, the paper is structured in seven sections. Section II gives an overview of the process of financial liberalization. Section III discusses its consequences for the balance of payments, the impact of global crises, and presents lessons from broader Asian experiences. Section IV links the path of future liberalization to critical development imperatives. Section V gives a snapshot of domestic development issues in the financial sector. Section VI brings out lessons for the structure and reform of regulation. Finally, section VII presents the conclusion.

## **II. FINANCIAL REFORM IN SOUTH ASIA**

Financial reform in South Asia began in the early 1990s (World Bank, 2005; ADB, 2009).<sup>1</sup> Liberalization was extensive, but remains incomplete even after more than twenty years. We evaluate reform in three South Asian countries with a focus on the three aspects of liberalization: domestic market development, opening out, and restructuring of regulation. The analysis begins with India, moves on to Pakistan and concludes with Bangladesh.

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<sup>1</sup> Reforms began at different dates. In Pakistan reforms were started in late 1989 with the aim of improving monetary transmission through financial markets (Khan, 1994). Bangladesh privatized one of the five state-owned banks in the 1980s (ADB, 2009). Problems with the balance of payments forced Indian reforms to begin in 1991. The analysis builds upon earlier work. More references are available from [www.igidr.ac.in/faculty/ashima/](http://www.igidr.ac.in/faculty/ashima/). Facts and figures quoted, unless otherwise mentioned, are from IMF, the Reserve Bank of India, Ministry of Finance (GOI), the State Bank of Pakistan and Bangladesh Bank websites.

## India

Since the early 1990s, the beginning of the post-reform period, many changes have taken place in India's macroeconomic framework. Among the most salient, tight controls on financial markets were relaxed, and new technology was used effectively to create electronic markets that reached and sometimes exceeded international benchmarks. Along with traditional oversight, advanced risk management systems promoted transparency, efficiency, safety, and market integrity. Practices included online monitoring and surveillance, positions limits, margin requirements, and circuit filters. During the reform period, markets were able to handle large global volatility without serious problems (Goyal, 2010b). After 2000, foreign exchange (FX) and money markets saw rapid developments. As established firms began raising credit abroad at cheaper rates, banks turned to retail credit, and consumer durable and housing finance expanded. Legislation aided loan recovery and fledgling credit bureaus made credit histories available. Collectively, these developments contributed to an expansion of credit and a reduction in non-performing assets (NPAs).

After an initial double devaluation of the Indian exchange rate in June 1991, the exchange rate regime became a managed float. The Reserve Bank of India (RBI) intervened to prevent excess volatility, accumulating or releasing foreign exchange largely through public sector banks. The degree of flexibility and market determination increased as FX markets deepened.

The financial reforms established current account convertibility in the 1990s, but convertibility of the capital account was a gradual process. Liberalization distinguished between types and direction of flows and was much greater for equity flows than for debt flows, including bank loans and intermediary transactions, and for foreign compared to domestic residents. FX requirements for current account transactions of residents were liberalized before their investment outflows. Among debt inflows, the aim was to liberalize long-term debt before short-term debt.<sup>2</sup> In the Indian situation, deregulation was selective in order to give domestic markets time to develop. Foreign participation had provided competition and learning but was

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<sup>2</sup> The rationale for this sequence was that since equity shares risk, the liabilities the country faces are lower in a crisis. In contrast, domestic resources required to service secured foreign debt rise as the currency depreciates in a crisis. Similarly, domestic currency loans by foreign investors are preferable to domestic entities borrowing abroad since in the first foreign lenders bear the currency risk; in the second it lies with the domestic borrowers. In India, capital flows could come in through foreign institution investors (FIIs) or their sub-accounts registered with the regulator. Even in 2011 restrictions on debt were much tighter than on equity flows. While a FII could invest up to 10 per cent of the total issued capital of an Indian company, the cap on aggregate debt flows from all FIIs together was \$1.5 billion. Source: <http://investor.sebi.gov.in/faq/foreign%20institutional%20investor.html>.

restricted until markets had reached sufficient maturity to be able to handle more volatility (Goyal, 2011).

After 2000, foreign exchange and money markets saw rapid developments. Many types of controls on FX transactions gave way to market-based regulation. A rule-based system that largely relied on self-certification replaced the cumbersome administrative procedures that required multiple discretionary approvals. The RBI continued as the regulator of banks. New financial regulatory institutions, which were set up during the post-reform period in India, included:

- the Securities and Exchange Board of India (SEBI) (the capital market regulator);
- the Insurance Regulatory and Development Authority (IRDA) (the insurance regulator);
- the Forward Market Commission (FMC) (the commodity futures trading regulator); and
- the Pension Fund Regulatory and Development Authority (PFRDA) (the interim pension regulator).

A 2006 amendment to the RBI Act expanded its regulatory powers beyond banks to cover the financial system as a whole and gave guidance to all of the agencies that were active in the markets, although SEBI had the major responsibility.

## **Pakistan**

Financial reforms freed Pakistan's domestic financial sector from severe controls that were impeding growth. The statutory liquidity requirement (SLR) for banks was brought down from a high of 45 to 20 per cent of total demand and time liabilities. Caps on maximum lending rates of banks and non-bank financial institutions (NBFIs) for most trade and project related modes of financing were removed in 1995. Caps and floors on minimum lending rates were abolished in July 1997. Banks and NBFIs were able to set their lending rates in relation to the demand/supply conditions in the market. Monetary policy began to use indirect tools such as open market operations, discount rates. Domestic interest rates on lending dropped to 5 per cent from 20 per cent.

Pakistan declared full current account convertibility in 1994, a few years after India did. While convertibility remained partial on the capital account, Pakistan was the most aggressive in freeing restrictions on international capital movements (both Bangladesh and India took a less aggressive approach). As reforms progressed, foreign banks were allowed to bring in and take capital out. In addition, they were

allowed to remit profits, dividends and fees without any prior approval. The corporate sector was permitted to acquire equity abroad. Resident Pakistanis could open foreign currency accounts with banks in Pakistan, freely transferable abroad, exempted from income and wealth tax, with no questions about the source of foreign exchange. Foreign investors could purchase up to 100 per cent of equity in industrial companies with full repatriation allowed. Shares could be exported and the remittance of dividend and disinvestment was permissible without prior approval of the State Bank of Pakistan (SBP). Income tax treatment of foreign private investment was at par with similar investment made by local citizens. There were no restrictions on foreign banks.

After 1998, with the exception of a few specific industries, reforms of the financial system in Pakistan included privatization of and free foreign investment in state-owned enterprises. Foreign investors were given permission to retain 100 per cent equity in a company with no obligation to go public; they had permission to bring in any amount of foreign currency and to take it out freely.

Pakistan adopted a market-based unified exchange rate system on 19 May 1999. Since 2001, despite its preference for a floating rate, SBP attempted to maintain the real effective exchange rate at a competitive level. SBP intervened from time to time to keep stability in the market and smooth excessive fluctuations.

The creation of Securities and Exchange Commission of Pakistan by an Act in 1997 aimed at establishing a professional agency that would improve the regulation and supervision of the securities market. It became operational in 1999.

## **Bangladesh**

During the post-reform period in Bangladesh the financial sector strengthened, but government interventions, in the form of ceilings, moral persuasion, and directed credit continued. Accounting and reporting was non-transparent. By 1997, banks were free to fix rates of interest on their deposits of different types after withdrawal of restriction on the floor rate of interest. With the exception of the export sector, banks were also free to fix their rates of interest on lending, which had been set at 7 per cent per annum from 10 January 2004. The statutory liquid requirement changed in the 2000s but was on an average around 20 per cent.

Bangladesh declared full current account convertibility in 1994, but restrictions on international capital movements were more stringent in Bangladesh than they were in neighboring India and Pakistan. For example, resident-owned capital was not freely transferable abroad. Required approval from Bangladesh Bank (BB) was given only sparingly. Even current settlements, beyond certain

indicative limits, were subject to *bona fides* checks. Direct and portfolio investments of non-residents, capital gains and profits/dividends were, however, repatriable abroad.

On 31 May 2003, Bangladesh adopted a flexible exchange rate regime. Under the new regime, BB did not interfere in the determination of exchange rate, but operated monetary policy to minimize extreme swings in the exchange rate that could have had adverse repercussions. In the FX market, banks were free to buy and sell foreign currency in both the spot and forward markets.

As the above discussion shows, liberalization paths were similar in South Asia. However, Pakistan had the most open capital account, while in Bangladesh continuing controls restrained financial deepening. Even so, during this period, countries in the region experienced considerable institutional and market development. Easier entry saw many private and foreign banks and mutual funds entering the financial sector. Restructuring, computerization and competition improved banking services. More interest rates became market determined. In 2012, in India, only interest rates on government small savings and providence schemes were still fixed by the regulator. But in South Asia, as in Asia more generally (see table 1), the debt market remained underdeveloped. Yield curves existed but thin markets made benchmark rates unsatisfactory. More market deepening was required. The next section examines the consequences of the financial liberalization process that began in the early 1990s.

### III. CONSEQUENCES OF FINANCIAL LIBERALIZATION

As discussed in section II, the post-reform period in South Asia saw many changes. In this section the consequences of financial liberalization in India, Pakistan and Bangladesh are illuminated. As we shall see, those consequences were similar in all three countries. Output growth rose, but so did volatility, and opening out coincided with a period of major international financial crises. However, a pattern of conservative regulation and “the gradual approach” prevented the financial sectors in each country from undergoing a crisis. A key consequence was greater mobility of various types of capital flows.

#### India

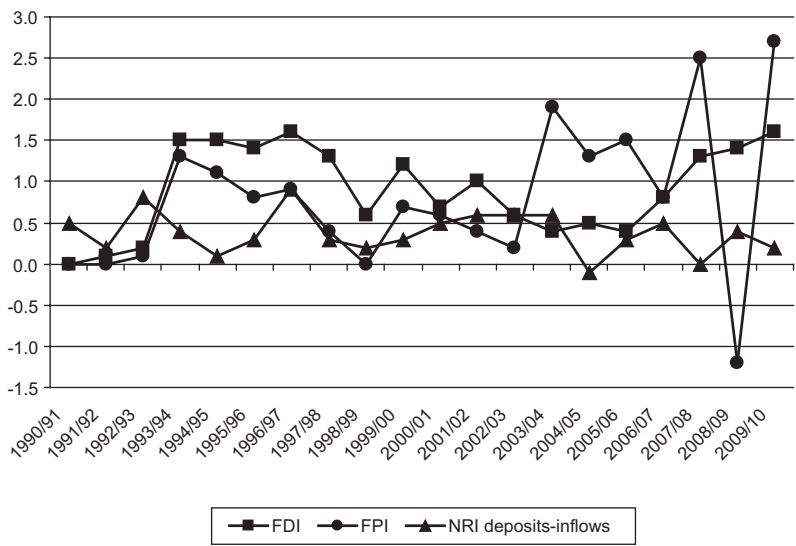
Different types of foreign investments<sup>3</sup> (FIs) from the private sector behave differently and therefore need to be analysed separately. Figure 1 gives some

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<sup>3</sup> These include foreign direct investment (FDI), foreign portfolio investment (FPI) and other long- and short-term investment flows.

categories of inflows as a percentage of gross domestic product (GDP) and illustrates how capital flows were impacted as a consequence of liberalization. It shows that as inflows rose in India, the pattern of volatility differed among various components: foreign direct investment (FDI), foreign portfolio investment (FPI) and non-resident India (NRI) flows.

Figure 1. Capital flows in India

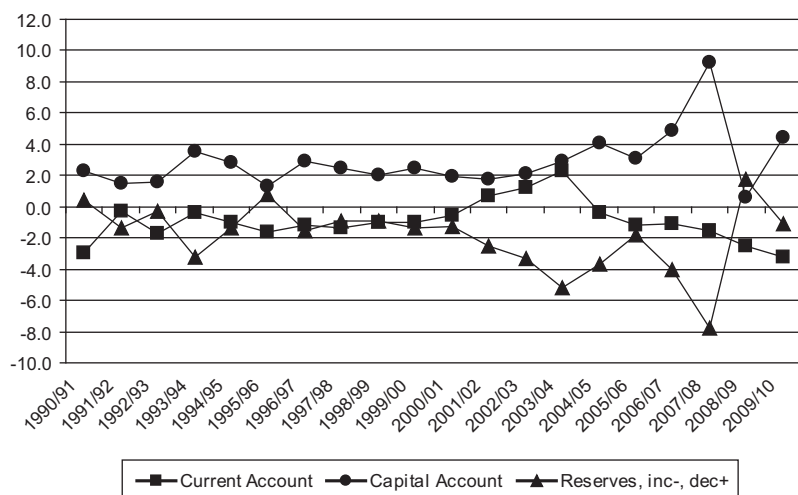


Source: Author's calculations based on data from RBI. Available from [www.rbi.org.in](http://www.rbi.org.in).

There was steady acceleration in absolute levels of FDI, which is an equity-type flow since it shares risks, and higher levels continued despite the global crisis. Figure 1 also shows how the absorptive capacity of the economy increased. At the beginning of reform, \$3 billion was about 1.5 per cent of GDP in the figure; \$29 billion in 2007/08 reached a similar ratio. The ratios were similar since GDP had increased. Gross inflows were even higher since Indian firms were investing abroad. Figure 1 reveals that FPI fluctuated, turning briefly negative during the East Asian financial crisis (1998-1999) and during the global financial crisis (2008-2009). It can be seen that NRI flows responded to opportunities for interest rate arbitrage, but NRI deposit rates were capped when Indian interest rates were much higher than international interest rates, as for example from 17 April 2004, so that NRI inflows fell. This restricted arbitrage. The NRI deposit caps were strategically removed in 2011 when India needed more capital inflows than were coming in during the European debt crisis.

Figure 2 shows how liberalization impacted India's balance of payments. It demonstrates how reserve accumulation was the mirror image of the capital account. Volatile capital flows were absorbed as reserves,<sup>4</sup> instead of being used to finance a wider current account deficit (CAD). The CAD was restricted to about 1 to 2 per cent of GDP. Reserves provided self-insurance, and damped volatility of the exchange rate, but came at a cost. Since reserve accumulation was sterilized to maintain money supply growth targets, RBI's holdings of Indian Government bonds decreased while those of foreign government bonds increased. The interest on Indian bonds was higher than on assets the RBI held abroad, imposing large interest costs that were shared by the government, RBI and banks.

**Figure 2. India's balance of payments**



Source: Author's calculations based on data from RBI. Available from [www.rbi.org.in](http://www.rbi.org.in).

Global depository receipts (GDRs) allowed firms to raise equity abroad; relaxation of external commercial borrowing (ECB) norms in 2006 allowed them access to cheaper foreign loans. Positive interest differentials and expected exchange rate appreciation created incentives to borrow abroad. Restrictions such as eligibility criteria, caps, minimum maturity period and end use criteria prevented excessive

<sup>4</sup> India's foreign currency reserves peaked at \$315.7 billion in June 2008 and fell to \$262 billion by the end of March 2009, but even then they exceeded India's foreign debt by \$22 billion. Although outflows were \$20 billion, much of the fall was due to valuation effects.

borrowing in response to domestic distortions, even while selective relaxation for longer-term debt increased credit availability for large corporations and funding of infrastructure.

In India, in the wake of reforms, partial capital convertibility provided additional policy flexibility; controls could be fine tuned in response to circumstances. Additional instruments were available to control the money supply and manage exchange rates, which was difficult to do with a more open capital account. Consequently, monetary policy had some autonomy even under conditions of volatile capital inflows. For example, stricter end use criteria were imposed for firms bringing funds in during periods of excessive inflows, and banks net-open-position limits were reduced when all of the banks were taking long positions on the dollar in 2011. There were more restrictions on intermediaries than on end users. Since inflows may not come in if they are not allowed to go out, it is difficult to restrict them. Continuing restrictions on domestic capital outflows, however, reduced the reserve cover required. In post-reform India, as reserves accumulated, selective easing of outflows by domestic residents and further trade liberalization were used as another way of absorbing inflows.

A major problem for India was that it had a CAD, and inflows were necessary in order to finance it. If inflows fell due to external shocks, such as the GFC and the European debt crisis, then the currency would depreciate if the Central Bank did not smooth demand and supply. Capital inflows do not always reflect domestic fundamentals, and so allowing them to determine the exchange rate can cause it to deviate from the level that is necessary to give a low CAD. More appreciation, for example, increases net imports and the CAD. Therefore, persistent current account deficits imply limits to appreciation.

The CAD is also affected by macroeconomic policy since it is the excess of domestic savings over investment. Macroeconomic policy affects the investment savings gap and therefore the extent of inflow absorption, which also depends on a general rise in absorptive capacity. Reducing the gap between domestic and foreign interest rates reduces some types of inflows and increases domestic investment. In the Indian case, the small CAD implied that the contribution of foreign savings to financing domestic investment remained small, even though foreign savings did contribute to relieving specific constraints on financing.



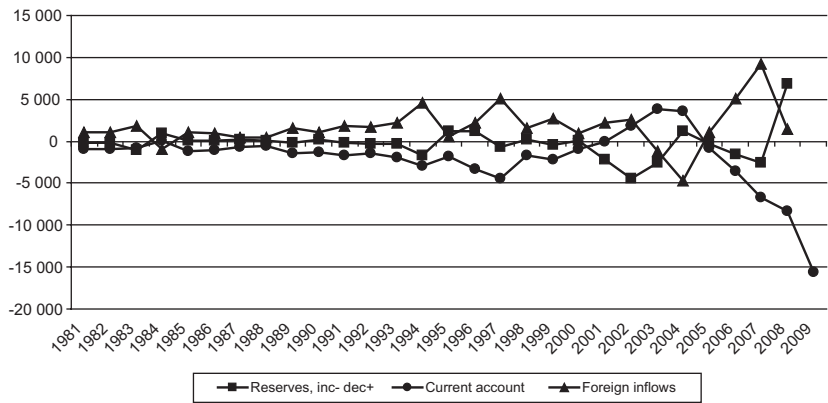
Pakistan and Bangladesh

Unlike the Indian case,<sup>5</sup> in Pakistan and Bangladesh the change in reserves was not the mirror image of capital inflows (see figures 3 and 4, both in US dollars). There were two reasons for this. First, since the current account was much more volatile, reserves had to be frequently used to finance it. Second, inflows were not so substantial and, at least for Pakistan, were often the result of IMF loans. As figures 3 and 4 reveal, Bangladesh saw a sharp improvement in its balance of payments after 2005, while for Pakistan the reverse occurred.

Asia

It is useful to sketch how financial liberalization impacted Asia in general. Financial liberalization in South Asia was late in coming. By the time the reforms took place in South Asia, many other countries in Asia had already undergone reform. With the exception of Malaysia, several of the smaller, more trade dependent Asian countries had already attained more or less open capital accounts by the 1990s (e.g. the Republic of Korea). In these countries debt and equity type inflows were liberalized as part of the reforms in the 1990s (BIS, 2003). Since government debt and deficits were generally low in East Asia, firms and banks were borrowing abroad. In

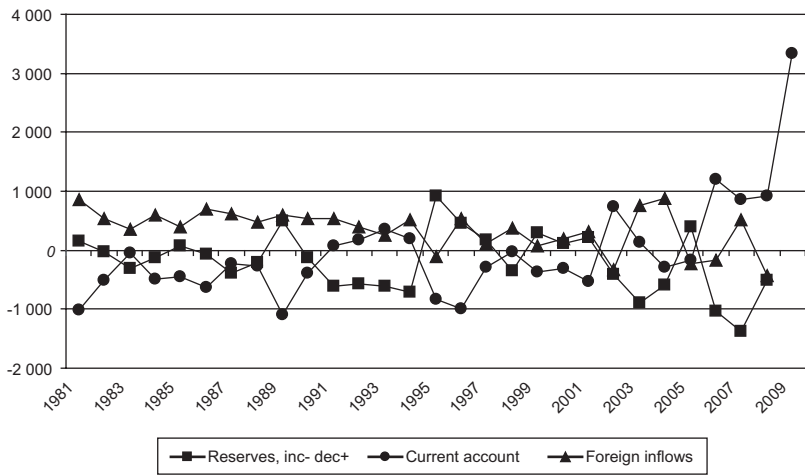
Figure 3. Pakistan's balance of payments



Source: Author's calculations based on data from SBP. Available from [www.sbp.org.pk/](http://www.sbp.org.pk/).

<sup>5</sup> Due to lack of data on capital flows they were derived as change in reserves plus current account deficit for Pakistan and Bangladesh.

Figure 4. Bangladesh's balance of payments



Source: Author's calculations based on data from BB. Available from [www.bangladesh-bank.org/](http://www.bangladesh-bank.org/)

the Republic of Korea, during its financial liberalization period, short-term inflows were favoured over long-term inflows. The rising ratio of short-term to total foreign debt made corporations and banks more vulnerable (BIS, 2003). External opening outpaced domestic financial market deepening. Regulatory, legal, accounting, and institutional gaps combined with government warranties from fixed exchange rate regimes led firms to ignore currency risk and take on excessive loans.

Among many countries in Asia, hype about the “Asian miracle” contributed to excessive lending. For example, prior to the East Asian crisis in 1997, Thailand had a CAD of 8 per cent and experienced a real estate bubble. High short-term debt aggravated outflows and bankruptcies during the crisis. However, many countries had gained so much from the process of globalization that they remained firmly committed to the process, and resolved to undertake whatever financial reforms were required to reach international standards. Foreign participation and entry contributed towards reaching those standards. Even after the GFC, that resolve remained unshaken (Lee and Park, 2010).

China was the major exception to capital account convertibility, and it retained many types of capital controls. It also differed from India in restricting FPI and liberalizing FDI relatively more.

Table 1 shows the outcomes across different financial sectors and Asian countries compared to advanced country benchmarks. A number of findings stand out. First, Asia has more deposit taking institutions compared to the West. Second, Asia lags behind much more in bond markets than it does in stock markets. Third, Indian stock markets have developed more than either its banks or bond markets, suggesting that its banks and bond markets need to develop more. In both Europe and Japan deposits as a ratio of GDP exceed that of market capitalization. This is an alternative strategy of financial development. Even if South Asia wants to follow such a strategy of developing banks more than markets, its deposit ratio is too low, and

**Table 1. A comparative picture of financial systems (percentage of GDP)**

	Financial sector assets							
	Deposit-taking financial institutions		Non-bank financial institutions		Stock market capitalization		Total bonds outstanding	
	2000	2009	2000	2009	2000	2009	2000	2009
Bangladesh*	46.8	62.0	0.7	1.7	2.4	14.4	..	17.1 <sup>a</sup>
China	157.5	200.6	5.1	15.8	48.9	82.7	16.9	52.3
India	64.5	103.5	15.6	29	69.9	205.2	24.6	48.8
Indonesia	63.6	34.7	8.7	11.4	16.2	39.8	31.9	18.2
Republic of Korea	130.5	158.6	41.9	67.3	27.8	100.3	66.6	122.7
Malaysia	154.2	211.5	41.4	99.9	120.6	149.5	73.3	96.5
Pakistan*	44.8	52.6	4.7	5.9	18.6 <sup>b</sup>	..	..	27.5 <sup>a</sup>
Philippines	99.2	83.1	23.9	20	33.3	53.6	27.6	39.2
Singapore	646.3	643.7	76.6	83.9	167.3	271.7	48	84.7
Thailand	132.3	146.6	10.7	41.1	23.8	67.1	25.3	67
<b>Asia average</b>	<b>181.1</b>	<b>197.8</b>	<b>28</b>	<b>46.1</b>	<b>63.5</b>	<b>121.2</b>	<b>39.3</b>	<b>66.2</b>
Euro zone	230.9	315.6	157.8	214.5	79.6	56.5	87.9	114.4
Japan	510.8	541.8	274.7	291.3	67.6	69.7	97.4	189.6
United States	79.6	107.9	279.3	314.1	152.1	105.8	138	175.8

Sources: ADB (2009); Lee and Park (2010), \* except for Bangladesh source is [www.imf.org/external/pubs/ft/scr/2010/cr1038.pdf](http://www.imf.org/external/pubs/ft/scr/2010/cr1038.pdf); for Pakistan sources are: [www.sbp.org.pk/bsd/10YearStrategyPaper.pdf](http://www.sbp.org.pk/bsd/10YearStrategyPaper.pdf), [www.osec.ch/sites/default/files/PakistanBankingSector2011.pdf](http://www.osec.ch/sites/default/files/PakistanBankingSector2011.pdf), and [www.sbp.org.pk/reports/annual/arFY03/Capital%20Market.pdf](http://www.sbp.org.pk/reports/annual/arFY03/Capital%20Market.pdf).

Notes: <sup>a</sup> Government Bonds outstanding in 2005

<sup>b</sup> for 2003. The average excludes Pakistan and Bangladesh since the dates differ, the two years for Pakistan are 2001 and 2008, for Bangladesh 2002 and 2008.

needs to be raised. The strategy of developing banks more than markets may, however, no longer be viable (Lee and Park, 2010). After the GFC higher capital adequacy requirements may restrict growth from banks, which suggests that markets must grow more in developed Asia.

Asian intraregional trade accounts for about 50 per cent of total trade, but its intraregional financial integration is limited. In 2004 intraregional cross-border portfolio liabilities were 2.25 per cent of Asian GDP, while its liabilities to either North America or the European Union were more than three times as much (Jung, 2008).

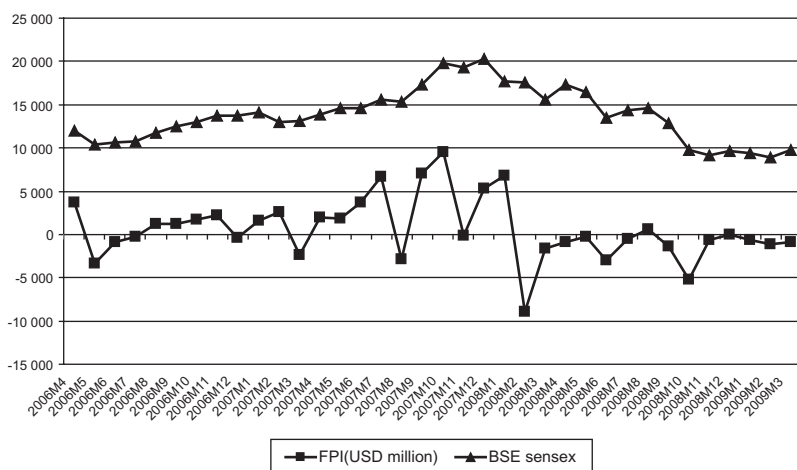
The international crises that occurred from 1990 to 2010 tested the financial strategies of countries in Asia. As we shall see in what follows, some were able to withstand those crises.

### **Withstanding crises**

Foreign inflows did make more resources available, demonstrated better organization and technology, aided price discovery, stimulated local investment, and allowed better allocation of world savings. However, inflows to emerging markets (EMs) are subject to sudden stops/reversals due to infectious panics that may be unrelated to domestic fundamentals (Calvo, Izquierdo and Mejia, 2004). The GFC in 2008 demonstrated this, as did the European debt crisis in 2011, when capital flowed out of EMs due to external risks.

As can be seen in figure 1, Indian FDI was relatively stable compared to other types of inflows, suggesting that it is worth reducing hurdles to entry of FDI. FPI was volatile but, as figure 5 demonstrates, it was risk sharing. Figure 5 shows FPI inflows were three times larger than outflows for equivalent variation in market indices. As markets fell during outflows the value remitted was lower. In the two years prior to October 2007 the value of the stock index of Bombay Stock Exchange (BSE) rose from 8,000 to 20,000 and FPI inflows were \$47 billion. Nonetheless, over the next year, as stock markets fell back to 8,000, outflows were only \$15 billion. Thus, FPI is able to take out much less in bad times compared to what it brings in during good times.

FPI inflows benefited firms, despite higher volatility, since loans became easier to get and more venture capital entered. The ratio of gross investment to GDP rose from 25.2 to 39.1 in the high growth period of 2003-2008. FPI tended to resume after stock indices had corrected. Households did not, however, benefit since retail participation shrank. The share of household financial savings in shares and debentures post-reform was low at 5.1 per cent in 2005/06 compared to 23.3 per cent pre-reform in 1991/92. Before the GFC (2007/08) it had increased to 12.5 per cent;

**Figure 5. India: FPI and BSE Sensex**

Source: Author's calculation based on data from RBI. Available from [www.rbi.org.in](http://www.rbi.org.in).

but post (2007/08) collapsed again to 2.6 per cent. The collapse was not only due to FPI related volatility; reforms had raised entry costs for the retail investor. Free foreign entry was allowed in mutual funds, but they focused on high-end customers and firms. Local pension funds had not grown adequately, and their exposure to stock markets was capped. The banked population itself remained low, so it was not surprising that exposure to stock markets was even lower. Despite the entry of new private banks, 60 per cent of the population remained unbanked.

Firms who were dependent on foreign trade and other short-term credit suffered severely as international credit markets froze. Even for long-term loans, reset clauses raised firms' costs as spreads widened. What this suggests is that firms must understand currency risk, and the interest differential between domestic and foreign loans must fall as a precondition for more liberalization of external borrowing.

Thus, foreign entry contributes, but it cannot, by itself, deepen markets. Other conditions also have to be in place. Eventual internationalization of Indian financial services is required as Indian companies go global. However, the sequencing has to be correct (RBI, 2006). Considerable deepening of equity markets and improvements in regulation has taken place but markets are still not broad based. Given the high domestic savings ratios, a larger percentage of household savings going to markets would make them more stable, as well as meeting investment needs without too large and risky an expansion in current account deficits.

Pakistan had a much freer capital account than Bangladesh. Taking 1995 as the reform date for the two countries, in the post-reform period Pakistan received help from IMF seven times.<sup>6</sup> In contrast, Bangladesh had only one arrangement with IMF, which was in 2003. India, which also retained capital controls and had more capital/domestic market deepening compared to Bangladesh,<sup>7</sup> did not have to go to IMF at all after the early 1990s. This suggests that strategic controls—the gradual liberalization of inflows, capital/domestic market deepening and capital controls—were protective.

Some scholars regard a departure from full liberalization as a failure of reforms (Rajan, 2009). Yet, the above experience shows a carefully sequenced path predicated on domestic reforms maybe a better strategy of liberalization. The distinction between types of flows is useful and must be retained. The countries affected by the East Asian crisis had high short-term debt. Later, during the GFC, the Republic of Korea had built up a large stock of foreign currency reserves. The security of reserves led to high short-term debt, and attacks on the currency (i.e. the won) occurred (Capital, 2010). This suggests that short-term debt should be discouraged regardless of other buffers. Free foreign entry without the other harder preconditions could put a country at unnecessary risk.

The sharp rise in inflows to EMs after 2003 was partly an aberration due to regulatory weakness in developed countries, so self-insurance was the correct policy response. It was not arbitrage driven by the low interest rates of developed countries, since the latter were also rising. The federal fund rate in the United States of America peaked at 5.25 per cent in 2007. Instead, it was high leverage, due to softening of regulation for investment banks that enhanced capital flows in response to profit opportunities. When Lehman Brothers failed in 2008 its leverage was 30:1 compared to 15:1 for a commercial bank.

During the exit, in 2010, from the coordinated macroeconomic stimulus that followed the GFC, the West and EMs were in different phases of their macroeconomic cycle. Higher growth in EMs and the near zero interest rates at home led to portfolio rebalancing towards EMs. The promised tightening of global regulations was relegated to the future and large Western financial institutions were encouraged to improve their impaired profits through trading. The low interest rates and quantitative easing major Western Central Banks implemented created large flows of capital into

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<sup>6</sup> There were two arrangements with IMF in 1997, and one each in 1993, 1995, 2000, 2001, and 2008.

<sup>7</sup> A review of the outcomes of the financial sector adjustment credit (FSAC), which Bangladesh contracted with the World Bank, done under the Structural Adjustment Participatory Review Initiative (SAPRI) in 2000 indicated that although reform implementation was satisfactory, desired outcome was not achieved.

EMs. They did not last, however, in periods of heightened global risk, such as the European debt crisis in 2011 during which FPI's rushed back to the United States.

A well-functioning Asian bond market (ABM) could reduce this type of instability. It would improve both domestic bond markets and intraregional financial integration; it would make the Asian financial system more balanced by encouraging markets as well as banks, providing alternative avenues for savings and sources for infrastructure investment, and recycling the region's large savings for regional long-term investment, thus reducing maturity and currency mismatches, and global imbalances, as dependence on capital markets in the United States would fall. Stable Asian savings would become available to finance large Asian infrastructure needs (for a similar view, see Jung, 2008).

Initiatives taken to further these aims include the establishment of the Asian Bond Fund (ABF), and the Asian Bond Market Initiative (ABMI). The ABF is a fund that comprises the foreign exchange reserves of regional member Central Banks (CBs); it aims to invest in regional bonds to contribute to the development of regional bond markets, and reduce dependence on dollar denominated assets. ASEAN+3<sup>8</sup> also seeks to strengthen regional markets through the ABMI, and build a common market structure that involves securitization, a credit guarantee, and a credit rating and settlement system essential for developing regional market interaction.

The 1990s crisis activated regional financial forums, even though there was no history of coordination in Asia. After the East Asian crisis Asian countries reformed their financial systems. Yet, reform of the international financial system (IFS) was not carried out (Goyal, 2010a). Consequently, Asia was pushed to adopt self-insurance and cooperation measures that improved its bargaining position and helped it survive the global crisis. The global financial crisis gave another push to efforts to promote regional financial stability, including multilateralization of the CB-reserve-pooling Chang Mai Initiative, making it more inclusive. South Asia is inadequately involved in these Asian initiatives, although dialogue has begun and needs to be pursued vigorously.

Capital account liberalization, deepening markets and improving government institutions and finance form a package. One alone is dangerous without the others. Empirical research has found that only countries with strong domestic institutions, markets and government finances benefit from foreign inflows (Chinn and Ito, 2002). These features determine absorptive capacity that reduces volatility and also gives countries the ability to withstand volatility. The global financial crisis showed that

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<sup>8</sup> ASEAN+3 expands the grouping of ten small Asian economies comprising ASEAN to include China, Japan and the Republic of Korea.

stronger international financial architecture and regulation are preconditions for full capital account liberalization. Countries with more controls have a lower probability of undergoing a financial crisis (Ostry and others, 2010). The experience of withstanding crises has implications for policy.

### **Policy recommendations**

Controls and prudential requirements are an essential line of defense. They can be designed to be market friendly.<sup>9</sup> Pure controls involve restrictions on cross border flows by residence. Market based controls include unremunerated reserve requirements and taxes. For debt pure controls must continue, but for portfolio flows the latter set may be considered, ideally as part of a global agreement on handling capital account distortions.

One argument made is that capital is successful in resisting taxes because taxes increase costs for countries that impose them. Nonetheless, just as prudential regulations are considered necessary for market stability, if cross border taxes contribute to crisis proofing they lower costs in the long run. Costs are also minimal if one country is not doing it alone (IMF, 2010).

Transparent, sequenced capital-account convertibility should follow domestic financial deepening and the ability of a country to absorb inflows productively, with the real sector as priority. The above arguments suggest that improvements in international financial regulation or regional arrangements would allow faster liberalization, since excessive risks under the current international monetary system delay further liberalization.

## **IV. DOMESTIC NEEDS AND FUTURE LIBERALIZATION**

Domestic deepening is a precondition for further liberalization. The latter is likely to progress fastest in the directions that satisfy critical development needs. Since these are similar in South Asia lessons from the Indian case can be applied to the region as a whole. Critical needs for financial development in the region are inclusion, infrastructure financing, and more effective risk management in the derivatives markets.

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<sup>9</sup> India has become a member of the Financial Action Task Force (FATF) against global terrorism and money laundering. Detailed electronic trails, linked information, and Know Your Customer (KYC) norms make it possible to discriminate between origins and types of flows together with central registration that reduces transaction costs.



## Inclusion

Although inclusion has been a major aim, reforms that have sought to increase inclusion have not been very successful, perhaps because such reforms have not “casted a wide enough net.” The idea of financial inclusion has to expand beyond the availability of credit to include banking, insurance and other financial services. Providers must be able to design a menu of services meeting lifecycle needs.

Financial institutions have been unable to leverage the shampoo sachet effect,<sup>10</sup> that is, to evolve a low denomination strategy that meets customer needs. Leveraging the shampoo sachet effect makes it possible to tap into huge potential numbers that make low margin/high volume a viable business model in India. In order to do so, systemic features that discourage small investors have to be changed, investor confidence must increase, and positive incentives must be offered. Possible measures to attain this goal should include:

- education of investors (increasing financial literacy)
- making one point credible information and suitable services available
- designing an ecosystem and service package to meet lifestyle needs
- reducing transaction costs in using technology for ease of entry and exit
- registering and rating of agents
- promoting simple, transparent, low-cost instruments, such as index funds and exchange-trade funds (ETFs)

## Infrastructure financing

Poor Indian infrastructure is both a bottleneck and an opportunity. Spending on infrastructure is currently 6 per cent of GDP, and is expected to reach 9 to 12 per cent to finance \$1 trillion over the twelfth Plan, 2013-2017. Long-term finance is required, and developing bond markets has some urgency in this context. More retail, pension funds participation, and limited investment by foreign investors in long-term rupee denominated bonds could make more long-term finance available. However, limits to entry of foreign capital into local currency bonds may still be necessary since structures can be created to index local currency denominated bonds to foreign currency or to make them payable in foreign currency, thus creating currency risk.

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<sup>10</sup> A marketing strategy in India introduced small, and therefore low priced, one time use shampoo sachets as an alternative to larger shampoo bottles. It was a great success, leading to a large expansion in sales to lower income groups.

Currently, the maximum tenor of financing available is 15 to 20 years, and that is in limited quantities. New instruments such as take-out financing are beginning to be used to rollover short-term financing, and allow the exit of risk capital. After a project begins earning, other more risk-averse types of capital are willing to participate. Such instruments can facilitate the entry of such capital for infrastructure project financing. Experience has been gained in private-public partnership contracts with good incentive features. If well done, they allow allocation of tasks according to comparative advantage and of risk to parties best able to bear it.

### **Risk: derivative markets**

Laying-off risk requires not only development of instruments and markets but also random movements in asset prices so that agents are not able to speculate on expected one-way movements. In thin markets, regulators sometimes have to create such movements, even while restraining excess volatility. Since firms cannot sell insurance to those who need it in imperfect markets, they may underinsure reversals of capital inflow. A well functioning bond market, for example, allows firms needing external resources to share their revenues with those with access to foreign funds (Caballero and Krishnamurthy, 2004).

Complex derivatives can be misused to create positions where the risk is non-transparent even to the holder. In 2007 many Indian firms entered into so-called “hedging deals”, which were actually complex bets on the value of the Swiss franc. With the steep rupee depreciation in 2008 many firms lost money.<sup>11</sup>

Although one leg of every over-the-counter (OTC) trade is regulated in India, so that information is available to the regulator, it is not available to the market as a whole. Standardized exchange traded instruments have the advantage of simplicity and more transparency, so risks are known. Yet, currently, day trading dominates in many instruments partly since physical delivery is limited. Measures are required to increase contrarian positions, open positions and hedging. The crisis demonstrated the robustness of exchanges compared to other financial institutions. Worldwide no exchange failed since they had multiple risk-management systems that covered tail risks. Post crisis, internationally, moves were made to report more derivative trade on exchanges.

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<sup>11</sup> Many newspapers carried such reports. See Gangadhar Patil, “India felt bolts of the sub-prime crisis”, *DNA*, Mumbai edition, 25 April 25 2012, for a recent analysis. Available from [www.dnaindia.com/india/report\\_india-felt-bolts-of-the-sub-prime-crisis\\_1680308](http://www.dnaindia.com/india/report_india-felt-bolts-of-the-sub-prime-crisis_1680308).

## **V. TOWARDS ACHIEVING GOALS**

This section illustrates the policies required to achieve the domestic goals of financial deepening and inclusion, in response to specific challenges in each sector.

### **Banks**

Indian credit deposit ratios remain one of the lowest in the world. There is considerable scope for expansion. Indian banks, especially private banks, provide better services to large corporations and high-net-worth individuals. For example, when average loan rates for blue chips were 5 to 7 per cent they were higher at 9 to 11.25 per cent for micro- and small-enterprises (MSEs). Banks also participate in infrastructure finance, but do not have the scale and size to meet large financing needs. Regulators set exposure limits for each sector, which prevent excessive lending to any one sector.

New developments in technology offer many opportunities for inclusion. The very rapid growth in mobile usage, their wide penetration, the competition and dynamism of mobile service providers (MSPs) in designing new products, suggests permitting mobile financial services could enable rapid strides in financial inclusion. Transaction costs would fall for users. India has about 100 million migrant workers from central India who need to send remittances home. Their security would increase since they would no longer have to carry cash. A mobile-based product would make customers independent of agents. Business correspondents (BCs)—RBI's favoured mode of inclusion—would only be required for enrolment, cash deposit and cash withdrawal.

RBI, however, wants to give banks the opportunity to expand based on using new technology and their widespread agent network. In smart card technology, an agent is required for initiation of all transactions. Account details and the transaction data are stored on the smart card. However, banks involvement in mobile financial services has advantages such as provision of additional banking services, increasing access to credit, and raising the level of savings for those currently excluded from the formal financial sector.

Because the overarching goal is to expand financial services to the unbanked population, specific policies have included expanding permitted points of service for small value transactions, for example by allowing MSPs to function as BCs, regularizing pilot projects, reducing the reporting requirements to set up no-frills bank accounts, and subsidizing inclusion for the non-banked population.

By 2012, the approval for mobile banking transaction volumes remained low. Banks found end-to-end encryption costly, and wanted to avoid it for low-value transactions. They found entering into partnerships with MSPs difficult. There were conflicts on which party created the most value. In 2008/09 RBI removed encryption for amounts less than 5,000 Indian rupees. It also lowered reporting requirements, reasoning that small cards could not be used for terrorist financing. Therefore, it is possible to revise limits upwards to permit transactions for certain items, such as the purchase of an air-ticket.

RBI did permit non-bank entities to issue mobile-based prepaid payment instruments, based on representation from MSPs. Yet, the response remained poor. MSPs value-added services have yet to improve. They are interested in the financial float, but RBI views this as equivalent to deposit taking, which it was not willing to allow non-banks. Since deposit insurance cannot be extended to non-banks, deposits with non-banks create risk.

In order to make banking more inclusive, policies should be implemented that (a) find innovative and non-exclusive ways to leverage new technology to spread banking services widely; (b) build on large mobile user bases, and meet the needs of specific population segments such as rural migrant labour; (c) find points of service that create utility for consumers, such as small grocery stores as business correspondents that also offer limited credit; and (d) increase competition between alternative service providers. If banks take too long to make the necessary policy changes, alternatives should be explored to ensure inclusion. Since unbundling services and distributing across providers is more feasible now, more competition can be created in specific sectors.

## **Markets**

Markets saw considerable progress but new issues came up over the reform years. A new stock exchange (NSE) was established to compete with the older BSE, but NSE soon became dominant with 85 per cent market share. In electronic markets physical distance does not matter, so the regional stock exchanges became defunct; like BSE, they could not compete. Electronic markets work like a network; costs fall in the one that is able to attract more customers, so others also find it in their interest to migrate and the equilibrium tips over. In the days of floor trading the greatest geographical clustering of financial intermediaries had the advantage. Yet, with ICT geographically dispersed intermediaries provide liquidity. The exchange with the best technology attracts the most customers. The governance structure of exchanges also changes to for profit corporations from a club of intermediaries distributing the rent among heterogeneous members. The latter does not work with dispersed

membership. Profits help in improving technology, which is now the main avenue of competition. BSE switched to a corporate management structure, but was unable to compete with NSE's more modern processes. Aware of the possibilities of tipping in networks, the exchanges try to lock in customers in various ways.

The Security and Exchange Commission (SEC) in the United States has a "best-price" stock-handling rule to prevent such lock in and to maintain competition across exchanges. When the New York Stock Exchange (NYSE) was using favourable network effects to lock-in users, resist automation, and reward insiders, SEC leveled the playing field by allowing "fast" automated markets that execute trades automatically to bypass a better price on a "slow" exchange, within some limits.

Therefore, regulators have to be proactive to maintain competition. For example, the judiciary had to intervene in the famous Microsoft case. Competition alone was inadequate given Microsoft's ability to tie its software sales with hardware, thus locking in customers. SEBI was not proactive in this sense. NSE made large profits and rewarded management while the user base remained narrow. BSE had acquired a bad name because of the dominance of insiders, but that governance structure was a function of the floor trading system and changed with its passing. NSE had a clean image. Yet, without regulation corporations will try to lock in customers and create entry barriers to increase profits. In addition, without competition transaction charges will not come down for consumers. In 2011 the Competition Commission of India found NSE guilty of anti-competitive practices.

Policy responses to deepen markets and create more inclusion should maintain competition together with high standards in exchanges. This will force exchanges to create products and strategies to expand the current narrow user base—creating the best outcomes for users. Competition and self-regulatory standard exchanges in a network industry are important for profit corporations. Exchanges did demonstrate greater stability and transparency during the GFC. International regulatory changes will encourage more OTC business to migrate to exchanges, even as higher capital adequacy inhibits banks.

## **Equity**

In 2010, trading in Indian markets was dominated by a few stocks, products, cities, and was largely short-term and cash settled. Only 1.5 per cent of the population was invested in markets; only 100 large cap stocks were liquid, with 90 per cent trading volume in the top 10 cities, and in equity and commodities (FOFM, 2010). Many instruments and exchanges were underperforming, and FPI inflows dominated equity markets.

Regulation removed the households' trusted distribution agents from the markets in favour of technology-enabled distribution. However, given the large job requirement in India, a technology-plus-people strategy may be more viable. Some big broking/brokerage houses are setting up large national chains with a good distribution network.

In 2010, an attempt was made to spread equity culture via mobile trading. At that time India had about 470 million mobile connections; dematerialized accounts for electronic trading of stocks (which indicate the number with the potential to actively trade stocks) amounted to 16 million users. Stock trading was already available through Internet banking. Brokers had to ensure secure access and encryption. The unique identification number used for Internet-based trading was to be applicable for securities trading using wireless technology.

To increase stability and inclusion, the following policies should be embraced: (a) leverage new technology for stable expansion of domestic equity participation, to reduce FPI dominated equity volatility; (b) generate more competition in exchanges to induce strategies for greater domestic inclusion; (c) create an ecosystem linking banks, markets and customers to effectively meet the needs of the latter; and (d) re-establish trusted technology-enabled distribution agents with local knowledge.

### **Fixed income markets**

India had a high government debt of 60 per cent of GDP in 2012, but the Indian debt market was underdeveloped, as was the corporate bond market. The government securities (G-secs) market was deep, and the risk-free market returns were attractive, especially with concessions, such as a held-to-maturity (HTM) part, which was not marked to market, so that capital losses could be avoided. HTM was originally given to ensure banks would find it profitable to hold G-secs as the statutory liquidity requirement was brought down. As interest rates became market determined and rose from repressed levels, the capital value of G-secs fell. G-secs available for trade in 2010 reached 10.5 trillion Indian rupees, even after removing the HTM part. Retail holding was negligible, while banks normally held G-secs in excess of a still high statutory liquidity requirement of 25 per cent net demand time liabilities. Yet, secondary trade remained small. The ability to hold to maturity reduced incentives to trade and to hedge interest rate risks.

To develop the debt market, as two-way movement of interest rates is established, policy should consider gradual reduction in the HTM component. Wider institutional and retail participation should be encouraged. However, more government debt must be held by households in a domestic retail market before freer

entry of foreign Indian rupee debt funds is allowed. The Greece sovereign debt crisis, and the post crisis explosion in government debts, suggests that risks associated with external holding of sovereign debt can be large. These risks include high interest rate volatility that the Indian system is not yet ready to face. Retail of G-secs will provide households with a well understood secure savings instrument, before they begin to trust fixed income funds. Inflation indexed bonds may help them migrate from holding excessive gold. Suggestions on domestic reforms to invigorate the corporate bond market include rationalizing stamp duty, incentivizing development of market makers, permitting pension type funds to invest in such instruments, taking measures to reduce the cost of issuing (e.g. simplifying disclosure documents for debt investments) and creating credit enhancement mechanisms.

### **Interest rate futures**

Globally, exchange traded derivatives, have 81 per cent share, and interest rate futures (IRFs) dominate in these. However, in Indian markets the share was only 1 per cent in 2009. Attempts were made in 2003 and in 2009 to start IRFs in Indian markets but they did not succeed. There was correction of some design flaws, but problems such as insistence on physical settlement remained. Initially there was lack of liquidity in the underlying G-secs on which the derivatives were written, since only two long-term G-secs were permitted. The fundamental reason for the failure of IRFs is that players continue to take positions to benefit from expected interest rate movements rather than hedge risks to capital value. Since interest rate movements are largely predictable, this is the advice brokers give to clients.

Policy interest rate surprises and homeopathic doses of interest rate volatility would create a demand for IRFs. Repurchasing corporate bonds, wider holding of G-secs, a reduction in HTM, and more active trading in G-secs would create more users of IRFs. Development of one segment would encourage other segments.

### **FX markets**

As in most countries of the world, OTC transactions conducted by banks had the largest share of FX transactions, with swaps being most widely used. Exchange traded futures were permitted in 2009 and saw rapid growth. Yet, limitations continued (e.g. they could not be settled in hard currency). Day traders dominated and open interest was low. The low contract size of \$1,000 and absence of customization in futures made OTC the preferred option for large corporate deals. Even so, there was continuous development of FX markets. For example, futures in multiple currencies and options were allowed. RBI slowly shifted from the earlier focus on underlying exposures to also allow indirect hedging. FIIs were still not

allowed the latter. As a consequence, the offshore market, which had provided them a hedging venue, grew and by 2011 exceeded the domestic market. Bank for International Settlements reported that Indian FX markets had the fastest growth rate among world markets although this slowed down after the global crisis. Even so, FX markets were still thin; large spikes could occur without CB intervention, especially given large capital movements in a currency that is not fully convertible.

In terms of policy, the above argument suggests that policy should strive for stable market development with the gradual removal of restrictions. Two-way movement of exchange rates, with movements limited to a moving 10 per cent implicit band will help develop markets and create the hedging habit.

The information presented above shows the direction of steady financial development that, if implemented, would support domestic goals.

## **VI. STRUCTURE OF REGULATION**

The crisis gave lessons for the regulatory structure India should follow.<sup>12</sup> The regulatory failure in advanced countries was due to the dominant belief in market efficiency and self-regulation along with the comparative advantage the United States had in the financial sector. This generated political support for finance driven growth. Regulation was thought to have a cost in terms of compliance, loss of innovation, and higher cost of funds. As a result, regulatory standards were lowered.

Both regulators and markets bought into the dominant paradigm of efficient and rational markets where failures do not occur. Yet, markets, as well as regulators, did fail, suggesting that better incentives are required for markets, and that regulators should have discretion. Financial regulation must ensure the integrity of financial markets and do so in a way that meets the needs of the real economy. In addition to supervision, enforcement and rules, four basic market failures require regulatory intervention: failure of information, failure of inclusion, behaviour that creates procyclicality, and the “too big to fail” (TBTF) syndrome. The market instability due to the European debt and the United States downgrade in 2011 made it clear that pumping up financial markets, in and of itself, does not deliver a sustained recovery.

The repeated crises may help discover the right combination of regulation and markets. Regulatory discretion invites excessive restraints, corruption and regulatory capture. However, rules need to incentivize better behaviour, moderating the basic market failures identified. A complex enough (or principle based) rule can be

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<sup>12</sup> This section is based on Goyal (2010b; 2012).



consistent with the basic principles, yet ensure prompt response reducing delays and regulatory forbearance. A combination of micro- and macro-prudential regulation can usefully moderate the failures. If regulation induced better outcomes through creating correct incentives for market participants it would enhance safety without crippling the energies and initiatives of markets.

There are many good reform suggestions that can be classified as principle-based rules. Prudential regulations, designed to reduce the level of risk, all have this character. Principle-based rules retain operational flexibility. For example, a rise in capital adequacy, linked to the stage of the cycle (a sharp rise in credit is normally a good indicator) would have to be implemented by the domestic systemic regulator. Implementing micro-prudential standards in financial markets such as prompt corrective action linked to banking parameters is a task for a local sectoral regulator. Principle-based rules avoid regulatory intervention in operational decisions of firms.

The key weakness the crisis highlighted was systemic risks and procyclicality due to spillovers from individual decisions. Yet, in the United States Dodd-Frank Act systemic risk was largely relegated to councils of regulators that could create delays. Regulators in one country would not want to be stricter than in their competitor countries. Basel III emphasizes holding more capital to absorb future losses. Yet, these are difficult to build in bad times. Such buffers reduce lending and are therefore procyclical. As a result, they are likely to be further postponed.

Another key weakness of proposed regulations is the focus on banks together with many exemptions. This will encourage the proliferation of “shadow banks”, which are institutions that conduct some banking activities but are subject to much less regulations than commercial banks are subjected to. Shadow banks, such as investment banks, hedge funds and mutual funds are a major source of volatility in capital flows to emerging markets. They also contribute to commodity price shocks that adversely impact emerging markets.

Global coordination can compel financial firms to choose safe over risky strategies, by removing the moral hazard from bailouts, and assuring that the competitor is not adopting risky strategies. Competition can force an institution to follow strategies that are high risk but offer high returns. That is why external regulatory standards are so powerful. If a bank is assured its competitor will not take more risks in order to make more money, it will avoid such strategies. Universal application of basic standards prevents regulatory arbitrage.

The simplicity of transaction-level regulation, based on broad, macro patterns, makes it easy to adopt such regulations universally, thus closing exemptions and preventing competitive arbitrage. Examples are margins, position limits, taxes,

loan-to-value ratios, and additional provisioning based on credit growth to specific sectors. Some of these have been successfully applied in many EMs, including India.

These types of regulation have the potential to close the gaps in international regulatory reform. They create good incentives, are automatically counter-cyclical, and can be made immune to regulatory discretion and micromanagement, thus protecting useful financial innovation. A package using these types of regulation could safely allow some fall in capital buffers, thus helping maintain lending. Such regulatory improvement and harmonization across countries would allow faster liberalization in EMs.

Macro-prudential regulation and micro-prudential regulation require different skills and information. The best alignment of information and incentives occurs if CBs are responsible for macro-prudential regulation, sectoral regulators for micro-prudential regulation, and there is good coordination between the two. Formal oversight authority over banks and markets generates information for CBs. This is useful for monetary policy, and policy analysis is useful for macro-prudential tasks. For example, FX and interest rate derivatives markets affect macro-variables. CBs have become crucial for the financial sector in their role as lenders of the last resort. The crisis forced them to expand this function beyond banks, as the financial sector diversified, its interlinkages thickened, and ability to inflate balance sheets procyclically and create risk increased. More responsibility for the systemic risk regulator must come with more power to check such credit inflation.

Micro-prudential supervisors also have an essential role since they have detailed knowledge of financial markets and institutions and will have critical information to assess stability risks. The macro/micro regulatory split has a functional basis. An apex body must not be a financial market regulator like the Financial Services Authority (FSA) in the United Kingdom, which would tend to support financial sector competitiveness and profitability, but a body for coordinating and sharing information led by the systemic risk regulator. The FSA has now been wound-up as an experiment that failed, with responsibility for banks reverting to the Bank of England.

### **Indian regulatory structure**

The post-1990s reform shift from microintervention to a strategy of macromanagement meant a shift to regulations based on broad macroeconomic patterns. For banks it meant strengthening prudential (safety) norms and the supervisory framework. The Basel I Accord capital standards were implemented fully by March 1996. Guidelines on income recognition, asset classification, provisioning, and capital adequacy were tightened. Therefore, regulators used a combination of restrictions, supervision, and incentives with a wary eye on market failure. Although

controls were reduced and steady market development encouraged, restrictions continued for complex financial products. One of the parties entering into an OTC contract had to be regulated by RBI. Guidelines on securitization imposed conservative capital adequacy requirements on exposures. Innovation in products and markets was slow.

The experience of scams in the securities market, involving a non-bank financial company (NBFC), a cooperative bank, and a commercial bank, after the 1990s reform led to a strengthening and extension of supervision and prudential norms to cover NBFCs. Given large capital flows there was a regulatory focus on systematically important non-deposit taking NBFCs and financial conglomerates. Thus, the scams pushed the regulators towards universal regulation, and towards closing the regulatory loopholes that created mature financial markets. Cross border flows across several regulatory jurisdictions led to initiatives for regulatory coordination across borders.

Nonetheless, most prescient were the macro-prudential regulations implemented much before their worldwide post-crises adoption. Countercyclical provisioning and differentiated risk weights for bank lending to bubble-prone sectors, such as real estate and equity markets, were examples of such regulation. They created incentives to moderate risky behaviour. A system of Prompt Corrective Action for banks based on capital adequacy, non-performing assets, and return on assets parameters gives an example of principle-based rules. All these reduced pro-cyclical incentives. There was an emphasis on stress tests to compensate for weakness in risk models.

This conservative yet forward looking regulation meant Indian banks were in sufficiently good health to make the cost of Basel III compliance low. Banks tier I capital to risk weighted assets was already 9.3 per cent in 2010 compared to the 8 per cent required.<sup>13</sup> Its history of macroprudential regulation and attention to the shadow or non-banking sector implies India's regulatory structure has a chance of being immune to the major flaws in the evolving global regulatory structure if it continues past practices. Some issues for India in accepting Basel III norms are: (a) very low credit to GDP ratio must be allowed to rise structurally, and (b) the large risk free statutory liquidity banks hold is not accepted as a liquidity buffer since it is compulsory. There is concern that the cost of OTC derivatives will rise, but electronic platforms like the Clearing Corporation of India are available to meet reporting requirements at reduced cost.

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<sup>13</sup> Gross non-performing assets (NPAs) as a percentage of loans had fallen from 12.8 in 2000 to 2.4 in 2010. They rose slightly in 2011, but the overall structural improvement dominated.

India had a precursor to the systemic council the US Dodd-Frank Act prescribed, as part of post GFC regulatory reform. A High Level Coordination Committee for Financial Markets (HLCCFM) was formed in 1992 in response to scams and regulatory arbitrage to monitor systematically important institutions with informal coordination across regulators, with the RBI governor as Chair. In 2010 a Financial Stability and Development Council (FSDC), with the Finance Minister as Chair, and RBI governor as Chair of the stability sub-committee replaced the HLCCFM. The structure was a diluted implementation of a series of committee reports that sought to shift power away from the RBI to favour market development (see, for example, Rajan, 2009). However, these reports were all influenced by the pre-crisis free market regulatory philosophy. Worldwide CBs were given more responsibility for financial stability after the GFC. India was unique in reducing the role of the CB, despite the current regulatory structure having done well in the crisis. Giving more responsibility to politicians goes against these worldwide trends. It also ignores lessons from India's history, where political control of the financial sector led to financial repression, which helped fund government expenditures. It is better to establish independent, professional regulatory institutions with good interaction and good peer review. The RBI's broader regulatory responsibilities provided information and contributed to designing preventive macro-prudential measures. There was synergy between monetary policy and regulatory responsibilities over many market instruments.

The Indian regulatory structure, however, is overweight on stability. Development is slow. Since coordination is poor among government agencies, the FSDC should function as a strengthened HLCCFM to improve coordination. The latter was set up in a crisis, without a well thought out structure and function. Better norms of functioning can be devised. Legislation can mandate the objectives of both systemic stability and market development.<sup>14</sup> It can plug regulatory gaps and assign responsibility with clear time lines to fulfil the objectives.

Better coordination is essential to deliver both stability and development. Modern financial products do not respect regulatory boundaries. For example, currency options in 2010 involved two regulators. Participating members must be registered with SEBI and follow its guidelines for position limits, margins, surveillance and disclosures. Yet, RBI retained the power to modify eligibility, limits, and margins and take any other actions required for stability and orderly development of FX markets.

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<sup>14</sup> EPWRF (2009) suggested creating a Financial Market Development Agency reporting to the Government as in New Zealand. A financial sector legislative reforms commission, set up in 2010, aims to modernize and harmonize Indian financial laws for a more interdependent market structure.

Sectoral regulation is best organized on a functional basis, but inevitable overlaps require a more complex definition of functions. Overlap may even create more regulatory ownership. A narrow regulatory jurisdiction can lead to neglect of the big picture. With its stability concerns addressed, RBI would favour deep liquid markets that could improve the transmission of monetary policy. Overlaps have been blamed for many delays but it is unclear allocation of responsibility that creates problems such as passing responsibility to the other, gaps in covering systemic risks, or high costs for industry in fuzzy dealings with many regulators.

Regulators will coordinate better if each regulator is vulnerable to the other. For example, while trading is the primary responsibility of SEBI, where it impinges on monetary policy or systemic risk RBI must continue to be involved, but with a mandate for market development. A clear allocation of responsibility, even with interlocking regulation, could resolve delays such as in establishing corporate repos. The government has since clarified that SEBI will be responsible for the primary and secondary markets in corporate bonds and RBI for corporate repos. With the systemic risk regulator coordinating the FSDC with a clear mandate for development, markets can be given more freedom to design products. The Finance Minister should come in only as a last and rare resort.

## **VII. CONCLUDING REMARKS**

In an emerging market it is natural to regard mature markets as an ideal, so that domestic systems are seen as lacking. However, the global financial crisis beginning in 2007 exposed flaws in the finance dominated markets and the financial regulations that existed in the West. Countries such as China and India that followed non-standard paths have done the best. Therefore, it is worthwhile to study those paths to see what worked. The definition of a mature financial system may have to be modified to some extent. The real sector must have priority since finance is a good tool but a bad master.

Nonetheless, even taking the goal of a mature financial system as given, it is not correct to ignore the path that leads to that goal and insist that the goal be reached instantly. The path may have to be long, with domestic institutions and markets to be strengthened before full capital account liberalization. Regulation that creates the correct incentives must be part of domestic market liberalization. Future liberalization should embrace what has worked in the past and be structured in a way that maximizes the probability that the region's critical developmental needs, such as inclusion and infrastructure, will be met. Improved domestic markets will benefit foreign participants as well. Japan's lost decade showed that recovery from financial

sector problems is difficult. As was the case in Japan, excessive financialization is imposing a large cost on Europe and the United States.

That India and China, with some controls, had the highest growth rates in the world, suggests that some controls can be useful. The experience of India's neighbours also demonstrates that a middling through path does best. Pakistan with a more open capital account suffered balance of payments crises and frequently had to turn to IMF for aid; Bangladesh retained more controls and needed IMF help only once. These two similar-sized countries had opposite experiences. India continued with strategic controls and had more successful domestic institutional and market deepening. In the post-reform period, India did not need IMF and was able to build up substantial reserves. India's experience suggests that moderate and sequenced external and domestic liberalization is the safe way to proceed.

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## PERFORMANCE OF FINANCIAL INSTITUTIONS IN BHUTAN

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*Bhutan is a small landlocked country in South Asia, located in the eastern Himalayas, and bordered by India and China. With a population of about 687,000, the country has a small economy that is also fragile. Nevertheless, its banking system plays an essential role in the growth and development of the country. This paper analyses the financial performance, the development and growth of bank and non-bank financial institutions of Bhutan for the period 1999-2008 using both traditional and data envelopment analysis (DEA). The DEA analysis shows that the country's financial institutions are efficient, with the Bhutan National Bank being the most efficient. Overall, the paper finds that the return on equity (ROE) of the financial institutions in Bhutan are comparable to that of international banks and the development of the financial sector in Bhutan has contributed to the growth of the Bhutanese economy.*

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*Key words:* Financial institution, performance, loan, deposit, net income, Bhutan.

### I. BACKGROUND

The role the financial system plays with regard to economic growth has been well researched both theoretically and empirically. As Bagehot (1873) argued, the distinguishing characteristic of British financial markets to mobilize savings to finance a variety of long-term illiquid investment opportunities led to industrialization in

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England. Schumpeter (1911) stressed that services provided by financial intermediaries and financial institutions facilitated technological innovation and economic development, thereby growth, by mobilizing resources and savings, evaluating projects, managing risks and monitoring the implementation of projects. Over the years, a volume of empirical research on the nexus between financial development and growth has been conducted. Some of the seminal empirical works in this area that establish a close relationship between economic and financial development are Goldsmith (1969), McKinnon (1973), King and Levine (1993a), Roubini and Sala-i-Martin (1991), Herring and Santomero (1991). These studies have explained in detail the link between financial development and steady state growth.<sup>1</sup> A number of cross country empirical studies on growth (Barro, 1991; Mankiw, Romer and Weil, 1992; Levine and Renelt, 1992; King and Levine, 1993b) have also established a strong link between financial development and growth after controlling relevant variables affecting growth. However, some studies also advocate that financial sector development is a result of economic development (Robinson, 1952; Greenwood and Jovanovic, 1990). Overall, it has been well established in literature that the financial sector plays a significant role as a mediator among economic agents, which leads to better resource mobilization, investment, risk management and overall economic development.<sup>2</sup>

At the macro level, the performance of the financial sector needs to be regulated and monitored with controlled checks as a way to deter serious setbacks to the economy, such as what occurred following the global financial crisis of 2008. On the other hand, at the micro level, competition in the financial sector places pressure on financial institutions to constantly improve their performance and operate efficiently. Banking institutions, which basically control the financial sector in developing and less developing countries, such as Bhutan, face a dynamic and competitive environment due to fast-paced global connectivity. While technological innovation creates more ways to deliver financial services, modern day consumers demand new services at their doorstep.

The financial sector in Bhutan is undergoing a transformation in which it is expected to efficiently fulfil the role of a mediator of resources in the economy. Due to growing competition in the financial sector, risk, profitability and balance-sheet structure management would not only play an important role in maintaining macroeconomic stability but also in the stability of the financial sector in Bhutan. The

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<sup>1</sup> However, some studies, such as Robinson (1952) and Lucas (1988), suggest that the role of financial development for growth has been overstressed.

<sup>2</sup> See Herring and Santomero (1991) for role of financial sector in economic performance.

financial sector is an important source of finance for businesses in a small economy such as Bhutan.<sup>3</sup> Since it is at the nascent stage in Bhutan, it is important to examine the performance of the country's financial institutions. The measurement of the financial performance of the financial institutions is well advanced within finance and management fields. However, as there has been no such study on the financial sector in Bhutan, this research systematically analyses the financial data of Bhutanese financial institutions and examines the performance of the financial institutions for the period 1999-2008. The data have been compiled from the published annual reports of the financial institutions. The main contributions of this research are that it organizes the data in a comparable manner, provides an overview of the financial sector and analyses the performance<sup>4</sup> of the financial institutions during a recent 10-year period.

The approaches for analysing the efficiency and performance of financial institutions can be broadly categorized as being parametric or non-parametric.<sup>5</sup> We use the traditional approach as well as the data envelopment analysis (DEA) to evaluate the performance of financial institutions in Bhutan. The traditional approach, which is used initially, includes an analysis of major financial indicators of these institutions over time to reflect a comparative performance. Next, we use DEA with different input-out variables on the basis of established studies in this area.

Bhutan is a small landlocked country in South Asia, located in the eastern Himalayas, and bordered by India and China. The country is home to a population of about 687,000, spread over an area of approximately 47,000 sq.km., with about 70 per cent of the land area under forest cover (World Bank, 2010). Much of the population lives in the central highlands, and almost two-thirds of the people are classified as rural inhabitants. The terrain is mostly hilly, with alpine peaks in the north, and some subtropical plains in the south.<sup>6</sup> Despite being landlocked, with difficult terrain and a widely dispersed population, the economy of Bhutan witnessed steady economic growth of 7 to 8 per cent annually over the last two decades, mainly

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<sup>3</sup> However, the rural population still depends on the informal source for financial business and other activities.

<sup>4</sup> The definition of performance or efficiency in financial institution is very broad. It depends on marketing strategy, organizational structure and human resource management (Roth and van der Velde, 1991; 1992; Heskett, Sasser and Schlesinger, 1997).

<sup>5</sup> See Berger and Humphery (1997) for complete review of 122 studies using alternative approaches.

<sup>6</sup> It is in the eastern Hindu Kush Himalayan range and surrounded by autonomous region of Tibet, China and Indian states. Bhutan is governed through three levels of administration – the central government agencies, district administrations, and block administrations. The country is currently divided into 20 districts (Dzongkhag), which are further divided into blocks (Gewogs) (Bhutan, Planning Commission, 2005).

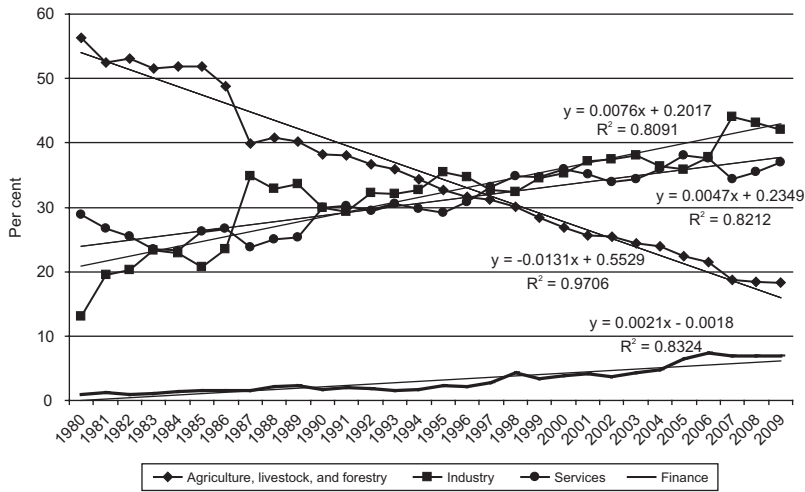
supported by the secondary sector (see table 1). However, the growth and contribution of the agriculture sector has slowed (from 56 per cent in 1980 to 18 per cent in 2007), particularly since 2000. While the contribution of the service sector to the economy has not shown much change, that of the finance and insurance sectors has improved marginally.<sup>7</sup> According to the World Bank (2010) the country’s per capita gross national income (GNI), one of the highest in South Asia, rose from \$730 in 2000 to \$1,900 in 2008.

Table 1. Structure and growth of Bhutanese economy: 1980-2010

Year	Contribution to economy				Growth of economy
	Primary	Secondary	Tertiary	Finance	Growth rate (%)
1980-1985	43.73	17.07	39.22	2.25	8.05
1986-1990	38.66	21.80	39.56	3.00	10.14
1991-1995	35.08	26.24	38.66	2.54	4.70
1996-2000	31.56	30.68	37.76	3.38	6.34
2001-2005	26.52	34.88	38.62	3.92	7.64
2006-2010	21.01	39.47	36.37	5.74	9.32

Source: National Statistical Bureau of Bhutan.

Figure 1. Share and trend of different sectors: 1980-2009



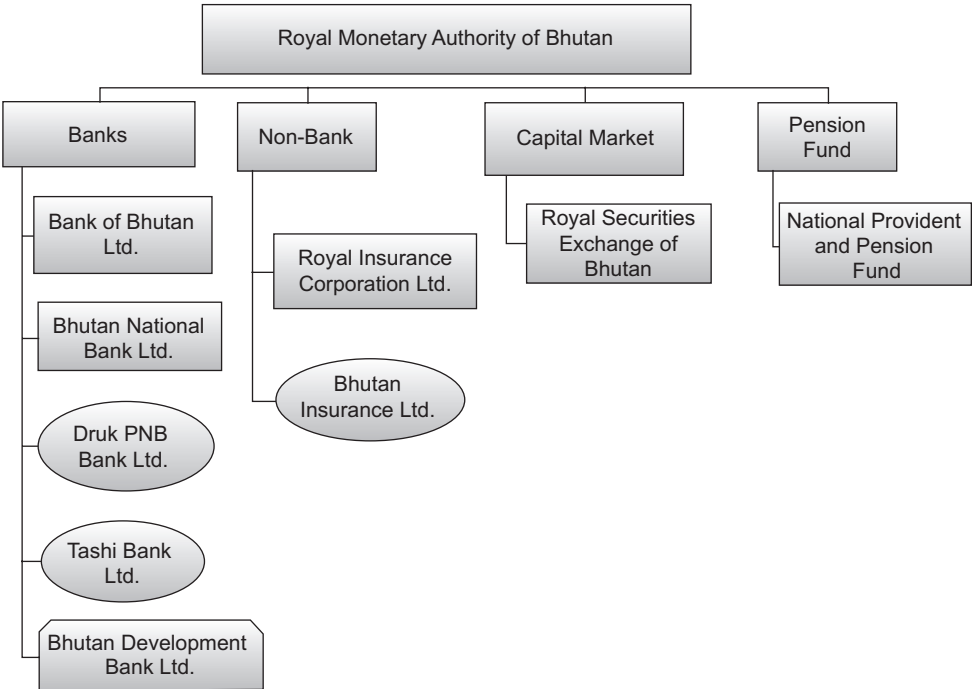
Sources: National Statistical Bureau of Bhutan (1999-2008) and authors’ calculations.

<sup>7</sup> See annex table A.1.

II. THE EVOLUTION AND STRUCTURE OF THE BHUTANESE FINANCIAL SECTOR

Established in 1982, the Royal Monetary Authority of Bhutan serves as the central bank of Bhutan. It is in charge of regulating the financial sector and formulating the monetary policy. The country has five banks<sup>8</sup> and two non-bank financial institutions.<sup>9</sup> In addition, the Royal Securities Exchange of Bhutan, the country’s stock exchange, and the National Pension and Provident Fund are important components of the Bhutanese financial sector. Figure 2 reports the structure of the financial sector in Bhutan.

Figure 2. Structure of the financial sector in Bhutan



<sup>8</sup> Bank of Bhutan Ltd., Bhutan National Bank Ltd., Druk Punjab National Bank Ltd., TBank Ltd. and Bhutan Development Bank Ltd.

<sup>9</sup> Royal Insurance Corporation of Bhutan Ltd. and Bhutan Insurance Corporation Ltd.

## **Bhutan: evolution of major banks and financial institutions in bank**

The Bank of Bhutan was established on 28 May 1968 as a joint venture with the Chartered Bank of India, Australia and China, which owned 25 per cent of the bank. As the public sector commercial bank with paid-up capital of 2.5 million Bhutanese ngultrum (Nu) (\$448,000) and a reserve amount of the same total, it carried out the function of a central bank until the establishment of the Royal Monetary Authority of Bhutan. The pace of growth of Bank of Bhutan was marginal due to the non-convertibility of the local currency until 1972 when it was reconstituted under the Royal Charter of Bank of Bhutan (1972) wherein the State Bank of India became a partner in capital and management with 40 shares.<sup>10</sup> In 2008, the Bank of Bhutan had a network of 26 branches and three extension counters with a paid-up capital of Nu 400 million (\$7.2 million). It enjoyed a complete monopoly until 1997 when the Unit Trust of Bhutan, an undertaking of the Government of Bhutan, was converted into country's second national bank, with initial capital of Nu 2.5 million (\$448,000), contributed by the Government and the Royal Insurance Corporation of Bhutan. Set up on 7 January 1975 as the country's only insurance company, the Royal Insurance Corporation of Bhutan continues to enjoy a monopoly in the country's insurance market. Initially, it managed the provident fund of government employees and public sector companies. However, in 2000, the National Pension and Provident Fund was created to manage the pension and provident fund of government and public sector employees.

Bhutan Development Finance Corporation Ltd. was established on 31 January 1988 as a financial institution to cater to the financial needs of the micro, small and medium enterprises with a special focus on agricultural development. It took over the administration of rural financial assistance from the Royal Monetary Authority. Loans were granted for improving farmland, acquiring livestock, and meeting short-term, seasonal requirements (Worden, 1991). Some of the funding for the corporation came from the Asian Development Bank (ADB), including an initial \$2.5 million loan in 1988 for the expansion of small- and medium-sized, private-sector industrial development. By 1991, the corporation had been privatized (Worden, 1991). The Government of Bhutan owns 87 per cent, with the remaining 13 per cent stake held by three financial institutions. The Bhutan Development Finance Corporation Ltd. was transformed into Bhutan Development Bank Ltd. in 2010. To develop the country's capital market, the Government with technical assistance from ADB set up the Royal Securities Exchange of Bhutan Ltd. in 1996. The exchange is owned by four

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<sup>10</sup> The State Bank of India share in Bank of Bhutan was reduced to 25 per cent in 1982 and then further to 20 per cent in 1987.

brokerage firms, namely Bank of Bhutan Securities Ltd., Bhutan National Bank Securities Ltd., Druk Securities Ltd. and Royal Insurance Corporation of Bhutan Securities Ltd. T Bank focuses its operations locally while the Druk PNB Bank has a 51 per cent stake in Punjab National Bank of India. Overall, there have been efforts to create institutions and inject competition in the financial sector to fulfil different socioeconomic objectives. It is, therefore, important to analyse the performance of these institutions in order to comprehend their efficiency and sustainability.

### **Recent development**

In recent years, the Bhutanese financial sector has experienced some major positive changes despite being affected by the global meltdown.<sup>11</sup> The tourism and hotel industries, major contributors to the economy and livelihood of the people, witnessed a decline in the tourist arrivals while the important ferro-silicon industries suffered due to a fall in the prices of the ferro-silicon products in the international market. The impact of the global meltdown on the tourism and steel industries trickled to the financial sector due to credit exposure in these two sectors of more than Nu 3 billion (\$52 million). As a response to the crisis as well as part of a drive to improve its operating performance, the ownership of Bank of Bhutan was transferred to Druk Holding Investment and major efforts were made to modernize the bank's services by using Flexcube CBS technology in eight branches under the guidance of Tata Consultancy Services. The implementation of the more advance technology has enabled the bank to introduce convenient delivery channels, such as SMS Banking, as well as on 28 May 2009, be the first bank in Bhutan to launch Internet banking facilities. The bank also constructed a \$1 million, Tier-III, state of the art data centre, the first of its kind in the country.

Taking into account the high level of importance customer satisfaction has on a bank's performance (Roth and van der Velde, 1991; 1992), the Bank of Bhutan regularly conducts feedback surveys to monitor the customer satisfaction level. In order to improve its services and customer conveniences, the bank introduced Sunday banking on 30 November 2008 to provide seven-day services to the customers in addition to the introduction of automated teller machines (ATMs) and Internet and mobile banking to improve the customer satisfaction level. Coinciding with the centenary and the coronation celebrations, Bank of Bhutan initiated social sector targeted loan schemes to assist, for example, the education sector and pensioners, and increased its loan base from 6,000 to 20,000 customers. The new technology, extensive branch network, a network switch and the planned installation

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<sup>11</sup> Although Bhutanese economy is weakly linked with the global economy, it was not completely immune from the global recession. Therefore, the global meltdown affected the economy marginally.

of 100 ATMs across the country, will enable the bank to provide “any time”, “anywhere” banking in the country. The bank implemented new organizational structures in order to improve its operations, including the creation of zonal offices to enable faster delivery of services. Another initiative is to give scholarships to 60 Bank of Bhutan employees for masters and post graduate studies abroad over a 10-year period.

Similarly, Bhutan National Bank upgraded to Flexcube CBS technology with a higher version and also introduced new delivery channels, including SMS and Internet banking and ATMs. In addition, the bank hired the services of the consulting firm Ernst and Young to restructure its operations in order to be better prepared to face the new competition in the Bhutanese financial market, resulting from the introduction of three new commercial banks.

The Royal Insurance Corporation of Bhutan has implemented a voluntary retirement scheme to make the organization more lean and in a better position to face the competition from Bhutan International Ltd., an insurance company that was introduced in September 2009. The corporation has also introduced new products and reduced policy premiums. The Bhutan Development Bank Ltd. moved its corporate office to a new building and obtained a licence, which enables it to accept deposits and function as a rural bank.

Although during the period 2005-2010 the Bhutanese financial sector has seen significant changes, it is too early to analyse their impact on the economy. A few of the recent major changes in the financial sector are as follows:

Two new commercial banks have begun operating in Bhutan, thereby increasing competition in the banking and financial sector. This has resulted in more comprehensive and innovative financial products and fair pricing of services and cost of capital in Bhutan. The Bhutan Development Finance Corporation was converted into Bhutan Development Bank Ltd. in 2010 and Druk PNB Bank began operating on 27 January 2010 by opening its first branch at Thimphu. Subsequently, it has opened two more branches, in Phuentsholing and in Wangdue. T Bank started its operation on 12 March 2010.

Bank of Bhutan Ltd., the oldest commercial bank, embarked on plan to connect all of its branches through a central server in 2008 by installing core bank solution technology. Prior to that, more than half of its branches were operated manually and the rest by using in-house developed computer software. By 2010, all the Bank of Bhutan branches were connected to the central server, enabling customers to do bank transactions from any branches. The other commercial banks



in Bhutan have since implemented core banking solution technology, making it possible for customers to operate from any branches.

1. The Royal Monetary Authority of Bhutan has implemented a central switch entitled the “Bhutan Financial Switch”, which connects all the banks in Bhutan. This provides a platform for the interbank settlements on a real-time basis. It also enables customers of any of the bank to withdraw funds from any ATM.

2. Bhutan National Bank had ATMs connected to central servers since its establishment only in Thimphu and Phuentsholing while Bank of Bhutan had a stand-alone ATM in Thimphu and Phuentsholing. Currently, there are several ATMs spread throughout the country and connected through the central switch.

3. The paid-up capital requirement for banks was increased to Nu 300 million (\$5.4 million) in 2008 from Nu 200 million (\$3.5 million) while the initial paid-up capital was set at Nu 200 million (\$3.5 million) with a requirement that it be raised to Nu 300 million (\$5.4 million) within three years from the commencement of business.

4. The establishment of Bhutan Insurance Ltd. reduced the monopoly of the Royal Insurance Corporation of Bhutan Ltd. As a result, there has been a dramatic improvement in insurances services and a reduction in costs related to insurance.

5. In 2009, the Royal Monetary Authority of Bhutan launched the Credit Information System (CIS). Funded by the financial institutions of Bhutan, CIS contains information on the borrowers (clients) of all financial institutions and is accessible instantly to all financial institutions for a minimal fee. This is expected to help in improving the quality of loans, which in turn, would cut the loan default rate and reduce the stock of non-performing assets.

6. In 2010, The Royal Monetary Authority introduced an electronic fund transfer and clearing system for automated clearing of the instruments between financial institutions in Bhutan.

7. Another major development in the banking sector in Bhutan is an initiative to introduce the Visa/MasterCard branded credit and debit cards. Bank of Bhutan was the first bank in Bhutan to obtain membership to the Visa International and MasterCard World Wide Services networks, followed by Bhutan National Bank and Druk PNB Bank. Foreigners travelling to Bhutan are able to use their Visa and MasterCard debit/card cards to make payment through a point of sale (POS) terminal and also withdraw cash from ATMs in Bhutan. In addition, Bhutanese travellers overseas are able to use cards to make payments through POS and withdraw cash from ATMs outside Bhutan.

8. A problem for Bhutanese economy has been the ongoing Indian rupee crisis, which has resulted in a large rupee deficit, which is being financed by the Government. The Bhutanese national currency, the ngultrum, and the Indian rupee have been pegged one to one since the introduction of the national currency. Initially, the ngultrum was freely circulated in parts of Assam and North Bengal and accepted as legal tender due to the convertibility of the ngultrum into the rupee. But, later, the central bank imposed a stringent measure on use of rupee to procure goods and services from India. This has resulted in a large rupee deficit due to the strong demand for goods and services from India. During the initial years of the introduction of the national currency, this problem did not persist because the developmental activities in Bhutan were being financed by India and the purchasing power of the Bhutanese people was low as the country was largely an agrarian society. However, amid rapid development and significant economic growth combined with the inflow of foreign aid in hard currency from multilateral organizations and other bilateral organizations, an increase in procurement of good and services from India has occurred. Also, the increase in tourist inflows from countries other than India has led to an inflow of hard currency while most of the goods and services are being imported from India. This basically, has led to growth in the hard currency and the depletion of Indian rupee assets in Bhutan. The interest that the central bank is paying to finance the deficit is basically to maintain the peg. At this point, relaxation of the peg would hurt confidence in the financial sector. Such a move would adversely affect economic growth as Bhutanese people would be less inclined to save and invest. As such, the property market, the only investment available for Bhutanese investors, has been escalating in Bhutan in line with a rapid increase in money supply. In addition to placing pressure on land and real estate, the restrictions on the use of the Indian currency have led to hoarding of the rupee in Bhutan. Unless the central bank provides enough rupees to the Bhutanese on demand, it will be difficult to maintain the one to one peg. In addition, of note, in the long run after the completion of a major hydropower project in Bhutan, the availability of the Indian rupee will rise dramatically and Bhutan could suffer from huge excess liquidity if the one to one peg is not maintained today.

### **Performance of recently established banks**

#### *Leverage (asset/capital ratio)*

The comparative analysis of the leverage (asset/capital ratio) shows that the recently established banks (T Bank and Druk PNB Bank) are much more leveraged than older banks, namely Bank of Bhutan and Bhutan National Bank (see table 2). Of the four banks in Bhutan, Bhutan Development Bank is the least leveraged with an asset to capital ratio of three times. This may be due to the fact that the bank was a non-bank financial institution until 2009 and it is taking time to leverage itself. In the

near future, we may notice that the assets to capital ratio of the bank may rise to the level of the other banks. Due to the increase in competition in the banking sector resulting from the launching of three additional banks, namely T Bank, Bhutan Development Bank and Druk PNB Bank, the leverage ratio of the banks in Bhutan is expected decline to a level comparable to the banks within the South Asian Association for Regional Cooperation (SAARC) region.

**Table 2. Leverage (asset/capital ratio)**

Financial institutions (FIs)	Calendar year 2010
Bank of Bhutan Ltd.	10.7
Bhutan National Bank Ltd.	11.6
Druk PNB Bank Ltd.	13.7
T Bank Ltd.	13.9
Bhutan Development Bank Ltd.	2.9
Royal Insurance Corporation of Bhutan Ltd.	5.7
Bhutan Insurance Ltd.	2.1

Source: Author's calculations based on data from Royal Monetary Authority of Bhutan, *Selected Economic Indicator*.

Bank of Bhutan and Bhutan National Bank together hold more than 70 per cent of the total assets held by the banks while the assets of the newly established banks hold less than 5 per cent each of total assets (see table 3). With greater competition and the introduction of more innovative financial products, the more equitable distribution of assets among the banks may occur.

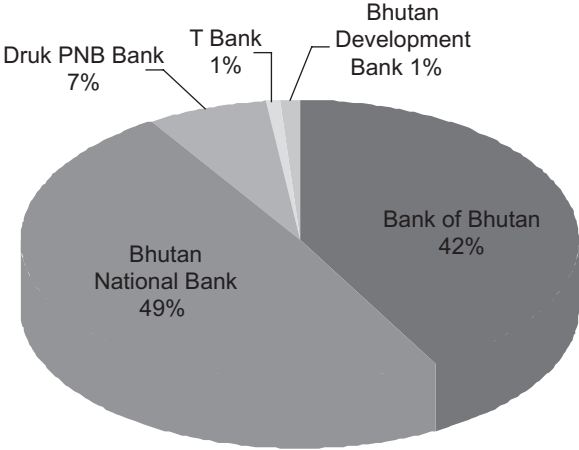
**Table 3. Market share of financial institutions based on assets**

Financial institutions (FIs)	Share to total assets of FIs		
	Apr 2010	Dec 2010	Sep 2011
Bank of Bhutan Ltd.	41.8%	43.4%	38.8%
Bhutan National Bank Ltd.	41.6%	32.5%	33.5%
Druk PNB Bank Ltd.	2.1%	6.3%	5.5%
T Bank Ltd.	0.7%	2.6%	4.3%
Bhutan Development Bank Ltd.	6.2%	6.1%	7.8%
Royal Insurance Corporation of Bhutan Ltd.	7.4%	8.7%	9.7%
Bhutan Insurance Ltd.	0.3%	0.4%	0.5%
Total (Nu in million)	50 349.7	64 302.5	64 362.5

Source: Author's calculations based on data from Royal Monetary Authority of Bhutan, *Selected Economic Indicator*.

In 2010, Bhutan National Bank held 49 per cent of the total deposits of the banking sector in Bhutan followed by Bank of Bhutan, which held about 42 per cent. The shares of Druk PNB Bank of T Bank and Bhutan Development Bank were 7 per cent and 1 per cent, respectively (figure 3). On the basis of the deposit market, Bhutan National Bank is the leading bank. The deposit share of the newly established bank may rise over time but it may take many years to catch up with the older banks as the newly established banks are concentrating only on the urban market.

**Figure 3. Market share of banks based on deposits share on the total deposit, 2010**



Source: *Selected Economic Indicators*, Royal Monetary Authority of Bhutan.

**Composition of deposits**

An analysis on the composition of the deposit shows that 77 per cent of the deposits of Bank of Bhutan are demand deposits, with the remaining 23 per cent, time deposits. The composition is an indication of the risk of liquidity (see table 4). The high proportion of demand deposits is a reflection on the fact the bank has been the main bank used by government as well as major government companies and projects. As government and government companies' deposits are replenished regularly, the bank is secure in terms of liquidity. In addition, these types of deposits reduce the bank's cost of capital as most of them are held interest free. Also of note, the Bank of Bhutan is part of Druk Holding Investment Groups, which owns major government companies and can raise deposits at times of a liquidity crunch.

**Table 4. Composition of deposits**

	2010 December	
	Demand deposit	Time deposit
Bank of Bhutan	77%	23%
Bhutan National Bank	34%	66%
Druk PNB Bank	48%	52%
T Bank	29%	71%
Bhutan Development Bank	70%	30%

Source: Author's calculations based on data from Royal Monetary Authority of Bhutan, *Selected Economic Indicator*.

### III. BRIEF SURVEY OF PREVIOUS LITERATURE

Literature on the performance of financial institutions is plentiful. A large number of studies either use a traditional approach for analysing financial indicators or parametric (Stochastic Frontiers Analysis) and non-parametric analysis (such as DEA) to evaluate performance and efficiency of financial institutions. The definition of performance or efficiency varies across studies and therefore the approaches used to examine are also different. Below, we briefly review a few studies which used the DEA approach for efficiency analysis.

Berger and Humphrey (1997) review 130 efficiency studies of financial institutions, including commercial banks. They explain that efficiency estimates of financial institutions in 21 countries vary across studies due to the use of different methods utilized in different studies. They found that the various efficiency methods do not necessarily yield consistent results and suggest some ways that these methods might be improved to bring about findings that are more consistent, accurate and useful. Avkiran (1999) used two DEA models, taking interest expense and non-interest expense as input variables and net interest income and non-interest income as output variables to examine the efficiency of Australian trading banks for the period 1986-1995. They found that efficiencies rose in the post-deregulation period and that acquiring banks were more efficient than target banks.

Chen and Yeh (1998) calculated the operating efficiencies of 34 commercial banks of Taiwan Province of China using the DEA model wherein input variables included staff employed and interest expense and output variables included loans, investment interest revenue, non-interest revenue and bank assets. Al-Shammari and Salimi (1998) examined the comparative operating efficiency of Jordanian commercial banks from 1991 to 1994 using a modified version of DEA. They found that the majority of banks were fairly inefficient during the study period. Noulas (2001)

employed both the DEA model and the traditional approach to study the effect of banking deregulation on private and publicly owned banks. The interest expense and non-interest expense were the input variables, and interest revenue and non-interest revenue were the output variables. The results revealed that state banks were less efficient than the private and that the gap widened during the study period.

Barr and others (2002) used five input variables, namely salary expense, premises and fixed assets, other non-interest expenses, interest expenses and purchased funds and four output variables, namely earnings, assets, interest income and non-interest income to evaluate the productive efficiency of commercial banks in the United States of America from 1984 to 1998. The authors found strong and consistent relationships among efficiency, inputs and outputs, as well as independent measures of bank performance. Grigorian and Manole (2002) used DEA for 17 European countries and found that foreign banks were more cost efficient than domestic banks. Furthermore, Jemric and Vujcic (2002) examined the efficiency of banks in Croatia by using two DEA models. They also found that foreign banks were more efficient. Similarly, Sturm and Williams (2004) and Havrylchuk (2006) used DEA and found that new foreign banks were more efficient than domestic banks in Australia and Poland.

Analysing the performance and efficiency of financial institutions using DEA is very popular. The present study contributes to the literature by carrying out an analysis of performance of four major financial institutions in Bhutan by using the DEA method and traditional ratios. It is hoped that the study would be useful to scholars and policymakers.

#### **IV. ANALYSIS OF PERFORMANCE: TRADITIONAL APPROACH**

In this section we analyse the performance of four major financial institutions by examining their profitability/earning/operational strategies productivity/efficiency, leverage and liquidity, capital adequacy, growth and aggressiveness and market shares by using traditional methods of looking at important financial indicators. The indicators for each financial institution are reported separately in annex tables A.1 to A.6.

##### **Profitability/earning/operational analysis**

###### ***Return on assets***

The return on assets (ROA) of Bank of Bhutan was very low during the period 1999-2008, averaging 1.1 annually. This was because government-owned companies tended to park their short-term volatile funds with the bank. These funds cannot be

invested to generate revenue. The average yearly ROA of Bhutan National Bank stood at 1.7 per cent during the period. However, the rate was closer to 2 per cent for most of the years with the average being weighed down by a fall in the rate to close to 1 per cent over a three-year period 2002-2004. The average ROA of Royal Insurance Corporation of Bhutan was 3.5 per cent, higher than Bank of Bhutan and Bhutan National Bank, with a standard deviation of 1.6, which was significantly higher than both banks. The Bhutan Development Finance Corporation, meanwhile, posted an average yearly ROA of 3.7 per cent for the period 1999-2008. The ROA of non-bank financial institutions was much higher than that of banks even though they can use only 63 per cent of their deposit base to generate income due to the cash reserve ratio requirement of 17 per cent and statutory liquidity requirement of 20 per cent.

### ***Return on capital***

The return on capital (ROC) reflects the performance of the company. Bank of Bhutan had a relatively high ROC in initial years of the study period but the rate fell in the later years, resulting in a yearly average ROC of 16.3 per cent for the study period, a rate that is acceptable based on most international standards. The average ROC rates of Bhutan National Bank and Royal Insurance Corporation of Bhutan were much higher at 21.7 and 19.9 per cent, respectively, than that of Bank of Bhutan. In general, these two institutions performed much better and were more stable than their counterparts during the study period. The Bhutan Development Finance Corporation posted the lowest ROC for the study period, with a yearly average of 11.9 percent. However, of note, the rate improved in the later years of the study period starting in 2004. The performances of Bhutan National Bank, the Royal Insurance Corporation of Bhutan and Bank of Bhutan, with averages that exceeded 15 per cent, is comparable to any global financial institution.

### ***Return on loans and investment***

The average yearly return on loan and investment (ROI) of the financial institutions in Bhutan was about 4 per cent during the period 1999-2008. The ROI figures of both Bank of Bhutan and Bhutan National Bank fluctuated widely, with high standard deviations. Though the average yearly ROI rate of Royal Insurance Corporation of Bhutan and the Bhutan Development Finance Corporation were comparable, they tended to post higher rates during the later years of the study period, with an average annual rate of 5 per cent.

### ***Revenue to asset ratio***

The revenue to assets ratio (RAR) shows how well assets are being utilized to generate revenue for the financial institutions. The average yearly RAR of Bank of

Bhutan for the study period was 5.5 compared to 7.4 and 6.1 for Bhutan National Bank and Royal Insurance Corporation of Bhutan, respectively. The RAR of Bank of Bhutan trended lower, indicating that the bank was unable to utilize its assets optimally. The declining revenue can be attributed to the fact that in the later years of the study the bank could no longer generate revenue from assets in its current account deposited in the State Bank of India. In addition, as mentioned previously, government-owned corporations and the salaries of civil servants are deposited in the bank. These funds are short-term in nature and too volatile to use for revenue. During the study period, the average yearly revenue to assets ratio of the Bhutan Development Financial Corporation was 11 per cent and throughout the study period it was always greater than 10 per cent.

### **Productivity/efficiency analysis**

During the study period, the average loans and investment per employee (ALIP) of Bank of Bhutan and Bhutan National Bank stood at Nu 7.8 million (\$136,000) and Nu 14.7 million (\$257,000), respectively. Though the ALIP increased for both banks, the rise was much faster for the latter, which posted the highest ALIP during the last few years of the study period. Notably, Royal Insurance Corporation of Bhutan and Bhutan Development Finance Corporation had an ALIP of Nu 8.6 million and Nu 7.4 million, respectively, for the ten years. Similarly, Bhutan National Bank had the highest average profit per employee, Nu 500,000 (\$9,000), was followed by Nu 400,000 (\$7,000) for Royal Insurance Corporation of Bhutan and Nu 300,000 (\$5,200) for Bank of Bhutan and Bhutan Development Finance Corporation for the reference period 1999-2008. Overall, we observe that all the four institutions have been improving in efficiency indicators, such as ALIP and average profit per employee.

### **Leverage and liquidity analysis**

The loan and investment to capital helps us to measure how leveraged a firm is. During the study period, the average annual loans and investment to capital ratio of Bank of Bhutan, the Bhutan National Bank, Royal Insurance Corporation of Bhutan and Bhutan Development Finance Corporation were 4.3, 5.8, 5.4 and 2.2, respectively. This indicated that Bhutan National Bank was the most leveraged followed by Royal Insurance Corporation of Bhutan, Bank of Bhutan and Bhutan Development Finance Corporation. In addition, the average loans and investment to total assets of Bank of Bhutan was 29.6 per cent as compared to 49.4 per cent for Bhutan National Bank. The average loan and investment to asset of Royal Insurance Corporation of Bhutan and Bhutan Development Finance Corporation was 84.4 per cent and 85.5 per cent, respectively, indicating that these two financial entities were the most leveraged institutions in Bhutan. The average loan to deposit ratio of Bank of



Bhutan and Bhutan National Bank were 25.5 and 51.9 per cent, respectively, whereas the average loan and investment to deposit ratio was 34.5 and 58.2 per cent, respectively during the ten-year period 1999-2008. More importantly, we observe that all four financial institutions had been continuously improving in these indicators (see annex tables A.1-A.4) and were almost comparable to international standards.

## **Capital adequacy**

### ***Capital to asset ratio***

This ratio measures first the financial health of the bank and second the ability of the bank to withstand the losses. The average capital to asset ratios (CAR) of Bank of Bhutan, Bhutan National Bank, Royal Insurance Corporation of Bhutan and Bhutan Development Finance Corporation were 7 per cent, 8.4 per cent, 17.5 per cent and 30.6 per cent, respectively. The low capital to asset of the banks can be attributed to the fact that the country imposed on financial institutions a 17 per cent cash reserve ratio and a 20 per cent statutory liquidity ratio. In addition, the assets of the Bank of Bhutan remained idle in the form of cash and balances with Royal Monetary Authority of Bhutan as these are short and volatile deposits of the governments, government projects and other large government corporations. During the 10-year period, the CAR of Royal Insurance Corporation of Bhutan improved much faster starting in 2004 whereas Bhutan Finance Development Corporation had a fairly strong CAR in the initial years.

### ***Capital to net loan***

The capital to net loan ratio (CNL) measures the equity cushion available to absorb losses on the loan book. We observe that Bank of Bhutan and Bhutan Development Finance Corporation are in a much better position to absorb the losses in the loan book with average CNL ratios of 34.3 per cent and 36.0 per cent, respectively, during the study period. However, the CNL of Bank of Bhutan declined during the 10-year period (from 40.1 in 1999 to 18.7 in 2008) whereas that of Bhutan Development Finance Corporation stayed above 30 per cent. The average yearly CNL ratios for Bhutan National Bank and Royal Insurance Corporation of Bhutan were 20.3 per cent and 22.6 per cent, respectively, for the reference period.

### ***Capital to net loan and investment***

Similar to CNL, capital to net loan and investment (CNLI) measures the equity cushion available to absorb losses on loans and investments. The average yearly CNLI of Bank of Bhutan, Bhutan National Bank, Royal Insurance Corporation of Bhutan and Bhutan Development Finance Corporation were 24.1 per cent, 18.3 per

cent, 20.3 per cent and 35.9 per cent, respectively. As with CNL, Bank of Bhutan and Bhutan Development Finance Corporation were better placed in this indicator though their CNLI ratio trended lower in the later years of the reference period.

## **Growth and aggressiveness**

### ***Bank of Bhutan***

During the 10-year study period, the assets of Bank of Bhutan grew on a year-to-year basis reaching Nu 21 billion (\$380 million) in 2008 from Nu 7.4 billion (\$133 million) in 1999. During the same period, loans and investments increased from Nu 2.2 billion (\$36 million) in 1999 to Nu 8.7 billion (\$156 million) in 2008. The deposits base increased from Nu 6.3 billion (\$113 million) in 1999 to Nu 18.4 billion (\$330 million) in 2008. The reserve and capital increased from Nu 451.3 million (\$8.1 million) in 1999 to Nu 1.5 billion (\$27 million) in 2008. Although the assets, loan and investment, deposits, revenue and reserve and surplus increased substantially in 2008, the operating cost increased marginally from Nu 86.5 million (\$1.6 million) in 1999 to Nu 197.5 million (\$3.5 million) in 2008.

### ***Bhutan National Bank***

We observe that Bhutan National Bank was quite aggressive during the 10-year period, with the bank experiencing impressive growth of its assets, deposit base, and loans and investment. The bank's assets expanded to Nu 16.7 billion (\$300 million) in 2008 from Nu 2.8 billion (\$50 million) in 1999 while the volume of loans increased from Nu 819.6 million in 1999 (\$14.3 million) to Nu 9.2 billion (\$165 million) in 2008. During the same period, the loans and investments increased from Nu 834.0 million (\$15 million) in 1999 to Nu 9.7 billion (\$174 million) in 2008. The deposit base and revenue increased from Nu 2.5 billion (\$45 million) in 1999 to Nu 14.6 billion (\$262 million) in 2008 and from Nu 199.2 million (\$3.6 million) in 1999 to Nu 1,149.6 million (\$20.7 million) in 2008, respectively. However, the operating expenses also increased from Nu 37.6 million (\$675,360) in 1999 to Nu 217.2 million (\$3.9 million) in 2008.

### ***Royal Insurance Corporation of Bhutan and Bhutan Development Finance Corporation***

The assets of Royal Insurance Corporation of Bhutan declined from Nu 2.5 billion (\$45 million) in 1999 to Nu 1.3 billion (\$23.3 million) as management of the government employee provident fund was changed from the corporation to the National Pension and Provident Fund. Gradually, the corporation rebuilt its asset base to reach Nu 2.7 billion (\$48 million) in 2008. Similarly, all other indicators such as

loans, investment, revenue and operating cost, also increased during the study time. Bhutan Development Finance Corporation also achieved positive growth in most of the financial indicators during the study period.

### **Market shares**

The market shares of the four major financial institutions have changed over time. In 1999, they were 55.8 per cent, 21.2 per cent, 18.4 per cent and 4.6 per cent of the total assets of the financial institutions for Bank of Bhutan, Bhutan National Bank, Royal Insurance Corporation of Bhutan and Bhutan Development Finance Corporation, respectively. By 2008, they had changed to 49.0 per cent, 38.9 per cent, 6.2 per cent and 5.9 per cent, respectively. Notably, the shares of Bank of Bhutan and Royal Insurance Corporation of Bhutan declined while the position of Bhutan National Bank increased. In terms of loans, the share of Bank of Bhutan held steady at about 36 to 37 per cent, whereas the share of Bhutan National Bank increased from 26.8 per cent in 1999 to 42.5 per cent in 2008. Royal Insurance Corporation of Bhutan saw its share of total loans decrease substantially from 22.6 per cent in 1999 to 10.1 per cent in 2008 while the share of Bhutan Development Finance Corporation declined from 14.7 per cent in 1999 to 10.2 per cent in 2008. Bank of Bhutan saw its share of total deposits decline from 71.7 per cent in 1999 to 55.8 per cent in 2008 while the share of Bhutan National Bank increased to 44.2 per cent in 2008 from 28.3 per cent in 1999.

## **V. DATA ENVELOPMENT ANALYSIS**

The definition of performance or efficiency in a financial institution is very broad. It depends on marketing strategy, organizational structure and human resource management (Roth and van der Velde, 1991; 1992; Heskett, Sasser and Schlesinger, 1997). There are different approaches to analysing the efficiency and performance of financial institutions which can be broadly categorized as being either parametric or non-parametric.<sup>12</sup>

DEA is a non-parametric approach. It is a linear programming technique which gives the set of best practices showing the optimal relations between outputs and inputs (see Charnes, Cooper and Rhodes, 1978). We use popular DEA with different input-output variables for the efficiency analysis.

We did an input-oriented constant returns to scale DEA. Three different DEA were done with different input-output variables. In the first model, we used capital as an input variable and revenue and profit as output variables. In the second model, we

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<sup>12</sup> See Berger and Humphery (1997) for complete review of 122 studies using alternative approaches.

used capital and employee as input variables and revenue and profit as output variables. In the third model, we used assets, capital and employees as input variables and revenue and profit as output variables.

As indicated early, Bank of Bhutan functions as the banker for the government and government-owned companies. Consequently, its asset base can become highly inflated during times when large government funds, such as revenue and grants, and government-owned companies are deposited in the bank. However, most of these large deposits are short-term and are withdrawn within short span of time, restricting them from being used to generate revenue. As these types of assets are volatile, when they are used as one of the input variables to measure efficiency, the results are misleading. Hence, the DEA result with assets, capital and employee as an input variable and revenue and profit as an output variable shows Bank of Bhutan as the least efficient financial institution.

The DEA 1 (input variable: capital; and output variable: revenue and profit) and DEA 2 (input variable: capital and employee; and output variable: revenue and profit) on efficiency produced a similar result for the study period. They indicated that Bhutan National Bank during the study period was the most efficient with the exception of certain periods during which Bank of Bhutan and Royal Insurance Corporation of Bhutan were more efficient. They also indicated that Bhutan Development Finance Corporation was the least efficient financial institution during the period 1999-2008 except in 2005. Using Bhutan National Bank as a benchmark, we observe that Bhutan Development Finance Corporation was less than 50 per cent efficient in comparison with Bhutan National Bank for the years 1999, 2000, 2001 and 2007. The efficiency of Royal Insurance Corporation of Bhutan was 89 per cent, 82 per cent and 77 per cent in 2006, 2007 and 2008, respectively, in comparison to Bhutan National Bank. In 2006, 2007 and 2008, the efficiency of Bank of Bhutan was 76 per cent, 76 per cent and 70 per cent, respectively, in comparison to Bhutan National Bank. In 2006, 2007 and 2008, the efficiency of Bank of Bhutan was 66 per cent, 44 per cent and 52 per cent, respectively, in comparison to Bhutan National Bank.

Overall, Bank of Bhutan was the second most efficient financial institution in 1999 and 2000 and most efficient from 2001 to 2004. Royal Insurance Corporation of Bhutan was the most efficient financial institution in 2002, 2003 and 2004 while 2005 to 2008, Royal Insurance Corporation of Bhutan was the second most efficient financial institution after Bhutan National Bank.

Table 5. Input-oriented constant returns to scale efficiency  
(comparison of different FIs for year)

Inputs	Capital				Capital and employee				Assets, capital and employee			
	Revenue and profit				Revenue and profit				Revenue and profit			
Year	Bank of Bhutan	Bhutan National Bank	Royal Insurance Corporation of Bhutan	Bhutan Development Finance Corporation	Bank of Bhutan	Bhutan National Bank	Royal Insurance Corporation of Bhutan	Bhutan Development Finance Corporation	Bank of Bhutan	Bhutan National Bank	Royal Insurance Corporation of Bhutan	Bhutan Development Finance Corporation
1999	0.99	1.00	0.55	0.33	0.99	1.00	0.55	0.33	0.99	1.00	0.58	1.00
2000	0.78	1.00	0.46	0.28	0.78	1.00	0.46	0.28	0.78	1.00	0.60	1.00
2001	1.00	1.00	0.87	0.38	1.00	1.00	0.87	0.38	1.00	1.00	1.00	1.00
2002	1.00	1.00	1.00	0.54	1.00	1.00	1.00	0.84	1.00	1.00	1.00	1.00
2003	1.00	0.76	1.00	0.66	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
2004	1.00	1.00	1.00	0.77	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2005	0.71	1.00	0.97	0.82	0.71	1.00	0.97	0.82	0.71	1.00	1.00	1.00
2006	0.76	1.00	0.89	0.66	0.76	1.00	0.89	0.78	0.76	1.00	1.00	1.00
2007	0.76	1.00	0.82	0.44	0.76	1.00	0.82	0.49	0.76	1.00	1.00	1.00
2008	0.70	1.00	0.77	0.52	0.70	1.00	0.77	0.52	0.70	1.00	1.00	1.00

Table 5. (continued)  
Input-oriented constant returns to scale efficiency of FIs  
(comparison of each financial institution across 10 years)

DMU	Bank of Bhutan			Bhutan National Bank			Royal Insurance Corporation of Bhutan			Bhutan Development Finance Corporation		
	DEA 1	DEA 2	DEA 3	DEA 1	DEA 2	DEA 3	DEA 1	DEA 2	DEA 3	DEA 1	DEA 2	DEA 3
1999	0.98	0.98	0.98	0.81	0.81	0.81	0.61	0.61	0.61	0.92	0.92	0.92
2000	0.96	0.96	0.96	1.00	1.00	1.00	0.81	0.81	0.81	0.95	0.95	0.95
2001	1.00	1.00	1.00	0.89	0.96	0.99	1.00	1.00	1.00	0.80	0.80	0.81
2002	0.78	0.85	0.85	0.77	0.80	0.80	0.90	0.90	0.90	0.86	0.86	0.87
2003	0.69	0.90	0.90	0.43	0.62	0.80	0.78	0.78	0.78	0.99	0.99	0.99
2004	0.60	0.84	0.84	0.50	0.66	0.78	1.00	1.00	1.00	1.00	1.00	1.00
2005	0.50	0.70	0.70	0.58	0.80	0.92	0.82	0.96	0.96	1.00	1.00	1.00
2006	0.60	0.94	0.94	0.61	0.77	0.83	0.87	0.98	1.00	0.94	1.00	1.00
2007	0.55	0.88	0.88	0.61	0.87	0.96	0.84	1.00	1.00	0.87	0.87	0.98
2008	0.57	1.00	1.00	0.66	1.00	1.00	0.77	1.00	1.00	1.00	1.00	1.00

Source: Author's estimations.

DEA 1: inputs: capital; output: revenue and profit.

DEA 2: inputs: capital and number of employee; output: revenue and profit.

DEA 3: inputs: assets, capital and number of employee; output: revenue and profit.

## **VI. COMPARISON WITH OTHER COUNTRIES**

Chansarn (2008) finds that the efficiency of Thai commercial banks is very high and stable while this study finds that the efficiency of the bank and non-bank financial institutions in Bhutan is also high but somewhat volatile. Unlike other small countries of the region, such as Bangladesh, Maldives, Nepal and Sri Lanka, the financial institutions in Bhutan have enjoyed fairly good growth in terms of credit, business volume and asset size with less volatility mainly due to strong regulation, the small size of the companies, the low level of integration and growing investment. Given the economic growth and changes in the demand of the financial services, the financial institutions in Bhutan and other small countries in the SAARC region must move into providing specialized financial services rather than focusing on the traditional ones. The following table gives a comparative picture of the performance of Bhutanese financial institutions vis-à-vis financial institutions in South Asia (see table 6).

The table below shows the comparative analysis of the financial institutions of Bhutan with the institutions in South Asia with respect to three indicators, namely ROA, asset to capital ratio (leverage) and net interest margin. The ROA of Bank of Bhutan and Bhutan National Bank are on the higher side of the benchmark. The ROA of Bhutanese banks have been higher than Indian, Bangladeshi and Nepalese banks but lower than the Pakistani banks. The ROA were fairly consistent from 2001 to 2006 in the Bhutanese banks while in other countries there were wide variances. This may be due to the fact that the Bhutanese economy did not experience any shock and also that during this period, only two banks operating in Bhutan, which enjoyed monopoly conditions but were not necessarily efficiently run. Similar to other countries, the ROA of the non-bank financial institutions was much higher than their counterparts in other South Asian countries.

Leverage as measured by the ratio of assets to capital measures is the extent to which assets of the financial institutions are financed by funds other than their own. The table shows the following: the leverage ratios of banks in Bangladesh, India, Nepal and Sri Lanka were lower than the benchmark range; the leverage for the banks in Pakistan was within the benchmark range but on the lower side; and the leverage for the banks in Bhutan were on the higher side of the benchmark range. This indicates that the banks in Bangladesh, India, Nepal, Sri Lanka and Pakistan were conservative or faced stiff competition in raising deposits and extending credit while the banks in Bhutan enjoyed a monopoly and were able to leverage much more than the banks in the region.

Table 6. Comparative analysis with regional banks and the benchmark

	Bangladesh	India	Nepal	Pakistan	Sri Lanka	Bhutan				Benchmark
						Bank of Bhutan	Bhutan National Bank	Royal Insurance Corporation of Bhutan	Bhutan Development Finance Corporation	
Return on assets (ROA)										
2001	0.74	0.90	-3.04	0.60	0.84	1.80	1.90	2.30	3.00	0.50-1.40
2002	0.54	1.10	-3.37	1.50	1.11	1.20	0.80	3.10	3.20	0.40-1.50
2003	0.59	1.50	-0.85	2.10	1.36	1.40	1.00	2.90	3.30	0.60-1.90
2004	-0.63	1.70	1.47	2.00	1.43	1.20	1.20	5.00	4.90	0.70-1.70
2005	1.30	1.30	1.79	2.90	1.70	0.90	1.90	4.40	5.50	0.70-1.80
2006	1.66	1.31	1.90	3.20	1.83	1.20	1.90	5.30	5.50	0.50-1.80
Leverage										
2001	4.17	4.96	3.27	4.58	3.90	14.60	13.60	10.10	3.30	6.58-15.01
2002	4.34	5.24	3.71	4.11	4.71	15.20	15.40	6.90	3.30	6.92-14.64
2003	4.77	5.75	3.87	5.03	5.53	13.00	8.30	6.30	3.70	6.01-15.39
2004	4.16	5.90	-3.00	6.45	5.63	12.80	10.00	4.70	3.20	6.41-15.18
2005	4.42	6.35	-4.65	7.64	6.93	13.10	10.30	4.40	3.00	6.32-15.25
2006	5.33	6.57	-4.14	8.94	6.78	13.60	12.20	3.90	2.80	6.02-14.37
Net interest margin										
2001	1.66	2.98	1.76	3.24	3.30	1.90	2.80	..	6.50	1.81-3.55
2002	1.04	2.66	0.92	3.10	3.78	1.20	2.10	..	8.10	1.83-3.55
2003	1.09	2.85	1.58	2.98	4.16	1.50	3.00	..	7.90	1.70-3.37
2004	1.97	3.07	1.99	2.87	3.97	1.40	3.40	..	9.30	1.45-3.12
2005	2.38	3.07	2.22	4.11	4.05	1.10	4.00	..	9.30	1.17-3.13
2006	2.04	3.01	2.26	4.41	4.31	1.50	3.80	..	8.40	1.04-2.93

Sources: Sophastienphon and Kuliathunga (2010) and authors' calculations from annual reports of financial institutions in Bhutan.



Similar to other banks in the region, the net interest margin of the banks in Bhutan was well within the benchmark range. However, the net interest margin of the Bhutan National Bank was close to the upper limit of the benchmark but the interest margin of the Bank of Bhutan trended towards the lower side of the benchmark.

## VII. FINANCIAL SECTOR DEVELOPMENT AND ECONOMIC GROWTH

### Granger causality: the vector error correction procedure

Our next step is to ascertain the direction of causality between economic growth (GDP) and financial sector development. Here the financial development is represented by total credit to private sector (CREDIT) and also total financial assets of financial institutions (ASSETS). As all three variables are found to be integrated of order one (see table 7), the vector error correction (VECM) procedure was used to see the direction of causality between economic growth and financial development. The general model for Granger causality for I(1) (see Engle and Granger, 1987) variables is given as:

$$\Delta GDP_t = \lambda + \sum_{i=1}^{p-1} \alpha_i \Delta GDP_{t-i} + \sum_{j=1}^{p-1} \beta_j \Delta ASSET_{t-j} + \Theta (GDP - \kappa ASSET)_{t-1} + U_t \quad (1)$$

$$\Delta ASSET_t = \tau + \sum_{i=1}^{p-1} \gamma_i \Delta GDP_{t-i} + \sum_{j=1}^{p-1} \delta_j \Delta ASSET_{t-j} + \Phi (ASSET - \kappa GDP)_{t-1} + U'_t \quad (2)$$

where the lagged ECM terms  $(GDP - \kappa ASSET)_{t-1}$  and  $(ASSET - \kappa GDP)_{t-1}$  are the lagged residuals from the co-integrating relation between GDP and ASSET. As Engle and Granger (1987) have argued, failure to include the ECM term will lead to misspecified models which can result in erroneous conclusions about the direction of causality. Thus, if  $GDP_t$  and  $ASSET_t$  are I(1) and cointegrated, Granger causality tests can be carried out using (1) and (2). However, there are now two sources of causation of  $GDP_t$  by  $ASSET_t$ , either through the lagged dynamic terms  $\Delta ASSET_t$  if all the  $\beta_i$  are not equal to zero, or through the lagged ECM term if  $\Theta$  is non-zero (the latter is also the test of weak exogeneity of GDP). Similarly,  $ASSET_t$  is Granger caused by  $GDP_t$  either through the lagged dynamic terms  $\Delta GDP_t$  if all the  $\gamma_i$  are not equal to zero, or through the lagged ECM term if  $\Phi$  is non-zero. The similar VECM model has been estimated between economic growth (GDP) and total credit to private sector (CREDIT). The results are reported in table 8. They show that there is an unidirectional causality from financial assets to growth as the ECM term is significant at 5 per cent. However, there is mutual feedback between economic growth and credit to private

sector. Overall, the results reveal that financial sector development in Bhutan leads to economic growth.

Table 7. ADF unit root test

Variables	Level		First difference	Result
	Without trend	With trend	Without trend	
Ln GDP	-1.27	-1.54	-4.31**	I(1)
Ln ASSETS	-0.95	-1.04	-5.62**	I(1)
Ln CREDIT	-0.36	-0.51	-4.76**	I(1)

Note:       \*\*Represent statistical significance at the 1% level. AIC criterion is used to choose the optimal lag length.

Table 8. Causality between real GDP and finance using VECM

Causality between GDP and infrastructure			
Dependent variable	$\sum_{j=1}^p \text{Ln } \Delta \text{ASSET}_{t-j}$	$\sum_{j=1}^p \text{Ln } \Delta \text{GDP}_{t-j}$	Lagged ECM term
	$\Sigma \beta_i = 0$ : F-stat (p-value)	$\Sigma \beta_i = 0$ : F-stat (p-value)	$\Theta = 0$ : t-stat (p-value)
$\Delta \text{Ln GDP}$	0.32 (0.85)	–	-1.11 (0.15)
$\Delta \text{Ln ASSET}$		0.79 (0.61)	-2.64* (0.02)
Causality between GDP and credit			
	$\sum_{j=1}^p \text{Ln } \Delta \text{CREDIT}_{t-j}$	$\sum_{j=1}^p \text{Ln } \Delta \text{GDP}_{t-j}$	Lagged ECM term
$\Delta \text{Ln GDP}$	3.35 (0.11)	–	-2.33* (0.03)
$\Delta \text{Ln CREDIT}$		1.45 (0.27)	-0.92 (0.21)

Notes:       \* denotes significance at 5% level. Optimal lag is selected on the basis of Akaike Information Criterion (AIC).

## **VIII. CONCLUSIONS AND POLICY RECOMMENDATIONS**

The financial sector in Bhutan has grown over the study period in terms of assets, loans and investment, deposit base, revenue and profit. The return of capital (ROC) and return on loan and investment (ROI) of the sector was impressive and comparable to international standards. The analysis finds that in terms of ROC and also efficiency, Bhutan National Bank was the most efficient financial institution in Bhutan. The reason for its relatively high level of efficiency could be that it started fresh with a manageable business size. In terms of liquidity and capital adequacy, Bank of Bhutan seemed to be more secure and stable while Bhutan National Bank was much more leveraged. Therefore, Bank of Bhutan has much room to expand further provided it expands its deposit base and does not lose out to new banks.

The economy of Bhutan is projected to expand rapidly supported by the following actions: (a) the implementation of several joint venture power projects between the Government of India and the Government of Bhutan; (b) the opening up of the tourism sector; (c) steps to liberalize the economy to attract foreign direct investment; (d) the establishment of special economic zones; (e) efforts to liberalize the power sector for the private sector; (f) the establishment of information technology (IT) parks; (g) the move to allow the leasing of agricultural land for large agro-companies; and (h) the establishment of new banks. In line with the expanding economy, the Bhutanese financial sector is also expected to witness tremendous growth and experience major changes in the next decade.

This paper uses the data envelopment analysis (DEA) in the performance measurement of Bhutanese financial institutions along with some traditional measures, such as return of equity, return on assets and the credit-deposit ratio, during the period 1999-2008. These two methodologies are used to provide a more comprehensive and complete picture of the Bhutanese financial institutions' performances. The main findings of this study are the following. Firstly, most of the financial institutions appear efficient when both the DEA and the traditional measures are used in comparison to the commercial bank and financial institution in other countries. Secondly, state-owned financial institutions were less efficient than the privately owned financial institutions. This may be due to the fact that the private financial institutions, to a large extent, are driven by corporate goals and performance. Thirdly, two traditional ratios, namely loans to deposits and loans to total assets, indicate that the Bank of Bhutan (80 per cent state-owned and 20 per cent owned by the State Bank of India) to some extent did not use its available resources properly. This suggests that there was excess liquidity in the system and that Bank of Bhutan should develop new strategies in order to utilize the available resources. Next, the individual banks can identify competition and benchmark

themselves with respect to competition with international banks and strive for excellence. Moreover, a large majority of the Bhutanese people do not have access to the financial services, such as e-loans, deposits and insurance. Therefore, some of the banks should target this section of population. Furthermore, as most of the bank and non-bank financial institution provides traditional banking and financial services, such as loans, deposit-taking and insurance, the central bank and the Government must encourage the establishment of more private banks with a mandate to offer specialized financial services. Finally, the causality analysis reveals that financial sector development in Bhutan leads to economic growth.

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## APPENDIX

Annex table A.1. Performance indicators of Bank of Bhutan

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Avg.	SD
<b>Leverage and liquidity</b>												
Loans and investment/capital ratio	4.8	4.1	4.1	4.6	3.1	4.1	3.5	4.0	4.5	5.7	4.3	0.7
Loans and investment/total assets (%)	29.2	24.6	27.7	30.2	23.5	32.2	26.9	29.4	31.1	41.2	29.6	4.9
Assets/capital (%)	16.4	16.7	14.6	15.2	13.0	12.8	13.1	13.6	14.6	13.9	14.4	1.4
Loans and investment to deposits (%)	34.3	29.6	32.7	35.4	28.0	38.3	31.4	33.2	35.2	47.1	34.5	5.3
<b>Profitability/earning/operation</b>												
Return on assets (ROA) (%)	1.0	1.0	1.8	1.2	1.4	1.2	0.9	1.2	0.9	0.8	1.1	0.3
Return on loans (ROL) (%)	6.3	7.3	11.2	5.9	7.9	5.0	4.4	4.5	3.5	2.1	5.8	2.6
Revenue to assets (%)	6.6	6.3	7.5	5.7	5.9	5.0	4.2	4.6	4.1	4.5	5.5	1.1
Net interest margin (net interest/assets) (%)	0.9	0.5	1.9	1.2	1.5	1.4	1.1	1.5	1.7	2.0	1.4	0.5
<b>Productivity/efficiency</b>												
Loans and investment per employees	5.1	4.8	5.8	7.2	5.7	8.3	7.0	9.0	10.4	14.5	7.8	3.0
Net profit per employee	0.2	0.2	0.4	0.3	0.3	0.3	0.2	0.4	0.3	0.3	0.3	0.1
Interest expense/total expenses (%)	77.2	81.7	80.9	83.2	80.7	74.9	70.7	66.4	59.6	59.7	73.5	9.0
<b>Income and sources of fund diversification</b>												
Share of interest income (%)	74.1	70.5	78.9	78.2	76.4	73.4	74.5	72.5	75.8	75.0	74.9	2.6
<b>Credibility or cost of fund:</b>												
Interest expense/deposit (IE/D) (%)	4.6	4.8	4.7	3.9	3.6	2.8	2.4	2.1	1.7	1.6	3.2	1.3

Annex table A.1. (continued)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Avg.	SD
<b>Capital adequacy</b>												
Capital funds/total assets (%)	6.1	6.0	6.8	6.6	7.7	7.8	7.6	7.4	6.9	7.2	7.0	0.6
Capital funds/net loans and investment (%)	20.8	24.4	24.7	21.8	32.7	24.2	28.3	25.0	22.1	17.4	24.1	4.2
<b>Growth and aggressiveness</b>												
Growth of assets (%)	..	13.9	12.0	22.5	2.9	11.5	9.6	17.5	14.5	7.3	12.4	5.7
Growth of loans and investment (%)	..	-4.0	26.2	33.3	-19.9	52.7	-8.4	28.5	21.1	42.3	19.1	24.5
Growth of deposits (%)	..	11.1	14.2	23.4	1.2	11.6	11.6	21.5	14.2	6.4	12.8	6.8
Growth of profit (%)	..	21.9	98.4	-20.4	20.7	-0.0	-16.3	44.5	-7.7	-8.6	14.7	37.8
Growth in revenue (%)	..	9.8	33.0	-7.5	6.0	-4.7	-7.6	28.5	2.7	17.0	8.6	15.0
Growth reserve and capital (%)	..	12.4	27.8	17.9	20.0	13.1	7.2	13.4	7.0	12.4	14.6	6.5
<b>Market shares</b>												
Share to total assets (%)	55.8	58.9	59.4	61.1	59.0	58.0	57.3	56.1	57.6	49.0	57.2	3.3
Share to total loans and investment (%)	48.6	45.2	45.5	46.1	34.4	37.5	34.0	36.7	34.5	37.8	40.0	5.6
Share deposits (%)	71.7	67.5	69.0	68.6	68.6	66.0	66.0	63.8	66.8	55.8	66.4	4.3

Source: Author's calculations.



Annex table A.2. Performance of indicators of Bhutan National Bank

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Avg.	SD
<b>Leverage and liquidity</b>												
Loans and investment/capital ratio	4.6	3.8	4.0	6.2	4.4	6.7	6.2	6.9	7.7	7.6	5.8	1.5
Loans and investment/total assets (%)	29.6	25.2	29.7	40.0	53.4	66.4	60.1	56.5	74.9	58.2	49.4	17.2
Assets/capital	15.5	15.0	13.6	15.4	8.3	10.0	10.3	12.2	10.3	13.0	12.4	2.6
Loans and investment to deposits (%)	33.5	28.6	34.0	44.8	64.7	79.7	72.9	65.9	91.1	66.7	58.2	21.6
<b>Profitability/earning/operation</b>												
Return on assets (ROA) (%)	1.7	2.7	1.9	0.8	1.0	1.2	1.9	1.9	2.4	1.9	1.7	0.6
Return on loans and investment (ROL) (%)	5.7	10.7	6.4	2.0	1.9	1.8	3.2	3.4	3.2	3.2	4.1	2.8
Revenue to assets (%)	7.1	9.0	8.9	6.8	6.9	6.8	7.6	6.8	7.7	6.9	7.4	0.9
Net interest margin (net interest/assets) (%)	2.9	3.1	2.8	2.1	3.0	3.4	4.0	3.8	5.3	3.7	3.4	0.9
<b>Productivity/efficiency</b>												
Loans and investment per employees	6.2	6.7	7.4	11.1	13.1	19.9	16.1	17.4	24.4	25.0	14.7	7.0
Net profit per employee	0.4	0.7	0.5	0.2	0.3	0.4	0.5	0.6	0.8	0.8	0.5	0.2
Interest expense/total expenses (%)	70.3	75.8	79.7	76.9	72.7	67.8	67.4	62.7	60.2	62.8	69.6	6.6
<b>Income and sources of fund diversification</b>												
Share of interest income (%)	85.7	79.7	84.6	89.3	93.6	89.0	85.7	90.6	98.8	85.8	88.3	5.3
<b>Credibility or cost of fund</b>												
Interest expense/deposit (IE/D)	3.6	4.6	5.4	4.4	4.2	3.1	3.1	2.7	2.8	2.5	3.7	1.0
<b>Capital adequacy</b>												
Capital funds/total assets	6.5	6.7	7.4	6.5	12.0	10.0	9.7	8.2	9.7	7.7	8.4	1.9
Capital funds/net loans and investment	21.8	26.4	24.7	16.2	22.5	15.0	16.2	14.5	13.0	13.2	18.4	5.0

Annex table A.2. (continued)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Avg.	SD
<b>Growth and aggressiveness</b>												
Growth of assets	..	36.1	7.6	22.8	9.8	24.5	12.7	28.9	4.3	59.7	22.9	17.4
Growth of loans and investment	..	15.7	27.1	65.2	46.5	54.7	2.0	21.2	38.2	24.1	32.8	20.1
Growth of profit	..	73.4	6.2	-6.3	11.9	21.5	27.1	14.2	19.1	42.3	23.3	23.1
Growth in revenue	..	115.1	-24.1	-48.7	42.0	43.9	85.2	26.5	30.1	24.4	32.7	49.6
Growth reserve and capital	..	40.3	19.0	8.3	103.3	3.2	9.9	8.8	23.9	26.1	27.0	30.9
<b>Market shares</b>												
Share to total assets	21.2	26.7	25.9	26.7	27.5	30.2	30.6	32.9	30.8	38.9	29.1	4.8
Share to total loans and investment	18.7	21.0	21.3	26.7	36.4	40.3	40.6	41.3	44.4	42.4	33.3	10.2
Share deposits	28.3	32.5	31.0	31.4	31.4	34.0	34.0	36.2	33.2	44.2	33.6	4.3

Annex table A.3. Performance indicators of Royal Insurance Corporation of Bhutan

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Avg.	SD
<b>Leverage and liquidity</b>												
Loans and investment/capital ratio	6.0	9.0	8.4	6.0	5.3	4.5	4.3	3.7	3.6	3.6	5.4	1.9
Loans and investment/total assets (%)	41.2	79.1	83.2	87.1	84.7	95.1	97.1	94.0	95.3	87.1	84.4	16.3
Assets/capital	14.7	11.4	10.1	6.9	6.3	4.7	4.4	3.9	3.8	4.1	7.0	3.8
<b>Profitability/earning/operation</b>												
Return on assets (ROA) (%)	1.0	1.6	2.3	3.1	2.9	5.0	4.4	5.3	5.3	4.5	3.5	1.6
Return on loans and investment (ROL) (%)	2.4	2.1	2.7	3.6	3.5	5.3	4.5	5.6	5.5	5.1	4.0	1.4
Revenue to assets (%)	1.7	3.6	5.2	5.3	5.2	8.4	7.8	8.2	8.4	7.2	6.1	2.3
<b>Productivity/efficiency</b>												
Loans and investment per employees	5.0	6.1	8.3	7.4	8.0	8.3	10.0	9.7	11.3	12.3	8.6	2.2
Net profit per employee	0.1	0.1	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.6	0.4	0.2
<b>Income and sources of fund diversification</b>												
<b>Capital adequacy</b>												
Capital funds/tot assets	6.8	8.8	9.9	14.5	15.9	21.1	22.6	25.4	26.3	24.2	17.5	7.3
Capital funds/net loans and investment	16.5	11.1	11.9	16.7	18.7	22.2	23.2	27.0	27.6	27.7	20.3	6.2
<b>Growth and aggressiveness</b>												
Growth of assets	..	-45.5	14.5	-12.8	12.1	-2.8	13.7	6.0	15.5	32.1	3.6	22.3
Growth of loans and investment	..	4.7	20.4	-8.7	9.1	9.1	16.1	2.5	17.1	20.8	10.1	9.7
Growth of profit	..	-9.8	59.1	19.9	5.3	67.0	-1.0	27.2	15.2	12.2	21.7	26.0
Growth in revenue	..	16.7	67.4	-10.7	10.6	55.1	5.4	12.6	17.4	12.9	20.8	24.6
Growth reserve and capital	..	-29.7	29.2	27.4	22.7	29.0	21.7	19.3	19.4	21.5	17.9	18.2

Annex table A.3. (continued)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Avg.	SD
<b>Market shares</b>												
Share to total assets	18.4	9.3	9.6	7.0	7.4	6.3	6.5	5.7	5.9	6.2	8.3	3.8
Share to total loans	21.8	23.6	21.9	18.5	17.8	13.8	15.7	12.8	11.6	10.1	16.7	4.7
Share to total loans and investment	22.6	23.0	22.1	15.3	15.5	12.1	13.9	12.0	10.9	10.1	15.7	5.0

Source: Author's calculations.

Annex table A.4. Performance indicators of Bhutan Development Finance Corporation

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Avg.	SD
<b>Leverage and liquidity</b>												
Loans and investment/capital ratio	1.7	1.6	1.9	2.3	2.6	2.3	2.3	2.0	2.4	2.7	2.2	0.4
Loans and investment/total assets (%)	73.5	69.8	79.6	93.2	90.3	91.0	94.1	85.3	93.3	87.3	85.7	8.7
Assets/capital	3.7	3.5	3.3	3.3	3.7	3.2	3.0	2.8	3.0	3.4	3.3	0.3
<b>Profitability/earning/operation</b>												
Return on assets (ROA) (%)	1.4	2.9	3.0	3.2	3.3	4.9	5.5	5.5	3.6	3.7	3.7	1.3
Return on loans and investment (ROL) (%)	1.9	4.1	3.8	3.4	3.6	5.4	5.9	6.4	3.9	4.2	4.3	1.3
Revenue to assets (%)	10.0	10.8	9.7	10.3	10.6	12.1	11.8	11.9	11.6	11.5	11.0	0.9
Interest income/assets (%)	8.8	9.2	8.6	10.0	10.3	11.8	11.6	11.3	11.2	11.0	10.4	1.2
Net interest margin (%) = net interest/assets	6.8	7.1	6.5	8.1	7.9	9.3	9.3	8.4	8.4	7.5	7.9	1.0
<b>Productivity/efficiency</b>												
Loans and investment per employees	3.5	3.8	5.2	6.8	8.4	8.7	8.7	8.1	9.7	10.6	7.4	2.4
Net profit per employee	0.1	0.2	0.2	0.2	0.3	0.5	0.5	0.5	0.4	0.4	0.3	0.2
<b>Income and sources of fund diversification</b>												
Share of interest income (%)	88.4	85.4	89.0	96.9	97.3	97.2	97.8	95.3	95.9	95.2	93.8	4.5
<b>Capital adequacy</b>												
Capital funds/total assets	27.2	28.5	30.4	30.3	27.1	31.2	33.6	35.6	33.5	29.0	30.6	2.9
Capital funds/net loans and investment	37.0	40.8	38.2	32.5	30.0	34.3	35.7	41.7	35.9	33.2	35.9	3.7

Annex table A.4. (continued)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Avg.	SD
<b>Growth and aggressiveness</b>												
Growth of assets	..	16.9	12.6	20.6	26.5	2.6	11.3	14.5	19.0	32.5	17.4	8.7
Growth of loans and investment	..	11.0	28.4	41.2	22.6	3.3	15.1	3.8	30.2	24.0	20.0	12.7
Growth of profit	..	26.9	0.5	29.1	30.1	16.9	8.8	15.0	16.6	31.3	19.5	10.7
Growth in revenue	..	135.6	17.7	28.1	29.1	53.2	25.7	13.7	21.1	33.8	35.1	42.6
Growth reserve and capital	..	22.3	20.4	20.1	13.1	18.0	20.1	21.2	12.0	14.8	18.0	3.8
<b>Market shares</b>												
Share to total assets	4.6	5.0	5.1	5.1	6.1	5.5	5.5	5.3	5.6	5.9	5.4	0.4
Share to total loans	14.7	14.5	14.8	15.1	16.4	11.9	13.4	11.1	11.1	10.2	13.3	2.1
Share to total loans and investment	10.1	10.9	11.2	12.0	13.7	10.1	11.5	10.0	10.1	9.7	10.9	1.2

Annex table A.5. Growth and size of financial institution

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Bank of Bhutan Ltd.</b>										
Assets	7 417.7	8 449.8	9 467.3	11 598.9	11 935.5	13 303.8	14 585.2	17 141.3	19 630.2	21 069.3
Loans and investment	2 167.1	2 081.4	2 626.2	3 501.2	2 806.2	4 284.1	3 924.8	5 041.6	6 103.5	8 686.8
Deposits	6 323.3	7 025.8	8 025.2	9 901.5	10 019.5	11 184.3	12 486.4	15 174.5	17 330.2	18 436.8
Revenue	488.7	536.5	713.5	660.0	699.6	667.1	616.6	792.2	813.4	951.7
Net profit	70.6	86.1	170.8	136.1	164.2	164.2	137.5	198.6	183.3	167.6
Operating expenses	86.5	75.9	89.8	77.0	85.4	104.0	122.5	164.0	196.1	197.5
<b>Bhutan National Bank Ltd.</b>										
Assets	2 816.1	3 831.5	4 124.2	5 062.7	5 559.3	6 921.6	7 799.4	10 051.8	10 481.1	16 734.0
Loans and investment	834.0	964.7	1 226.5	2 026.4	2 969.5	4 593.8	4 685.4	5 679.5	7 850.2	9 740.0
Deposits	2 489.9	3 376.1	3 610.2	4 522.2	4 587.1	5 761.6	6 424.6	8 622.9	8 614.8	14 601.4
Revenue	199.2	345.4	366.8	343.8	384.9	467.7	594.5	678.7	808.1	1 149.6
Net profit	47.9	102.9	78.1	40.1	56.9	81.9	151.6	191.8	249.5	310.4
Operating expenses	37.6	49.8	50.2	60.1	71.6	85.8	96.2	140.5	162.2	217.2
Capital, reserve and retained earnings (RE)	181.8	254.9	303.3	328.5	668.0	689.5	757.9	824.6	1 021.7	1 288.7
<b>Royal Insurance Corporation of Bhutan Ltd.</b>										
Assets	2 452.6	1 336.8	1 530.1	1 334.0	1 495.3	1 454.0	1 652.9	1 751.3	2 023.0	2 672.8
Loans and investment	1 009.9	1 057.1	1 272.8	1 161.7	1 267.2	1 382.3	1 605.1	1 645.5	1 927.3	2 329.1
Deposits	—	—	—	—	—	—	—	—	—	—
Revenue	40.7	47.5	79.5	71.0	78.5	121.8	128.3	144.4	169.5	191.4
Net profit	24.2	21.9	34.8	41.7	43.9	73.3	72.6	92.3	106.3	119.3
Operating expenses	6.0	12.9	29.8	11.4	15.8	16.8	14.7	12.5	17.6	21.0
Capital, reserve and retained earnings (RE)	167.1	117.6	151.9	193.6	237.5	306.4	373.0	445.1	531.5	646.0

Annex table A.5. (continued)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Bhutan Development Finance Corporation Ltd.</b>										
Assets	614.7	718.6	809.3	976.3	1 234.8	1 266.6	1 410.3	1 614.8	1 921.5	2 546.2
Loans and investment	451.7	501.5	643.9	909.5	1 115.4	1 152.5	1 327.1	1 377.0	1 792.8	2 222.3
Deposits	-	-	-	-	-	-	-	-	-	-
Revenue	61.2	77.7	78.1	100.8	131.2	153.3	166.9	191.8	223.7	293.8
Profit	8.8	20.7	24.4	31.3	40.4	61.8	77.7	88.3	69.6	93.2
Operating expenses	27.7	25.6	25.9	31.8	35.9	37.3	48.9	51.7	69.7	75.0
Capital and reserves	167.2	204.5	246.2	295.8	334.7	394.9	474.4	574.8	643.5	738.6

Source: Author's estimates based on data from Royal Monetary Authority of Bhutan, *Selected Economic Indicator*.



Annex table A.6. Key indicators

Item	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11 (p)
<b>GDP growth and prices</b>													
(per cent change)													
GDP at constant (2000) price <sup>a,b</sup>	6.1	7.9	7.9	6.8	10.9	7.2	6.8	6.5	6.3	17.9	4.7	6.7	11.8
Consumer prices <sup>c</sup>	9.2	3.6	3.6	2.7	1.8	4.6	5.5	6.2	5.9	8.8	3.0	6.1	8.3
Wholesale prices (India) <sup>d</sup>	2.5	5.3	6.6	1.7	5.7	5.6	5.2	4.6	5.4	9.6	0.5	10.6	9.9
<b>Government budget</b>													
(in millions of Nu) <sup>e</sup>													
Total revenue and grants	6 919.5	7 859.5	8 686.7	8 826.7	7 054.3	11 113.9	10 501.1	13 452.2	16 082.1	18 316.9	23 443.0	30 990.7	30 549.7
Of which: foreign grants	3 262.6	3 274.1	3 711.0	3 748.5	2 269.1	5 367.4	4 373.1	6 424.7	6 000.0	5 935.4	6 575.1	11 118.9	13 314.0
Total expenditure and net lending	7 224.4	8 624.1	11 177.6	10 052.1	9 945.3	10 534.1	12 893.7	13 770.9	15 795.0	17 913.4	22 350.5	29 888.9	34 196.6
<b>Money and credit</b>													
(per cent change, end of period)													
Broad money, M2	21.4	20.3	6.4	17.6	43.6	4.4	10.7	26.3	8.6	2.3	24.6	30.1	21.2
Credit to private sector	5.2	4.1	57.1	27.7	23.4	32.8	26.3	32.2	35.5	37.4	31.1	38.6	31.6
<b>Interest rates</b> (end of period)													
One year deposits	10.0	9-10	9-10	9.0	7.0	6.0	4.5	4.5	4.5	4.8	4.8	4.8	4.8
Lending rate	13-16	12-16	12-16	12-16	12-16	10-16	10-16	10-16	10-16	10-16	10-16	10-16	10-16
91-day RMA bills	7.5	7.3	6.9	4.7	3.5	3.5	3.5	3.5	3.5	6.0	6.0	2.0	2.0
<b>External indicators</b> (end of period)													
Gross official reserves in millions of US\$	258.3	291.1	292.6	315.3	373.3	383.3	366.5	478.8	600.4	589.1	704.4	791.6	906.0
(in months of merchandise imports)	19.3	19.3	19.0	18.9	21.2	17.6	9.3	13.6	13.3	12.8	13.9	11.2	9.1
External debt (per cent of GDP)	39.8	44.6	54.8	61.6	73.6	81.8	82.2	84.6	79.2	66.9	69.5	66.6	80.9
Debt-service ratio <sup>f</sup>	12.1	4.9	4.7	4.9	6.8	6.8	11.9	7.6	3.6	18.3	30.5	29.7	51.7
Trade balance	-2 453.7	-3 087.3	-4 059.1	-4 795.5	-4 481.0	-4 766.0	-11 099.0	-5 496.7	2 061.8	-2 921.6	-4 322.4	-13 938.2	-23 544.9
With India	-738.3	-1 354.5	-2 654.3	-3 088.3	-3 911.3	-3 820.7	-3 601.2	-3 170.7	4 447.6	-27.8	-278.6	-4 933.6	-15 160.0

Annex table A.6. Key indicators

Item	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11 (p)
Current account balance	384.2	1 049.6	-2 024.6	-3 127.4	-4 011.9	-3 318.0	-10 487.4	-1 695.7	6 417.2	-1 134.3	-664.3	-6 634.9	-16 088.9
(in per cent of GDP)	2.4	5.7	-10.1	-13.7	-15.3	-11.3	-32.4	-4.6	15.9	-2.3	-1.2	-10.8	-22.2
With India	-921.4	1 537.5	-1 918.3	-2 327.1	-4 479.3	-3 420.8	-5 253.9	-2 344.6	5 882.1	-157.3	-798.8	-3 493.7	-13 193.9
(in per cent of GDP)	-5.8	8.4	-9.6	-10.2	-17.1	-11.7	-16.3	-6.4	14.5	-0.3	-1.5	-5.7	-18.2
<b>Memorandum items:</b>													
Nominal GDP (in millions of Nu) <sup>a,b</sup>	15 813.7	18 326.5	20 111.7	22 895.0	26 422.2	29 385.6	32 320.0	36 462.6	40 448.1	49 456.5	54 713.0	61 222.6	72 477.6
Money supply, M2 (end of period)	7 359.2	8 851.6	9 419.8	11 076.9	15 904.7	16 597.7	18 376.9	23 208.7	25 208.7	25 781.5	32 114.8	41 778.7	50 639.8
Money supply, M1 (end of period)	2 868.4	3 612.7	4 477.9	5 019.5	7 502.5	8 524.7	9 331.9	10 678.1	13 542.3	14 393.2	18 375.0	22 537.7	30 270.3
Reserve money, M0, of which	4 464.0	4 872.0	4 631.9	5 937.6	8 008.0	9 370.3	9 340.1	13 474.7	13 319.6	12 871.0	14 697.9	20 574.7	19 727.6
Money multiplier (M2/M0)	1.6	1.8	2.0	1.9	2.0	1.8	2.0	1.7	1.9	2.0	2.2	2.0	2.6
Income velocity (GDP/M2)	2.1	2.1	2.1	2.1	1.7	1.8	1.8	1.6	1.6	1.9	1.7	1.5	1.4
Population growth rate <sup>a,g,h</sup>	-	-	-	3.1	2.4	1.3	2.5	1.3	1.3	1.3	1.3	1.3	1.8
Unemployment rate <sup>a,g,h</sup>	-	-	-	1.9	-	1.8	2.5	3.1	3.2	3.7	n/a	4.0	3.3

Source: Adapted from Royal Monetary Authority, *Annual Report*.Notes: <sup>a</sup> On a calendar year basis, e.g. the entry under 2010/11 is for 2010.<sup>b</sup> Source: National Accounts Statistics 2010, NSB.<sup>c</sup> The CPI reflected in this table is for the last quarter of the fiscal year.<sup>d</sup> Source: Reserve Bank of India. Wholesale Price Index of All Commodities, base = 2004/05, effective August 2010, the RBI revised base year from 1993-2004 to 2004-2005, creating a break in the continuity and comparison of data. The newly recalculated WPI commences from April 2004; reference period same as for Bhutan CPI.<sup>e</sup> Data for 2010/11 are revised estimates.<sup>f</sup> Debt service payments in per cent of exports of goods and services.<sup>g</sup> Data on CY basis; sourced from NSB.<sup>h</sup> Updates sourced from Labour Market Information System, MOLHR.

# THE CHALLENGES OF IMPLEMENTING MILLENNIUM DEVELOPMENT GOAL TARGET 7D IN PACIFIC ISLAND TOWNS AND CITIES

Paul Jones\*

*In the Pacific island region, the progress towards achieving the global Millennium Development Goal (MDG) target 7D, improving the lives of a hundred million slum dwellers, is fraught with many challenges. Out of all the MDG targets, minimal support has been provided to improving the quality of life of residents living in squatter and informal settlements in Pacific towns and cities. In this context, this paper seeks to understand and explain why MDG target 7D and the broader urban sector in the Pacific island region is marginalized. The paper examines the state of squatter and informal settlement growth in Pacific towns and cities, and explores the reasons as to why there is a lack of interest in addressing the plight of squatter and informal settlement dwellers at the Pacific country, regional and development partner levels. The paper calls for renewed action in elevating MDG 7D onto the Pacific island region and national development agendas.*

*JEL Classification:* R58, H11, R31.

*Key words:* MDG 7D, Pacific Island Countries, slums, squatters, unplanned settlements, urban poor.

## I. INTRODUCTION

The Pacific Island Countries (PICs) are experiencing rapid and unprecedented urban change, providing donors, governments and communities with a range of challenges and opportunities. This change is set against a backdrop of increasing urbanization, a recent phenomenon in the Pacific island region involving

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the movement of people from rural areas to towns and cities, and accompanied by major economic, social and environmental transformation (Jones, 2011a). While Pacific towns and cities are small compared to the megacity developing regions of Asia and Africa, there is a growing consensus that the future of the Pacific island region is clearly focused on growing urban areas (Storey, 2006; 2010; ESCAP and UN-Habitat, 2010).

At present, approximately one billion people or 33 per cent of the world's urban residents live in slums (UN-Habitat, 2009). In 2010, the bulk of these people lived in developing countries that are the least able to manage the scale of such change, given that their capacity for urban planning and management is weak (UNFPA, 2007; UN-Habitat, 2009). While the share of the urban population living in slums has decreased from 39 per cent in 2000 to 33 per cent in 2010, the number of slum dwellers continues to rise (United Nations, 2011). Although the contextual setting is vastly different, and the terms squatter and informal settlements are used in preference to slums in PICs and the Pacific island region, the emerging socioeconomic trends in the Pacific island region are a microcosm of wider patterns experienced at the global level.

The achievement of international development goals, such as the Millennium Development Goals (MDGs), will increasingly be concentrated in urban areas (UN-Habitat, 2009). Of particular importance to the topic of this paper is MDG 1, "Eradicate extreme hunger and poverty", and most importantly MDG 7, "Ensure environmental sustainability", specifically target 7D. MDG 7D seeks to achieve by 2020 a significant improvement in the lives of at least one hundred million slum dwellers, a target already achieved numerically, but detached from the monumental challenge of rising numbers of slums and the deteriorating living conditions of the poor (United Nations, 2011). The state of progress on MDG 7D has been documented globally, and at the Pacific island region level and PIC level in MDG and related progress reports. In the Pacific island region, it is argued that the progress on achieving MDG target 7D has been disappointing, as effectively little support has been given to dwellers residing in growing squatter and informal settlements. Unfortunately, MDG target 7D reflects the least attention and progress of all the MDG targets in the Pacific island region, having been put in the "too hard" basket. This has occurred against a backdrop of the MDGs being documented in the Pacific island region as being significantly off track to meet a 2015 time frame (PIFS, 2011; Smith and McMullan, 2010).

In the light of the above, this paper reviews the status of progress on achieving the MDG target 7D in the Pacific island region by: (i) assessing the state of squatter and informal settlement growth in Pacific towns and cities, and (ii) exploring the reasons for the ambivalence to addressing the plight of squatter and informal

settlement dwellers. The neglect of MDG target 7D can be viewed as one major symptom of the marginalization of the urban sector generally, including the growing assumption that rising levels of urban poverty are somehow a less serious issue than rural poverty (Lea, 2011). The challenges to implementing MDG 7D are examined at the PIC national level, and importantly at the Pacific island region level, where there is little development partner interest in the urban sector, primarily by the biggest donor in the region, the Australian Agency for International Development (AusAID) and lead regional organizations, such as the Pacific Islands Forum Secretariat (PIFS).

## **II. CONTEXTUAL CORRECTNESS: SLUMS, SQUATTERS, AND INFORMAL SETTLEMENTS**

For the purpose of this paper, the words squatter and or informal settlements are used in preference to the term “slum”, except where used in reference to the MDG target 7D. Reference to global terms, such as slums, has not been commonplace in the Pacific islands region.<sup>1</sup> Unlike larger African and Asian cities, the comparatively smaller scale of land and unregulated housing development in Pacific towns and cities has led to the use of terms, rightly or wrongly, such as shanties, low income settlements, unplanned settlements, semi-permanent settlements, squatter settlements, informal settlements, as well as slums. As illegal housing areas took hold in the Pacific island region’s post independence era and slowly flourished in the 1980s and 1990s (see, for example, the evolution of settlements in Papua New Guinea by Koczberski, Curry and Connell, 2001), terms such as squatter settlements have been used to describe settlers (squatters) illegally occupying State and freehold lands. On the other hand, settlers who negotiated occupation agreements with traditional or customary land owners (and who may or may not have initially squatted), came under the broad term of informal settlements.

In comparison to the MDG term “slum”, the terms squatter and or informal settlements dominate in usage in the Pacific island region, and are differentiated in PIC meaning and use according to local circumstances. In Fiji and Kiribati, for example, the use of squatter settlements is commonplace (see, for example, Itaia, 1987, on the evolution of the term squatter in South Tarawa), while in Papua New Guinea and the Solomon Islands, the terms settlements and informal settlements dominate (see, for example, Chand and Yala, 2008; National Capital District Commission, 2006; Jones, 2010; 2011b). Some city policies state explicitly that the use of the global term slum is inappropriate for use in their urban settings, such as the

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<sup>1</sup> A similar situation occurred with the term “poverty”, which was considered unwelcome and too extreme for application by PICs in the Pacific island region (see Bryant-Tokalau, 1995; ADB, 2004).

Port Moresby Urban Sector Profile coordinated by UN-Habitat (2008: 1). Use of the generic term slum in the Pacific island region is problematic, and therefore not widely used. Where it has been applied, it has been in the context of describing the state of the physical, social and environmental condition of a squatter or informal settlement area (see, for example, Tauafiasi, 2011, on Samoa's slum).

A review of case studies on Pacific urban squatter and informal settlements, including Port Vila (Mecartney, 2001), Suva (Kiddle, 2010; Lingham, 2005; Mohanty, 2006; New Zealand Agency for International Development, 2007), Honiara (Maebuta and Maebuta, 2009), Kiritimati Island (Jones, 2008) and Port Moresby (Chand and Yala, 2008; Jones, 2011a; Mawuli and Guy, 2007), reflects a number of unifying features characterizing squatter and informal settlements in the Pacific island region. Key common features of Pacific squatter and informal settlements are: (i) many are often illegal under the rules and regulations of the prevailing formal state system, (ii) the land tenure status is uncertain (which may or may not cause household insecurity), (iii) built housing standards and environmental conditions are inadequate, and (iv) the level of access to services and infrastructure is low. Formal state rules and regulations relating to land title (including customary law), planning and building are bypassed, and as a result, overcrowded housing, health concerns and illegal connections to water and power, are the norm.

### **III. UNDERSTANDING THE BACKGROUND TO THE MILLENNIUM DEVELOPMENT GOAL TARGET 7D**

Agreement on the MDGs was first reached at an international summit attended by world leaders at the United Nations in New York in 2000.<sup>2</sup> The agreement was spelled out in the United Nations Millennium Declaration, which was adopted by the General Assembly in 2000. The agreement was a milestone in international cooperation; it addressed basic human needs and rights that every individual should be able to attain (see table 1). Global, regional and national leaders agreed to work in partnership to achieve the eight universal goals, with progress to be measured via twenty one targets and sixty indicators (United Nations, 2011). In the Pacific island region, the MDGs have become a central focus of development work and have been incorporated into PIC and regional projects and programs. As embodied in MDG 8, aid and development cooperation involving development partners is a major mechanism by which to achieve the MDGs and their targets. In the Pacific island

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<sup>2</sup> The agreement was spelled out in the United Nations Millennium Declaration adopted by the General Assembly in 2000. See General Assembly Resolution 55/2. Available from [www.un.org/millennium/declaration/ares552e.htm](http://www.un.org/millennium/declaration/ares552e.htm).

**Table 1. The Millennium Development Goals**

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Goal 1	–	Eradicate extreme poverty and hunger
Goal 2	–	Achieve universal primary education
Goal 3	–	Promote gender equality and empower women
Goal 4	–	Reduce child mortality
Goal 5	–	Improve maternal health
Goal 6	–	Combat HIV/AIDS, malaria, and other diseases
Goal 7	–	Ensure environmental sustainability
Goal 8	–	Develop a global partnership for development

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*Source:* United Nations Statistics Division (2012).

region this involves PIC collaboration with the key multilateral development agencies, such as the United Nations system, the Asian Development Bank (ADB) and World Bank, as well as national development agencies such as AusAID, and the New Zealand Aid Programme (Wood and Naidu, 2008).

The objective of MDG 7 is to “ensure environmental sustainability”. MDG 7 is comprised of four diverse targets (7A to 7D). These targets address the bio-physical environment, such as forest cover, protection of land areas to maintain biological diversity, energy efficiency, and greenhouse gas and ozone depleting gas emissions. They also address human needs, such as safe drinking water and sanitation, as well significant improvements in the lives of slum dwellers (PIFS, 2011).

Understanding how the target for improving the lives of slum dwellers became incorporated into the MDGs is critical in shedding light on the state of progress on MDG target 7D. Target 7D was originally adopted as a major goal of the “Cities without Slums” action plan, a World Bank coordinated Cities Alliance initiative launched in December, 1999. Championed by former South African President, Nelson Mandela, and UN-Habitat, the “Cities without Slums” target became incorporated into the Millennium Summit agenda and was supported along with the other goals and targets in the agreed Millennium Declaration. The slum target was initially included under MDG 1, “Eradicate extreme poverty and hunger”, and its inclusion was considered a momentous occasion as it was the first time that cities, in conjunction with slums and urban poverty, had been included as an international development goal (Hildebrand, 2010).

Following its adoption in the Millennium Declaration in 2000, the slum dweller target became the subject of debate and contention. The focus on urban development conflicted with the organizational priorities of many development

agencies who were responsible for translating the Millennium Declaration into the MDGs, and whose major thematic focus was on rural development and poverty alleviation. Opposition to the target, including calls for its abandonment, led to it being relocated from MDG 1 and subsumed as the last target of MDG 7 (Hildebrand, 2010). Divorced from its underpinnings with poverty in MDG 1, the target sits somewhat uncomfortably with the dominant concerns of MDG 7, namely, climate change, biological diversity, and greenhouse gases (targets 7A and 7B). It has been argued that much damage had been done to the integrity of the slum target by those “who continue to counter pose rural and urban development and encourage planning against urban growth” (Hildebrand, 2010: 8).

As the MDGs were operationalized, it was soon acknowledged that the slum dweller target was considerably underestimated. During its conception at the end of the 1990s, it was considered that improving the lives of a hundred million slum dwellers was a realistic target to be achieved by 2020. However, by 2003, it was agreed that global trends could not support such a low number as the target reflected only 10 per cent of the global situation. The target was unrealistic and did not show the full extent of the escalating slum phenomena. In contrast to other MDGs, the slum target was not set as relative to a specific baseline period, such as 1990, which was a common starting point for other MDGs. The target was an absolute number and set globally, making it problematic for regions and countries to set specific goals, as well as address different contextual interpretations of the term slum. While there is no excuse for not systematically addressing the MDG slum dweller target, there now exists growing pressure to recast the target, so as to focus on increased commitment, progress accountability and renewed support from both governments and development partners (United Nations, 2010).

The slum target was subject to further criticism given it had a 2020 time frame, as opposed to the 2015 MDG target date. It was also not aligned to the dominant proportional expression used by nearly all the other MDG targets, which begin with the words “to halve, by 2015, the proportion of the world’s people” (Hildebrand, 2010: 9). Further, the indicator by which to measure progress on the target was also changed. The original MDG indicator was the “proportion of households with access to secure tenure”, which is only one of many hardship features that may characterize squatters. In the latter half of the first millennium decade, this was amended to the current indicator, namely, “the proportion of urban population living in slums expressed as percentage”, with a slum defined as the proportion of the urban population living in households with at least one of four characteristics, namely: (a) lack of access to improved water supply, (b) lack of access to improved sanitation, (c) overcrowding (three or more persons per room), and (d) dwellings made of non-durable material (United Nations Statistics Division, 2010).



#### **IV. AN URBANIZING PACIFIC**

The growth of urban areas in the Pacific island region has been characterized by rural to urban migration, growing urban based economies and demographic change, all occurring in a setting of mediocre PIC economic performances over the last decade (AusAID and New Zealand Government, 2009). The cross sectoral dimensions of urban problems and challenges now facing PICs—for example, poverty, unemployment, squatter and informal settlements, land for development, provision of affordable services and infrastructure, crime and social breakdown—are essentially new to Pacific cultures and lifestyles (see, for example, Connell and Lea, 2002; Goddard, 2005; Jones, 2007; Storey, 2006). Planning and managing urban growth and the consequences of urbanization remain foreign challenges for most Pacific societies, given that they have governed themselves for thousands of years using local traditional systems and mechanisms based on their prevailing sociocultural orders (Jones, 1997).

The most recent PIC population censuses indicate the average percentage share of urban populations in PICs is approximately 50 per cent. In 2010, the number of persons actually living in Pacific towns and cities was just over two and a half million persons, equivalent to 26 per cent of the Pacific island region population (Secretariat of the Pacific Community, 2011). Given the persistence of under enumeration in urban areas (Storey, 2010), the population is more likely to be in the order of three million persons. If Papua New Guinea is excluded from the analysis, then approximately 50 per cent of the Pacific island region population live in urban centres. Papua New Guinea is by far the largest and most populated PIC in the Pacific island region, containing the region's biggest urban populations and largest city, Port Moresby. In 2010, the urban population of Papua New Guinea was approximately one million persons (Papua New Guinea, Office of Urbanisation, 2010), which is more than the 2010 populations of the Pacific subregions of Polynesia (663,795 persons) and Micronesia (547,345 persons).

Despite the rapidity of growth in Pacific towns and cities, urban issues have not been considered a priority by donors, researchers and governments, despite the important role Pacific towns and cities play in local, national and regional growth (Storey, 2006). Sentiments of anti-urbanism and a lack of interest in PIC urban reform, urban policy and the urban sector prevail, with the situation couched by some commentators as “flying blind” (Haberkorn, 2008: 113) and “everybody's but nobody's business” (Jones and Kohlhase, 2002: 27). As such, urban issues and concerns do not figure as mainstream issues in national and regional development agendas in the Pacific island region (Jones and Lea, 2007; ESCAP and UN-Habitat, 2010).

While issues and concerns associated with urbanization and urban management have been well documented in the Pacific island region during the last 25 years, there are two main issues which arguably are gaining major prominence over other urban management challenges. These are the explosive growth of squatter and informal settlements, and the manifestations of urban poverty. Both of these are inextricably linked, as it is widely acknowledged that the majority of the Pacific urban poor gravitate to and live in squatter and informal settlements (see, for example, Chand and Yala, 2008; Jones, 2011a; Mawuli and Guy, 2007; ESCAP and UN-Habitat, 2010).

## **V. GROWTH TRENDS IN PACIFIC URBAN SQUATTER AND INFORMAL SETTLEMENTS**

In the Pacific island region, the growth of squatter and informal settlements is a major manifestation of continuing Pacific urbanization (Connell and Lea, 2002; Jones, 2011a). Squatter and informal settlements are now acknowledged as being a permanent feature of the fabric of Pacific towns and cities (AusAID, 2008; Storey, 2006; Tabureguci, 2010). Settlements cater for the majority of urban population growth occurring in the PICs, with the largest number of informal settlements and people living in settlements found in urban centres located in Melanesia, specifically Port Moresby, Suva, and to a lesser degree, Honiara. In 2008, it was estimated that 45 and 35 per cent of Port Moresby's and Honiara's population, respectively, were living in informal settlements (AusAID, 2008; UN-Habitat, 2008). Such trends are not new as it was estimated at the beginning of the 1990s that approximately 40 per cent of the then Port Moresby population were living in informal settlements (Monsell-Davis, 1993, cited in Koczberski, Curry and Connell, 2001). Squatter and informal settlements are common in all of Papua New Guinea's 17 towns and 3 cities. For example, Papua New Guinea's third largest city, Mount Hagen, with a population of approximately 150,000 persons, has some 20,000 to 25,000 squatters from the Highlands Region and coastal provinces living in 33 settlements in and around the city (Togarewa, 2011).

Estimates of informal settlements in Suva range from 16 to 45 per cent of the population (AusAID, 2008; Kiddle, 2010). In 2009 in Fiji, it was estimated that some 80 per cent of all new houses being built were located in informal settlements (Squatters, 2009). In the Vanuatu towns of Port Vila and Luganville, an estimated 30 per cent of the population were living in slums, as defined by the MDG framework (UNDP, 2010a).<sup>3</sup> Storey (2006) found that for some of the smaller capital towns of

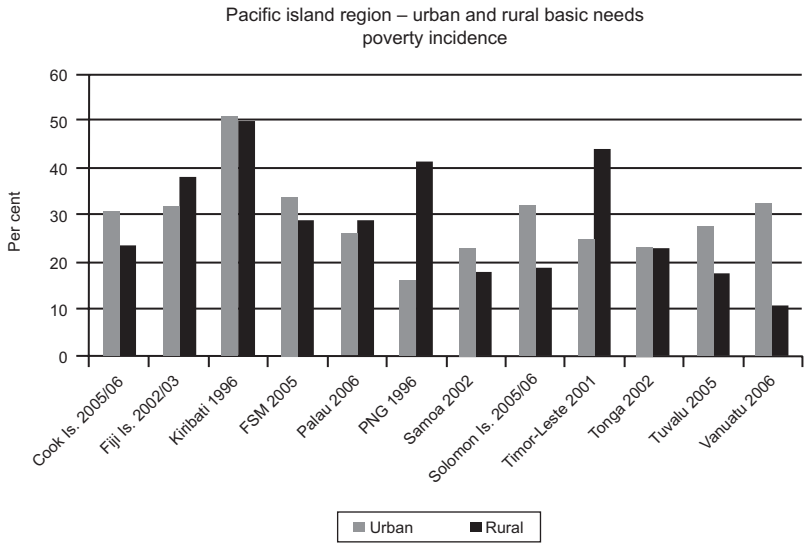
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<sup>3</sup> The rate was higher as the definition of urban excluded many informal settlements located outside the defined urban boundary.

Micronesia, such as South Tarawa in Kiribati, between 25 to 50 per cent of the urban population were squatters.

Against this Pacific urban setting, it is not surprising that squatter and informal settlements are increasingly home to the urban poor (Jones, 2011b). Urban poverty, especially in the Melanesian towns and cities, has been historically linked to households that comprise the city’s settlements (Anis, 2010; Mawuli and Guy, 2007; Papua New Guinea, National Capital District Commission, 1996; 2006; ESCAP and UN-Habitat, 2010). Poverty line estimates for PIC urban and rural areas show that 8 out of the 12 PICs have greater urban populations below the basic needs poverty line (BNPL) than rural populations (see figure 1 which includes year of source data). Four PICs—Timor-Leste, Palau, Fiji, and Papua New Guinea—have greater rural populations below the BNPL than urban areas. While the Papua New Guinea poverty incidence figures are dated and estimates in the new millennia have been questioned, the incidence in 1996 was 16.1 per cent BNPL in urban areas and 41.3 per cent BNPL in rural areas. The Melanesian countries—Papua New Guinea, the Solomon Islands, Vanuatu and Fiji—have the greatest numbers of people in urban poverty. They also have the largest towns and cities, and importantly, the largest proportions of squatter and informal settlements in the Pacific island region. These trends reinforce the

**Figure 1. Pacific island region – urban and rural national basic needs poverty incidence**



Source: Adapted from Parks, Abbot and Wilkinson (2009).

growing urbanization of poverty now being concentrated in Pacific towns and cities, a trend first documented in Fiji in 2004 (Fiji, 2004).

## **VI. PROGRESS ON MDG TARGET 7D**

Aside from the on-the-ground evidence of small improvements made in a handful of PICs, such as site and service upgrading of squatter settlements in Fiji, progress on attainment of MDG target 7D in the Pacific island region can be derived from the assessments documented in global, regional and PIC MDG progress reports. The global reports, removed from the influence of politics and pressure from PICs and key regional development partners, present a stark position on MDG target 7D, a position often hidden away, glossed over, or omitted in Pacific island region and PIC assessments.

The 2011 United Nations MDG progress report provides the latest global position on MDG achievements (United Nations, 2011). In terms of target 7D, the key message is that slum improvements have failed to keep pace with the increase in urban poor. While gains have been made globally for millions of slum dwellers via improvements in water supply, sanitation and enhanced housing conditions, these have been grossly insufficient to keep pace with major increases in the number of urban poor. Slum dwellers in urban areas in developing countries continue to rise, and in 2010 was estimated at some 828 million, compared to 657 million in 1990 and 767 million in 2000 (United Nations, 2010). Importantly, the assessment indicates that just over 24 per cent of the urban population of the Pacific island region are residing in slum areas (United Nations, 2010). This estimate is comparable to the larger countries of East Asia, where some 30 per cent of urban populations are estimated as living in slums (World Bank, 2007).

At the Pacific island region level, there are two recent assessments that outline the state of progress, or more correctly, lack of progress in regard to MDG target 7D. These assessments are contained within the Pacific Regional MDGs Tracking Reports, as prepared in 2010 and 2011 by the Pacific Islands Forum Secretariat (PIFS, 2010b; 2011). Based in Fiji, the PIFS is the premier political regional organization, representing all heads of the 16 sovereign PICs, plus Australia and New Zealand (PIFS, 2009). Established in 1971 as the South Pacific Forum, PIFS is funded by its members, of whom Australia is one of the largest contributors. In 2010-2011, for example, Australia provided core funding of AUD\$10 million to strengthen work in regional cooperation, security, economic development, and progress towards the MDGs (AusAID, 2011c).

The 2010 assessment found that Pacific island region MDG progress was uneven, with nine PICs off track to varying degrees to achieve at least half of the eight MDGs. The overall trend was that some Melanesian countries, notably those characterized by conflict, civil and political tension, such as Papua New Guinea, were seeing a reversal of earlier MDG gains. This trend was also common in the Micronesian states, while the Polynesian countries have been achieving comparatively more.

The 2011 assessment reflects similar trends, with all countries off track on at least one goal, with the exception of the Cook Islands, Niue, Samoa and Palau. The Melanesian countries of Papua New Guinea and the Solomon Islands, plus the Micronesian countries of Kiribati and Nauru are not on track to achieve any of the MDGs. The majority of the PICs are off track in achieving reductions in poverty levels, such progress constrained by low to mediocre levels of economic growth, rising costs of living, and limited job opportunities. The overarching message on MDG progress is that “more concerted effort is needed in the region to accelerate and sustain progress towards achieving the MDGs by 2015” (PIFS, 2011: vii).

In terms of progress towards MDG target 7D, the 2010 assessment found that “the increasing urbanization of all PICs also means that the number of squatter settlement dwellers is increasing and thus the goal of reducing the number of slum dwellers will not be met in any of the PICs” (PIFS, 2010b: xii). While slum dwellers, squatters or informal settlements are not cited as Emerging Issues and Challenges (PIFS, 2010b: xiv-xv), they are identified as a concern in regard to Accelerating Progress. Importantly, the assessment suggests measures for improving the plight of squatters and those in informal settlements, namely, “sound urban planning, including infrastructure and utilities, which are essential for the sustainable growth of urban centres” (PIFS, 2010b: 69). As a pointer to addressing the underlying drivers of rural urban migration and the broader issue of spatial inequalities in PICs, the report highlights the need for more balanced growth (noting rural development as a key lever for change, but not urban development).

However, the 2011 PIFS assessment reflects less attention on progress towards MDG target 7D, further reinforcing its marginalization in the Pacific island region MDG debate. There is no reference to MDG 7D in the Executive Summary, with target 7A (reversing the loss of environmental resources) and target 7C (water and sanitation) being the focus of attention in terms of gains made under Goal 7. In the assessment section on Goal 7, “Ensure environmental sustainability”, the report indicates that an absence of data makes it difficult to accurately assess progress on MDG 7D, noting countries in Melanesia are off track to meet this target. Only 2 out of 15 PICs shown in the table summarizing the percentage of the urban population living

in slums contain data, namely, Tuvalu (7 per cent) and Vanuatu (30 per cent). There is no other discussion on MDG 7D in the 2011 MDG assessment report (PIFS, 2011).

At the PIC national level, some 13 PICs have completed at least one national MDG progress report since 2000 (PIFS, 2010b). These MDG reports have formed the basis of the datasets used in the regional assessments by PIFS. The lack of interest and ambivalence in addressing squatter and informal settlements is reflected in the range of assessments (or no assessments) contained in the PIC MDG reports. For example, for Vanuatu, comments on target 7D indicate that it is unlikely the target will be met (UNDP, 2010a). Where target 7D is reported on, this and similar comments pervade other PIC MDG progress reports, including targets for MDG 1, “Eradicating extreme hunger and poverty”. Like the regional MDG reports, some PIC MDG assessments cite the goals and indicators for target 7D, but do not report on them, such as for Fiji and Kiribati (see, for example, the 2007 Kiribati MDG progress report (UNDP, 2007). These assessments are lost or omitted in the context of the wider MDG analysis.

Similarly, the Australian Government report “Achieving the millennium development goals: Australian support 2000-2010”, which espouses Australia’s international MDG achievements over the last decade, reflects the same trend. Target 7D is omitted from discussion on MDG 7 progress (AusAID, 2010a). While data are cited as a constraint in ascertaining the status of progress on MDG 7D, one conclusion that could be derived from the above is that target 7D is not part of the Australian Government agenda for achieving overall MDG progress.

In summary, there are four main messages that can be derived from the MDG progress reports relevant to the Pacific island region. First, globally and regionally, the number of slum dwellers continues to rise significantly. Second, the target of reducing the number of slum dwellers, both regionally and in PICs, will not be met. Third, there is no analysis documented between time periods in regional and PIC reports, with an absence of data commonly cited as the excuse for no assessment (see, for example, PIFS, 2010b). Availability of accurate data remains problematic not just for MDG 7D, but for the all national and regional MDG assessment in the Pacific island region (PIFS, 2011). Fourth, and importantly, there is little or no discussion on what practical steps need to be taken to make the MDG target 7D a reality in PICs and the Pacific island region. Discussion on directions for achievement of MDG 7D, where they are provided, pale into insignificance compared to other MDGs and targets. Some regional and, to a lesser degree, PIC reports provide generic statements for target 7D. However, these are short on coherent detail so as to provide an understanding of the existing situation, as well as what is required to address the drivers and symptoms of the living conditions in squatter and informal settlements. Given it is now over

a decade since the Millennium Declaration was agreed and a minimum of at least one in four urban inhabitants in the Pacific island region could be classed as “slum dwellers”, the above is not good news for improving the lives of the urban poor.

## **VII. DISCUSSION ON CONSTRAINTS TO ACHIEVING PROGRESS ON MDG TARGET 7D**

While acknowledging that MDGs anchored in improvements that are directed towards poverty alleviation, health, education, water and sanitation are interrelated, and that progress in one goal and targets supports progress in others (UNDP, 2010b), the following major questions need to be asked. Why is there a lack of interest in dealing with a growing disadvantaged section of the Pacific urban population? Why is it that MDG target 7D is unable to make it onto the PIC and regional development agenda, while other MDGs and their targets are given significant attention via projects, programmes and analysis? Why is the issue of squatter and informal settlements being sidelined in the Pacific MDG debate and destined for no action? Urban issues have been incorporated into the Pacific Plan; the overarching regional plan was agreed by the leaders representing PIFS in October 2005. The Pacific Plan, amongst other matters, guides the regions’ efforts towards achieving the MDGs. However, such urban issues have received little attention since that time. A number of reasons for such trends are suggested at both the national PIC and regional levels.

### **National PIC level**

Urban development activities need to be understood against a background of weakened PIC economic settings. These include the recent 2007-2009 global financial crisis, which continues to have a profound impact upon the precarious economic, social, and environmental well-being of Pacific towns and cities, including informal settlements (Duncan and Voigt-Graf, 2010). Against this setting, and including social and political instability for some Melanesian PICs, some countries have been both reluctant and unable to embrace effective planning and management of their squatters and informal settlements. Urban development and urban management, by their nature, are cross-sector and multidisciplinary, requiring stakeholders and agencies to work together and agree on strategic action that involves a number of cross cutting issues. This work involves addressing the policy, institutional and regulatory systems underlying urban development in a coordinated and orderly manner. Such an approach often conflicts with national-led PIC development plans that are sector orientated, such as those that address mainstream health, education, agriculture, tourism, construction and other key sectors (Jones, 2007).

National PIC plans have a limited emphasis on cross-cutting urbanization policies (Jones and Lea, 2007). The management of urbanization and larger urban development projects are often viewed as being primarily focused around land issues (one of many urban resource mobilization issues). Not surprisingly, there is little or no reference to MDG 7D in national plans. One reason for this anti-urban bias is that the benefits and gains of improved urban planning and management in growing Pacific towns and cities, including the contribution that urban gross domestic product (GDP) makes to national economic growth, have not been clearly articulated by policymakers. The exception is the recently endorsed National Urbanisation Policy for Papua New Guinea, 2010-2030, the first for Papua New Guinea, which clearly sets out the benefits and advantages of planned and managed urbanization (Papua New Guinea, Office of Urbanisation, 2010).

Where there are well intentioned PIC urban plans and policies, they “rarely move on from politically expedient rhetoric into tangible policy outcomes and implementation” (Haberkorn, 2006: 2). A 2006 survey of urbanization policies in PICs undertaken by the regional organization, the Secretariat of the Pacific Community for the PIFS, found that only the larger urbanized PICs of Papua New Guinea and Fiji had developed urban policies. The other Melanesian PICs of Vanuatu and the Solomon Islands were dealing with their urbanization concerns as part of national population policy statements. Of the other PICs, only Tonga and Tuvalu showed any interest to develop national approaches in urban planning and management.

Politicians in PICs are strongly aware that any attempt at improved urban development outcomes is likely to involve addressing sensitive land tenure issues, which underpin the stability and cohesion of many squatter and informal settlements in Pacific towns and cities. While planning involves achieving short- and long-term gains, the tenure of many politicians is often short-term, with major projects involving improved urban outcomes met with reluctance. With nearly all PIC urban populations politically underrepresented nationally, ensuring that urban issues, such as squatter and informal settlements, are systematically addressed at the national level is problematic.<sup>4</sup>

Ultimately, PIC politicians and governments must address urban, rural and outer island concerns (Jones, 2007). In all PICs, the priority for many poorer households in squatter and informal settlements is on meeting day-to-day family and household survival needs. Household and social enclave issues regarding land security, shelter, or requests for cash contributions for food and school bills, for example, take on greater immediacy for support with politicians who invariably have

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<sup>4</sup> For example, urban South Tarawa in Kiribati has nearly 50 per cent of the national population. However, it is only represented by 5 out of 43 members in the national Parliament.



ethnic and kinship ties to settlers. Such needs are of greater importance, including social relevance, than putting in place settlement wide medium- and long-term urban development and upgrading plans, often with unknown consequences.

Despite its adverse manifestations, urbanization in most PICs reflects a history of being both unwanted and misunderstood, with calls for the removal of illegal squatter and informal settlements commonplace. Occupants of squatter and informal settlements have been seen as undesirable, with informal settlements stereotyped as havens of law and order breakdown, crime and social unrest (ESCAP and UN-Habitat, 2010). Evictions, settlement neglect and calls for settlers to return to their village and rural lifestyles, are all short-term reactions that do not address or reflect an understanding of the root causes of settlement growth (Koczberski, Curry, and Connell, 2001). Squatter and informal settlements are also often seen as incompatible and a blight on political and bureaucratic visions and aspirations for a modern city (UN-Habitat, 2009). The denial of urbanization issues and concerns by policymakers in PICs is a major challenge to be confronted (Haberkorn, 2008).

In the above setting, it is not surprising that there is ongoing malaise shown by PICs in addressing squatter and informal settlements. This, in part, reflects caution by governments and politicians in evaluating the social, economic, environmental and political implications of urban change, rather than some conscious decision not to address foreign development objectives, such as MDG 7D. The weighing up of the implications of urban change, including evaluating financial costs, assessing the ramifications of urban improvements versus deferred expenditure in rural areas, the costs of the conditions and caveats attached to development loans and grants, and their impacts on local sociocultural settings and landowners groups, are paramount considerations. The latter inevitably surface when planning and mobilizing customary and traditional lands for urban development (Jones and Holzknecht, 2007; Jones and Lea, 2007).

All of the above provides a backdrop as to why PICs are reluctant to show leadership and a commitment to tamper with the fabric of squatter and informal settlements. Many squatter and informal settlements have been long established, have informal occupation agreements in place with land owners, and have developed their own governance structures (Jones, 2011c). This includes access to basic water supply and power (ESCAP and UN-Habitat, 2010). Collectively, these all provide impediments of varying significance to putting in place a consistent approach to addressing MDG 7D.

## **Regional and development partner level**

At the regional level, a major constraint impacting progress on MDG 7D is the reluctance of key development partners to support the urban sector. Major urban reform in the Pacific island region, whether in Melanesia, Polynesia or Micronesia, has occurred where it has been supported and facilitated by development partners and financed by international development banks. Trends show that PICs cannot tackle the challenges of urban management and urban development alone because all urban projects involve partnerships, in one form or another, with international development banks, aid agencies, NGOs and other development partners (Jones and Lea, 2007). While agencies such as United Nations Human Settlements Programme (UN-Habitat), United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), the Asian Development Bank (ADB) and the New Zealand Aid Programme have taken an active role in promoting and being involved in the urban sector, the amount of development assistance given to improving the planning, management and development of towns and cities in PICs by bilateral and multilateral agencies, including sites and service schemes and settlement upgrading, remains minimal and insignificant.

The major development banks involved in the urban sector in the Pacific island region are ADB, and to a lesser degree, the World Bank (WB). These organizations have designated urban development and Pacific divisions overseeing urban sector activities, and based on agreed country programmes and time frames, provide loans and grants supporting PIC development priorities. The lead Pacific island region organization, the PIFS, however, has been reluctant to seriously take on the urban sector (Haberhorn, 2008). The PIFS adopted a PIC regional urban initiative, known as the Pacific Urban Agenda (PUA), which was endorsed by ESCAP and integrated into the Pacific Plan in October 2005. The Pacific Plan was revised in October 2007, with the Forum Island Leaders re-endorsing the PUA and requesting its implementation be undertaken as part of a wider urban Regional Action Plan (RAP) by PIFS and the Secretariat of the Pacific Community (PIFS, 2007). Citing limited technical and human capacity, the PIFS and the Secretariat of the Pacific Community have not been able to initiate any action on the coordination and implementation of the PUA and RAP. The Pacific Plan 2010 Annual Progress Report makes no reference to the PUA, the RAP, and any action required to address Pacific regional and national programmes on urbanization, urban management and urban development, including MDG 7D (PIFS, 2010a).

AusAID, the largest development partner in the Pacific island region, provides more aid to PICs than any other donor. The total Australian Official Development Assistance to the Pacific island region in 2010-2011 was estimated as AUD\$1,085

million, which equates to approximately 25 per cent of the Australian aid budget (AusAID, 2011b). Most of this assistance is delivered via PIC bilateral country programmes, to regional organizations such as PIFS, non-government organizations, and to multilaterals, such as ADB, WB, and the Global Environment Facility. However, AusAID's interest in MDG 7D and the urban sector is marginalized, as reflected in its thematic priorities, budgets, programmes and activities. AusAID's position can be described as diffuse, with minimal interest and assistance spread thinly across a range of activities that are not anchored to any internal urban institutional and programmatic focus. A range of reasons are suggested as to why the above position continues to be perpetuated in the Pacific island region and in PICs:

- Institutionally, the urban sector is not an Australian Government priority for regional and PIC development assistance. AusAID has prioritized a range of thematic areas of support, including economic growth, education, health, human rights, rural development, mine action, disabilities, food security, MDGs, infrastructure and the like. The urban sector, urban development and urban management, do not rate as priority development areas. Gender equity is the main theme designated as an overarching or cross-sector theme (AusAID, 2011a). Organizationally, AusAID had an urban development section in place at the beginning of the 1990s, but that section was phased out as the importance of the urban sector was downgraded.
- Historically, there has been a strong focus in AusAID on supporting rural development. Such a view still pervades AusAID's programme focus, as reflected in its rural development aid theme and budget allocations. It is also mainstreamed in more recent themes, such as infrastructure, which has a strong rural development focus (AusAID, 2011a). One consequence of this approach is that rural areas have received the bulk of attention in poverty alleviation programmes and analysis in the Pacific island region, despite the fact that urban hardship is on the rise and the future population of PICs is an urban one (Storey, 2010). In this context, some researchers have questioned AusAID's assumption as to why urban poverty is considered somewhat less serious than rural poverty (Lea, 2011).
- Concurrent with a focus on rural development is the emphasis on service delivery and the social sectors, especially education and health. In the 2010-2011 AusAID budget, Australian Official Development Assistance increased in education, health, and infrastructure as well as in rural development (Smith and McMullan, 2010). Access to good quality basic services, such as education,

health care, clean water and sanitation, is essential for improving the living conditions of the poor, especially if they address regional inequities in a balanced manner. In the 2010-2011 AusAID budget listing of focus areas for 12 PICs and a Pacific Regional Programme, the word “urban” is not mentioned, further undermining the rhetoric on assisting PICs to achieve MDG target 7D.

- Noting the importance of water supply and sanitation (MDG 7C) to underpinning achievements in MDG 7D, the effectiveness of Australia’s relatively small support to this sector remains questionable. The Annual Review of Development Effectiveness 2009 states that evaluating such support remains problematic, “as water and sanitation activities are often embedded in broader humanitarian and community development efforts and are not reported on separately, either in terms of funding or performance” (AusAID, 2010b: 32). Water and sanitation activities that could be identified represented only 0.8 per cent of the 2008-2009 Australian aid programmes, with many of the activities contained within rural development programmes.
- By distancing itself from the urban sector, AusAID has no institutional capacity and experience in urban management in the Pacific island region and PIC context. For example, in 2009, the growing Office of Urbanisation in Papua New Guinea sought technical assistance from AusAID under the then Australian Support Facility for urban customary land development and settlement upgrading. AusAID supported a technical adviser, albeit reluctantly, and after a short period, the funding for the technical assistance was discontinued. The reasons provided by AusAID for not supporting this urban technical assistance included a lack of internal AusAID technical expertise to monitor the assistance being provided to the Office of Urbanisation, the priority of funding to other mainstream central government agencies, such as Treasury and Finance (and low priority of the Office of Urbanisation), and the non-identification of the urban sector in the overarching Government of Australia and PNG Development Cooperation Agreement (Director of Office of Urbanisation, Port Moresby, personal communication, July 2011).
- Within the context of the urban sector not being a priority area of assistance, the small support that is given is dispersed and fragmented, such as that allocated to global urban funds and non-government organizations. Globally, for example, this is reflected in AusAID’s decision in 2009 to join and be a financial member of the Cities Alliance, the coalition responsible for supporting the

achievement of the “Cities without Slums” target which underpins MDG 7D. However, to date, AusAID’s partnership in Cities Alliance has yet to translate into any on-the-ground upgrading projects linked to MDG 7D within the Pacific island region. At the regional non-government organization level, for example, the Pacific Island Planners Association, whom AusAID supported with financial assistance for its development and establishment since 2008, has now been withdrawn. The above approach reflects the position that donors want to put money into sectors in order to be seen as visible and doing something, rather than to be seen as doing nothing at all (Howes, 2011).

- At a wider level, the stance by AusAID aligns with Australian, Pacific and global trends for governments to disengage from involvement in land and housing markets in urban areas (Durand-Lasserve, 2006). This trend can be viewed as part of the wider privatization and liberalization of markets that fall within the ambit of neoliberal policies (see, for example, Asia Pacific Network for Housing Research, 2011). Such cyclical trends in the Pacific island region are reflected in the prominence of urban development and housing ministries, which existed in the 1980s and 1990s in PICs, such as in Fiji and Papua New Guinea, and which have now been phased out.

Collectively, the information presented above paints a clear picture as to why MDG target 7D and the broader urban sector do not sit comfortably with the development agenda for the Pacific island region.

## **VIII. CONCLUSION**

This paper has sought to deepen an understanding of the challenges facing the implementation of MDG target 7D, improving the lives of hundred million slum dwellers, in PICs and the Pacific island region. The chequered history of MDG target 7D reflects a target that was reluctantly included in the MDGs, and has subsequently struggled to find a legitimate home and owner to oversee its mandate. The minimal Pacific island region progress achieved on MDG 7D mirrors these difficulties and lack of focus, reflecting little regional and PIC responsibility and accountability for developing action to seriously address both the conditions of squatter and informal settlements, and the lives of the dwellers themselves. Unfortunately, despite global calls for action, such as via MDG target 7D and the good efforts of agencies such as UN-Habitat and ESCAP based in Fiji, urbanization with its growing negative manifestations remains problematic and marginalized on the Pacific development agenda.

The escalating growth of squatters and informal settlements in Pacific towns and cities effectively reflects the hope and despair of hundreds of thousands of new urban dwellers seeking opportunities for an improved quality of life. “As the developing world becomes more urban and as the focus of poverty shifts to cities, the battle to achieve the MDGs will have to be waged in the worlds’ slums” (UNFPA, 2007: 15). Pacific towns and cities increasingly represent the urbanization of poverty, but at the same time, they are the main conduits for moving the poor out of poverty. This fundamental point has yet to register with PICs, key regional agencies and development partners, who by focusing on solutions anchored primarily in rural areas, contribute to the manifestations emanating in urban areas.

Noting the adverse social and economic impacts of successive politico-economic crises that continue to characterize PICs in Melanesia, compared to the more favourable conditions of the state as seen in Micronesia and Polynesia, the challenge now is to address the scale of growing squatter and informal settlements via generation of commitment, interest and leadership in PICs. The latter are the key lessons learned from successful urban institutional reform experience as documented for Samoa (Jones and Lea, 2007). Unless the issues surrounding MDG 7D are addressed in a comprehensive manner in the Pacific urban context—such as defining what is really meant by “improving the lives of slum dwellers”, developing a more inclusive target definition and time frames to address and measure the above, and debating why urban poverty should be considered less important than rural poverty—then the spectre of a continued demise in the social, economic and environmental fabric of Pacific towns and cities will continue.

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