

Let's think aloud, shall we?

Edited by
Selim Raihan

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South Asian Network on Economic Modeling

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Citation: Raihan S. (Ed). (2017). Let's Think Aloud, Shall We?. Dhaka, SANEM Publications

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ISBN 978-984-34-2255-2

Edited by
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First published: February, 2017

Published by



South Asian Network on Economic Modeling (SANEM)
House-1/B, Road 35, Gulshan 2, Dhaka, Bangladesh
Tel: +88 02 58813075; Fax: +88 02 9883445

BDT: 550
USD: 30

Publisher
SANEM Publications
252/3, North Goran, Khilgaon
Dhaka-1219, Bangladesh

Printing
New Usha Alo
11 Naya Palton, Dhaka.

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Preface

I am delighted to offer the book titled ***Let's Think Aloud, Shall We?*** This book is a compilation of the articles and interviews published in SANEM's monthly digest *Thinking Aloud*. SANEM's *Thinking Aloud* embarked its journey in June, 2014. The inception of *Thinking Aloud* coined with the intention to address contemporary economic problems of Bangladesh and other developing countries that needs persistent attention from several angles and perspectives. The monthly publication also highlights some of the on-going researches and activities of SANEM. This book covers a wide range of contemporary economic issues which are arranged in five parts: macro economy, growth and poverty; trade, regional integration and foreign direct investment; labor market; sustainable development goals (SDGs); and political economy.

I would like to express my gratitude to the associate editors of different issues of *Thinking Aloud*, and they are Md. Naibur Rahman, Nabila Tasnuva, Raisa Tamanna Khan, Ahmed Tanmay Tahsin Ratul, Israt Jahan, Farazi Binti Ferdous, Mahtab Uddin, Nabila Hasan, Sunera Saba Khan, Fayeza Ashraf, Md. Wahid Ferdous Ibon and Iffat Anjum. I am also thankful to Sk. Ashibur Rahman and Tanzina Tareq Nitol for their excellent support in the regular publication of *Thinking Aloud*. I am pleased to recognize the contributions of the authors and interviewees in this book.

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PART I

MACRO ECONOMY, GROWTH AND POVERTY

1

‘Managing’ growth for social inclusion

S E L I M R A I H A N

Social exclusion is a process that prevents individuals or groups from effective participation in the mainstream social, economic and political spheres in the country. Even with high economic growth a significant part of the under-privileged population may likely be let out. ‘Managing’ growth for social inclusion, therefore, remains a critical challenge.

To understand the cross-country variation in the levels of social inclusion, the Social Inclusion Index for 156 countries for the year 2015 is constructed using 32 indicators covering economic, social, environmental and institutional aspects of the countries. These indicators include percentages of population with access to electricity, improved sanitation facilities and improved water sources (total, rural, urban), adult literacy rate (total, female), cost of business start-up procedures (% of GNI per capita), ease of doing business index, logistics performance index, mobile cellular subscriptions (per 100 people), forest area (% of land area), labor force participation rate (total, female), life expectancy at birth (total, female), infant mortality rate and under-5 mortality rate (total, female), maternal mortality ratio, gini index, and 6 institutional variables from the World Governance Indicators (voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of

corruption). Data for most of the indicators are derived from World Bank's World Development Indicators. All these variables are normalized with a scale between 0 and 100, where 0 is the worst performance and 100 is the best performance. The Social Inclusion Index is constructed by averaging these normalized variables.

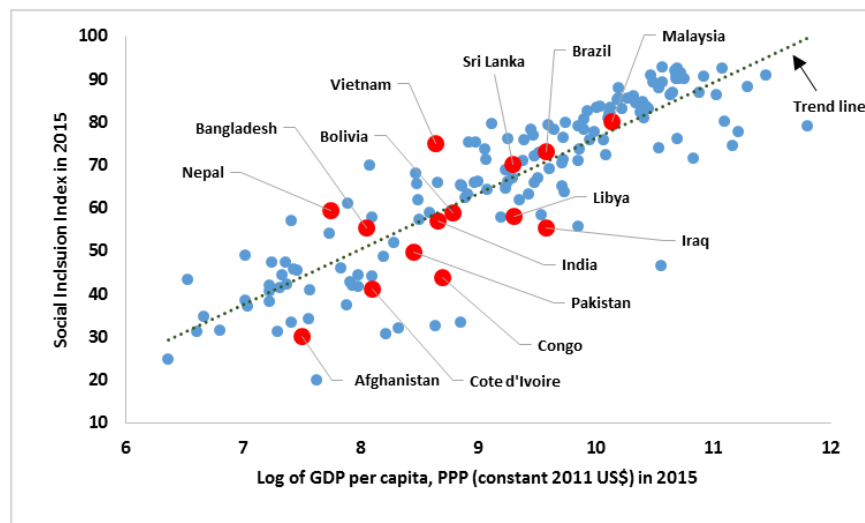
With an index value of 92.97, Finland is at the top of the ranking, while with an index value of 20.01, Chad is at the bottom of the ranking. A classification of the ranking of the countries shows that there are only 12 countries with index values of 90 and above. Also, there are 30 countries with index values of 80 and above but less than 90. These first two classifications include mostly Western European and North American countries. Furthermore, there are 35 countries with index values of 70 and above but less than 80; 24 countries with index values of 60 and above but less than 70; 15 countries with index values of 50 and above but less than 60; 23 countries with index values of 40 and above but less than 50; and finally, 17 countries with index values less than 40. Most of the Sub-Saharan African countries fall into the last two categories.

Among the South Asian countries, the highest index value (75.83) is for Maldives (58th rank position) and the lowest one (30.04) is for Afghanistan (154th rank position). The other countries in South Asia are Sri Lanka (index value of 69.64 with 78th rank position), Bhutan (index value of 66.05 with 86th rank position), Nepal (index value of 59.39 with 102nd rank position), India (index value of 56.95 with 111th rank position), Bangladesh (index value of 55.23 with 114th rank position), and Pakistan (index value of 49.73 with 117th rank position).

The scatterplot (Figure 1.1) between the calculated Social Inclusion Index and log of GDP (Gross Domestic Product) per capita at PPP (constant 2011, US\$) for 156 countries shows a reasonably strong

positive association between per capita GDP and Social Inclusion Index. Though, the association is stronger at the higher level of per capita GDP, it becomes weaker for the countries at the middle and lower levels of per capita GDP. In South Asia, Nepal, Bangladesh and Sri Lanka are above the trend line, whereas Afghanistan, India and Pakistan are below the trend line.

Figure 1.1: The scatterplot between Social Inclusion Index and log of GDP per capita at PPP



Source: Author, using data from World Bank's World Development Indicators and World Governance Indicators

The scatterplot also provides some very useful insights with regard to 'managing' growth for social inclusion. A comparison between Nepal and Bolivia shows that, despite having a much lower level of per capita GDP, Nepal has a Social Inclusion Index similar to that of Bolivia. Interestingly, Nepal, compared to Bolivia, secured larger achievements in areas of access to electricity and improved water source for rural households, female labor force participation, female life expectancy, child mortality, control of corruption, rule of law and income inequality. Bangladesh too has

6

a Social Inclusion Index almost similar to that of India, but at a lower level of per capita GDP. Compared to India, Bangladesh also has 'managed' larger achievements in areas of access to improved sanitation for rural households, female labor force participation, female life expectancy, maternal and child mortality, and income inequality. Furthermore, even with a similar level of per capita GDP, Bangladesh has a much higher level of Social Inclusion Index than that of Cote d'Ivoire. Likewise, though India, Vietnam and Congo have almost similar levels of per capita GDP, Vietnam has a much higher Social Inclusion Index than those of India and Congo. Similar observation holds while making comparisons between Sri Lanka and Libya and between Brazil and Iraq. In these two cases, in addition to availability of better services for rural households and larger achievements in maternal and child mortality, better economic and political institutions made the difference.

The aforementioned analysis suggests that mere economic growth, resulting in the rise in per capita GDP, is not the sufficient condition for enhancing social inclusion. Effective economic and social policies and programs targeting disadvantaged people in the society as well as better economic and political institutions are very critical in achieving high level of social inclusion.

2

Cross-country differences in income inequality: Where do South Asian countries stand?

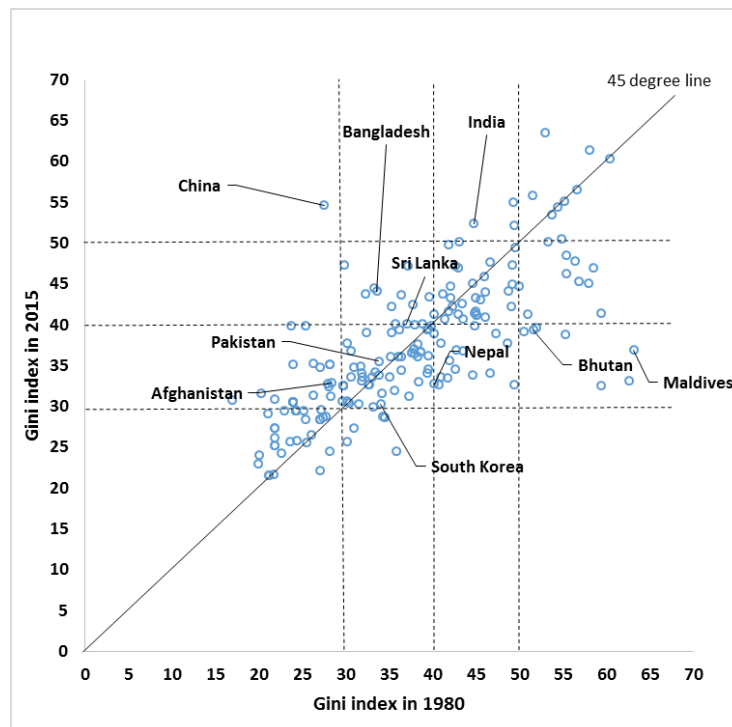
S E L I M R A I H A N

In recent years, there has been a growing interest among general people, researchers and policy makers in income inequality, its causes, and its effects. The most popular index of income inequality is the 'Gini index' which measures the inequality among levels of income of the people of any country. A Gini coefficient of zero means perfect equality, where everyone has the same income, and a Gini coefficient of 1 (or 100%) expresses maximum inequality.

For meaningful comparisons among different countries with respect to their levels and trends in income inequality we need comparable data. National surveys on households' incomes and expenditures in different countries provide data on the Gini index of these countries for some years. However, we are not in a position to use these data for cross-country comparisons due to various reasons. In those surveys there are differences in the population covered, differences in coverage on geography, age and employment status, differences in the definition on welfare (whether to use market income or consumption data), differences in the use of equivalence scale (whether to use household per capita or household adult equivalence), and differences in the

treatment of various other items, such as non-monetary income and imputed rents. The Standardized World Income Inequality Database (SWIID), introduced in 2008, provides a dataset on income inequality that facilitates comparability for the largest possible sample of countries and years. A custom missing-data algorithm is used to standardize data on cross-country income inequality using the data from national surveys (Solt, 2016). Using the SWIID database, the World Economy Database (WED) version 9.1 has generated a time series database on the “Gini index” for 207 countries over the period between 1970 and 2015 by filling missing observations with the help of different estimation methods.

Figure 2.1: Movement of gini index during 1980 and 2015



Data source: World Economy Database (WED)

Using the WED 9.1, we have produced a scatterplot diagram (Figure 2.1) with data on Gini indices for 207 countries in 1980 in the horizontal axis and data on Gini indices of the same countries in 2015 in the vertical axis. In the scatter plot, dots around the 45 degree line are the countries with 'no or very small' changes in Gini indices during 1980-2015; dots above the 45 degree line are the countries which experienced an increase in the Gini index; and finally, dots below the 45 degree line are the countries which experienced a decline in the Gini index. Out of those 207 countries, 18 experienced 'no or very small' changes in Gini indices, 109 experienced increases and 80 experienced declines. Among the 8 south Asian countries, 5 countries (Afghanistan, Bangladesh, India, Pakistan and Sri Lanka) observed rises while the rest 3 countries (Bhutan, Maldives and Nepal) experienced declines. We also brought China and South Korea into the picture, and it appears that the Gini index in China increased quite astonishingly, whereas that of South Korea declined.

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We have also categorized the values of Gini index as follows: a Gini index value lower than 30 is considered low; an index value between 30 and less than 40 is considered medium; an index value between 40 and less than 50 is considered high; and an index value above 50 is considered very high. Depending on these classifications, we can observe some interesting movements of the South Asian countries during 1980 and 2015. Afghanistan moved from a status of low inequality to medium inequality; Bangladesh moved from medium inequality to high inequality; though Nepal, Pakistan and Sri Lanka remained within the medium inequality range, Sri Lanka was at the border of high inequality; India moved from high inequality to very high inequality; and both Bhutan and Maldives moved from very high inequality to medium inequality. In comparison, China moved from low inequality to very high inequality, whereas South Korea moved from medium inequality to very close to low inequality.

We also explored the factors affecting inequality in the cross-country and over time contexts. Results from a fixed effect panel regression suggest that while rise in the real GDP per capita tends to have a small negative association with the Gini index, an increase in both life expectancy at birth and net secondary school enrollment are strongly associated with the decline in the Gini index. These suggest that, an increase in per capita real GDP is not a guarantee for the reduction in income inequality, whereas investment in social infrastructure with the aim of raising the life expectancy at birth and a rise in secondary school enrollment can be very instrumental in reducing income inequality.

Reference

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3

How do some countries make the most of the demographic dividend?

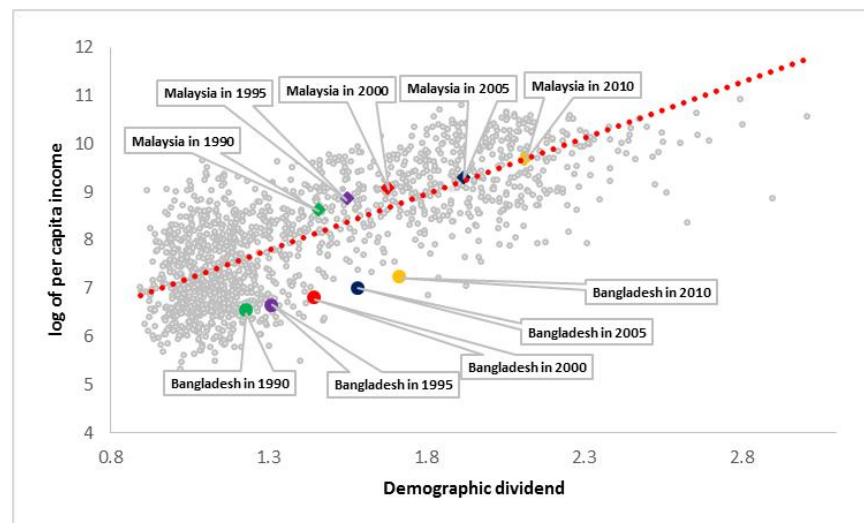
S E L I M R A I H A N

For long, debates among economists and social scientists on the impact of population change on economic development centered on positions that population growth either restricts, promotes, or is independent of economic development. Despite the merits of these views, a critical issue is largely ignored which is the age structure of the population that can change dramatically as the population grows. As people's economic behavior varies at different stages of life, changes in a country's age structure can have substantial effects on its economic performance. This latter view relates to a 'demographic dividend' which can exert a large positive effect on the economy stemming from a favorable age structure of the country.

The demographic dividend is not, however, automatic. With the right kind of policy environment, this demographic dividend can attain the targeted objectives. This brings to the fundamental question: how do some countries make the most of the demographic dividend and why others don't? A simple association between the demographic dividend and per capita income, as is shown in the scatterplot (Figure 3.1), can shed some light on this

issue. The scatter-plot is generated with the data of 124 countries for the period between 1950 and 2010 with five-year intervals. The demographic dividend is calculated from the data of the United Nations (Department of Economic and Social Affairs-Population Division), and is defined as the ratio of working age population to the dependent population. The per capita income data are from the World Bank WDI. Since demographic dividend might have a lag effect on per capita income change, we assume that the data of demographic dividend for any particular year corresponds to the average per capita income data for the subsequent five years. For example, demographic dividend data for 1950 corresponds to the average of per capita income data for 1951-1955. The trend line (red-dotted) shows a very strong positive association between the demographic dividend and per capita income.

Figure 3.1: Demographic dividend and per capita income



Data source: United Nations (Department of Economic and Social Affairs-Population Division) and World Bank, World Development Indicators

Though simple, but even this scatterplot tells us a very interesting story. If we compare an East Asian country (Malaysia) with a

South Asian country (Bangladesh) we find that both Malaysia and Bangladesh, during 1990 and 2010, were experiencing rising demographic dividends which contributed to the rise in their per capita incomes. However, Bangladesh has always been much below the trend line; whereas Malaysia was always on or above the trend line. This suggests that compared to Bangladesh, Malaysia was much better able to utilize demographic dividend to raise its per capita income during the period under consideration. For Bangladesh, the concern is that the country is yet to exploit the demographic dividend it has, and over time, the distance from the trend line has enlarged. Interestingly, in 2010, Bangladesh had the demographic dividend similar to that Malaysia had in 2000, but Bangladesh in 2010 had one-seventh of the per capita income of what Malaysia had in 2000.

The aforementioned analysis is also supported by results from a cross-country least square dummy variable (LSDV) panel regression of 124 countries for the period between 1950 and 2010 with data of five-year intervals. Here the dependent variable is the log of per capita income. The explanatory variables are the log of demographic dividend (as defined earlier) and two interaction variables – first one is the interaction between log of demographic dividend and South Asia dummy and the second one is the interaction between log of demographic dividend and East Asia dummy. We also add a few other control variables such as fixed capital formation as percentage of GDP, government consumption as percentage of GDP, trade-GDP ratio, under-five mortality rate and manufacturing export as percentage of total export. As we did in the scatter-plot exercise, here we also assume that the data of demographic dividend for any particular year corresponds to the respective averages of all other variables of the subsequent five years. The LSDV panel regression results suggest that all control variables have expected and significant signs: the ratio of fixed capital formation to GDP, the ratio of government consumption to GDP, the trade-GDP ratio and manufacturing export to total export ratio have positive and significant signs, and the under-five

mortality rate has a negative and significant sign. The demographic dividend variable has a positive and significant sign and the size of the coefficient suggests that 1 percent increase in the demographic dividend leads to 0.24 percent increase in the per capita income. Both South Asia and East Asia interaction dummies are positive and significant with coefficients 0.87 and 1.71 respectively, suggesting that these two regions have larger positive effects of demographic dividends on the rise in their per capita incomes than the global average. However, the effect is double for East Asia compared to that for South Asia.

How did the East Asian countries make the best use of the demographic dividend? Evidence suggests that compared to the South Asian countries, most of the East Asian countries were in a better position to successfully capitalize on shifts in their age structures to gain a boost in economic productivity. The critical policy areas that made the difference included investment on youth development, expanding access to family planning, investment in infrastructure, public health, education, especially female education and skill development. Also, decisive policy emphasis was on promoting both labor-intensive and skill intensive jobs, savings and openness to trade and foreign investment.

4

Augmenting agricultural productivity can be instrumental in reducing poverty in developing countries

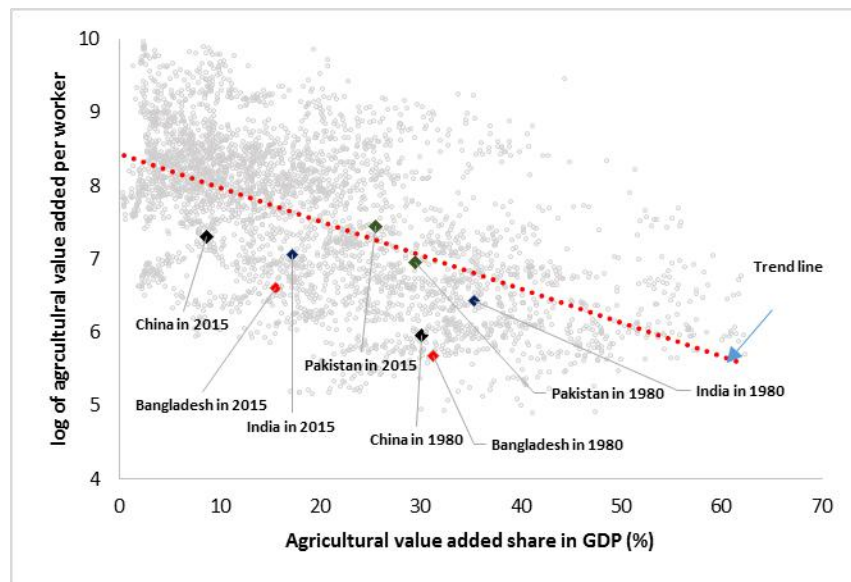
S E L I M R A I H A N

The role of agriculture in alleviating poverty in developing countries has been a contentious issue. The dominant paradigm focuses on manufacturing and services sectors as the drivers of growth and alleviation of poverty, and in this context, agriculture is considered as the ‘residual’ sector. However, it is very important to understand how structural transformation takes place in developing countries with a declining share of agriculture in the gross domestic product (GDP), and how it affects agricultural productivity. A critical question also emerges, whether augmented agricultural productivity can be instrumental in reducing poverty in developing countries.

In a cross-country and over time framework, the relationship between the share of agriculture in GDP and agricultural productivity (measured as the agricultural value-added per worker), as shown in the scatterplot (Figure 4.1), appears to be negative. This scatterplot has been generated using data from the World Bank’s WDI for 121 developing countries for 36 years (1980-2015). Countries much closer to the global trend line are able to raise agricultural productivity with a reduction in the share

of agriculture in GDP at a pace reflected by the 'productivity association' of the global trend line.

Figure 4.1: Agriculture's share in GDP and its productivity



Data source: World Bank, World Development Indicators

The scatterplot also shows the relative positions of Bangladesh, China, India and Pakistan in 1980 and 2015, as all these four countries moved up along the 'productivity association' during this period. In South Asia, Pakistan in 1980 was very close to the trend line, and by 2015 went above the trend line. However, in 2015, the share of agriculture in GDP in Pakistan was much higher than those of Bangladesh, India and China, indicating much slower progress in structural transformation in Pakistan compared to those in Bangladesh, China and India. Though India in 1980 and 2015 was in much better positions than those of Bangladesh, the rate of progress of Bangladesh, during 1980 and 2015, along the productivity association was better than that of India. This is reflected by the fact that, compared to the position in 1980, by

2015, while Bangladesh moved closer to the trend line, India moved further away. Also, China, while drastically reducing its share of agriculture in GDP during 1980 and 2015, was able to move closer to the trend line by 2015.

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Does agricultural productivity affect poverty in cross country and over time contexts? Since there is no time series data on poverty indices, we have constructed a cross-country panel data for head count poverty rates (at \$1.90 a day, 2011 PPP) for 74 developing countries, considering periodic average poverty rates and average values of other variables for those corresponding periods. The constructed data has seven periods between 1981 and 2015. These are 1981-1985, 1986-1990, 1991-1995, 1996-2000, 2001-2005, 2006-2010 and 2011-2015. The missing values of the poverty rates have been filled-in using extrapolation and interpolation methods. The fixed effect (FE) panel regression results, considering head count poverty as the dependent variable, suggest that, after controlling for variables like human capital and trade openness, agricultural productivity has a positive association and agricultural value-added as a share of GDP has a negative association with poverty rate. According to the FE regression coefficients, 1% decline in the ratio of agricultural value-added share in GDP is associated with a decline in the head count poverty rate by 0.4%, and 1% rise in the agricultural value-added per worker is associated with a decline in the head count poverty rate by 0.6%.

How does agricultural productivity affect poverty? There are two major channels through which increased agricultural productivity can affect poverty. First, growth in agricultural productivity can reduce underemployment in agriculture in many developing countries, and thus increase real wage rates in agriculture, which both directly and indirectly leads to poverty alleviation. Second, increased agricultural output can lead to reduction in food prices, which benefits all net food buyers in both rural and urban areas. These two channels can have further positive multiplier effects

through backward and forward linkages between agriculture and other sectors in the economy.

The policy lessons from the aforementioned discussion are related to what needs to be done for raising agricultural productivity. In many developing countries, there are huge needs and scopes for mechanization of agriculture. Facilitating cheaper agricultural inputs and machineries through both market mechanism and public support is very critical. Also, diversification of agriculture is an important policy issue which needs to be considered very seriously. Diversification of agriculture towards products with a higher value-added contributes to more rapid agricultural income growth and employment. Allocating required resources for agricultural research, extension and technological innovation is also very important. Finally, there is a need for developing the required infrastructures for modern agriculture in many of the developing countries.

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5

Is growth in South Asia inclusive?

SELIM RAIHAN AND
GANGA TILAKARATNA

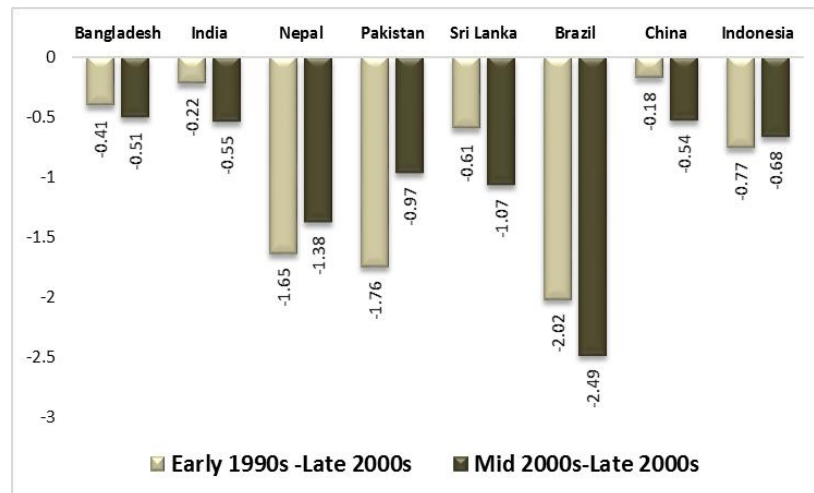
In recent times, inclusive growth has become a much debated issue in South Asia. There are two critical questions, whether the growth processes in the South Asian countries have been inclusive in nature, and what needs to be done to make the future growth processes of these countries more inclusive.

We have calculated the growth elasticity of poverty (GEP) and growth elasticity of inequality (GEI) for Bangladesh, India, Nepal, Pakistan and Sri Lanka. We have used data of per capita GDP at constant 2005 prices, poverty head-count ratio at \$1.25 and \$2 a day (PPP) and Gini index from the World Development Indicators of World Bank. For comparisons we have also calculated these elasticities for Brazil, China and Indonesia.

Figure 5.1 shows that, in the case of \$1.25 a day, for the period early 1990s- late 2000s, among the five South Asian countries, Pakistan had the highest GEP followed by Nepal; and India's GEP was the lowest (though higher than that of China). For the period mid 2000s- late 2000s, Nepal had the highest GEP followed by Sri

Lanka, and Bangladesh's GEP was the lowest. Brazil's GEP for both these periods had been much higher than those of the countries under consideration. China's GEP for both the periods had been low and similar to those of India's. China's low GEP shouldn't undermine its achievements in reducing extreme poverty by a significant margin; as its low GEP is largely due to its phenomenal growth performance during the period under consideration. Indonesia's GEP had been higher than those of Bangladesh, India and Sri Lanka for the period early 1990s-late 2000s.

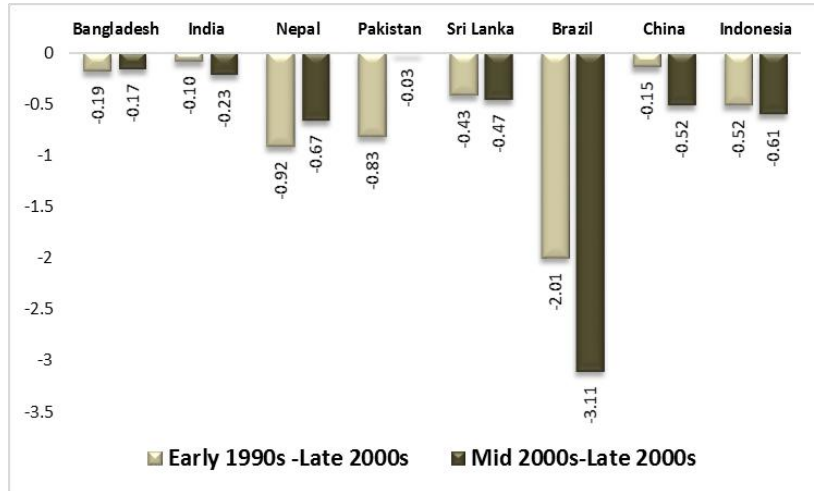
Figure 5.1: Growth elasticity of poverty (\$1.25 a day)



Data source: World Bank, World Development Indicators

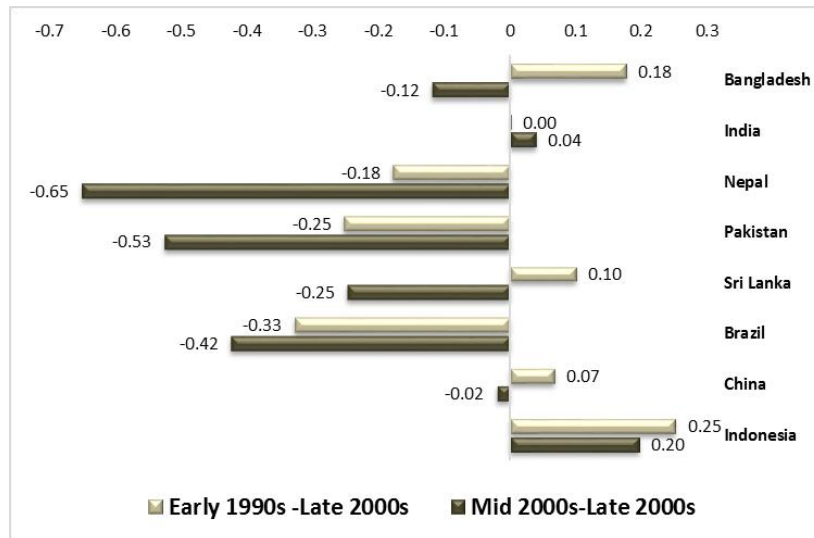
In the case of \$2 a day, for the period early 1990s – late 2000s, Nepal had the highest GEP followed by Pakistan; and again, India's GEP was the lowest (Figure 5.2). Also, for the period mid 2000s- late 2000s, Nepal had the highest GEP followed by Sri Lanka, and Pakistan's GEP was the lowest. Again, Brazil had much higher GEP for both these periods than those of the countries under consideration. China's GEP for both the periods had been higher than those of India. Indonesia's GEP had been higher than those of Bangladesh, India and Sri Lanka for both the periods.

Figure 5.2: Growth elasticity of poverty (\$2 a day)



Data source: World Bank, World Development Indicators

Figure 5.3: Growth elasticity of inequality



Data source: World Bank, World Development Indicators

In the case of GEI (Figure 5.3), for the period early 1990s-late 2000s, Bangladesh, Sri Lanka and India had positive GEI,

meaning rise in inequality despite economic growth, whereas Nepal and Pakistan had negative GEI. In recent years, except India, all other four South Asian countries had negative GEI. Brazil's negative GEI had been much higher than those of Bangladesh, India and Sri Lanka. However, China had positive GEI for the period early 1990s – late 2000s and very low negative GEI for the period mid 2000s- late 2000s, and Indonesia's GEI had been positive for both these periods.

These results demand careful examination. During 1990 and 2010, Pakistan's GDP growth rates had been erratic and Nepal's growth rates had been low and stagnant. However, these two countries had the highest GEP and GEI. Also, despite India's and Bangladesh's impressive growth performance, their achievements in reducing poverty and inequality had been rather unimpressive. Especially, given the fact that India is the home of more than 1.2 billion people with over 400 million people living below \$1.25 a day, questions remain on the quality of economic growth process which has not been able to reduce poverty significantly, and increased inequality instead, over the past two decades. Sri Lanka's performances in GEP and GEI in recent years are somehow consistent with its growth performance.

These results are also interesting when we look at the differences in the GEP for \$1.25 a day and \$2 a day poverty lines. As one would expect, for all the South Asian countries, the magnitudes of the GEP are notably higher in the case of \$1.25 a day compared to those of \$ 2 a day. This seems to be more significant for countries like Nepal, Pakistan and Sri Lanka, for mid-2000s-late 2000s, where the GEP for \$1.25 is more than 1 (negative), implying that an increase in growth by 1 percent leads to a more than 1percent reduction in extreme poverty; however, for the \$2 a day poverty line, this reduction is only less than proportional change (less than 1percent). This shows a high concentration of head-count poverty between \$1.25 a day and \$2 a day poverty lines. In the case of

Pakistan, the striking result is that for the period mid 2000s-late 2000s, while moving from \$1.25 a day to \$2 a day poverty line, GEP declines from -0.97 (nearly elastic) to -0.03!

Interestingly, for the three countries used for comparison (Brazil, Indonesia and China), the differences in the magnitudes of GEP for \$1.25 a day and \$2 a day are relatively low (marginal in the case of Indonesia and China for the period mid 2000s-late 2000s). This suggests that the patterns of poverty in these countries are not so different whether we consider \$1.25 a day or \$2 a day poverty line. In this context, the experiences of the South Asian countries are quite different.

Few cautionary notes are to be considered. The progress in reduction in head-count poverty in South Asia remains fragile, since many households remain clustered near the poverty line. Therefore, a large portion of the population remains vulnerable to falling back into poverty. There are equally serious concerns and disagreements with regard to the measurement of poverty in many of the South Asian countries as head-count poverty rates are regarded as largely underestimated. Furthermore, the factors which have been instrumental in the reduction of poverty in recent decade, i.e., rise in remittance flow or growth in narrowly based exports, remain to be susceptible to external shocks. Poverty in South Asia is multifaceted. Though growth has a positive impact in reducing income poverty, other aspects of poverty in the form of access to health, education, basic infrastructure are still seriously lacking for most of the people in this region and these sectors demand considerable attention. There are issues of disparities among different regions within the countries. Similarly, gender disparity has remained a matter of grave concern. All these suggest that the current growth process in the South Asian countries are still far to be inclusive.

Economic diversification is a major challenge for the South Asian countries. There are convincing reasons to argue that productive diversification, through structural transformations, of these economies is necessary for their growth processes to be more inclusive. Productive diversification ensures growth to transit from a narrow base to a broader base through generation of productive employment in the dynamic and growth generating sectors. The South Asian countries need to carry out this transition through well devised policies and programs. Productive employment and 'decent' job are interlinked. Most of the jobs in South Asian countries are still very far to be 'decent'. Growths in the formal sector employment in these countries have been rather slow, and informal sector employment for most of the countries is more than 80percent of total employment (for Sri Lanka and Maldives the figures are around 60percent). The prospect of inclusive growth in South Asia also hinges on the challenges of generating more employment which are 'decent', and at the same time productive.

6

Does growth in South Asia promote employment?

SELIM RAIHAN AND NABILA TASNUVA

The relationship between economic growth and employment is an important discussion in the economics discourse. Promotion of inclusive growth also requires economic growth process to be employment friendly. In South Asia, this issue is perhaps more burning. Usually, the employment effect of economic growth is captured by calculating the employment elasticity of economic growth. In this context, more robust approach is estimating the employment elasticity in a multivariate econometric regression model, where the effect of economic growth on employment can be estimated after controlling for other influencing factors.

In order to understand the long term effect of economic growth on employment in South Asia, we have estimated a cross country panel regression with 167 countries for the period of 1950 to 2011 with number of people employed being the dependent variable. Here, real GDP entered into the estimation as the key explanatory variable with a number of variables which are likely to influence employment e.g. share of gross capital formation in GDP, share of government expenditure in GDP, trade as a percentage of GDP and inflation level. The data are taken from the Penn World Table

version 8. All variables are expressed in natural logarithm. With a view to exploring the employment and growth linkage for South Asian countries, we have interacted real GDP with South Asian country dummies (Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka). The data point for Bangladesh starts from 1972. For Bhutan, Nepal and Maldives it is 1980 whereas the data point for India, Pakistan and Sri Lanka starts from 1960. However, the countries share the same ending point for data, which is 2011. To tackle the endogeneity problem between economic growth and employment we have run a two-stage regression model with lag real GDP as the instrument.

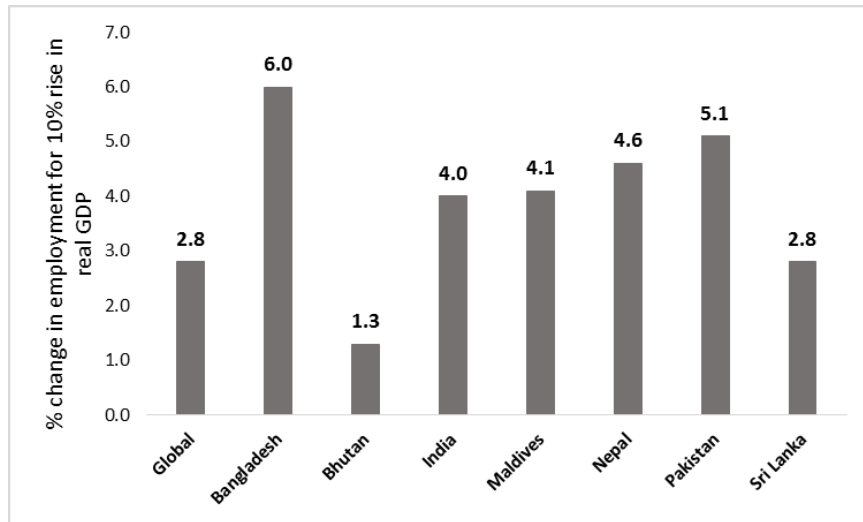
The regression results show that real GDP comes out as highly significant with positive sign in the fixed effect regression model, and one percent rise in real GDP would raise the number of employment by 0.28 percent. Our estimates suggest that, gross capital formation has a positive and statistically significant effect on employment, and a percentage point rise in the share of gross capital formation in GDP would lead to 0.03 percent rise in employment. The size of government has a negative and statistically significant effect on employment, and a percentage point increase in government expenditure-GDP ratio would reduce employment by 0.04 percent. Trade-GDP ratio has also a significant negative effect on the dependent variable, and a percentage point increase in trade-GDP ratio would reduce employment by 0.03 percent. Rise in the price level has however a positive effect on employment.

The highly significant and positive coefficient estimate of real GDP reveals that, in the cross-country panel setting, a ten percent increase in real GDP would raise employment by 2.8 percent (Figure 6.1). A close look at the interaction dummies suggest interesting findings regarding the relationship between employment and the rise in real GDP of South Asian countries. The coefficients of the interaction dummies for all but Bhutan and

Does growth in South Asia promote employment?

Sri Lanka are positive and statistically significant, suggesting that real GDPs have found to have statistically significant different implications for employment of most of the South Asian countries, and for these countries the employment elasticities of economic growth are higher than the global estimate. Among the South Asian countries, the largest effect on employment is observed for Bangladesh, and a ten percent rise in real GDP would lead to the rise in employment by 6 percent. Such effect is the least and lower than the global estimate for Bhutan, as its interaction dummy has a negative and statistically significant coefficient, and a ten percent rise in real GDP in Bhutan would lead to the rise in employment only by 1.3 percent. For Sri Lanka, the effect is the same as the global effect, since its interaction dummy is statistically insignificant. The magnitude of such impact for India is 4 percent, 4.1 percent in the case of Maldives, 4.6 percent in the case of Nepal, and 5.1 percent in the case of Pakistan.

Figure 6.1: Percent change in employment for 10% rise in real GDP



Source: Cross-country panel regression results

The aforementioned analysis leads to some important policy concerns and the necessity of revisiting the quality of growth processes of the South Asian countries. Concerning the regional context, in the long run, while for Bangladesh, Pakistan and, to some extent for Nepal, their economic growth processes have been somewhat employment friendly, for Bhutan and Sri Lanka, their growth processes generated very small employment momentum. For Maldives and India, the employment effect of economic growth has been rather low; and especially for India, it has been lower than those of its two major neighbors, i.e., Bangladesh and Pakistan.

7

Why do countries differ in total factor productivity (TFP)?

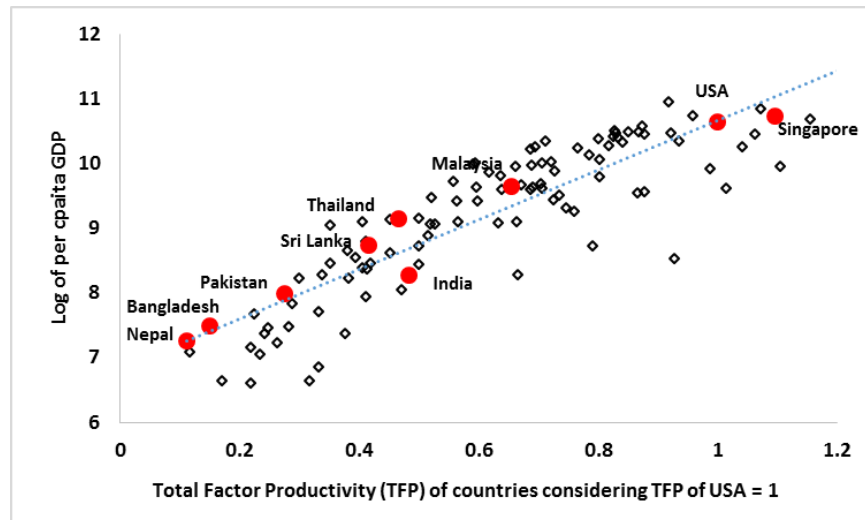
S E L I M R A I H A N

Theoretical and empirical literatures on sources of economic growth emphasized on factor accumulation and factor productivity as two major sources of growth. Though factor accumulation can explain a significant part of economic growth, it can't explain the sustained long run economic growth, as sustained long run economic growth is attributable to growth in productivity. Productivity is the cornerstone of economic growth. Increases in productivity allow firms to produce greater output for the same level of input, and thus result in higher Gross Domestic Product (GDP).

We should make clear the difference between labor productivity, which is output per worker, and Total Factor Productivity (TFP), which is the 'ability' with which all factors are combined to produce outputs. TFP is the part of output which is not explained by the amount of inputs used in production. Essentially, its level is determined by how efficiently and intensely the inputs are used in the production process. TFP growth is usually measured by the Solow residual. TFP plays a key role in economic fluctuations, economic growth and cross-country differences in per capita income.

The scatterplot using the data for 110 countries in 2011 (Figure 7.1) shows a very interesting association between TFP and log of per capita GDP. The TFP data are derived from the Penn World Table version 8.1 (PWT 8.1) with some required adjustments and extensions. Here the TFP level of USA is considered as 1 and other countries' TFP levels are indexed against USA's TFP level. For example, among the South Asian countries, the TFP levels of Bangladesh, India, Nepal, Pakistan and Sri Lanka in 2011 were 0.15, 0.48, 0.11, 0.28 and 0.42 respectively. Similarly, TFP levels of Malaysia and Thailand were 0.65 and 0.47 respectively. Singapore's TFP level (1.1) was higher than that of USA. The trend line shows a very strong positive association between TFP and log of per capita GDP (the correlation coefficient is 0.9). Nepal and Bangladesh, though on the trend line, are at the lower end of the association. A straightforward policy suggestion for these countries is that a rise in the TFP level is required to raise their per capita GDPs.

Figure 7.1: Association between TFP and per capita GDP



Data source: Penn World Table version 8.1

Why do countries differ in TFP? How to improve the level of TFP? In order to answer these questions, we have run fixed effect cross-country panel regressions for 110 countries for the period 1995-2011 considering log of TFP as the dependent variable. The explanatory variables include log of human capital (an index of human capital per person which is linked to the average years of schooling and the return to education), log of public expenditure on health as percentage of GDP, and log of trade-GDP ratio. The data source of human capital is the PWT 8.1, and the data of health expenditure and trade-GDP ratio are taken from the World Bank WDI. The logic behind the formulation of this model is that we want to explore how cross-country differences in statuses of education, health and openness affect the cross-country differences in the TFP. The regression results suggest that all three explanatory variables are statistically significant with expected signs. One percent rise in the human capital index is associated with 0.39 percent rise in the TFP. Also, one percent rise in the ratio of public health expenditure to GDP is associated with 0.03 percent rise in the TFP. Finally, one percent rise in the trade-GDP ratio is associated with 0.03 percent rise in the TFP.

In extended models, we have found that the ratio of FDI to GDP is positively and significantly associated with the TFP. One percent increase in the FDI-GDP ratio is associated with 0.01 percent rise in the TFP. Furthermore, institutional variables like bureaucracy quality and investment profile (from the PRS database) are positively associated with the TFP with statistical significance. Improvements in the bureaucracy quality and investment profile by one unit are associated with rise in TFP by 0.03 percent and 0.01 percent respectively.

The aforementioned analyses suggests that countries like Bangladesh need to attach decisive emphasis on improving their currently low levels of human capital. This can happen by enhancing investment on education and health quite a lot in order

to increase the efficiency in using inputs in the production process thus raising the level of TFP. Also, larger trade and FDI orientations and improvement in the quality of institutions are indispensably important.

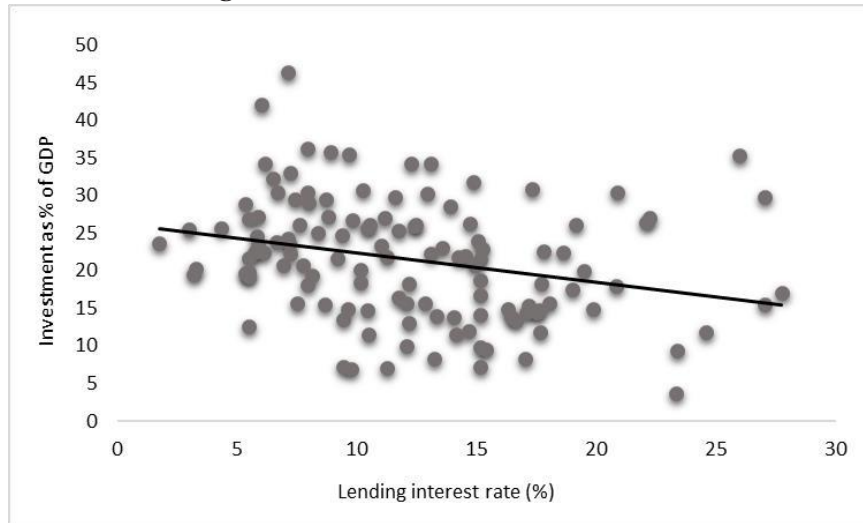
8

Why are some countries able to invest more than others?

SELIM RAIHAN AND MAHTAB UDDIN

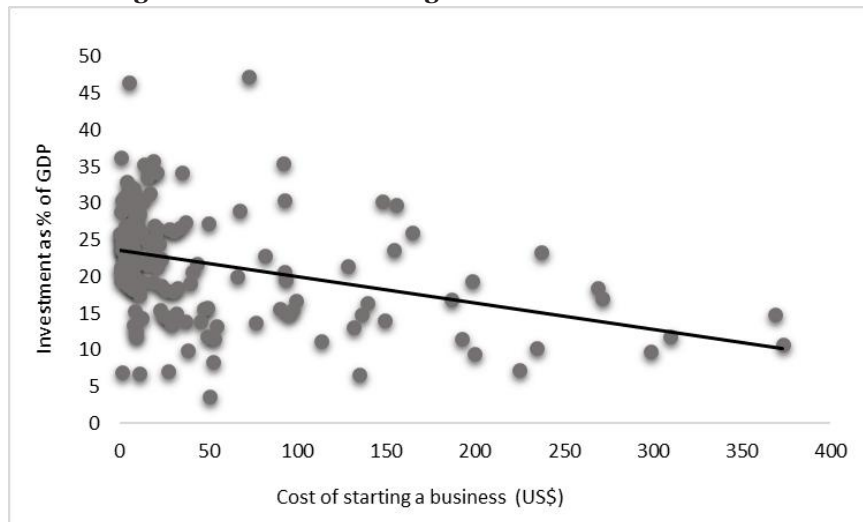
Why are some countries able to invest more than others? Some simple scatterplot illustrations are presented in Figures 8.1-8.4. Figure 8.1 shows that investment is negatively related to the lending interest rate, as higher level of lending interest rate means higher level of cost of borrowing. The World Bank's doing business survey provides cross-country information on a number of indicators related to business environment. One of these indicators is the cost of starting a business in US\$. Figure 8.2 suggests that the higher the cost of starting a business the lower is the investment-GDP ratio at the cross-country context. Penn World Table version 8.1 provides data on human capital per capita. Figure 8.3 indicates that the countries with higher human capital per capita tend to have higher investment-GDP ratio. Finally, as literatures on institutions and economic growth have emphasized a lot on the importance of quality of institutions, one indicator of the quality of institution is the control of corruption. Figure 8.4 suggests that the higher the level of control of corruption, the higher is the investment-GDP ratio.

Figure 8.1: Interest rate and investment



Note: Average for 2006-2010. Data for 125 countries
Data source: World Bank, World Development Indicators

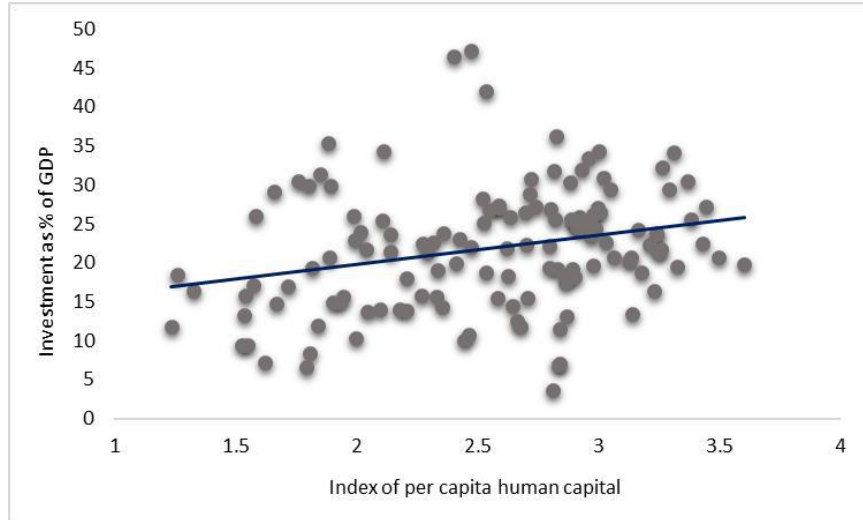
Figure 8.2: Cost of starting a business and investment



Note: Average for 2006-2010. Data for 145 countries
Data source: World Bank, World Development Indicators

Some countries invest more than others

Figure 8.3: Human capital and investment

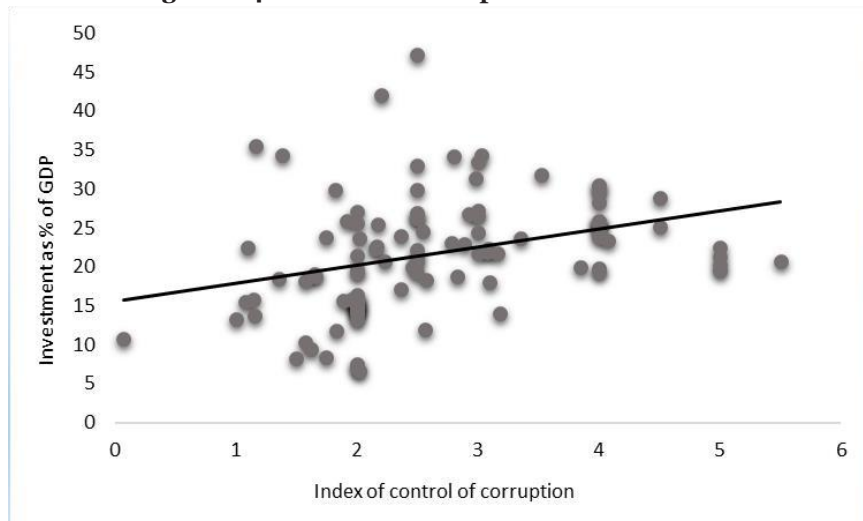


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Note: Average for 2006-2010. Data for 133 countries

Data source: Penn World Table version 8.1

Figure 8.4: Control of corruption and investment



Note: Average for 2006-2010. Data for 103 countries

Data source: ICRG data. <https://www.prsgroup.com/>

In order to do a more sophisticated analysis, we have used a cross-country panel regression for 165 countries for the period between 1960 and 2010. Our dependent variable is the investment-GDP ratio. We have used physical capital stock per capita and gross domestic savings as percentage of GDP as the control variables. Our first set of explanatory variables includes lending interest rate, openness (trade as percentage of GDP) and human capital per capita. The regression results suggest that in the long run, the countries with lower capital-stock per capita tend to have higher investment-GDP ratio, though the magnitude of the effect is very small. Furthermore, the investment-GDP ratio is positively associated with the gross domestic savings-GDP ratio. A percentage point rise in the gross domestic savings-GDP ratio would lead to the rise in the investment-GDP ratio by 0.12 percentage points. Lending interest rate indeed has a negative and significant effect on the investment-GDP ratio; however, the impact is very small, as one percentage point fall in the lending interest rate would lead to the rise in the investment-GDP ratio by only 0.003 percentage points. Openness has a positive and significant effect on the investment-GDP ratio. A percentage point rise in the trade-GDP ratio would lead to 0.03 percentage points rise in the investment-GDP ratio. Also the countries with higher human capital per capita tend to have higher-proportion of investment in GDP, as a unit rise in the human capital index would lead to the rise in the investment-GDP ratio by 2.9 percentage points.

Using region-wise interaction dummies in the panel regression, we are able to show the differences in impact of any variable on investment across regions. Here, we have made some comparisons between South Asia and East Asia. It appears that, though, as derived from the panel regression, reduction in the lending interest rate has a very low effect on investment in East Asia, in South Asia it has a much deeper favorable effect on investment. For South Asian countries 1 percentage point fall in the lending interest rate would lead to the rise in the investment-GDP ratio by 0.4 percentage points! Similarly, openness has almost four times

larger positive impact on investment in South Asia than in East Asia. Human capital has larger effects on investment both in South Asia and East Asia than the global average, though the effect in East Asia is 1.5 times larger than in South Asia.

We are also interested in exploring the effects of different business environment and institutional variables on the cross-country and over time differences in investment-GDP ratios. We have used the variables from the World Bank's Doing Business Survey (for details see: www.doingbusiness.org), with a time period between 2004 and 2010 for 97 countries. Among the doing business survey indicators, three indicators appear to have statistically significant effect on the investment-GDP ratio. The cost of starting a business has a negative and significant effect on investment, and reduction in the cost of starting a business by one US\$ would lead to the rise in the investment-GDP ratio by 0.004 percentage points. The time (days) for enforcing contracts also has a negative effect, as reduction in the time for enforcing contracts by one day would lead the investment-GDP ratio to rise by 0.005 percentage points. Finally, cost of enforcing contracts (percentage of claim) has a negative impact on investment, as one US\$ reduction in such cost would lead to the rise in the investment-GDP ratio by 0.04 percentage points. Interestingly, there is not much difference between South Asia and East Asia with regard to impacts of these three variables on investment.

In the case of the institutional variables, we have considered 12 political risks variables from the International Country Risk Guide (ICRG) database (for details see: www.prsgroup.com) with a time period between 1984 and 2010 for 97 countries. These are bureaucracy quality, government stability, democratic accountability, corruption, law and order, military in politics, investment profile, internal conflict, external conflict, religious tensions, socioeconomic conditions and ethnic conflicts. The regression results suggest that all these institutional variables, except socioeconomic conditions, have positive and statistically significant effect on investment. A point rise in bureaucratic

quality (in a scale of 0-4) would lead to 0.51 percentage points rise in the investment-GDP ratio. A point rise in government stability (in a scale of 0-12) would lead to 0.2 percentage points rise in the investment-GDP ratio. A point increase in democratic accountability (in a scale of 0-6) would lead to a rise in the investment-GDP ratio by 0.47 percentage points. A point improvement in the control of corruption (in a scale of 0-6) would lead to 0.44 percentage points rise in the investment-GDP ratio. A point improvement in law and order (in a scale of 0-6) would result in 0.88 percentage points rise in the investment-GDP ratio. A point improvement in military in politics (in a scale of 0-6 with higher value means lower military in politics) would steer 0.98 percentage points rise in the investment-GDP ratio. A point advancement in investment profile (in a scale of 0-12) would lead to a rise in the investment-GDP ratio by 0.14 percentage points. A point improvement in internal conflict (in a scale of 0-12) would help the investment-GDP ratio to rise by 0.4 percentage points. Similarly, a point improvement in external conflict (in a scale of 0-12) would help the investment-GDP ratio to rise by 0.54 percentage points. A point progress in religion in politics (in a scale of 0-6 with higher value means lower religion in politics) would result in the investment-GDP ratio to rise by 0.34 percentage points. Finally, a point improvement in ethnic conflicts (in a scale of 0-6) would lead to a rise in the investment-GDP ratio by 0.6 percentage points. Bureaucracy quality and investment profile appear to have three and four times respectively larger effects on investment in South Asia than in East Asia; whereas all other institutional variables tend to have larger effects on investment in East Asia than in South Asia.

The aforementioned analysis points to the importance of macroeconomic policy support in the form of raising the domestic savings and lowering the cost of borrowing, economic reforms leading to greater openness, investment in human capital, as well as reduction in the cost of doing business through a variety of institutional reforms for the upswing in the investment-GDP ratio.

9

How does improvement in infrastructure affect economic growth?

S E L I M R A I H A N A N D
S U N E R A S A B A K H A N

Infrastructure plays a decisive role in stimulating long-run economic growth. An increase in the level of infrastructure stock directly helps in reducing poverty and accelerating productivity. Infrastructure also contributes to the development process through the provision of intermediate consumption items for production as well as final consumption services for households. It contributes to growth through generating new jobs, creating cohesive spillover benefits and attracting further investments through crowding in effects. Empirical studies also corroborate the relationship between different infrastructural indicators and growth.

In the present article, we have constructed an Infrastructure Index to observe the growth-infrastructure nexuses from a broader perspective. With a view to observing nexus we have constructed the Infrastructure Index for 133 countries over the period between 1990 and 2012 using four indicators namely Electric Power Consumption (per kWh per capita), Energy Use (kg of oil equivalent per capita), Fixed Broad Internet Subscribers (per 100 people) and Mobile Cellular Subscriptions (per 100 people). The indicators are selected based on the availability of data and importance. We have obtained the data of these selected indicators

from the World Development Indicators (WDI) of the World Bank. In order to assign weight to each indicator to construct the Infrastructure Index we have applied the Principal Component Analysis (PCA) method as it enables to derive the weight for each variable associated with each principal component and its associated variance explained. In doing so, firstly, we have used normalized values of variables followed by the extraction of factors. Secondly, the Eigen values of the factors, which help to determine the significance of principal components, have been used to determine the factors that will be retained. Thirdly, the variables have been assigned weights, which have been calculated by multiplying factor loadings of the principal components with their corresponding Eigen values. And, finally, the index has been constructed using those weights. The constructed Infrastructure Index ranges from 0 to 100 where 0 depicts the worst case and 100 depicts the perfect case. The PCA suggests that the weights for electric power, energy use, internet use, and mobile subscriptions were 29.9 percent, 37.6 percent, 16.3 percent and 16.2 percent respectively in 1990; 30.1 percent, 36.5 percent, 15.8 percent and 17.6 percent respectively in 2000; and 31.4 percent, 33.8 percent, 19.4 percent and 15.4 percent respectively in 2010.

Tables 9.1, 9.2 and 9.3 depict the top 10 and bottom 10 countries in terms of the Infrastructure Index for the years of 1990, 2000, and 2010 respectively. Norway ranked at the top in 1990 while Iceland ranked at the top in both 2000 and 2010. Among the 133 countries considered, Bangladesh ranked the lowest invariably in both 1990 and 2000 whereas, Ethiopia ranked the lowest in 2010. The ranking of the South Asian countries (Table 9.4) shows that Pakistan ranked 110th in 1990, the highest among the five South Asian countries; while Sri Lanka ranked 108th and 103rd respectively in the following two consecutive decades, the highest among the five South Asian countries. It should be noted that the South Asian countries' rank as some of the bottom most countries, which clearly indicates dissatisfactory performance in their infrastructure development. This poor performance clearly depicts

that the region has huge electricity shortages and very low energy use, which together takes into account more than 60 percent weight of the Infrastructure Index.

Table 9.1: Top and bottom 10 countries in terms of Infrastructure Index in 1990 among 133 countries

Top 10			Bottom 10		
Rank	Country	Index	Rank	Country	Index
1	Norway	72.34	133	Bangladesh	0.05
2	Sweden	64.07	132	Senegal	0.45
3	United States	59.46	131	Cambodia	0.52
4	Finland	55.88	130	Ethiopia	0.56
5	Iceland	55.85	129	Nepal	0.56
6	Canada	55.71	128	Benin	0.69
7	Qatar	52.32	127	Congo DR	0.74
8	Luxembourg	43.64	126	Togo	0.76
9	Australia	40.46	125	Sri Lanka	0.79
10	Switzerland	37.51	124	Tanzania	0.81

Source: Authors' calculation

Table 9.2: Top and bottom 10 countries in terms of Infrastructure Index in 2000 among 133 countries

Top 10			Bottom 10		
Rank	Country	Index	Rank	Country	Index
1	Iceland	82.58	133	Bangladesh	0.16
2	Norway	71.72	132	Ethiopia	0.30
3	Qatar	58.96	131	Congo, DR	0.48
4	Sweden	58.28	130	Nepal	0.50
5	Canada	57.66	129	Sudan	0.58
6	Finland	57.09	128	Cambodia	0.61
7	Luxembourg	54.14	127	Benin	0.63
8	United States	53.44	126	Tanzania	0.66
9	Australia	46.93	125	Mozambique	0.72
10	Netherlands	44.78	124	Congo, Rep.	0.84

Source: Authors' calculation

Table 9.3: Top and bottom 10 countries in terms of Infrastructure Index in 2010 among 133 countries

Top 10			Bottom 10		
Rank	Country	Index	Rank	Country	Index
1	Iceland	92.95	133	Ethiopia	1.39
2	Qatar	67.18	132	Korea, DPR	1.89
3	Luxembourg	56.42	131	Congo, DR	1.95
4	Norway	56.26	130	Mozambique	3.98
5	Kuwait	56.04	129	Nepal	4.47
6	Trinidad & Tobago	54.87	128	Togo	4.49
7	Finland	53.42	127	Bangladesh	4.56
8	Bahrain	51.17	126	Cameroon	4.80
9	Sweden	47.10	125	Cambodia	5.25
10	Canada	46.10	124	Tanzania	6.49

Source: Authors' calculation

Table 9.4: Ranking of South Asian countries' Infrastructure Index

South Asia in 1990			South Asia in 2000			South Asia in 2010		
Rank	Country	Index	Rank	Country	Index	Rank	Country	Index
110	Pakistan	1.10	108	Sri Lanka	1.60	103	Sri Lanka	9.87
113	India	1.03	112	India	1.25	112	India	7.56
121	Sri Lanka	0.79	113	Pakistan	1.24	115	Pakistan	7.03
125	Nepal	0.56	126	Nepal	0.50	125	Bangladesh	4.56
133	Bangladesh	0.05	133	Bangladesh	0.16	127	Nepal	4.47

Source: Authors' calculation

In order to explore the association between infrastructure and economic growth we have run a series of fixed effect panel regressions where Infrastructure Index and its sub-components are treated as infrastructure capital. We have followed the production function approach in the cross-county growth regressions where aggregate output Y at time t is produced using other capital, infrastructure capital and labor. Our data covers the time period between 1990 and 2011 and we have a balanced panel data set. We have chosen a long panel over other models as infrastructure is expected to have a long-term effect on growth. Output is measured as real GDP at constant 2005 national prices (in million 2005 US\$), other capital is measured as capital stock at

constant 2005 national prices (in million 2005 US\$), and labor is measured as the number of persons engaged (in millions). The data of real GDP, capital stock and labor is obtained from the Penn World Table 8.1. We have taken natural logarithm for all variables except the infrastructure variables.

We have carried out five individual sets of fixed effect regressions. The first set of regressions included real GDP, the Infrastructure Index, capital stock, and labor. The result shows strong, statistically significant and positive relationship of labor, capital stock, and Infrastructure Index with real GDP: a 10 percent increase in labor supply increases real GDP by 3.5 percent; a 10 percent increase in capital stock increases real GDP by 6.2 percent while a 10 unit increase in the Infrastructure Index raises real GDP by 1 percent. Analogous to the first set of regressions, in all of the successive regressions, after controlling for capital stock and labor, we find a highly significant influence of sub-components of Infrastructure Index over real GDP growth. It is observed that, a 10 unit increase in the electric power consumption raises real GDP by 1.3 percent; a 10 unit increase in the energy use raises real GDP by 1.7 percent; a 10 unit increase in the fixed broad internet subscribers brings about 1.6 percent increase in real GDP; and finally, a 10 unit increase in the mobile cellular subscriptions boosts real GDP by 1.6 percent.

Furthermore, to capture the regional differences between 'South Asia' (SA) and 'East and South-East Asia' (ESEA) with regard to impact of infrastructure over growth performances, we have carried out regressions using a least squares dummy variable model (LSDV). It is observed that in case of South Asia a 10 unit increase in Infrastructure Index results in a 3.1 percent rise in their real GDP, whereas, a 10 unit increase in Infrastructure Index results in a 1.2 percent increase in real GDP in ESEA. A reason for such difference in the size of the coefficients may be due to the differences in the level of development of infrastructure between

SA and ESEA. As SA is well behind ESEA in terms of infrastructure development, improvements in infrastructure will bring about a larger positive effect on growth in SA than in ESEA.

The aforementioned analysis points to the fact that improvements in infrastructure significantly contributes to economic growth, and therefore, investment in infrastructure is an essential pre-requisite pediment. Hence, to opt for the 'inclusive growth' agenda, supply side bottlenecks should be addressed promptly. Priorities should be given to the development of infrastructures that can create highly adhesive 'crowding in' effect for private sector investment.

10

What do international remittances mean for the South Asian countries?

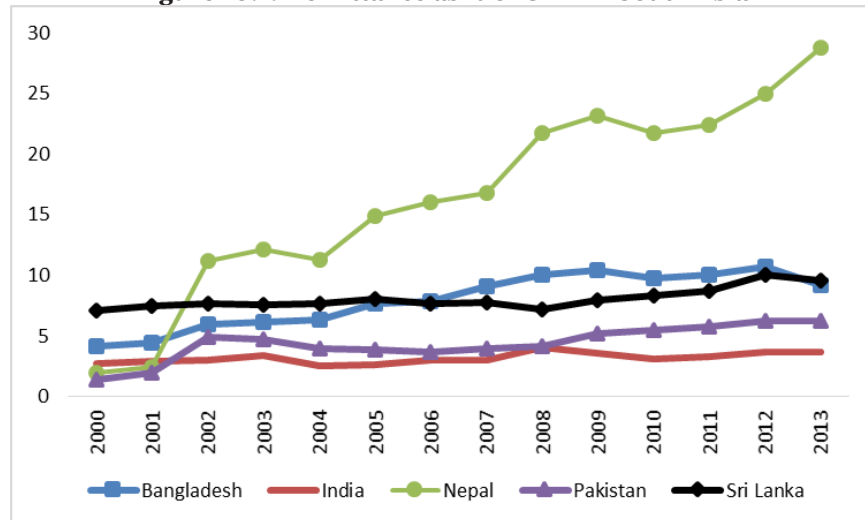
S E L I M R A I H A N

International remittances are gaining importance for the South Asian region, reflecting the significance of labor-based services exports. South Asia's large labor endowment, including low-skilled, semi-skilled, high skilled categories, results in a regional comparative advantage in exporting labor-based services. As Figure 10.1 suggests, during 2000 and 2013, international remittances as percentage of GDP increased from 4.2 percent to 9.2 percent in Bangladesh, from 2.7 percent to 3.7 percent in India, from 2 percent to 28.8 percent in Nepal, from 1.5 percent to 6.3 percent in Pakistan and from 7.1 percent to 9.6 percent in Sri Lanka. International remittances are important sources of foreign capital for these South Asian countries. Reasonably significant inflows of remittances into these economies have macroeconomic effects which may have critical and important implications for these countries. Anecdotal evidences also suggest that remittances have helped alleviating poverty in these countries.

We have examined the impacts of remittances on five South Asian economies using comparative static CGE models of these countries. The advantage of a CGE framework is that it traces the price effects of the exogenous shock. In an increasingly market-

oriented economy, the variations in prices may be the most important sources of re-allocation of resources among competing activities, which then may alter the factorial income and, hence, the distribution of personal income.

Figure 10.1: Remittance as % of GDP in South Asia



Data source: World Bank, World Development Indicators

Social Accounting Matrices (SAMs) for the year 2012 for Bangladesh, India, Nepal, Pakistan and Sri Lanka have been used in the CGE models as the benchmark data. In order to understand the short run impacts of the rise in remittances, in the CGE model, as model closures, we assume that total stocks of land, tax rates, technical changes, total real inventories and total real government expenditures are fixed; capital stocks are sector specific; government savings, current account balance and total real investment are endogenous, whereas rigidities in the labor market are reflected by allowing aggregate employment to change—i.e., labor is in elastic supply with a pool of unemployed workers waiting to be hired—at a wage (nominal and real) indexed to the economy-wide consumer price index (CPI). The consumer price

index (CPI) is the model's numéraire. This experiment undertakes a scenario of a rise in remittances by 10 percent in all five South Asian countries.

The macroeconomic effects of this scenario suggest that (Table 10.1) real GDPs in all the five South Asian countries would rise. However, the largest positive effect would be observed for Nepal where real GDP would rise by 3.7 percent. Bangladesh would have the second largest effect with a rise in real GDP by 2.4 percent. The least positive effect would be observed for India with the rise in real GDP by only 0.32 percent. Rise in remittances would have resulted in the real exchange rate to appreciate in all the five countries, and the largest effect would be observed for Nepal followed by Bangladesh. The appreciation of the real exchange rate makes exports less competitive in the world market, hence, there would be depressing effects on exports. Such a scenario, would lead to negative effects on exports in both Bangladesh and Nepal by more than 4 percent, in Pakistan and Sri Lanka by more than 1 percent and in India by less than 0.5 percent. The appreciation of the real exchange rate leads to the fall in the price of imports in local currency, which would result in the rise in the demand for imports in all these countries. Such rises in imports would be highly prominent in Nepal and Bangladesh.

Table 10.1: Macroeconomic impacts (% change from the base)

Variables	Bangladesh	India	Nepal	Pakistan	Sri Lanka
Real GDP	2.41	0.32	3.71	0.44	0.66
Real exchange rate	-1.49	-0.11	-1.94	-0.20	-0.23
Exports	-4.07	-0.46	-4.08	-1.33	-1.03
Import	6.82	0.98	7.85	1.88	2.25
Household demand	3.42	0.64	4.74	0.74	1.49
Domestic demand	0.90	0.27	2.09	0.27	0.66
Gross production	0.48	0.18	1.62	0.18	0.32
GDP deflator	1.51	0.11	1.98	0.20	0.23

Source: CGE simulations

Rise in remittances inflow would lead to rising household demand. For Nepal, such rise would be 4.7 percent while for Bangladesh it would be 3.4 percent. In the case of India, the impact would be the least. However, rises in the household demand would be met more by the imports and less by the rise in demand for domestic goods. As a result, there would be positive but small effects on the gross domestic production. The rise in remittance inflows would have some inflationary impact on these economies, as the GDP deflators would rise in all five South Asian countries, with larger effects in Nepal and Bangladesh. Under this scenario, the major boost for the rise in real GDP would be coming from the significant rise in consumption demand in all five South Asian countries.

Table 10.2: Impacts on sectoral output (% change from the base)

Sector	Bangladesh	India	Nepal	Pakistan	Sri Lanka
Grains and Crops	0.56	0.24	1.23	0.03	0.07
Livestock and Meat Products	1.79	0.28	2.11	0.40	0.39
Mining and Extraction	0.72	-0.26	0.58	-0.28	-0.07
Processed Food	2.74	0.34	0.21	0.30	0.18
Textiles and Clothing	-2.35	0.20	-4.24	-0.33	-0.73
Light Manufacturing	0.58	-0.01	-0.19	-0.28	-0.27
Heavy Manufacturing	-1.48	0.01	-0.88	-0.16	-0.12
Utilities and Construction	1.43	0.44	4.74	0.34	1.60
Transport and Communication	0.43	0.22	1.84	0.38	0.43
Other Services	1.99	0.22	1.83	0.28	0.77

Source: CGE simulation

At the sectoral level, there would be some important reallocation effects (Table 10.2). In Bangladesh, textile and clothing is the major export-oriented sector and its output would have reduced by 2.3 percent. Negative effect would also be observed in the production of heavy manufacturing. However, outputs in all other sectors would increase. The largest positive rise in output would be observed in the case of processed food. Output of other services would also rise by around 2 percent. In the case of India, production would fall in the mining and extraction sector and in

the light manufacturing sector with small rises in all other sectors. In the case of Nepal, large negative impacts would be observed for textile and clothing sector, and some small negative impacts on both light and heavy manufacturing sectors; however, there would be positive impacts on other sectors with a significant rise in output in the utilities and construction sector. In the case of Pakistan and Sri Lanka, remittances inflow would have some negative impacts on the outputs of mining and extraction sector, textile and clothing sector and on both light and heavy manufacturing sectors with some positive effects on outputs in other sectors.

The aforementioned analyses clearly suggest that remittances play very important roles in the economies of Bangladesh, India, Nepal, Pakistan and Sri Lanka. However, there are critical differences in the magnitude of impacts in these economies, and the CGE simulation results show that such differences originate from differences in the degree of orientation of remittances for these five South Asian countries.

LET'S THINK ALOUD, SHALL WE?

50

11

The future of the manufacturing sector in Bangladesh

S E L I M R A I H A N

Bangladesh's economy has witnessed significant structural changes over the last four decades. The share of agriculture in GDP has declined from over 60 percent to less than 20 percent during this period, while the relative significance of industry (including manufacturing), which is currently estimated to be 28 percent of GDP, and of the services sectors (currently estimated to be more than 50 percent of GDP) has increased substantially. Over the past two decades or so, Bangladesh has experienced sustained overall economic expansion of more than 5 percent per annum. The growth dynamism in Bangladesh during this period has been largely provided by the industrial and services sectors. However, the economy is yet to have a strong manufacturing base, despite the success of the garment industry, as the share of manufacturing in GDP touched only 19 percent by 2010, which was just 4.9 percentage points higher than that in 1985-86 (Table 11.1).

The pace of reduction in the share of agriculture in overall employment has been much slower than the pace of reduction in the share of agriculture in GDP. This suggests that growth in the overall manufacturing and service sectors has not been strong

enough to allow for a re-allocation of surplus labor from agriculture. Table 11.1 also suggests that the share of manufacturing in overall employment in 2013 was only 16.4 percent, which was much lower than the share of this sector in GDP. This indicates that as far as the overall manufacturing sector is concerned, the challenge for employment creation on a larger scale remains.

Table 11.1: Share of manufacturing in GDP and employment in Bangladesh (%)

	1985-86	1995-96	2005-06	2010	2013
Share in GDP (%)	14.16	15.33	16.53	17.89	19.06
Share in Employment (%)	9.08	10.12	11.03	12.46	16.42

Sources: Share in GDP figures from World Development Indicators, World Bank; Share in employment figures are estimated from Labor Force Surveys of Bangladesh Bureau of Statistics

Manufacturing is now an overwhelmingly salient component of the country's export composition, thanks largely to the rapid expansion of the RMG industry. From a small base of only around US\$ 32 million in 1984, RMG exports have grown to around US\$ 20 billion by 2012, accounting for more than three-quarters of export earnings. RMG has been an important contributor to growth and employment generation in Bangladesh. It provides direct employment to over 4 million people, 70 percent of whom are women. More than 50 percent of the manufacturing labor force is now employed in this sector, and the sector accounts for 30 percent of the investment in manufacturing. Therefore, the story of the growth of the manufacturing sector in Bangladesh over the past two decades has been the story of the success of the RMG sector. However, the question remains as to whether the current structure of the manufacturing sector would continue as a sustained driver of economic growth and employment creation in Bangladesh in the future because of two reasons. And to repeat the obvious, the challenge of improving the poor quality of many jobs in manufacturing persists.

First, although diversification of the manufacturing sector has been on the agenda of policy-makers drafting trade and industrial policies, little progress has been achieved during these decades. There is no denying the fact that diversification is a necessary condition for achieving sustained and long-term growth of the manufacturing sector in an economy. However, given the existing heavy reliance on the RMG sector and weak performance of most of the non-RMG manufacturing sectors, achieving sustained and long term growth in the manufacturing sector in Bangladesh remains a challenge.

Second, it can be argued that the growth in the RMG sector in Bangladesh has to a large extent, been driven by some sizeable 'rents' generated in this sector, and there are possibilities of shrinking the sizes of such 'rents' in the future due to both domestic and international factors. There have been five major sources of 'rents': the Multifibre Arrangements (MFA) quota (which no longer exists) and the Generalized System of Preferences (GSPs); different forms of subsidies; tax exemption; the labor regime; and compliance.

The MFA regime was phased out by the end of 2004, though the GSP facility of the EU is still in place. However, there are concerns with regard to the continuation of such facilities in the future on grounds of lack of compliance, weak labor standards and the conflictual political situation in Bangladesh.

The RMG industry also enjoys support from the government in the form of export subsidies, interest rate subsidies and subsidies on the cost of utilities. 'Rent' in this sector is also generated by the tax exemption facilities. It is estimated that the size of the tax foregone in the RMG sector due to the provision of tax exemption facility in recent years could be as high as 6.3 percent of the total

tax revenue. However, the size of such 'rent' could shrink over time due to the budgetary constraints of the government.

Over the past three decades, the RMG industry has benefited from a labor regime, supported by the major political parties, which has been able to keep the wages of labor in this industry very low. However, recent labor unrest over the hike of the minimum wages in this sector as also the pressure exerted by the international community pose serious challenges in terms of the 'sustainability' of such a labor regime. Similarly, a regime of lack of compliance, especially with regard to the working environment and factory standards, in the context of weak regulatory institutions, has generated 'rent' for this sector over the years. However, such 'rent' has become highly unsustainable due to the serious international pressure for enforcing compliance in the wake of recent incidents of fire and building collapse, which have resulted in a large number of deaths of RMG workers. All these developments suggest that the RMG sector in Bangladesh needs to undergo some major structural changes in the future for ensuring its sustainability, which would have important implications for the growth of both the manufacturing sector as also of the overall economy.

Against this backdrop, it is important to highlight that in order to become a sustained driver of economic growth and employment creation in Bangladesh, the manufacturing sector needs to lay stress on expanding and diversifying its base. It is important to support macroeconomic, trade and industrial policies, and to address the policy-induced and supply side constraints, which have hampered the growth of the non-RMG sectors. Some of these constraints include the lack of investment funds and working capital, prevalence of high interest rates, shortage of skilled workers, lack of entrepreneurial and managerial skills, availability of poor physical infrastructure, and inefficient ports along with high transport costs, weak institutions, a poor law and order

situation, and high invisible costs of doing business, among other things.

Therefore, apart from RMG, the export response of all other major commodities has been very weak. The RMG sector also appears to be the main beneficiary of the export incentives while for the non-RMG sectors, such schemes have proved to be less effective. The RMG owners constitute the most powerful and organized business group in Bangladesh. The political power of this group is derived from its high contribution to economic growth, close political integration with the State (including in the form of parliamentary representation) and the class origins of the owners (erstwhile military and bureaucratic officials and members of the managerial class have been pioneers of the RMG sector). The political clout and policy influence of the RMG sector are also clearly manifested in the process whereby the relevant government institutions, such as the National Board of Revenue, and the association of RMG owners, that is, the Bangladesh Garment Manufacturers Exporters' Association (BGMEA), have jointly decided and enforced a large proportion of the tax privileges that the RMG sector enjoys.

This situation also raises a critical question as to whether rents are needed for the promotion of the non-RMG sectors. The current industrial policy highlights the importance of economic diversification and of providing incentives to other sectors in order to generate some rents in the non-RMG sectors. However, it should be kept in mind that the manner in which the RMG sector has been able to generate 'rents' through the suppressed labor regime and weak compliance is not sustainable and cannot be replicated in the other sectors. Hence, there is need for a well-designed and effective industrial policy wherein monetary (interest rate subsidies) and fiscal incentives (reduced taxes or tax holidays) should be transparent and time-bound. The current industrial policy, however, lacks vision and is also poorly designed.

In addition, industrial policy needs to address issues of education and skill development for facilitating higher capabilities, in which Bangladesh is lacking.

In addition current labor practices prevalent in the RMG sectors need to be improved in order to make the sector sustainable. There is strong international pressure, in the form of the threat of cancelling large preferences in the markets of Western countries, if labor conditions are not improved. Improvement of the labor condition is closely linked to the enhancement of the productivity of labor. The RMG owners in Bangladesh have been reluctant to invest in training workers as most of them produce low-value added RMG products and also because of the free-riding problem. Thus, the BGMEA and the government should collaborate with each other, with help from relevant international agencies, to be able to work effectively in this area.

One pragmatic way of dealing with such issues is to consider a well-devised integrated approach under a well-designed industrial policy. Under this approach, actions required at different levels can be brought together to make intervention schemes or support systems comprehensive and broad-based. Such intervention schemes should be sector-specific in order to ensure the effective diversification of the economy of Bangladesh. It is thus imperative to make relevant government instructions effective and well-functioning for the execution of such an integrated approach.

12

Bangladesh needs a new investment regime

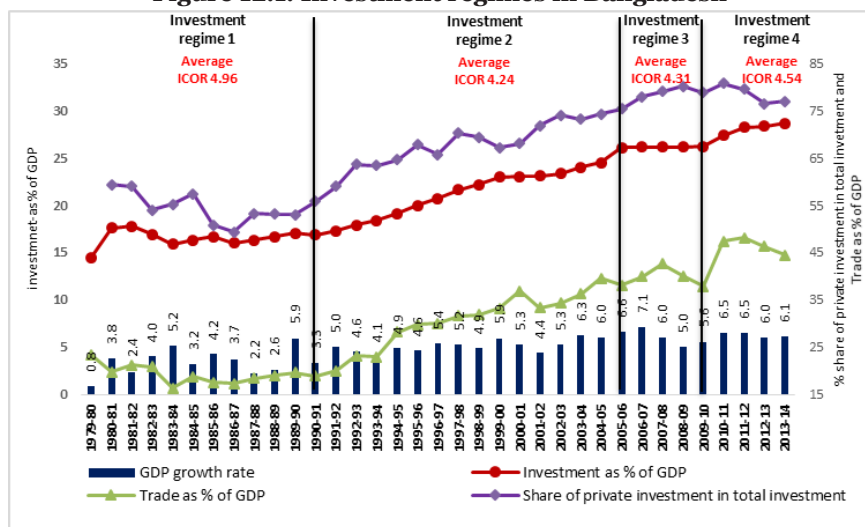
S E L I M R A I H A N

Looking at the trend in the investment-GDP ratio since 1979-80, we can suggest four different investment regimes in Bangladesh (Figure 12.1). The first regime (1979-80 to 1989-90) is characterized by low level of investment-GDP ratio with an annual average of 16.5 percent. This regime generated large fluctuations in GDP growth rates and the annual average GDP growth rate was only 3.5 percent. The second regime (1990-91 to 2004-05) saw a steady rise in investment-GDP ratio with an annual average of 21 percent. This regime yielded an annual average GDP growth rate of 5 percent. The third regime (2005-06 to 2008-09) experienced a higher but virtually flat investment-GDP ratio of 26.2 percent and a resultant rise in annual average GDP growth rate to 6.2 percent. Finally, the fourth regime is the current one (2009-10 to 2013-14) with a rise in annual average investment-GDP ratio to 28.2 percent, with 6.3 percent annual average GDP growth rate.

These four investment regimes, as portrayed in Figure 12.1., can be tagged with different economic and political environments in Bangladesh. One economic indicator is the degree of openness. During the first regime, the economy was highly protected as is manifested by very low level of trade-GDP ratio. However, since

the second regime, through different economic reform measures, the economy became more and more trade-oriented, as the trade-GDP ratio experienced a steady rise over the years since then. The third regime, however experienced a rise in the trade-GDP ratio at the beginning and then a fall. The striking feature of the fourth regime is that, the recent years are experiencing a gradual fall in the trade-GDP ratio, which is a matter of big concern. This is also linked to sluggishness in economic reforms in recent years. On the political front, the sluggish and low level of investment during the first regime was accompanied by a military dictatorship. The second regime of the steady rise in investment was under the regime of 'parliamentary democracies' with high prevalence of 'contested politics'. The third regime of stagnant investment was associated with a 'military backed' caretaker government with complete absence of 'contested politics'. And finally, the fourth regime has been a regime of 'parliamentary democracies' with a low level of 'contested politics'.

Figure 12.1: Investment regimes in Bangladesh



Data Source: World Bank, World Development Indicators and author's calculation

One very important aspect of these investment regimes is the trend in the private sector participation in the economic growth process. If we look at the trend in the share of private investment in total investment, the first regime was characterized by a low and declining share of private investment. However, during the second regime, large contribution to the rise in investment came from the rise in private investment and its share in total investment. During the third investment regime, the share increased in the initial years and then fell in the later years. However, under the fourth regime, with the fact that the investment-GDP ratio has become somehow stagnant in the recent years, the share of private investment in total investment has fallen with the rise in the share of public investment, which is essentially unsustainable.

One very striking feature is that, in the recent two investment regimes, the productivity of investment has fallen. One way of measuring the productivity of investment is the Incremental Capital-Output Ratio (ICOR), which is the ratio of 'investment as percent of GDP' to 'GDP growth rate'. The higher the ICOR, the lower the productivity of investment. During the first regime, the annual average ICOR was as high as close to 5. However, during the second regime it came down to 4.24. The third regime saw a rise to 4.31. But, alarmingly, the fourth investment regime has an average ICOR of 4.54. This suggests that in recent years, there have been noticeable rises in the inefficiencies in the economic institutions and resultant falls in the returns to investment. This is clearly manifested by the fact that though during the third and fourth investment regimes, the annual average GDP growth rates have been little over 6 percent, the investment-GDP ratio in the fourth regime was 2 percentage points higher than that of the third regime, indicating that the economy is now needing more resources to generate the same level of GDP growth rate! This also points to the alarming fact that mere rise in investment-GDP ratio would not ensure higher GDP growth rate in the future!

There is no denying the fact that economic diversification is very important for economic growth process to be sustainable. It is

important to mention that as against the first investment regime, the second investment regime was able to generate some essential diversifications of the economy through significant expansion of some non-agricultural sectors. One such example is the growth of the export-oriented readymade garment sector. However, in the later investment regimes, there has not been much progress in further diversification of the economy in general and the export basket in particular. There remain large policy induced and supply side constraints inhibiting further diversification of the economy.

All these suggest that there is a need for a new investment regime in Bangladesh. This new investment regime calls for some substantial policy and institutional reforms aiming at considerable rise in private investment and its efficiency. What needed are: (i) a new paradigm of macro, trade and investment policies aiming at economic diversification, (ii) reducing the cost of borrowing through financial sector institutional reforms, (iii) reform of the economic institutions tuned to further growth acceleration and growth maintenance, (iv) stability in the political institutions and presence of higher degree of 'contested politics', (v) efficient public investment in social and physical infrastructures facilitating further private investment, (vi) attracting large FDIs, with emphasis on regional cooperation in South Asia, and (vii) improving the overall governance of the macroeconomic policy environment.

13

Is an agriculture-focused development strategy right choice for Bangladesh?

MOHAMMAD A. RAZZAQUE AND
SELIM RAIHAN

After more than two decades of neglect by academic and donor communities, agriculture returned to the center stage amidst historically high food prices inflicting widespread food insecurity and threatening several years' of progress made on poverty reduction. International donors have made fresh commitments for increased resources to be devoted in agriculture of developing countries with the possibilities of different desirable outcomes. Key questions that are being asked include, *inter alia*, how to formulate country strategies so that the sector can be used to support structural transformation of the economy under 'heterogeneous' conditions (de Janvry, 2010).

This renewed emphasis on agriculture has an interesting context and important policy relevance for Bangladesh. Despite registering agricultural output growth faster than that of population, the country faces formidable food-security challenges comprising food availability, accessibility and affordability by the poor. Besides, agricultural growth is considered to be vital in tackling poverty. Sustained economic growth with the on-going structural

transformation, as reflected in the declining relative significance of agriculture, is generally considered to be a usual route to development. Nevertheless, addressing food insecurity and poverty would imply a continuously prominent role of agriculture. In this respect, an important issue that needs to be better understood is the implications of a reinvigorated agriculture-focused growth strategy for the overall economy.

However, the relevant policy choices involving agriculture, growth and poverty reduction may not be straightforward: the impact of agricultural growth on poverty-reduction is likely to be strong, but the effect on the overall economy is not clear. There are also concerns about weak linkage effects of agriculture. In an open economy, farm outputs provide mainly for import-competing consumption with the comparative advantage determining sectoral resource allocation. If the productivity in agriculture is low, nonfarm sectors can be argued to be the most important vehicle for growth and poverty reduction.

The role of agriculture in the growth-poverty reduction nexus is one of the most critical medium to long-term policy issues for Bangladesh. The growth-poverty trade-off associated with agriculture-focused development strategy is greatly mitigated if farm activities can exert strong linkage effects for the rest of the economy. Despite attracting so much attention, discussions surrounding it are often uninformed in nature due to lack of in-depth empirical investigations into the nature of linkages between agriculture and the rest of the economy.

In a recent paper for the International Growth Centre, we made an attempt to understand the effect of farm production on the overall economic activity and sectoral outputs. The analytical framework used for that purpose is grounded in dualistic models applied for studying sectoral linkages within an economy. One significant

contribution in this regard is due to Feder (1983) who depicted the effects of exports on output as the sum of ‘externality’ and ‘productivity differential’ effects. Our paper adapts the same Feder framework but to deduce an empirical model to assess the linkage effects of agriculture. At the outset, agriculture has certain externality effects for the overall economy. While it may be difficult to accept the farm sector’s having (positive) productivity differential effects (compared to the rest of the economy), which is a salient feature associated with the export sector in Feder’s theoretical construct, we argue that the sum of ‘externality and production differential effects’ arising from agriculture can be left for empirical verification. Therefore, following Feder (1983) but adapting it to our case, the economy is divided into two sectors – agriculture and non-agriculture. We assume that aggregate outputs of agriculture and non-agricultural activities are functions of both capital and labor employed in farm and nonfarm sectors respectively. Agriculture then enters into the production function of nonfarm sector.

Using the time series data, we then test for a valid long-run relationship (cointegration) amongst variables using appropriate time series and econometric techniques. The results associated with the dual sector model provide strong externality effects of agriculture. These effects are robust as they are maintained under different model formulations. When the model is appropriately modified as proposed by Gemmell et al. (2000), there is also the evidence of ‘cointegration’ between agriculture and overall economic output. The estimated long-run agricultural elasticity ranges from close to 1 to 1.6. These results are supported by well-behaved short-run dynamics as the corresponding error-correction models satisfy usual properties with the positive effects of farm output growth borne out.

To clear out the natural growth-accounting effect of agriculture on overall GDP, empirical tests are carried out. The estimation of this

relationship, using a methodology that treats both the variables as jointly determined, generates positive and highly significant effects of agriculture on the nonfarm sector.

We also examine inter-sectoral linkages involving agriculture, manufacturing and services. These components of GDP seem to move together and confirm a valid long-run relationship. The effects of agriculture on services are found to be quite large: a 1 percent increase in agricultural GDP leads in the long-run to a 1.14 percent increase in services output. On the other hand, the same increase in manufacturing GDP results in 0.25 percent increase in service GDP. Along with detecting causality effects running towards agriculture, more importantly for our case, there is also the evidence of agricultural growth causing growth of outputs in other sectors. Finally, impulse response functions are computed to trace the movements of different variables. A one standard deviation shock in the agricultural sector generates a sustained positive effect on the services output, and almost a similar effect, although slightly fluctuating, is also exhibited for the manufacturing output.

There are important policy implications of the above findings. First and foremost, agriculture has significant positive spillover effects. As such, a policy emphasis to promote agriculture will not necessarily have adverse implications for other sectors.

There exists an enormous scope of productivity improvement in agriculture. It is widely recognized that agricultural production is still much less capital intensive compared to many other countries. Future productivity gains therefore are likely to come from additional investment in this respect. This will not only bolster the firm sector's ability to provide food for population and raw materials for industrial sectors, but also tax revenues for government as well as savings generation for investment

elsewhere. The farm economy appears to exert large and significant positive influence on growth and productivity in the services sector, which is often regarded as a low productive area. Movement of labor and savings out of agriculture to nonfarm sectors can explain part of the inter-sectoral linkages. Recent evidence shows wages in agriculture are on the rise along with the growth in services, particularly the rural nonfarm sector has flourished. This seems to indicate a more active role of agriculture in which it not only does provide capital and labor to other sectors, but also a huge market. The service-oriented rural nonfarm and urban informal sectors have been considered to be the 'bridge' between commodity based agriculture and livelihood earned in the modern sectors, providing the transition from underemployment at farm tasks to regular wage employment in the local economy. If services sectors are actually responding to increased demand of the farm economy, the farm-nonfarm linkages mark an important structural transformation process for Bangladesh.

Notwithstanding the spillover effects, an agriculture-focused growth strategy will enhance the sector's ability to sustain a decent income growth for rural population thereby triggering immediate anti-poverty effects while ensuring a huge market for products and services for local industries. With its big population, Bangladesh has relatively a large domestic market, which implies that non-tradable and import-competing sectors are likely to be an important source of growth. Given its linkages, agricultural growth can boost economic activities in these sectors. Indeed, the findings of our exercise suggest that an agriculture-focused development strategy may not compromise with a growth maximizing objective that will also make a powerful dent in poverty incidence.

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14

Do households with international remittances have different expenditure patterns?

SELIM RAIHAN, TASNEEM SIDDIQUI
AND RAISUL A MAHMOOD

Starting from a very low base, during 1976 and 2014, international remittances in Bangladesh increased steadily. However, there is a very little systematic research on the link between international remittances and households' expenditure pattern in the context of the Bangladesh economy. The empirical base of our study comes from a detailed household survey conducted by the Refugee and Migratory Movements Research Unit (RMMRU) during 2013-2014 in 17 districts of Bangladesh from 7 divisions. The selection of districts was both random and purposive. Districts were chosen from high, medium and low intensities of international migration. The survey covered short-term international contract migrants, internal migrants and non-migrant households. One upazila from the top three migrant producing upazilas from each district was selected. Within each selected upazila, one union was selected from the top three migrant producing unions. Within each selected union, 6 villages were selected. This led to a total 102 villages to survey in. The survey interviewed a total of 5084 households, of which 2484 were international migrant households

and 1372 internal migrant households and 1228 non-migrant households.

A “two stage instrumental variable regression method” is used. At the first stage, we have run a probit regression of the factors affecting the probability of receiving remittances. Areas of frequency of migration have been considered as instruments. At the second stage, we use the predicted value of likelihood of receiving remittances as an explanatory variable, along with household characteristics in the household expenditure equation. The marginal effects from the probit regressions are calculated.

The regression results suggest that, in general, household size, dependency ratio and female headed household have negative effects and household head's age, average years of schooling of household head, employment in the non-agriculture sector and land size of the household have positive effects on different categories of expenditures of the households. The effects of the predicted value of likelihood of receiving remittance are positive and statistically significant for total expenditure, food expenditure, non-food expenditure and education expenditure; which suggest that 1 unit increase in the predicted probability of households receiving remittances leads to 0.302 percent increase in the total expenditure, 0.283 percent increase in food expenditure, 0.412 percent increase in non-food expenditure and 0.728 percent increase in education expenditure at the household level. Remittance doesn't seem to have any statistically significant effect on health expenditure at the household level. Remittances seem to have a larger positive effect on non-food expenditure than food expenditure.

The estimation results for savings behavior, after controlling for household size, age of the household head, religion, average years of schooling of household head, dependency ratio, gender of

household head, employment sector and land size of the household show that, 1 unit increase in the predicted probability of receiving remittances leads to rise in probability of having savings account in bank, and monthly deposit in bank and other financial institution by 0.443 percentage points and 0.067 percentage points respectively; whereas, it leads to fall in having insurance and savings in NGO by 0.163 and 0.204 percentage points respectively.

In the case of investment on farm agriculture, after controlling for different household characteristics, predicted probability of receiving remittances has a positive and significant effect on different farm agricultural investment. For example, 1 unit increase in the predicted value of likelihood of receiving remittances leads to rise in the probability of cultivating all arable land by 0.542 percentage points, purchasing high quality seeds by 0.477 percentage points, purchasing adequate amount of fertilizer by 0.087 percentage points, irrigating all land by 0.664 percentage points, investing on irrigation pump by 0.256 percentage points, power tiller by 0.13 percentage points, and tractor by 0.306 percentage points. However, remittances seem to have negative effects on investment on off-farm agriculture and non-farm businesses: 1 unit increase in the predicted probability of receiving remittances leads to fall in the probability of investing on animal husbandry by 0.18 percentage points, fisheries by 0.217 percentage points, and poultry by 0.118 percentage points. In the case of investing on enterprise development, trade business and transport business, remittances seem to have either very small or insignificant effect.

Our analyses show that even after controlling for self-selection, international remittance receiving households have higher predicted probability of per capita expenditure, food expenditure, non-food expenditure and education expenditure than non-receiving households, higher predicted probability of savings

through bank accounts and fixed deposits in bank than other methods of savings compared to the non-receiving households, higher predicted probability of investing in farm agriculture and farm equipment, and lower predicted probability of investing in off-farm agriculture than the non-receiving households. However, in the cases of non-farm businesses, there are no significant differences in investment behaviors among the remittance receiving and non-receiving households.

15

Dynamics of economic growth in Bangladesh

SELIM RAIHAN AND
M D . WAHID FERDOUS IBON

Rapid and sustained economic growth is very critical for Bangladesh economy in its way towards a middle-income country. In this article, we have investigated the major determinants of economic growth in Bangladesh using time series data for 44 years (1972-2015). We start with a production function approach, which incorporates the features of neo-classical and new-growth theories. Subsequently, we have investigated the impacts of trade policies, fiscal policies, FDI, interest rate, inflation, infant mortality rate, enrolment in secondary education, infrastructure and institution on growth in Bangladesh's real GDP (gross domestic product). A new database (World Economy Database, version 9.1) has been used, which is complemented by data from the Penn World Table (PWT8.1) and World Bank's World Development Indicators (WDI). Most of the variables under consideration are found to be non-stationary (integrated of order one). Two non-stationary time series may lead to a spurious relationship between them if they are not co-integrated. Therefore, we checked for the possibility of a co-integrating relationship, using the Johansen co-integration test, and found at least one co-integrating relationship in all the regressions, which confirms that the long run estimates show

causal relationships. We ignore bi-directional causality in the regression model, as this is not what we want to explore in this analysis.

The basic production function

With the aim of identifying the determinants of economic growth in Bangladesh, we start with a Cobb-Douglas production function. Along with employment and physical capital stock, we have incorporated human capital into the production function. We multiply the data on human capital with employment data to create the human capital adjusted employment variable. The regression results suggest that, in the long run, on average, one percent increase in the human capital adjusted employment leads to 0.25 percent increase in the real GDP. Furthermore, on average one percent increase in the physical capital stock leads to 0.12 percent increase in the real GDP. As the variables of the production function are co-integrated, there must be an Error Correction representation which shows the short run adjustments of the variables under consideration if there is any deviation from the long run equilibrium relationship. Error Correction term is -0.0197 which is statistically significant, negative and less than unity, as expected. About 1.97 percent error is thus being corrected each year following any deviation from the long run equilibrium.

Secondary school enrolment helps

There is both theoretical and empirical literature, which provides evidence that the educational level and its quality are important causal determinant of income, both at the individual and national levels. A highly educated labor is more productive relative to his/her less educated counterpart, and this increased labor productivity helps a nation grow faster. Education is a key component of human capital. In terms of the net secondary school enrolment, though Bangladesh made a progress during 1972 and 2015 from around 16 percent to 52 percent, still there is a need for

substantial improvements. Here, we have investigated the effect of the net enrolment in secondary school on real GDP and have found a positive effect, as expected. One percentage point rise in the net secondary school enrolment ratio leads to, on average, 0.013 percent increase in the real GDP.

Reduction in the infant mortality rate helps

Bangladesh has shown its capacity to reduce infant mortality rate rapidly over the past four decades. Among 1000 live births, the rate came down from 148 in 1972 to 30.7 in 2015. In the regression, the infant mortality rate appears with a negative and significant coefficient. On average, one point reduction in the infant mortality rate contributes to the rise in real GDP by 0.01 percent.

Greater trade-orientation promotes growth

Theoretically, trade liberalization results in productivity gains through increased competition, efficiency, innovation and acquisition of new technology. Trade policy works by inducing substitution effects in the production and consumption of goods and services through changes in prices. These effects, in turn, change the level and composition of exports and imports. In particular, the changing relative prices induced by trade liberalization cause a re-allocation of resources from less efficient to more efficient uses. Trade liberalization is also thought to expand the set of economic opportunities by enlarging the market size and increasing the effects of knowledge spill over. Since its independence, Bangladesh underwent a variety of trade policy reforms, which resulted in the rise in trade-GDP ratio, import-GDP ratio and export-GDP ratio from 10.6 percent, 6.5 percent and 4.1 percent respectively in 1972 to 41.7 percent, 23.3 percent and 18.4 percent respectively in 2015. To identify the growth effects of these three trade-orientation variables, we incorporated them into the production function through three separate

regressions. The regression results indicate that, these variables are statistically significant with positive signs. One percentage point increase in trade-GDP ratio, import-GDP ratio, and export-GDP ratio account for, on average, 0.014 percent, 0.023 percent and 0.029 percent increase in the real GDP respectively.

Larger FDI-orientation propels growth

Foreign direct investment (FDI) is another driver of economic growth, particularly for a least developed country (LDC) like Bangladesh. FDI contributes to transfer the technical knowhow from advanced countries to the less developed countries. In 2015, the FDI inflow in Bangladesh was only US\$ 2.2 billion which was about 1 percent of the GDP, whereas government, as stated in the 7th five year plan, aims to achieve a level of FDI inflow of US\$ 9.6 billion by 2020. In the regression, the coefficient of the FDI-GDP ratio is found to be statistically significant and positive, as expected. One percentage point increase in the FDI-GDP ratio leads to the rise in real GDP, on average, by 0.12 percent. In order to attract more FDI, there is a need to maintain political stability, improvement in infrastructure and reduction in the cost of doing business. The planned 100 special economic zones, if they are implemented successfully, can be helpful in attracting FDI.

Positive effect of government transfer payments

The regression result confirms a positive significant impact of government transfer (social security payments, safety net programs, pension payments etc.) on the rise in real GDP in Bangladesh economy. On average, one percentage point rise in the ratio of government transfer to GDP leads to a rise in real GDP by 0.05 percent.

Reduction in lending interest rate helps

Interest rate is the price of fund that private investors borrow from banks. Therefore, more private investment takes place following a

reduction in lending rate, which in turn promotes economic growth. This is evident from our regression analysis that one percentage point reduction in the lending rate, on average, increases real GDP by 0.03 percent.

Inflation hurts growth

Rise in the general price level hurts Bangladesh's growth. An increase in the price level decreases the real wage earned by the laborers. This lower real wage is followed by a lower aggregate private consumption demand, which in turn affects national income badly. Our regression analysis suggests, one point increase in consumer price index accounts for, on average, 0.001 percent reduction in real GDP.

Infrastructure promotes growth

Infrastructure is a key ingredient for high and sustained economic growth. Better infrastructure helps total factor productivity to rise by lowering transaction cost and a more efficient use of inputs of production. Due to the lack of time-series data on different dimensions of infrastructure, here we consider total number of mobile and fixed line telephone subscriptions as a proxy for infrastructure. In the regression analysis, we find that one percent increase in total telephone subscription results in, on average, 0.12 percent rise in real GDP.

Quality of institution matters

We have considered an index of institution in the regression. We have constructed the index of institution using the data of six major ICRG (www.prsgroup.com) variables, namely bureaucracy quality, control of corruption, investment profile, democratic accountability, government stability, and law and order. As values of these six ICRG variables have different scales, we have rescaled them between 0 and 10. The aggregate institution index is the

average of these six indicators with the range between 0 and 10, where 0 and 10 respectively indicate the lowest and highest levels of quality of institution. In 1980, the index value was 2.15, which increased to 5.5 by 2015. The regression suggests a positive significant role of institution on real GDP in Bangladesh. On average, one point rise in the institution index leads to the rise in real GDP by 0.05 percent.

What do we learn?

The analysis in this article suggests that, for further economic growth acceleration in Bangladesh, there is a need for reforms in economic policies and institutions, investment in infrastructure, and making most of the demographic dividend through investment in public health, education, and human capital development. All these will require increased domestic private investment and FDI targeting broader economic and export diversification. Reform of economic and political institutions for efficiency gains is critically important.

16

Does employment status matter for the wellbeing of rural households in Bangladesh?

SELIM RAIHAN AND
FATIMA TUZ ZOHORA

In rural Bangladesh, a great challenge is to tackle the low pay, poor-quality jobs that are unrecognized and unprotected by law, widespread underemployment, the absence of rights at work, inadequate social protection, and the lack of representative voice. There remains a big question whether poverty in rural Bangladesh is concentrated in certain employment categories.

Our paper uses the data from the Bangladesh Integrated Household Survey (BIHS) of IFPRI. This data are nationally representative data of rural Bangladesh for the year 2011-2012 where the sample size is 6,500 households in 325 primary sampling units (PSUs). The reason for using the BIHS database for this study is that this is the latest available survey data on rural Bangladesh. Our paper has attempted a systematic analysis in understanding the association between employment status and wellbeing of rural households in Bangladesh.

From the BIHS data, our study has used consumption expenditures as the principal indicator of household economic status or wellbeing, and has used per capita consumption

expenditure as the proxy for income. The total consumption expenditure is measured as the sum of total food consumption and total non-food expenses excluding lumpy expenditures. Income (expenditure) deciles have been created by dividing the households into ten groups from the lowest to the highest in terms of households' total income. Employment statuses have been constructed for those household heads who are able and eligible to participate in the labor market. By definition, the labor force consists of everyone above the age of 15 who is employed (including individuals working without pay) or unemployed but actively seeking employment. Household head, not counted in the labor force, includes students, retired people, disabled people, and discouraged workers who are not seeking work.

Figure 16.1: Distribution of employment categories by income deciles



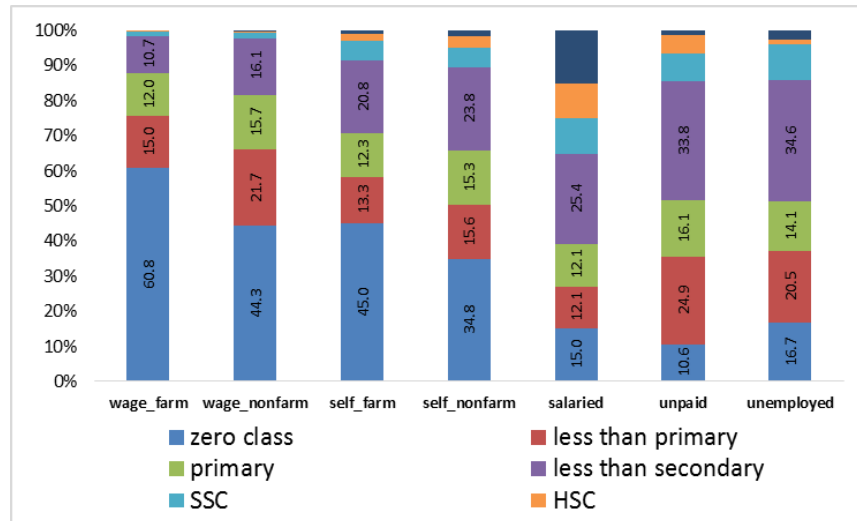
Data source: Bangladesh Integrated Household Survey (BIHS) of IFPRI

The distribution of the different employment categories in the labor force is shown in Figure 16.1. In the x-axis, 10 deciles are organized in ascending order on the basis of monthly consumption expenditure of the rural households. Therefore, first decile is the poorest one and the 10th decile is the richest one. Figure 16.1

summarizes that, while wage employment is mostly concentrated in the poorer deciles, self-employment is concentrated mostly in the richer deciles. Salaried employees maintain smaller shares among poorer deciles.

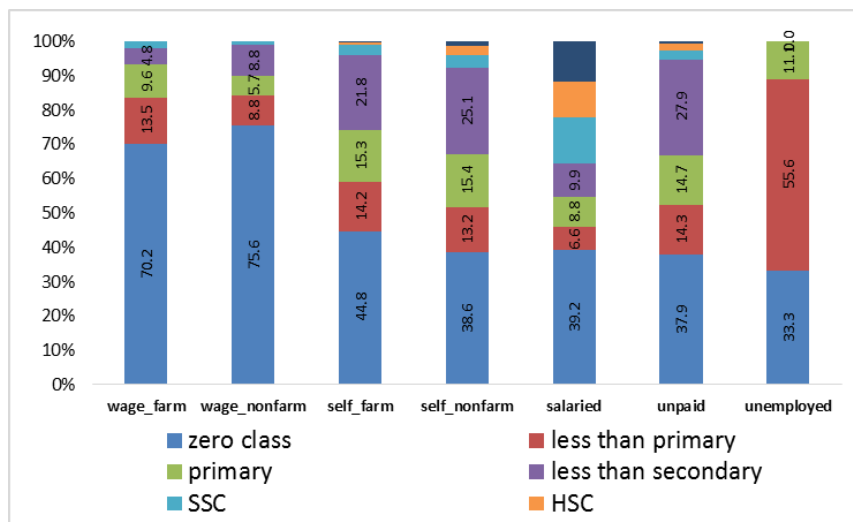
Figures 16.2 and 16.3 show the educational status of male and female workers by employment categories in the rural areas. Males with no education seem to be highly concentrated in wage employment in both farm and nonfarm sector. They are also densely present in self-employment activities. In the salaried employment category, the dominant share is of males with less than secondary level but higher than primary education. However, males with HSC and beyond HSC account for around 25 percent of salaried employment. Females with no education also seem to be highly concentrated in wage employment (Figure 16.3). Females with less than primary education has a dominant share in the case of unemployed (55.56 percent). In the case of the unpaid family job for female adults, around 28 percent of them are with less than secondary but higher than primary education.

Figure 16.2: Education by employment categories (male)



Data source: Bangladesh Integrated Household Survey (BIHS) of IFPRI

Figure 16.3: Education by employment categories (female)



Data source: Bangladesh Integrated Household Survey (BIHS) of IFPRI

In order to investigate the factors affecting wellbeing of rural households in Bangladesh we have used the cross section multinomial logistic regression models. The income status of the household is considered as the dependent variable, where per capita consumption expenditure is used as a proxy for households' income status. For the explanatory variables, we have used different categories of employment of household head e.g. wage labor in the farm and nonfarm sector, self-employed in the farm and nonfarm sector, salaried worker and unpaid worker. All of these variables are dummy variables, where 'unemployed' has been considered as the base employment status. Other explanatory variables are age of household head, years of education of the head, number of dependent members per household, per capita landholding and a dummy variable on whether the household receives international remittance or not.

The major findings from multinomial logistic regressions can be summarized as follows. First, wage employment in the farm sector has statistically significant association with all income deciles between 6 and 10. However, such employment status doesn't have any statistically significant association with income deciles between 2 and 5. For a wage worker in the farm sector, relative probabilities to be in deciles 6, 7, 8, 9 and 10 are respectively 39 percent, 44 percent, 75 percent, 85 percent and 90 percent lower than to be in decile 1. The result depicts the fact that wage employment in the farm sector are more concentrated among the poorer households and doesn't play any pivotal role in shifting up the status of a household. The result is quite analogous for the wage-employed in the nonfarm sector too: if the household head is employed in nonfarm activities, the relative probability to be in the deciles 9 and 10 are 62 percent and 78 percent lower (respectively) than to be in decile 1.

Second, in case of self-employment, if the household head is engaged in the farm sector, the relative probability of that household to be in decile 10 is 44 percent lower than to be in the base decile 1. This association is insignificant for all other deciles meaning that, self-employment in the farm sector does not necessarily improve the income status. On the contrary, if the household head is self-employed in the nonfarm sector, the relative probabilities to be in deciles 3, 4, 5, 6, 7, and 8 compared to the base category are higher by 90 percent, 86 percent, 124 percent, 84 percent and 72 percent respectively. It shows that, self-employment in nonfarm sector has a strong transitory power to improve household wellbeing.

Third, when considering salaried employment, the study finds no significant influence of salaried employment over shifting the well-being status from income decile 1 to higher income deciles. On the other hand, if the household head is employed as an unpaid

worker the relative probability to be in deciles 8, 9 or 10 is more than 80 percent lower than to be in the decile 1.

Finally, among other variables, household characteristics like age of the head, dependent member per household, per capita land holding and remittance status hold significant impact on the nature of economic status of the household. If the age of the household head increases by one additional year, the relative probability to be in the top four deciles compared to the decile 1 increases by around 1.2 percentage points. It is also seen that, with the rise in number of dependents in a family the relative probability of the household to be in a higher decile compared to decile 1 becomes lower. The regression results also suggest that, education and international remittances play a role of pull factor in case of shifting household status from the lowest decile to upper deciles. An increase in the years of education of the household head by one additional year increases the relative probability to be in decile 2 compared to decile 1 by 10 percentage points; whereas, for the same increment, the relative probability to be in decile 10 compared to decile 1 increases by 35 percentage points. In case of remittances, households that receive remittance have more than 3 fold relative probability to be in decile 4 or above. For the remittance receiving households, the relative probability to be in decile 10 compared to decile 1 is more than 25 times higher than a household that does not receive remittances. Along with these, per capita land holding appeared as an important household characteristics that can help a household to be on the higher deciles.

The findings of this paper provide a significant indication that rural nonfarm sector has a crucial role in reducing poverty and increasing the wellbeing of the rural household in Bangladesh. The study also specifies the importance of addressing the concern in the national policy making that poverty in rural Bangladesh is highly linked with certain employment categories.

17

Does agricultural credit help in raising agricultural production? Empirical evidences from Bangladesh

SAYEMA HAQUE BIDISHA AND
BAZLUL HAQUE KHONDKER

In the context of least developed countries, lack of access to financial services is often argued to have constrained poor individuals from utilizing their economic potentials. It is also argued that credit helps the farmers to invest in modern methods of cultivation and aids them in terms of better cultivation practices, marketing, storage etc. For the developing countries like Bangladesh, credit markets are often underdeveloped both in terms of coverage and size of loan, which has forced the credit-constrained households to avail credit from informal sources at high rate of interest and also with unfavorable terms and conditions. In order to facilitate the growth and productivity of agriculture sector, it is therefore important to understand the role of credit in facilitating agricultural production.

Data of Household Income and Expenditure Survey 2010 (HIES 2010) shows that, in terms of the overall market structure of credit, Bangladesh Krishi Bank along with other formal public financial institutions act as a source of around one-fourth of agricultural credit, informal sources supply 8 percent of

agricultural credit whereas microfinance institutions serve as the key source by supplying the remaining. From HIES data, it can also be inferred that, on an average, households borrow 30,210 taka as credit, where the borrowing from formal sources is the highest, 41,000 taka on average. In terms of interest rate, formal sector charges relatively low interest rate, around 14 percent per year, where the interest rate charged by the MFIs is 15.4 percent per annum. In case of informal sources, when positive interest is charged, the rate is however quite high, around 21 percent. HIES also asked the respondents whether they wanted to borrow more and around 29 percent responded positively with the highest response found among the micro borrowers.

Table 17.1: Summary statistics by micro-borrower groups and microloan sizes

Variables	Mean [Standard Deviation]					
	Microcredit Take-up		Microloan Size Quintiles			Total
	No	Yes	First	Second	Third	
Household size	4.823 [1.836]	4.792 [1.790]	4.662 [1.840]	4.644 [1.665]	5.071 [1.806]	4.792 [1.790]
Whether HH head is female (dummy)	0.072 [0.259]	0.026 [0.160]	0.029 [0.168]	0.044 [0.207]	0.009 [0.094]	0.026 [0.160]
Whether HH head is literate (dummy)	0.385 [0.487]	0.357 [0.480]	0.331 [0.472]	0.322 [0.470]	0.416 [0.495]	0.357 [0.480]
Total cultivable land owned (decimals)	42.692 [42.639]	36.579 [41.807]	38.065 [40.979]	37.711 [44.083]	33.85 [41.193]	36.579 [41.807]
Access to electricity (dummy)	0.419 [0.493]	0.386 [0.488]	0.374 [0.486]	0.389 [0.490]	0.398 [0.492]	0.386 [0.488]
<i>Instrument:</i>	0.52	0.359	0.443	0.295	0.304	0.359
Average distance to the MFIs within 10 km [normalized by no. of MFI branches]	[1.023]	[0.614]	[0.826]	[0.227]	[0.497]	[0.614]

Source: HIES 2010

In Table 17.1 a simple comparison has been made between households who has availed microcredit and those who has not. It is interesting to find that in terms of the gender of household

head, for the households without microcredit take up, female household heads were more prominent-which is contrary to our prior expectation. Around 35 percent households were found to be literate with greater proportion of literates found in the 3rd quintiles of micro loan size. In terms of land holding, on an average households were found to possess 37 decimals of land. Household without microloan were found to have greater possession of cultivable land- those without microloan possessed around 43 decimals of land as opposed to those with microloan possessing 37 decimals.

Table 17.2: Effect of microcredit take-up on crop production (OLS and 2SLS estimates)

	(Reg 1)	(Reg 2)	(Reg 3)	(Reg 4)
		Second Stage		Second Stage
Variables	Crop production (in '000 BDT)	Crop production (in '000 BDT)	Crop production (in '000 BDT)	Crop production (in '000 BDT)
Microcredit take-up	6.54*** (2.269 - 10.815)	42.46* (-3.463 - 88.373)	7.20*** (3.106 - 11.302)	66.70*** (18.006 - 115.387)
Observations	2,492	2,190	2,492	2,190
Controls	No	No	Yes	Yes
Instrumented by avg. distance	No	Yes	No	Yes
IV F-stat	N/A	16.23***	N/A	16.19***

Note: Robust ci in parentheses; *** p<0.01, ** p<0.05, * p<0.1; The 1st stage regression includes a number of explanatory variables, e.g. whether HH head is female, whether HH head is literate, total cultivable land owned in decimals, whether HH have access to electricity.

With a view to understanding the role of credit in agricultural production, we attempted to estimate model of agricultural production where 'total crop production in 1000 taka' was regressed on a dummy variable of whether household took microcredit. Here, crop production is represented by the total money value of different types of crop production converted in thousand taka. However, given that such an estimation might suffer from endogeneity problem, in addition to simple OLS as

shown in Table 17.2 (Regression 1), 2SLS estimation has been adopted where the instrument that was chosen for access to credit was average distance of the household to the MFIs within 10 kilometer (normalized by the number of operating MFI branches). The average value of the instrument across HIES survey households was found to be 0.36 kilometers with those households without microloan take up being situated further away than those with microloan take up. The analysis revealed strong positive impact of microcredit take up on agricultural production. Credit can increase agricultural production by as high as 66,700 BDT (Regression 4, Table 17.2). Thus, instead of a dummy of microcredit take up, similar models (OLS and 2SLS) with the size of micro credit loan (in thousand BDT) as independent variable is applied. Despite the structural transformation of Bangladesh economy towards industry and service sector, the importance of agriculture in the context of generating employment and meeting food requirement still remains crucial. Given the robustness of findings in terms of suitable econometric methodology, this study has further emphasized the importance of appropriate policies in ensuring hassle free and cheap access to credit for farmers, particularly to the marginal and small ones whose production is often suffered due to lack of credit access. In this context, a number of recommendations in terms of facilitating the supply of credit in increasing production can be considered.

Given a positive association between institutional credit and agricultural production, it can be recommended to expand the disbursement of agricultural credit particularly to small farmers. In addition, while devising their credit portfolio a careful balance must be maintained between both formal and quasi formal institutions. It is often argued that timely sanction of credit and hassle free advance is more preferred by the farmers than lower rate of interest or any other waiver on interest. In case of approaching the credit from public institutions, the potential recipient has to undergo unofficial transaction cost like bribe or has to spend longer time due to bureaucratic process. Therefore,

an important policy issue will be to streamline the bureaucratic processes in public institutions.

Marginal and poor farm households, not having access to formal lending sources except MFI, utilize the non-farm credit for agricultural purposes. But this installment based credit is not suitable for 'Point input Point output' type of agricultural, especially crop activity. Steps should be taken so that MFIs can arrange appropriate agricultural (crop) credit scheme for the marginal farmers and landless sharecroppers.

Households, mainly the low income ones use credit (mostly collected from informal sources) to buy necessary food items. When the food security situation becomes worse in bad years due to flood or bad harvest, they often use credit meant for agricultural production for meeting food requirements and their share of consumption loans often increases. Formal institutions therefore should incorporate such seasonal factors in devising credit and consider the provision of relaxation of collateral for small loans in this context.

Note: This write up is a shorter version of the paper: "Returns to Agricultural Microcredit: Quasi Experimental Evidence from Bangladesh" (Bidisha, S.H.; Khan, A.; Khondker, B.H. and Imran, K), vol. 38, no.4, Bangladesh Development Studies.

LET'S THINK ALOUD, SHALL WE?

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Will Bangladesh miss out on the first demographic dividend?

BAZLUL KHONDKER AND
MUHAMMAD MOSHIUR RAHMAN

Bangladesh has entered the window of population dividend opportunities from 1991 onwards as the dependency ratio decreased. However, the expressed time of the window of opportunities is not bolstered by observational confirmation. The absence of certain proof on the period and extent of the demographic dividend is a gap policymakers must address when setting needs for human resources and capital investment to gather the economic advantages of the demographic move. Applying the methodology of National Transfer Accounts (NTA), this study is an endeavor to provide some observational evidence so as to evaluate the demographic benefit for Bangladesh and to explore the conditions to appreciate it.

Demographic transition captures the movement of a society from an equilibrium portrayed by high fertility and high mortality, to one depicted by low fertility and low mortality. Bangladesh has been experiencing significant changes in her demographic structure. The demographic transition can enhance economic growth in *two broad ways*. **First**, as the dependency ratios decline and the share of working age population grows relative to

the total population, the average number of children per working age adult also falls. Assuming, this is associated with a freeing up of resources that previously would have been consumed by additional children-allowing living standards to rise. *This is the first demographic dividend.* **Second**, a second dividend results in when the faster growth of first dividend leads to larger savings in the short run and higher investment in the human capital and investment per worker in the long run. An important question with regard to the first demographic dividend is the impact of age structure on economic growth. More specifically, how, why and at which extent age structure influences economic growth? The total dependency ratio is purely a composite indicator to capture the change in age structure and it does not reflect the variations of earnings and the consumption according to the age. This limitation can be overcome in the NTA based on the economic life cycle approach which is applied in the current paper.

National Transfer Accounts provide an accounting of economic flows to and from residents of a country classified by their age. It is structured to emphasize the generational economy and its key features: the economic life cycle and age reallocations realized by relying on intergenerational transfers and assets. The aggregate values are broadly consistent with those found in national accounts, as detailed in the System of National Accounts (SNA) methodology. NTA is an analytical framework for accounting for the life-cycle deficit. The life cycle deficit equals consumption less labor income with the introduction of age into the national accounts. The consumption from an individual perspective includes publicly (government) sponsored targeted programs for health care, education, poverty alleviation, social assistance and other goods either in kind or in cash and private (household) consumption for, among other things, education, healthcare, housing, food and non-food goods. The labor income from an individual perspective is the aggregate of wage of employees (including both in kind and cash) and a fixed part of mixed income (income from own business enterprise).

Figure 18.1a: Per capita consumption profile

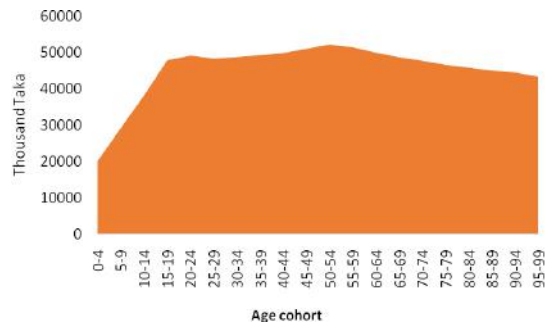


Figure 18.1b: Per capita labor income profile

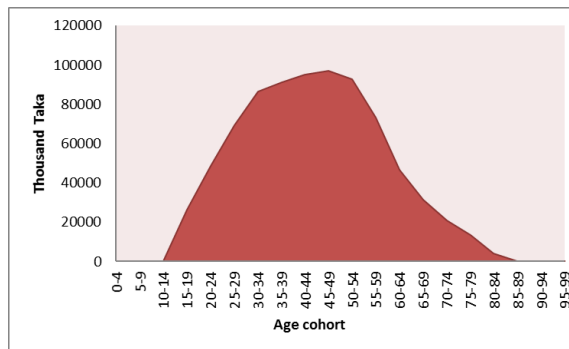
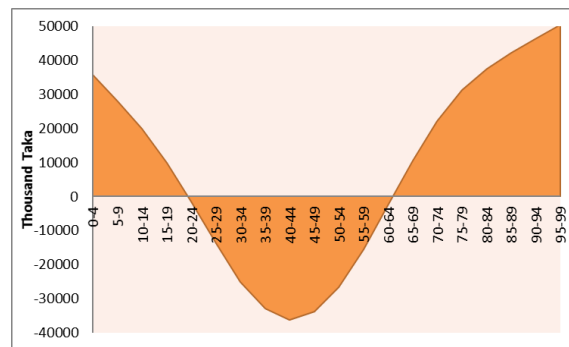


Figure 18.1c: Per capita lifecycle deficit profile



Source: Authors' calculation, Bangladesh National Transfer Accounts (2010)

Figure 18.2a: ESR under different variants

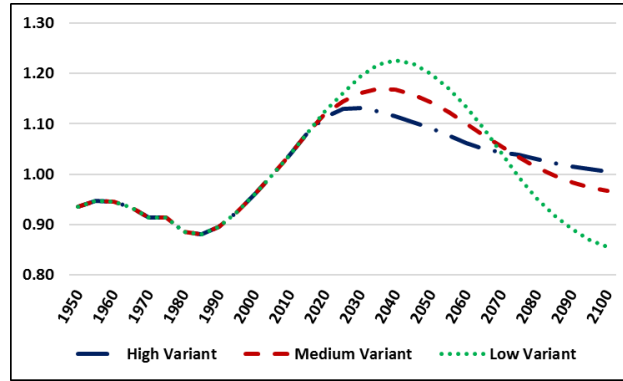


Figure 18.2b: ESR under different assumptions

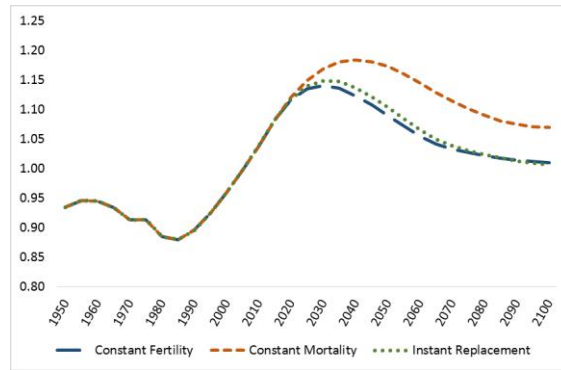
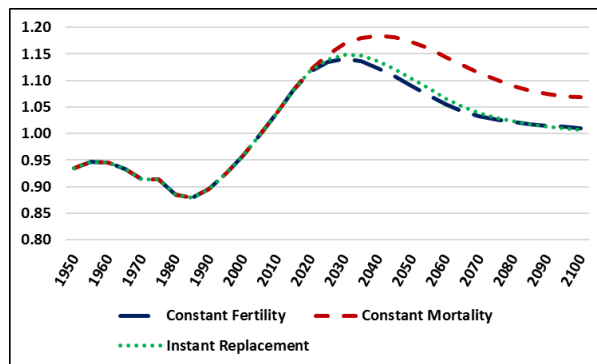


Figure 18.2c: ESR under zero migration



Source: Authors' calculation, Bangladesh National Transfer Accounts (2010)

The first demographic dividend is defined as the contribution of age structure to economic growth, precisely the per capita income or the per capita consumption, and **it is measured as the positive growth of the economic support ratio (ESR)**. The first demographic dividend measures the effects of changes in age structure on consumption per equivalent adult holding the consumption rate and output per worker constant.

The data sets for Bangladesh NTA include: (i) Household Income and Expenditure Survey, 2010 of Bangladesh Bureau of Statistics; (ii) Labor Force Survey, 2010 of Bangladesh Bureau of Statistics and (iii) National Accounts Statistics (SNA) of Bangladesh Bureau of Statistics and (iv) UNFPA population prospectus data. Results from the Bangladesh NTAs 2010 have been reported under two broad headings: (i) economic lifecycle and lifecycle deficit; and (ii) economic support ration and first demographic dividend.

The consumption profile by age in Figure 18.1a suggests a sharp rise in consumption alongside increasing the age, particularly for school-age consumers. Per capita yearly consumption increases sharply from about 4 years of age till it attains an early peak at about 19 years, indicating investment in education and continues up to 25 years.

The Figure 18.1b shows distribution of the per capita labor income according to the age profile. This reflects a number of distinctive features. It is an inverse U-shaped curve suggesting low earning potential at early ages. The labor income increases steeply till about 34 years of age and then steadily increases between 35 and 49 years of age. Thereafter, income starts declining and after 54 declines rapidly with advancing age. The presence of child labor is obvious with the early age of entry into the labor force and marginal share of labor income of young persons. The tapering

income profile of the elderly is indicative of their low wages as many are self-employed farmers, or work in the informal sector.

The Figure 18.1c shows the deficit for each age group. **Three distinct age groups are found in term of LCD.** As expected two deficit groups are children (age 0 to 19) and the elderly (65 +). However, the deficit for elderly group is higher than the children perhaps indicating low levels of income as well as higher poverty among households with children compared to households with elderly. The group encompassing age 20 and 64 is generating surplus in Bangladesh. According to the 2006 revision, several assumptions have been used by UN to project the population. Following that, eight variants underlying the fertility, mortality, constant fertility and mortality and also with international migration assumptions have been used in this paper to observe the first demographic dividend. These variants are used to observe the probable year of highest ESR with the range of the first demographic dividend and to estimate the maximum year left to harvest the benefits of it.

Figure 18.2 shows that ESR is varying according to the various variant of the population projection by UN. In particular, with high, medium and low variant population growth, ESR increases positively till 2030, 2035 and 2040 respectively. ESR will increase positively till 2030 with both the instant replacement and constant fertility and with the constant mortality rate, the ESR will rise positively till 2040. Similarly, ESR patterns, under zero migration and no change in fertility-mortality, will rise positively till 2030 and 2040 respectively.

Thus, summarizing the estimates of *first demographic dividends* under various assumptions of population growth, fertility-mortality rate and rate of migration, it may be argued that the first demographic dividend in Bangladesh will continue to a point

somewhere between 2030 and 2040. After that it will approach towards further change in the demographic situation.

Utilizing the NTAs system, this paper estimates the extent of first demographic dividend using ESR. According to the estimates, the first demographic dividend predominates from 2020 to 2045 according to several population projection variants. The connection between the demographic dividends and income growth is policy dependent. In order to reap the maximum economic gains of the potential first demographic dividend, nonetheless, adequate job opportunities need to be created focusing on higher investment for employment generation; higher public sector investment in education, skills development and female participation in economic activities.

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Reforming the Bangladesh social protection system

BAZLUL HAQUE KHONDKER

Transfers of resources through the social protection programs have been considered a key instrument for poverty reduction in Bangladesh. Although, the rate of poverty reduction has been impressive; still one third population of Bangladesh was poor in 2010. Analysis with Household Income and Expenditure Survey (HIES) 2010 data suggests that the impacts of major social protection programs on poverty reduction are less than satisfactory. For instance, if there were no social protection programs in Bangladesh head count poverty rate would have been 33 percent instead of 31.5 percent. If the programs were targeted effectively to the poor, the head count rate would drop to 29 percent – a 2.5 percentage point reduction in poverty rate. Analogously, if the programs were targeted effectively to the extreme poor, the head count rate would drop to 13.5 percent from 17.6 percent reported in HIES 2010 (for detail please see National Social Security Strategy, 4th Draft, April 26, 2014). The above analyses suggest that Bangladesh may be missing out as far as poverty reduction using social protection as the instrument is concerned. More specifically, with effective application of social protection programs more than 3.5 million poor people and

almost 6 million extreme or hard core poor people could have been graduated out of poverty in 2010.

Reasons for missing out are predominantly inefficiency and incoherence in the social protection system of Bangladesh. Moreover, performances are deteriorating. According to the World Bank (Bangladesh Poverty Assessment: Assessing a Decade of Progress in Reducing Poverty, 2000-2010' Bangladesh Development Series Paper No. 31, The World Bank Dhaka Office, June 2013), system's capacity to target beneficiaries efficiently has worsened in 2010 compared to 2005 with 64 percent of the poor not having access to any Social safety nets in 2010 and leakages of SSN funds increased from 44 percent in 2005 to 60 percent in 2010. According to Ministry of Finance, between 2005 and 2010, Bangladesh spent about USD 9 billion for social protection programs. Assuming 50 percent leakages (i.e. average of two point estimates of 44 percent in FY05 and 60 percent in 2010) it can be argued that USD 4.5 billion of social protection program has been wasted during the last five years. This is a large estimate. What could have been achieved with USD 4.5 billion? To put it into context – 5/6 mega infrastructure projects for which Bangladesh has sought assistance from Japan/China.

Against the backdrop of the current state of Social Security System, Bangladesh government has prepared the national social security strategy to redress some of the above mentioned problems of the system. More specifically, the strategy proposed short, medium and long term solutions. It is argued that “reform the national Social Security System by ensuring more efficient and effective use of resources, strengthened delivery systems and progress towards a more inclusive form of Social Security that effectively tackles lifecycle risks, prioritizing the poorest and most vulnerable members of society (National Social Security Strategy, April 26, 2014)”. We believe the immediate reform areas may include the following:

(i) Establishing a comprehensive and error free beneficiary data base combining proxy means test (PMT) approach and community based approach. Initial analysis by BBS and World Bank found that the introduction of PMT would reduce incidence of mis-targeting by about half from around 60 percent to 30 percent. If we include implementation level error it may even be higher than 30 percent to about 35-40 percent. However, it is still high and hence innovative approaches involving communities may be attempted to further lessen the incidence of mis-targeting.

(ii) Expanding coverage to the residents of urban areas. The social protection programs have been so far targeted to the rural poor. Current reality is that due to migration, the incidence of poverty has increasingly been urbanized. However, due to program design, poor in urban location are virtually excluded from social protection programs. Therefore, from equity perspective, social protection program must be expanded to the urban residents.

(iii) Strengthening Government to Person (G2P) payment systems that promote financial inclusivity and prevent leakages. Current delivery system is prone to leakages and corrupt practices. Along with establishing beneficiary data base, government should strengthen the payment system through introducing G2P system taking advantage of mobile banking facilities to further reduce the incidence of leakages.

(iv) Enhancing transfer amounts. Current transfer amount (estimated at around BT 480) has been found inadequate for a meaningful impact on the livelihood of a poor person. It is thus recommended that the transfer amount should be increased to between BDT 800 and BDT 1,600 from the current level. This change in the social protection system can be implemented mainly by consolidating large number of social protection programs into

100 | six/seven core programs focusing on life-course approach without
needing substantial additional funds from government exchequer.

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“...public investment in infrastructure crowds in private investment...”

INTERVIEW OF DR. SANJAY KATHURIA

SANEM interviews Dr. Sanjay Kathuria on the linkage between infrastructure development and growth. Dr. Kathuria is a Lead Economist in the World Bank's Trade and Competitiveness Global Practice, and the Coordinator for Regional Integration in South Asia, based in Washington, D.C. Until August 2012, he was the Bank's Lead Economist for Bangladesh, based in Dhaka. In 23 years at the World Bank, he has worked in South Asia, as well as the Latin American and East European regions. He describes his goal as helping in the quest for deeper engagement amongst the economies of South Asia. Prior to joining the World Bank, he was a Fellow at the Indian Council for Research on International Economic Relations in New Delhi. His research interests include issues relating to economic growth, international trade and trade policy, foreign investment, competitiveness, technology development, fiscal policy, and financial sector development. This interview is taken in February, 2016.

SANEM: Why is infrastructural development so crucial for growth and development?

SK: Infrastructure includes both hard infrastructure, such as roads and bridges, as well as soft infrastructure, such as education and health. Infrastructure is a critical part of the investment

climate in the country, and it enables the private sector to invest in manufacturing, services and agriculture, and creates jobs. Another way to look at this is to say that public investment (to the extent that infrastructure is created by government) will crowd in private investment. An infrastructural deficit in a country can penalize growth and job creation. I can do no better than quote from the words of the Growth Commission: *“No country has sustained rapid growth without also keeping up impressive rates of public investment—in infrastructure, education, and health. Far from crowding out private investment, this spending crowds it in. It paves the way for new industries to emerge and raises the return to any private venture that benefits from healthy, educated workers, passable roads, and reliable electricity.”* (The World Bank, 2008. “The Growth Report: Strategies for Sustained Growth and Inclusive Development”, pp. 5-6. The World Bank, Washington DC)

SANEM: How does infrastructural development help export diversification?

SK: In many ways. Better roads can get export products faster to the ports. Better rural roads can allow farmers to have access to ports. Improved and better functioning ports can reduce the cost and time taken to access export markets. Efficient and adequate power supply can ensure more competitive export production. Better communications infrastructure can facilitate efficient exchange of information between the vendors and central producers. A better educated labor force can be more skilled and productive and so can increase efficiency and allow production of more sophisticated products.

SANEM: Is there any linkage between regional value chain and infrastructural development? What measures the South Asian countries should be taking for greater connectivity among the countries?

SK: Regional value chains are dependent, among other things, on smooth in and out flow of goods. For example, a producer in Kolkata should consider a vendor in Dhaka as a viable source of inputs as a vendor in, say, Jamshedpur. This can only happen if there is seamless connectivity between the producer and the vendor-which requires good transport connectivity, very efficient border procedures (a soft infrastructure) so that goods are not held up at the border. A zero duty trade regime would also be very helpful in allowing smooth flows of goods in both directions. Also, trade and investment are very closely linked, so country policies should encourage intra-regional FDI, which is part of their soft infrastructure. Again, to give an example, a Kolkata based garment manufacturer can invest in Chittagong, import yarn from Ludhiana, and export garments from its Chittagong facility back to India as well as to the rest of the world. Therefore, priorities for regional value chain development include transport connectivity-roads, river and rail transport; trade facilitation at the border; moving speedily on SAFTA so that there is genuine zero duty trade between countries in the region; and ensuring that the policy regimes in South Asian countries encourage intra-regional investment so that companies can exploit comparative advantage in their neighboring countries. At present, South Asia has massive infrastructure needs, and it would be fair to say that most countries in the region have significant infrastructural deficits, including in roads, education and health, among others.

SANEM: What are the policy lessons that the South Asian countries should be adopting from the East Asian countries with respect to infrastructural development? Can PPP (public private partnership) be a tool for the development of infrastructures?

SK: East Asian countries, broadly speaking, reaped very strong dividends from investment in both hard and soft infrastructure. This led to the popular sobriquets “East Asian Tigers” and the “East Asian miracle.” They devoted very significant budgetary resources to such investments. According to the Growth

Commission, fast-growing Asia (during the early 1970s to the early 2000s) invested about 5-7 percent of GDP in physical infrastructure, with China, Thailand and Vietnam investing more than 7 percent of GDP. Hence, South Asian countries would need to create more fiscal space for infrastructure investment.

PPPs can support the development of infrastructure, but many countries tend to underestimate the complexity of putting in place a sustainable PPP framework. However, PPPs cannot substitute for critical public investment. They can play a supporting role. Success stories can be seen in areas such as power generation plants.

SANEM: What is the role of World Bank in developing infrastructure in the South Asian region?

SK: The World Bank Group takes a holistic view of a country's development, and so accords priority to key gaps in infrastructure as well as policies and institutions. In South Asia, you would see significant World Bank Group support to energy, national and rural roads, education, health, and policy and institutional support in these and other sectors.

SANEM: Thank you so much for your time.

SK: You are most welcome.

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“...allocate more resources in education and health to improve productivity...”

INTERVIEW OF
DR. BAZLUL HAQUE KHONDKER

SANEM Interviews Dr. Bazlul Haque Khondker on productivity, growth and sustainable economic development. Dr. Khondker is a Professor at the Department of Economics, University of Dhaka and the Chairman of South Asian Network on Economic Modeling (SANEM). His areas of expertise include construction of technical framework for the Five Year Plan of Bangladesh, assessing resource gaps implications of various investment intervention (including MDGs) using consistent Macroeconomic Framework, construction of Social Accounting Matrices (SAM), and analysis of poverty and income distribution impacts of trade and tax policy reforms using static as well as dynamic Computable General Equilibrium models. Dr. Khondker was involved in designing and implementing a 'Generalized Macro Economic' framework on behalf of UN Regional Bureau for the Asia and Pacific (UN RBAP) which has been used in Mongolia and Nigeria to develop their MDG financing strategies. This interview is taken in May, 2016.

SANEM: Why productivity is so important for growth and sustainable economic development?

BHK: Bangladesh aims to attain the status of higher income country by 2040 focusing on high and sustained economic growth

in the vicinity of 7-8 percent. Following the stellar example of the East Asian countries, Bangladesh intends to pursue a growth strategy primarily focusing on manufacturing export and modern service sector. The country expects to double manufacturing contribution to GDP from the current level of around 20 percent.

The question is – how are we going to achieve this? I think along with deepening of capital (capital accumulation) and expansion of labor force, productivity will need to play an important role in this pursuit. Theory and empirical evidence envisaged that the most important growth drivers are: capital accumulation, expanding labor force along with their quality and the growth of total factor productivity (TFP). In the case of Bangladesh, empirical evidence concluded limited role of TFP and dominant contribution of capital accumulation. Furthermore, use of growth accounting found that the expansion of labor force and investment in human capital have also contributed to growth. As mentioned above, the contribution of TFP on growth has not been significant so far, but there are signs that TFP contribution has improved appreciably during 2001-12.

Given the Incremental Capital Output Ratio (ICOR) of about 4.5, it would require an investment of 40-50 percent of GDP to achieve 7-8 percent growth rate. Sixth Five Year Plan aimed to add 5 percentage points additional investment on the base rate of about 26 percent (i.e. investment-GDP ratio found in 2010 – base year of the Sixth Plan). In reality, the economy could only add 1 percentage-point additional investment during the Sixth Five Year Plan. Thus, the investment target to achieve 7-8 percent growth appears to be very ambitious unless we would somehow be able to attract large FDI – an area where our track record is very poor. Thus, productivity growth must play a central role in the coming decades to attain high growth rates. However, this would require much higher investment in social sector, investment in R&D, installation of efficient and modern production system (including

agriculture), ensuring smooth and efficient transportation and logistics - all of which would also help improve environment in Bangladesh.

SANEM: How can productivity enhancement help reaping benefits of demographic dividend for a country like Bangladesh?

BHK: Demographic transition captures the movement of a society from an equilibrium portrayed by high fertility and high mortality, to one depicted by low fertility and low mortality. Bangladesh is a populous country and has been experiencing significant changes in her demographic structure. The demographic transition can enhance economic growth in two broad ways. First, as the dependency ratios decline and the share of working age population grows relative to the total population, the average number of children per working age adult also falls. Assuming, this is associated with a freeing up of resources that previously would have been consumed by additional children -allowing living standards to rise. This is the first demographic dividend. Second, a second dividend results in when the faster growth of first dividend leads to larger savings in the short run and higher investment in the human capital and investment per worker in the long run.

In other words, the first demographic dividend is defined as the contribution of age structure to economic growth, precisely the per capita income or the per capita consumption, and it is measured as the positive growth of the economic support ratio. The first demographic dividend measures the effects of changes in age structure on consumption per equivalent adult holding the consumption rate and output per worker constant. Empirical evidence suggests that Bangladesh has entered first demographic dividend in early 1990s which will continue to a point somewhere between 2030 and 2040.

An important growth driver is expanding labor force along with their quality. Looking at the labor market characteristics in Bangladesh – we found two distinct trends: (i) per annum average growth of the labor force has been 2.9 percent between 1974 and 2010, while the population growth rate has been 2.1 percent. The faster expansion of the labor force is caused by rising share of population in the working age group of 15 plus and increasing participation of female workforce. However, the level of female participation (only 36 percent in 2010) remains low by international standards; (ii) Quality of labor force has remained poor – around 40 percent of the workforce had no education and 23 percent had only primary level education in 2010. These indicators are indicative of a very low skilled workforce.

Thus it is clear that addressing the skills gap must be a top most priority for reaping the maximum benefit of the first demographic dividend. Investment in education, training and human development must be raised from current 2 percent level to about 4 percent. Vocational training and skills development should get priority and adequate allocation. Moreover, higher investment (i.e. 3-4 percentage points higher) is needed for creating employment for new entrants. We must also adopt strategies to enhance female labor force participation including greater opportunities for wage employment and self-employment.

SANEM: What are the major obstacles and challenges for Bangladesh on its way towards productivity enhancement?

BHK: We are not investing enough in sectors those have close linkages with increasing productivity. It is widely believed that without adequate investment in education and health (including nutrition) sectors and quality of service delivery, it is difficult to raise productivity. However, data suggests that investment in these two sectors has historically been low in Bangladesh. More specifically, allocation to health sector as percentage of GDP has

remained stable at around 0.8 between 2009 and 2014. Allocation to the education sector is higher than the health sector and has remained stable at around 2 percent of GDP over the same period. These figures compare poorly with social sector allocations found in other countries. For instance, allocations to education and health sector in Malaysia as percentage of GDP in 2011 were 5.9 and 4 respectively. The corresponding figures for Thailand were 5.8 and 4.6 respectively. In the case of India, the corresponding figures were 3.9 and 4 respectively. Bangladesh needs to find out a way to allocate more resources in education and health sectors. In addition, attention must be given to improve quality of services.

SANEM: What action should be taken in Bangladesh for productivity improvement?

BHK: TFP growth measures the improved efficiency of all inputs, factors (i.e. capital and labor), and technology which are used in the production process. TFP is an endogenous variable and is influenced by government policies. The top most important policy is to ensure investment in research and development. Spending on research and development (R&D) is a major determinant of technology development, innovation and adoption of technological change. Thus, spending on R&D should be increased about 1 percent of GDP. Seventh Five Year Plan also advocated for increasing proportion of primary government schools with a computer laboratory; improving tele-density to 100 percent and expanding Broad Band Coverage to 35 percent.

Government should also pursue an aggressive FDI inflow strategy since it is an important conduit to enhance technical know-how (i.e. latest equipment and management skills) of a country.

Furthermore, there is also sufficient international evidence that stronger institutions help improve total factor productivity. Thus, Bangladesh needs to pay greater attention in this area.

SANEM: Thank you so much for your time.

BHK: My pleasure.

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“Reaping a demographic dividend...
will require women empowerment”

INTERVIEW OF MR. IORI KATO

SANEM interviews Mr. Iori Kato on demographic dividend and population growth in Bangladesh. Mr. Iori Kato is the Deputy Representative of UNFPA Bangladesh Country Office, Dhaka. He is heading the Program Team of UNFPA in Bangladesh, implementing the current Country Program for 2012-2016 that is composed of four components: Sexual and Reproductive Health, Population, Planning and Research (PPR) and Gender, as well as Adolescents and Youth. This interview is taken in January, 2016.

SANEM: Do you think population policy/strategy is adequately integrated in the medium term plan in Bangladesh?

IK: Any national/local development strategy or plan is a richer and more comprehensive one if it properly analyzes the actual causes and consequences of population trends and dynamics, more specifically, how population variables (e.g. population growth, age structure, geographical distribution etc.) influence the accumulation of wealth, and are thereby translated into eradication of poverty and sustainable development (or not).

Upon request by the Planning Commission, UNFPA contributed a Demographic Impact Study (DIS) as a background paper to be used as an input to the new 7th Five Year Plan. In this regard, I am glad to note that the 7th FYP indeed takes into account the importance of the nexus between population and development, for instance when it discusses a “demographic dividend”. Yet, the national development strategy may give an impression that it is still influenced perhaps overly by the notion of a population-poverty trap, given the fact that population is still treated as a ‘sub-sector’ of Health, Population and Nutrition Sector, where population tends to be discussed only in the context of fertility rate or contraceptive prevalence rate.

SANEM: What are the key issues of population development in Bangladesh?

IK: At the individual/household level, there are some P&D related issues like health, education, gender inequality etc. Bangladesh was almost achieving the MDG 5 on maternal health; yet, still more than 5,000 women and girls die in the country every year, trying to give birth to a new life. The total fertility rate is stagnant at 2.3 since 2011. More than 60 percent of deliveries take place at home. Close to 60 percent deliver without any skilled birth attendant. Teen pregnancy (113/1,000) is worst in South Asia. Female students at universities account for only 30 percent of all, which limits the potential of the country to reap a demographic dividend. Gender-based violence and culture of silence and impunity are also major issues in Bangladesh.

Although poverty had declined constantly in recent decades, the income inequality on the other hand has worsened over past two decades. The concentration of the population in just one mega city of Dhaka (32 percent of urban population) will continue to pose a pressure, given the slow pace of urban planning in the city, including the poor public transport infrastructure and congestion. Climate change and disasters in Bangladesh are also important

issues. The coastal area is already vulnerable and sea-level rise of just 400 mm in the Bay of Bengal would put 11 percent of the Bangladesh's coastal land underwater, which would create 7–10 million 'climate refugees'. The real/felt vulnerability influences decisions on family size and mobility, and at the same time people's mobility will influence the vulnerability of a given community: a two-way interaction between population and climate.

SANEM: How population development can reap the benefit of demographic dividend in Bangladesh?

IK: Whether a 'demographic window of opportunity' will be translated actually into a 'demographic dividend' is not automatic. As mortality and fertility decline, Bangladesh has been enjoying, since the 1990s, a period when the ratio of working-age population to both young and old dependents rises, and thereby providing a one-time "demographic window of opportunity". This one-time demographic window of opportunity in Bangladesh will be closing rapidly after 2031, as the dependency ratio rises again with the growth of the elderly population. This means it is "now or never" if the country can lead this demographic window of 'opportunity' into a "demographic dividend" by investing more and better in particular in health, education, skills development, and employment generation, especially for the adolescents and youth, as well as for gender equality and women's empowerment, just as the so-called East Asian Tigers like Hong Kong, Singapore, Republic of Korea and Taiwan did between the late 1970s and 1990s. More specifically, the demographic dividend will be garnered if all three conditions are met. First, improvements in health status, especially children's and women's health, will contribute both to improved child survival and a decrease in the number of children born to each family in successive cohorts, thus accentuating the population bulge in the cohorts now entering or about to enter the working ages. Second, those in these large cohorts and the smaller cohorts that follow them will benefit from investment in education and health. As families have fewer

children, they and the government have more resources to invest in the education of the surviving children, and women can increasingly enter the labor force. The third and final condition is having an economically enabling environment where those in the educated cohort can find well-paying jobs. This appears to be a challenge for Bangladesh given the high unemployment and underemployment rates of young people and women.

SANEM: How do you link youth demography and youth employment with economic growth?

IK: Although Bangladesh has achieved significant reduction in mortality and fertility rates, the population remains young, with roughly half of them under 25 years of age. The 15-29 age group (“youth” as defined in Bangladesh, as opposed to 15-24 globally) will grow to 51.3 million in 2026 from 41.2 million in 2011.

The future growth of Bangladesh – its nature and scope - will depend largely on the degree of success in educating the youth (the next cohort of workers) to build and expand their capabilities, employability, productivity and competitiveness, and also finding decent work for them. However, this can be a double-edged sword, because of a risk of failing to provide them with productive employment opportunities. Given the fact that, every year, 2 million people are newly entering the working age and looking for a job – not just a job but decent work—the government will have to fashion ways to roll back unemployment and underemployment among the youth. This is not just an opportunity, but a ‘must’ as Bangladesh is competing with many other countries in a highly competitive international value chain and marketplace.

Currently Bangladesh seems to rely much on the Ready-Made Garment sector and remittance from the migrant workers, but how long can Bangladesh sustain this model? In the long run, the expansion of education and improvement of the quality of such

education, especially for the youth, will be crucial, so as to expand Bangladesh's industrial and service sectors, by providing workers with the qualities needed to enable Bangladesh to compete, while at the same time without neglecting agriculture and rural development, but making agriculture (and related business) attractive to young people.

SANEM: Is women labor force participation important to enhance demographic dividend?

IK: Yes, definitely. Unemployment, underemployment and vulnerable employment in Bangladesh has a strong gender dimension, as also seen in other countries. The inability of women to participate more actively in the labor market significantly decreases their ability to escape poverty and for the entire society to reap a demographic dividend.

Bangladesh has been demonstrating progress during the past decades in women's health, education, nutrition, economic opportunities and political participation. Still, women in Bangladesh remain far behind men on these indicators. The prevailing patriarchal culture, including particular socio-cultural perceptions towards women and gender-inequitable attitudes, is a significant barrier. Though women labor force participation rate improved, they usually engage more in informal sector, and receive lower wages than men. Most unpaid work is done by women as well.

SANEM: Thank you so much for your time.

IK: My pleasure.

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“...continuity and predictability of policies are needed...”

INTERVIEW OF
MR. SYED NASIM MANZUR

SANEM had a conversation with Mr. Syed Nasim Manzur, Managing Director of Apex Adelchi Footwear Ltd., the largest footwear exporter of Bangladesh. He is also the Director of Apex Tannery Ltd. and President of Leather Goods and Footwear Manufacturers & Exporters Association. He is the current President of Metropolitan Chamber of Commerce & Industries (MCCI). Mr. Manzur completed his B.Sc. in Economics in entrepreneurial management from Wharton School, University of Pennsylvania. This interview is taken in July, 2015.

SANEM: What is the current investment scenario in Bangladesh?

NM: Although we are continuously congratulating ourselves for maintaining 6 percent growth rate on average for the last 10 years, this is not enough. We need to mobilize further investment, and investment-GDP ratio has to be increased by another 7-8 percent. The main driver of investment should be the private sector. Unfortunately, in recent years, the growth in private sector investment has gone negative. To compensate for this, the government has been increasing public investment by undertaking various ambitious projects under the Annual Development

Programs. These kind of ventures have been successful in centrally planned economies like China and Vietnam. In China, the government is the biggest landlord, the largest business house, and has the resources for undertaking such initiatives. However, for a quasi-free market economy like Bangladesh it is very difficult to continue such a scenario for long. Thus, the present investment scenario in our country, which, as the finance minister admitted, is quite frustrating.

SANEM: What are the major obstacles to increase the private investment in Bangladesh?

NM: Investors are generally attracted to long term ventures. This is the reason why people invest more in China and India. However, in Bangladesh, the return to investment is not high enough to compensate for the risks and obstacles associated with it. For example, a study by BBS shows that less than 1.7 percent of all incoming remittances are spent on monetary instruments while majority is spent on purchasing land. The low risk and high return from land within a short time has created a craze among people to invest their money on land, and as a consequence, it is distracting investment. Also, the cost of doing business in Bangladesh is very high. According to the 13 indicators of Doing Business Report 2015, Bangladesh severely underperformed in the following three: (i) enforcing contracts: It takes 1442 days to enforce a contract in Bangladesh, while in Vietnam and China corresponding figures are 400 and 443 days; (ii) electricity connections: It takes 429 days to get electricity connection in Bangladesh compared to 115 days in Vietnam and 143 days in China; (iii) registering property: It takes 244 days in Bangladesh to register a property. In West Bengal it has been pulled down to 7 days only. It takes 57 days in Vietnam while in China it takes 19 days. In addition to these, interest rate must be lowered for attracting investments in Bangladesh. For example, in China it is only 5 percent for export oriented investments whereas in Bangladesh it is still 13 percent. Cost of finance, cost of land, cost of construction materials etc. are very high in Bangladesh. We did a study on Bangladesh, Vietnam and

Cambodia regarding the cost of a squared-meter of land. Near Dhaka (42 km vicinity) it is \$340 while in the industrial zones of Vietnam and Cambodia; where you have water, electricity and gas connections, it is \$144. Thus whoever goes there with the permission can just immediately set up a plant. Now, how do we compensate our inefficiencies in the banking, transport and legal systems? We do so by giving unhealthy pressure on wages to keep it low. Ironically, this is counterproductive, as by depressing wages we are decreasing productivity, output and their loyalty. This is a dilemma for Bangladesh that must be addressed. Another alarming factor is our educated unemployed youth. The more GPA 5.00 are out in the market, the more educated unemployed we have. Although number of GPA 5 holders in the country has increased, their quality is not in accordance with their results. Almost in every sector, there is still a lack of technically qualified people. This mismatch can only be overcome by vocational and technical training. However, there is a stigma prevalent in our country that only the lowest category of students goes for vocational education.

SANEM: How important is political stability for private investment?

NM: Everyone adds a risk premium for uncertainties such as strikes, blockades, or other political unrests while undertaking any business initiative. The investor tries to predict about the long term continuation of such instabilities while taking investment decisions. Although right now, there is no political violence in the country, political uncertainties still persist. Hence, if someone decides to invest with a long term plan in mind, he/she has to consider these facts. Only an inclusive, responsive and participatory political practice can curtail uncertainties about political stability.

SANEM: How could FDI inflow in Bangladesh be increased?

NM: If the local investors in a country remain absent in taking business initiatives, then foreign investors will also be discouraged. For making us an attractive investment destination, we must deal with corruption at first. A recent survey by us shows that, 94 percent of people who want to get a permit and 99 percent of people who want to get a service have to pay bribe in Bangladesh. This also adds up to the cost of doing business. What is more alarming is that, even after paying the bribe many of them do not get the service at all. The three departments where corruption is most prevalent include the departments of environment, gas and electricity. Furthermore, to attract FDIs, our major focus should be on the predictability and continuity of policies, which are still very low in Bangladesh. We also need to have a proper soul searching whether we really need FDI, and if so, by how much.

SANEM: What do you think about the PPP?

NM: Many of the investors are not fully acquainted with the concept of PPP. Our government has also not called for any such projects yet. Once the laws of PPP are well prepared, the government should go for some small projects. It is necessary to set up some success stories of PPPs which could attract the investors. Any investor will not be encouraged to be the first mover in any new projects unless there are some well-established examples of success.

SANEM: What role can MCCI and other business chambers play?

NM: The trade bodies can keep a running score card of the major ongoing projects and update the policymakers based on it and also make suggestions as well; for example, updates on the progress of Dhaka – Chittagong and Dhaka - Mymensingh highway. We could also provide information to our government on the opportunities that the other competing countries like Cambodia, Vietnam or

Ethiopia are offering to their investors. MCCI and other chambers can suggest potential and pragmatic target specific strategies. For example, China has come around with a 'new manufacturing policy' by which they commit to create 85 million jobs within the next 10 years. The government of Bangladesh has to come forward with such forward looking policies and chambers could provide specific suggestions. MCCI has a historical relationship with Japan and is currently working on a very high level delegation. MCCI is providing Japan with necessary information on the potential areas for investments. This will encourage the Japanese investors to come and invest in Bangladesh in collaboration with the domestic investors. Chambers should project our success stories like women empowerment, improvement in social development indicators etc. to create a positive image of Bangladesh to the outer world. The next 3 to 5 years are very crucial for us. Hence it is high time that both the private and public stakeholders take necessary initiatives to boost investment in the country for higher economic growth.

SANEM: Thank you very much for your time.

NM: You are welcome.

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"Create the political will for social protection programs"

INTERVIEW OF DR. DAVID HULME

SANEM interviews Dr. David Hulme to discuss on social protection programs in Bangladesh. Dr. David Hulme is Professor of Development Studies, Director of the BWPI and CEO of the ESID Research Centre at The University of Manchester, UK. Dr. Hulme is one of the editors of the newly published book "Social Protection in Bangladesh: Building Effective Social Safety Nets and Ladders out of poverty". This interview is taken in August, 2014.

SANEM: How important social protection programs are in reducing poverty in Bangladesh?

DH: Social protection programs have made significant contributions to reducing poverty in Bangladesh and helping poor people better engage in the economy and raise their incomes. It has a long history of innovation and transformation and has been promoted and expanded by governments and politicians across the political spectrum of the country. Central to Bangladesh's recent economic and social achievements has been a surprisingly effective portfolio of social protection programs addressing different vulnerabilities of both transient and chronic poverty. In

an age of globalization, central to the achievement of inclusive development is an effective and evolving social protection system.

SANEM: What major changes are needed in the current structure of social protection in Bangladesh?

DH: There are few major changes needed in the current structure of Social Protection: (i) the programs need rationalizing so they can be more effectively managed and information can be generated that will permit strategic decisions to be taken; (ii) better MIS system and a proper impact assessment; (iii) civil service pensions should be removed from the Social Protection budget. This will reveal that social protection expenditure is only 1.6 percent of GNI, which should be raised to at least 2.5 percent of GNI; (iv) innovations in program design and implementation; (v) tackling urban poverty and vulnerability as an emerging challenge; (vi) effective targeting, avoiding program capture and systematic monitoring; (vii) the financial sustainability of social protection programs and exit policy; and (viii) combining protection and promotion goals aiming at household graduation out of poverty.

With its robust program portfolio, a capacity for innovation and broad based support for social protection across the political spectrum, Bangladesh has reasonably good foundations for formulating a National Social Protection Strategy. An additional requirement for a national social protection strategy is the provision of high quality information about the performance of Bangladesh's existing programs. It is critical to build on the innovations from such programs and pursue an effective scaling up strategy for graduation programs with proven results.

SANEM: What are the major challenges ahead for a country like Bangladesh in the case of social protection?

DH: The major challenges are: (i) creating the political will to reform the present mish-mash of programs; (ii) educating the political elite so that they understand that Social Protection is about human development and economic productivity – these are not hand-outs; and (iii) working out what forms of social protection are needed in urban areas.

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The contemporary set of “good enough” programs cannot, however, meet the developmental demands and aspirations of the future. The contribution of social protection to Bangladesh’s development is becoming increasingly constrained by the lack of coherent strategic framework and vision. This undermines its effectiveness in facing new and growing challenges arising from economic globalization, environmental and climatic changes, rapid urbanization and, what will become in the near future, an aging population. Coverage gaps, multiple types of leakages, the presence of low value-for-money program components and other factors weaken the prospects for improving the country’s approach to social protection and the innovations that will be needed in an urbanizing and environmentally vulnerable country that is heading for middle-income country status. The country needs sound institutional arrangements for program coordination, implementation, monitoring and evaluation/learning, resource sharing, and service delivery.

SANEM: Thank you so much Prof. Hulme for your time.

DH: You are welcome.

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"A growth can be poverty reducing and at the same time inequality increasing -which is the case of Bangladesh"

INTERVIEW OF DR. BINAYAK SEN

Dr. Binayak Sen is a Research Director of the Bangladesh Institute of Development Studies (BIDS). He has served as a Senior Economist in the South Asia Region of the World Bank as a regular staff member, and a Visiting Research Fellow at the Research Administration Department of the World Bank. He has also served as a consultant for the Asian Development Bank, UN-ESCAP, UNDP and the WHO. Dr. Sen has played an active role in various high-level national committees and commissions for the government of Bangladesh. SANEM discusses with Dr. Sen regarding inclusive growth, poverty and inequality from the perspective of Bangladesh. This interview is taken in September, 2016.

SANEM: Why is inequality a concern?

BS: Inequality can be a concern for several reasons. First, if initially there is a very high level of inequality it will most likely depress subsequent economic growth. However, the level at which initial inequality becomes a binding constraint, is a matter of debate. In some opinions, if initial inequality crosses Gini ratio 0.57, which was historically observed in Brazil, then that would dampen economic growth. Therefore, we should not let inequality go out of hand and cross a threshold level. Second, even a

moderate increase in inequality will dampen the rate of poverty reduction. You can statistically decompose the change in poverty into the change in growth component and change in redistribution component. If there is an increase in inequality, it will most certainly reduce the pace of poverty reduction. If we want to achieve 'SDG goal 1' regarding zero poverty, then even a moderate increase of inequality from the present high level could be a concern. Third, inequality destabilizes a society, reduces social cohesion and social capital. Thus, through this channel, it also reduces economic growth rate. Lastly, neither 'income inequality' nor 'consumption inequality' are big concerns per se. The main reason why development economics is so concerned about inequality is 'asset inequality'. If there is a persistent asset inequality (say) in the distribution of human capital, or inequality in accessing the credit market, then it will dampen the possibility of intergenerational mobility and cause intergenerational inequality. But unfortunately, there are no active measures for estimating asset inequality in countries like us. It may be mentioned that the implementation of some of the recently in vogue measures of income inequality also suffer from severe statistical problems. For instance, the Palma ratio compares the richest 10% of the population's share of income to the poorest 40%'s share. However, in Bangladesh the richest 10%'s income is much under-reported (no sample was taken from Gulshan, Banani and Baridhara—the three richest areas of Dhaka city in 2010 HIES).

SANEM: Is growth in Bangladesh inclusive?

BS: There is no consensus in literature to define inclusive growth. At one point of time poverty reducing growth was being termed as pro-poor growth. And that was the standard World Bank approach to measure inclusive growth. ADB had a different approach where they termed a growth as inclusive if it reduced Gini coefficient or any acceptable index of inequality. On the contrary, in one of my papers I reviewed that equal weight should be given to both 'equality of outcomes' and 'equality of opportunities'. In one

strand of literature, inequality of outcomes is not given any due weight; it is inequality of opportunities that is given the maximum weight. In my view, both should be given equal weight. Now, a growth can be poverty reducing and at the same time inequality increasing – which is the case of Bangladesh. However, we should be trying to minimize the inequality's negative effect on poverty reduction.

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SANEM: Why is inequality on the rise in Bangladesh?

BS: In my view, corruption is the main driver of rising inequality. This is because corruption means unearned income. Distribution of unearned income is much more skewed than the distribution of earned income based on skill differences. When governance deteriorates in a country the unearned income posits a larger share in the overall income portfolio. That is what is happening perhaps in Bangladesh. This misgovernance didn't matter as much for growth acceleration but it mattered a great deal for income deterioration. Therefore, I think the trend of income deterioration is largely fueled by misgovernance. In addition to that, not everybody in our society has equal access to opportunities such as education or skill formation. Therefore, these types of marketable skill differences and/ or human capital differences will have an effect on future occupational choice and future productivity difference between the rich and the poor. Unequal access to the financial capital has also played a role in this connection. Some people have much wealth and easy access to capital while poor people are not getting any sort of financial access and hence they are probably getting stuck into sub-optimal production activities or occupations. This is especially true for those who are coming from the marginalized class of society. Another stimulating factor is the division of education system into English, Bengali and Madrasa medium. The returns to education from these mediums greatly vary and have intergenerational impact on heightening inequality.

SANEM: What measures are needed to reduce differences in returns to education in Bangladesh?

BS: This is an important issue. The lowest return is exhibited by female madrasa students, then the male madrasa students, then the Bengali medium students. The highest returns to education is exhibited by the English medium students. To what extent these differences are due to the branding effect and to what extent it is genuinely attributable to the skill differences is a subject matter of further research. Although we have successfully achieved some of the elementary deprivations captured by MDG indicators enormous challenges lie ahead. For instance, we mostly focused on enrolment rate. However, we have not been successful to that extent on the completion rate. Therefore, from the perspective of access to primary and secondary education, there is still a big gap between the rich and the poor or the poorest. This gap is further encouraged by the upbeat trends in wages. Due to tightening of the labor market since 2007 and 2008 agricultural wages for male workers have gone up tremendously in rural Bangladesh. As a response to that, many male students from poorer community are leaving schools to get the immediate benefits of higher wages. It could be one of the contributing factors for improved gender parity in secondary education. It also points out the need for second chance education. Our education system should be more accessible: it should provide second chance schooling of acceptable quality. Lastly, if we cannot do anything about equalizing madrasa and non-madrasa education standards, we can at least connect madrasa education with technical and vocational education.

SANEM: Does international remittance increase inequality in rural Bangladesh?

BS: International migration has a sure impact on rise in inequality. Prof. Osmani and I have estimated that about 70% increase in rural inequality in the decade of 2000s is contributed by unequal opportunity of international remittances. The

households who have at least one member abroad are actually far better off than the households without such access. It takes a lot of resources to send a person abroad with work permit. Poorer households do not have access to that kind of initial capital to self-finance migration or access borrowing for migration financing to take advantage of the international labor market. Therefore, from that perspective I find that a broad based migration financing is very important policy option which will specifically target the poorest regions and poorer families. Government has started something in this sector in terms of distributing migration opportunities for lagging districts but I don't think this is adequate to the problem we are discussing. In case of domestic migration, some recent studies have tried to explore whether giving financial support to migrate to cities is a better option for reducing poverty compared to giving finance for self-employment in rural areas. They found migration finance to be a better option. This intuitively sounds to be true because migration will allow prospective workers to be employed in the fast growing urban economies where the wage is far better and more secure.

SANEM: How can we tackle the rise in inequality in a market economy? Is it an inherent problem of capitalism?

BS: If we want to tackle inequality one instrument could be the tax instrument. We all know that our tax-GDP ratio is miserably low at 10-11%. As a result, our public expenditure-GDP ratio is also very low at 15-16%. In all developed capitalist countries, public expenditure as proportion of GDP is very high--in the range of 40%-55 %. That means, they spend a quite significant share of their resources for the welfare of their citizens such as public education and public health care. These types of spending demands lots of subsidies and those subsidies are paid by redistributive taxes. In those economies direct tax constitutes over 80% of the total tax revenue. In addition, in countries like USA and UK they have other redistributive tax instruments such as wealth tax, inheritance tax, etc. In Bangladesh, we have something

similar—the instrument of ‘surcharge on income tax’ conditional on the value of assets exceeding 20 million Taka. However, this tax instrument is not at all effective—value of assets is grossly underpriced and only a tiny fraction of tax payers has been covered by this route (only 11,500 pay some surcharge on their income taxes). Even within the capitalist framework the experience of last 50 years has been mixed in this respect. Some countries have performed very well in terms of redistributive taxation. At some point, the Gini ratio of Sweden was 0.21—very similar to the Gini ratio of income in the former Soviet Union. Hence, both conventional state-socialism and Scandinavian capitalism had more or less similar effects on income inequality. Therefore, it is wrong to claim that nothing can be done about inequality under capitalism. Policies and the role of government can make considerable difference. And that’s why most of the opinions now argue that the ‘Kuznets process’ (first inevitable sharp rise and then gradual fall in inequality) is not inevitable.

SANEM: What to do to reduce inequality in Bangladesh?

BS: There can be a variety of policies to reduce asset inequality. Some actions would be promotive type while others would be protective type. Promotive type of actions may include promotion of quality human capital for all segments of population. There should be options for second chance schooling for the drop outs. There should be a greater integration with technical and vocational education system. We should be a member of PISA (Program for International Student Assessment) so that we can compare our education standard with other countries. The other block for reducing inequality would be to increase access to the broad based financial capital for the poor and the lower middle class. There should be separate credit window for the small and medium producers other than the microcredit route. Protective type of actions include social protection, but also shielding the poor from the encroachment of the rich and the powerful. The government has to salvage the banking system from the encroachment of large defaulters. Mobile banking and other

technological innovations can be used for retailing loans (as well as cash transfers earmarked for social protection) to the poor and the poorest. We have to stop corruption (especially corruption due to illegal and privileged access to public assets) with strong political will. There should be some investment for the housing of poorest segment of the population as well. This should be backed up by public investment in the development of transport infrastructure so that the poor can commute to cities on a daily basis while residing in the peri-urban and rural areas. My last word is that, without inclusive citizenship you cannot have an inclusive society, inclusive development and inclusive growth where the problem of inequality is effectively tackled.

SANEM: Thank you very much.

BS: You are welcome.

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"...sustained high growth is only feasible if we can keep a lid on inequality and maintain social cohesion..."

INTERVIEW OF DR. FAISAL AHMED

Dr. Faisal Ahmed is the Senior Economic Advisor to the Governor to support Bangladesh Bank's financial market development and reform agenda. Prior to his appointment, he served as the IMF Resident Representative in Cambodia during 2011 - 2015 and previously worked as a senior economist at the Monetary and Capital Markets Department at the IMF. Dr. Ahmed specialized in macro-financial issues and was a core member of the IMF's emerging market surveillance team and led IMF Technical Assistance missions on reserve and debt management. Dr. Ahmed holds a Ph.D. and an M.A. in Economics from the University of Minnesota, an M.Fin. in Quantitative Finance from Princeton University and is a CFA charter holder. Prior to joining the IMF, he worked in numerous international organizations and institutions like Central Bank of Turkey, U.S. Federal Reserve Bank, Royal School of Administration in Cambodia, the University of Minnesota, and at the South East Asian Central Banks Research and Training Centre (SEACEN). While talking to SANEM, Dr. Ahmed expressed his views on various issues regarding growth, economic diversification, financial inclusion, etc. This interview is taken in August, 2016.

SANEM: Bangladesh aims to become a developed country by 2041. Achieving 8 percent growth rate is also

a major agenda. What are the key macroeconomic issues that should be addressed in this regard?

FA: It is hard to meaningfully talk about projections twenty five years out in the future. But on a medium-term horizon, an 8 percent growth would require extra push, especially in a slowing world. On investment, we all are familiar with the usual suspects - infrastructure, energy, land, skills, and education. At a strategic level, we have to join the Asian production network, especially if we want to move beyond garments and up the value chain. We also should focus on productivity - both at the micro (plant or industry) and at the macro (TFP) level. There is a lot of discussion on how investment has stalled in recent years but not much on its productivity. Ultimately, productivity is the key. Last but not least, sustained high growth is only feasible if we can keep a lid on inequality and maintain social cohesion, especially in a crowded country like ours. Just look around the world to see what inequality can do to societies and politics.

SANEM: Generating employment is not sufficient for ensuring 'inclusive growth'. How can we create more employment opportunities and also increase the quality of employment?

FA: We are lucky in that our major growth drivers -agriculture, garments, remittance - have been relatively job-rich and thus structurally inclusive. Quality job remains the single most important channel of inclusion. For that, education, skills training, and investment are essential to increase productivity, especially as we mature as a lower-middle income economy. Going forward, labor-intensive manufacturing will have to play the lead role. In terms of sectors, the more we can meaningfully nurture SMEs, though easier said than done, the more jobs we will see generated in the economy.

SANEM: How can we encourage more private sector investment as well as attract more FDI?

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FA: At one level, when viewed through the lens of risk-return, domestic and foreign investment are correlated, as they both are exposed to many similar considerations. The bar, understandably, is higher for FDI. The good news is Bangladesh has enjoyed a relatively stable macro-economic backdrop, which should help. We need to make progress in the usual suspects of bottlenecks we talked about little earlier. For FDIs, given our local realities, several well-functioning SEZs would be helpful. FDIs generally work through demonstration effects - one good experience by a Japanese company can help bring others. It can work them other way around, too. If we bungle one deal, it deters many future ones. Foreign investors talk to each other. We need to create some manufacturing FDI success stories in industries where we want to move up to (e.g., automobile, electronics). For private domestic investment in SMEs, there is no single magic bullet but we need to continue working on financial access, and regulation.

SANEM: How can the Central Bank play a role in diversifying the economy as well as the export basket of Bangladesh?

FA: By risking a macro cliché, let me sympathize with the view that the most important thing a central bank can do it is to support macro-financial stability, create a predictable regulatory and supervisory environment. That said, in a developing country like ours, there might be some need and scope for targeted and time-bound high-impact policy interventions, e.g., bridging credit market failures, expanding financial inclusion. Developing markets that lengthen financing nature can have catalytic effects on the type of investment. Equally important for the central bank is also to know its limits; to be mindful that monetary, financial, and exchange rate policies can only do so much. Some of the deeper issues that often stifle export diversification have structural factors at play, i.e., fiscal or tariff policy.

SANEM: What are the policies of Bangladesh Bank for achieving greater financial inclusion?

FA: Financial inclusion needs a multi-pronged approach. The Bangladesh Bank, with support of the government, has prioritized the financial inclusion agenda for some years now through a host of policy supports, initiatives, and regulations. The goal has been to take finance to as many people as possible without creating stability risks and at reasonable costs, by including leveraging technology (e.g., mobile money). The regulations and the initiatives have tried to bridge past gaps that came from geography (urban-rural), gender, and the excluded (e.g., poor farmers). Many of these programs would hopefully mature over the coming years as we learn about their strengths and challenges, redesign them. Financial inclusion agenda has to be iterative.

SANEM: In progressing towards a middle-income country, Bangladesh has done well in the previous decades. What are the future challenges for Bangladesh in its aim towards a middle-income country?

FA: We are entering a new phase - relative to our past journey and in terms of the tepid global growth environment. Many of the growth bottlenecks we have now, even we address some, are likely to get more binding. We will have to keep working on them. There is no fixed list of challenges or constant solution. Given our demographics and density, our focus should be on more and quality jobs, inclusion, social cohesion. Growth is important but more important is how we manage our inequality over the coming years. Both monetary and fiscal policies will have to play their roles.

SANEM: Thank you very much for your time.

FA: You are most welcome.

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"...the constraints of small farmers need attention to enable them to raise their productivity and change the face of agriculture..."

INTERVIEW OF
DR. MUSTAFA K. MUJERI

Dr. Mustafa K. Mujeri is the Executive Director of Institute for Inclusive Finance and Development (InM). He was the Director General of BIDS and the Chief Economist of the Bangladesh Bank. He also served as the Poverty Monitoring and Analysis Advisor of UNDP in Cambodia and Research Director of the Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP). He has wide ranging professional experience in consultancy and research on development issues in different UN and other international organizations. For the November 2016 issue, SANEM speaks to Dr. Mujeri about the agricultural performance of Bangladesh over the years in terms of productivity and change. This interview is taken in November, 2016.

SANEM: How would you describe the agricultural growth performance of Bangladesh for the last four decades?

MKM: Since Independence, Bangladesh's agriculture has experienced significant transformation in structure, productivity and output growth. The 'Green Revolution' of the 1960s was the main driver, which was supported by policy reforms at both macro

and sector levels in later years. One major element of the reform agenda of the period was removal of various restrictions and liberalisation of the input and output markets since the 1980s facilitating participation of the private sector in trade and pricing decisions. These reforms were vigorously pursued in the 1990s. The positive impact of these two elements—technological innovation and shift in policy regime—was evident from growth in agricultural production especially of rice, the main crop. However, agricultural diversification was slow due mostly to absence of favourable conditions. Overall, we may say that, especially given the resource constraints in agriculture such as land and frequent incidence of weather uncertainty including flood and natural disasters, the agriculture sector has performed well with a respectable growth performance. This no doubt is a big achievement. Obviously, a more dynamic agriculture sector would have contributed more towards poverty reduction, rural dynamisms and overall growth performance.

SANEM: Bangladesh has recently shifted from a rice importing country to a rice exporting country. What factors have played the key role in this transformation?

MKM: As I have said earlier, Bangladesh's agricultural growth is dependent mostly on the performance of rice sector. Since the 1970s, total production of rice has more than tripled in recent years. Therefore, increased production is a major factor which is due to adoption of improved technology, better irrigation and water management and adoption of better policies. In addition, we also need to take into account changes in food consumption pattern especially with rising household incomes and rapid urbanisation. The data from Household Income and Expenditure Surveys show a consistent decline in per capita rice consumption in the urban areas and rising consumption of non-rice crops and other value added food items. Although no such trend is observed in the rural areas, similar declining trend may set in the rural areas without much delay with rapid reduction in rural poverty and rise in rural incomes. Such declining trend in dependence on

the staple food like rice is quite natural since, with rising incomes, people would like to consume a diversified diet rich in protein and other nutrients. As a result, our import dependency of rice has declined from around 10 percent of total rice consumption to only a negligible share in recent years. Although, our overall rice consumption is likely to rise due to population growth and other factors for some time to come, the rising trend is likely to tone down and eventually we may emerge as a rice exporting country. We are already exporting some rice, however, the quantity is very small. For consistent growth in rice export, we need to adopt pragmatic strategies for the world market of rice keeping in view the thin size of the global rice market, rice quality and other considerations.

SANEM: Has there been an adequate increase in productivity of agriculture in Bangladesh over the decades? If not, what are the reasons behind this sluggish increase in productivity?

MKM: Available evidence show that total factor productivity in Bangladesh agriculture is rising but at a very slow rate. This slow rate has been induced by many factors, such as structural bottlenecks including the unfinished land reform issue. Although many studies show that small firms are more efficient than larger ones in Bangladesh, small farmers are constrained in investing in agriculture due to low income, limited access to credit, high risks due to natural disasters, market and price uncertainties and many other factors. Since about 85 percent of the farms are small in size, the constraints of small farmers need attention to enable them to raise their productivity and change the face of agriculture in the country.

SANEM: Bangladesh has experienced a significant increase in the production of fish and vegetables. What were the key factors behind this success?

MKM: It is well established that farmers, especially small farmers, take rational decisions and respond quickly to positive

incentives. As I told earlier, the consumption pattern of the people are changing rapidly in response to rising incomes and rapid urbanisation. This has been raising the consumption of vegetables, fish and similar items rapidly. As a result, their prices are also rising providing positive incentives to the farmers to increase the production of these food items. Thus, a major factor behind the rising production of fish and vegetables is the price response of the farmers. One should, however, also note the role of government policy of keeping the rice price relatively low in view of the politically sensitive nature of price rise for this staple crop. Therefore, government policy itself changes the relative price of rice and other competing crops against rice itself. It is obvious that rational farmers would increase production of fish and vegetables in response to price incentives by adopting new technologies such as fish culture and other yield-raising practices.

SANEM: Bangladesh has successfully dealt with seasonal hunger. How significant a role did our agricultural performance play in this regard?

MKM: The phenomenon of seasonal hunger has significant geographic concentration and it mostly occurs in locations lacking income earning opportunities in lean periods in terms of agricultural production cycle. Therefore, creating alternative income earning opportunities during lean seasons and measures to reduce income fluctuations over different seasons is a sustainable way of tackling seasonal hunger. In such situations, both agriculture and non-agriculture sectors can help to meet the challenge. The complementary and mutually supportive role of both these sectors has enabled Bangladesh to successfully deal with seasonal hunger. Adoption of agricultural technology such as adoption of early maturing rice varieties, crop diversification, growing minor crops during the period between harvesting and sowing of two major crops, expansion of non-crop agricultural activities and similar other innovations have helped agriculture to play its role. This is supplemented by expansion of non-farm

earning opportunities during lean seasons and better utilization of seasonal migration opportunities.

SANEM: What are the policy issues to be addressed?

MKM: Bangladesh needs to make a rapid transition to ‘new agriculture’ which will support our journey to prosperity. For this, we have a number of challenges. In terms of technology, green revolution is on the verge. Environmental issues related to agricultural practices are important for productivity and sustainability of agriculture since agricultural practices have significant implications on loss of biodiversity, land degradation, deforestation, water availability and purity, and other environmental services. Moreover, agricultural production and rural livelihoods are highly dependent and vulnerable to environmental stresses, shocks, food price volatility, and climate change. Similarly, little is understood on how agricultural practices interact with agriculture and rural economy, and how effectively environment-friendly interventions in the small farmer-dominated agriculture in Bangladesh can contribute towards achieving food security and sustainable development goals. One must also realize that these are highly context-specific and need in-depth analysis of multiple interactions. The food marketing and distribution system is also undergoing rapid transition with the emergence of superstore supply chains and contract farming; the implications of which for the poor farmers are mostly unknown. I believe, there still exist strong arguments for introducing land reforms and strengthening property rights of the rural poor in Bangladesh. These policies will lead to increased investment and contribute to agricultural growth and more equitable development.

SANEM: What policy suggestions would you recommend to address these challenges?

MKM: The challenges of agricultural transformation of Bangladesh in this globalised world are multiple and complex, both domestic and global. Moreover, we need to foresee the

challenges and their possible impacts. As I have told earlier, many of these challenges are new and we need to explore the underlying dynamics of these challenges. The policy prescriptions should address these dynamics in an integrated manner, keeping both macro and micro dimensions in view. In the process, lessons from regional and country experiences could add important dimensions.

SANEM: Climate change is a big concern globally. Is Bangladesh ready to meet the challenges of climate change?

MKM: Bangladesh is one of the most climate change vulnerable countries in the world and agriculture will have to share the biggest burden of these changes. Moreover, the impact of climate change is somewhat uncertain and one cannot predict the outcomes accurately. What is important for our agriculture is to improve the response mechanism to climate change stress through technology and other adaptive mechanisms. Building resilience is also important.

SANEM: What lessons can be taken from other developing countries like Thailand, China, South Korea, etc to help improve agricultural productivity?

MKM: A major factor behind the success of these countries, which we call 'East Asian Miracles', has been their favourable initial conditions and pursuit of prudent policies providing right incentives. During initial periods, agriculture in these countries provided the required dynamism for faster growth and prepared the stage for smooth take-off to higher growth trajectories. Bangladesh must also transform its agriculture to spur more inclusive growth and development.

SANEM: Thank you for your time.

MKM: My pleasure.

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"In order to boost the level of FDI, we need big flagship investment"

I N T E R V I E W O F
D R . A H S A N H . M A N S U R

Dr. Ahsan H. Mansur is the Executive Director of Policy Research Institute (PRI) of Bangladesh. After completion of his PhD from the University of Western Ontario in 1982, he joined and served the IMF in different ranks. After his retirement from the IMF, Dr. Mansur joined the PRI of Bangladesh as its founder Director and Executive Director. Dr. Mansur has published extensively in many renowned journals, contributed in many working paper series and edited books on special economic topics. For this issue, SANEM interviews Dr. Ahsan H. Mansur on the prospects, challenges and policy issues regarding FDI in Bangladesh. This interview is taken in December, 2016.

SANEM: Why is FDI important?

AHM: FDI inflow does not bring only investment, but also some other positive changes for the business climate of a developing country like Bangladesh. First of all, foreign investment brings along a “structured management”, which is in general much better than the local management structure. In Bangladesh, we have shortcomings in both mid and high level management. Secondly, FDI brings improved accounting practices, labor relations and working conditions which benefits local businesses through spillover effect. Another important thing that comes with FDI is-

technology. As foreign investors bring new products, they always try to produce them with the best technology available at that time. Moreover, foreign investors are well connected with the world market. They have well-spread marketing networks all over the world, whereas it will be a challenge for domestic investors to develop this market chain. Besides these, the direct gain from FDI is the generation of additional employment opportunities for Bangladeshi workers. The higher wages generally offered by foreign investors help in improving the overall standard of living and health services for the local workforce.

SANEM: How would you describe the performance of Bangladesh in attracting FDI?

AHM: Despite doing well in terms of many indicators, Bangladesh's performance in attracting FDI is rather poor. Our FDI-GDP ratio is very low compared to many other developing countries in South and Southeast Asia. It is very important for Bangladesh to increase the FDI, which is only little over 1% of GDP at present. The Government of Bangladesh has targeted to increase the FDI-GDP ratio to 3 percent by FY20 in the 7th FYP. Achieving this target might be a challenge given our track record in attracting FDI, but it is also very much possible, especially if we can establish the 100 Special Economic Zones (SEZs) all around the country as planned by the Government and put them into operation expeditiously.

SANEM: Which sectors are attracting FDI in Bangladesh? What are the potential sectors?

AHM: So far, telecommunications and energy sectors are dominating in attracting FDI in Bangladesh. In recent times, the FDI inflow in the telecommunications sector has decelerated somewhat, mostly due to the fact that 3-G investment is largely completed. It is however also expected that, there will be some

large foreign investment in the telecommunications sector once we start implementing the 4-G network.

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My observation about the future of FDI in Bangladesh is that, in order to boost the level of FDI, we need big flagship investment. If large companies come to invest, they will be able to contribute to larger technological transfer and they will also bring many small suppliers and complementary supporting companies with them. So far, there has been no such big flagship investment in Bangladesh. SAMSUNG once showed interest in coming to invest in Bangladesh and it would have brought 67 supporting companies along. However, we could not meet their demand for 350 acres of land at that time and they went to Vietnam instead. In future, we have to give more emphasis on attracting such big investments.

There is huge potential for attracting FDI in RMG sector, as well as in many other sectors. Chinese investors are eager to relocate their RMG plants to Bangladesh because they are becoming uncompetitive due to surging wages in China. However, we are unable to give them enough land to relocate their factories. Also, BGMEA is not very keen to allow foreign investors outside SEZs, which is unreasonable and slowing down the expansion of the sector. However, there is no obstacle for foreign investors within SEZs, therefore, we can be hopeful that the FDI inflow will see a significant rise once the SEZs come into operation.

SANEM: What are the prospects of larger FDIs from countries like Japan, India and China?

AHM: The government is planning to develop some country specific SEZs. All SEZs will be open for all but some SEZs can be allotted to these countries to attract more investment from them. The SEZs are also in a position to provide further incentives for the investors from these countries. However, the problem is, the proposed 100 SEZs are yet to be ready and the implementation process is rather slow due to capacity constraints, slow moving bureaucracy and other issues.

SANEM: How do political stability and business climate play role in attracting FDI?

AHM: Political stability and security issues are crucial for FDI as well as domestic investment. Regrettably, the Holy Artisan incident of July, 2016 has cast a shadow upon foreign investment. Two big Japanese funded projects, Matarbari Coal-Based Power Plant and Dhaka Metro Rail, have effectively stopped. Favorable business/investment climate also plays a critical role in attracting FDI. Bangladesh has been ranked 176th out of 190 countries in the “Doing Business Index” 2016, which is obviously a very poor performance.

There is huge room for improvement in terms of infrastructural development (i.e. ensuring supply of electricity and gas), contract enforcement, and availability of land for foreign and domestic investors, overall security issues etc. However, one positive development is that Bangladesh government has recently formed Bangladesh Investment Development Authority (BIDA) by merging Privatization Commission and Board of Investment (BOI). BIDA has recently taken some steps to improve the business climate and enhance the overall investment scenario. It has targeted to bring Bangladesh’s ranking down to below 100th position in terms of Doing Business Index by 2021.

SANEM: What steps can Bangladesh take to develop semi-skilled and skilled labors for attracting higher FDIs?

AHM: The lack of skilled labor is a generic and systematic problem in Bangladesh. As an underdeveloped country, the quality of education, and consequently the quality of labor, is very poor. There is huge shortage of technical and vocational skill in our labor market. Our social norms tend to socially undermine those who go for acquiring technical skills such as nursing and technicians of various skills, which deepen our problem. In many developed countries, almost 50 to 60 percent of the students go for

the vocational education. A major change in our social mindset is needed to overcome this problem.

Interestingly, FDI can also help improve the labor skill of our country, as foreign companies provide skill development training for their local employees. This skill development does not only help the host firm, but also the whole industry through “Agglomeration Effect”.

SANEM: What are the major challenges for Bangladesh for attracting FDI?

AHM: Infrastructural bottlenecks are a major issue. It takes 404 days on an average to get electricity connection, which is absurdly long and causes the cost of business to go up. The situation is also not ideal in our neighboring countries, but still they manage to provide electricity connection in about 100 days. Developed countries take only about 2-3 weeks. Even though we have sufficient production of electricity now, inefficiency in transmission and distribution systems is resulting in underutilization of the produced electricity. Removing these constraint through investment in better transmission system is paramount for Bangladesh to increase its inflow of FDI.

Another critical obstacle is the breach of contract. It takes 4.5 years on an average to settle a contract enforcement lawsuit. It also costs about two-thirds of the amount under consideration while going through the contract enforcement and litigation process. This kind of inefficiency in contract enforcement process creates huge disincentive for the foreign investors. Unfortunately, there have been several instances of contract violation by local parties which contributed to a negative reputation for Bangladesh resulting in low inflow of FDI and lack of confidence in doing business in Bangladesh. Policy support and quick enforcement of contracts related to investment and business operations by the government administrative and legal systems will be important in ensuring swift enforcement of contract. This in turn will help build the attitude for respecting contracts in a timely manner. In short,

150 | in order to boost the level of FDI, we have a lot to do in terms of infrastructural development (i.e. electricity, gas and connectivity), contract enforcement, and availability of land for foreign investors, overall security issues, lowering of domestic interest rates and more open current and capital account payments regimes.

SANEM: Thank you so much for your time.

AHM: You are most welcome.

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“They can transcend their social classes through migration”

INTERVIEW OF
DR. TASNEEM SIDDIQUI

SANEM had a conversation with Dr. Tasneem Siddqui on Migration and Remittance issues related to Bangladesh. Dr. Tasneem Siddiqui is Professor of Political Science and Founding Chair of the Refugee and Migrating Movements Research Unit (RMMRU), University of Dhaka. This interview is taken in January, 2015.

SANEM: Why are international migration and remittance important for Bangladesh?

TS: Since 1980's, it is the migrant remittance that kept the development of the country rolling. Comparing remittance with FDI, it was found that remittance is 12 times higher than FDI for Bangladesh. If compared with foreign aid, each year it is 6 to 7 times higher than Foreign Aid received by the country. For the last ten consecutive years, in current account balance, we could retain surplus because of the flow of remittances. Remittance is the highest foreign exchange earning sector of the country. Therefore

in all its development interventions, there is some role of migrant remittances.

Along with the macro level economic results, BBS and RMMRU-SDC studies show that the poverty level is much lower among migrant families compared to non-migrant families with the same socio-economic background. In rural areas, migrants are investing in every possible opportunity. They are creating jobs for the non-migrants as well as creating seasonal jobs for people of those areas which are not prone to international migration and are affected by climate-change. Migrants who return permanently also contribute immensely to the economy by engaging in self-employment, as they lack in the social linkage that helps creating jobs.

SANEM: What are the major issues concerning migrant workers?

TS: People, particularly in the bottom stratum have learnt that, they can change their livelihood, their economic status; even in some cases they can transcend their social classes through migration. In Bangladesh, wherever you are born you get stuck to your economic class. But through migration, numerous rural poor could change their fates and economic condition.

However, the major concern now is the government policy and its effectiveness in keeping the flow of migrants constant. For example, the government signed the G2G for cost effectiveness and brought certain accountability. Unfortunately enough, even though this policy did not work over the years, the government failed to re-evaluate it, thus causing irregular migration overseas. People are migrating to Malaysia via Thailand through Bay of Bengal. UNHCR came up with the figure that last year alone more than 54 thousand people were identified in different camps of Malaysia who migrated through irregular sea route. Another major concern is the implementation of the human rights of our workers

who migrate through irregular channels. Workers are treated in the worst possible ways. They are paid almost half the salary and are kept in almost enslaved working condition. Therefore it is now an utmost requirement to send the workers through formal channel reducing the irregular channels as soon as possible.

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Another major problem of international labor migration in general is the Kafala system. As a result of this system work visas are sold unofficially and the cost of migration is going up. Once dealt in this system it is taking almost years after years for the workers to pay for the migration cost.

The migration of female workers is another crucial issue. As women work within the boundary of house and are not covered by the labor law, the exploitations often go unnoticed. In such case of vulnerability, Bangladesh can follow Sri Lanka as their process of female migration is more organized. However, it seems to be complicated as the resource allocation of the government is very poor. Thus, the main concern lies in designing suitable and appropriate policies that will ensure a safe and smooth female migration process. Again we should keep in mind that these policy implications will make the female migration process less hazardous and risky but will certainly not stop the migration of females.

SANEM: How have the migration policy and conditions changed over time in Bangladesh? What further improvements do you expect?

TS: Bangladesh has done very well regarding development of institutional structures. Now we have a separate ministry for managing international migration, we have a policy and a new law. Even though the migration law in 2013 has been promulgated, but the implementation is yet to take place. So those who have committed crime against the migrants are charged under different

laws which do not have enough punishment or enough commensurate punishments for the crime they commit. Even though there are positive changes, but the follow-up is weak. Although some areas of institutions have been developed, but the quality of services is not yet satisfactory. For example, we can develop a separate cadre for labor attaché.

I would say that despite some positive changes in the governance of migration, the changes are not producing desired results due to nepotism or certain kind of ad-hoc-ism. And that is why a migrant does not receive the required service that he/she deserves.

SANEM: What measures are needed to be taken for better use of remittance so that it can be channeled to productive investments?

TS: About remittance there are two sides. One is flow of remittance and the other is use of remittance. When you think of flow of remittance, Bangladesh government and public and private banks have done a lot to bring remittance and a major portion of remittance through formal channel. They could see that migrants are important customers who will eventually increase their profit margin. That is why the public and private banks have worked very proactively. Major changes have taken place and today you see that although the remittance of last year showed a decline, this year it has increased. Of course there are other reasons but increase in remittance took place despite the negative growth of number of migrants over last three four years.

The increase took place because remittances brought through informal channels earlier have been continuously brought within formal channels under the leadership of Bangladesh Bank. Private Banks also performed tremendously well in bringing remittances through formal channels. In our (RMMRU-SDC 2014) study, we have seen that almost 37 percent of the remittances are now

invested in different investment portfolio like fixed deposit, DPS, which is a massive development from what it was before. Previously, majority of the remittance used to be consumed but now people are investing into different investment schemes.

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The same study, “Impact of migration on poverty and local development”, we found that whatever investment opportunities are available, migrant families do invest. In many of the families, agriculture still remains viable because of this external flow of remittances. Therefore, in agriculture, you see lot of innovation and mechanization and migrant families are better equipped to spend on such investments. So I think if the right kind of packages could be offered by the government, migrants can nourish and develop their entrepreneurial attitude and for that they need training and business consultancy services. Most importantly, access to credit is needed. Due to lack of availability of loan, Probashi Kollan Bank was established. But even this bank could not provide migrant investment loan at a reasonable sum.

These are the problems where I believe lot of improvements are needed to be done to encourage investment of remittances. Even though not all migrant families might invest, large scale investment opportunities should be created and they should be allowed to purchase bonds from there. Then again corruption is such pervasive that investment in the stock market becomes risky.

In a way, I would say that migrants are on their own. So there has to be certain programs that support migrant investment. We don't have any skills training or other things like joint investment, PPP, challenge fund etc. Government should come up with such initiatives that encourage migrants for innovation with available resources.

SANEM: Thank you so much for your time.

TS: You are welcome.

LET'S THINK ALOUD, SHALL WE?

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PART II

TRADE, REGIONAL INTEGRATION AND FOREIGN DIRECT INVESTMENT

30

Towards a new regime of regional integration in South Asia

S E L I M R A I H A N

There are strong arguments for deeper regional economic integration in South Asia, as it is believed to generate significant intra-regional trade and welfare gains for the countries involved. Deeper regional integration is supposed to provide countries in the region improved market access in each other's markets, and thus help boost their exports, which would augment the significance of intra-regional trade and associated investment flows. That would, on the other hand, generate more trading opportunities among the countries involved since there will be tariff differentials due to the most favored nation (MFN) vis-à-vis regional tariff regimes. These are static gains that the countries involved would be able to realize. Dynamic gains could be even greater due to the possible expansion of the scale of operation owing to easy access to the large regional market buoyed by increased investment and more efficient allocation of regional resources.

There are also convincing evidences that deeper regional integration is needed for generating and sustaining economic growth in South Asian countries in a region that is home to a significant share and the highest density of poor people in the

world, sustainable economic growth can ensure employment creation and contribute to poverty alleviation. Moreover, South Asia is one of the most food insecure regions in the world where ensuring food security continues to remain an insuperable challenge. Consequently, intra-regional trade in agriculture and food products is crucial to improve the situation of food security in the region.

Inarguably, deeper regional integration through trade and transport facilitation, along with the presence of efficient regional supply chains, will dramatically improve intra-regional trade and increase the competitiveness of South Asian countries to better participate in the global market. Meanwhile, peace dividends of intra-country stable political relations—a pre-requisite for regional integration—will also be immensely high.

Regrettably, intra-regional trade in South Asia has hovered around 5 percent for the past decade, which is significantly lower when compared to other regional arrangements such as the North American Free Trade Agreement (NAFTA), Association of Southeast Asian Nations (ASEAN), and the European Union (EU). Such inferior performance is despite the focus of the current regime of regional integration on improving intra-regional trade in goods. There is, however, a growing perception that South Asia's intra-regional trade is underestimated since a large volume of informal trade among South Asian countries is not fully captured. Additionally, while formal intra-regional trade is low in the region as a whole, bilateral trade among South Asian countries, namely between India and other smaller countries such as Bhutan and Nepal, is exceptionally high. Furthermore, trade in services, particularly in education, health care, information technology and construction, is vibrant at best, but is not recorded well.

In their pursuit to improve intra-regional trade, South Asian countries crossed an important milestone in regional integration with the implementation of the Agreement on South Asian Free Trade Area (SAFTA) in 2006. SAFTA is a landmark achievement, but sadly, it has thus far failed to bring about significant changes in the status of intra-regional trade. Hence, for a deeper integration in South Asia, countries in the region have to first fully implement SAFTA and then move beyond it.

South Asia is at the verge of a new regime of regional integration, which involves four integration processes, namely: i) market integration: integration in trade in goods and services; ii) growth integration: integration in economic growth processes of South Asian countries; iii) investment integration: promotion of regional investment and trade nexus; and iv) policy integration: harmonization of economic and trade policies.

The new regime of regional integration should focus more in promoting regional investment and trade nexus. Promoting intra-regional investments and attracting extra-regional foreign direct investments (FDIs) in goods and services in general, and energy and infrastructure sectors in particular, should be the key features of the new regime. Additionally, it is necessary to link intra-regional trade liberalization with enhanced intra-regional investment in different services sectors. Regional and sub-regional efforts must be promoted for different trade and transport facilitation measures, for cooperation in energy generation and transmission, and for linking energy cooperation and trade and transport facilitation with investment and growth processes of countries in the region. Importantly, regional focus should include the development of efficient regional supply chains to gain competitive edge in the international market. In addition, the new regime should re-emphasize the importance of concrete regional efforts to diversify the export structures of the weaker economies for their effective integration into the regional economy. Notably,

realistic short- and medium-term targets should be set to ensure timely progress in achieving the ultimate goal of deeper regional integration for shared regional prosperity.

In that context, there is need to further reduce intra-SAARC tariffs and sensitive lists, relax rules of origin, and establish effective mechanisms to deal with non-tariff measures (NTMs) and non-tariff barriers (NTBs). Moreover, a more proactive policy initiative should be taken for SAFTA to match extensive tariff reductions under the bilateral Free Trade Agreement (BFTAs) within the region. Accordingly, a review of all current commitments under SAFTA should be initiated with the objective of converging SAFTA's tariff reductions to match those provided under the bilateral FTAs. In addition, the Rules of Origin (RoO) under SAFTA should also be made consistent with those that are now in force under the BFTAs, in which the rules are often more liberal than those in SAFTA.

Some of the important elements of regional integration in South Asia, which exist today but need serious revisiting include, among others: i) overcoming NTBs; ii) deepening customs cooperation; iii) promoting services trade; iv) enhancing investment cooperation; v) smoothening trade and transport facilitation; and vi) promoting energy cooperation. These are briefly discussed below.

One of the crucial factors that have largely rendered SAFTA ineffective is the various types of NTBs imposed by countries in the region. According to Raihan et al (2014), there are many products in which SAARC countries have high export capacities, but intra-SAARC trade of these products are absent due to the presence of various NTMs. In order to effectively deal with existing NTMs, the SAARC Secretariat should take the inventories on NTMs of the SAARC member states into cognizance and endorse

the many initiatives taken by the private sector and development partners. Importantly, prominent NTMs should be reviewed and analyzed to identify their impact on trade. Subsequently, to reduce the trade-impeding effects of NTMs and NTBs, SAARC countries should sign mutual recognition agreements (MRAs). In that context, SAARC countries should accept certificates issued by the competent authorities of other SAARC member countries, for which the laboratories issuing the certificates should be accredited. Accreditation bodies or agencies may set up accreditation centers in collaboration with a designated national agency. It is also important to strengthen the SAARC Regional Standards Organization (SARSO) and allocate adequate human and financial resources to make it function effectively. Importantly, focused interactions on NTBs and NTMs between the private sector and the government should be conducted regularly in each SAARC country.

In order to facilitate regional trade, customs valuation should be strictly in line with the WTO Customs Valuation Agreement, and the certificates issued by designated national institutions should be accepted by all ports of entry. Fees levied should be based only on the cost of services rendered. Additionally, considering the importance of automation of customs in trade facilitation, SAARC Members should expedite and prioritize the introduction of increased automation of their customs clearance procedure under the harmonized Automation System of Customs Data (AYSCUDA).

Considering the rising prominence of global trade in services, deeper regional integration in South Asia requires enlarged services integration in the region. Deeper regional integration in services trade would provide huge welfare gains for South Asian countries as almost all South Asian countries are net importers of services. SAARC countries, therefore, have signed the SAARC Agreement on Trade in Services (SATIS), which awaits implementation. Unfortunately, many South Asian countries lack

established and well-functioning regulatory and institutional frameworks that support services trade liberalization and hence effective implementation of SATIS. Therefore, considering their specific economic requirements and the necessary technical assistance for capacity building, SAARC countries should frame appropriate domestic regulations without delay. Thus, countries should be provided adequate regulatory flexibilities to promote services trade liberalization.

South Asia lacks adequate investment in different sectors, which is necessary to deepen regional integration. While much of such investments need to be attracted from countries outside the region, there is ample scope for intra-regional investment too. However, for that to materialize, effective domestic regulatory frameworks need to be harmonized with the regional investment framework, taking into account the country-specific priorities in different sectors. That will require streamlining of investment regulations, improvement of the business environment, enhancement of institutional and regulatory capacities, making regulatory cooperation effective, and enhancing people's mobility. Notably, a regional investment treaty and double taxation treaties among SAARC countries are needed to remove existing barriers to investment in the region.

Studies have shown that development of economic corridors among South Asian countries would help these countries better integrate regionally and globally. In this regard, the need for harmonization of laws and processes related to transport networks, and transit and trade facilitation among these countries, becomes obvious. Trade facilitation landscape of South Asia is unimpressive when behind-the-border issues are considered. South Asian countries suffer from excessive direct costs and time taken to cross borders and from inefficiency in cross-border transactions. Trade in the region is also constrained by the poor conditions of trade- and transport-related infrastructure,

congestions, high costs, and lengthy delays. Among the major causes of high trade transaction costs is the number of cumbersome and complex cross-border trading practices, which also increase the possibility of corruption. Goods carried by road are subject largely to transshipment and manual checking at the border, which imposes serious impediments to regional and multilateral trade. The problem is further compounded by the lack of harmonization of technical standards.

Studies have shown that improved trade facilitation in South Asia would increase the volume of intra-regional trade by reducing the transaction costs of trade, thus making exports more competitive and imports less expensive. Therefore, reduction of transaction time through simplification of documentation and promotion of paperless trade should be a priority. To reduce trade-related transaction costs, governments must collaborate on a trade facilitation agenda that encompasses procedures, regulations and processes that impose costs on cross-border commercial transactions such as customs, standards and movement of people, among others.

South Asian countries have wide variations in commercial energy resource endowments and commercial energy demand. Hence, they can immensely benefit from efficient sharing of their energy resources through a wider energy system integration, which would lead to more optimal energy supply solutions with greater energy security for the region. Regional cooperation is thus needed in the areas of increased energy production, expanded energy trade infrastructure, promotion of a regional power market, and harmonized legal and regulatory frameworks, together with an improved investment environment.

SAARC leaders have visioned an Economic Union in South Asia. To materialize this vision, SAARC should now enter into a new

regime of regional integration. Building on past experiences and effectiveness of the existing regional integration regime, the new regional integration regime will require pro-active and visible leadership, mainly from India, in taking the agenda forward. The success and the effectiveness of the new regime will largely depend on the delicate balance between what each country can offer and what it can expect in the deeper integration process. Moreover, regional institutions, like the SAARC Secretariat, have to be institutionally reformed and reoriented. Business associations and civil society organizations have to understand and participate in the political economy process of pursuing regional integration agenda in South Asia more than ever under the new regime.

Reference:

Raihan, S., M. A. Khan and S. Quoreshi. 2014. NTMs in South Asia: Assessment and Analysis. Kathmandu: SAARC Trade Promotion Network.

31

Sub-regional cooperation can be the answer to the deadlock of regional integration in South Asia

S E L I M R A I H A N

Though there is a strong demand for a deeper regional integration in South Asia, the progress has been rather slow. Actual implementation of agreements often does not match the declared ambitions, and in this context, lack of political will and leadership, institutional weaknesses and capacity and resource constraints have been argued to be the major impeding factors. The political rivalry between India and Pakistan has often constrained the SAARC to be a functional regional forum. The recent cancellation of the SAARC summit is such an example.

In order to take forward the regional integration process in South Asia a good and effective initiative is the Bangladesh, Bhutan, India, Nepal (BBIN) initiative, which is a sub-regional coordinative architecture of countries in South Asia. BBIN operates through Joint Working Groups (JWG) comprising official representation from each member state to formulate, implement and review quadrilateral agreements. Areas of cooperation include water resources management, connectivity of power grids, multi-modal transport, freight and trade infrastructure. Focused on the

subcontinent's north east, it endeavored to cooperate on trade, investment, communication, tourism, energy and natural resources development. Its objectives have been expanded over years to incorporate substantial land and port connectivity.

The economic needs and drivers for a deeper integration in the BBIN sub-region are more prominent compared to these countries' integration with the rest of South Asia. Especially, a deeper integration among the BBIN countries is very important to place BBIN as the gateway for further integration with China and Southeast Asian countries. The political economy drivers also seem to be more favorable. In the context of some structural factors, especially the political rivalry between India and Pakistan which has confined the progress of SAARC, and landlockedness of Nepal and Bhutan, the BBIN sub-regional initiative has seen a great interest from the political elites from these four countries. The extra-regional drivers for BBIN are also favorable as there are growing interests from international organizations like the Asian Development Bank (ADB) and the World Bank for improvement in connectivity and infrastructural development in this sub-region.

As far as intra-BBIN trade is concerned, there are substantial potentials for the rise in intra-regional trade. However, despite that India has already provided almost full duty-free-quota-free of its market access to exports from South Asian LDCs, Bangladesh, Nepal and Bhutan are facing escalated challenges to at least secure and then to increase their exports to the Indian market. These challenges are related to their limited export capacities, lack of diversification of their export baskets, and various non-tariff measures (NTMs) and procedural obstacles (POs) due to inadequate infrastructure and lack of support facilities both at home and in the Indian market. However, streamlining of NTMs and removal of associated POs are very important as such actions are likely to intensify further market integration in the BBIN sub-region through development of regional value chains. These will

also encourage larger intra and extra regional investments in the BBIN sub-region which can be instrumental for growth integration among these countries. To make these happen there is a need for policy integration among the BBIN countries.

Domestic capacities of the exporters in Bangladesh, Bhutan and Nepal need to be improved to meet different international standard requirements. Unless and until these exporters develop their capacities, they will not be able to diversify exports and become competitive in the regional and international markets. A number of supply side factors at home can actually undermine the exporters' competitiveness and constrain economic and export diversification. These factors are directly associated with the domestic production and investment environment. Most prominent of these factors are access to finance, weak physical infrastructure, inefficient ports and high transport costs, shortage of skilled workers, technological bottlenecks, lack of entrepreneurship and management skills, lack of information, and high costs of doing business.

There are some signs of heightened 'new' commitment among political elites of the BBIN countries. The recent speedy resolution of land boundary agreement (LBA) between Bangladesh and India, the positive reception of the India-Bangladesh Maritime Arbitration Award announced in July 2014, establishment of border haats along the border between India and Bangladesh, and the BBIN Motor Vehicle Agreement are signs of such 'new' political commitments.

However, the aforementioned 'new' commitments have not yet been translated much to resolve the issues related to NTMs and POs discussed above. There is a need to put renewed emphasis on this. There are some recent initiatives by the Government of India to solve the trade infrastructural problems at the border by setting

up of Integrated Check Posts (ICPs) at major entry points on the land borders between Bangladesh and India. Two such ICPs have been put in place recently. Such ICPs need to be established at the borders between India and Nepal and India and Bhutan.

There is also a need for cooperation among different institutions in the BBIN countries to deal with NTMs and removal of POs. Cooperation is needed in a number of areas for harmonization of TBT and SPS measures, Mutual Recognition Agreements (MRAs) among respective organizations of these countries, and for introduction of increased automation of their customs clearance procedure.

32

What determines south-south trade?

S E L I M R A I H A N

In recent times the world economy has witnessed an unprecedented growth of developing countries with their share in global trade and output almost doubling over the last two decades. Table 32.1 shows that the share of north-north trade in global trade declined from 55.5 percent in 1990 to around 31 percent in 2011. Such fall in north-north trade had been accompanied by rising trade involving the south countries. The south-north trade share increased from 13.9 percent to 16.5 percent during the same period. The most spectacular phenomenon was the rise in south-south trade, which increased from only 6.4 percent to 20.3 percent during this period. However, such rise in south-south trade has not been uniform across different south countries. During 1990 and 2011, though all categories of south countries (all south, LDCs, SVEs, advanced south and south excluding advanced south) experienced rises in their shares in global trade, trade involving the advanced south countries was the major contributor to the changing landscape in global trade, which resulted in the remarkable rise in the south-south trade.

Table 32.1: Share in world trade (percent)

	1990	1995	2000	2005	2011
North-North	55.47	46.74	46.97	40.84	30.87
South-North	13.88	14.77	15.73	16.24	16.47
South-South	6.37	8.69	9.87	14.37	20.33
Advanced South-South	2.16	3.33	4.06	6.69	10.51
LDCs-South	0.16	0.21	0.23	0.35	0.53
SVEs-South	0.10	0.11	0.16	0.24	0.29
South excl. Advanced South-South	4.22	5.36	5.81	7.68	9.82

Note: North = Developed countries; South = Developing countries; Advanced South = Brazil, China, Hong Kong, India, Indonesia, South Korea, Malaysia, Mexico, Russia, Singapore, South Africa, Thailand and Turkey; LDCs = Least developed countries; SVEs = Small and vulnerable Economies.

Data source: UNCOMTRADE

Table 32.2: Top 10 South countries in term of share in south-south export

Average (2000-2002)			Average (2008-2010)		
Rank	Country	%	Rank	Country	%
1	China	15.70	1	China	23.36
2	Hong Kong	13.92	2	Rep. of Korea	9.24
3	Rep. of Korea	10.13	3	Hong Kong	8.33
4	Singapore	9.43	4	Singapore	8.31
5	Malaysia	5.88	5	Russia	4.65
6	Russia	5.02	6	India	4.34
7	Thailand	3.72	7	Malaysia	3.82
8	Indonesia	3.34	8	Thailand	3.63
9	Brazil	3.11	9	Brazil	3.62
10	India	2.75	10	Indonesia	2.80
	Total	73.00		Total	72.10

Data source: UNCOMTRADE

Table 32.2 lists the top 10 south countries in terms of their shares in south-south export. All these 10 countries belong to the advanced south countries. The names of the top 10 countries remained the same during 2000 and 2010, though their ranking changed. The total share of the top 10 South countries declined slightly from 73 percent to 72.1 percent during this period. China

registered a remarkable rise in its share from 15.7 percent to 23.4 percent. While India and Brazil also experienced rises in their shares, India's gain was more prominent as its share increased considerably from 2.7 percent to 4.3 percent, and Brazil could increase its share by 0.5 percentage points from 3.1 percent to 3.6 percent. When it comes to country-wise shares in south-south export, there are some gainers and losers. It should also be mentioned that during 1990 and 2011, out of the 135 south countries, 50 experienced rise in their shares in south-south export while 85 experienced fall.

What factors determine the pattern of south-south trade? As south countries are not homogenous, there could be differential effects of different variables on the patterns of trade among different groups of south countries. Empirically, such analysis can be done using the framework of gravity models. We have run the augmented gravity regressions for each of these country groups considering all other groups including itself as partners. The gravity regression involved import of home country from partner country as the dependent variable. The explanatory variables are per capita GDPs of both home and partner countries, distance between the capitals of home and partner countries, common language dummy, land lock dummies for both home and partner countries, island dummies for both home and partner countries, common border dummy, and tariff or trade cost in home country while importing from partner country. All variables (except dummies) are expressed in natural logarithm. We use an unbalanced panel dataset constructed for the period between 1988 and 2011. Bilateral import data are taken from UNCOMTRADE. The data of per capita GDP are taken from the World Bank's WDI. The data on the distance, common language dummy and land lock dummy are taken from the "GeoDist" data base of CEPII. The data on island dummy and common border dummy are taken from Wikipedia. The source of bilateral tariff data is TRAINS and the data is from 1988 to 2011. Trade cost data are taken from World

Bank-UNESCAP database and the data is from 2005 to 2010. In all cases, fixed effect panel regression models are run.

The gravity modeling regressions provide some interesting results (Table 32.3). A comparison among the sizes of coefficients of different variables suggests that as far as intra-south trade is concerned, among the continuous variables, the largest positive effect stems from the per capita GDP of the home country and largest negative effect comes from the distance. Among the dummy variables, the common border dummy has the largest positive effect, whereas the island dummy of the partner country has the largest negative effect. However, these variables have differential effects when it comes to trade between different groups of south countries.

Table 32.3: Gravity model coefficients (Dependent variable: Import of south countries from partner country)

Explanatory variables	Partner					
	South	North	LDC	SVE	ASouth	ESouth
Per capita GDP of home	0.74	1.17	0.88	0.29	0.92	0.75
Per capita GDP of partner	0.57	1.02	-0.14	0.73	-0.30	-
Distance	-1.09	-1.23	-0.78	-1.41	-1.41	-1.31
Common language	0.51	1.39	0.24	0.49	0.81	0.74
Land lock dummy for home	-	-1.61	-2.10	-	-1.34	4.35
Land lock dummy for partner	-1.94	-1.64	-1.19	-	-	-1.48
Island dummy for home	-	-3.27	-	-3.02	-	-
Island dummy for partner	-2.09	-0.45	-2.22	-0.32	0.05	-2.17
Common border dummy	2.10	-0.34	1.66	0.36	0.65	1.63

Note: ASouth = Advanced south; ESouth = South excluding advanced south

'-' means statistically insignificant

Source: Gravity regression

Table 32.3 shows that when considering south as the home, there are marked differences among different groups of countries as far as the impact of per capita GDP of home country (in this case the south countries) on exports from these groups of countries to the south countries are concerned. Per capita GDP of the south

countries has the largest positive effect on the export from the north; and among different south countries such positive effect is the largest for the export from the advanced south countries. For SVEs, the effect is positive but is the smallest among all country groups. Now, while considering south as the source of export, the per capita GDP of the advanced south has the largest positive effect among all country groups on the export from south. Interestingly, the per capita GDP of the north doesn't have any significant effect. Also, though the per capita GDP of LDCs has a positive effect on the export from south, that of the SVEs doesn't have any statistically significant effect. The distance factor has the largest negative effects on exports from the advanced south and SVEs to south; and distance factor has the largest negative impact on south countries' export to advanced south among all country groups as destinations for south countries' export.

Table 32.3 also shows that the common language dummy, while considering exports to south from all country groups, has the largest positive effect on export from north countries, and while considering export from south, common language has the largest positive effect on the export to south excluding advanced south countries. The land lock dummy for home country, considering south as the home, has mixed effects on exports from different country groups; for example, it has negative impacts on exports from LDCs and north, while it has a positive impact on export from south excluding advanced south. Also, this dummy has only negative effect on the export from south to north among all country groups as destinations for south countries' export. The land lock dummy for a partner country, when south is the home, among all country groups, has the largest negative effect on the export from the south; however, when south is the export source, this dummy has the largest negative effect on south countries' export to advanced south countries. In the case of the island dummy for home country, considering south as the home, the export from the island countries will be reduced, if those countries are either north or SVEs. Also, south countries' export to advanced

south countries will be reduced if the south countries are the island countries. In the case of island dummy for partner country, considering south as the home, the export from LDCs is mostly affected among exports from all country groups if LDCs are island countries. Also, if south are island countries, then their export is mostly affected in the advanced south countries. When south is the export destination, common border dummy has the largest positive effect on the export from South countries in general, and among different groups of south countries, this dummy has the largest positive effect on the export from LDCs. However, this dummy has a negative effect on the export from north to south.

Table 32.4 presents the comparison of the coefficients of the weighted average effectively applied tariff in home country. In general, south countries' tariff rate has the largest negative effect on the export from SVEs. North countries' tariff is most restrictive on the export from south in general and south excluding advanced south and SVEs in particular. LDCs' tariff rate affects mostly the export from SVEs and south excluding advanced south. SVEs' tariff rate affects mostly the export from LDCs. Tariff rates of advanced south affect mostly the export from SVEs and tariff rates of south excluding advanced south have the largest negative effect on export from LDCs.

Table 32.4: Percentage change in import of home country from partner country due to 10 percent fall in weighted average effectively applied tariff in home country

Home	Partner					
	South	North	LDC	SVE	ASouth	ESouth
South	-3.9	1.1	-4.2	-5.2	1.0	-4.7
North	-1.7	-	-2.2	-2.6	-	-2.6
LDC	-6.3	-	-5.8	-9.1	-	-7.2
SVE	-2.8	-	-4.5	-2.1	-	-3.7
ASouth	-3.6	-	-2.7	-5.8	-1.3	-4.3
ESouth	-4.0	1.3	-4.9	-4.8	1.3	-4.8

Note: ASouth = Advanced south; ESouth = South excluding advanced south.

'-' means statistically insignificant

Source: Gravity model regressions

The gravity modeling results also suggest that as far as south is considered as the export destination, trade cost in south affects mostly the export from south. Trade cost in north has the largest negative effect on export from LDCs, and it seems that such negative effect is higher than the negative effect on export from north to LDCs due to trade cost in LDCs. While the trade costs between LDCs and advanced south countries are compared, trade costs in advanced south countries seem to be more restrictive on export from LDCs, as compared to the negative effect of trade cost in LDCs on the export from advanced south. Similar observations are held for SVEs, while comparing the restrictive effect of their trade cost with those of north and advanced south.

33

Demystifying non-tariff barriers (NTBs) in South Asia

S E L I M R A I H A N

In the initial years of formation of SAARC in the 1980s, the popular hypothesis for the reason behind limited intraregional trade was the prevailing high tariff rate among the member countries. High tariff rates have come down substantially over the years since the formation of SAARC due to increased globalization of trade, establishment of WTO regime, and South Asian Free Trade Agreement (SAFTA). Despite significant reduction in tariff rates in the region, the intra-SAARC trade has been quite static as before, about only 5 percent of the total trade of this region. Now the popular hypothesis is that it is not the high tariff rates, but the Non-Tariff Measures (NTMs) and the resulting trade barriers, i.e., Non-Tariff Barriers (NTBs) are the main reasons behind limited intra-regional trade in South Asia. This view is reflected in many contemporary studies and documents.

NTMs are generally defined as policy measures other than ordinary customs tariffs that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both (UNCTAD, 2013). In contrast, NTBs are thought to be policy measures that surely affect the quantity traded and

prices and have proven discriminatory effects against foreign firms (Nicita and Peters, 2013).

The UNCTAD classification of NTMs comprises technical and non-technical measures, such as sanitary or environmental protection measures, technical barriers to trade (TBTs) and other traditional instruments of commercial policy, e.g. quotas, price control, exports restrictions, or contingent trade protective measures, as well as other behind-the-border measures, such as competition, trade-related investment measures, government procurement or distribution restrictions. This classification acknowledges the existence of measures and does not judge on legitimacy, adequacy, necessity or discrimination of any form of policy intervention used in international trade (UNCTAD, 2013).

Detailed information, appropriate and specific analysis is required for better understanding of the impacts of NTMs on trade. It is important to emphasize that many NTMs are legitimate and thus cannot be negotiated away. For example, sanitary and phytosanitary (SPS) measures and TBT are there to protect consumers and environment; pricing and licenses are there to regulate domestic markets; anti-dumping duties, subsidies, quotas are there to protect domestic firms; and rules of origin is there to avoid unintended trade deflections.

Regardless of whether NTMs are imposed with protectionist intent or to address legitimate market failures, NTMs often impose additional costs on trading, and thus may have substantial effects on trade (Nicita and Peters, 2013). And these costs may be higher for some countries or firms than for others. For example, compliance costs are often fixed costs when small firms are in a disadvantageous position. Most of the small and medium sized firms in South Asia face this challenge, especially with respect to meeting the SPS and TBT standards. Therefore, there is a need to

develop the capacities of these firms so that they can meet the justified SPS and TBT standards in other countries. In this regard, technical assistance in their production and export processes is required, and different aid for trade and similar initiatives should be put in place on a priority basis. Also, there is a need to strengthen the capacities of the National Standards Authorities so that certificates issued by them are accepted in other countries. Furthermore, there is a need for harmonization of standards, custom procedures and establishing mutual recognition principle in South Asia through regionally coordinated efforts.

Cost of complying is often dependent on infrastructures. Since the intra-regional trade in South Asia happens predominantly through the land borders, a large part of the NTM related complaints in South Asia are related to weak infrastructure at the land custom stations in the South Asian countries as well as due to lack of testing and laboratory facilities nearby the land custom stations. In this process, many of the legitimate NTMs turn into NTBs affecting the intra-regional trade. Therefore, improvements in relevant infrastructures should be on high priority.

Due to various procedural obstacles, which are related to complicated bureaucratic process, delays, corruption, and frequent changes in the policies, many legitimate NTMs turn into NTBs. In South Asia, a significant part of the NTBs is related to procedural obstacles. Therefore, policy effort is critical to ensure that NTMs serve their intended legitimate purposes.

The policy makers in the respective countries in South Asia, while negotiating for streamlining NTMs and reducing NTBs at the regional level, need very clear analysis, information and updated data on NTMs/NTBs for all South Asian countries. These data and analysis need to be relevant with concrete examples so that effective measurable actions can be undertaken. Analysis should

emphasize on the respective roles and responsibilities for both home and partner countries in solving the problems.

Reference

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34

Export diversification: Myths and realities

S E L I M R A I H A N

Export diversification has been an important policy agenda in many of the developing countries. It is commonly viewed that export diversification is a necessary condition for a sustained and long-term growth of the economy and job creation. The current discourse of 'global value chain' also highlights the importance of diversification of export portfolio for an effective integration with the global value chain. Among the developing countries, the problem of export concentration is more acute for most of the Least Developed Countries (LDCs). Many of the LDCs are still the exporters of primary products, mainly agricultural, which are not only susceptible to large volatility in the international market, but also provide limited opportunity for value addition. Few LDCs like, Bangladesh and Cambodia, have been able to move from agricultural exports to manufacturing exports, but still their export baskets remain highly concentrated around few low value-added manufacturing products. For many of these economies, export diversification is argued to be playing an important role in structural transformation of their economies from producing low value-added products to high value-added products.

One strong view related to the policy for diversification of exports is its heavy emphasis on extensive tariff liberalization with the aim of reduction in anti-export bias. The policy conclusion that emerges from this stance is for low and uniform tariffs and a seamless export-import regime that facilitates least-cost transactions at the border. Tariff liberalization, under this view, is seen as a kind of 'auto' driver of export expansion and diversification of the export basket.

While the importance of tariff liberalization for export promotion and diversification can't be undermined, tariff liberalization alone can't by itself be sufficient to trigger 'auto' large supply response in terms of expanding export volumes and diversifying the export basket. A number of supply-side constraints can prevent local producers from expanding exports, and the lack of an enabling environment can strangle entrepreneurship and innovation. Studies have indicated that most of the LDCs and a large number of other developing countries face several supply-side constraints. High lead-time is an important challenge in many LDCs. Inefficiencies at ports and related internal road transportation further aggravate the problem. Amongst others, lack of investment fund and working capital, high interest rate, poor physical infrastructure, shortage of skilled workers, technological bottlenecks, lack of entrepreneurship and management skills, poor law and order situation, lack of information, invisible costs of doing business, etc. are major impediments to export prospects and export diversification. Therefore, the policy options and support measures for exports are much more difficult and involved than mere reduction of tariffs. It is also essential to keep in mind that comparative advantage doesn't necessarily translate into competitive advantage. While many of the developing countries have comparative advantages in producing and exporting several agricultural and manufacturing products, given a domestic environment of high cost of doing business, such comparative advantages are seized to be realized. Therefore, while many of the LDCs are provided with significant market access

opportunities in most of the developed countries' markets through different trade agreements and generalized system of preferences (GSP), the single major reason for their inability to take advantage of such opportunities is their supply side constraints, which undermines their competitive ability to supply to the global markets.

It is important to note that in the discourse of policy reforms for export diversification, the political economy perspective is generally ignored and reform of institutions is largely overlooked. A favorable overall incentive structure through the management and distribution of 'rent' is important for the diversification of the export basket. Experiences from many developing countries show that the dominant export sector becomes the main beneficiary of different export incentives (both formal and informal) while for other sectors, such schemes appear to be less effective primarily due to various structural bottlenecks as mentioned before. In this process, the dominant export sector grabs the lion's share of the 'rent' being generated through such incentives.

This situation also raises a critical question as to whether 'rents' are needed for the promotion of other sectors. Experiences from successful countries highlight the importance of providing effective incentives to other sectors and removing structural bottlenecks in order to generate some 'rents' in those sectors. However, it should be kept in mind that while generating such 'rent' there is a need for a well-designed and effective industrial policy wherein monetary (interest rate subsidies) and fiscal incentives (reduced taxes or tax holidays) for the emerging dynamic export sectors should be transparent and time-bound. In addition, industrial policy needs to address issues of education and skill development for facilitating higher capabilities for export diversification, attracting FDI and integrating with the global value chain.

Experiences from different countries, who have been successful in diversifying their export portfolios, also suggest that institutional reforms should be considered as a key to overall policy reforms targeting larger export response and export diversification. Improving the bureaucracy quality, ensuring property rights, managing corruption, ensuring contract viability through reduction of the risk of contract modification or cancellation are examples of such institutional reforms. Furthermore, reducing political uncertainties or establishing political stability and generating political capital for a diversified export basket are critically important.

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Why do some countries trade more than others?

S E L I M R A I H A N

Theoretically, trade liberalization results in productivity gains through increased competition, efficiency, innovation and acquisition of new technology. In particular, the changing relative prices induced by trade liberalization cause a re-allocation of resources from less efficient to more efficient uses. Trade liberalization is also thought to expand the set of economic opportunities by enlarging the market size and increasing knowledge spillover effects. Empirical research on international trade also shows that, in general, larger trade-orientation and freer trade, with supporting policies and institutions, can lead to higher welfare for a country than otherwise.

However, a major question remains some way unclear – why do some countries trade more than others? More specifically, does country size matter? How does differences in per capita income affect trade-orientation among countries? Does human capital make any difference? How does tariff liberalization promote trade-orientation? Moreover, does foreign direct investment (FDI) affect trade performance? Furthermore, does geographical location have a bearing, i.e., being an island country or a landlocked country?

Also, does membership of the GATT/WTO raise trade-orientation? Finally, does institution matter in trade-orientation? In order to answer these questions, fixed effect panel regressions using a database covering the period between 1981 and 2014 for 128 countries were conducted. We have defined country's trade to GDP ratio as the country's trade-orientation. We want to explain why some countries have higher trade-GDP ratio than others. The explanatory variables are the size of population (to represent country size), per capita real GDP, an index of human capital, domestic average applied tariff rate, and FDI to GDP ratio. Data for all these variables, except human capital, are taken from the World Bank's WDI, and the data of the human capital is taken from the PWT-8.1. All variables are expressed in natural logarithm. The regression results show that all explanatory variables are statistically significant.

The negative coefficient estimate of the size of population reveals that larger countries tend to be less trade-oriented than their counterparts, as 1 percent rise in the size of the population is associated with 0.2 percent fall in the trade-GDP ratio. The reason is that countries with a large population find a ready domestic market and can substitute imports by producing for the internal market. The positive coefficient of the per capita GDP shows that a rise in the real GDP per capita by 10 percent is associated with a rise in the trade-GDP ratio by 2.2 percent. The reason behind such an association could be related to domestic producers, with the rise in per capita GDP, becoming more efficient in competing and integrating with their foreign counterparts in the world market. As expected, domestic tariff liberalization is positively associated with higher trade-GDP ratio, as a cut in tariff rate by 10 percent is associated with a rise in trade-GDP ratio by 0.7 percent.

The positive coefficient of the FDI-GDP ratio suggests that greater FDI orientation is positively associated with greater trade orientation, and a rise in the FDI-GDP ratio by 10 percent is

positively associated with a rise in the trade-GDP ratio by 0.3 percent. FDI is assumed to have a positive impact on the export-orientation of any economy, as much of FDI is directed towards the export-oriented sectors. The success stories of East and South East Asian countries have suggested that FDI is a powerful tool of export promotion because multinational companies, through which most FDI is undertaken, have established-contacts and up-to-date information about foreign markets. FDI may also lead to increasing imports in the recipient country as foreign owners tend to have a higher propensity to obtain their inputs from abroad than do their domestically owned counterparts.

Finally, in the case of human capital variable, a rise in the index of human capital by 10 percent is associated with a rise in the trade-GDP ratio by 9 percent. This is not surprising! A higher level of human capital is likely to have a positive impact on the perception of the people, as well as on the policy making of the government, in integrating their economy with the world market.

The findings of the LSDV models, show that landlocked countries and island countries are 194 percent and 284 percent respectively more trade oriented than their counterparts. Both for island and landlocked countries, international trade plays a crucial role in their economic lives as most of these countries are dependent, to an unusual degree, on imported goods and services, including foodstuffs, fuel, equipment and industrial material as well as a wide range of manufactured products. However, interestingly, being a member of the GATT/WTO doesn't make any difference in terms of trade-orientation.

We have also explored the association between trade-orientation and different institutional variables. The data of these institutional variables are derived from the ICRG database. The fixed effect regression results suggest that countries with better bureaucracy

quality, larger democratic accountability, and sounder investment profile are associated with higher trade-orientation. These results are also consistent with findings from studies on the determinants of trade flows which argue distortions or costs placed on firms under inefficient institutions and poor governance can negatively affect trade flows.

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Rethinking 'industrial policy': How to increase the 'manufacturing content' of services?

S E L I M R A I H A N

The conventional wisdom on the industrial policy defines it as a strategic effort to encourage the development of the manufacturing sector of the economy. Over the past four decades, there had been a long debate over the importance and success of the industrial policies in many countries. However, in recent times, there have been some positive rethinking processes on the merit of the industrial policy for greater diversification of the economy in many of the developing countries aiming for accelerated economic growth. One of these new thoughts rejects the narrow focus of the conventional industrial policy only on the manufacturing sector and argues for enlarging the scope of the industrial policy to incorporate the services sectors.

It is important to note that services sector constitutes a major part of the economy in a large number of developing countries. However, when it comes to the linkages of the services sectors with the rest of the economy, especially with the manufacturing sectors, in many developing countries such linkages appear to be weak. This article develops a concept called the 'manufacturing content'

192 | of services, which is defined as the share of domestic manufacturing value-added in the services final demand in an economy. If the 'manufacturing content' of services is high, then the industrial policy targeting both the manufacturing and services sectors would be expected to generate larger positive effects in the economy.

The index of the 'manufacturing content' of services is calculated from the OECD- WTO Trade in Value Added database. The data are available for 60 countries. As shown Table 36.1, in 2010, China had the highest 'manufacturing content' of services with the share as high as 20.2 percent, whereas Hong Kong had the lowest with the share as low as only 0.4 percent. In the list of the top 10 countries, Indonesia is the second with the share of 15.3 percent. India's position is 9th with a share of 6.8 percent. In the list of the top 10 countries, the developing countries dominate, whereas in the list of the bottom 10 countries, the developed countries dominate.

Table 36.1: Top and bottom 10 countries in terms of 'manufacturing content' in services final demand in 2010

Top 10 countries			Bottom 10 countries		
Rank	Country	%	Rank	Country	%
1	China	20.15	60	Hong Kong	0.40
2	Indonesia	15.33	59	Brunei Darussalam	1.02
3	South Korea	9.20	58	Luxembourg	1.17
4	Thailand	8.67	57	Saudi Arabia	2.56
5	Malaysia	7.70	56	Malta	2.61
6	Romania	7.18	55	Hungary	2.67
7	Japan	6.99	54	Greece	2.67
8	Viet Nam	6.84	53	France	2.74
9	India	6.77	52	New Zealand	2.86
10	Cambodia	6.50	51	Norway	2.87

Data source: <http://stats.oecd.org>

In order to understand what makes some countries to have higher 'manufacturing content' of services than those of others, we run fixed effect panel regression with a balanced panel data constructed for the years of 1995, 2000, 2005 and 2010 for 60 countries. Our dependent variable is the 'manufacturing content' of services. We try to explore whether the level of per capita GDP and capital stock per capita make any impact on the cross-country differences in 'manufacturing content' of services. Also, if the share of the manufacturing sector in GDP is high, it can be expected that the 'manufacturing content' of services would also be high. Furthermore, a rise in services exports is likely to induce larger use of inputs from other sectors and thus may lead to larger 'manufacturing content' of services. Higher share of domestic savings in GDP leads to scopes for higher investment in the productive manufacturing sectors, which may lead to higher 'manufacturing content' of services. Finally, the impact of trade openness on the 'manufacturing content' of services may either be positive or negative, leaving this as an empirical issue to be explored. Data of five of the explanatory variables, i.e. per capita GDP, manufacturing value-added as percentage of GDP, services exports as percentage of total exports, trade as percentage of GDP, and domestic savings as percentage of GDP are taken from World Bank WDI; and data of another explanatory variable, i.e. physical capital stock per capita is taken from Penn World Table (PWT) version 8.1.

The regression results suggest that though the per capita GDP has a very small negative coefficient, it is not statistically significant, suggesting the difference in the level of per capita GDP doesn't matter in determining the cross-country differences in the 'manufacturing content' of services. Similarly, the physical capital stock per capita has a small positive but insignificant effect. The manufacturing value-added as percentage of GDP has a significant positive effect, and 1 percentage point rise in the manufacturing value-added as percentage of GDP leads to 0.23 percentage points rise in the 'manufacturing content' of services. Services exports as

percentage of total exports has a significant positive effect, and 1 percentage point rise in such ratio leads to around 0.06 percentage points rise in the 'manufacturing content' of services. Domestic savings as percentage of GDP has a significant positive effect, and 1 percentage point rise of this ratio leads to 0.08 percentage points rise in the 'manufacturing content' of services. Trade as percentage of GDP has a small negative and significant effect, indicating the fact that greater openness may have a small negative impact on the 'manufacturing content' of services.

The aforementioned analyses point to the fact that to increase the 'manufacturing content' of services, policies should aim at raising the manufacturing value-added share in GDP, promoting larger services exports, raising the share of domestic savings in GDP thus facilitating scopes for accelerated domestic investment, and strategic openness of the economy with some safeguards for the incipient manufacturing sectors. These policies should be critically considered in the rethinking process of the industrial policy, where the re-designing of industrial policy should be anchored on the productive and effective linkages between the manufacturing and services sectors.

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Why do some countries have comparative advantages in value-added manufacturing exports?

S E L I M R A I H A N

Though, conventionally, gross exports has received the major emphasis in the trade policy, it is important to understand the pattern of comparative advantage in value-added exports as trade in value-added data shows what part in the production chain is internationally competitive in a particular country. The question is, why do some countries have comparative advantages over others in value-added manufacturing exports? Revealed Comparative Advantage (RCA) is widely used to identify a country's comparative advantage in export sectors. Here we explore the factors affecting the RCAs in value added exports of manufacturing for 56 countries (34 developed and 22 developing countries) over the period between 1995 and 2009.

The data on RCAs, based on domestic value added embodied in gross exports of 9 categories of manufacturing for 56 countries, are derived from the OECD database on trade in value added (<http://stats.oecd.org>). A close look at the data suggests that in 2009, among the 56 countries, for food & tobacco, 31 countries had RCAs greater than 1. The leading developed countries with very high RCAs (greater than 2) were New Zealand, Australia and

Denmark, and such leading developing countries were Chile, Argentina and Vietnam. In the case of textile & leather, 19 countries had RCAs greater than 1. The leading developed countries with very high RCAs were Portugal and Romania, and such leading developing countries were Turkey, China and Vietnam. For wood & paper, 28 countries had RCAs greater than 1. The leading developed countries with very high RCAs were Latvia, Finland and Estonia, and among the developing countries Chile had such a very high RCA. In the case of chemical & minerals, 26 countries had RCAs greater than 1. Among the developed countries, only Ireland had a very high RCA, and among the developing countries Saudi Arabia had such a very high RCA. For metal & metal products, 25 countries had RCAs greater than 1. The leading developed countries with very high RCAs were Australia, Luxembourg and Bulgaria, and among the developing countries, South Africa and Russian Federation had such very high RCAs. In the case of machinery & equipment, only 14 countries had RCAs greater than 1, and no countries had RCAs greater than 2. For electrical & optical equipment, 17 countries had RCAs greater than 1. The only developed country with very high RCA was Malta, and among the developing countries, Philippine and Taiwan had such very high RCAs. For transport equipment, 16 countries had RCAs greater than 1, with only three developing countries (Mexico, Korea and Turkey) had RCAs greater than 1, and no countries had RCAs greater than 2. Finally, in the case of other manufacturing, 19 countries had RCAs greater than 1. Among the developed countries only Lithuania had a very high RCA, and among the developing countries India had such a very high RCA.

Among the BRICS countries, in 2009, Brazil had RCAs greater than one in food & tobacco, wood & paper, and metal & metal products; for Russia such sectors were wood & paper, chemical & minerals, and metal & metal products; for India, such sectors were textile & leather, and other manufacturing; for China such sectors were textile & leather, electrical & optical equipment, and other manufacturing; finally for South Africa, such sectors were food &

tobacco, wood & paper, chemical & minerals, metal & metal products, and other manufacturing.

We have run a number of multinomial logit panel regression models with RCAs as the dependent variable in three categories: RCA 0, if the RCA is less than or equal to one; RCA 1, if RCA is greater than one but less than or equal to two; and finally RCA 2, if RCA is greater than 2. The explanatory variables in the regressions are human capital per capita, capital stock per capita and total factor productivity, and their data are taken from Penn World Table Version 8.

The regression results show that while switching from RCA 0 to RCA 1, human capital plays very important role. Though, for the food & tobacco, and textile & leather the countries with a relatively lower level of human capital per capita could have higher RCAs, in all other cases, except chemical & minerals, such switches are associated with higher human capital per capita. The strongest positive effect is observed for transport equipment. In the case of switching from RCA 0 to RCA 2, however positive effects of human capital are observed only for wood & paper, and metal & metal products. In the case of switching from RCA 1 to 2, the positive effects of human capital are observed only for food & tobacco and wood & paper. These results suggest that higher level of human capital is associated with comparative advantage in value-added exports of complex types of manufacturing. Physical capital stock tends to have effects on six of the nine categories of value-added manufacturing exports. The countries with lower per capita capital stock (i.e., countries with higher labor-capital ratio) tend to have RCAs in food & tobacco, textile & leather, wood & paper and other manufacturing; while higher per capita capital stock is associated with RCAs in chemical & minerals, and machinery & equipment. Finally, the positive impact of total factor productivity seems to be observed only in the cases of electrical & optical equipment and transport equipment.

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Why do countries differ in export diversification?

SELIM RAIHAN AND MAHTAB UDDIN

In the literature of export-growth linkages, the issue of export diversification draws a considerable interest for reducing risks associated with adverse and volatile terms of trade, slow productivity growth or relatively low value addition in the global value chain. Diversification of exports can lead to reducing the dependence on fluctuating commodity prices as well as can encourage other technology intensive sectors through triggering the knowledge spillovers, which could be attained from the exposure to international markets, business practices, and production processes. A number of empirical studies have shown strong relationships between economic growth and export diversification. While previous studies tried to correlate export diversification with investment, economic structure and development, the objective of our current article is to find out major factors that influence differences in export diversification across countries and time.

For constructing the model, index of export diversification is considered as the dependent variable while the explanatory variables of the model are log of per capita GDP, gross fixed capital

formation (as percentage of GDP), domestic credit to the private sector (as percentage of GDP), tariff rates (both average MFN and weighted mean applied for all products in percentage), doing business indicators and institutional variables. Taking into consideration of the individualistic effect, a fixed effect panel regression is used over the period of 1962 to 2010 for 182 countries. In another set of regressions, LDC, Land Locked and Island dummies are used for desegregating the impacts of these variables over the export diversification. In this respect an LSDV model is applied.

The export diversification index is taken from the Export Diversification and Quality Databases of the IMF-OECD (<https://www.imf.org/external/np/res/dfidimf/diversification.htm>). From the database, data of 182 countries are considered for the period of 1962-2010. The higher value of the index indicates lower diversification; and therefore, for a better understanding, we term this index as export concentration index. The data of per capita GDP, investment, tariff rates, and credit to private sector are taken from the World Bank World Development Indicator database. The doing business indicators are taken from the Doing Business database. Institutional variables are adopted from the International Country Risk Guide (ICRG) database. The LDC country dummy variable is created using the UNCTAD's list of LDC countries while the dummy variables for landlocked countries and island countries are created using Wikipedia.

In the first set of regressions, we have used log of per capita GDP, domestic credit to the private sector and investment. The regression result shows a strong negative association between economic development and export concentration index which means that, with economic development a country's export basket tends to be more diversified. With the rise of per capita GDP by 10 percent, the export concentration index will decline by 0.01 points. Analogously, investment and domestic credit to the private sector

(as percentage of GDP) are negatively associated with export concentration. Although the associated coefficients of these explanatory variables are small in magnitude, the strong significance resembles two facts: (i) a strong backbone of financial institutions which promotes smooth flows of credit to the private sector can lead a country towards greater diversification of exports; and (ii) a higher level of investment leads towards greater level of diversifications. On the contrary, despite the existence of a common belief that tariff liberalization leads to greater export diversification, the current study found no significant association between these two variables. Both MFN tariff and weighted applied tariff rates are found to be insignificant. Moreover, the time invariant dummies, namely, LDC, land lock and island dummies are found strongly significant and associated positively to export concentration index. On an average, for a country of LDC the export concentration index is higher than that of a non-LDC by 1.48 points, which shows that LDCs' export baskets are more concentrated than those of non-LDCs. The result also shows that, export baskets of land-locked economies are more concentrated than those of non-landlocked economies. A reason behind this could be the high cost of exports and dependence on other countries by the landlocked countries for shipment procedures. Analogous to the previous dummies, export baskets of Island economies are appeared to be more concentrated than those of non-island economies.

A similar picture is also depicted in Table 38.1, which shows the list of top 10 most diversified economies. All of the countries in the top 10 list are developed countries. Not only that, all of the top 40 most diversified countries are non-LDC developing/developed countries. We also see from the list of 10 least diversified countries that among them 4 are LDCs. The dominant presence of countries from Sub-Saharan Africa in the list is also noticeable. In 2010, among the South Asian countries, India tops the list being the most diversified economy in the region with a global position of

23rd while Bangladesh ranks the bottom with a global position of 155th among the 182 countries.

Table 38.1: Top and bottom 10 countries in terms of diversification of exports in 2010

Top 10 countries			Bottom 10 countries		
Rank	Country	Index	Rank	Country	%
1	Italy	1.44	1	Iraq	6.41
2	Netherlands	1.44	2	Angola	6.34
3	United States	1.48	3	Cayman Is.	6.02
4	Austria	1.55	4	Sudan	5.98
5	France	1.57	5	Libya	5.96
6	Spain	1.61	6	Azerbaijan	5.85
7	Germany	1.63	7	Bermuda	5.78
8	Portugal	1.65	8	Nigeria	5.78
9	Poland	1.67	9	Congo, Rep.	5.77
10	Latvia	1.68	10	Equatorial Guinea	5.73

Note: Lower value of index means higher diversification

Data source: Export Diversification and Quality Databases of IMF

It is important to explore the effects of different business environment and institutional variables on the cross-country and over time differences in export concentration index. In this regard, we have used doing business indicators from the World Bank's Doing Business Survey, with a time period of 2004 to 2010 for 166 countries. For convenience, distance to frontier (DTF) of different indicators is considered as the representative variable. The DTF score benchmarks economies with respect to regulatory best practice, which shows the absolute distance to the best performance on each Doing Business indicator. An economy's DTF is scored on a scale of 0 to 100, where zero represents the worst performance and 100 the frontier. Among the indicators, four indicators appear to have statistically significant negative effect on export concentration index. For example, an increase in the DTF of starting business by 1 unit would lead to a fall in the export concentration index by 0.005 units. If the DTF of getting credit increases by 1 unit the index of export concentration decreases by

0.002 units. Analogously, a rise in the DTF of enforcing contracts by 1 unit can reduce the export concentration index by 0.02 units. All of these results suggest a positive correlation between ease of doing business and export diversification.

In the case of institutional variables, we have considered 6 political risks variables from the ICRG database (for details see: www.prsgroup.com) for 126 countries over a time period of 1984 to 2010. These are bureaucracy quality, government stability, democratic accountability, investment profile, corruption, and law and order. The regression results show that all these institutional variables, except investment profile, have a negative and statistically significant effect on the export concentration index. It follows that, improvement in all these parameters would promote further export diversification. A point rise in bureaucratic quality (in a scale of 0-4) would reduce the index of export concentration by 0.03 points. A point rise in government stability (in a scale of 0-12) would lead to a decline in the export concentration index by 0.02 points. A point rise in democratic accountability (in a scale of 0-6) would lead to a fall in the export concentration index by 0.02 points. A point improvement in the control of corruption (in a scale of 0-6) would reduce the export concentration index by 0.03 points. A point improvement in law and order (in a scale of 0-6) would result in a 0.05 points decline in the export concentration index. Results found in this model suffice the reality: for promoting export diversification – improvement in institutional variables is very critical.

The analysis thus points out the necessity of addressing the supply side issues with economic and policy reforms. For promoting diversified and technology driven exports – greater access to credit along with increment of productive investment is a pre-condition. Institutional reforms should be undertaken with a view to reducing the cost of doing business.

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What determines trade in value-added?

SELIM RAIHAN, NAFIZ IFTEAKHAR
AND MIR TANZIM NUR ANGKUR

Until the recent past, the international trade literature focused on trade in gross value of imports and exports, since trade flows involved mostly of finished goods. However, with the growing significance of global value-chains in international trade, such 'gross' measures are unable to capture the magnitude of a country's effective integration in international trade. Also, the available data on trade in value-added shows that the gross export data and value-added export data do not provide the same information. Table 39.1 presents the top 10 developed and developing countries in terms of domestic value-added embodied in exports as percentage of GDP. Table 39.2 presents the top 10 developed and developing countries in terms of the least difference between their gross exports and value-added exports as percentage of their GDPs. Table 39.3 presents the top 10 developed and developing countries in terms of the largest difference between their gross exports and value-added exports as percentage of their GDPs. A comparison between Table 39.1 and Table 39.2 shows that among the top 10 developed countries only Norway is in common, whereas among the top 10 developing countries, Brunei Darussalam, Saudi Arabia and Chile are in common. A comparison between Table 39.1 and Table 39.3 shows

that six of the developed countries from Table 39.1, i.e. Luxembourg, Ireland, Malta, Hungary, Slovak Republic and Belgium are in the top 10 list in Table 39.3. And also six of the developing countries from Table 39.1, i.e. Singapore, Malaysia, Thailand, Viet Nam, Cambodia and Chinese Taipei are in the top 10 list in Table 39.3.

Table 39.1: Top 10 countries in terms of domestic value-added embodied in exports as % of GDP in 2009

Top 10 Developed country			Top 10 Developing country		
Rank	Country	%	Rank	Country	%
1	Luxembourg	62.37	1	Brunei Darussalam	63.08
2	Ireland	50.54	2	Singapore	57.50
3	Malta	47.02	3	Malaysia	57.23
4	Hungary	41.96	4	Saudi Arabia	50.40
5	Estonia	41.37	5	Thailand	42.99
6	Slovak Republic	38.60	6	Viet Nam	40.96
7	Slovenia	36.62	7	Cambodia	37.60
8	Switzerland	35.09	8	Chinese Taipei	34.49
9	Norway	34.54	9	Hong Kong, China	31.70
10	Belgium	34.46	10	Chile	30.65

Data source: <http://stats.oecd.org>

Table 39.2: Top 10 countries in terms of least difference between gross exports and value-added exports as % of GDP in 2009

Top 10 Developed country			Top 10 Developing country		
Rank	Country	% difference	Rank	Country	% difference
1	Australia	13.32	1	Saudi Arabia	3.30
2	Norway	16.04	2	Russian Federation	7.78
3	Japan	16.54	3	Brazil	9.66
4	United States	17.78	4	Brunei Darussalam	11.33
5	New Zealand	18.51	5	Argentina	12.26
6	United Kingdom	18.85	6	Indonesia	14.94
7	Canada	20.63	7	South Africa	16.60
8	Italy	21.30	8	Chile	18.61
9	Spain	21.78	9	Turkey	22.03
10	Greece	23.43	10	India	22.49

Data source: <http://stats.oecd.org>

Table 39.3: Top 10 countries in terms of largest difference between gross exports and value-added exports as % of GDP in 2009

Top 10 Developed country			Top 10 Developing country		
Rank	Country	% difference	Rank	Country	% difference
1	Luxembourg	59.13	1	Singapore	50.38
2	Slovak Republic	44.68	2	Chinese Taipei	42.30
3	Ireland	42.53	3	Korea	41.50
4	Hungary	40.15	4	Philippines	38.65
5	Czech Republic	39.91	5	Malaysia	38.59
6	Malta	36.77	6	Viet Nam	36.88
7	Netherlands	36.73	7	Thailand	34.83
8	Iceland	36.56	8	China	34.70
9	Lithuania	36.23	9	Cambodia	34.07
10	Belgium	35.76	10	Mexico	31.01

Data source: <http://stats.oecd.org>

It also becomes evident that some countries could export more value-added products than others. In this context, this paper explores why for some countries domestic value-added embodied in their exports are higher than those of other countries. We use gravity regression models, where export of value added from the source country to the destination country is considered as the dependent variable. The standard explanatory variables are per capita GDPs, distance, and dummies for common language, landlocked, island and common border. In addition, we consider tariff and nontariff trade cost in the destination country. We also explore the impact of relative physical capital stock per capita and relative human capital per capita on the value-added exports from the source country. By relative physical capital stock per capita we mean the 'log differences of per capita capital stock between the source country and the destination country', and by relative human capital per capita we mean the 'log difference of human capital index per capita between the source country and the destination country'. All variables (except dummies) are expressed in natural logarithm.

We use a balanced panel data constructed for the years of 1995, 2000, 2005 and 2009 for 56 countries (34 developed and 22 developing countries) covering 18 sectors. Domestic value added embodied in the countries' exports data are taken from the OECD–WTO Trade database. The data of per capita GDPs are taken from the World Bank's WDI. The data on the distance, common language dummy and landlocked dummy are taken from the "GeoDist" data base of CEPII, and the data on island dummy and common border dummy are taken from Wikipedia. The data on weighted average effectively applied tariff rate is taken from WITS, and the nontariff trade cost data is taken from UNESCAP-World Bank (www.unescap.org/resources/escap-world-bank-trade-cost-database). Data on physical capital stock and human capital index are taken from the Penn World Table, version 8. In order to handle the problem of zero values for trade in value-added we run Poisson Pseudo Maximum Likelihood (PPML) estimator. The basic gravity modeling results show the positive impacts of per capita GDPs and negative impact of distance on the trade in value-added. Also, the common border has a positive impact, landlocked dummy has a negative impact and island dummy has a positive impact on the trade in value-added.

We mainly focus on the estimated coefficients of the four key explanatory variables, i.e. tariff rate, nontariff trade cost, relative physical capital stock per capita, and relative human capital stock per capita. The coefficient on the weighted average applied tariff rate is negative and significant, indicating that if the weighted average applied tariff rate faced by the source country on its exports in the destination country decreases by 1 percent then the value-added in export by the source country would increase by US\$ 0.06 million. The coefficient on the non-tariff related trade cost describes that there would be an increase in value added in exports of the source country by an amount of US\$ 3.61 million if non-tariff trade related cost of the destination country decreases by 1percent.

The coefficient of the relative physical capital stock per capita is positive and significant, and the magnitude of the coefficient suggests that a 1percent rise in the difference in the physical capital stock per capita between the source and the destination countries (i.e. source country being more physical capital abundant) would increase value added export from the source country by US\$ 0.05 million. Similarly the coefficient of the relative human capital per capita is positive and significant, suggesting 1percent rise in the difference in human capital index per capita between the source and the destination countries (i.e. source country being more human capital abundant) would increase value added exports from the source country by US\$ 0.34 million. To see whether the effects of tariff rate, non-tariff trade cost, physical capital stock and human capital on value added exports by the source country vary across industries we run models with interaction terms between each of these variables and the sector dummies. From the regression with interaction terms between the tariff rate and sector dummies it is found that lower tariff rates in the destination country would increase the value added exports from the source country in larger magnitudes in the cases of 'Electrical & Optical Equipment', 'Machinery and Equipment', 'Transport Equipment', 'Basic Metals & Fabricated Metals' and 'Food Products, Beverage & Tobacco' compared to those of other remaining sectors. For non-tariff trade cost it can be stated that for 'Construction', 'Business Service', Wholesale & Retail Trade' and 'Transport and Storage', the effects of reduction in non-tariff trade costs in the destination country on the value added exports by the source country are significantly higher compared to those of the other industries. In the case of the relative human capital per capita, it is apparent that for industries like 'Electrical & Optical Equipment', 'Machinery & Equipment', 'Mining & Quarrying', and 'Wholesale & Retail Trade' the effects of human capital on the value-added exports are larger compared to those of the other industries. Finally, the regression with interaction terms between the relative physical capital stock per capita and sector dummies show that the effects of the difference in physical capital stock per capita are stronger for 'Electrical &

Optical Equipment', 'Machinery & Equipment', 'Financial Service' and 'Transport & Storage' relative to those of the remaining ones.

In conclusion, both physical capital stock and human capital have significant positive impacts on the value-added exports of a country. Also the reduction of tariff rates as well as other nontariff trade costs faced by the source countries in the destination countries could increase the value-added exports of the source countries. The policy implications emerging from the aforementioned analysis suggest that in order to promote trade in value-added countries should invest more on human capital, raise physical capital stock through both domestic and foreign investments, liberalize tariff, and lower nontariff trade costs through trade facilitation and reduction in nontariff barriers.

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What determines domestic services value-added share in gross exports?

SELIM RAIHAN, NAFIZ IFTEAKHAR
AND NABILA HASAN

In trade policy, importance has been given to gross export statistics until recent past. However, this traditional measure of international trade has several limitations. One important limitation is that it does not reveal the role played by one sector to supply raw materials for export from another sector. This becomes more crucial while considering the value-addition of the domestic services sectors in other sectors' gross exports, as gross export statistics disguise such contribution from the service sector. It is also important to mention that, while services sector constitutes a very large share of GDP in most of the advanced economies, for many of the developing economies such a share is also very high. Therefore, understanding the magnitude and determinants of the share of domestic service sector's value-addition in gross exports is important as it shows the scale of integration of the domestic service sector with the export sector.

Table 40.1 shows the top and bottom 10 countries in the context of services value-added share in agricultural gross exports. The value-addition of the service sector in agricultural gross exports is

the highest for Hong Kong and the lowest for Cambodia. Developed countries dominate in the top list whereas developing countries dominate in the bottom list. Table 40.2 shows the top and bottom 10 countries for services value-added share in manufacturing gross exports. The highest figure is for Hong Kong and the lowest figure is for Cambodia.

Table 40.1: Top and bottom 10 countries in terms of services value-added share in agricultural gross exports in 2010

Top 10 countries			Bottom 10 countries		
Rank	Country	%	Rank	Country	%
1	Hong Kong	37.56	1	Cambodia	0.41
2	United States	28.03	2	Tunisia	3.94
3	Germany	27.56	3	Indonesia	5.44
4	South Africa	27.51	4	Viet Nam	6.21
5	Denmark	27.37	5	Luxembourg	6.25
6	Lithuania	26.34	6	India	6.43
7	Australia	26.04	7	Philippines	7.88
8	United Kingdom	25.77	8	China	8.05
9	New Zealand	25.62	9	Thailand	8.07
10	Netherlands	25.52	10	Malaysia	8.61

Data source: <http://stats.oecd.org>

Table 40.2: Top and bottom 10 countries in terms of services value-added share in manufacturing gross exports in 2010

Top 10 countries			Bottom 10 countries		
Rank	Country	%	Rank	Country	%
1	Hong Kong	40.16	1	Cambodia	6.24
2	France	32.45	2	Luxembourg	7.08
3	Brazil	32.27	3	Ireland	8.95
4	Lithuania	31.71	4	Saudi Arabia	9.86
5	Russia	30.26	5	Malaysia	10.12
6	New Zealand	29.67	6	Viet Nam	10.12
7	Switzerland	29.13	7	Malta	11.19
8	Italy	27.74	8	Thailand	11.36
9	South Africa	27.72	9	Tunisia	12.05
10	Australia	27.52	10	Hungary	12.63

Data source: <http://stats.oecd.org>

Table 40.3 represents the top and bottom 10 countries in the context of services value-added share in services gross exports. The highest figure is for the United States and the lowest figure is for Luxembourg. Four countries in the top 10 list namely United States, United Kingdom, Lithuania and South Africa are in common in both services value-added share of agricultural and services gross exports. In the bottom 10 list, Thailand, Vietnam, Cambodia, Malaysia and Luxembourg are in common in cases of services and manufacturing gross exports. A comparison between Table 40.2 and Table 40.3 shows that in the top 10 list, France, Brazil, Lithuania and South Africa are in common.

Table 40.3: Top and bottom 10 countries in terms of services value-added share in services gross exports in 2010

Top 10 countries			Bottom 10 countries		
Rank	Country	%	Rank	Country	%
1	United States	89.22	1	Luxembourg	43.13
2	Mexico	87.86	2	Malta	56.88
3	Brazil	87.76	3	Ireland	58.31
4	Israel	87.75	4	Singapore	61.76
5	France	86.48	5	Denmark	64.03
6	United Kingdom	85.96	6	Malaysia	66.71
7	Japan	85.61	7	Cambodia	67.14
8	Canada	85.37	8	Iceland	67.61
9	Lithuania	84.96	9	Viet Nam	67.66
10	South Africa	84.92	10	Thailand	70.22

Data source: <http://stats.oecd.org>

In the light of the above discussion this article explores why for some countries the domestic services value-added shares of gross exports are higher than those of other countries. We use cross country panel regression models where the dependent variable is the domestic services value-added share in gross exports (data taken from the OECD- WTO Trade in Value Added database). We use a balanced panel data constructed for the years of 1995, 2000, 2005 and 2010 for 60 countries covering 33 sectors. Fixed effect

estimator has been used to control for country fixed effect, time fixed effect and industry fixed effect. Data of four of the explanatory variables, i.e. per capita GDP, service value-added as percentage of GDP, FDI as percentage of GDP, and trade as percentage of GDP are taken from World Bank WDI; and data of two other explanatory variables, i.e. physical capital stock per capita and total factor productivity (TFP) at constant national prices are taken from Penn World Table (PWT) version 8.1.

We run several regressions where the domestic services value-added shares in gross exports of agricultural, manufacturing and services sectors are considered separately as dependent variables. The first regression is for the agricultural sector where the dependent variable is the domestic services value-added share in agricultural gross exports. It is found that per capita GDP, service value-added as percentage of GDP and trade as percentage of GDP have positive significant impacts, and physical capital stock per capita and TFP have negative significant effects. However, FDI as percentage of GDP is not significant. The regression results suggest that if per capita GDP increases by 100 US\$, domestic services value-added share in agricultural gross exports increases by 0.024 percentage points. If service value-added as percentage of GDP increases by 1 percentage point, domestic services value-added share in agricultural gross exports increases by 0.25 percentage points. Again, if physical capital stock per capita increases by 1 thousand US\$, domestic services value-added share in agricultural gross exports declines by 0.04 percentage points. This suggests that higher is the capital abundance of a country lower is the share of domestic service sector's value-addition in agricultural gross exports. Lastly, the coefficient of TFP suggests that higher domestic services value-added share in agricultural gross exports is possible with a lower level of TFP.

In the second regression, the dependent variable is the domestic services value-added shares in manufacturing gross exports. It is

found that services value-added as percentage of GDP and TFP have positive significant impacts. The coefficient of GDP per capita is found to be insignificant but positive. Also the coefficients of physical capital stock per capita and trade as percentage of GDP and FDI as percentage of GDP are found to be insignificant. It can be concluded here that if service value-added as percentage of GDP increases by 1 percentage point, domestic services value-added share in manufacturing gross exports increases by 0.30 percentage points. Again, if TFP increases by 1 unit, domestic services value-added share in manufacturing gross exports increases by 3.91 percentage points. These results suggest that a higher level of TFP is required to increase the domestic services value-added share in manufacturing gross exports.

In the third regression, domestic services value-added share in services gross exports has been regressed on the same set of explanatory variables as described above. It is found that services value-added as percentage of GDP and trade as percentage of GDP have positive and significant effects. The impacts of GDP per capita, FDI as percentage of GDP and TFP are found to be insignificant. However, the coefficient of TFP is positive. The impact of physical capital stock per capita is marginally significant and negative. It can be stated from the regression that if trade as percentage of GDP increases by 1 percentage point, then domestic services value-added share in services gross exports increases by 0.025 percentage points. If services value-added as percentage of GDP increases by 1 percentage point, domestic services value-added share in services gross exports increases by 0.107 percentage points. Again, if physical capital stock per capita increases by 1 thousand USD, domestic services value-added share in services gross exports decreases by 0.024 percentage points.

In summary, we can say that GDP per capita has a significant positive impact on the share of domestic service sector's value-addition in agricultural gross exports, but in other cases, GDP per

capita doesn't have any significant impact. Services value-added as percentage of GDP is positive significant in all three scenarios. FDI as percentage of GDP is insignificant for all three scenarios. Trade as percentage of GDP has significant positive effect on the shares of domestic service sector's value-addition in agricultural and services gross exports, but has an insignificant effect in the other case. Physical capital stock per capita has significant negative effect in the cases of agricultural and services gross exports, but is insignificant for the manufacturing gross exports. TFP is not important for the service sector's value addition in agricultural and services gross exports, but TFP has a significant positive impact on share of service sector's value-addition in manufacturing gross export and the size of the coefficient suggests that the impact is quite large.

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Unearthing Bangladesh's comparative advantages

SELIM RAIHAN AND
M D . JILLUR RAHMAN

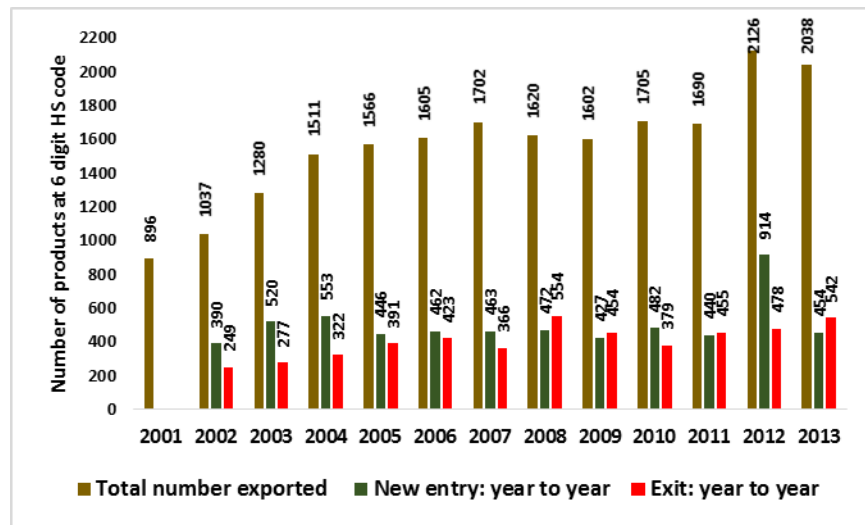
The analysis of comparative advantage is important from the policy perspective. Trade policies of a country should be tuned to promote export items where the country has comparative advantage. The Revealed Comparative Advantage (RCA) analysis, suggested by Bela Balassa in 1965, is an ex post analysis of comparative advantage and has been used in many studies. RCA index is used to calculate the relative advantage, disadvantage and trade potential of a certain product in a country.

The RCA index is measured as the ratio of a product's share in the country's total export relative to its share in the world's total export. The formula for the RCA is equal to $(X_{ij}/X_{it})/(X_{wj}/X_{wt})$ where, X_{ij} and X_{wj} are country i 's export and world export of product j respectively, while X_{it} and X_{wt} are country i 's total export and world total export respectively. If RCA is greater than unity, the country is said to have comparative advantage in that product; and if RCA is less than unity, the country has comparative disadvantage in that product. The RCA index is popular because of its simplicity, availability of data and for cross-

country comparisons. The index is consistent with country's factor endowment and productivity.

In this article, we are interested to know in which products Bangladesh has comparative advantage, and the dynamic changes of its comparative advantage. We have calculated RCA at 6-digit level of the harmonized system (HS) of classification for the periods between 2001 and 2013. RCA indices for Bangladesh are calculated using the data of export volumes of Bangladesh and the world from the Trade Map database.

Figure 41.1: Bangladesh's export capacity

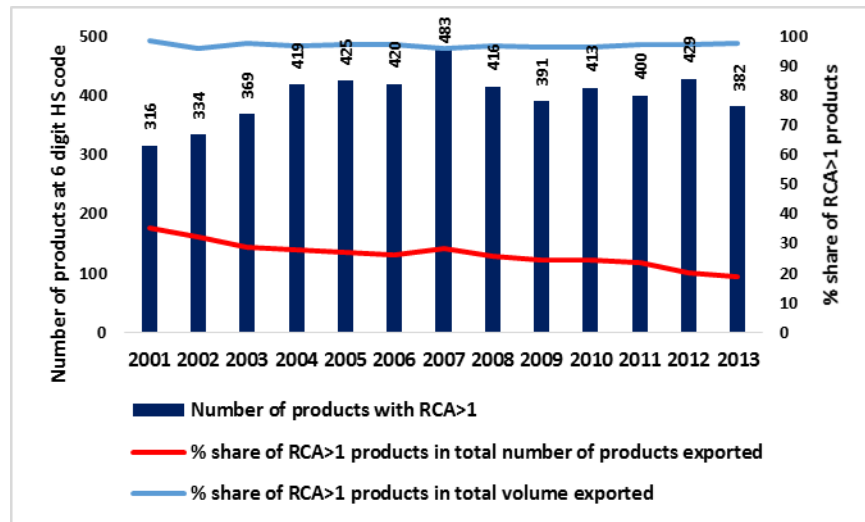


Data source: ITC Trade Map database

Before going into the RCA analysis, let's first explore how many products Bangladesh exports. At the 6-digit HS code level, there are approximately 5300 products. Figure 41.1 shows that in 2001, Bangladesh exported 896 products, which, by 2013, increased to a number of 2038. In 2012, Bangladesh exported 2126 products

which was the highest among the years under consideration. This suggests that, not only in terms of volume but also in terms of number of products, Bangladesh's export capacity increased by more than double during 2001 and 2013. On a year-to-year basis, some new products were added to the export basket and some were ceased to be exported. However, there were 375 common products which Bangladesh exported all the years under consideration.

Figure 41.2: Dynamics of Bangladesh's RCA

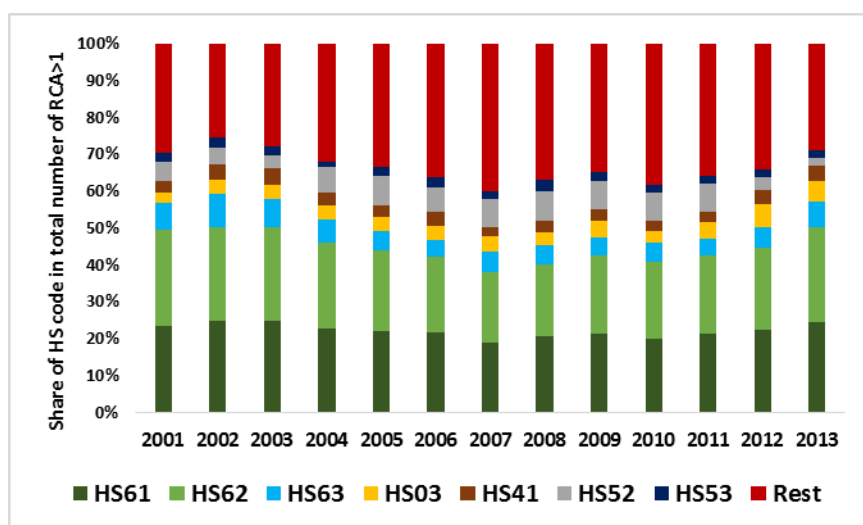


Data source: ITC Trade Map database

Figure 41.2 presents the numbers of products at 6-digit HS code where Bangladesh had comparative advantage during 2001 and 2013. In 2001, the number of products with RCA>1 was 316, which, with some year-to-year fluctuations, increased to 382 by 2013. The highest number of RCA>1 was observed in 2007 consisting 483 products. Figure 41.2 also suggests that the percentage share of RCA>1 products in total number of products declined over time: from 35 percent in 2001 to 19 percent in 2013. However, as a percentage of total exports, throughout those years,

Bangladesh enjoyed comparative advantage in more than 97 percent of its total export. Furthermore, over those years, comparative advantage had been consistent for 130 products at the 6-digit level among which 115 products were from readymade garment industries. All these suggest that although Bangladesh was able to expand its export basket during 2001 and 2013, the number of products it had comparative advantage didn't increase proportionately, which indicates escalated concentration of RCA in certain products.

Figure 41.3: Concentration of Bangladesh's RCA

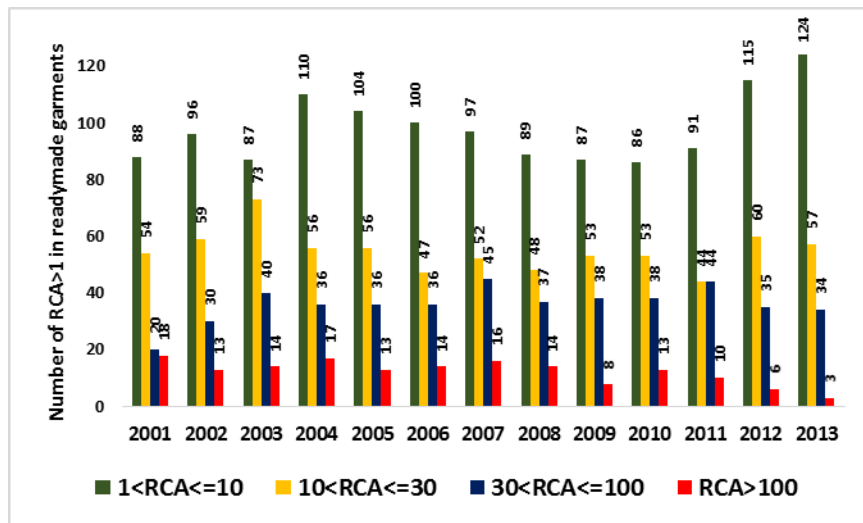


Data source: ITC Trade Map database

The escalated concentration of RCA in certain products during the period under consideration is manifested by the fact that Bangladesh's RCAs had been concentrated around the products in the HS codes 03 (fish and shrimp), 41 (raw hides and skins and leather), 52 (cotton yarn), 53 (raw jute), 61 (knitted readymade garments), 62 (woven readymade garments) and 63 (home textile and jute hessian bags). However, a close look at Figure 41.3

suggests that Bangladesh's comparative advantage has been highly concentrated around the readymade garments sector. In 2013, number of products with $RCA > 1$ under the HS codes 61, 62 and 63 accounted for 57 percent of the total number of products with $RCA > 1$. In 2007, such number was 43 percent. It should also be mentioned here that, readymade garments account for more than 80 percent of total export earnings of Bangladesh in recent years.

Figure 41.4: Magnitude of RCA in the readymade garments



Data source: ITC Trade Map database

Although RCA had been concentrated around the readymade garments sector, the average value of RCA declined. The maximum value of RCA in the readymade garments was 495 in 2001, which declined to 184 by 2013. Bangladesh had also been losing the very high comparative advantage it had in garments exports. Figure 41.4 suggests that, in 2001, Bangladesh enjoyed very high RCA ($RCA > 100$) in 18 garments products, which declined to only 3 in 2013. In contrast, the number of products with RCA less than or equal to 30 increased over time: from 142 in 2001 to 181 in 2013.

Similar analysis, with respect to the leather and leather goods, suggests that there had not been much variations in the number of products having RCA in this sector. And, as in readymade garments sector, Bangladesh had been losing very high comparative advantage it had in this sector. In contrast, Bangladesh had been enjoying consistently very high comparative advantage in jute and jute products, where, in all of 6 products, RCA ranged between 53 and 1068.

The aforementioned analysis shows that during the period under consideration, Bangladesh's comparative advantage had been concentrated around low-skilled labor intensive readymade garments exports. However, in recent years, compared to early 2000s, there had been some products where Bangladesh gained comparative advantage. These include edible fruits, animal and vegetable fats and oil, preparations of cereals, flour, starch or milk and pastry cooks' products, preparation of vegetable, fruits, nuts, residues from food industries, rubber and rubber products, copper and copper products, and furniture. However, Bangladesh lost comparative advantage in fertilizers, printing industry's products, articles of iron and steel, and miscellaneous manufactured articles.

Finally, we are interested to know how tariff rates, both at home and partner country, affect Bangladesh's revealed comparative advantage at the sectoral level. For this exercise, we have constructed a panel data at 6-digit HS code level for the period between 2001 and 2013. The dependent variable is the RCA which is a binary variable, where it takes a value of 1 if RCA is greater than unity and zero otherwise. The first explanatory variable is the domestic tariff rate at 6-digit HS code level, which is the effectively applied tariff rate and its data is taken from the WITS database. The second explanatory variable is the partner country's tariff rate, which is calculated as the weighted average of simple tariff rates imposed by top export destination partners of Bangladesh namely

USA, EU, Canada and India. Data of partner countries' tariff rates are taken from the WITS and OECD-WTO database. The fixed effect panel logit regression results suggest that domestic tariff rate is negatively associated with RCA and the coefficient is statistically significant. This suggests that a cut in domestic tariff raises the likelihood of RCA greater than unity among the sectors. In contrast, the coefficient of the partner countries' weighted tariff rate is not statistically significant. The reason behind the non-association between the RCA and partner countries' tariff rate could be because of the fact that the large part of Bangladesh's export to its major partner countries are under different preferences schemes; for example, Bangladesh's exports enjoy duty free and quota free market access in the EU market.

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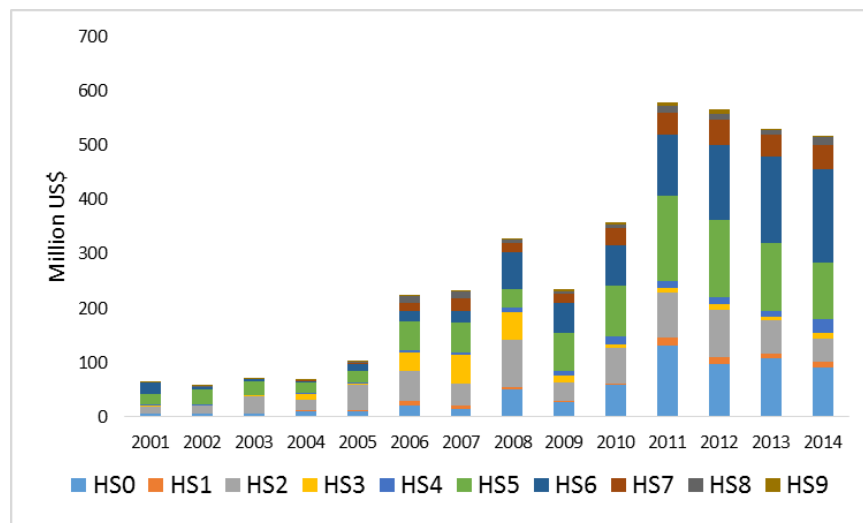
Tapping on the trade-investment nexus for improving bilateral economic cooperation between Bangladesh and India

SELIM RAIHAN AND
FARAZI BINTI FERDOUS

Bangladesh and India have long bonds in culture and history. Despite such bonds and neighborly proximity, economic cooperation between the two countries has remained far below potential. A number of studies have shown that bilateral trade and investment offer immense opportunities for accelerating growth and reducing poverty in Bangladesh and India. These studies suggest that India could become a major player for accelerating the growth of intra-industry trade and uplifting foreign direct investment (FDI) inflow to Bangladesh. Also, for India, Bangladesh could become an additional source of trade as well as a critical destination for investment thus addressing many concerns relating to the economic isolation of its backward Eastern and North-Eastern states. Furthermore, better connectivity between Bangladesh and India through multi-modal transport and transit facilities will further enhance the strength of the economic relations between these two countries.

Although it experiences annual volatility, the overall trade between Bangladesh and India has increased over time, and the balance of trade remained heavily in favor of India. Total exports from Bangladesh to India increased from US\$ 50.2 million in 2001-02 to US\$ 527.2 million in 2014-15 (which was only 0.1 percent of India's total import). The share of Bangladesh's exports to India in the country's overall export increased from 0.3 percent to around 1.5 percent during the same period. On the other hand, India's exports to Bangladesh increased from about US\$ 1019 million in 2001-02 to US\$ 5.8 billion in 2014-15 (around 2 percent of India's total export). At present, India is the second largest import source for Bangladesh. In 2014-15, the share of Bangladesh's import from India was around 16 percent of the country's total import from the world.

Figure 42.1: Composition of Bangladesh's export to India

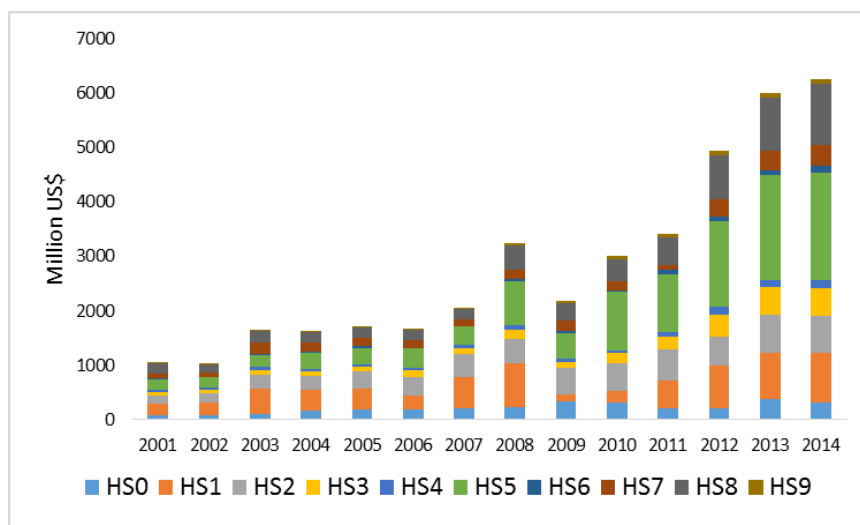


Data source: ITC Trade Map

Looking at the product details we find that in recent years Bangladesh's exports to India (Figure 42.1) have been dominated

by readymade garments (RMG) (HS code 6) and jute products (HS code 5). Bangladesh also exports products like textile articles, edible fruit and nuts, salt, fish, inorganic chemicals, mineral fuels and raw hides and skins. In contrast, large parts of Bangladesh's import from India have been raw materials and capital machineries (HS codes 5 and 8) (Figure 42.2) which are used in Bangladesh's export oriented and domestic industries. Bangladesh's major products imported from India for the last decade were cotton, vehicles and parts and accessories, machinery, cereals, man-made staple fibres, iron and steel, electrical machinery, organic chemicals, tanning or dyeing extracts and plastics.

Figure 42.2: Composition of Bangladesh's import from India

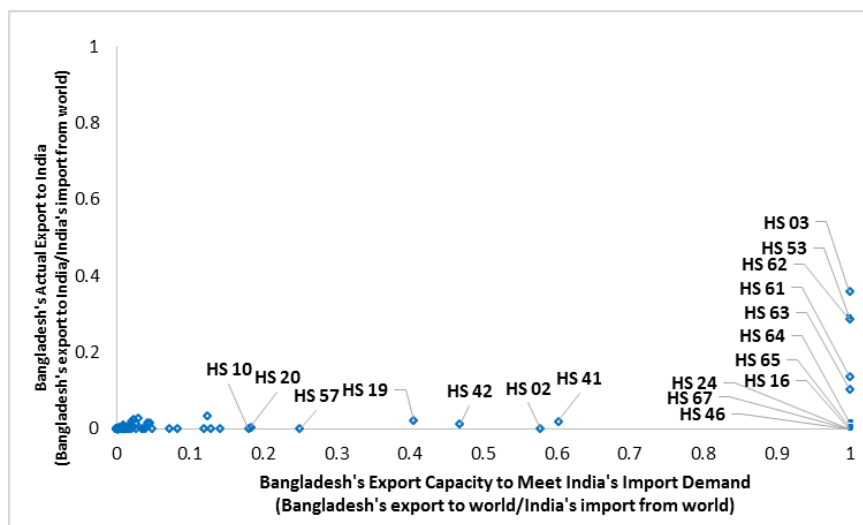


Data source: ITC Trade Map

Though exports from Bangladesh were supposed to increase significantly as the Indian government offered Bangladesh duty-free benefit for all products except 25 alcoholic and beverage items since November 2012, exports did not increase much after 2012. A number of challenges can be made responsible for such weak

export response which are related to Bangladesh's limited export capacity, lack of diversification of export baskets, and various non-tariff measures (NTMs) and procedural obstacles (POs) due to inadequate infrastructure and lack of support facilities both at home and in the Indian market.

Figure 42.3: Bangladesh's export capacity and actual export to India in 2014



Data source: ITC Trade Map

It is noteworthy that readymade garments (RMG) has become the major item in Bangladesh's export to India on account of duty-free market access granted by India. In 2009-10, the share of RMG was more than 28 percent in total export of Bangladesh to India, which rose to 34.3 percent by 2014-15. However, studies have shown that there are many products in which Bangladesh has large export capacities, but actual exports to India are either very low or zero. For example, Figure 42.3 shows that though for products in the HS categories of 02, 16, 24, 41, 46, 64, 65 and 67, Bangladesh has either the full or significantly partial export capacities to meet India's import demand, actual exports to India are zero. Similar

observation also holds for Indian exports to Bangladesh. Therefore, there is enormous scope for raising bilateral trade between the two countries. There is a need to explore carefully, how different NTMs and POs and lack of trade facilitation affect such prospects. Necessary measures should be taken to improve the scenario. In order to address the trade infrastructural problems at the border, lately, there are some initiatives by the Government of India to set up Integrated Check Posts (ICPs) at major entry points on the land borders between Bangladesh and India. Two such ICPs have been launched recently, and they are expected to boost bilateral trade.

Bangladesh and India have to tap on the trade-investment nexus for improving their bilateral economic cooperation. The horizontal and vertical integration of Indian and Bangladeshi industries could help to improve scale economies, especially for Bangladesh, and help Indian firms gain from the use of cheap labor in Bangladesh. However, in terms of sources of FDI inflow in Bangladesh, the US, the UK, and South Korea top the list of countries, and FDI from India is still very low.

Lately, there have been a number of initiatives between Bangladesh and Indian governments to improve the investment situation. The Bangladesh Power Development Board and the Indian National Thermal Power Corporation have signed a memorandum of understanding in 2010 to set up two coal-fired power plants, each of which will have a capacity of 1,320 MW, with partnership shared equally between them. Furthermore, recently, Bangladesh has offered India to establish two Special Economic Zones (SEZ) for Indian companies. Launching of these SEZs is expected to substantially increase Indian FDI into Bangladesh.

In 2015, Prime Ministers of India and Bangladesh contracted international gateway of internet service in Agartala and supply of

100MW power to Bangladesh from Tripura. India is already supplying 500 MW of power to Bangladesh, and supply of another 500 MW was also announced during Indian Prime Minister's visit to Bangladesh in 2015. On the other hand, the bandwidth connection came as Bharat Sanchar Nigam Limited (BSNL) and Bangladesh Submarine Cable Company Limited (BSCCL) signed an agreement for leasing of international bandwidth for Internet at Akhaura. As a result, Agartala has become third station connected to submarine cable for Internet bandwidth after Chennai and Mumbai. The internet bandwidth export to India from Bangladesh will enable reliable and fast Internet connectivity for the people of Tripura as well as other parts of India's northeastern region. It is expected that the latest shipping arrangement between Bangladesh and India would make faster movement of goods between these two countries. Currently, such shipments are routed via Colombo or Singapore. Also, it takes around 20 days for a shipment by land. However, the direct shipping is expected to reduce the time to around 7 days, as there is no longer a need for transshipment at Colombo. The service will play a vital role in decongesting the border points and bringing down the cost and transit time involved. This improved arrangement of connectivity would bring better efficiency and thus provide the best competitive freight rates to the advantage of the industries.

The aforementioned analyses point to the fact that there are heightened political commitments among the governments of both Bangladesh and India to improve bilateral economic cooperation through different initiatives. Such initiatives need to be materialized at the earliest. As for Bangladesh, to make the most out of such initiatives, there are a number of challenges though. The country needs to significantly improve the business environment for attracting FDI, as the latest World Bank's ranking of the ease of doing business shows that Bangladesh's position dropped two steps to 174 out of 189 countries due to stalled regulatory reforms.

Finally, besides abovementioned economic issues, still there are some bilateral issues between Bangladesh and India, which need to be resolved for enriching mutual trust and confidence for greater economic cooperation. For example, border killing is an issue that strains India Bangladesh relations as the victims are often ordinary people of Bangladesh living in border areas. This needs to stop, for which a political decision at the highest level is necessary. Also, the water-sharing issue between India and Bangladesh is yet to be solved properly, which undermines a lot of the developmental prospects. However, it can be hoped that these issues will be solved with the heightened commitment among political elites of the two countries for a deeper economic cooperation.

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What factors matter in attracting FDI?

SELIM RAIHAN AND
FAYEZA ASHRAF

Foreign direct investment (FDI) plays an important role in the long-run economic growth of an economy. FDI develops productive capacity through transfer in technology, enhances domestic labor skills through global managerial practices and contributes to human capital development. FDI assists in integrating the domestic markets with the global market. Furthermore, FDI bridges the gap between domestic savings and investment and spurs economic growth which is a powerful tool for alleviating poverty.

Although developing countries understand the need for FDI to boost economic growth in their countries, not all countries have been successful in attracting FDI equally. As FDI inflow for the countries is important, we have constructed rankings of countries using the averages of Foreign Direct Investment-Gross Domestic Product (FDI-GDP) ratio and FDI per capita for the latest 5 years period (2011-2015) for 179 countries to observe the highest and lowest recipients of FDI. The data of FDI-GDP ratio is obtained from the World Bank's WDI database, and the FDI per capita is calculated using data of FDI net inflow and total population from the WDI. Top and bottom 10 countries in terms of FDI-GDP ratio and FDI per capita are shown in Tables 43.1 and 43.2 respectively.

Luxembourg ranked the top in cases of both FDI-GDP ratio and FDI per capita. Also, Malta, Ireland, Netherlands and Singapore consistently appeared among the top 10 for both the Tables 43.1 and 43.2.

Table 43.1: Ranking for top and bottom 10 countries for FDI-GDP ratio (average for 2011-2015)

Top 10			Bottom 10		
Rank	Country	%	Rank	Country	%
1	Luxembourg	71.31	179	Qatar	0.30
2	Liberia	45.81	178	Nepal	0.32
3	Malta	42.34	177	Afghanistan	0.39
4	Ireland	33.81	176	Swaziland	0.39
5	Mozambique	32.65	175	Burundi	0.44
6	Netherlands	25.57	174	Pakistan	0.54
7	Congo, Rep.	21.54	173	Greece	0.57
8	Singapore	20.79	172	Iran, Islamic Rep.	0.65
9	Mongolia	20.68	171	Algeria	0.65
10	Aruba	18.89	170	North Korea	0.71

Data Source: World Development Indicators (WDI). Ranking among 179 countries.

Table 43.2: Ranking for top and bottom 10 countries for FDI per capita (average for 2011-2015)

Top 10			Bottom 10		
Rank	Country	US\$	Rank	Country	US\$
1	Luxembourg	75912.61	179	Burundi	1.21
2	Ireland	17520.13	178	Nepal	2.24
3	Netherlands	13082.79	177	Afghanistan	2.42
4	Singapore	11326.23	176	North Korea	4.69
5	Malta	7025.87	175	Central African Republic	5.00
6	Switzerland	3966.25	174	Pakistan	7.02
7	Seychelles	2308.92	173	Eritrea	8.14
8	Australia	2267.14	172	Guinea-Bissau	11.19
9	Belgium	1681.09	171	Haiti	12.37
10	Norway	1644.1	170	Ethiopia	12.78

Data Source: World Development Indicators (WDI). Ranking among 179 countries.

In both Tables 43.1 and 43.2, among the bottom 10 countries, Nepal, Afghanistan, Burundi, North Korea and Pakistan are in common. The rankings of the South Asian countries are depicted in Table 43.3. Among the South Asian countries, Maldives topped the list in both cases with global rankings of 16th and 30th respectively, whereas, Pakistan, Afghanistan and Nepal consistently ranked at the bottom. In the case of FDI-GDP ratio, India, Bangladesh and Sri Lanka ranked at 136th, 149th and 159th respectively. However, In the case of FDI per capita, Sri Lanka, India, and Bangladesh ranked at 135th, 156th and 168th respectively. Except Maldives, all South Asian countries have FDI-GDP ratio much lower than 2 percent, whereas most of the Southeast Asian countries have FDI-GDP ratios well above 2 percent. For example, during the same period, the average FDI-GDP ratios of Malaysia, Indonesia, Thailand, Vietnam were 3.65 percent, 2.38 percent, 2.07 percent and 5.42 percent respectively. Even the LDCs like Cambodia, Lao PDR and Myanmar had much higher FDI-GDP ratios, which were 8.98 percent, 5.43 percent and 3.15 percent respectively.

Table 43.3: Ranking for South Asian countries (average for 2011-2015)

Global Rank	Country	FDI-GDP Ratio (%)	Global Rank	Country	FDI per capita (US\$)
16	Maldives	12.09	30	Maldives	851.32
136	India	1.73	135	Sri Lanka	42.81
140	Bhutan	1.59	140	Bhutan	39.13
149	Bangladesh	1.42	156	India	26.02
159	Sri Lanka	1.21	168	Bangladesh	14.39
174	Pakistan	0.54	175	Pakistan	7.02
177	Afghanistan	0.39	177	Afghanistan	2.42
178	Nepal	0.32	178	Nepal	2.24

Data Source: World Development Indicators (WDI). Ranking among 179 countries.

This article aims to examine the factors that affect the FDI inflow in a cross-country and over time framework. We have constructed an unbalanced panel data covering 217 countries over a period of 56 years (1960 to 2015), and the data is obtained from the WDI. We have conducted a series of fixed effect panel regressions. The dependent variable is considered to be the FDI-GDP ratio (measured in percentage) or FDI per capita (measured in million US\$), and the explanatory variables are trade-GDP ratio (trade as percentage of GDP), used as a proxy for economy's openness, electric power consumption (measured in kWh per capita), used as a proxy for infrastructure, domestic investment-GDP ratio (gross fixed capital formation as percentage of GDP), used as a measure of the magnitude of domestic investment, and natural logarithm of population or GDP used as proxies for the market size.

The results of the basic fixed effect panel regression model, considering FDI-GDP ratio as the dependent variable, show that all these four explanatory variables have statistically significant and positive associations with the FDI-GDP ratio. 1 percentage point increase in the trade-GDP ratio is associated with 0.1 percentage points increase in the FDI-GDP ratio; 100 unit rise in the electric power consumption per capita is associated with 0.04 percentage points increase in the FDI-GDP ratio; 1 percentage point increase in the domestic investment-GDP ratio is associated with 0.14 percentage points rise in the FDI-GDP ratio; and finally, 1 percent increase in the size of the population is associated with 0.03 percentage points rise in the FDI-GDP ratio. When the variable 'population' is replaced by 'GDP' to reflect market size, the results are also consistent.

This article has also explored whether quality of institution affects FDI. Institutional variables such as bureaucracy quality, law and order, control of corruption, government's stability, democratic accountability and investment profile are considered from the International Country Risk Guide (ICRG) for 126 countries over a

time period of 27 years (1984 to 2010). Out of all these six institutional variables, government's stability and investment profile appear to be statistically significant with positive sign. According to the ICRG, 'government's stability' is a measure of both of the government's ability to carry out its declared program(s), and its ability to stay in office. The risk rating assigned is the sum of three subcomponents: government unity, legislative strength, and popular support. Also, the ICRG suggests that 'investment profile' is a measure of the factors affecting the risk to investment that are not covered by other political, economic and financial risk components. The risk rating assigned is the sum of three subcomponents: contract viability/expropriation, profits repatriation, and payment delays. The regression results suggest that on an average, 1 point rise in the index of government's stability is associated with 0.11 percentage points rise in the FDI-GDP ratio. Also, 1 point rise in the index of investment profile is associated with 0.27 percentage points rise in the FDI-GDP ratio. While the dependent variable in the panel regression model is replaced by the FDI per capita, the results obtained are largely consistent with those of the model considering FDI-GDP ratio as the dependent variable.

The aforementioned analysis highlights on the fact that certain factors are key to attracting FDI, and policies should be designed to take into account these factors. To attract FDI, relevant trade policy reforms leading to higher degree of openness are essential. With the increased importance of globalization, trade openness has become a key component to growth. Liberalization of trade leads to greater specialization and division of labor leading to higher productivity and export capabilities. Furthermore, infrastructural development is needed to attract larger FDI in an economy. A major component of infrastructure is electricity, and analysis earlier has shown that electric power consumption is strongly and positively associated with inflow of FDI. Infrastructure also includes roads and highways, railways and waterways, telecommunication services, etc. These services assist

in smooth operation of the businesses and promote greater productivity with the possibility of further investment. The regression results also show that FDI is positively associated with the magnitude of domestic investment. Low or stagnant domestic investment may show lack of business confidence by the domestic investors, which may convey negative messages to the foreign investors. Therefore, government needs to improve the business environment, reduce the cost of doing business and facilitate domestic investment through eliminating policy induced and supply side constraints. All these have also been reflected by the regression results that a better investment profile facilitates larger inflow of FDI. It is also important to note that government's stability is a crucial issue. Two aspects of government's stability, i.e. political stability and stability in economic policies are both important. It has to be ensured that the country is not in political conflicts which can affect business operation and planning. Also, ensuring stability in economic policies with no policy reversals and continuation of progressive economic reforms is immensely important.

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South Asia needs regional value chains in garments and leather products

R A S H M I B A N G A

South Asia as a region is losing out on its cost competitiveness, especially in their traditional export-oriented industries like textiles & garments and leather & leather products. Global imports of textile and leather products of the region increased by 70 percent and 300 percent respectively in the last decade. Not only are these industries losing out on their domestic markets, they are also losing out on their domestic value addition in their exports. Exports of textile products rose in Bangladesh by four times over the last decade, while it doubled in Sri Lanka. However, domestic value additions in these industries have declined in both the countries, as imports of raw material and semi-finished products in these industries have risen steadily. In Sri Lanka, domestic value addition in exports of textile products declined by 4 percentage points and is now 48 percent while in Bangladesh it declined by 5 percentage points and is now 67 percent. Decline in domestic value addition in exports of textiles products is also striking in Pakistan, where it declined by 14 percentage points to reach 78 percent. Exports of finished leather products from India and Pakistan are experiencing a similar *hollowing-out* as domestic value addition declined in these products from 77 percent to 60

percent in India and from 85 percent to 74 percent in Pakistan. The importance of domestic value-addition in exports cannot be ignored as a fall would mean losing out on the commensurating production-linked gains of exports.

While it can be argued that rising import-content of exports indicates linking into global value chains (GVCs), it is important to pause and rethink whether falling domestic value-addition of exports can be in any way gainful for an economy. While the entire emphasis of policy makers has been on linking into GVCs, there is a need to refocus policies on "*gainfully*" linking into GVCs, whereby not only exports rise but also domestic value-added content of exports. While it may be difficult to climb up the GVCs given the structure of GVCs where the lead firms capture maximum value created in GVCs through providing pre and post manufacturing services- forming Regional Value Chains (RVCs) in these industries can offer much higher to South Asian countries in terms of domestic value-addition.

A RVC differs from GVC, as in RVCs the end product (finished product) is exported by a country from the region, while sourcing its intermediate products and raw materials from within the region. This will create demand for raw materials and semi-finished products within the region offering higher scale economies to other South Asian countries. For example, if a RVC is formed within South Asia and leather products are exported by Bangladesh and India and tanned leather imported from Pakistan, not only tanneries in Pakistan will benefit but the finished leather product industry will also benefit from falling costs of tanned leather due to rising scale of production. RVCs therefore offer opportunities to the countries within the region to link into value chains by using the region for boosting their competitiveness and increasing the domestic value added content of their exports. Linking into GVCs at higher end can also become easier if there are well established RVCs, as this will improve countries'

bargaining power vis-à-vis the lead firms in GVCs. Sri Lanka and Bangladesh have acquired the necessary skills for producing world class quality garments and have well trained workforce. Establishing their brands is the need of the hour.

The region has rising demand and supply of both the inputs and outputs of textile and clothing industry and therefore provides a fertile ground for forming the RVC. Similar potential exists in the region's leather industry.

However, RVCs will not form automatically given the political economy of the region. There is a need to develop targeted policies and strategic interventions by both the policymakers as well as private sector in the region. Setting up industry-specific regional associations, regional design studios, regional R&D centers, promoting regional brands and prioritizing regional infrastructure are needed to improve the global competitiveness of the regional products. The region can also benefit from having an intra-regional investment agreement and deepening trade agreement. With the new governments in place in some of the countries in the region, new mindsets need to be promoted which emphasizes on collaboration and not competition.

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Decomposing bilateral trade costs between LDCs and non-LDCs

SELIM RAIHAN AND NAFIZ IFTEAKHAR

Trade cost performance of a given country varies significantly depending on trading partners, as well as the type of goods traded. The World Bank-UNESCAP trade cost database provides a bilateral measure of trade costs which includes all costs involved in trading goods internationally with the partner. It includes not only international transport costs and tariffs but also other trade costs such as direct and indirect costs associated with differences in languages, currencies as well as cumbersome import or export procedures. Another important characteristic of the database is that it provides trade costs in ad valorem equivalent form, i.e. in percentage of value of goods traded. This article explores the factors affecting trade costs while Least Developed Countries (LDCs) trade with their non-LDC partners, and the relative importance of those factors. Tables 45.1, 45.2 and 45.3 present the top and bottom 10 pairs of countries in terms of ad valorem rate of total trade cost, agricultural trade cost and manufacturing trade cost respectively in 2010 while LDCs are reporters and non-LDCs are partners. The bilateral trade cost is symmetric. For example, in Table 45.1, the bilateral total trade cost between Senegal and Zimbabwe is 934 percent, which is the same irrespective of whether we consider Senegal as the reporter and Zimbabwe as the partner, or vice versa.

Table 45.1: Top and bottom 10 pairs of countries in terms of total trade cost in 2010 while LDCs are reporters and non-LDCs are partners

Top 10 pairs			Bottom 10 pairs		
Reporter (LDC)	Partner (non-LDC)	Trade cost (%)	Reporter (LDC)	Partner (non-LDC)	Trade cost (%)
Senegal	Zimbabwe	934	Zambia	Zimbabwe	71
Senegal	Venezuela	928	Mozambique	South Africa	84
Burkina Faso	Belarus	899	Cambodia	Thailand	85
Bhutan	Spain	869	Cape Verde	Portugal	88
Ethiopia	Kazakhstan	845	Mozambique	Zimbabwe	88
Burkina Faso	Hong Kong	831	Malawi	Zimbabwe	89
Nepal	Romania	801	Mali	South Africa	89
Cambodia	Mauritius	791	Burkina Faso	Côte d'Ivoire	93
Maldives	Russia	790	Bhutan	India	94
Burundi	Norway	776	Afghanistan	Pakistan	97

Data source: <http://databank.worldbank.org>

Table 45.2: Top and bottom 10 pairs of countries in terms of agricultural trade cost in 2010 while LDCs are reporters and non-LDCs are partners

Top 10 pairs			Bottom 10 pairs		
Reporter (LDC)	Partner (non-LDC)	Trade cost (%)	Reporter (LDC)	Partner (non-LDC)	Trade cost (%)
Cambodia	Sri Lanka	779	Mozambique	South Africa	112
Nepal	Sweden	770	Zambia	Zimbabwe	125
Gambia	Sweden	767	Afghanistan	Pakistan	126
Bhutan	China	754	Malawi	Zimbabwe	130
Malawi	Namibia	722	Malawi	South Africa	134
Nepal	Pakistan	721	Mozambique	Zimbabwe	140
Ethiopia	Nigeria	721	Afghanistan	Iran	145
Ethiopia	Ghana	715	Cape Verde	Portugal	153
C. African R.	Nigeria	665	Burkina Faso	France	153
Benin	UK	626	Burundi	Kenya	173

Data source: <http://databank.worldbank.org>

Table 45.3: Top and bottom 10 pairs of countries in terms of manufacturing trade cost in 2010 while LDCs are reporters and non-LDCs are partners

Top 10 pairs			Bottom 10 pairs		
Reporter (LDC)	Partner (non-LDC)	Trade cost (%)	Reporter (LDC)	Partner (non-LDC)	Trade cost (%)
Malawi	Philippines	1310	Cambodia	Thailand	39
Senegal	Zimbabwe	874	Cambodia	Singapore	67
Senegal	Venezuela	872	Mozambique	Zimbabwe	69
Malawi	Russia	808	Mozambique	South Africa	72
Burkina Faso	Belarus	796	Bhutan	India	72
Bhutan	Spain	768	Malawi	Zimbabwe	76
Burkina Faso	Hong Kong	756	Burkina Faso	Côte d'Ivoire	76
Malawi	Qatar	713	Cambodia	Malaysia	77
Nepal	Romania	691	Cape Verde	Portugal	78
Ethiopia	Iraq	671	Afghanistan	Pakistan	87

Data source: <http://databank.worldbank.org>

In order to decompose the bilateral trade costs between LDCs and non-LDCs, we use a balanced panel data for 130 countries (26 LDC and 104 non-LDC), where trade cost is taken as the dependent variable. The aim of our regression is to explain the effect on the bilateral trade cost between LDCs and non-LDCs by two variables namely Logistic Performance Index (LPI) and weighted average of Effectively Applied Tariff (EAT). The data of LPI is taken from the World Bank database and the data of weighted average of effectively applied tariff is taken from WITS (<http://wits.worldbank.org/>). As control variables, we consider several indicators and their data are derived for different sources. For example, data of distance, common language dummy and landlocked dummy are taken from the “GeoDist” data base of CEPII (<http://www.cepii.fr/CEPII/en/>); and data of island dummy and common border dummy are taken from Wikipedia. Due to the availability of LPI data for the years of 2007, 2010 and 2012 only, which correspond to the availability of trade cost data, we construct our panel data taking into account these three years. We also include time dummies to control for the time fixed effect. We use three types of trade costs, which are overall trade costs,

agricultural trade costs, and manufacturing trade costs, in three separate regressions. From the regression of overall trade costs, we find that all the control variables have expected signs, and after controlling for these variables, LPI index of both LDCs and non-LDCs have negative and significant associations with the bilateral trade costs between LDCs and non-LDCs. However, a rise in the LPI of LDCs by 1 unit is associated with the fall in the bilateral trade costs by 62 percentage points, whereas a rise in LPI of non-LDCs by similar magnitude is associated with the decline in the bilateral trade costs by 40 percentage points. This implies that after controlling for other factors, improvement in LDCs' logistic performance status compared to the same of non-LDCs has a larger positive association with the reduction in the bilateral trade costs. In the case of effectively applied tariff, it is also found that the reduction in tariff rates in LDCs has a larger positive significant association than those of non-LDCs with the overall trade costs between the two groups of countries.

Results from regressions involving agricultural trade costs and the manufacturing trade costs as the dependent variables are consistent with the regression results of total trade costs. In the case of agricultural trade costs, a rise in the LPI index of LDCs by 1 unit is associated with the decline in the bilateral agricultural trade costs by 242 percentage points, whereas, the LPI index of non-LDCs has much lower impact on such trade costs. In the case of manufacturing trade costs, improvement in the LPI index of LDCs by 1 unit is associated with 76 percentage points decline in bilateral manufacturing trade cost which is almost three times higher than the effect of similar improvement in the LPI of non-LDCs. Similarly, reduction in the effectively applied tariff of LDCs has much larger positive significant impact than those of non-LDCs on the decline in both agricultural and manufacturing trade costs between these two groups of countries.

Bilateral trade costs between LDCs and non-LDCs

The aforementioned analysis points to the greater importance of improving the quality of logistic performance of the LDCs for the reduction in trade costs between LDCs and non-LDCs. The World Bank's LPI has six indicators related to the quality of Customs, Infrastructure, International shipments, Logistics quality and competence, Tracking and tracing and Timeliness. Most of the LDCs are seriously lagging behind in these indicators. Furthermore, the study finding highlights the greater significance of liberalization of the tariff regimes in the LDCs for attaining lower trade costs with their trading partners.

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Gains from liberalization of intra-regional trade in environmental goods in South Asia

SELIM RAIHAN, NAFIZ IFTEAKHAR
AND MUHAMMAD MOSHIUR RAHMAN

In recent years, in the face of a rising awareness towards environmental crises, a new market for environmental goods (EGs) is created. The WTO at its fourth Ministerial meeting in Doha in 2001, decided to negotiate for opening up the market for EGs through reducing tariff and non-tariff barriers on EGs trade. This paper explores the potential gains from the liberalization of Intra-regional trade in EGs in South Asia.

South Asia has been characterized as a region of low intra-regional trade. Also, the intra-regional trade in EGs in South Asia is very limited (our analysis is based on the latest list of the 389 EGs at the 6-digit HS code from WTO). The figures towards the end of 2000s show that in the case of intra-regional exports of EGs, Bangladesh exports the largest volume. Bangladesh also has the highest proportion as more than 27 percent of the country's export of EGs is directed to the South Asian region. India has the lowest proportion in this case (only 1.2 percent). The relevant figures for Nepal, Pakistan and Sri Lanka are 18.6 percent, 9.3 percent and 12.7 percent respectively. Bangladesh also has the highest

proportion of exports of EGs (16.3 percent) in the country's total exports directed to the region. In this regard, all other four South Asian countries have very low shares, well below 2 percent. The South Asian countries also have very low intensity of import of EGs from the region. Sri Lanka has the highest share in terms of regional imports of EGs as percentage of the country's total import of EGs (7.3 percent). India has the lowest share in this regard (only 0.27 percent). The corresponding figures for Bangladesh, Nepal and Pakistan are 3.5 percent, 3.9 percent and 1.8 percent respectively. Also, in the case of share of regional imports of EGs in the country's total regional import, all five South Asian countries have very low shares: the largest share is for Sri Lanka (2.18 percent) and the lowest share is for India (0.98 percent). The corresponding figures for Bangladesh, Nepal and Pakistan are 2.1 percent, 1.2 percent and 1.3 percent respectively.

In the case of number of EGs exported bilaterally in South Asia, India exports largest numbers of EGs at the 6 digit HS code level to other four South Asian countries. Out of 389 EGs, India exports 257 goods to Bangladesh, 307 goods to Nepal, 116 goods to Pakistan, and 292 goods to Sri Lanka. Bangladesh exports larger number of EGs to India (72 EGs) than to Pakistan (13 EGs) and Sri Lanka (11 EGs) and none to Nepal. Nepal exports EGs only to India (57 EGs). Pakistan exports larger number of EGs to Bangladesh (58 EGs) than to Sri Lanka (31 EGs) and India (15 EGs), and none to Nepal. Sri Lanka, exports 46 EGs to Bangladesh, 41 to India, five to Pakistan and only one to Nepal. The bilateral trade of EGs of four South Asian countries, namely of Bangladesh, Nepal, Pakistan and Sri Lanka with India are more prominent in terms of volume and number than bilateral trade between any other South Asian countries.

In South Asia, the average tariff rates on EGs declined quite significantly over the last two decades. In Bangladesh, the major reduction took place during the late 1990s, when the average tariff was reduced from more than 70 percent to around 15 percent, and by the end of 2000s the rate came down to less than 10 percent. In

India, major reduction in average tariff occurred during early 2000s and by the end of 2000s, the tariff rate came down to around 10 percent. Nepal and Sri Lanka initially had lower tariff rates on EGs compared to other South Asian countries. However, the rate of reduction in tariff rate in Nepal was slower, and by the end of 2000s, Nepal's average tariff rate (12.2 percent) was higher than those of Bangladesh, India and Sri Lanka. Sri Lanka always had the lowest average tariff rate and by the end of 2000s, Sri Lanka's average tariff rate on EGs was only 5.4 percent. By the end of 2000s, the average rate was the highest for Pakistan (around 14 percent).

The SAFTA sensitive lists among the South Asian countries have some effects on the intra- regional trade of EGs among the South Asian countries. Bangladesh's exports of EGs to India, Nepal and Pakistan virtually face no sensitive list. However, more than 29 percent of exports of EGs from India to Bangladesh are subject to Bangladesh's sensitive list. Also, more than 16 percent of exports of EGs from India to Pakistan confront Pakistan's sensitive list. India's exports of EGs to Nepal and Sri Lanka however are not restricted much by the sensitive lists in Nepal and Sri Lanka. Almost 100 percent of Nepal's exports of EGs to Bangladesh and Sri Lanka are under both Bangladesh's and Sri Lanka's sensitive lists. Nepal's such exports however do not face any sensitive list in India and Sri Lanka. Pakistan's exports of EGs to India confront no sensitive list, and such exports to Bangladesh and Sri Lanka are under limited coverage of the respective sensitive lists. However, around 77 percent of Pakistan's exports of EGs to Nepal and 37% Sri Lanka's exports of EGs to Nepal face Nepal's sensitive list. Sri Lanka's exports of EGs to India and Bangladesh are also subject to some limited restrictions under India's and Bangladesh's sensitive lists.

In order to see the impacts of liberalization of tariffs on exports and imports of EGs under a partial equilibrium model, we have run a scenario using the WITS/SMART model where the five South Asian countries would reduce their tariffs on imports of EGs

among themselves to zero. The results of this simulation in terms of changes in exports and imports of the five South Asian countries, as shown in Table 46.1, suggest that, among the five South Asian countries, India has the largest base exports of EGs and, therefore, though in terms of percentage change, India would experience the lowest rise in exports of EGs, in terms of volume, the rise in exports of EGs from India would be much larger than those from other four South Asian countries. In the case of import of EGs, however, Bangladesh would experience largest rise in terms of both volume and percentage changes.

Table 46.1: Impact on total exports and imports of intra-regional trade liberalization in EGs in South Asia

	EGs Export		EGs Import	
	Volume change (million US\$)	% change	Volume change (million US\$)	% change
Bangladesh	5.95	1.92	27.60	2.23
India	89.98	0.97	9.45	0.12
Nepal	3.71	7.73	0.07	0.10
Pakistan	4.13	2.82	6.18	0.29
Sri Lanka	2.56	7.08	16.67	2.13

Source: WITS-SMART Simulation

We have also explored the general equilibrium effect of the tariff liberalization. The results of the changes in exports from the WITS/SMART model simulation at the 6-digit HS code level are mapped into the sectors of the Social Accounting Matrices (SAM) of the five South Asian countries. Then these changes in exports are introduced as exogenous shock in the SAM multiplier models of these countries. The simulation results, as presented in Table 46.2, show that all five South Asian countries would experience positive change in gross output, commodity demand, value added and household consumption. In terms of changes in total gross output and commodity demand, the largest impacts would be observed in Nepal, and Pakistan would have the smallest impacts. However, in terms of value added and household consumption, Bangladesh would experience the largest impact. In all five South Asian countries, there would be larger rise in the industrial gross

output and commodity demand compared to those in the agricultural and services sectors.

Table 46.2: Results from the SAM multiplier model (% change from the base)

Variables	Bangladesh	India	Nepal	Pakistan	Sri Lanka
Gross output	0.017	0.011	0.035	0.006	0.009
Commodity demand	0.017	0.011	0.035	0.007	0.012
Value added	0.017	0.009	0.016	0.006	0.008
Household consumption	0.015	0.008	0.014	0.004	0.008
Agricultural gross output	0.019	0.007	0.013	0.008	0.006
Industrial gross output	0.023	0.018	0.136	0.008	0.019
Service gross output	0.012	0.007	0.009	0.004	0.005
Agricultural commodity demand	0.018	0.007	0.013	0.008	0.006
Industrial commodity demand	0.021	0.017	0.108	0.010	0.026
Services commodity demand	0.013	0.007	0.009	0.004	0.005

Source: Simulation in the SAM multiplier models

Table 46.3: Results from the GTAP Model (% change from the base)

Countries	Real GDP	Exports	Imports
Bangladesh	0.0076	0.04	0.07
India	0.0011	0.02	0.02
Nepal	0.0204	0.45	0.47
Pakistan	0.0003	0.01	0.02
Sri Lanka	0.0005	0.01	0.01

Source: Simulation in the GTAP model

Using the global CGE model (the GTAP model), we also explored the impact of such liberalization on real GDPs, exports and imports. The changes in tariff rates at the 6-digit HS code level derived from the WITS/SMART model simulation are mapped into the GTAP sectors using the calculated weights of the EGs in bilateral imports of the respective countries. These changes in bilateral tariff rates are then introduced as shocks in the GTAP model. In the GTAP model, a scenario is considered where the five South Asian countries reduce tariffs on their bilateral imports of

EGs to zero. As shown in Table 46.3, though very small, all South Asian countries will encounter positive change in their real GDPs, total exports and total imports. Nepal would experience the largest rises in real GDP, total exports and total imports. The aforementioned results clearly suggests that despite the low level of trade of EGs among the South Asian countries, there are still areas of gains from the intra-regional liberalization of the trade in EGs in South Asia. Therefore, the South Asian countries should pursue the liberalization agenda with more interest. However, not only tariffs but there are also sensitive lists and NTBs which are holding back the potentials of the rise in intra-regional trade in EGs in South Asia.

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Why should Bangladesh integrate more with East and Southeast Asia?

S E L I M R A I H A N A N D
S U N E R A S A B A K H A N

The Bangladesh economy over the past two and half decades has been experiencing steady rise in economic growth rate which has been accompanied by country's increasing trade-GDP ratio. The economy has become more and more trade-oriented. However, when it comes to integrating with its neighboring countries, there are still large untapped potentials for Bangladesh to gain from such integration. Effective regional integration, through enhanced scope for larger economies of scale and pathway for integration with global and regional value chains, can be a critical tool for Bangladesh to boost its economic growth process. Over the past three decades, regional integration agenda for Bangladesh has focused primarily on integrating with its South Asian neighboring countries. However, there are reasons to believe that Bangladesh can also gain significantly by integrating more with the East Asian countries (China, Japan and South Korea) and Southeast Asian countries (10 ASEAN countries. i.e. Brunei, Myanmar, Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand and Vietnam). Bangladesh government also wants to pursue the "Look East Policy", and for this it is high time for Bangladesh to

begin the quest for expanded trade and investment opportunities with these countries.

The Bangladesh economy is now at a cross-road. Further growth acceleration is essential to make a transition to a higher growth path in order to obtain the upper-middle income country status. The country needs to promote economic diversification, with a simultaneous diversification of the export basket, in order to boost its growth rate. When it comes to export diversification, in terms of both product and destination, integration with East and Southeast Asian countries is very important for Bangladesh. A major reason why integration with East and Southeast Asia will prove to be beneficial for Bangladesh is because East and Southeast Asia are essentially integrated with the Global Value Chains (GVCs) in a number of manufacturing products. Thus, such integration will pave the way for linking Bangladesh with wider GVCs and in diversifying its export basket. In addition, flows of Foreign Direct Investment (FDI) from these countries to Bangladesh will be beneficial for the economy. Among the Southeast Asian countries, Indonesia, Malaysia and Vietnam are large exporters of electronics, machinery and leather goods, primarily driven by the leading multinational companies in the world. Therefore, integration will lead to a number of multinational companies specialized in electronics, machinery and leather goods investing in Bangladesh, thus generating large spill-over benefits to the domestic economy.

However, Bangladesh's level of integration with East and Southeast Asian countries is mixed. Table 47.1 clearly depicts that Bangladesh's imports from East and Southeast Asia are significantly higher compared to exports to these regions. With a share of around 30 percent of total import, China in 2014 was the major source of import for Bangladesh. Singapore also had more than 8 percent share. Except Philippines, Thailand and Vietnam, all other countries accounted for more than 1 billion US\$ import

for Bangladesh. In contrast, Bangladesh's exports to most of these countries were very low. The largest export was to Japan, which was close to 1 billion US\$, followed by export to China by 760 million US\$. The lowest export was to Philippines with an amount of only 21.4 million US\$.

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Table 47.1: Bangladesh's exports and imports from Leading East and Southeast Asian countries in 2014

Country	Import (million US\$)	% of total Import	Export (million US\$)	% of total Export
China	11,783.10	29.82	760.85	2.26
Indonesia	1,377.62	3.49	71.30	0.21
Japan	1,164.49	2.95	937.26	2.78
Malaysia	1,229.34	3.11	114.94	0.34
Philippines	10.14	0.03	21.37	0.06
Singapore	3,273.44	8.28	132.45	0.39
South Korea	1,236.21	3.13	345.29	1.02
Thailand	863.37	2.19	43.52	0.13
Viet Nam	709.89	1.80	56.01	0.17

Source: ITC Trade MAP

The current scenario clearly portrays that Bangladeshi exports to East and Southeast Asia are significantly low and immediate initiatives need to be adopted in order to raise export levels. Product diversification followed by market and need assessments in those countries will help Bangladesh accelerate the desired integration process. Bangladesh's exports to these countries can be improved if Bangladesh engages in exports of non-traditional goods. Bangladesh should actively pursue the agenda of free trade agreements (FTAs) with these countries, either bilaterally or with the region as a whole (i.e. with ASEAN). In this context, it is important to mention that four Southeast Asian countries (Brunei Darussalam, Malaysia, Singapore and Vietnam) are part of the recently signed Trans-Pacific Partnership Agreement (TPP), which is a free trade agreement among nine countries. The other

countries are the United States, Australia, Chile, New Zealand and Peru. Furthermore, all 10 ASEAN countries are part of the proposed Regional Comprehensive Economic Partnership (RCEP), which is a free trade agreement (FTA) between these ten countries and the six states with which ASEAN has existing FTAs (Australia, China, India, Japan, South Korea and New Zealand). With the emergence of these mega FTAs, where a large number of East and Southeast Asian countries are involved, there are risks of negative impacts on Bangladesh as Bangladesh is not part of these FTAs. Therefore, it is imperative for Bangladesh to proactively take up the FTA agenda with the East and Southeast Asian countries. At this moment, Bangladesh is part of BIMSTEC, where two of the Southeast Asian countries (Thailand and Myanmar) are members. However, the BIMSTEC FTA is yet to be implemented.

Table 47. 2: Impact on Bangladesh economy due to FTAs with East and Southeast Asian countries

Impact on welfare, GDP and trade	FTA with Southeast Asia	FTA with East Asia	FTA with East and Southeast Asia
Welfare (EV) in million US\$	224.68	772.91	1245.5
% change in real GDP	0.33	1.12	1.58
% change in total exports	3.42	15.06	16.74
% change in total imports	4.66	16.44	19.36

Source: GTAP simulation results

Table 47.2 presents the results from simulations using the GTAP model, where we have explored hypothetical scenarios of FTAs between Bangladesh and East and Southeast Asian countries. Under certain assumptions, Bangladesh stands to gain from these FTAs. The largest gain seems to appear from the FTA with both East and Southeast Asian countries.

As far as Bangladesh's imports from these countries are concerned, a major chunk of the imports are used as raw materials

and capital machineries in the export industry as well as in the domestic industrial sector. Being the dominant export sector, until now the benefits from such imports have largely been enjoyed by the RMG sector in Bangladesh. However, the non-RMG export sectors and domestic manufacturing sectors have not been able to benefit much from such imports. In addition, there are a number of policy-induced and supply-side constraints for these non-RMG sectors which constrict their expansion. Sector specific infrastructural problems, poor overall physical infrastructure, lack of investment fund and working capital, high interest rate, shortage of skilled workers, invisible costs of doing business, etc. are major impediments to export prospects and export diversification. Therefore, while pursuing the deeper integration agenda, it is also imperative to address these supply side constraints; otherwise the country will not be able to make much progress towards export diversification and will fail to reap the benefit from such integration.

Table 47.3: FDI inflows from East and Southeast Asian countries in 2015

Source country	FDI Inflows (million US\$)	% of total FDI
Indonesia	1.18	0.07
Malaysia	101.14	5.97
Singapore	126.24	7.45
Thailand	50.74	2.99
China	44.45	2.62
Japan	34.14	2.01
South Korea	135.24	7.98

Source: Bangladesh Bank

Bangladesh should also invite much larger FDIs from East and Southeast Asian countries. The current level of total FDI in Bangladesh is very low, and Table 47.3 shows that FDI inflows from East and Southeast Asia are also low. Bangladesh can immensely benefit from higher FDI inflows from these countries

in terms of export diversification and large employment generation. The government's initiative of setting up special economic zones should give priorities to the leading investors from East and Southeast Asian countries targeting electronics, leather and different processing industries. Finally, enhanced connectivity with China and other Southeast Asian countries through BCIM, Asian highway and Trans-Asian Railway network should be accentuated.

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Does export orientation lead to higher Productivity? Firm-level evidence from Bangladesh

SELIM RAIHAN, NAFIZ IFTEAKHAR
AND MIR TANZIM NUR ANGKUR

For long, empirical studies on the role of exports in promoting growth in general, and productivity in particular, used data at the country or industry level to test whether exports promote productivity growth or vice versa. However, a series of empirical studies since early 1990s started using firm level data to look at differences between exporters and non-exporters in various dimensions of firm performance, including productivity.

Two alternative but not mutually exclusive hypotheses can be mentioned why exporting firms can be expected to be more productive than non-exporting firms. The first one relates to the fact that firms which are considered to be more productive than others are likely to participate in export markets – the so called ‘self-selection’ of the more productive firms into export markets. The second one relates to the notion of ‘learning by exporting’ hypothesis which suggests that after entering the export market, firms are able to acquire new knowledge and adopt new expertise which eventually leads to higher level of productivity. Though

there is sizeable evidence that exporters perform better than non-exporters, the issue of the direction of the causality between exports and productivity is still debated. While in the contexts of more advanced countries, most studies find evidence that the export premium is due to a self-selection process, a number of recent studies on less developed countries tend to endorse the learning effect.

Against this backdrop, this paper explores how export orientation affects firm-level productivity by looking at the range of determinants of productivity of manufacturing firms in Bangladesh. Review of empirical studies suggest that there could be several factors, i.e. firm size, firm age, share of firm's output in the industry, export orientation measured as percentage of total firm's output that is exported, which may affect firm's productivity. Our measure of firm's productivity is the total factor productivity (TFP) which is derived using the Cobb-Douglas production function framework. Specifically, we have regressed log of output (calculated as total sales of firms) on log of capital (measured as netbook value of fixed assets of the firms) and log of labor (measured as total number of employees) to get the output elasticity of capital and labor which are then used to estimate the total factor productivity (TFP). To get unbiased estimates of those elasticities in the presence of industry fixed effects, we have included industry dummies in the above regression. We have used the dataset of "The World Bank, Enterprise Survey-Bangladesh" for 2007 and 2013 and have only considered firms belonging to the manufacturing sector (<http://www.enterprisesurveys.org/>). Table 48.1 shows the industry descriptions along with the distribution of firms for both 2007 and 2013. We have estimated TFPs of firms separately for 2007 and 2013 by following the same procedure described above.

Table 48.1: Distribution of firms in the survey by industry classification

Industry description	2007 (%)	2013 (%)
Food	18.04	13.8
Garments	19.98	16.77
Leather	19.69	8.98
Textiles	10.18	10.07
Machinery & equipment	5.92	2.2
Chemicals	12.61	9.99
Electronics/electrical	5.82	1.61
Non-metallic minerals	0	5.93
Other manufacturing	7.76	30.65
Total	100.00	100.00

Source: World Bank, Enterprise Survey, Bangladesh

In order to explore the effect of export orientation on the productivity of firms, we have run cross-section regressions for 2007 and 2013. For both years, we used the same model and Table 48.2 shows the estimated results. The dependent variable of our model is total factor productivity.

Table 48.2: Effect of export orientation on firms' total factor productivity (TFP)

Independent Variables	2007	2013
	Coeff (S.E.)	Coeff (S.E.)
Firm age	0.01*** (0.00)	-0.002 (0.003)
Medium size	-0.89*** (0.17)	-1.43*** (0.15)
Small size	-1.70*** (0.17)	-2.57*** (0.18)
Output share in industry	0.31*** (0.08)	0.12*** (0.03)
Internet connection	1.17*** (0.14)	1.08*** (0.15)
Export orientation dummy	0.94*** (0.12)	0.75*** (0.14)
Constant	16.19*** (0.18)	17.55*** (0.17)
Number of observations	840	863
F	382.37	231.64
R-square	0.727	0.628

Note: *** p<0.01, ** p<0.05, * p<0.1

The main explanatory variable is the export orientation while the set of control variables include firm size, firm age, firms' output share and internet connection. In the regression models, export

orientation of the firm is represented by a dummy variable, where the dummy variable takes the value of 1 if the firm exports 25 percent or more of its total output.

For firm size, we have also taken three dummies - large, medium and small based on the number of employees. For capturing the effect of technology on productivity, we have taken internet connection dummy. Internet connection dummy will take the value of 1 if the firm communicates by e-mail.

The cross section regression result of 2007 suggests that firm age has positive and significant effect on productivity, while the result of 2013 indicates no such relationship. For 2007, it is estimated that an increase in firm age by one year would lead to a rise in productivity by 1 percent. For both years, firm size has an effect on productivity. In particular, both medium and small sized firms tend to be less productive than large firms. The firm's output share is found to have a positive and significant effect on productivity for both 2007 and 2013 respectively. For 2007, one percentage point increase in firm's output share would lead to a rise in firm's productivity by 31 percent, while for 2013 such productivity rise would be by 12 percent. Now considering the effect of internet connection on productivity, firms with internet connections are found to be more productive than firms with no internet connection for both 2007 and 2013.

Our variable of interest is the export orientation which is found to have a positive and significant effect on productivity for 2007 and 2013. For 2007, we have found that on average, productivity of a firm that exported 25 percent or more of its output was 156 percent higher than a firm that exported less than 25 percent of its total output. Such productivity difference was however reduced in 2013, as productivity of a firm that exported 25 percent or more of

its output was 112 percent higher than a firm that exported less than 25 percent of its total output.

From the aforementioned analysis, it can be said that larger firms are more productive as compared to small and medium sized firms. Larger firms, due to economies of scale, are able to reap some benefits which help them to utilize resources more efficiently. Firms which started earlier in an industry also tend to be more productive than firms which entered in the industry later. This is due to the fact that already established firms have advantages over new firms in case of production, marketing, etc.

Also output share of the firm belonging to an industry (measured by the proportion of sales of firms in total industry sales) may influence the firm's productivity. Firms with higher output share can positively affect productivity, as dominant firms hold the necessary resources and technical skill and expertise as compared to firms with low output share. It is also found that firms which have access to internet connections can benefit from lower communication cost and can also communicate with its clients and suppliers timely and thus leads to higher productivity.

Finally, the regression results confirmed that the exporting firms in Bangladesh are more productive than their counterparts. There could be several reasons for this. The learning process may work through technical supports from external buyers, and/or through the exposure to competition in the international markets, which can result in knowledge, technology, and efficiency gain from exporting.

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What stimulates south-south FDI?

SELIM RAIHAN AND ISRAT JAHAN

Foreign Direct Investment (FDI) has been considered as one of the major contributors to capital formation and GDP growth in developing countries. North (i.e. developed) countries have been the major source of FDI in the south (i.e. developing) countries. However, over the past one decade or so, with the dramatic rise in south-south trade and enhanced scopes for south-south cooperation, there is a heightened aspiration for increased south-south FDI. Especially, with the emergence of the advanced south countries (i.e. Brazil, China, Hong Kong, India, Indonesia, South Korea, Malaysia, Mexico, Russia, Singapore, South Africa, Thailand and Turkey), FDI from these countries to the other south countries has been a major issue of discussion under the broad idea of 'south-south cooperation'.

The growth in south-south FDI in recent decades is highly significant and encouraging. Annual south-south FDI flows increased from around 12 billion US\$ in 1990 to around 150 billion US\$ by the end of 2000s. South-south FDI flows as a percentage of world total grew substantially from a low level of 4 percent in the late 1990s to around 14 percent in the late 2000s.

In order to explore the factors that stimulate the pattern of south-south FDI, we run gravity regression of FDI. The gravity regression involves FDI in the home country from the partner country as the dependent variable. The standard explanatory variables are per capita GDPs, distance, and dummies for common language, landlocked, island and common border. In addition, we use a trade cost variable in the home country to capture the effect of the business environment in the home country on the FDI inflows. All variables (except dummies) are expressed in natural logarithm. We use an unbalanced panel dataset constructed for the period between 2001 and 2012 for 145 countries. Bilateral FDI statistics are taken from UNCTAD FDI database (<http://unctad.org/en/Pages/DIAE/FDI%20Statistics/FDI-Statistics-Bilateral.aspx>). The data of per capita GDPs are taken from the World Bank's WDI. The data on the distance, common language dummy and land lock dummy are taken from the "GeoDist" data base of CEPII, and the data on island dummy and common border dummy are taken from Wikipedia. The bilateral trade cost data are taken from World Bank-UNESCAP database (<http://www.unescap.org/resources/escap-world-bank-trade-cost-database>).

Results from the fixed effect panel gravity model regression of FDI suggest that as far as south-south FDI flow is concerned, per capita GDP of the home country doesn't have any effect, while that of the FDI source country has a positive significant effect; 1 percent increase in the per capita GDP of the FDI source country leads to 0.4 percent increase in the south-south FDI flow. The distance between the south countries doesn't matter in influencing the FDI inflows. However, common language and common border influence south-south FDI positively; the south countries with common language have 47 percent more FDI inflows than the south countries without common language; and the south countries with common border have 30 percent more FDI inflows than the south countries not having common border. The FDI

inflow is reduced by 80 percent if the FDI source country is land locked. The island dummies are not significant.

Since, as data suggests, the major source of south FDI is the FDI from the advanced south countries, we also run gravity regression considering all south countries as home and advanced south countries as the source of FDI. In this case, the per capita GDP of the advanced south, common language and common border dummies have much larger positive effects on such FDI inflow compared to what we observed in the overall south-south gravity regression. The results suggest that 1 percent increase in per capita GDP of the advanced south countries leads to the rise in FDI from these countries to all south countries by 0.6 percent; the south countries having common language with advanced south countries have 112 percent more FDI from advanced south than their counterparts; and the south countries with common border with advanced south countries have 122 percent more FDI from advanced south than their counterparts. However, both the land lock and island dummies turn out to be insignificant in this case.

In the augmented gravity regressions, we find that reduction in trade cost in the home country has a large positive impact on the south-south FDI; 1 percent reduction in such trade cost leads to the rise in south-south FDI flows by 1.1 percent. Such impact appears to be larger when we consider south as the recipient and advanced south as the source of FDI; 1 percent reduction in trade cost in the south countries leads to the rise in FDI flows from advanced south to the south countries by 1.8 percent.

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“Work on the low hanging fruits”

INTERVIEW OF DR. SAMAN KELEGAMA

SANEM interviews Dr. Saman Kelegama to talk about regional integration in South Asia. Dr. Saman Kelegama is the Executive Director of the Institute of Policy Studies of Sri Lanka (IPS). He is the co-editor of the South Asia Economic Journal. He is an eminent expert on regional trade issues in South Asia. This interview is taken in July, 2014.

SANEM: What is your view on the benefits of deeper regional integration in South Asia?

SK: Benefits of deeper integration will lead to flow of investments that in turn will stimulate trade in South Asia. More investment is essential to stimulating the investment-trade nexus – thereby promoting more intra-regional trade. Deeper integration will lead to higher growth. Deepening economic integration under a regional framework has been noted to be one of the most effective ways of addressing poverty. There are ‘direct’ and ‘indirect’ linkages through which regional integration can affect poverty. The direct link relates to the impact of regional integration on economic growth through increased levels of income while the indirect linkages are via channels such as trade, foreign direct

investment, migration and other routes like regional social infrastructure programs.

SANEM: What are the major impediments?

SK: The first impediment is regional politics which fluctuates up and down and this has an impact on the economic integration process. South Asia has still not found a formula to insulate the economic integration process from regional politics. Second, although the Track II activities in South Asia are far ahead of the Track I (or the official SAARC process), the two tracks do not meet effectively and seem to be moving in parallel. The Track II is yet to find an entry point to Track I. Third, non-tariff barriers (NTBs) are an impediment but some of them can be overcome by wise entrepreneurship. Fourth, the SAARC Secretariat does not have adequate powers to move the economic integration agenda in-between SAARC Summits.

SANEM: Non-tariff barriers are considered as major hindrances; Is this somehow an exaggeration?

SK: They are certainly a hindrance to trade, but if you master the art of overcoming them, then they will not be major barriers to trade. For example, take China's trade with India, where China's exports to India increased from US\$ 1.5 billion in 2001 to US\$ 70 billion by 2013 without any FTA between the two countries in place. Now, many entrepreneurs in South Asia complain about NTBs in the Indian market and the difficulty in penetrating it. But then, one has to ask how China is exporting to India with the same NTBs in place and how they overcame them to increase their exports by 47 times in a twelve year period? Therein lies the answer. It is a barrier but its impact is sometimes exaggerated.

SANEM: What should be done to promote intra-regional trade in South Asia?

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SK: If countries could unilaterally liberalize trade, then intra-regional trade can be increased but then, unilateral liberalization is a political economy issue in regional trading agreements and it does not happen in practice. So what we need to do is to work on the “low hanging fruits” and implement trade facilitation (TF) measures as per the agreement of the WTO Bali package. TF can reduce transaction costs by an average of 10 percent and is as effective as tariff reduction in moving trade. Since TF is a non-controversial area, implementing it would not be difficult. But implementation should be based on binding commitments and also should be time bound. The SAARC Development Fund can allocate funds to implement some of the required TF measures. We should also start dismantling some Non-Tariff Measures (NTMs) that have become barriers to trade. Selim Raihan has done an excellent study recently on identifying NTMs in South Asia. This should be a starting point to begin this exercise. I suggest that the SAARC Secretariat should create a Director post for a representative of the SAARC Chamber of Commerce and Industry so that the trade and investment issues are effectively addressed in Track I using such studies.

SANEM: Thank you so much for your time.

SK: Pleasure.

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“..south-south cooperation agreement
is needed..”

INTERVIEW OF
DR. RAJAN SUDESH RATNA

SANEM interviews Dr. Rajan Sudesh Ratna on the prospects of South-south trade. Dr. Rajan Sudesh Ratna is the Economics Affairs Officer of Trade and Investigation Divisions of United Nations ESCAP in Bangkok, Thailand. His current assignment relates to research and analysis on issues relating to WTO and regional trading arrangement and formulating and organizing capacity building programs for ESCAP members. Previously, Dr. Ratna served the Government of India for 25 years as a member of Indian Trade Service and later he also handled regional and multilateral trade policy issues in the Ministry of Commerce, Government of India. SANEM speaks to Dr. Ratna on south-south trade issues related to LDCs and developing countries. The views expressed in this interview are his personal and may not necessarily reflect the views of the United Nations and ESCAP and their members. This interview is taken in April, 2015.

SANEM: Why is south- south trade important for LDCs and developing countries?

RR: Trade has acted as a predominant factor for the growth and development of Asia-Pacific economies and globally. The south-

south trade is increasing over years, rising from about one fifth of world trade to about one fourth in the past decade. The share of intra south-south trade has also increased from 42.04 percent in 1995 to 58.55 percent in 2013 (UN Handbook of Statistics 2014). This south-south trade was mostly driven by trade with China and other large trading emerging economies. Thus while trade volume of LDCs also increased in both south-south and south-north trade, their share in world trade remains low and is still hovering at just above 1 percent. Thus the challenges associated with participation of LDCs in world trade still remain and need to be addressed. Studies have shown that the south-south trade can have the effect of lowering the prices of intermediate imports and eventually allow southern producers to be more competitive in both domestic and international markets. The south-south trade has also been enhanced due to the various bilateral, regional and interregional preferential trade agreements. The Asia Pacific Trade Agreement or APTA signed in 1975 paves the way for south-south trade among the Asia-Pacific economies. APTA is a unique agreement comprising of diverse economies – three major economies like China, India and Republic of Korea, LDCs like Bangladesh and Lao PDR, island country like Sri Lanka and land locked developing country like Mongolia. In recent times, due to the global economic recession, the world trade declined and it affected the developing countries more adversely. It has been pointed out by ESCAP's Asia-Pacific Trade and Investment Report that the early recovery in the Asia and the Pacific was possible due to increased imports by China and to some extent by India during the early stage of recession. This led to a stronger south-south trade and also provided the economies of Asia-Pacific to rely less on the developed countries' markets. This effect thus led to some product as well as market diversification for LDCs as it provided them a substitute for traditional export markets.

SANEM: What are the constraints to south-south trade?

RR: There are several constraints to south-south trade. *First*, the tariffs on items that are being traded between south-south are still

high, which unnecessarily increase trade costs and thus hinders trade. *Second*, it has also been seen that the non-tariff measures in the form of SPS and TBT are increasing day by day and are having major effect on trade. Stricter technical regulations in the form of SPS and TBT are imposed by the developed countries and thus despite a lower incident of duties for export to North, an exporter faces higher non-tariff barriers and thus higher costs of compliance. On the other hand, since the developing countries are at different stages of development, their standards are not harmonized with the international standards as much as the developed countries. The different national standards of the developing countries thus, act as non-tariff barriers and an exporter has to comply with different formalities for export of the same product to different markets. *Third*, the plethora of preferential trade agreements between same countries have also created a web of 'noodle bowl' syndrome in Asia and the Pacific. The trade agreements developing countries tend to sign among themselves tend to be shallower with big sensitive list/negative list items including major trading items as well as have complex rules of origin thereby hindering regional integration. *Fourth*, services play a very important role in the economy of the south, however, despite the autonomous liberalization in services sectors, greater liberalization have not taken place for providing market access to other developing countries or LDCs in such sectors which are important to them. Even most of the LDCs have not liberalized important sectors especially those relating to financial sector and thus have weak trade finance provisions. *Fifth*, due to their small economic size, remoteness, geographical dispersion, vulnerability to natural disasters, ecosystem fragility, lack of natural resources, LDCs are highly dependent on international trade as a driver of inclusive and sustainable development. The Duty-free, Quota-free (DFQF) market access was introduced to address some of the constraints faced by LDCs; however there are challenges with the implementation of DFQF by some developed and emerging economies in the region. Though countries like China, India and Republic of Korea have announced their DFQF schemes, most of the other developing countries are yet to implement them. Even in

the DFQF Schemes each country's rules of origin vary which has created a complex situation for the LDCs. *Sixth*, on the export side constraints, the developing countries face higher trade cost due to lack of proper infrastructure, lack of EDI system, burdensome documentary requirements for exports and time taken by the agencies in issuing export documents.

SANEM: Does the WTO Bali declaration have any implication for south- south trade?

RR: Although the WTO Doha Round negotiations had already lasted for 12 years, the Ninth Ministerial Conference held in Bali came out with the 'Bali package'. The package, while a far cry from the full Doha Development Agenda, has agreements on Trade Facilitation and Agriculture (especially on food stock holding) and a decision for LDCs. The implementation of the Bali Package will definitely help the LDCs if implemented at an early date. The WTO Trade Facilitation Agreement (TFA) provides an excellent basis for developing countries to reduce trade transaction costs through a variety of measures aimed at making import, export and transit procedures more transparent, efficient and reduce the trade cost. Agriculture and more specifically food-stock holding, was an important topic at the Ministerial especially for many Asia-Pacific countries, including the host country Indonesia. While many countries are net exporters of agricultural goods and food, some are net importers and thus it may have different implications for the net food importing countries. The LDC package includes a re-affirmation on DFQF market access. Many countries have already implemented duty free access on 97 percent of LDC products, and the decision merely states that countries not meeting this standard "shall seek to" improve the number of products covered. Where LDCs exports are concentrated in uncovered sectors, this will be of little assistance. Likewise, with general tariff levels falling and expected to fall further under new regional trade agreements, the benefits of preferential access for LDCs is being eroded. However, the adoption of guidelines on simpler rules of origin for LDC products is an important aspect. The decision on service waiver

under which WTO members can provide preferential market access on trade in services to LDCs is another important aspect which will help develop LDCs. However, unless the entire package of the Doha Round is agreed and implemented, the full benefits of liberalization will still remain a distant dream. Disciplines on domestic support to agriculture and export subsidies as well as issues relating to tariff peaks will be addressed only when the Doha package is implemented.

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SANEM: What do you suggest to improve and deepen south- south trade?

RR: To improve and deepen the south-south trade, the following suggestions are made; (i) broadening and deepening of the trade liberalization must be done, both at multilateral level as well as through PTAs, especially on the items that are exported by the south; (ii) an effort to consolidate the PTAs are necessary. Same country participating in several agreements with same trading partner is not desirable; (iii) developing countries should make a stronger effort for an early conclusion of Doha Round and ensure that S&D treatment remains the core of the outcome; (iv) a south-south cooperation agreement on trade, investment and technology should be attempted. This would help reduction in the trade costs and (v) developing countries should also cooperate among themselves in formulating regional standards and also effectively participating in setting up of international standards.

SANEM: Thank you very much.

RR: You are most welcome.

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“...national efforts must complement regional efforts...”

INTERVIEW OF DR. RUPA CHANDA

*SANEM interviews Dr. Rupa Chanda on the prospects of services trade in South Asia. Dr. Rupa Chanda is a Professor of Economics at IIM Bangalore since 1997. Prior to joining IIMB, she was an economist at the International Monetary Fund in Washington, DC. Dr. Chanda's research interests concern multilateral trade liberalization, specifically, WTO and services, migration, health care, and IT. Dr. Chanda has many publications to her credit. Some of these include, *Globalization of Services: India's Opportunities and Constraints*, published by Oxford University Press in 2002 and an edited book titled, *India's Trade in Services: Prospects and Strategies*, brought out by Wiley-India in 2006. This interview is taken in August, 2015.*

SANEM: What is the prospect of intra-regional trade in services in South Asia? Which are the key sectors of interest to South Asian countries for such intra-regional services trade?

RC: Intraregional trade in services has considerable scope and the potential immediate and long run benefits are huge. There are many sectors where there is potential for increased intraregional

trade and investment flows. They include infrastructure or producer services such as energy, telecommunications, transport and financial services; social services such as healthcare and education; cultural services such as audiovisual services; and commercial services such as IT and tourism services. This scope arises from the huge infrastructural and investment requirements in this region, the trend towards liberalization and deregulation of many services in these countries, the competitiveness of some SAARC countries in specific services, and the cultural, historical and linguistic ties that bind countries in this region. Take the case of energy services. It is well-recognized that energy cooperation and energy trade in South Asia can help address the energy security interests of this region. Many studies have highlighted the scope for energy exports from Bhutan, and Nepal to meet the huge power deficits in India, and the scope to structure this generation mix in a way that can meet the region's demand pattern and make possible lower electricity prices for all countries concerned. Effective development of Nepal and Bhutan's huge hydropower potential could serve regional electricity needs while also addressing those countries' trade deficits with partner countries like India. Another case is tourism services. There is huge commonality of interest and affinity with respect to language, culture, history, religion and geography among the countries in South Asia, which provides an excellent basis for regional trade in tourism services, with potential spinoff benefits for infrastructure development and employment creation. Specific segments of interest include sports and recreational tourism, adventure and eco-tourism, religious and cultural tourism, and medical tourism. Health services have a lot of potential too, such as through cross-border investment in hospitals and medical tourism. I have just highlighted a few services here. There are many others.

SANEM: What are the major impediments to intraregional services trade in South Asia?

RC: There are cross-cutting and sector-specific challenges. As evident from the earlier examples, regional services trade involves

movement of capital, people, information, ideas, and goods. This requires regulatory and institutional cooperation across a range of issues such as investment, visas, connectivity, and recognition. The main impediment is lack of regulatory cooperation. A second cross-cutting impediment is the existence of “behind the border” barriers cooperation among the countries in this region and the many “behind-the-border” barriers that persist. This makes the business environment in these countries non-conducive to trade and investment flows both from within and outside the region. Investments are constrained by procedural and administrative delays, lack of transparency, and uncertainties stemming from economic and political instability and policy changes. Another challenge is the defensive mindset and the vested interests of domestic constituencies which hinder competition and thwart progress on key issues such as investment and labor mobility. There are also sector-specific challenges. Energy cooperation is fraught by political instability which has deterred investments in the energy sector in these countries. The absence of institutional arrangements for energy cooperation and financial constraints also pose a challenge. In tourism services, poor transport connectivity and infrastructure, restrictive bilateral air services agreements and visa regimes constrain intraregional trade. The absence of an integrated transport infrastructure in terms of cross-border road and rail links, limited air connectivity between major cities and lack of transit facilities within the region are a constraint. Visa restrictions and related security considerations remain a thorny issue. In health services, there have been difficulties with regional mobility of professionals and lack of recognition of qualifications among the SAARC countries. Medical tourism is constrained by delays in getting visas, the lack of processes for obtaining expedited medical visas, poor airline connectivity, lack of insurance portability, absence of a regional insurance product, and inadequate and poor local support infrastructure.

SANEM: What issues should be addressed to enhance the scope of regional services trade in South Asia?

RC: There are issues at the regional level and at the national level that need to be addressed. On the investment front, the focus should be on speedier clearances and approval procedures. It might be useful to consider a regional investment treaty and double taxation treaties among the countries. This framework would need to address issues of investment facilitation, investor protection, dispute settlement, and contract enforcement so as to ensure greater ease, transparency, and commitment in regional investments. A common investment framework would help in developing investment policies and associated regulations in a coordinated manner and enable harmonization of rules and procedures, and mutual recognition of standards and technical specifications in services within the region. Bilateral investment relations between India and Pakistan will need to be improved. These efforts will need to be complemented by national efforts to improve the business environment. Regional efforts will also need to focus on facilitating cross country mobility of persons through the simplification of visa procedures and expediting of visa approvals for selected categories of persons. Transport connectivity will also need to be addressed. All these steps will require institutional and regulatory cooperation. A multi-pronged approach is thus needed and national efforts must complement regional efforts.

SANEM: What are the current major issues at the multilateral level on services trade liberalization which are of interest for the South Asian countries?

RC: The South Asian countries have a common interest in securing greater market access in modes 4 and 1. They have a common interest in addressing discriminatory and cumbersome regulatory barriers, such as recognition requirements and procedures and regulations affecting the entry and operations of their service providers in other markets. In ongoing multilateral

discussions, they need to stress earlier proposals for more transparent and streamlined regulations for mode 4, for reducing the scope to apply measures such as economic needs tests and burdensome licensing procedures and for liberalizing market access for contractual service suppliers and independent professionals, They must also actively engage in discussions on data privacy and other regulatory barriers affecting market access in mode 1. Another issue of common interest is the LDC services waiver which proposes to provide preferential treatment to services and service suppliers of LDC WTO members in sectors and modes of particular interest to these economies and to improve access of LDC service suppliers to global distribution channels and information networks. The South Asian LDCs as well as regional and sub-regional forums in South Asia should do the necessary groundwork to identify these sectors of interest, assess capacity constraints, and engage in capacity building through national and regional efforts. They could develop a collective voice on the LDC services waiver in multilateral discussions, particularly on technical assistance and capacity building related issues. There also needs to be regional discussion on the role that could be played by the larger countries in influencing this waiver. Yet another multilateral issue of interest is whether these countries should join the plurilateral Trade in Services Agreement. Regional discussions could assess the potential costs of and benefits from joining the TISA.

SANEM: Thank you very much.

RC: You are most welcome.

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“..participating in the lower end of GVCs can be counterproductive..”

INTERVIEW OF
DR. MOHAMMAD A. RAZZAQUE

SANEM interviews Dr. Mohammad A. Razzaque on the prospects of GVC. Dr. Mohammad A. Razzaque is Head of International Trade Policy at the Commonwealth Secretariat. As a trained Economist, his primary area of work includes applied trade policy analysis. He has led the Commonwealth's policy and advocacy work in such areas as Aid for Trade, South-South cooperation, regional integration and supply chains, trade challenges of small states and Sub-Saharan Africa, rise of mega regionals etc. He has written and published numerous policy papers, books and edited several volumes on trade and development issues. He is the editor of Commonwealth Trade Hot Topics, a publication of the Commonwealth Secretariat, which aims to communicate technical trade policy issues to wider readership. Dr. Razzaque has previously taught at the University of Dhaka. This interview is taken in June, 2015.

SANEM: What are the current trends of Global Value Chain?

MAR: The world-export GDP ratio has increased from 19 percent to 31 percent over the past two decades. This is an indication of

intensifying GVC activities. However, there is strong evidence of highly concentrated GVC participation. It is estimated that more than 90 percent of the total value added created by GVCs is due to OECD, BRICS and a few Asian nations. Richard Baldwin, an influential economist in the area, has dubbed GVCs as activities taking within networked firms that he called Factory Europe, Factory North America and Factory Asia. There is limited evidence of some LDCs and African countries' participating in GVCs. Of course, Bangladesh has strong presence in textiles and apparels GVCs. In the case of African countries, because of their overwhelming dependence on primary commodity exports, the nature of their GVC participation is considered not desirable. Currently, very little is known about small island states' participation in GVCs. On the whole, the data on GVCs remain inadequate.

SANEM: How does GVC work and what are the recent concerns about GVC?

MAR: Countries specializing in pre-manufacturing (e.g. R&D, standardization, design) and post-manufacturing (logistics, marketing and brand development) activities are able to capture more value in GVCs compared to countries that specialize in the manufacturing of the products. Many garment items exported by Bangladesh are classic examples of low-value added items. How countries participate and where they are located within the GVC matter. Participating in the lower end of GVCs can be counterproductive. Some commodity exporters have become trapped in captive value chains, exporting low value-added items with lower gains accruing over time. This disadvantageous process has been known for a long time but has largely been ignored by the current GVC discourse.

SANEM: Recently, the Commonwealth has highlighted the issue of structural barriers in GVC participation. What are these structural factors?

MAR: Yes, we have argued that inherent structural characteristics can result in the systemic exclusion of some countries. Think about Pacific island states or landlocked countries, including Nepal and many in Sub-Saharan Africa. For them, trade costs are excessive: 50-100 percentage points higher than that of developing country average. On the other hand, export margins from GVCs for developing countries are typically so low that these cost disadvantages cannot be overcome. For apparel exports, countries like Bangladesh obtain price margins which are just about 30 percent of final retail prices. Within this narrow margin, manufacturers have to bear two-way shipping costs (for importing raw materials and then exporting final products). Many island and landlocked countries will not find it viable to enter into these GVCs. In other cases where there is the presence of poor countries, for example, in primary commodities, the margins are also low. Only 10-15 percent of final retail prices for coffee and horticulture products go to the African producers. This has implication for social development.

SANEM: If LDC exporters are not receiving “fair prices” for their products what is the solution?

MAR: A difficult question - as I said before, this issue has been overlooked in the current discourse where GVCs are considered generally as opportunities for accessing export markets. The typical policy prescriptions have been to undertake further liberalization and improve trade facilitation measures. In other cases, countries have been advised to upgrade their products and services, and moving up the value chain ladder. These suggestions have serious merits, but the distribution of value in GVCs is an important issue for many poor countries. In order to promote trade-led development, there is perhaps a need for thinking about the global governance of global value chains.

SANEM: What role do you think the emerging developing countries have in GVCs?

MAR: I believe the rising significance of developing countries in global trade is likely to exert a strong future influence on GVC development. Almost half of global merchandise exports and about 40 percent of world GDP are now attributable to developing countries. Trade between developing countries is also rising rapidly. The average annual growth of South–South trade since 2000 has been 17 percent as against the world trade growth rate of 10 percent. Trade with fast growing developing countries offers new opportunities for specialization, efficiency gains, investment and export market diversification. These countries offer new opportunities for forming regional supply chains. Studies have identified the potential for developing regional supply chains in sub-Saharan Africa (SSA) and South Asia in such sectors as textiles and clothing, leather and leather products and agro-processing. As much as 40 percent of intra-SSA trade takes place in manufacturing, indicating significant scope for developing regional production networks. Another important aspect of the rise of developing countries is that new markets and growth centers are likely to be in the region, helping many poorer developing and landlocked countries to connect through regional trade and integration processes. However, there are challenges as well. The nature of current trade patterns with emerging economies such that SSA and small states predominantly export primary commodities and import largely manufactured items. There is an apprehension about this nature of specialization within South-South trade.

SANEM: How would you see the role of upcoming trading arrangements such as Trans-Atlantic and Trans-Pacific in future GVC participation?

MAR: There are serious concerns about these upcoming mega trading blocs as they are associated with the three main GVC hubs: the USA, Europe and Asia. These super trading blocs have the

potential for trade and foreign investment diversion effects which could harm excluded countries. Furthermore, the rules and provisions negotiated under these new regional frameworks are likely to be more elaborate and encompassing, which capacity-constrained excluded countries will find it extremely difficult to comply with. This can compromise the scope of their participation in GVCs further. That is to say, unless appropriately designed, future GVC development may become more exclusive as opposed to inclusive.

SANEM: What kind of external support can LDCs and other low-income countries demand from development partners to facilitate GVC participation?

MAR: First of all, the Aid for Trade support initiative needs to be strengthened so that adequate and effective assistance is available to support trade-related productive capacity. The AfT support can be instrumental in enhanced regional integration and developing regional supply chains. The existing support mechanism needs to duly recognize the special and unique development challenges faced by small states and land-locked countries. While there is evidence of AfT being effective in promoting trade facilitation, its impact on productive capacity is not clear. I would also think that any new agreements reached by the major drivers of mega-regionals should be accompanied by a commensurate development package to mitigate any adverse consequences for capacity-constrained countries. In light of the on-going developments, there is a real need to enhance and strengthen the trade policy review process and trade surveillance mechanisms of the WTO so as to ensure that potential damaging trade effects are identified, quantified and appropriate measures are undertaken to support excluded countries. The current pattern of highly unequal distribution of value-added along GVCs is not conducive to the design of more inclusive approaches. The governance of GVCs including the relationships between lead firms and local suppliers is an area that needs to be better understood in order to support more inclusive GVC development.

SANEM: Thank you very much for your time.

MAR: You are most welcome.

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“BIMSTEC is a linkage and an essential platform for stimulating sub-regional co-operation”

INTERVIEW OF
AMBASSADOR SUMITH NAKANDALA

SANEM interviews First Secretary General of BIMSTEC, Ambassador Sumith Nakandala on the prospects of BIMSTEC. Ambassador Nakandala joined the Sri Lankan Foreign Services in 1988. He was the Ambassador of Sri Lanka to Nepal and Iraq. He also served as the Deputy High Commissioner at Ambassadorial level in Chennai and London. Along with his South Asian bilateral experience for more than 20 years, Ambassador Nakandala also dealt extensively with regional organizations such as SAARC, BIMSTEC, IORA, ACD, G-15, ESCAP, AMED, WIPO during his career. This interview is taken in April, 2016.

SANEM: How would you describe the context of BIMSTEC in comparison to other regional co-operations?

SN: BIMSTEC should be seen as an intermediary. For South Asia, regional cooperation and integration came a bit late. Regional cooperation in South Asia started in 1985, whereas in Southeast Asia, it came into operation in 1965. If you see the formation of

ASEAN as a regional entity, there were certain push factors that made the countries collaborate with each other. However, the idea of regional cooperation in Asia goes back to 1950s when Colombo plan was initiated which incorporated South-South cooperation as well as North-South cooperation. With that context, I would say, BIMSTEC is a linkage between South Asia and Southeast Asia and an essential platform for stimulating sub-regional cooperation as well as widening both regions together.

SANEM: How BIMSTEC is different from other regional integration agreements? How can South Asia and Southeast Asia benefit from regional co-operations like BIMSTEC?

SN: If you analyze the founding documents of BIMSTEC, you will see some certain differences. In BIMSTEC, we have 14 specific sectors of cooperation. Moreover, you need to understand the historical underpinnings on which the organization was established. The issue of trade liberalization in both SAARC and ASEAN started much later. However, the situation in Asia and the Pacific saw a rapid change in trade and investment dynamics over the decades. Within one year of BIMSTEC's establishment, the organization focused on trade liberalization and decided to go for an FTA. Since 2004, we have been trying to finalize the BIMSTEC FTA. Although we have certain difficulties at the official level, at the political level there is a clear mandate to implement the BIMSTEC FTA as early as possible. In the 3rd BIMSTEC summit held in Myanmar in March 2014, all the leaders subscribed to an urgent need to implement the BIMSTEC FTA.

BIMSTEC is different from other regional co-operations in this region due to its unique nature; it is a connecting bridge of cooperation between South Asia and Southeast Asia. Therefore, if we can successfully implement the FTA between BIMSTEC countries, it will lead towards market expansion and rapid regional development. Subsequently, SAARC, BIMSTEC, ASEAN

and other regional organizations will act as important building blocks for larger Asia-Pacific market and economic integration process.

SANEM: Tell us about the performance of different sectors. Which sectors are currently receiving priority and which sectors deserve priority?

SN: Trade liberalization is a sensitive issue as you have to protect your domestic producers up to a certain point to help them grow while thinking of integration process. Unfortunately, even the less controversial areas like agriculture, fisheries, culture or environment are lagging behind. Hence, there is an on-going thought to prioritize some of the sectors. There are few areas where we are doing well. For example, we have achieved much progress in counter terrorism and transnational crime. In 2009, the members signed the BIMSTEC convention on suppression of terrorism. In addition, we are ready to sign BIMSTEC convention on mutual legal assistance in criminal matters. We are going to have another meeting in Colombo very soon on combating the financing of terrorism. We have already finalized the transnational grid connectivity MoU which is ready for signature. Recently, ADB has finalized the BIMSTEC Transport Infrastructural Study (BTIS). Now we are looking forward to the working group meeting on transport activity. Last year we had an agriculture expert group meeting to identify scopes of common projects in the region. Now, priority should be given to trade and investment, transport connectivity, counter terrorism, cultural co-operation and climate change.

Regarding implementation of FTA in the region, it is very important to improve both hard infrastructure (like roads and highways) and soft-infrastructure (like digital connectivity). Furthermore, reduction of NTMs and NTBs will trigger trade and FDI in the region along with enhancement of other economic activities.

SANEM: How would you perceive the progress of BIMSTEC since its inception?

SN: Looking at the progress, it can be said that, BIMSTEC is not as emanating as SAARC or ASEAN. The major reason behind this is that, there was no secretariat for BIMSTEC till August, 2014 which has caused considerable delay in the progress. One of the most significant progresses in BIMSTEC is the establishment of the secretariat in Dhaka with assistance from Government of Bangladesh. Now, as we have a secretariat, the progress will be expedited. However, since it is a member driven organization, the secretariat's responsibilities must include providing suggestions, arranging meetings and facilitating other initiatives to attain more progress in near future.

SANEM: Although BIMSTEC is a unique opportunity for South Asian Countries to engage with Southeast Asian countries, in reality we do not see much progress. Why is that?

SN: One needs to understand the historical perspective. Even before the advent of colonization in the Bay of Bengal or Indian Ocean territories, there were inter-regional contacts, migrations and trade between these places. However, the scenario is different now as to what extent a nation will engage in a regional platform depends on the self-interest of that country. Apparently, most of the member states are more interested in bilateral arrangements. Bilateral arrangement will never negate the regional arrangement or vice-versa. Therefore, it is a unique opportunity for the members to work together. For example, India has a foreign policy posture like 'Look East and Act East', whereas Thailand has a foreign policy posture like 'Look West'. India has a unique opportunity to use BIMSTEC to implement their trade policies. However, it is up to the member states to utilize this unique opportunity to make collective progress. To bring prosperity in the region, it is essential to implement agreements in collaboration.

SANEM: What major challenges does BIMSTEC face?

SN: I think the most pressing challenge is accelerating the integration process. If the sectoral co-operation becomes the disciple outcome then it will also trigger the internal dynamics which will further mobilize the integration process. Now, whether we should embrace customs union or move step by step from Preferential Trade Arrangement to Economic and Monetary Union depends on further studies on the issue. We need to take the approach that suits our regional benefit most. We need to bring the members together and discuss the ways and means of enhanced regional co-operation, exchange of ideas, views, technologies, transfer, and methodologies so that sectoral co-operation can proceed. Thereafter, we can see what kind of sectoral co-operation we need in terms of trade creation, trade diversion and enhancement of investment. Therefore, one major challenge for BIMSTEC is whether it should concentrate on FTA or other regional arrangements as most of the countries are having bilateral FTA. In addition, if trade is not attractive enough, interregional investment will not rise.

SANEM: What is the way forward for BIMSTEC?

SN: In terms of way forward, the secretariat cannot provide the blue print as it should be the vision of the member states. Therefore, it is up to the member states to comprehend how they would like to see BIMSTEC in 2030. We are trying to prepare a vision document for the member states. As we are living in 21st century, we need to consider models of integration provided by Viner or Balassa carefully. Markets have changed; growth rates and other macroeconomic variables are now more routinely observed; uncertainty has increased. It is now evident that growth is important for integration process. If growth does not increase, markets will not expand which will further slowdown the rise of trade and investment. However, in my opinion, BIMSTEC has a great future; may be not in recent times, but in the long run.

SANEM: Thank you so much for your time.

SN: My pleasure.

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“...to develop harmonized standards for the region to facilitate intra-regional trade...”

INTERVIEW OF
DR. SYED HUMAYUN KABIR

SANEM interviews Dr. Syed Humayun Kabir on the prospects of SARSO. Dr. Syed Humayun Kabir has been serving as the Director General of South Asian Regional Standards Organization (SARSO) since its beginning in 2014, at its headquarter in Dhaka, Bangladesh. Dr. Kabir had served the Bangladesh Standards and Testing Institution (BSTI) since its formation in 1986. His expertise lies in core areas of national quality infrastructure including standardization, conformity assessment, accreditation, planning and development. This interview is taken in October, 2015.

SANEM: How does SARSO play its role in harmonizing standards among SAARC Member States for regional trade?

HK: Standardization is a key element to push up the capacities of export and competition, and a necessary process for ensuring effectiveness in any product or services. They are vital because

they provide a common language among the buyers and sellers from different economies. For this reason, the South Asian Regional Standards Organization (SARSO), a specialized body of SAARC, has been established to achieve and enhance coordination and co-operation among the SAARC Member States in the fields of standardization and conformity assessment and is aimed to develop harmonized standards for the region to facilitate intra-regional trade and to have access in the global market. Furthermore, SARSO's aims are to build capacity and provide technical assistance to the SAARC Member States in the fields of standards development, metrology and conformity assessment procedures. One of the objectives of SARSO is to promote and undertake harmonization of the national standards of the SAARC Member States with a view to removing the technical barriers to trade and facilitate flow of goods and services in the region. In doing so, SARSO is providing a platform to the stakeholders of SAARC Member States to harmonize their National Standards and ultimately develop SAARC Regional Standards on the products having impact on import and export within SAARC region.

SANEM: What is your assessment about the capacity of the National Standards Bodies for SAARC countries?

HK: The capacity of the National Standards organizations in SAARC Member States is proportional to their economy. Some Member States like India, Pakistan, Sri Lanka and Bangladesh have a good set up in development of National Standards and have affiliation with international partner organizations. On the other hand, Nepal, Bhutan and Afghanistan have limited capacity to develop National Standards; meanwhile Maldives has no official national standards body yet. Therefore, SARSO aims to develop capacity of less developed Member States to ensure active participation of all members. In addition, it is required to develop quality infrastructure along with competency of staff of standards organizations. We are working on these issues in a close coordination with each Member State.

SANEM: What progress has been achieved so far?

HK: After SARSO started its operation in 2014, there has been significant progress in the area of SAARC Regional Standards development process as all Sectoral Technical Committees (STCs) of SARSO organize meetings according to their schedules. Experts from SAARC Member States through STCs are involved in developing SAARC Regional Standards for about 35 products on priority basis and among them seven Standards have been finalized that include Refined sugar, Biscuits, Code of hygienic practices on Dairy products, Hessian, Cotton Twill and Cotton Drill. Furthermore, SARSO is making effort in bilateral co-operation with some International as well as regional counterparts. We hope, SARSO will sign MoUs with International Organizations for Standardization (ISO), International Electro technical Commission (IEC) etc. by the end of this year in order to adopt international practices at regional level. In addition, SARSO is also involved in different standardization activities such as capacity building, interactive sessions and many more.

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SANEM: How the standards are set?

HK: In SARSO, we have six Sectoral Technical Committees (STCs) i.e. Food and Agricultural products; Jute, Textile and Leather; Building materials; Electrical, Electronics, Telecom & IT; Chemical and Chemical products; and Conformity Assessment. The STCs are represented by technical experts from the SAARC Member States. These STCs are responsible to develop a draft SAARC Regional Standards through consensus among SAARC Member States. These draft Standards are finally recommended for endorsement from Technical Management Board and then from Governing Board of SARSO.

SANEM: What process do you follow to reduce the distance in national and regional level standards?

HK: As per the Agreement, SAARC Member States will take measures to harmonize the National Standards and participate actively in the development of those Standards that are related to the products and or processes having trade implications for them. Therefore, SAARC Regional Standards are developed by SARSO with equal participation of SAARC Member States. So, for the development process of SAARC Regional Standards, available national standards of SAARC Member States are taken into consideration and experts of each SAARC Member State are given equal opportunity to discuss during particular STC meeting. Each SAARC Member State is given enough time for internal consultation and for submission of their national inputs to develop consensus among SAARC Member States. Since SAARC regional Standards are developed with the abstention of sustained negative comments from SAARC Member States, therefore, I think, Member States will adopt SAARC Regional Standards as National Standards in order to facilitate trade.

SANEM: How do you prioritize between standards?

HK: Standards development work in SARSO started with initially 12 identified products by the Member States. During the standardization process, the concerned Sectoral Technical Committee identified another 25 items for the development of SAARC Regional Standards that have been traded within the SAARC Region. In addition, Member States are asked to give their list of top 10 products that have impact on import and export of the country, from which we will prioritize products where common standards are required.

SANEM: What are the major challenges that you face in case of setting standards?

HK: SARSO is a budding organization; it started its work from April 2014. The main concern in setting standards is the existing regulations and we are trying to solve this problem by consulting with regulators. For example, India has a huge regulatory body in

their food sector whereas such regulatory bodies are absent for the same sector in other countries. Therefore, we are arranging a meeting with regulators of this region to establish the importance of strong regulations and coordination in this sector. The problems of testing facility or inspection by only selected authority will be solved once the “SAARC Agreement on Multilateral Arrangement on Recognition of Conformity Assessment” is signed. Only Nepal has not signed it. This agreement contains list of laboratories of this region that all members must accept to obtain assurance certificates. Another agreement on implementation of regional standards is now under consideration.

SANEM: Which countries of this region play significant roles in setting standards?

HK: India, Pakistan, Bangladesh and Sri Lanka are the major economies as well as the major trade partners in this region. Therefore, their contribution in standards setting is more compared to other Member States. However, it does not mean that other Member States are not participating in the standard setting procedures.

SANEM: Whom do you mostly follow in setting standards? How the standards are updated?

HK: SAARC Regional Standards are mostly based on Member States’ National Standards. References are also made to international standards such as ISO, IEC, CODEX, ITU, IPPC etc. For the development process of SAARC Standards, ISO/IEC directives and guides are being followed. Standards are usually updated every five years and SARSO will also follow the international practices.

SANEM: How SARSO can work in collaboration with research organizations?

HK: We can work with research organizations like SANEM to get a clear picture of the real issues regarding trade facilitation and standardization of products. We believe that existing issues in borders can be addressed through joint academic researches. And SARSO can take initiatives to resolve these matters.

SANEM: Thank you very much for your time.

HK: The pleasure is mine. Hope to work with you in future.

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“...incentives given to domestic producers and exporters have to be balanced...”

INTERVIEW OF DR. ZAIDI SATTAR

Dr. Zaidi Sattar is the founder Chairman of Policy Research Institute (PRI). He started his career as a lecturer of Economics, University of Dhaka. Later he served civil service of Bangladesh in various positions. He joined the World Bank in 1996, where he served as Senior Economist of South Asia Region until his retirement in September 2007. Dr. Sattar has many publications in international and national journals and numerous papers presented on trade policy, private sector development and growth issues at national and international conferences. This interview is taken in June, 2016.

SANEM: What are the burning issues of trade policy in Bangladesh?

ZS: Trade policy has to be considered in two parts - external measures and internal policy reforms. The external part consists of initiatives regarding market access and export expansion, utilization of Bangladesh's LDC status, getting preferential treatment within the WTO rules, getting involved in bilateral or regional trade pacts and of course with the multilateral trading

system of the WTO. Our government is taking a lot of initiatives on the external front.

The burning issue in trade policy lies in the internal or domestic side of trade policy, namely, the trade protection regime which creates an imbalance of incentives provided to the exporters versus producers for the domestic market. There appears to be a lack of understanding about the distinction between trade policy and industrial policy, which are too integrated to be considered separate. It's a matter of concern to have industrial policy that is only focused on promoting X, Y, or Z sectors, rather than creating the right policy environment to improve productivity and competitiveness. Not to be ignored are the trade facilitation (trade infrastructure) components, the so-called supply-side constraints, that impede productivity growth and competitiveness of exports.

SANEM: How do you evaluate the contribution of trade policy so far in the success of Bangladesh's RMG sector?

ZS: RMG is a success story – no ifs or buts. The debate about the contribution of trade liberalization in making RMG sector a success is misplaced. RMG did not graduate out of an import substitution regime. Rather, it flourished within a free trade channel that was created from the very start. The Multi-fiber Arrangement (MFA) of 1974 opened up markets for apparels made in Bangladesh. The garments sector took advantage of this opportunity but this was not the only reason behind its success. During that time Bangladesh had a very high tariff regime for all kinds of imports, including inputs for the apparel industry (e.g. yarn, fabrics, and accessories). Policymakers of Bangladesh were quick to realize the need for ensuring world priced imported inputs (i.e. duty-free) for making our apparel exports competitive in the world market. Special Bonded Warehouse (SBW) system and the back-to-back LC system were the policy innovations. That's why countries like South Korea saw huge opportunity of producing apparels here. Without these policies, RMG wouldn't

have reached its present state. Later, there was an incentive to develop backward linkage industries, driven by RMG export success. Thanks to the adoption of right policies, the labor-intensive RMG industry was able to exploit Bangladesh's comparative advantage based on low cost labor.

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SANEM: What is the shortcoming in trade policy that causes non-RMG exports to lag far behind the export success of RMG sector?

ZS: We are exporting a wide range of products, such as footwear, leather products, agro-processed products, tableware, but in relatively small volume. The reason behind slow growth of non-RMG exports lies in the inherent conflict within our trade policy of providing high protection to import substituting industries (ISI). Our policies of protecting domestic ISI and promoting exports are in conflict. Why? Today, ISIs catering to the domestic market are highly profitable not because of efficiency but high protective tariffs maintained through strong producer lobbies. In the past 20 years, tariffs on all kind of inputs (basic raw materials, intermediate and capital goods), have trended downward. But those on consumer goods produced domestically have remained high. Moreover, tariff escalation ratio has been too high. Whereas input tariffs are bunched within 1-10 percent, output tariffs on domestically produced consumer goods are at 87 percent+! No other developing country has such a wide dispersion between input and output tariffs. What we are not realizing is that incentive given to both groups, domestic producers and exporters, have to be balanced.

That is not the case in Bangladesh. Firm level surveys reveal that, in case of goods produced and sold in the domestic market, average profits as percentage of sales revenue is 15 to 20 percent. On the other hand, in the competitive export market, profit margins are very small for exporters. Net profits as a percentage of sales are about 5 percent - 7 percent for exporters. In addition,

exporters must maintain international standards of quality. Political lobbies don't work in export as goods must be sold at a given price in the international market. Firms that produce for the domestic market and also export face a choice: to export or sell in the domestic market? If profitability is the determinant, the answer is obvious. This gives rise to the classic case of anti-export bias. Nominal Protection Rate (NPR) for most consumer goods produced locally is 87 percent, compared to zero protection for exports. Since RMG is 100 percent export oriented, they do not face the choice just mentioned. Footwear, agro-processed products, and the like, all face the choice. The incentive for good exporters lies in generating profits from large volume in limitless export markets.

The only way to reduce or eliminate anti-export bias is to scale down protection levels which happen to be too high compared to Bangladesh's comparators. However, political lobby is the potential barrier to decrease protection level. There is a theory of Professor Mancur Olson which says that, the larger the group, the weaker its capacity for collective action. Small groups can form association and lobby their own interest. Consumers, who actually pay the protection tax, are too large to organize. ISIs are organized in many chambers of different associations. Pre-budget consultations are organized with them, not with consumers.

SANEM: What other issues should we contemplate?

ZS: We must divert attention from our highly but artificially profitable domestic market. I'm using the term "artificially profitable" because domestic producers see higher profits from domestic sales but that is because of high protective tariffs. Reduce those tariffs and profits will fall or disappear. Then they will find exports relatively more profitable. There are four types of duties-duty on consumer goods, intermediate goods, capital goods and basic raw materials. Duties on intermediate goods, capital goods and basic raw materials have been declining over time. We should

ask the question: how come duties on consumer goods are not coming down? How long should ISIs (e.g. biscuit manufacturers) continue to receive protection? And consumers continue to pay the protection tax?

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SANEM: What are the prospects and challenges for Bangladesh in international trade?

ZS: In the next 10 years our competitiveness will be defined by low cost labor. Wages will rise slowly, like in China. China is less competitive now and has a large domestic market. They have grown 10-12 percent in the last 30 years, have pulled 500 million people out of poverty, on the back of export growth. India has a vast market of 1.2 billion people, and a market of 2.5 trillion dollars. Both countries are still harping on increasing export. It doesn't take long to realize that domestic market is not enough to create necessary jobs. Exporters must be given opportunity so that they can export in high volumes and create jobs. We have to encourage FDI – as we cannot exploit our export potential without it. In today's market, we have to be technologically sound - not just for bringing capital, but also for seizing external markets for our products and integrating with the global market.

SANEM: Can Bangladesh embark in International market using “made in Bangladesh” brand?

ZS: All the top global buyers are using “Made in Bangladesh” products. Buyers in Europe and North America are attracted by global brands (e.g. Levis, Gap, Calvin Klein) regardless of where the apparel is made. Vietnam, our major competitor, is aggressively capturing the USA market and will soon gain further advantage once the Trans Pacific Partnership (TPP) is launched. To be more competitive, our quality must improve, and we must ensure compliance of standards related to workplace safety. Our goal must be to capture more of the global market in RMG and non-RMG exports. The size of world market is 65-70 trillion

dollars; 35 trillion dollars in the markets of Europe and America. We should be breaking into these markets with more labor-intensive products in order to create good jobs at home. Presently, some 50 percent of manufacturing output and employment are in export industries. Our exports should be employment intensive because our comparative advantage lies in labor intensive export.

SANEM: What would be your suggestions about our current tariff regime?

ZS: We need to significantly restructure our tariffs. The extreme position is a low and uniform tariff, which isn't feasible. We should not increase the number of tariff slabs, and there should be one tariff rate in each of the HS-4 digit tariff heading because each heading represents similar product. PRI research has shown that Supplementary duty (SD) is predominantly a protective instrument. It's not yielding revenue, except from automobile imports. Since they are applied mainly to protect domestic consumer goods industries, lowering or eliminating SD would yield higher revenue through some import penetration. A modest degree of tariff liberalization on consumer goods would not hurt our balance of payments but ease the pressure on the exchange rate at a time when Bangladesh Bank is accumulating foreign exchange reserves and fighting appreciation pressure.

SANEM: Thank you so much for your time.

ZS: My pleasure.

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“...political tension is the sole factor slowing down the SAARC integration process...”

INTERVIEW OF DR. PRABIR DE

Dr. Prabir De is a Professor at the Research and Information System for Developing Countries (RIS). He is also the Coordinator of ASEAN-India Centre (AIC) at RIS. He works in the field of international economics and has research interests in international trade and development. He is an Adjunct Fellow of the Institute of Chinese Studies, New Delhi and SANEM. He was a Visiting Fellow of the Asian Development Bank Institute (ADBI), Tokyo; and Visiting Senior Fellow of United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), Bangkok. He has been conducting policy research for the Government of India and several international organisations. He was also a visiting faculty member of the Calcutta University. Professor De has a Ph.D. in Economics from the Jadavpur University, Calcutta. He has contributed several research papers in international journals and written books on trade and development. He is also the Editor of South Asia Economic Journal, published by Sage. This interview is taken in October, 2016.

SANEM: The 19th SAARC Summit has been postponed, how will this affect the future of regional integration in South Asia?

PD: Following India, Afghanistan, Bangladesh and Bhutan have also pulled out from the coming SAARC Summit. Most likely, the 19th SAARC Summit will be postponed. Terrorism and trade cannot go together. So, India had to withdraw from this year's SAARC Summit. No doubt SAARC integration process will slow down further. This will heavily affect LDCs who depend on SAARC, and Pakistan, in particular. South Asian integration is moving towards East, which is happening already. So, smaller economies, since they are most vulnerable, will have to reorient their integration process with BBIN, BIMSTEC, ASEAN, BCIM, etc. China will formally get into this new emerging scenario where Bay of Bengal becomes a pivot.

SANEM: To what extent we have met the expectations of SAARC?

PD: There is no denying that SAARC regional integration process has gained momentum with implementation of SAFTA. However, the current political relation between India and Pakistan and Bangladesh and Pakistan is not very much conducive to SAARC integration process. To a large extent, smaller economies are yet to be optimally benefitted from the SAARC integration process. Regional integration does not work well when we have political conflicts, shallow integration arrangements and lack of regional cohesiveness. South Asia is a unique case in point, where despite having all ingredients, regional economic integration has never picked up the required pace. Countries like Bangladesh, India and Sri Lanka have been trying their best to give it a life. But, a similar move from other member countries is not always forthcoming. Nevertheless, SAARC has to move from FTA-based integration arrangement to a comprehensive arrangement, where member countries also benefit from non-economic areas, particularly cultural and political issues. FTAs are the case of the past.

Comprehensive cooperation is the new trend among developing countries. Implementation is very important, merely signing of the FTA is not enough. FTAs are not fully implemented in South Asia. In implementing FTAs, we also need to keep in mind that regional integration can only be successful if it unleashes new competition that lowers prices, introduces new technology and gains productivity. Has SAFTA helped Bangladesh to improve its overall productivity? One must investigate all these, at least for academic purpose. FTAs also give rise to negative effects, including rise in poverty and inequality. Has our region made any concerted effort to deal with such social issues? Perhaps, not yet. Coordinated efforts are necessary to realize sustainable growth and development in South Asia.

SANEM: How important is political will in implementing regional integration in South Asia?

PD: Political tension is not uncommon in South Asia. It has started in various forms soon after the region got fragmented in 1947. Political cooperation has been the weak link of the relation between India and Pakistan or between Bangladesh and Pakistan. India and Pakistan had wars in the past. It is the fact that political tension is the sole factor slowing down the SAARC integration process. As a result, sub-regional arrangements like BBIN has picked up the pace. Now, a group of business people and diplomats are even advocating pursuing BIM (Bangladesh, India and Myanmar) subregional cooperation. Until the political conflict is resolved permanently, which I doubt, SAARC integration process will continue to follow the second or third best path. The incentive to intensify political dialogue is also not there.

SANEM: How can India play a pro-active role in steering regional integration?

PD: South Asia has been deeply and structurally influenced by India. South Asian countries acknowledge it. Given the diversity of

the region, India's active involvement in SAARC is crucial in order to achieve higher pace of regional integration. India has been proactive in the integration process. India is the first country in SAARC to help facilitate LDCs export to Indian market by removing duties in most of the items before the stipulated deadline. Apart from trade, India has been playing a key role in education, energy, health and physical connectivity areas. We need India in developing value chains in the region. India's private sector, technology and market size are important assets for creation of regional value chains and also global value chains from South Asia. This is yet to happen. Services trade is an area where engagement of India and other South Asian countries would be 'win-win' for all the members of South Asia. Services trade offers complementarities. South Asian countries have to identify the barriers to trade in selected services and remove them gradually. For example, signing MRAs in education may help South Asian countries to recognize the degrees or diplomas offered by them, thereby leading to generate higher trade in educational services. South Asian countries have to facilitate FDIs, operate a business friendly environment, play an active role in regional connectivity, to mention a few. Afghanistan represents an important gateway for South Asia to Central Asia and vice versa. The opening up of Afghanistan represents a further scope of strengthening SAARC. A regional MVA would strengthen the SAARC integration where participation and support of all SAARC member countries is essential. South Asian countries shall also strengthen their integration with Southeast and East Asian countries. However, all depend on political peace and tranquility.

SANEM: How can the recent bilateral cooperation between Bangladesh and India and also between India and Sri Lanka play roles in uplifting the regional integration process in the region?

PD: Bilateral cooperation is the building block for regional cooperation and integration. This is very important. However, we need to understand that too many bilateral integration

arrangements in a given region sometimes become counterproductive. Trade diversion happens and countries ultimately lose interest. We have to minimize the costs so that regional integration process gets an identity and strong participation of stakeholders. Sustainability of regional integration is a must. India and Sri Lanka are currently negotiating the ECTA. Sri Lanka is also negotiating an FTA with Singapore. These bilateral FTAs not necessarily will strengthen the regional integration process, provided they have complementarities. Ultimately we need to see how much value addition these bilateral agreements do in terms of generating political, social and economic wealth. There are several non-performing or low utilising bilateral FTAs like Sri Lanka – Pakistan FTA, which do not facilitate regional integration in a great way. On the other hand, a stronger bilateral cooperation between India and Bangladesh or Sri Lanka and India is dividend-creating. We need to support these agreements and implement the commitments. Trade facilitation by means of harmonisation of standards and customs procedures and cooperation in transport infrastructure is very important, which can be done by bilateral and/or regional level. So, bilateral agreements must cover trade facilitation issues.

SANEM: What kind of measures should be taken to solve problems of NTMs and infrastructure inadequacy in South Asia?

PD: Original intentions of these measures were to facilitate national trade and integrate the economy with global market. Given the varied structure of the South Asian countries, economic, social and political gains from regional market could facilitate the countries global integration much faster in an inclusive manner. So far, the regional integration process in South Asia has been driven with little support from formal institutional arrangements. Market forces have not played a greater role so far. Regional integration, if done correctly, can work. So what South Asian countries might have to do is to adopt an agenda for building common markets in selective sectors gradually. For example, a

South Asian Customs Union may remove the problems of NTMs for member countries. SANEM, under the leadership of Dr. Selim Raihan, has done some seminal works on this area. Similarly, regional currency swap, regional bond market, regional single window in customs, regional standards, regional open sky in aviation, regional health facility, etc. are needed to take forward the SAARC integration process to the next stage. Ultimately, these would help facilitate South Asian Economic Union (SAEU). The bottom line is SAARC has to take initiatives to transform itself from a mere FTA-driven zone into an Economic Community, which could enhance the free movement of goods, services, investment, capital and skilled labour, and could contribute to the formation of a single market as well as a single production base. We also need to engage the dialogue partners in a constructive manner. ASEAN has several important lessons to offer to SAARC. We must learn from ASEAN. South Asia needs a stronger Secretariat, which can effectively drive the integration process. Finally, success would depend on how strongly South Asia is getting integrated with the world economy.

SANEM: Thank you very much.

PD: You are welcome.

PART III

LABOR MARKET

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From ‘good-enough’ job to ‘decent’ job: inclusive growth in transition in Bangladesh

S E L I M R A I H A N

Though there are many views on ‘inclusive growth’, the key consensus is that ‘inclusive growth’ is a growth process which reduces poverty and inequality, promotes ‘decent’ jobs, reduces social exclusion and promotes economic and social cohesion. One of the major pillars of inclusive growth is ‘decent job’, where ‘decent’ job is referred to a productive job for women and men in conditions of freedom, equality, security and human dignity. It also involves opportunities for work that deliver a fair income; provides security in the workplace and social protection for workers and their families (ILO, 2011).

Bangladesh economy had been growing at a rate over 5 percent over the last two decades. There are arguments that such growth in Bangladesh has been largely ‘inclusive’ in nature and Bangladesh has been successful in generating ‘good’ jobs by improving farm-nonfarm, rural-urban, inter-industry and inter-sectoral labor mobility at a relatively low skill level that had poverty reducing and social cohesion enhancing effects (Hossain et al, 2012). Such claims demand careful examination as it is not

clear how 'good' job is defined in the context of Bangladesh economy. It is equally important to understand what needs to be done in the transition towards a regime of 'decent' jobs, a critical factor for the promotion of 'inclusive growth' in the country.

'Decent' job should be regarded as a dynamic and progressive phenomenon. There could be three stages for moving towards 'decent' job. The first stage is the 'good-enough' job which shows the transition from 'no job' to 'job' or from 'unpaid family job' to 'a kind of paid-job'. The second stage is the 'good' job which shows the transition from 'good-enough' job to job with better return, formal job security and enhanced workers' rights. The third stage is the 'decent' job, which is the transition from 'good' job to a state of productive employment in compliance with agreed international standards of working environment and workers' rights.

The economic growth process in Bangladesh, over the past two decades, has been in a position to generate employment in agriculture, rural non-farm sector, urban informal sector, and the urban formal sector, and mostly in the ready-made garment (RMG) sector. Apart from the RMG, employment in all other sectors has largely been for the male, mostly informal in type. The nature of these jobs has been largely 'good-enough'. Rise in employment in agriculture, both in the crop and non-crop sectors, has been associated with agricultural growth and rise in agricultural real wage, with virtually no progress towards 'good' job. Rises in employment in the rural non-farm and urban informal sectors have also happened without much progress towards the creation of 'good' jobs in these sectors. For the male, such expansion has helped moving out from unemployment or unpaid family labor to 'good-enough' jobs. For the female, employment in the RMG sector, in most cases, is a manifestation of the transition from no labor force participation or unpaid family jobs to paid-jobs. Such paid-jobs in most of the RMG factories are

largely 'good-enough' in nature. Thus, the RMG sector has been able to generate very large 'good enough' jobs, which however has also contributed to the reduction in poverty and generating growth in Bangladesh.

While discussing 'inclusive growth', it is equally important to understand the quality of structural transformation that has happened in the process of economic growth in Bangladesh. Though the share of industrial sector in GDP has increased from around 20 percent in the early 1990s to around 30 percent by late 2000s, with a simultaneous reduction in the share of agricultural sector, there is still a long way to go for the creation of large scale 'good' jobs in the urban sectors. This will require both quantitative and qualitative changes in the current pattern of structural transformation of the economy. The economy is yet to have a strong and diversified manufacturing base, which requires supporting macroeconomic, trade and industrial policies and removal of policy-induced and supply-side constraints. In the near future, for the promotion of inclusive growth, the challenge of the Bangladesh economy, as far as the quality of employment is concerned, is how to transit from the current state of 'good-enough' jobs to large scale 'good' jobs. In the medium to long term, the prospect of inclusive growth in Bangladesh would depend on how the growth momentum would be able to generate successful transition towards a state of 'decent' job.

Reference:

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Do education and skill development affect the transition from good-enough job to decent job?

SELIM RAIHAN AND MAHTAB UDDIN

Majority of studies conducted on ‘decent job’ primarily focused on the demand side issues. However, there is a need to explore the supply side issues as the composition of labor supply itself can be a determining factor in the status of ‘decent job’. This article follows the definitions of ‘good-enough job’, ‘good job’ and ‘decent job’ from Raihan (2014) where the author argues that there could be three stages for moving towards ‘decent job’. The first stage is the ‘good-enough job’ which shows the transition from no job to job or from unpaid family job to paid-job. The second stage is the ‘good job’ which shows the transition from ‘good-enough job’ to job with better return, formal job security and enhanced workers’ rights. The third stage is the ‘decent job’, which is the transition from ‘good job’ to a state of productive employment in compliance with agreed international standards of working environment and workers’ rights.

We use the Labor Force Survey data of 2010 (LFS 2010) for Bangladesh and the available indicators in that survey, and classify the jobs as per the above mentioned definitions. As the data and

questions in the questionnaire of LFS 2010 are different for wage employed and self-employed, we consider different indicators for defining quality of jobs for wage employed and self-employed. The data from LFS 2010 suggests that while the 'decent job' appears to be only 10.1 percent, 'good job' and 'good enough job' constitute 36.4 percent and 53.5 percent respectively of total wage employed. For self-employed, 'decent job' comprises 9.2 percent, while 'good job' and 'good-enough job' constitute 39.2 percent and 51.6 percent respectively.

To see the impacts of education and training on the quality of job that a person may avail, after controlling for other factors, we use multinomial logistic regression involving three categories of aforementioned job with 'good-enough job' as the base category.

In the regression involving the wage-employed, we find that education and training has highly significant impact on moving from 'good-enough job' to 'good job' and 'decent job'. Though, primary education is found to be insignificant in changing the quality of job, persons with secondary and higher secondary education have almost 20 percent higher probability to be in a 'decent job' compared to persons with no-education. The impact of education is found to be the highest for university education: being educated in a university increases the probability to be in a 'good job' by 23 percent while it increases the probability to be in a 'decent job' by 26 percent. Moreover, education of the household head has a statistically significant and positive trans-generational impact if the household head has more than primary education. The results also indicate that, training helps to move people up from 'good-enough job' to 'good job' or 'decent job'. Compared to persons without training, a trained worker has 8 percent higher probability to be in a 'good job' and 4 percent higher probability to be in a 'decent job'. To understand how education and training shifts the quality of job we also calculate the relative risk ratio (RRR) of the corresponding variables for each category compared

to the base category. We find that RRR is significant for all other levels of education except primary education. For a person with a secondary education relative to no-education, the relative risk (RR) for 'decent job' compared to 'good-enough job' would increase by a factor of 27.4. The RR for 'decent job' compared to 'good-enough job' would increase by factors of 39.1 and 284.3 for attainments of higher secondary and university education respectively compared to the no-education category. These results indicate the strong capability of higher education in lifting up the quality of job as opposed to no-education. Although small in magnitude, training does have a highly significant impact. For persons with training in comparison to persons without training, the RR for 'decent job' compared to 'good-enough job' increases by a factor of 2.2 holding all other variables constant.

For the self-employed, the regression results show that education levels higher than primary education have statistically significant impact over moving from 'good-enough job' to 'good job' or 'decent job'. Persons with secondary or higher secondary education have more than 10 percent higher probability of having a 'good job' compared to no-education category. Having a university degree provides 4 percent higher probability to be employed in a 'decent job' compared to no-education category. However, impacts of training is found to be insignificant in cases of such transitions. A possible explanation is the very low percentage of people (only 4.6 percent) in the self-employed participating in any training program in the LFS 2010 data. In terms of RRR, having primary education compared to no-education does not improve the Relative Risk (RR) for 'decent job' compared to 'good-enough job'. However, having secondary or higher secondary education compared to no education increases the RR for 'decent job' compared to 'good-enough job' by more than a factor of 1.6. With a university education compared to no-education the RR for 'decent job' compared to the 'good-enough job' increases by a factor of 1.7 holding all other things constant.

Reference:

Raihan, S. 2014. "From 'Good-enough' Job to 'Decent' Job: Inclusive Growth in Transition in Bangladesh." Thinking Aloud. Vol. I, No. 4. Dhaka.

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What determines the switching between farm and non-farm employments in rural Bangladesh?

SELIM RAIHAN AND
SYER TAZIM HAQUE

Though agriculture has been the major employment generating sector, the rural economy in Bangladesh has been seeing a transition over the past two decades. While unpaid family work in the rural area is still highly farm-based, paid employment is experiencing a transition, shifting more towards the non-farm activities. Recent labor force surveys reveal some strong growth of rural non-farm economy. According to one estimate, the rural non-farm sector accounts for about 40 percent of rural employment, and in recent years has grown by more than 5 percent per annum.

There have been several studies on the rural non-farm sector employment in Bangladesh. Some of these studies used econometric models and identified the factors behind the non-farm employment. However, one of the major limitations of these studies is that they couldn't take into account a longer time horizon, and control for endogeneity and heterogeneity bias. We have explored the factors determining the transition and dynamics of the rural non-farm employment in Bangladesh during 1995 and 2010 with the help of a constructed pseudo panel database using

data from four rounds of Household Income and Expenditure Survey (HIES). Our study uses the methodology developed by Raihan (2014) (Raihan, S. 2014. "An alternative methodology for constructing pseudo panel data") for the construction of the pseudo panel database. Data of rural households for each survey year is divided into 100 cohorts where the cohorts are defined based on percentile ranking of monthly consumption expenditure of households. As there are 100 cohorts in each survey year, four rounds of data give us 400 observations in total.

Simple observations of the changes over time in the farm and non-farm employments of the cohorts during 1995 and 2010 tells us that the average non-farm employments across all cohorts in 1995, 2000, 2005 and 2010 were 40 percent, 36 percent, 44 percent and 47 percent respectively. Looking into specific cohorts for the last decade shows us the shift more profoundly. In 2000, average non-farm employment for the 1st, 25th, 50th and 75th percentile cohorts were 37.1 percent, 20.23 percent, 32.40 percent and 30.0 percent respectively, which rose to 48.45 percent, 56.41 percent, 45.53 percent and 49.5 percent respectively by 2010.

For the econometric analysis of the key determinants of the rural non-farm employment, using our pseudo panel data, we have used a two-stage instrumental variable regression method. At the first stage, we have run a regression of the factors affecting the relative farm income (ratio of farm income to off-farm income). We have used age of household head and average years of schooling of household head as the instruments. At the second stage, we have used the predicted value of the relative farm income as the explanatory variable along with other explanatory variables in the regression equation where the dependent variable is the relative non-farm participation (the ratio of the number of adults participating in the rural non-farm activities to the number of adults participating in the rural farm activities within any percentile cohort). This dependent variable shows the switch

between rural non-farm and farm employments. Other explanatory variables are average age of adults within any percentile cohort, average years of schooling of adults within any percentile cohort, household size, dependency ratio, size of land holding, the labor force participation (LFP) rate of adults, and share of international remittances in household incomes. All variables are expressed in natural logarithms.

We have run fixed effect model for the regression. Average age of the adults has a negative significant effect and average education of the adults has a positive significant effect on the relative non-farm participation, suggesting younger and educated adults tend to participate more in the non-farm activities than in farm activities. A 10 percent decline in the average age of adults and a 10 percent increase in the average years of schooling of the adults lead to the rise in the relative non-farm participation by 7.2 percent and 2.7 percent respectively. Dependency ratio and household size do not have any significant effects on the relative non-farm participation. Relative farm income has a push effect: a 10 percent fall in the relative farm income leads to the rise in relative non-farm participation by 2.3 percent. Land holding also has a push effect: a 10 percent fall in the average size of landholding leads to the rise in relative non-farm participation by 0.6 percent. The rural LFP rate has a positive effect: a 10 percent rise in rural LFP rate leads to the rise in relative non-farm participation by 6.2 percent. International remittance doesn't seem to have any significant effect on relative non-farm participation. We have also computed the z-scores of the variables in the regression, and it is found that as far as the employment in the rural non-farm sector relative to the farm sector is concerned, the largest pull effect comes from the rise in education of the adults, and the largest push effect stems from the fall in the relative farm income.

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Why are some households different from others when it comes to female labor force participation?

SELIM RAIHAN AND ISRAT JAHAN

Integrating the contribution of the female into the economy has grown to be a necessity in equity and efficiency considerations for any economy. It suggests that the labor market participation of female workforce improves their relative economic position, and also stimulates the efficiency and development potentials of the economy. Yet the relatively low level of female labor force participation (LFP) rate in Bangladesh is in conflict with the equity and efficiency goals. Nevertheless, the female LFP in Bangladesh has increased over the recent two decades: the rate has reached at 36 percent in 2010, where it was only 14 percent in 1990. However, in the process of understanding the factors determining female LFP, a fundamental question can be raised: why are some households different from others when it comes to female LFP? To be very precise, the question is: To what extent differences in household characteristics matter in determining participation of a female household member in the labor market? In order to address this question, we have conducted an exercise using the data from the 2010 Household Income and Expenditure Survey (HIES) in Bangladesh. All the households are classified as whether they have at least one adult female member participating in the labor market or not. A set of variables are considered as

explanatory variables, which include age of the household head, years of education of the household head, gender of household head, religion, ratio of the number of male earners to the household size, household having members aged under 5, household having members aged over 65, average years of schooling of female adults in the household, poverty status, rural-urban status, per capita land ownership, share of income from social protection in household's total expenditure, share of remittance in household's total income, share of farm income in household's total income, and six divisional dummies. We have run a probit regression model and calculated the marginal effects from the probit regression.

The marginal effects of the probit regression results suggest that household with higher aged head has a higher probability of female LFP: a year rise in the household head's age increases the probability of household's female LFP by 0.1 percentage points. Education of the household head doesn't seem to have any significant impact on the household's female LFP. Being a male headed household reduces the probability of household's female LFP by 15.8 percentage points and being a Muslim household reduces the probability of female LFP by 10.6 percentage points. The higher the proportion of male earners in the household the lower is the probability of female LFP: one percentage point increase in such ratio decreases the probability of female LFP by 17.9 percentage points. Households with young children and elderly members have lower probabilities of female LFP: household with children aged lower than five reduces such probability by 4.3 percentage points, and household with elderly members aged above 65 reduces such probability by 3.6 percentage points. The average of the years of schooling of the adult female members of the household has a positive effect: a rise in the average years of schooling by one year leads to the rise in such probability by 0.3 percentage points. Poor household has a higher probability of female LFP: being a poor household increases such probability by 4.2 percentage points. Compared to

the rural household, the urban household has a higher probability of female LFP: being an urban household increases such probability by 2.2 percentage points. Households with higher landholding have lower probability of female LFP: a 10 percent increase in per capita landholding by household reduces the probability of female LFP by 8.9 percentage points. Social protection has a positive impact on female LFP: a 10 percent rise in the household's social protection coverage increases the probability of household' female LFP by 2.9 percentage points. Remittance has a negative impact on female LFP: a 10 percent rise in remittance share in total household's income reduces the probability of female LFP by 13.5 percentage points. Dependency on farm income reduces the probability of female LFP: a 10 percent rise in the ratio of farm income to total income of the household reduces the probability of female LFP by 2.3 percentage points. From the HIES 2010 data, Rangpur division, among all seven divisions, has the highest proportion of households with at least one adult female member participating in the labor market. We have, therefore, considered Rangpur as the base for the division dummy in the regression. Compared to Rangpur, the probability of female LFP reduces by 2.3, 6.2, 2.6, and 3.9 percentage points respectively if households are from Chittagong, Barishal, Khulna and Rajshahi divisions (for Dhaka and Sylhet, there are no differential impacts compared to Rangpur).

What do we learn from this exercise? Some households are different from others in 'letting' their adult female members participate in the labor market. The story tells us to what extent females' labor market participations are 'constrained' by their household characteristics. Therefore, economic policies, targeted at enhancing female LFP in Bangladesh, need to take into account such 'constraints' generating from differences in household characteristics.

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Does rise in per capita income in South Asia promote female labor force participation?

SELIM RAIHAN, SAYEMA HAQUE
BIDISHA AND NAFIZ IFTEAKHAR

The relationship between female labor force participation (LFP) and per capita income is far from straightforward with cross sectional evidences often differing from individual country experiences. The relationship is believed to support a U-shaped pattern with the participation of females in the labor market tends to be higher in poor economies but eventually falls when countries goes towards the transition of middle- income countries. Finally, with the course of development, female LFP tends to rise. This U-shaped relationship is, however, not robust to individual countries and different estimation methodologies. From an empirical point of view, it is somewhat widely argued that, with the course of development, weakening of social constraints along with expansion in education, women's participation in the labor market tends to improve.

From a global perspective, evidences show that, despite the gradual rise in female LFP over the decades, there still exists gender gap in labor market participation. However, this gap is much larger in South Asia than in other regions of the world, excepting those of Middle Eastern and North African countries,

where average male LFP rate (LFPR) being 84 percent as opposed to the corresponding figure of 33 percent for female. Over time, with increased education, higher income and lesser stigmatization, there has been an overall increase in female labor market participation in South Asia, supporting a positive association between economic development and women's involvement in labor market. In terms of individual countries, the relationship between income/GDP and LFPR is mixed.

Table 62.1: Female labor force participation rate (% of female population ages 15+)

Country	1990	2000	2012
Bangladesh	14.00	24.63	39.40
Bhutan	49.40	53.30	66.40
India	34.80	33.90	28.80
Maldives	20.20	37.50	55.90
Nepal	79.80	81.70	79.90
Pakistan	13.40	16.00	24.40
Sri Lanka	36.40	37.30	35.00

Source: ILO

The trend in Female LFPR in South Asian countries, as presented in Table 62.1, reflect that, over time there has been an increase in female LFPR for Bangladesh: from only 14.0 percent in 1990 to 39.4 percent in 2012. Similar trend can also be seen for Maldives as the country has experienced a consistent increase from a mere 20.2 percent in 1990 to 55.6 percent in 2012. As for Pakistan, an increase in female LFPR has also been seen in recent years. Nepal has experienced consistently high female LFPR over time whereas Bhutanese females' LFPR has undergone an impressive rise over time. In terms of economic progress, all of these countries have experienced increases in their per capita GDP over the years. Therefore, economic development can be said to have been translated into greater participation of female in the labor market. This positive association between per capita GDP and female LFPR is however not observed for countries like India and Sri

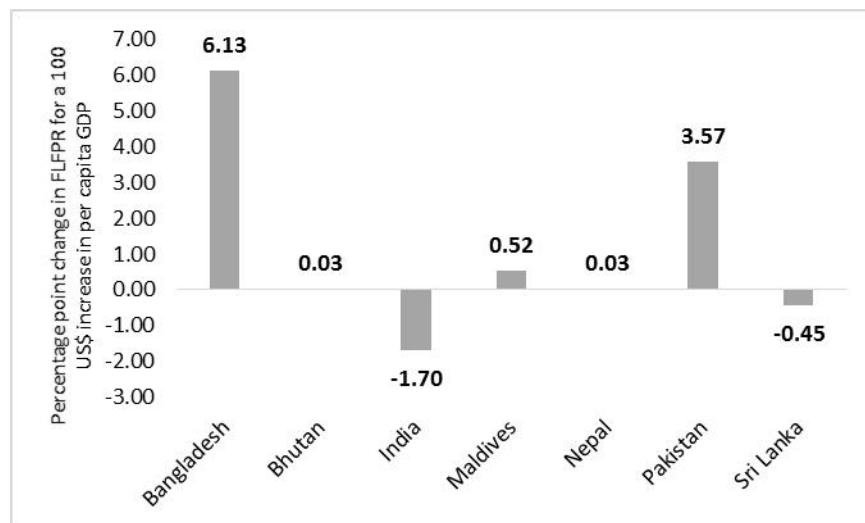
Lanka, and in spite of the impressive growth performance of these two countries, we do not observe any reflection in corresponding labor market performance of females. The inspiring performance of Bangladesh and Maldives in female LFP on one hand and the lagging experience of India and Sri Lanka on the other, therefore leads to a puzzling scenario for South Asia. The 'rise in per capita GDP' inducing effect of female LFP is not that clear cut which necessitates further investigation into the matter.

In order to understand the effect of economic development on labor market performance of females in South Asia in greater detail, we have estimated a cross country panel regression with 180 countries for the period of 1990 to 2013 with female LFP rate (FLFPR) being the dependent variable. Here, real per capita GDP entered into the estimation as the key explanatory variable with a number of macro variables which are likely to influence FLFP e.g. initial value of FLFPR, under five mortality rate, remittance as a percentage of GDP, industry sector's value addition as a percentage of GDP, public spending in education as percentage of total government expenditure, fertility rate, dummy variable for religion (1 if religion is Islam and 0 otherwise) etc. The data are mostly taken from the World Development Indicator. With a view to exploring the FLFPR and per capita GDP linkage for South Asian countries, we have interacted per capita GDP with South Asian country dummies (Bangladesh, India, Pakistan, Sri Lanka, Bhutan, Nepal and Maldives).

As expected, initial value of FLFPR has come out as highly significant with positive sign in the fixed effect regression model. Our estimate suggests that, industrialization also have a positive and statistically significant effect on FLFPR and a percentage increase in industry-GDP ratio would raise FLFPR by 0.07 percentage points. Remittance-GDP ratio, on the other hand has a significant yet negative effect on the dependent variable. In case of human capital variables, reduction in under five mortality is found

to have a highly significant and positive effect on females' participation in the labor market whereas greater government spending in education has a negative effect. Given the expected negative effect of reproductive responsibilities on women's work, the coefficient of 'fertility rate' has come out as significant with negative sign. According to our estimates, holding other factors constant, countries with majority of the people being Muslim are found to have significantly lower FLFPR.

Figure 62.1: Percentage point change in female labor force participation rate for a 100 US\$ increase in per capita GDP



Source: Regression results

The highly significant and positive coefficient estimate of real per capita GDP reveals that, in the cross-country panel setting, a 100 US\$ increase in real per capita GDP will raise FLFPR by 0.03 percentage points. A close look at the interaction dummies suggest interesting findings regarding the relationship between FLFPR and the rise in per capita GDP of South Asian countries (Figure 62.1). While for Nepal and Bhutan the positive and significant associations between per capita GDP and FLFPR, derived from the

cross-country panel regression, are maintained, the per capita GDPs have found to have statistically significant different implications for FLFPR of other South Asian countries. In contexts of Bangladesh, Pakistan and Maldives, per capita GDPs have significantly higher impacts: a 100 US\$ increase in per capita GDP of Bangladesh, for example is expected to raise FLFPR by 6.13 percentage points, the magnitude of such impact for Pakistan is 3.57 percentage points and 0.52 in the case of Maldives. The net impact is significant but negative for countries like India and Sri Lanka - which is consistent to the descriptive mentioned earlier. According to our estimation results, a 100 US\$ increase in per capita GDP for India is likely to result in a 1.7 percentage points reduction in FLFPR where the corresponding figure for Sri Lanka is 0.44 percentage points.

This contrasting set of estimation results for South Asia therefore reflects a mirror image of the simple descriptive, indicating a puzzling scenario while rise in per capita GDPs in South Asia have led to different outcomes for different countries. This also calls for a careful examination of the characteristics of the economic growth processes in these countries. In particular, concerns are very much on the rise for India and Sri Lanka despite their impressive growth performances in recent decades.

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Dynamics of employment elasticities in Bangladesh

SELIM RAIHAN AND
SYER TAZIM HAQUE

This article presents calculated sectoral employment elasticities for Bangladesh, which to the best of our knowledge, have been rather unexplored, especially for the time horizon that we have considered (from 1995-96 to 2009-10). Employment elasticity of output is the percentage change in employment divided by the percentage change in output. Employment data have been taken from the Labor Force Survey (LFS) reports of the years 1995-96, 1999-2000, 2005-06 and 2009-10. LFS report 1995-96 is considered as the base for sectoral disaggregation as it has the least number of sectors compared to other years. The sectors have been classified into 10 sectors following the classification of 1995-96 report. These sectors are Agriculture, Forestry & Fishing; Mining & Quarrying; Manufacturing; Electricity, Gas & Water; Construction; Trade, Hotel & Restaurant; Transportation, Storage & Communication; Financial & Business Service; Community & Personal Service; and Household Sector & Not Adequately Defined. Sectoral level real GDP data (base price 1995-96) have been taken from different statistical yearbooks, where the 86 sectors were merged into the aforementioned 10 sectors. As we have four data points, we calculated three respective elasticities for changes from 1995-96 to 1999-2000, from 1999-2000 to 2005-06

and finally from 2005-06 to 2009-10. The findings of this exercise are presented in line with the idea depicted in Table 63.1.

Table 63.1: Employment elasticity, output growth and productivity relationship

Employment elasticity	Positive output growth	Negative output growth
$\varepsilon < 0$	(-) Employment growth (+) Productivity growth	(+) Employment growth (-) Productivity growth
$0 \leq \varepsilon \leq 1$	(+) Employment growth (+) Productivity growth	(-) Employment growth (-) Productivity growth
$\varepsilon > 1$	(+) Employment growth (-) Productivity growth	(-) Employment growth (+) Productivity growth

Source: Kaspos (2005)

The real GDP data for the 10 sectors under consideration show that outputs of all the sectors experienced positive growth which confines our discussion to the left column of Table 63.1 only. The productivity of labor merely shows output per worker, and the relationship can be summarized as, for a given level of increase in output, if employment experiences a positive growth it must be met by an equal and opposite decrease in labor productivity. The upper left box of Table 63.1 contains sectors with positive output growth but negative employment elasticities indicating negative employment growth; hence these sectors have positive productivity growth. The middle left box represents the ideal scenario as it contains the sectors with positive output growth and positive employment elasticities between 0 and 1; thus these sectors experience both employment growth and productivity gains. The lower left box represents the scenario where employment elasticities are greater than one, indicating positive employment growth with negative productivity growth.

Table 63.2 shows the calculated elasticity values and distribution of sectors in each of the three boxes for the three data periods we have. From 1995-96 to 1999-2000 no sectors observed negative

elasticity and only two sectors, namely Mining & Quarrying; and Electricity, Gas & Water had elasticity values greater than 1. Other eight sectors experienced positive employment growth but their elasticity values varied between 0 and 1. Among these sectors, Agriculture, Forestry & Fishing; Transportation, Storage & Communication; and Financial & Business Service sectors seem to be observing higher employment elasticity values, and hence can be indicated as more employment intensive, and thus, from the analogy of the productivity, output and employment relations, they correspond to lower productivity. A different scenario is observed in the second period (from 1999-2000 to 2005-06). The sectors that observed elasticity values greater than 1 in the first period (Mining & Quarrying; and Electricity, Gas & Water) now have negative elasticity values. Agriculture, Forestry & Fishing; Manufacturing; Construction; Trade, Hotel & Restaurant; Community & Personal Service; and Household Sector remained in the same category but the magnitude of elasticity values changed dramatically for all but Agriculture, Forestry & Fishing. Elasticity for Manufacturing; Construction; Trade, Hotel & Restaurant; and Household Sector became greater than 0.5, and, in contrast, that of Community & Personal Service reduced from 0.56 to 0.12. Transportation, Storage & Communication; and Financial & Business Service experienced elasticity values greater than 1 during this period. During 2005-06 and 2009-10 only Financial & Business Service was found to have a negative employment elasticity. Mining & Quarrying; Construction; and Electricity, Gas & Water experienced elasticity values greater than 1, indicating, during this period, these sectors observed productivity falls. Agriculture, Forestry & Fishing; Manufacturing; Community & Personal Service; and Household Sector remained in the same category as before but all these four sectors had employment elasticity values greater than 0.5.

Table 63.2: Point employment elasticity of 10 sectors

Employment elasticity	1995-96 to 1999-2000	1999-00 to 2005-06	2005-06 to 2009-10
$\varepsilon < 0$		MNQ (-1.2) EGW (-0.8)	FBS (-0.15)
$0 \leq \varepsilon \leq 1$	AFF (0.71) MNF (0.21) CON (0.21) THR (0.12) TSC (0.51) FBS (0.88) CPS (0.56) HNA (0.30)	AFF (0.81) MNF (0.75) CON (0.62) THR (0.57) CPS (0.12) HNA (0.54)	AFF (0.71) MNF (0.86) THR (0.24) TSC (0.04) CPS (0.64) HNA (0.56)
$\varepsilon > 1$	MNQ (32.1) EGW (2.41)	TSC (1.17) FBS (2.47)	MNQ (2.77) EGW (2.59) CON (2.68)

Note: AFF = Agriculture, Forestry & Fishing; MNQ = Mining & Quarrying; MNF = Manufacturing; EGW = Electricity, Gas & Water; CON = Construction; THR = Trade, Hotel & Restaurant; TSC = Transportation, Storage & Communication; FBS = Financial & Business Service; CPS = Community & Personal Service; HNA = Household Sector & Not Adequately Defined. In bracket is the elasticity value
Source: Authors' calculation

So far, we provided aggregated elasticity value for the Manufacturing sector. With available data only for the two periods (from 1999-00 to 2005-06 and from 2005-06 to 2009-10) we subcategorized the Manufacturing sector into 12 sub-sectors and calculated their employment elasticity values in the same manner. These sub-sectors are Food and Beverage; Tobacco; Textile; Wearing Apparel; Leather and Footwear; Wood and Wood Products; Printing and Publishing; Chemical, Rubber and Plastic; Metal and Mineral Products; Electrical Machinery; and Other Manufacturing. The results are given in Table 63. 3.

Table 63.3: Point elasticity of 12 disaggregated manufacturing sectors

Employment elasticity	1999-00 to 2005-06	2005-06 to 2009-10
$\varepsilon < 0$	LEF (-2.87) ELM (-0.61)	LEF (-1.59) WWP (-0.16) PPP (-2.44) CRP (-0.91) MMP (-0.89) ELM (-1.24) OMN (-1.24)
$0 \leq \varepsilon \leq 1$	FAB (0.19) TEX (0.15) OMN (0.42)	TOB (0.49) TEX (0.06)
$\varepsilon > 1$	TOB (4.09) WAP (1.63) WWP (4.79) PPP (1.96)* CRP (1.76) MMP (2.67)	FAB (2.04) WAP (3.49)

Note: FAB = Food and Beverage; TOB = Tobacco; TEX = Textile; WAP = Wearing Apparel; LEF = Leather and Footwear; WWP = Wood and Wood Products; PPP = Printing and Publishing; CRP = Chemical, Rubber and Plastic; MMP = Metal and Mineral Products; ELM = Electrical Machinery; OMN = Other Manufacturing

Note: In bracket is the elasticity value.

* Sector with negative output growth

Unlike the first part of our analysis, Printing and Publishing had a negative output growth which means this sector would concern the right column of Table 63.1. During 1999-2000 and 2005-2006 both output and employment for Printing and Publishing sector experienced negative growth, and elasticity was greater than 1, hence this sector belonged to the bottom right box of Table 63.1 reflecting a productivity growth. However, during 2005-06 and 2009-10, output growth of Printing and Publishing was negative but its employment growth was positive with the employment elasticity value less than 1, putting this sector into the upper right box of Table 63.1 which shows a negative productivity growth. Looking into the other sectors, during 1999-2000 and 2005-2006, seven among the rest of the eleven sectors showed elasticity values greater than 1. Food and Beverage; Textile; and Other Manufacturing belonged to the middle box of Table 63.3, and they

had elasticity values between 0 and 0.5. Only Leather and Footwear; and Electrical Machinery had negative employment elasticity values. The scenario changed quite drastically during 2005-06 and 2009-10, when seven of the eleven sectors had negative employment elasticity values, and elasticity for Tobacco fell from greater than 1 to less than 0.5.

Employment elasticity of the Textile sector fell but the sector remained in the same category as before, whereas Food and Beverage experienced a rise in the employment elasticity moving from middle box to the lower box. The performance in the Wearing Apparel sector was at the peak as the sector experienced employment elasticity of greater than 1 in both the period under discussion. The aforementioned results point to some important structural changes in the overall economy as well as in the manufacturing sector in Bangladesh.

Reference

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What makes cross-country differences in informal employment?

S E L I M R A I H A N

There are considerable debates about the role of the informal sector in an economy. The argument is that the expansion of the informal sector obstructs the economic growth in the developed as well as in the developing countries as the informal sector may create a barrier to increased productivity and economic growth. However, there are some contrasting views seeing informal sector as a solution to poverty reduction and economic growth by absorbing labor which could remain unemployed. Informal economy is mostly defined depending on the employment structure in an economy. Informal jobs mostly fall outside the domain of the government's labor market regulations. Moreover, informal workers do not function with the types of legal protections concerning the number of working hours, health and safety or with the types of mandated benefits that would normally be a feature of formal employment opportunities.

For many countries, the informal sector constitutes a significant share of their economies. ILO provides a database on the share of informal employment in total employment for 40 countries covering the time period mostly during the second half of 2000s

(<http://laborsta.ilo.org>). We also added data of 17 more countries to the ILO database for the similar time period from the country specific documents. Out of these 57 countries 2 are OECD countries (Mexico and Turkey), 11 are Least Developed Countries (LDCs) and the rest 44 are developing countries. As shown in Table 64.1., among these 57 countries, the top country in terms of informal employment share in total employment appears to be Bangladesh with a staggering figure of 88.31 percent, followed by Nepal with 86.4 percent. In fact, 4 South Asian countries are in the top 10 list. Among the bottom 10 countries, Serbia appears to have the lowest share of informal employment in total employment (6 percent).

Table 64.1: Top and bottom 10 countries in terms of share of informal employment in total employment during the second half of 2000s

Top 10 countries			Bottom 10 countries		
Rank	Country	%	Rank	Country	%
1	Bangladesh	88.31	57	Serbia	6.07
2	Nepal	86.40	56	Russian Federation	8.60
3	India	83.51	55	Macedonia, FYR	12.60
4	Mali	81.81	54	Moldova	15.98
5	Pakistan	78.40	53	Armenia	19.77
6	Tanzania	76.20	52	Romania	22.00
7	Bolivia	75.14	51	Azerbaijan	26.50
8	Guatemala	75.10	50	Turkey	30.60
9	Honduras	73.86	49	Syria	30.70
10	Madagascar	73.63	48	China	32.60

Data source: ILO and Country data

In order to understand the factors affecting differences among countries in terms of the share of informal employment in total employment, we have run a cross-country regression with the database for those aforementioned 57 countries. The first explanatory variable we have considered is the per capita GDP to see whether countries with higher per capita income tend to have a lower share of informal employment. The second explanatory variable is the share of working age population in the total

population, to see whether countries with a higher proportion of working age population tend to have a lower share of informal employment. The third explanatory variable is the ratio of trade to GDP, to see how trade openness affect the share of informal employment. The fourth explanatory variable is the average years of schooling, to see how the level of education affect the share of informal employment. Finally, the fifth explanatory variable is the share of self-employed people in total employment, to see whether self-employment is associated with informal employment.

The regression results suggest that all five explanatory variables are statistically significant. Per capita GDP has a strong negative association with the share of informal employment in total employment, as a 1 percent rise in the per capita GDP is associated with around 6 percentage points drop in the share of informal employment in total employment. The rise in the share of working age population in the total population by 1 percentage point is associated with 0.63 percentage points fall in the share of informal employment. Trade openness also has a negative association, as 1 percentage point rise in the ratio of trade to GDP is associated with 0.15 percentage points fall in the share of informal employment. Rise in the level of education is negatively associated with the informal employment, as the rise in average years of schooling by 1 year is associated with the fall in the share of informal employment by 3.2 percentage points. However, self-employment appears to be positively associated with informal employment, as 1 percentage point rise in the share of self-employment in total employment is associated with the rise in the share of informal employment in total employment by 0.73 percentage points.

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What determines the participation in the urban informal sector in Bangladesh?

SELIM RAIHAN, NAFIZ IFTEAKHAR
AND MIR TANZIM NUR ANGKUR

The informal sector accounts for a large part of the economy in a developing country like Bangladesh in terms of both output and employment. Like many developing countries, the urban formal sector in Bangladesh is not able to provide enough job opportunities for its growing labor force, a majority part of which migrate from the rural areas. Thus, the growing labor force could easily find themselves in the urban informal sector for their livelihood. There are several factors which affect participation in the urban informal sector. This study makes a systemic attempt to understand those factors. Studies differ in defining informality based on certain characteristics ranging from ease of entry, low resource-base, family-based ownership, being small-scale and labor-intensive, unregulated but competitive, and informal processes of acquiring skills. In this study, we used data from the Labor Force Survey (LFS) of 2005 and 2010 for Bangladesh. The LFS provides a limited amount of information which can be used to define informality.

We have defined informality in this study by using three dimensions. The first dimension relates to the production unit or enterprise in which the workers work. More specifically, if the production units or enterprises are not registered with the concerned authority then we consider those units falling under the informal sector. The second dimension relates to the existence of contract between the workers and the employers. If there is no contract between workers and employers, either in written or verbal form, then we classify those workers as belonging to the informal sector. In addition to the above two criteria for the wage employed workers, if workers do not get any kind of pay slips or any kind of documents for their wages then they are considered to be involved in the informal sector. It appears that, according to the LFS 2005 and 2010, the share of urban informal employment in total urban employment fell in 2010 to 71 percent compared to 82 percent in 2005.

In order to conduct a systemic analysis of the factors affecting participation in the urban informal sector, we have constructed a pooled data base of urban employment from the Labor Force Survey data of 2005 and 2010. We model the participation decision of a person for which the dependent variable is a binary variable indicating '1' if the person is employed in the urban informal sector. Individual and family characteristics of the particular person may influence the decision of entering in the urban informal sector such as years of schooling, age and family dependency ratio, which have been included in the regression model. We have also taken the land holding (in decimal) as a proxy of the financial condition of the person (as the LFS data doesn't provide any overall income data). Employment characteristics or types may affect the decision to enter in the urban informal sector. As per the LFS data, an employed person may be a wage employee, self-employed or an unpaid worker. It would be interesting to see whether there is any association between participation in the urban informal sector and the types of employment which is analyzed by introducing the wage

employee dummy and the self-employed dummy in the regression model (where base category is considered to be the unpaid worker). To control for the industry fixed effect we have also added industry dummies.

We have estimated probit regression, since the dependent variable is a binary outcome variable. This implies that regression analysis would try to explain the effect of different factors captured by explanatory variables described earlier, on the estimated probability of any person's participation in urban informal sector. More specifically, we have applied a pooled model within the framework of non-linear probability specification by introducing a time dummy for the year 2010 and the interaction terms of this time dummy with each of the explanatory variables as described earlier. This allows us to examine whether there are any changes in effects of those explanatory variables in 2010 compared to those of 2005.

Unobserved heterogeneity (i.e., individual's ability) can result in the inconsistency of the estimated parameters, therefore fixed effect estimator is preferred to control for the unobserved heterogeneity. However, LFS data, as such, doesn't permit applying fixed effect estimator as it requires a panel data. In order to counter this problem, in this study, we have developed a pseudo panel by constructing the cohorts using the "industry types" of the urban area. Cohorts are the sub groups of the sample, and in our case, the employed persons from a particular industry type are taken as a cohort of that industry type. That means, for each industry type we will have a cohort. Though there are several industry types in the Labor Force Survey of 2010 and 2005, we have reclassified (i.e. merged comparable industry types and recoded where necessary) the industry types so that data of 2005 and 2010 can be comparable. In this case, for the fixed effect panel estimation, the dependent variable would be the percentage of informal sector employment in total employment for a particular

industry code in the urban area. This can be termed as informal intensity of urban industry. For explanatory variables, we take averages for each cohort. Through this process, we are able to construct a pseudo panel where each of the observation represents a particular industry type.

From the 'probit' regression, using the pooled data, it is confirmed that the level of education significantly affects the probability of participating in the urban informal sector, with lower level of education being employed more in the urban informal sector. In 2005, a rise in 'years of schooling' by one year would mean lowering the probability of participating in the urban informal sector on an average by 0.017. The coefficient of time dummy confirmed that compared to that of 2005, in 2010, the impact of education on the probability of participating in the urban informal sector declined. Fixed effect estimator, using the pseudo panel data, also suggests that education has negative significant impact on the informal intensity of a particular industry code, which implies higher average level of education would likely to reduce the urban informal sector participation. The coefficient implies that a rise in the average years of schooling of persons employed in a particular industry code by one year would decrease the informal intensity of that industry code on an average by 0.046 percentage points.

From the 'probit' regression, using the pooled data, it is found that individuals with higher family dependency ratio were less likely to be associated with the urban informal sector in 2005, though in 2010, this relationship reversed with statistical significance. The estimated coefficient of dependency ratio by fixed effect estimator, using the pseudo panel data, is positive and significant, implying an increase in the informal intensity of any industry is associated with the rise in average family dependency ratio of the workers employed in that industry.

From the probit regression it is clear that if landholding increases by 1 decimal, the probability of informal sector participation would reduce by 0.003, and between 2005 and 2010 no change has been observed in this respect. Fixed effect estimator, using the pseudo panel data, provides the similar result as far as the sign of the coefficient of family landholding is concerned.

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From the probit regression, compared to the base category of 'unpaid labor', for both 'wage-employed' and 'self-employed', the probability of participating in the urban informal sector is much lower with statistical significance, and in 2010, these differences significantly enlarged. However, with the fixed effect estimator, using the pseudo panel data, only the coefficient of 'wage-employed' is significant and negative, and the magnitude of the coefficient can be interpreted as 1 percentage point rise in the proportion of 'wage labor' in a particular industry would decrease the informal intensity of that industry by 0.52 percentage point.

From the probit regression it is observed that, in 2005, female were more likely to participate in the urban informal sector as compared to their male counterparts; though in 2010 such differences declined. However, under the fixed effect estimator, using the pseudo panel data, 'female labor intensity' of any industry doesn't appear to have any statistically significant effect on the informal intensity of the industry. It has been also confirmed by both types of regression that elderly people are more likely to be associated with the urban informal sector.

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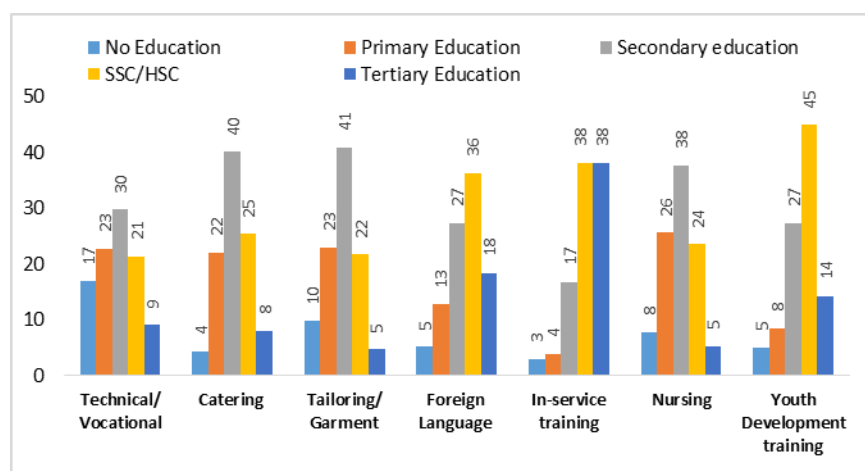
What type of training matters most for labor force participation decision in Bangladesh?

I S R A T J A H A N

Education and skill development of labor are considered as important tools on influencing the labor market in Bangladesh. With a labor force participation (LFP) rate of 59.3 percent in 2010, there is still a large proportion of working age population who remain 'unpaid' or 'unemployed' in Bangladesh. Using the Labor Force Survey data of 2010 (LFS 2010), the study analyzes the distinctive impacts of different types of training on the choice of employment categories in Bangladesh. Training programs are classified into eight sub groups (as provided in the LFS 2010): technical/vocational, catering, tailoring/garments, foreign language, in-service training, nursing, youth development, and others. The population who has received any type of training is only 4.8 percent among the working-age population, whereas it is 6.23 percent among the total labor force. While all types of training are highly male dominated; nursing (52.36 percent are female) and tailoring/garments (45.68 percent are female) are exceptions.

The level of education of the trained population differs for different type of training (Figure 66.1). Where technical/vocational, catering, tailoring and nursing training are mostly received by the people with secondary level of education, youth development and foreign language training are mostly received by people with SSC or HSC level of education. However, in-service trainings are mostly received by highly educated ones (38 percent with SSC/HSC and other 38 percent with tertiary level of education).

Figure 66.1: Educational distribution of total trained population (%)

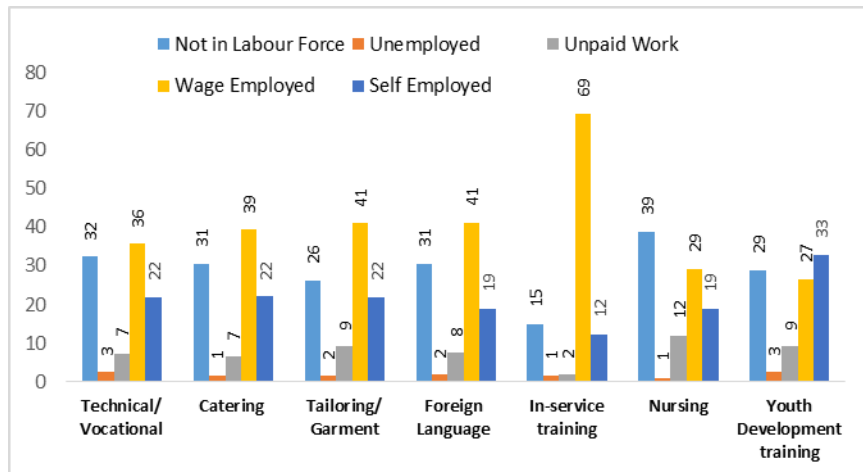


Data source: LFS 2010

To observe the employment distribution of the people with different types of training, the total workforce (age greater than 15) has been categorized into four categories: (i) not in labor force, (ii) unemployed/unpaid, (iii) wage employed, and (iv) self-employed. The category “unpaid” has been defined if the person worked at least one hour in the reference period (other than household work) without pay or profit. Such work commonly includes those of husking paddy, rearing poultry and livestock, vegetable gardening etc. Among the total trained population

almost half (44.99 percent) of them are ‘wage employed’, another 24.86 percent, 22.22 percent and 7.92 percent are respectively ‘not in the labor force’, ‘self-employed’ and ‘unemployed/unpaid’.

Figure 66.2: Employment distribution of total trained population (%)



Data source: LFS 2010

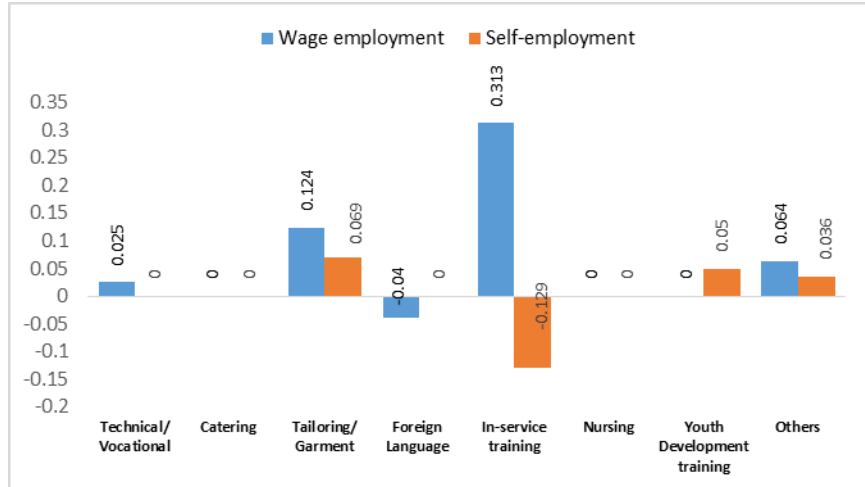
The percentage distribution among different employment categories varies for different types of training (Figure 66.2). High prevalence of ‘wage employment’ is observed among the people receiving any kind of training, but more specifically for trainings related to in-service, tailoring and foreign language. Interestingly, a high percentage of people (39 percent) got nursing training, but left out from the labor force. Not surprisingly, there is a high percentage of people with training on youth development working as ‘self-employed’. To determine the impact of training on employment, different multinomial logit regressions have been conducted. In all models, the dependent variable is a categorical variable with four categories (not in labor force, unpaid/unemployed, wage employed, self-employed). Given that an individual chooses among all the alternatives available in the labor market, the multinomial logit model is the most appropriate

one to understand the factors affecting the choice of participation in the labor market. In addition to the variables of interest (different types of training), other factors have also been controlled in the models, such as the age and squared-age of the individual, gender, marital status, dummies for different levels of education (with no-education as the base), gender of household head, household size, per capita land holding, regional dummy (urban vs. rural) and number of dependent members in the household.

The first set of models considers firstly 'not in labor force' and then 'unpaid/unemployed' as the base category to examine the overall impact of *any type of training*. Changing the base shows the relative risk ratios (RRRs) of being in any category rather than being in the base category. The higher the RRR, the more important the variable is to influence the choice. Results show that the probability of being 'wage employed' is 13.6 percentage points higher, and the probability of being 'self-employed' is 2.5 percentage points lower for the individuals with any type of training, considering other factors remaining unchanged. Moreover, the RRRs also show the greater impact of training on 'wage employment' than on 'self-employment' irrespective to the change in base from 'not in labor force' to 'unpaid/unemployed'.

The second set of models divide trainings into sub groups and compare the RRRs and the marginal effects of each training on 'wage and self-employment'. Figure 66.3 presents the estimated marginal effects. Regression results show that the probability of being 'wage employed' is higher if an adult receives specifically technical/vocational or tailoring or in-service training. On the other hand, the marginal effect of being 'self-employed' is higher if an adult receives tailoring or youth development training. However, language training lowers the probability of being 'wage employed', and in-service training lowers the probability of being 'self-employed'.

Figure 66.3: Marginal effects of trainings



Source: Multinomial logit model regression results

Comparing the significant RRRs of the trainings from the multinomial logit models, study finds that technical/vocational, tailoring, foreign language and in-service trainings encourage people to take part more in ‘wage employment’ as against of being ‘not in labor force’ or ‘unpaid/unemployed’. However, youth development training encourages people to be in ‘self-employment’ rather than being ‘not in labor force’.

The third set of models do the same exercises like the previous ones with different sets of samples to observe the impact of trainings on those specific groups. For example, tailoring, in-service and nursing training give females greater RRRs for being ‘wage employed’ rather than being ‘not in labor force’ or being ‘unpaid/unemployed’. Tailoring and in-service training also encourage females being ‘self-employed’ rather than being ‘not the labor force’ or ‘unpaid/unemployed’. However, the impacts of such trainings are greater for females being in the ‘wage employment’ than in the ‘self-employment’. On the other hand, lifting males from ‘unemployed/unpaid’ work, the RRR is greater than 1 for

technical (1.36), catering (1.97), tailoring (1.86) and in-service (3.84) training.

Models for different samples of adults having different level of education have been estimated to observe the impacts of trainings on the adults with that particular level of education. Results conclude that compared to 'not in the labor force': (i) with no education, but trainings on tailoring, in-service and youth development can bring adults to 'wage employment'; (ii) with primary education, trainings on tailoring and in-service encourage adults to take part in 'wage employment'; (iii) with secondary education, trainings on in-service, tailoring and technical/vocational encourage adults to be in 'wage employment', (iv) with SSC/HSC level of education, trainings on tailoring and in-service lead adults to 'wage employment', and (v) with tertiary level of education, only in-service training promotes adults to 'wage employment'. Furthermore, trainings on tailoring and youth development, with any level of education, also encourage 'self-employment' rather than 'not being in the labor force'.

To divert the huge proportion of unpaid and unemployed workers (23.28 percent unpaid and 4.5 percent unemployed in the labor force) to either 'wage or self-employment', education as well as training have significant importance. Though, in-service training has higher RRR for all types of education, tailoring with no education, or primary or secondary level of education can also bring adults to the 'wage employment' rather than being 'unpaid/unemployed'. Providing technical training to 'unpaid/unemployed' worker with secondary level of education may also help bringing them to 'wage employment'. On the other hand, tailoring training to the 'unpaid/unemployed' with no/primary/secondary education can bring them to 'self-employment'.

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Social protection and labor market in Bangladesh

BAZLUL HAQUE KHONDKER

Bangladesh spends about 2.2 percent of her GDP in more than 90 social protection programs per annum. Social protection (or social safety nets) programs were initiated in early 1980 mainly responding to the disaster needs and providing support to the rural poor. During the last three decades, numbers of social safety net (SSN) programs have proliferated; broadened the coverage of households; recorded higher incidence of leakages; and experienced greater inefficiencies in beneficiary targeting. According to the available statistics (i.e. HIES 2005 and 2010), in 2010 the coverage of household with one social safety net program was 34.4 percent; in 2005 coverage was 21 percent. Leakages of SSN funds increased from 44 percent in 2005 to 60 percent in 2010. System's capacity to target beneficiaries efficiently has worsened with 64 percent of the poor not having access to any Social safety nets (for detailed analyses on these aspects please refer to the 'Bangladesh Poverty Assessment: Assessing a Decade of Progress in Reducing Poverty, 2000-2010' Bangladesh Development Series Paper No. 31, The World Bank Dhaka Office, June 2013).

A closer review suggests that the major SSN schemes in Bangladesh have evolved over time to address lifecycle risks. More specifically, some 65 percent of the SSNs are seeking to address life-cycle risks – a better approach to design SSN program to mitigate risks of citizens. Still there are significant gaps. The coverage of children aged between 0 and 4 years is very small. Only a small proportion of people with disabilities and elderly persons receive some form of tax-financed benefit.

There are 10 specific SSN schemes for people of working age. The major programs in this category could be divided into two main types: workfare schemes and programs for women. There are as many as 8 workfare schemes of which the two largest programs are the Food for Work Program (FWP) and the Employment Generation Program for the Poor (EGPP). The aim of these programs is to help create employment in rural areas during agricultural slack period to create jobs for those who might need them, especially women. The work typically involves support for building rural infrastructure. These programs use up considerable resources - 14 percent of total spending on SSN. Several concerns have emerged about the effectiveness of the use of these resources. The other set of schemes for working age people are directed towards women. The largest is the Widows' Allowance, which reaches just over a million women; although around 23 percent among them is over 62 years of age.

What strikes is the lopsided outlook completely ignoring the risks of the urban working age and urban formal workers. An inadequate SSN system means that families with children also have to provide care and support to those elderly people and people with disabilities who are in need of assistance. In effect, this is an informal tax on working families that limits their ability to invest in productive activities while reducing the support they can give to their own children. It is particularly challenging for poor families. In other developing countries, old age pensions and

disability benefits paid at reasonable levels are able to reduce demands on families with children, with significant benefits for working families.

Currently, the labor market is dominated by informal employment. Bangladesh is aspiring to become a middle-income country by 2021. The strategy to realize this aspiration is to promote modern manufacturing and organized services activities. As the economy grows along with the expanding share of modern manufacturing and organized services both in GDP and employment, the requirements from the SSN system will change dramatically. “The approach to delivering social benefits will therefore need to broaden from the concept of a safety net to a more inclusive concept of a Social Security strategy that is aligned to the life cycle and incorporates formal employment policies as well as social insurance schemes” (Draft NSSS paper, April 2015).

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Social protection and female labor force participation in Bangladesh: Insights from econometric exercises

SELIM RAIHAN AND ISRAT JAHAN

Evidence suggests that female labor force participation (LFP) reduces the likelihood of household poverty; and resources in females' hands have a range of positive outcomes for human capital and capabilities within the household. Thus there is a strong rationale for ensuring females' participation in the economy's growth process. Though the economic growth process over the past two decades has been able to increase the rate of female LFP in Bangladesh, the rate is still very low. Experiences from different countries suggest that social protection (SP) programs can be very useful in increasing female LFP. The SP programs in Bangladesh primarily aim to reduce poverty; and majority of these programs target vulnerable groups and some are related to labor market participation. During 2005 and 2010, there had been a significant rise in the allocation for SP in Bangladesh.

We have examined the impact of SP programs on female LFP in Bangladesh. We have constructed a pseudo panel, using the 2005 and 2010 household income and expenditure survey (HIES) data,

to see the effects of SP on female LFP for different cohorts. Our study follows the methodology developed by Raihan (2014) (Raihan, S. 2004. "An alternative methodology for constructing pseudo panel data"), where cohorts are defined on the basis of percentile ranking of monthly consumption expenditure of households. HIES data for 2005 and 2010 are divided into 100 cohorts separately based on the percentile ranking, and therefore there are 200 observations in total. Two different SP variables are constructed: the *participation* variable is the percentage of adult female participating in any SP programs for any cohort, and the *coverage* variable is the percentage share of income from SP in total income of any cohort. Our constructed panel data shows that the 1st, 25th, 50th and 75th percentiles had, in 2005, respectively 28.8 percent, 15.6 percent, 12.5 percent and 10.6 percent female LFP; and in 2010 the corresponding figures were 25.7 percent, 19.3 percent, 18.6 percent and 13.5 percent respectively. Actually, out of 100 percentile cohorts, 83 experienced rise in the rate of female LFP during 2005 and 2010. In the case of SP, as high as 83 percentile cohorts experienced rise in the *participation* and 55 percentile cohorts experienced rise in the *coverage*. In the case of SP *participation*, 1st, 25th, 50th and 75th percentiles had, in 2005, respectively 4.5 percent, 2 percent, 3.6 percent and 2.5 percent *participation*, and in 2010 the corresponding figures were 8 percent, 3.7 percent, 4.4 percent and 2.5 percent respectively. In the case of SP *coverage*, 1st, 25th, 50th and 75th percentiles had, in 2005, respectively 2.19 percent, 0.60 percent, 0.32 percent and 0.16 percent *coverage*, and in 2010 the corresponding figures were 2.93 percent, 0.51 percent, 0.45 percent and 0.11 percent respectively.

The fixed effect model results from pseudo panel regression show that, among the control variables, female LFP is positively affected by higher female education and female LFP also increases if the household is female headed. A 10 percent rise in average years of schooling of the female adults in the cohorts leads to 8.5 percent rise in the female LFP and being a female headed household

increases female LFP by 1.2 percent. Also, female LFP rises if average size of the household falls - a 10 percent fall in the average household size leads to 10.04 percent rise in female LFP.

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In the case of SP, female LFP doesn't appear to be affected by the *participation* variable. However, female LFP increases with the rise in the *coverage* variable. A 10 percent rise in the *coverage* leads to 0.82 percent rise in the female LFP. Our study also shows that the ratio of female LFP to male LFP increases among cohorts and across time with the rise in the *coverage*. A 10 percent rise in the *coverage* leads to 0.9 percent rise in the ratio of female LFP to male LFP. It means more female participate in the labor force relative to male if social protection has the higher *coverage* in the household income. These results suggest that SP programs contributed significantly to the rise in female LFP in Bangladesh during 2005 and 2010. The policy implication which emerges from the analysis is that the coverage of SP should be expanded which can take care of child and old age dependency within the household and this will help female participate more in the labor market.

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" ..job creation for growth to be inclusive.."

INTERVIEW OF DR. SHER VERICK

SANEM had a conversation with Dr. Sher Verick on growth and employment issues related to South Asia. Dr. Sher Verick is Senior Employment Specialist in the International Labour Office's Decent Work Technical Support Team for South Asia in New Delhi, India. Before that, he worked as a Senior Research Economist for the ILO in Geneva, at the United Nations Economic Commission for Africa, and at various research institutions in Europe and Australia. He holds a Master's degree in development economics from the Australian National University and a PhD in economics from the University of Bonn. This interview is taken in March, 2015.

SANEM: What is the linkage between economic growth and employment? How relevant is this issue for the South Asian countries?

SV: Without sustained and strong economic growth, it is very difficult for a country to generate sufficient jobs, especially decent jobs. However, the relationship between growth and employment is complex. Growth leads to new jobs through, for example, an increase in exports, investment or consumption. At the same time, employment contributes to growth as a factor of production. Most discussions are based on trends and differences in employment elasticities. However, this approach can be misleading because what matters is whether economic growth is accompanied by the

creation of decent work, not just growth in employment at all costs. Can countries in the region sustain high growth rates as witnessed in China and other fast-developing countries? This has proven to be elusive even in India, which has experienced periods of growth above 8 per cent in recent times. Therefore, countries need to increase growth through more investment and other sources of demand. However, whether this translates into decent jobs depends on the nature of growth, namely the sectoral and spatial distribution. For growth to be inclusive, job creation needs to benefit all, not only a selected few.

SANEM: Do you think the process and progress of economic growth are favorable for employment generation in South Asia?

SV: Trends in GDP growth rates reveal both commonalities (a slowdown since 2011) and heterogeneity in countries' growth paths in the region. Following a number of years of more spectacular growth rates, the region's largest economy, India, experienced a sharp slowdown in 2012. The economies of Nepal and Pakistan have grown consistently below the regional average due to political, security and macroeconomic factors. In contrast, Bangladesh and Sri Lanka have been able to maintain more robust economic growth rates in recent years. Growth in these countries does result in employment generation. After all, in the absence of social security systems, the majority of people across the region have little choice but to acquire a job (either domestically or in a foreign labor market). For this reason, the highest unemployment rates in South witnessed among the best educated, especially the educated youth – these jobseekers are able to wait for better employment opportunities in line with their own preferences or remain unemployed because they lack skills demanded by employers (i.e. a skill mismatch). Economic growth can also be associated with a fall in employment as witnessed among women in rural areas in India in the 2000s. From 2004-2005 to 2009-2010, a period when the Indian economy was growing at around 8 per cent per annum, the number of women workers in India

dropped by 21.3 million, of which 19.5 million were in rural areas. Though puzzling, the overall low level of female labor force participation in South Asia is a major challenge, and stronger economic growth has largely failed to generate more employment for women in the region, apart from Bangladesh. Overall, while growth may improve wages, as witnessed in India in the mid-2000s, the quality of employment generated is poor. Many new jobs created in India have been in the construction sector or contractual work in the organized sector. Many women end up as domestic workers.

SANEM: What do you think about the quality of employment in this region? And how this should be for poverty alleviation and human development?

SV: Arguably the greatest problem facing South Asia is, therefore, the quality of employment. The region continues to have some of the highest rates of informality and vulnerable employment. According to ILO estimates, the share of workers in the agriculture sector in South Asia stood at 45.4 percent in 2014. The share of the primary sector in GDP has, however, declined much faster (the regional average was just 18.9 percent of GDP in 2013). The flipside of this trend is the growth of the services sector, which now accounts for 56.3 percent of GDP (in 2013), but only 31.6 percent of employment. Thus, the overwhelming task in the region is to promote the manufacturing sector as a key driver of growth and job creation. In this regard, only 12.4 percent of South Asian workers were engaged in this sector in 2014 (ILO estimates). At the same time, the share of manufacturing in GDP has, in fact, declined from 14.9 per cent in 2010 to 13.4 percent in 2013. This worrying trend suggests that gains in productivity in manufacturing are lagging those witnessed in the service sector. Thus, to accelerate poverty alleviation and promote human development in South Asia, it is essential that more people, especially the unskilled and youth, are able to make transitions from low to high productivity jobs.

SANEM: What changes in policies should the countries in this region adopt to promote economic growth which can generate employment both in number and quality?

SV: On the policy front, governments need to consider a multi-pronged approach. Critical is to accelerate economic growth. However, growth must be promoted in sectors, which will make a robust contribution to the creation of more productive employment. This requires supportive infrastructure, education and skills development, R&D and permissible incentives under the rubric of a strategic industrial policy. Efforts are also needed to improve agricultural productivity. Moreover, special measures are required for those who do not benefit from growth and labor market outcomes. In this regard, gender must be one of the key priorities of all countries in South Asia as an economic and social objective, addressing interventions on both the supply and demand-side of the labor market. A major topic of debate in the region is the impact of labor laws with many arguing that regulations constrain investment and job creation, especially in the manufacturing sector. However, the majority of workers are outside the purview of most laws since they operate in the informal sector. Furthermore, many laws are not enforced leaving workers unprotected. A more constructive path should be taken to develop effective labor market regulations and social protection systems that both protect workers and support employers to improve productivity and competitiveness. To achieve more harmonious industrial relations and fair outcomes in the labor market, social dialogue, which is weak in the region, should be strengthened. Finally, given the complexity of employment, governments should take a comprehensive approach, assigning a greater priority to the objectives of job creation and decent work at all levels of policymaking. To formulate more relevant and effective policies, better data and monitoring and evaluation of interventions should also be given high prioritization.

SANEM: Thank you very much.

SV: You are welcome.

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“women are not entering wage
employment at an increased pace”

INTERVIEW OF MS. SIMEEN MAHMUD

SANEM interviews Ms. Simeen Mahmud, Coordinator of the Centre for Gender and Social Transformation (CGST) based at BRAC Institute of Governance and Development (BIGD). She is also the Lead Researcher at BIGD, BRAC University. Her current research focuses primarily on women’s work, pathways of women employment, NGO contributions to deepening democracy and mobilization for citizenship and rights. This interview is taken in December, 2014.

SANEM: Do you think there has been any significant change in the female labor force participation rate?

SM: Female labor force participation (LFP) rate in Bangladesh during the last two decades has increased slowly from very low levels (8 percent) in the mid-1980s to 35 percent in 2010, meaning 1 in every 3 economically active women is participating in the labor force. In West Bengal, female LFP rate during the 90s was higher than the female LFP rate in Bangladesh, which has currently surpassed that of West Bengal, where the rate remains largely unchanged. There has been some structural change both in the economy and the society that has contributed to the rising female labor force participation in Bangladesh.

SANEM: Considering the current scenario, can we say that the change in the FLFP has been a good one?

SM: Yes, rising female LFP is generally a “good” change for both women and the society and economy. But the extent to which this is “good” depends upon whether there has also been a corresponding improvement in the quality of employment in terms of remuneration, skill development, hours of work, place of work and so on. If we turn our focus on the status of women’s employment, we find that wage and salaried employment has declined in importance, while over 50 percent of the employed women are engaged in unpaid work inside the home. Family responsibilities and child rearing are major reasons that restrict women from seeking (and finding) paid work outside their homes. In addition, microcredit has also contributed in generating more self-employment for women, perhaps depressing wage employment. Moreover, there is spatial variation: not all regions have experienced similar growth in female labor market participation: Barisal and Sylhet lag behind Dhaka and Rajshahi.

SANEM: What types of job opportunities are available for women? What is the rising trend?

SM: In terms of new employment opportunities, the health and education sector and employment within households have increased, as well as in manufacturing and factory based employment. But women’s employment is still very much concentrated within 5-6 industries, dominated by agriculture. In manufacturing sector, participation is highly concentrated in the RMG sector.

SANEM: How would you perceive this increased participation in unpaid and self-employment work?

SM: Self-employment and unpaid work are better than not working, but work inside the home is often not given value by families and societies, and women do not have access to their

earnings. They are also unable to acquire skills and resources necessary to negotiate and bargain better.

SANEM: Do you think there is any definition and/or data issues for Female Labor Force Participation in Bangladesh?

SM: The quality of BBS Labor Force Survey is improving. Data for 2010 was much better than data for 2005. However, the data collection and analysis would be more reliable and effective if the same households could be surveyed for both HIES and LFS. By doing so, many other aspects and characteristics could have been analyzed with the available data and the studies conducted would be more diversified.

SANEM: What do you think about the necessity of a Time Use Survey Data for Bangladesh?

SM: Time use data can help gain an in-depth understanding of the overall labor market scenario of a country. It is more important especially for Bangladesh because the BBS 2012 pilot time use survey helped a lot in better understanding the care economy and its link to the labor market. The survey showed that women who participate in productive work spend more time in combined production and care work compared to men. Also, when women allocate time for the labor market, their leisure time gets squeezed, but that of men remain unchanged.

SANEM: What do you think are the policy issues in terms of Female Labor Force Participation?

SM: There are several issues for concern. First, women are not entering wage employment at an increased pace, possibly due to demand constraints, but also perhaps due to the fact that work outside the home is not very attractive to either women themselves or their families, unless it is very well paid and in the formal

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sector. But the reality is that new employment opportunities are mainly emerging in the informal sector. Second, there is no clear relationship between education and women's labor market participation. We find that women with an SSC/HSC have the lowest LFP rates, so apparently education is not raising the marketable skills of women, which may be one reason why so many women turn to unpaid work or self-employment at home.

SANEM: Thank you very much.

SM: You are welcome.

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“A structural transformation with greater emphasis on investment in education is key to move towards a more inclusive society”

INTERVIEW OF
DR. EDGARD RODRIGUEZ

SANEM interviews Dr. Edgard Rodriguez, Senior Program Specialist, International Development Research Centre (IDRC), Canada. Dr. Rodriguez is an expert on small-enterprise development and labor markets in developing countries. Prior to joining IDRC, Edgard worked for multilateral development organizations and the Canadian public service. He evaluated small-enterprise development programs in Asia and Latin America for the World Bank in Washington, DC, and worked with the Asian Development Bank on lending and technical assistance for business development in the Philippines and Indonesia. Also, he worked on local economic development with the Canadian International Development Agency, and undertook research on inequality, productivity, and investment in Canada at the Department of Finance in Ottawa. Dr. Rodriguez holds a PhD in Economics from the University of Toronto with specialization in economic development and labor economics. He discusses different issues including current job market scenario, creating decent jobs, skill of labor force and structural transformation, policy implications for skills development and the role of IDRC, Canada for improving labor market issues in developing countries. This interview is taken in December, 2015.

SANEM: How would you describe the current job market scenario in South Asian economies from a global perspective?

ER: Labor is Asia's biggest asset. Creating jobs for a growing labor force is a mammoth task for Asian economies, especially the younger economies of South Asia. For instance, India needs to create about one million jobs a month to cope with the cohorts of young people reaching working age. However, these workers do not have access to the same kind of jobs one would expect them to have in an industrialized economy. The majority of Indian workers will get unpaid, informal jobs without hardly any benefits. The prospects for young Asian workers are, in fact, quite challenging. Five out of 10 young workers in the region are self-employed, according to a recent ILO report for Asia. This means that they are creating their own job, becoming entrepreneurs out of need. Moreover, Asian young workers will find a mismatch between their qualifications and the work they perform. Over one-half of young workers in Bangladesh, Cambodia and Nepal are undereducated for the work they do.

SANEM: For growth to be more inclusive in nature and to create "Good jobs", what kind of structural transformation is needed in a country like Bangladesh? How this transformation can be achieved?

ER: A structural transformation with greater emphasis on investment in education is key to move towards a more inclusive society. Young Bangladeshis are not benefiting from the current weak educational system. In Bangladesh, more than 50 percent of young people finished their education at primary level or below. On average, South Asian workers have only 6 years of education. They can only improve their job prospects if they go further. Increasing educational attainment will go a long way in having better job opportunities whether you become an employee or self-employed. East Asian countries invested heavily in human capital. They have equipped their populations with universal, good-quality education. As a result, these societies have been more successful in

having a workforce prepared to complement the massive influx of capital into their economies. Today, most East Asian countries have working age population with more than 10 years of education. This has enabled, for instance, Korea to move up in the development ladder reaching a sophisticated, diversified industrial base.

SANEM: Is there any linkage between level of skill of labor force and structural transformation?

ER: With low levels of education, a country can hardly expect to climb the development ladder. Asian education levels have improved dramatically across generations. Today, grandchildren are doing much better in terms of education than their grandparents. The educational attainment in South Asia was about 3 years of education in the 1970s, and has now doubled. But, even with these improvements, the average of 6 years of education is still quite low, and it is even lower for South Asian women. In Nepal, women have on average only 4 years of schooling. High rural-urban migration has transformed most South Asian cities such as Dhaka into some of the world's fastest growing cities. But this rural-urban transformation is likely to remain characterized by very low-productivity, informal employment, reflecting the population's low human capital endowment.

SANEM: What policies should the South Asian countries adopt to tackle the skill development challenges?

ER: First, it is imperative to invest in education. This means not only improving access to education but improving the quality of education offered. Asian education needs to pay attention to the quality of teachers, school infrastructure, curriculum design etc. For countries like Bangladesh with a high deficit in education, I think that the improvements in education need to pay a lot of attention to remedial schooling. Many young adults have already missed having a basic education. These young adults should have access to suitable adult education programs to meet minimum standards. Also, Bangladesh could use specific programs tailored

for working women or rural youth to enable them acquire basic skills to find employment in occupations that are in high demand.

SANEM: How IDRC, Canada is playing its role or planning to contribute in improving the labor market issues in South Asia?

ER: IDRC's mandate is to fund policy relevant research that can provide solutions to development challenges. Since 2006, IDRC has paid attention to research on labor markets. Today our "Employment and Growth" program funds research on specific solutions that can help low-skilled populations obtain better jobs and acquire better skills. Examples of this research include skill enhancing programs for rural women in rural Pakistan and in rural Bangladesh, provision of childcare facilities for young mothers in rural Rajasthan, and a short-term certification in housekeeping for young street children to work in Cambodian hotels. These evaluations will help understand what exactly makes a skills-acquisition program successful to reach the poor and whether the intervention is worth to be scaled up. Despite the importance of labor in the development of South Asia, there is plenty of room to disseminate existing research and data on issues related to workers in the region. South Asian universities have seldom specialized programs or courses on topics such as labor economics, labor relations and other similar courses or programs. Comparable data on employment remain a challenge to undertake cross-country comparisons. In India, IDRC has funded the first Labor and Employment Report as a way to raise policy awareness about the existing research on the challenges faced by Indian workers. A second report will appear next year. And, since 2013, IDRC has funded a South Asian Labor Research Network (SARNET) to promote training and research on labor issues for young scholars.

SANEM: Thank you so much for your time.

ER: My pleasure.

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“It’s All Worthwhile”

INTERVIEW OF A DOMESTIC MIGRANT IN BANGLADESH

SANEM interviews Mizanur Rahman to talk about his cycle of domestic migration. Mizanur Rahman, a landless day laborer from Kurigram of Bangladesh, migrated to Gazipur, a suburb near Dhaka, in search of seasonal occupation with contracts of harvesting in paddy field. His work paradigm not only relates to the untold story of domestically migrated labor force in Bangladesh but also validates the changing pattern of Bangladesh economy. His work story, and life story as well, represent the same defining story of thousands of domestic migrant workers in Bangladesh. And this story is quite interesting. This interview is taken in June, 2014.

SANEM: It seems to be a very scorching summer day. You are all the way from Kurigram. Does it seem worthwhile?

MR: Yes. As far as the wage is concerned, I am getting almost BDT 350 per day here having a wage difference of BDT 150 from Kurigram. The whole mechanism is contract based where we are working as a group to harvest the paddy from the particular contracted field. We came as a group of 12 members. I have been working in Gazipur for 15-20 days and already covered more than 5 decimal land area yielding me around BDT 7,000.

SANEM: Why are you here? Kurigram has a vast productive land. Couldn't you find job there?

MR: Yes. I could have been working there. I once had my own land which was taken by Tista River. In my village, there are only harvesting related opportunities. Also, I get much lower wage there.

SANEM: What sorts of other work do you do? Do you get the same sort of payoff?

MR: I often migrate to Dhaka for 15-20 days and do the Rickshaw pulling. In some cases, the payoffs are even better. I can earn at least BDT 5,000 in 15 days. When I chose to pull the rickshaw in Dhaka, I work 15 days at a stretch and then go back to Kurigram. Once my reserve ends, I again go out in search of work.

SANEM: You seem to have a diverse choice of profession. Have you ever tried of doing business?

MR: Not really. Business requires capital which I don't have. And opportunities are also limited to fishing, grocery, dairy business. This makes me always dwindling between these two professions – contractual farming and rickshaw pulling.

SANEM: Development organizations like BRAC, Grameen Bank, TMSS, and BURO hold good coverage in your locality. Have you ever tried getting micro-credit scheme?

MR: No. I am not comfortable with their terms and conditions and I also doubt my capability of paying back the loan from these organizations. I normally take loans from my neighbor though they take high interest, paying almost BDT 200 interest in one month for BDT 1,000 loan.

SANEM: Do you think this struggle, in form of migration, is changing your life?

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MR: Though it's a struggle and hardship, I can afford my livelihood. But I also have the ambition of transcending my family's fortune. I am a proud father of two boys, studying in class VI and III respectively, and one girl, studying in class I. And I want to continue their education as far as I can because I don't want my sons to be migrant workers like me. This makes my struggle, this frequent migration, worthwhile.

SANEM: Thank you so much for your time.

MR: My pleasure.

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“I want to be independent”

INTERVIEW OF A READYMADE
GARMENT WORKER IN BANGLADESH

SANEM interviews Shopna Begum to talk about her transitions to a RMG worker. Shopna Begum is an 18-years-old girl from a village in Gaibandha, a northern district in Bangladesh. She works in a RMG factory, located in Dhaka. This interview is taken in September, 2014.

SANEM: How did you know about working in the RMG factory?

SB: Before taking some training in an NGO in Gaibandha, I didn't have any skill, and also didn't have any idea about the job opportunities in the RMG. I had the perception that this job would be very tough. I had my cousin and his wife working in a garment factory in Dhaka, and they helped me getting my current job.

SANEM: When did you leave school?

SB: I studied up to class VII. Before the first term of class VIII, I left school, as I fell sick. More importantly, my family couldn't afford to buy my study materials and also could not manage private tuition for me.

SANEM: How do you feel about your job and working conditions?

SB: My factory is just a typical one. I don't have any formal contract with my employer. My employer can fire me anytime without any notice. Though quite a number of people work in my room, it is not so cramped. Our factory has fire-escapes, but I haven't experienced any fire-drill yet. We don't get any annual leave. In the case of maternity leave, a worker can get at best 10 days, but the factory doesn't bear any medical cost. I know there are some factories with better working conditions, and workers in my category get BDT 5,300 per month while I get only BDT 3,700. My factory doesn't provide any overtime facility though I have to work for 12 hours a day, from 8 am to 8 pm. I tried in some better factories, but getting a job there is highly competitive. In other factories, where payment is very low, getting a job is easy.

SANEM: What are the major differences you can see in your life after you've been employed?

SB: We used to take two meals a day. Now in Dhaka and Gaibandha, we can have three meals a day. Sometimes, we can have eggs in the morning. But, in meals, we usually have rice, lentils and vegetables, and sometimes, we can have fish or meat. I brought my brother and mother to stay with me. My brother is doing a small job and my mother helps me in household works. I can manage sending BDT 1,000 every month to my family living in Gaibandha. I wish I could send more, but life is expensive here. I also sent some money when my little brother was unwell few months back. I can now afford better clothes and cosmetics. I think, I can now face any challenges if I have to. Also, previously none listened to my opinion, but now people do. I have learned a lot about life since I have been working here.

SANEM: Do you see any change in the perception of the people of your village?

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SB: Now girls, from my village and surroundings, are getting more interested to come to Dhaka to find jobs, and their families are positive about it. When people call from the village, I tell them about the job opportunities here and our lives in Dhaka.

SANEM: What is your plans for the future?

SB: I wanted to pass the S.S.C, but I couldn't. I want to study again, but I know it may not be possible. Though girls at my age in my village get married early, I want to delay my marriage for a few more years. I want to be independent and want to help my family as long as I can.

SANEM: Thank you so much for your time.

SB: You are welcome.

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INTERVIEW OF TWO PEOPLE EMPLOYED IN RURAL NON-FARM ACTIVITIES IN BANGLADESH

“I want to be independent”

SANEM interviews Mohammad Alkas Ali to talk about his involvement in a rural grocery shop. Mohammad Alkas Ali, a local resident of Chandapat village, Rangpur Sadar Upzilla, Rangpur district owns a little grocery shop at his village. The story of Alkas Ali's engagement in rural non-farm sector (RNFS) reflects the stories of numerous people of rural Bangladesh who found employment opportunities in the vibrant rural non-farm sector to support themselves and their families. This interview is taken in November, 2014.

SANEM: Was joining the RNFS a choice?

AA: As I am a part-time employee in the Shyampur Sugar Mill which pays very little, it's difficult to make all ends meet. Seeing my struggle, my son-in-law suggested me to start the business. So starting the business was more of a necessity than a choice. After getting into it, I got assistance from fellow businessmen which eventually helped me expanding my business.

SANEM: Why didn't you join the farm sector?

AA: Definitely land availability is the major obstruction on my way to farming activity; not only because I am a landless person

but also because arable land is scarcely available in the region. Thus, getting access to good quality land with high crop yield is quite difficult.

SANEM: Do you think you are doing better in this business compared to farm activity of any sorts?

AA: I personally feel running a small business is more profitable than becoming a landless sharecropper. The cost of farm production now-a-days is very high, hence unlike small business, the profit margin becomes very little with sharecropping. Therefore, I personally feel more accomplished in terms of both financial and social gains compared to farm activities.

SANEM: How did you manage the seed capital for the business?

AA: I started my business with BDT 12,000 of which my personal contribution was BDT 10,000 that I saved from the small salary I receive. The rest of the money was provided by my son-in-law as a personal loan. Informal loans are available along with quasi-formal loans from NGOs. Taking loans from NGOs is better as they charge relatively lower interest than informal lenders. Although I managed the seed capital myself, I took loans from two separate NGOs for the expansion of my business.

SANEM: What major problems do you see in the expansion of rural non-farm sector?

AA: Speaking from my personal experience, the major problem is that the companies don't deliver their goods to small local shops like mine. So I have to collect them myself which reduces my profit. In addition, often customers refuse to pay their dues, which is a rather minor problem. In order to flourish the non-farm sector, the infrastructure could be developed so that companies could deliver goods directly. Along with these, making loans

available on easy terms and low interest rates will help me. These measures will help businessmen like me to expand their activities and will also encourage the new entrants.

SANEM: Thank you so much.

AA: You are welcome.

“The main bottleneck is managing the seed capital...”

SANEM interviews Mohammad Mukul Mia to talk about his involvement in rural non-farm activity. Mohammad Mukul Mia who is a migrated resident of Chandapat village, Rangpur Sadar Upzilla, Rangpur district is a van driver by profession. As he reports, his migration was marriage driven and now he is living with his in laws. Like many others, Mohammad Mukul Mia has found his employment in the rural non-farm sector (RNFS) which is now a major source of employment in rural Bangladesh. This interview is taken in November, 2014.

SANEM: Was joining the RNFS a choice?

MM: As I don't have any land of my own, farm activity was never an option for me. From that point of view, my choice of employment can be considered forceful. But compared to other jobs available in the region, driving a van is better because I can earn more. Low capital requirement was a major factor why my wife and father in law encouraged me to get into this work.

SANEM: Why didn't you join the farm sector?

MM: Unavailability of land was the main reason for not seeking employment opportunities in the farm sector. In addition, sharecropping does not seem like a viable option these days

because of high input cost which results in low profit. Furthermore, as far as I have seen most land that are up for lease are problematic, meaning they are either low yielding or have some other problems.

SANEM: Do you think you are doing better in this profession compared to farm activity of any sorts?

MM: As I have mentioned earlier, monetary return in this work is better compared to other jobs. As there are various impediments associated with farm sector and relatively I am earning more, this job makes perfect sense. Honestly, driving a van does not boost my social status but as it has made me financially solvent, I am fairly content with this job. But if I can get easy loan, I probably would like to start a small business of my own.

SANEM: How did you manage the seed capital for the business?

MM: The van cost BDT 15,000 which is basically my seed capital for this work. My wife works in a garments factory and that's why she and my father in law were able to manage BDT 10,000. I was fortunate enough to manage the rest of my seed capital by getting loans from an NGO. There are various NGOs like BRAC, ASA who provide loans on different ventures. Informal loans are also available, but the informal lenders charge a very high interest rate. So I personally prefer the quasi formal loans.

SANEM: What major problems do you see in the expansion of rural non-farm sector?

MM: The main bottleneck is managing the seed capital. Even though many people have interest in the non-farm sector, they cannot get involved due to lack of capital. If loan can be made available on easy terms and conditions, then it would be beneficial to a lot of people like us. In addition, training programs can also

Interview of two people in rural nonfarm activities

be provided to make the interested individuals well-equipped before they start any rural non-farm activity which will definitely promote the non-farm sector.

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SANEM: Thank you so much.

MM: You are welcome.

LET'S THINK ALOUD, SHALL WE?

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INTERVIEW OF THREE PEOPLE EMPLOYED IN URBAN INFORMAL ACTIVITIES IN BANGLADESH

SANEM interviews three individuals in Dhaka involved in urban informal sectors. SANEM talks about the opportunities, benefits, challenges and other nitty-gritties of urban informal sector. The interview aims to give the readers an insight into how urban informal sectors have been changing and affecting lives of numerous people of Bangladesh migrating to Dhaka in search of a better fortune. These interviews are taken in September, 2015.

“I wish to be an entrepreneur...”

SANEM interviews Mr. Shahidul Hasan, aged 19, who works at a small manufacturing firm at Dholaikhal in Dhaka.

SANEM: How long have you been working in Dhaka? Why did you come to Dhaka instead of working at your village?

SH: It has been 5 years since I joined this mechanical firm in Dhaka. I came to Dhaka from Chandpur in search of fortune when I was 14. I came here because employment opportunities are scarce in our village and the main mode of income generation is performing agricultural activities. It was very difficult for my farmer father to bear the family expenses as income from

agricultural activities is quite low. Thus, he sent me to Dhaka for work.

SANEM: How much do you earn here? Is it adequate?

SH: At times when our firm gets more contracts, we get bonuses along with the monthly wage of BDT 6,000. We have to work 12 hours a day over six days a week. Although it is not adequate, I cannot manage higher income at this stage of my life. It costs me BDT 4,500 including accommodation and other expenses monthly. I save rest of the income in my bank account.

SANEM: What kind of activity do you do in your firm?

SH: At this firm, we produce any kind of motor/vehicle/machinery parts based on orders. My job is to cut the shapes of the metals accordingly. Once the metal is cut in shape, others get engaged in producing the part.

SANEM: What types of challenges do you face here?

SH: Working in a mechanical firm is very risky. We do not get any safety tools. As we do not have any insurance coverage, if we get ill/injured during work - neither we get any financial support from the owner nor are we able to manage the expenses through any insurance policy. Although we get paid in case of sick leave, the scenario is not the same for everyone working in this sector. Another challenge our sector is facing now is that the profitability of this sector has shrunk over last few years. Now we have to compete with the Chinese manufacturers. Previously who used to order us in bulk has now switched to Chinese market. Although our products are better in quality, the Chinese products are low at cost and we cannot compete with them. Hence, the activities of these kinds of firms are now declining day by day and so are our wages and bonuses.

SANEM: What is your future plan?

SH: I do not think that I would get any other decent job with my qualifications as I studied only up to class 7. However, I wish to set up my own mechanical firm in future. For that, I will have to acquire more skills in this sector. The owner of our firm in the beginning was an inexperienced worker like me; but now he himself is a farm-owner. I wish to be an entrepreneur like him.

SANEM: Thank you.

SH: You are welcome.

“There are opportunities of earning a handsome amount...”

SANEM interviews Mr. Rifat Hossain, aged 17, who works as an engine repairer at Dholaikhal in Dhaka.

SANEM: How did you come to know about this job? Where did you get your training from?

RH: I got to know about this job from my father as he used to work in a workshop at Munshiganj. Since childhood, I cherished the dream of becoming an engine repairer and thus I came to Dhaka at the age of 10. I got training from a workshop for 5 years where I learned a lot about engines. Now, I can repair car, microbus even truck engines very easily. For training, I started as an apprentice. I had to pay BDT 30,000 for getting the opportunity of apprenticeship that I took from my family. For five years, I had to pay BDT 2,000 monthly which was deducted from my salary. Therefore, it cost me around BDT 150,000 in total. As an apprentice, my salary was BDT 5,000.

SANEM: How much do you earn from this job? Is it adequate for your living?

RH: My monthly income ranges between BDT 20,000 - 60,000 depending upon the availability of contracts. As I don't have any bank account, I save some money on my own. I send home more than BDT 10,000 every month. Now my income is satisfactory and my family is well-off. Moreover, I bear the educational expenses of my younger brother who studies in class seven.

SANEM: What challenges do you face in this informal sector?

RH: First of all, I am not provided with any safety tools although there are chances of getting injured. Even if we get sick leave, the leave is unpaid. I get paid only depending on how much I can work. If I am unable to work for few days due to illness, it means I would be unable to earn during those days. Besides, I have to bear my own medical expenses even if I get injured during my work. Furthermore, there are days when I don't have any leisure time and have to work more than 12 hours.

SANEM: What are your future plans? Do you intend to switch your job in future?

RH: No, I don't want to switch this job. There are opportunities of earning a handsome amount once one develops skills in this sector. I want to be more skilled so that I can earn more and save more. In future, I hope to be an owner of a workshop like the one I am currently working in.

SANEM: Thank you so much for your time.

RH: My pleasure.

“I will go back to my village...”

SANEM interviews Mr. Nurul Alam, aged 41, who pulls a rickshaw in Dhaka city.

SANEM: Why did you choose rickshaw pulling over other jobs?

NA: I studied up to class 4 only which makes me ineligible for formal jobs. I could not study further as I started working with my father in the fields. Moreover, I do not have any training on driving so I couldn't be a driver. I came to Dhaka in 2000 and I have been pulling rickshaw since then.

SANEM: What did you do before rickshaw pulling?

NA: Before rickshaw pulling, I used to work in our own lands. In 1998, I went to Iraq in search of a good fortune which cost me BDT 400,000. I managed the money by selling 1 acre (3 Bigha) land in my village at Gaibandha. Also, I borrowed from others. However, the visa was valid for six months only. I was cheated by pimps engaged in manpower business due to my illiteracy. I had a hard time in Iraq as I didn't have any work permit. After six months, they sent me back to Bangladesh. Once I came back, everyone persuaded me to go to Malaysia to make a better living. I again contacted the local pimps who promised to send me to Malaysia by Sea. I went to Chittagong port where I saw the pimps injecting other passengers to put them asleep. I was traumatized and fortunately I managed to escape from there. I lost another BDT 150,000 in that pursuit. After being cheated twice to the frauds, I had no other way than coming to Dhaka.

SANEM: How much do you earn monthly? Is it adequate to manage your living expenses?

NA: Usually I earn about BDT 10,000-12,000 in 10-15 days in Dhaka. From the income, I have to repay my loans every month.

Once I earn enough, I go back to my village where I have some lands (about 33 decimals). During my stay at village, I actively participate in agricultural activities there. From my lands I earn about BDT 15,000 during each harvest season. With the income from rickshaw pulling, I have managed to take additional 2 Bigha of lands (equivalent to 66 decimals) as lease for cultivation. For me, the overall expense in Dhaka is around BDT 300 a day including rickshaw rent, two meals and accommodation at the rickshaw garage. After all expenses, I get BDT 500-700 at my disposal every day. Thus, I send BDT 1,500 - 2,000 per week to my village through mobile banking. However, during Eid my income gets doubled.

SANEM: What challenges do you face during work?

NA: Mainly, there are issues regarding bribing the police and security. We have to bribe the traffic police every day. Also, there is a high risk of rickshaw theft. However, the major problem of this job is the persisting uncertainty in it. During illness, I remain unpaid. If any accident occurs, I won't be able to pull rickshaw or do any other activity. So my income will be disrupted then.

SANEM: What are your future plans?

NA: In future, I wish to go back to my village and set up a shop there along with farm activities. I do not like rickshaw pulling as it is very strenuous. Once I repay my loans, I will go back to village and live there.

SANEM: Thank you.

NA: You are welcome.

PART IV

SUSTAINABLE DEVELOPMENT GOALS (SDGS)

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SDGs: A paradigm shift?

S E L I M R A I H A N

The Sustainable Development Goals (SDGs) are a set of Global Goals with three major aspects: Economic, Social and Environmental. SDGs emphasize that eradicating poverty in all its forms and dimensions, including extreme poverty and hunger, inclusive and equitable quality education, gender equality, inclusive and sustainable industrialization are pre-requisites for sustainable development in the coming decades. Other global goals such as ensuring sustainable consumption and production patterns, taking actions to combat climate change, ensuring healthy lives and promoting well-being for everyone at all ages are also important components of SDGs.

SDGs build on the legacy of the Millennium Development Goals (MDGs). Though countries in Europe, North America and few developing countries have been able to eradicate absolute levels of poverty and achieve certain levels of standard of living for their mass population, the reality is that, there remains uneven developments and serious disparities between and within the countries. This is also reflected by the fact that in a large number of countries in Asia, Africa and Latin America, majority of the people are still far from securing any decent standard of living. The aspiration for MDGs and SDGs emanates from the

understanding that such serious uneven developments and disparities both at the country and global levels are unsustainable, and these uneven developments and disparities lead to periodic and long lasting economic, social and environmental crisis. Therefore, specific actions are needed to combat such crisis.

Though, both MDGs and SDGs seek to address the aforementioned crisis, what is the paradigm shift under the SDGs? Three major changes characterize the paradigm shift under the SDGs. The first key change brought by the SDGs is that, while MDGs emphasized primarily on the aspects of social development, the SDGs, in contrast, represent a much wider agenda which, in addition to social development, also address the other two pillars of sustainable development: the economic and the environmental. The second major change is the shift in the focus from an agenda which was applicable to a group of countries (under the MDGs) to one that is applicable to all countries irrespective of the differences in their levels of development. The third major change is that while MDGs were characterized by a 'North-South' model dependent on typical 'donor-recipient' relationships, SDGs emphasize on domestic resource mobilization as the key to achieving the goals. It is evident that global 'dissatisfaction' with the MDGs' processes, deliveries and progresses also led countries to go for such goals under the SDGs.

The 'discontent' with the performance of MDGs is reflected by the fact that a large number of countries lagged behind in implementing the MDGs by some considerable margins. According to the MDG Track Global Index (published by TAC Economics, www.mdgtrack.org), out of the 140 countries, only 6 countries could implement MDGs between 70 percent and 77 percent, only 18 countries could implement MDGs between 60 percent and 69 percent, 30 countries could implement MDGs between 50 percent and 59 percent and the rest 86 countries could implement less than 50 percent of the MDGs.

It is important to note here that, while the MDGs had eight goals with 18 targets, SDGs have 17 goals with 169 targets. Therefore, given the weak performances of the MDGs and the very wide coverage of SDGs, questions will remain whether achieving such wide and ‘ambitious’ goals and targets within next 15 years by majority of the countries is feasible and realistic.

One of the major challenges of the SDGs is that among the proposed indicators, related to the targets, many of them are non-quantifiable. This will be problematic while monitoring the progress in achieving SDGs. Also, there are indicators that do not specify any targets for the year 2030. Besides, there are unavailability of data as relevant data for some of the indicators are not available or readily available, and a number of indicators appear to be overlapped or repeated.

One of the most critical issues related to the implementation of the SDGs is the resources needed for implementing SDGs. As mentioned before, domestic resource mobilization is the key to achieving SDGs, the question is how to mobilize required amount of resources domestically when a large number of countries suffer from weak institutions and infrastructure. It is also important to note that mere generation of resources would not ensure implementation of the SDGs if institutional and governance related aspects are not properly addressed.

The changing global scenario is a major challenge for the SDGs. The MDG period and whatever success it achieved was coined with growing globalization and trade integration among the countries. However, recently emerging strong skepticism in such globalization and trade integration process, as reflected by Britain’s BREXIT and the presidential election in the United States, has casted shadows on the future of the ‘global partnership’ for SDGs. There are risks of trade wars between the dominant

countries in the coming years, which will certainly undermine the prospects of such 'global partnership'.

Despite the aforementioned challenges, the SDGs have the promise of bringing some very changes in the lives of millions of people across the world. There is a need for a strong political commitment for negotiating with the challenges in the implementation of SDGs. Generating political capital for SDGs, both at the country and global levels, will remain to be the most critical task over the next one and half decades.

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What factors can help achieve SDGs? What do we learn from countries' performance during the MDG period?

SELIM RAIHAN AND
M D . WAHID FERDOUS IBON

Sustainable Development Goals (SDGs) are the set of seventeen Global Goals, initiated by the United Nations as the 2030 global agenda for sustainable development. Whilst the SDGs have come as the successor to the Millennium Development Goals (MDGs), the successful implementation of SDGs by the countries over the next 15 years will hinge on how countries performed during the MDG period. In this article, MDG Track Global Index of 140 countries, published by TAC Economics (www.mdgtrack.org), is used to assess the performance of countries in achieving MDGs between the period 1990 and 2015. The MDG Track Global Index is the result of the mean average of each goal's percentage of completion, and the data are from World Bank MDGs dataset (<http://data.worldbank.org>). Since, there are more than one country with same index value, 52 ranking positions are found for 140 countries. Top and bottom 10 countries in terms of MDG Track Global Index are shown in Table 77.1 and Table 77.2 respectively. In Table 77.1, Lithuania scores the highest as the country implemented the highest percentage of MDGs (77 percent). The next other top performing countries include Egypt,

410 | Iran, Belarus, Maldives, Tunisia and China. In contrast, Table 77.2 depicts that, Somalia, Central African Republic and Korea Dem. Rep. are the worst performers with index values below 15 percent. Five out of the eight South Asian countries are among the top 20 positions (Table 77.3). However, Afghanistan is the worst performer, and both Pakistan and India turn out to be poorer performers than Maldives, Nepal, Bangladesh and Sri Lanka.

Table 77.1: Top 10 performing countries during the MDG period

Rank	Country	MDG index (%)
1	Lithuania	77
2	Egypt, Arab Rep.	75
3	Iran, Islamic Rep.	73
4	Belarus and Maldives	71
5	Tunisia	70
6	China	67
7	Cambodia, Ecuador	66
8	Mongolia, Turkey	64
9	Bosnia & Herzegovina, Mexico, Russia, Thailand	63
10	Brazil, Costa Rica	62

Data source: www.mdgtrack.org

Table 77.2: Bottom 10 performing countries during the MDG period

Rank	Country	MDG index (%)
52	Somalia	11
51	Central African Republic, Kosovo	13
50	Korea, Dem. Rep.	14
49	Vanuatu	17
48	American Samoa, Chad, Cote d'Ivoire, Nigeria	18
47	Congo, Dem. Rep.	19
46	Papua New Guinea, Sudan	20
45	Cameroon	22
44	Zimbabwe, Djibouti	23
43	Angola, Micronesia, Sierra Leone	24

Data source: www.mdgtrack.org

Table 77.3: Ranking of South Asian countries during the MDG period

Rank	Country	MDG index (%)
4	Maldives	71
13	Bhutan	60
15	Nepal	58
19	Bangladesh, Sri Lanka	53
25	India	43
33	Pakistan	34
41	Afghanistan	26

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Data source: www.mdgtrack.org

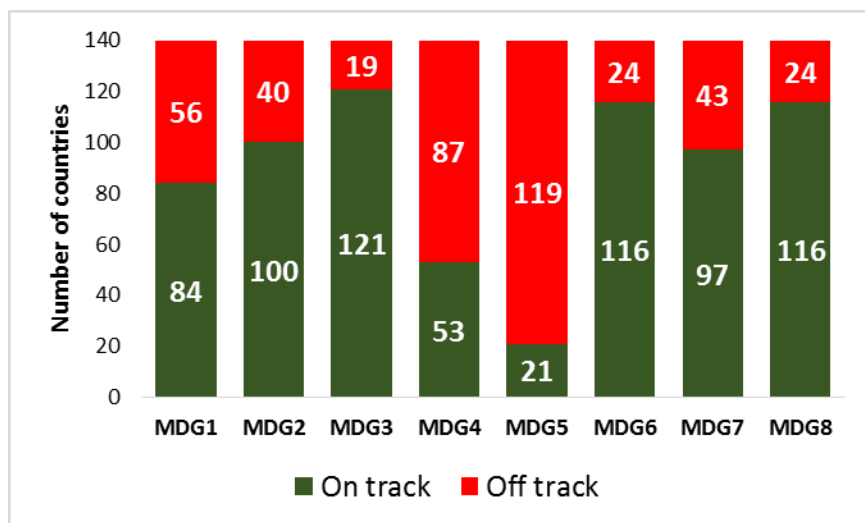
To understand the potential performances of the countries over the next 15 years to implement SDGs successfully, we need to know what factors affected countries' performances of achieving MDGs during the MDG period (1990-2015). Taking into account the aforementioned MDG index of 140 countries as the dependent variable, we consider a set of explanatory variables for these countries which include initial per capita real GDP, population growth rate, real GDP growth rate, trade-GDP ratio, public expenditure on education as percentage of GDP, public expenditure on health as percentage of GDP and different institutional variables. Except the initial per capita real GDP (for the year 1990), all other variables are averaged over the period 1990 to 2015 using weights derived from the time series data of real per capita GDP for these 26 years. The source of the data for these explanatory variables is the World Development Indicators (WDI).

International Country Risk Guide (ICRG) variables have been used as the proxy of institutions for the countries. The OLS regression result suggests that, countries with higher average real GDP growth performed better in achieving MDGs. On average, one percentage point increase in the weighted average of real GDP growth is associated with 2.29 points increase in the MDG index. Similarly, on average, one percentage point increase in the weighted average of trade-GDP ratio is associated with 0.06 points

increase in the index value. Furthermore, on average, one percentage point reduction in the average population growth rate is associated with 6.23 points increase in the index value. The initial per capita real GDP is found to have statistically significant positive association with the MDG index. On average, one hundred dollar increase in the initial per capita real GDP is associated with 0.1 points increase in the index value. Coefficients of both public expenditure on education as percentage of GDP and public expenditure on health as percentage of GDP are statistically significant with positive signs, which suggest that public expenditures on both education and health have critical positive association with MDG achievement. On average, one percentage point increase in weighted averages of public expenditure on education and health as percentages of GDP, increase the MDG index by 2.76 and 1.43 points respectively. Major ICRG variables (reflecting institutional quality) are found to be the crucial determinants of MDG performance index. For instance, on average, one point increase in the average bureaucracy quality is associated with 7.80 points increase in the MDG index. Moreover, on average, one point increase in the average law and order, investment profile, government stability and socioeconomic condition are associated with 5.46, 2.77, 5.30 and 5.38 points increase in the MDG index respectively. It is also found that countries with lower internal and external conflicts and less ethnic tensions are associated with higher MDG index.

Figure 77.1 depicts the goal wise performances of different countries. If a country has already achieved or will be achieving a particular goal by 2020, it is said to be 'on track', otherwise it is 'off track' in that particular goal. Worst performance is observed with respect to MDG5 (improve maternal health) and MDG4 (reduce child mortality rate), as out of the 140 countries, only 21 and 53 are on track in achieving desired level of the respective goals.

Figure 77.1: Number of countries on track and off track of MDGs



Data source: www.mdgtrack.org

We have also employed a binary outcome model (Probit) to assess the country wise MDG performances. Probit regression result suggests that, one percentage point increase in the weighted average of real GDP growth is associated with a rise in the predicted probability of eradicating extreme poverty and hunger (MDG1) by 0.18. Furthermore, one percentage point decrease in average population growth rate accounts for increase in the predicted probability of achieving MDG1 by 0.32. Countries with higher GDP growth and higher initial per capita real GDP have performed better in achieving the environmental sustainability. Also, reduction in child mortality rate was fueled by the reduction of population growth rate, particularly in the developing countries. Public expenditure on education has a positive association with an increase in predicted probability of achieving MDG2 (achieve universal primary education), and public expenditure on health has a positive association with increase in predicted probabilities of achieving both MDG5 (improve maternal health) and MDG4 (reduce child mortality rate). Institutional variables such as,

bureaucracy quality, investment profile and socioeconomic condition played vital role in achieving MDGs over the past 26 years. One point increase in average bureaucracy quality accounts for an increase in predicted probabilities of achieving MDG1, MDG2, MDG3 (promote gender equality and empower women) and MDG6 (combat HIV/AIDs malaria and other diseases) by 0.64, 0.82, 0.66 and 0.47 respectively. Similarly, one point increase in average investment profile of a country accounts for an increase in predicted probabilities of achieving MDG1, MDG2, MDG3 and MDG8 (develop a global partnership for development) by 0.35, 0.44, 0.34 and 0.25 respectively.

Finally, one point increase in average socioeconomic condition of a country leads to an increase in predicted probability of achieving MDG1, MDG2, MDG3 and MDG7 (ensure environmental sustainability) by 0.44, 0.43, 0.58 and 0.44 respectively. The aforementioned analysis suggests that economic growth, together with reduction in population growth, enhanced trade-orientation, public expenditure on both education and health and better institutional quality helped countries do well during the MDG period. These lessons can be very instrumental for a large number of countries in registering good performance with respect to achieving SDGs over the next 15 years.

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How to end global hunger?

SELIM RAIHAN AND
FATIMA TUZ ZOHORA

The Sustainable Development Goals (SDGs) are a proposed set of targets to replace the Millennium Development Goals (MDGs) by the end of 2015. The second goal of the SDGs targets to “*end hunger, achieve food security and improved nutrition and promote sustainable agriculture*”. There is no doubt that eradicating hunger is one of the biggest challenges for economic development to be sustainable. In the low income countries, and especially in the LDCs, this challenge is perhaps more critical.

In order to understand the factors affecting global hunger, we have estimated cross-country panel regressions for 117 countries using data for the years of 1990, 1995, 2000, 2005 and 2010. The state of hunger across countries, captured by the Global hunger index (GHI) of IFPRI (www.ifpri.org), is used as the dependent variable. In the IFPRI report, the data of GHI for 2014 was constructed using data from 2009 to 2013, and we consider this as GHI for 2010. The GHI index is based on three components: percentage of undernourished in the population, percentage of underweight in children under age five, and under five mortality rate; and each of the three components is weighted equally. The index varies between a minimum of 0 and a maximum of 100. The maximum

value of 100 would mean all children died before their fifth birthday, the whole population was undernourished, and all children under five were underweight. The minimum value of zero would mean that a country had no undernourished people in the population, no children under five who were underweight, and no children who died before their fifth birthday. However, the GHI data shows that in 1990, the worst performer was Angola with hunger index of 40.8, and in 2010, the worst performer was Burundi with hunger index of 35.6. In our panel regression, to focus on the hunger status of LDCs and developing countries, we have excluded all developed countries from our analysis.

For the explanatory variables, we have used initial real GDP per capita, level of real GDP per capita, food production index, three indicators related to expenditure on health, percentage of population with access to improved sanitation facilities, percentage of children immunized with measles vaccine, percentage of children immunized with DPT vaccine, trade-GDP ratio, share of agriculture in GDP to capture country's dependence on agriculture, and the LDC dummy. The source of these data is the World Bank's World Development Indicators. We have also used several institutional variables from the ICRG database (www.prsgroup.com) to see whether institution matters in reducing hunger.

The regression results show that initial GDP per capita has a negative coefficient though not statistically significant. However, the level of real GDP per capita has a negative impact on hunger; and 1 percent rise in real GDP per capita would lead to 2.3 unit reduction in the hunger index. Food production index has a negative impact on hunger; and 1 unit increase in the food production index would reduce hunger index by 0.1 unit. We tried three separate regressions to consider three different health expenditure variables; and they are public expenditure on health as percentage of GDP, total health expenditure as percentage of

GDP, and out of pocket health expenditure as percentage of total health expenditure. We find that, only the variable total health expenditure as percentage of GDP turns out to be statistically significant, where a percentage point increase in the share of total health expenditure in GDP would reduce hunger index by 0.1 unit. Improved sanitation has a negative impact on hunger; and a percentage point increase in the ratio of improved sanitation facilities would reduce hunger index by 0.1 unit. Trade openness doesn't appear to have any significant impact. Reduced dependence on agriculture is negatively associated with hunger and a percentage point decline in the share of agriculture in GDP would reduce hunger index by 0.04 unit. Immunizations of DPT and measles are significantly related with hunger, and one percentage point increase in the coverage of vaccination of DPT and measles would reduce hunger by 0.02 and 0.01 units respectively. The LDC dummy shows that being an LDC would increase the hunger index by 10 units.

We also calculated the z-score of the regression coefficients to compare the relative magnitude of their impacts on reducing hunger. It appears that the strongest negative effect on hunger comes from the rise in per capita GDP. The second largest negative effect comes from the rise in food production, followed by improved sanitation facilities, reduction in dependence on agriculture and rise in health expenditure. However, hunger is very strongly and positively associated with the LDC status.

We also explored the impact of different institutional variables. Interestingly, it appears that while most of the ICRG political risk variables turn out to be statistically insignificant, government stability and reduction in external conflict are statistically significant. This suggests, while a rise in external conflict has an adverse impact, government stability is helpful on the reduction in hunger.

The above analysis leads to some important policy concerns and necessity to rethink what affects hunger. Economic growth is a necessary condition for the reduction in hunger. However, rise in food production, improved access to sanitation facilities, rise in expenditure on health, immunization, reduction in dependence on agriculture, reduction in external conflict and government stability are very important in reducing hunger. The policies targeting the reduction in hunger need to take into account these issues.

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How to enhance gender equality?

SELIM RAIHAN AND NABILA TASNUGA

The fifth goal of the SDGs aims to “*Achieve gender equality and empower all women and girls*”. This goal focuses on ending discrimination, violence and malpractice of any form against women and provide them with equal rights in terms of obtaining education, health services and labor market participation.

In order to explain the gender equality situation in the cross-country context, we have constructed a ‘Gender Equality Index’ (GEI) and conducted cross country panel regression for 165 countries to investigate what factors affect gender equality. The GEI is constructed annually for the period between 2000 and 2010, and is used as the dependent variable in the regression. The index is constructed taking into consideration three major components like health, education and empowerment. The indicators for health are adolescent fertility rate, maternal mortality rate and ratio of female to male life expectancy. The indicators for education are the ratio of female to male in primary enrollment and the ratio of female to male in secondary enrollment. The empowerment indicators are the proportion of seats in parliament held by women and the ratio of female to male labor force participation. After normalizing the data, the GEI is constructed by taking the arithmetic mean of the seven indicators. The value of this index varies between 0 and 100, and the higher

the value of the index the more it demonstrates gender equality. In 2000, the best performer was Sweden with an index value of 86 and the worst performer was Afghanistan with an index value of 16. In 2010, the best performer was Belarus with an index value of 88.9 and the worst performer was Somalia with an index value of 24.8.

In the cross-country panel regression, we have used public expenditure on education as percentage of GDP as one of the explanatory variables, as literature suggests access to education is a key determinant for bringing gender equality. Similar to education, health is considered as an important determinant that influences gender equality and we have considered public expenditure on health as percentage of GDP as another explanatory variable. The other explanatory variables are initial per capita GDP, level of per capita GDP, trade-GDP ratio, remittance-GDP ratio, and subscriptions of mobile phone and fixed telephone users per 100 people (to capture the effect of infrastructure on gender equality). Along with these explanatory variables some institutional variables (taken from ICRG data base: www.prsgroup.com) are used to observe their impacts on gender equality. The data for constructing the Gender Equality Index are taken from World Bank, UNPD, WHO and UNESCO; and the source of explanatory variables is the World Bank's World Development Indicators.

The panel regression results show that while initial level of per capita GDP has a positive and significant impact on gender equality index, the change in the level of per capita GDP doesn't have any impact, which suggests that economic growth doesn't necessarily bring gender equality. However, both public expenditure on health and education have positive impacts on GEI. A percentage point rise in the ratio of public expenditure on health to GDP would lead to 0.7 point rise in the GEI, while such rise in the ratio of public expenditure on education to GDP would

lead to 0.15 point rise in the GEI. Both trade openness and remittance-GDP ratio have positive and significant impact on GEI. A percentage point rise in trade-GDP ratio would increase GEI by 0.02 points, and similar increase in remittance-GDP ratio would increase GEI by 0.07 points. Both the infrastructural variable as per expectation has positive impacts. If mobile and telephone users increase by 100 persons GEI would increase by 0.3 and 1.3 points respectively. In the case of institutional variables, we have found that the rise in bureaucracy quality and reduction in internal conflict have positive and significant impact on GEI. We also calculated the z-scores of the regression coefficients to compare the relative magnitudes of their impacts on GEI. Keeping aside the initial GDP per capita, the largest positive impact comes from the infrastructural variables followed by public expenditure on health. Our findings reflect that infrastructural advancement is a necessary condition for enhancing women's access and participation and making public expenditures on health and education are very crucial for equality.

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What makes doing business easy?

SELIM RAIHAN AND MD. ABDUR RAHIM

The ninth Sustainable Development Goal (SDG) targets to “*Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation*”. There is a lack of good and consistent data on infrastructure across countries for a longer time horizon. Since, one of the fundamental objectives of building resilient infrastructure is to reduce the cost of doing business, in this article, we have explored the factors which can make the doing business easier. We have estimated cross-country panel regressions for 146 countries for the period from 2004 to 2013 considering Doing Business indicators as the dependent variables. The Doing Business data is taken from the World Bank (www.doingbusiness.org). There are 10 Doing Business indicators – Starting a Business, Dealing with Construction Permits, Getting Electricity, Registering Property, Getting Credit, Protecting Minority Investors, Paying Taxes, Trading Across Borders, Enforcing Contracts, and Resolving Insolvency. We have considered the distance to frontier (DTF) index of the Doing Business data. The DTF of any doing business indicator shows the distance of each economy to the ‘frontier’ which represents the best performance observed on each of the indicators across all economies. This allows to see the gap between a particular economy’s performance and the best performance at any point in time and to assess the absolute change in the economy’s doing business environment over time. An economy’s distance to ‘frontier’ is reflected on a scale from 0 to 100, where 0 represents

the lowest performance and 100 represents the frontier. For example, a score of 75 means an economy was 25 percentage points away from the frontier constructed from the best performances across all economies and across time.

In the cross-country panel regressions, as the explanatory we have used initial per capita GDP, level of per capita GDP, trade-GDP ratio, lending interest rate, mobile cellular subscriptions per 100 people and several institutional variables from the ICRG database (www.prsgroup.com) to see whether institution matters in doing business. The data for the explanatory variables are taken from the World Bank's World Development Indicators. We have run a number of panel regressions considering each of the 10 DTF indicators as the dependent variable. The regression results show that, while the initial GDP per capita doesn't have any significant impact on the rise in DTF in all cases, the rise in per capita GDP has positive associations with all subcategories of DTF of doing business indicators except DTF of dealing with construction permits and paying taxes. 1 percent increase in per capita GDP would lead to the rises in DTFs of doing business indicators in the range of 2 to 6 percentage points, with the largest impact in the case of DTF of getting electricity. The trade-GDP ratio appears to have positive significant effect on the DTFs of construction permits, protecting minority investor, and paying taxes; however it has no significant effect on the DTFs of other indicators. Lending interest rate has negative and significant impact on DTFs of starting a business, getting electricity and resolving insolvency, while it has no significant impacts on other DTFs. Mobile subscription per thousand people has positive and significant association with DTFs of each subcategories of doing business indicators with different magnitudes, with the largest impact observed in the case of the DTF of starting a business. We have found that three institutional variables - control over corruption, democratic accountability and low degree of military in politics appear to have statistically significant and positive impact on many of the DTFs. Control over corruption has a significant

positive impact on DTF of all doing business indicators except registering property and enforcing contracts. The democratic accountability has significant positive impact on the DTFs of starting a business, getting credit, protecting minority investors and trading across borders, with insignificant impacts on other DTFs. Low degree of military in politics positively affects the DTFs of starting business, trading across borders, registering property, and getting credit, while others are unrelated.

The above analysis leads to some important policy concerns. Economic growth and trade openness have positive implications for moving towards the frontier of doing business. The rise of lending interest rate would particularly deteriorate the DTFs of some of the important indicators of doing business. The rise in mobile subscriptions would lead closer to the frontier of ease of doing business. Finally, institutions have very important roles. Control over corruption is expected to result in a business friendly environment and so does the democratic accountability. Low degree of military in politics improves some of the indicators of doing business.

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How to ensure water and sanitation for all?

S E L I M R A I H A N A N D
S Y E R T A Z I M H A Q U E

The sixth goal of the SDGs is to “*Ensure availability and sustainable management of water and sanitation for all*”. In order to explore the factors that determine access to safe water and proper sanitation, we have run several cross-country panel regressions for 107 countries for the period between 1990 and 2010, considering percentage of people with access to improved water source (national, rural and urban) and percentage of people with access to improved sanitation facilities (national, rural and urban) as the dependent variables. For the explanatory variables, we have considered initial per capita GDP, level of per capita GDP, government expenditure as percentage GDP, urban population as percentage of total population, population in the largest city (in million), school primary enrollment rate, trade-GDP ratio, number of mobile and fixed telephone line users in 1000 people. The source of these data is the World Bank’s World Development Indicators. Several institutional variables from the ICRG database (www.prsgroup.com) are also considered to see their impacts.

The three regression results (for national, rural and urban) in the case of percentage of people with access to improved water source

as the dependent variable show that while the initial per capita GDP turns out to be statistically insignificant, the rise in per capita GDP has significant positive impact on the access to water. Government expenditure as percentage of GDP turns out to be insignificant. Rise in the share of urban population in total population by 1 percentage point would increase access to water by 0.52 percentage points. Rise in the population in the largest city by 1 million would increase the access to water by 0.07 percentage points. Rise in the primary enrollment ratio by 1 percentage point would increase access to water by 0.13 percentage points. 1 percentage point rise in the trade-GDP ratio would increase access to water by 0.3 percentage points, whereas an increase in fixed telephone line users by 1000 persons would increase access to water by 0.93 percentage points. It appears that in most cases, there are much larger impacts in the rural area than in the urban area.

The three regression results (for national, rural and urban) in the case of percentage of people with access to improved sanitation facilities as the dependent variable show that initial per capita GDP has a positive significant impact on improved access to sanitation at the national level and in the urban area, while for rural area it is insignificant. Per capita GDP has positive and significant effect in all three cases. Both urban population and population in the largest city have positive significant impacts, where a percentage point increase in the share of urban population increases the access to sanitation by 0.58 percentage points, and if population of the largest city increases by a million it increases access to sanitation by 0.17 percentage points. The impact of government expenditure is found to be statistically insignificant at the national level and in the urban area, while it has a positive and significant effect in the rural area. School primary enrollment has positive significant impact at the national level and in the urban area, whereas it is not significant in the rural area. Infrastructure has a positive impact in all three cases, and at the national level, it is found that if fixed telephone line

users increase by 1000 persons, access to sanitation would increase by 1.6 percentage points. Trade openness also has positive impact on sanitation, and one percentage point rise in the trade-GDP ratio would increase the access to sanitation by 0.02 percentage points. For both telephone line users and trade openness, the impacts are larger in the rural area than in the urban area.

In the case of the institutional variables, bureaucracy quality has positive significant impacts on improved access to water at the national level and in the rural area but not in the urban area. Bureaucracy quality also has positive significant effects on access to sanitation in all three cases with larger impacts in the rural area than in the urban area. Democratic accountability has insignificant impact on access to sanitation, but is significant and positively associated with access to water in the rural area. Lastly, government stability is positively and significantly associated with improved access to sanitation in the rural area, and has a positive significant impact on access to water for both rural and urban areas.

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What matters most for environmental performance?

SELIM RAIHAN AND
SYER TAZIM HAQUE

Four of the Sustainable Development Goals (SDGs) are directly and indirectly related to environment. They are the third goal: “*Ensure healthy lives and promote well-being for all at all ages*”; the sixth goal: “*Ensure availability and sustainable management of water and sanitation for all*”; the thirteenth goal: “*Take urgent action to combat climate change and its impact*”; and the fifteenth goal 15: “*Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss*”. There is no denying the fact that protection of environment is extremely critical for the promotion of sustainable development.

In order to see what affects environment performance, we have used an index of environmental performance as the dependent variable in our cross country panel regression models for 167 countries. The data of Environmental Performance Index (EPI) is taken from Yale Center for Environmental Law and Policy (YCELP) (<http://epi.yale.edu>). This index includes two broad areas of environmental and ecological concerns - Environmental

Health (EH) and Ecosystem Vitality (EV). Indices like health impacts, air quality, water and sanitation make EH index, where EV index concerns about water resources, agriculture, forests, fisheries, biodiversity and habitat, climate and energy. The EPI, EH and EV have a scale of 0 to 100, where higher scores depict better environmental performances. In 2012, the top 5 countries with highest EPIs were Switzerland (87.7), Luxembourg (83.3), Australia (82.4), Singapore (81.8) and Czech Republic (81.5). In the same year, the bottom 5 countries with lowest EPIs were Somalia (15.5), Mali (18.4), Haiti (19), Lesotho (20.8) and Afghanistan (21.6). The scores and the rankings may differ for EH and EV indices. For example, in 2012, though Australia's EV index was lower than those of the Czech Republic and Germany, the EH index for Australia was much higher, and ultimately, the EPI of Australia was the highest among these three countries.

We have run cross-country panel regression models for 167 countries with an annual data for the period from 2002 to 2012. The explanatory variables are initial per capita GDP, level of per capita GDP, share of industry in GDP, population growth rate, share of urban population in total population, total health expenditure as percentage of GDP, trade-GDP ratio, number of mobile cellular users in 100 people as a proxy for infrastructure, several intuitional variables, and LDC dummy. The data of these explanatory variables are taken from World Bank's World Development Indicators. Data of institutional variables are taken from the ICRG database (www.prsgroup.com).

Regression results show that, initial per capita GDP has a positive impact on the EPI. The rise in per capita GDP also has positive and significant effect, and one dollar rise in real GDP per capita would increase EPI by 0.0002 points. Per capita GDP has however, a larger positive impact on EH index than on EV index. The share of industry value addition in GDP doesn't appear to have any significant impact on either EPI or EH or EV indices. Fall

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in population growth rate has a positive impact on overall EPI. A percentage point rise in the share of urban population in total population would increase EPI by 0.31 points; however, such rise has a greater impact on EH index (by 0.60 points) than on EV index (by 0.11 points). With no significant impact on EV, total health expenditure as percentage of GDP has its positive impact on EH and overall EPI; and a percentage point rise in the share of health expenditure in GDP would improve the EPI by 0.14 points. Infrastructure has a positive impact, and it is found that if the number of mobile phone users increases by 100 persons, EPI would increase by 0.2 points. Trade openness appears to be an influential variable with its significant impact on EV and EPI, as a percentage point rise in trade-GDP ratio would increase EV and EPI by 0.01 and 0.008 points respectively. The coefficient on LDC dummy suggests that being an LDC would reduce the EH and overall EPI by 8.5 and 6.1 points respectively. To expand the scope of the study, we have checked how institutional factors may have impact on environmental performances. We have found that bureaucracy quality turns out to be the most important institutional variable in positively affecting the EPI.

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Why do countries differ in educational attainment?

SELIM RAIHAN AND
AHMED TANMAY TAHSIN RATUL

The fourth of the Sustainable Development Goals (SDGs) aspires to “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”. Education is a critical component of wellbeing that is thought to have major impact on economic development and quality of life.

To explore why countries differ in educational attainment, we have run cross-country panel regressions considering the ‘Education Index’ from the ‘Human Development Index’ as the dependent variable. Education Index is a measure of educational attainment of the countries. Education Index is a composite index, calculated from the ‘mean years of schooling index’ and the ‘expected years of schooling index’ (<http://hdr.undp.org>). The Education Index varies between 0 and 1, where 1 is the best value; hence, the higher the value a country has, the better is the educational performance of that country. The data are available for 194 countries with five-year intervals for 1980, 1985, 1990, 1995, 2000, 2005 and 2010. In 1980, the best performer was Australia with Education Index of

0.87 and the worst performer was Niger with Education Index of 0.06. In 2010, the best performer was again Australia with Education Index of 0.92 and the worst performer was again Niger with Education Index of 0.18.

We have considered several explanatory variables in our panel regression models, which are initial per capita GDP, level of per capita GDP, progression to secondary school (which is the number of new entrants to the first grade of secondary school in a given year as a percentage of the number of students enrolled in the final grade of primary school in the previous year excluding the repeaters from the last grade of primary education in the given year), public expenditure on education as percentage of GDP, under five mortality rate, pupil-teacher ratio in primary schooling and pupil-teacher ratio in secondary schooling. In addition, several institutional variables are considered with data from ICRG (www.prsgroup.com) to see whether institution matters in cross-country differences in educational attainment. Data of the explanatory variables are taken from the World Bank's World Development Indicators.

The regression results show that, after controlling for initial per capita GDP, the level of per capita GDP has a positive and significant impact on Education Index. 1 percent increase in per capita GDP would increase Education Index by 0.06 units. Progression to secondary school has a positive and significant impact on educational attainment. A unit increase in progression to secondary school would result in 0.002 units increase in Education Index. Public expenditure on education has positive and significant impact on Education Index. A percentage point rise in public expenditure on education would raise Education Index by 0.01 units. Reduction in child mortality has positive and significant impact on educational attainment. A percentage point reduction in under five mortality rate would raise Education Index by 0.001 units. Finally, provision of quality of education, as

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proxied by pupil-teacher ratio, has significant impact on educational attainment. One percentage point reduction in pupil-teacher ratios in the primary and secondary schooling would raise Education Index by 0.001 and 0.002 units respectively.

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The analysis reveals interesting insights when individual institutional variables are introduced in the base model. It appears that democratic accountability, better investment profile, improved law and order, government stability, low degrees of internal and external conflicts, and low degrees of military and religion in politics have significant and positive impacts on educational attainment. Among these, the most important institutional variable appears to be the democratic accountability.

The regression analysis poses important policy implications. In addressing the objectives of the fourth SDG, countries should focus on economic growth, raising public expenditure on education, reduce child mortality and increase the quality of education. However, there is also a vital need to emphasize on the state of democracy, ensuring accountability along with a stable government that boost investment conditions. Internal and external conflicts are also vital issues to be contained for ensuring better, equitable and quality education, which would eventually result in the rise in educational attainment. Mitigation of involvements of military and religion in politics are also essential in enhancing educational attainment. Thus, a strong nexus between economic policies and institutional development can improve conditions for attaining the fourth Sustainable Development Goal by all countries by 2030.

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How pervasive is regional disparity in primary education in Bangladesh?

SELIM RAIHAN AND MANSUR AHMED

Sound knowledge on educational performances of different regions across the country can be helpful in the decision making process for better resource allocation and policy formulation. A multidimensional composite measure of educational development, that captures many dimensions such as access, inputs, quality, gender-parity, and outcome, would enable policy makers to target and to channel scarce resources in lagging regions more efficiently.

This paper develops a multidimensional composite index for the primary education development for 483 upazilas (sub-districts) in Bangladesh and identifies the lagging regions for potential policy intervention. More specifically, this paper constructs the Education Development Index (EDI) for the primary education sector of Bangladesh. This index facilitates cross-sectional analysis of the levels of attainment in education among different regions of Bangladesh. Furthermore, it draws policy attention to crucial parameters for achieving equity in access and attainment in educational development.

Bangladesh has one of the largest primary education systems in the world with an estimated 16.4 million primary school aged children (6 to 10 years). This study uses the data from a census which was carried out in 2011, which covered all 11 types of primary schools with a total number of more than 80,000 schools. Education Management of Information System (EMIS) division of Directorate of Primary Education (DPE) under Ministry of Primary and Mass Education (MoPME) undertook the census.

Five broad parameters and 19 sub-parameters (individual indicators) are used in the construction of EDI. The broad parameters are (i) Access, (ii) Infrastructure, (iii) Quality, (iv) Gender Equity, and (v) Outcome. This study has applied the Principal Component Analysis (PCA) method for each broad parameter and calculated weights for each of the indicators within the broad parameter. (For detailed methodology of EDI construction and list of indicators, see Raihan and Ahmed, 2016). The objective of PCA is to reduce the dimensionality (number of indicators) of the data set but retain most of the original variability in the data. The overall EDI constructed for this analysis is again a weighted summation of five broad EDIs - access EDI, infrastructure EDI, quality EDI, gender equity EDI and outcome EDI, with weights derived from the PCA on these five EDIs. The index value of 1 indicates the highest educational development with 0 as the lowest development.

Analysis of the aforementioned census data suggests that, despite indicators related to accessibility of schools showed good scenarios, still about 20 percent schools were not easily accessible to the neighboring residents. Astonishingly, only 20 percent of schools enjoyed electricity access. Class rooms at the primary schools in Bangladesh were quite crowded as the student-room ratio was 38. Student-teacher ratio was also very high, implying crowded class rooms with low degree of interaction between

students and teachers. Still a significant proportion of teachers in primary schools were without bachelor degree. In terms of gender parity in primary school enrolment, not all upazilas achieved gender parity. Though Ministry of education set a target that the ratio of female to male teachers should be above 60 percent, the observed female to male teacher's ratio in the census data was about 53 percent, which suggests need for renewed efforts to reach that goal. Another important indicator related to gender equity is the percentage of schools with girls' separate toilet. The census data shows that only 40 percent of schools had separate toilets for girls. Despite Bangladesh achieved remarkable success in primary school enrolment, average pass rate at grade V and school attendance rates were 87 percent and 85 percent respectively with wider variations among the upazilas. On average, 1 out of 10 students needed to repeat the same class and 1 out of 20 students dropped out from school.

In terms of access EDI (constructed using two sub-parameters - schools per thousand populations and accessibility of schools), most upazilas performed in the mid-range (0.4 - 0.6), suggesting a significant scope of improvement in terms of accessibility of schools. However, the upazilas around the 'haor' (large water bodies) regions in Sylhet division and in Mymensingh division and the upazilas from Chittagong Hill Tracts (CHT) lagged behind other upazilas badly in terms of accessibility. Some other upazilas along the Jamuna River and the Padma River (the 'char' lands) also performed poorly. While improvement of accessibility of schools is necessary for most upazilas, these lagging upazilas warrant special attention for their geographical locations. Upazilas located in the metropolitan areas, in contrast, performed well in terms of accessibility.

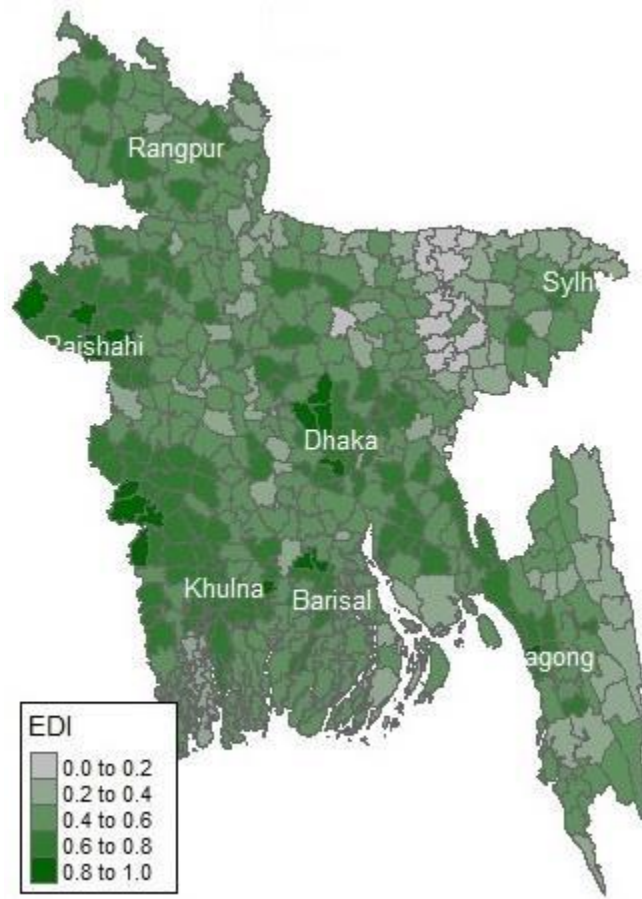
The patterns of infrastructure EDI (constructed using five sub-parameters - school with safe water, school with electricity, school with toilet per 100 students, average room condition of the school,

and student-room ratio) were similar to those of the access EDI. However, the performance of upazilas in terms of infrastructure EDI was worse than that of access EDI. A large number of upazilas were in the lower mid (0.2 - 0.4) of infrastructure EDI, while most of them belonging to the Chittagong Hill Tracts and Mymensingh division. Upazilas in the south west coastal region and along the upper Jamuna River in the Rangpur division also performed poorly.

In terms of quality EDI (constructed using three sub-parameters - students-teacher ratio, qualification of teachers, and availability of teaching-learning materials), though some number of upazilas performed in the upper middle range (0.6 - 0.8), only few upazilas were in the top quintile. In fact, quite a few upazilas were in the lower middle range (0.2 - 0.4). Most of the top ten performing upazilas were from metropolitan areas.

In terms of equity EDI (constructed using four sub-parameters - ratio of girls among total students, ratio of female among teachers, schools having separate toilet for girls, and gender equity in dropout rate), most upazilas in Bangladesh performed in the lower middle of the ladder (0.4 - 0.6). Some upazilas performed even poorly. Therefore, despite the 'satisfactory' level of gender equity in primary education at the national level, gender parity in primary education is a serious issue in a large number of upazilas. Like the access EDI, upazilas from 'haor' regions performed poorly in gender equity. Quite understandably, upazilas from urban areas were among the top performing upazilas in terms of equity EDI. In terms of outcome EDI (constructed using five sub-parameters - gross enrolment ratio, pass rate at grade five, attendance rate, dropout rate and repetition rate), most upazilas performed in the mid-range, implying a room for improvement for all upazilas. Upazilas from the 'haor' region, Chittagong Hill Tracts, and poverty-stricken North Bengal were the worst performers.

Figure 84.1: The Composite Education Development Index (EDI) map of Bangladesh



Source: Raihan and Ahmed (2016)

Figure 84.1 depicts the spatial distribution of composite EDI (constructed using five EDIs – access EDI, infrastructure EDI, quality EDI, gender equity EDI, and outcome EDI). Figure 84.1 shows that very few upazilas were in the highest range (0.8 - 1.0) of EDI. In fact, not many upazilas were in the range of 0.6-0.8 of EDI score. Most upazilas were concentrated in the range of 0.4-0.6. Most of the top ten upazilas were from large metropolitan

areas such as Dhaka, Chittagong or Khulna. Lowhajong of Munshiganj and Shibpur of Norsingdi were the only exceptions and these upazilas were also located in close proximity to the capital city Dhaka. Upazilas in the 'haor' region of Sylhet division and Mymensing division and upazilas from the CHT were fatally lagging behind all other upazilas in terms of primary education development. All the bottom ten upazilas were either from the 'haor' region or from the CHT. Though the population density in the CHT is low, the upazilas in the 'haor' region are home to a sizeable portion of population of the country. Thus, these lagging regions warrant special attention to improve the overall development of primary education in Bangladesh. The aforementioned analysis suggests that despite many achievements during the past decades, major improvements are still needed in Bangladesh in order for all children to receive the benefit of quality primary education. Opportunities for good quality primary education in Bangladesh are limited by inequalities associated with wealth, location, ethnicity, gender, and other factors. The major challenges thus include addressing poor quality of education, high dropout rates, promotion of equity and accessing education, and targeted programs for lagging regions.

Reference:

Raihan, S. and M. Ahmed. (2016). Spatial divergence of primary education development in Bangladesh through the lens of Education Development Index (EDI). MPRA paper 71177.

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“..SDGs are ambitious but achievable..”

INTERVIEW OF DR. NAGESH KUMAR

Dr. Nagesh Kumar is Director of Social Development Division of the UNESCAP, Bangkok and officer-in-charge of UNESCAP's South and South-West Asia Office, New Delhi. In his immediate past position, he served as the Director and Head of UNESCAP's South and South-West Asia Office, based in New Delhi. He was the Chief Economist at ESCAP during 2009-2013. Dr. Kumar served as the faculty of the United Nations University-Institute for New Technologies in Maastricht, Netherlands. He has also served as a consultant to the World Bank, Asian Development Bank, UNDP, UNCTAD, UNIDO, UN-DESA, ILO, the Commonwealth Secretariat, and the Commission on Intellectual Property Rights, among others. For the January 2017 issue, SANEM interviews Dr. Nagesh Kumar on the challenges and expectations surrounding SDGs in Asia and the Pacific. The views expressed in this interview are personal and should not be attributed to the United Nations and its member states. This interview is taken in January, 2017.

SANEM: Are the targets and goals of Sustainable Development Goals (SDGs) realistic?

NK: The SDGs are certainly ambitious and transformative agenda. They provide an opportunity to countries in South Asia in particular and Asia and the Pacific to eradicate extreme poverty and hunger and provide a life of dignity to all their people. However, success in achieving the MDG of poverty reduction,

among other targets, gives confidence that SDGs are not beyond the realm of achievement. However, the governments of national and local levels and other stakeholders have to commit themselves to deliver. Therefore, I would say that the SDGs are ambitious but achievable.

SANEM: Which experiences and lessons of MDGs can be applied in case of SDGs?

NK: SDGs have been formulated keeping in mind the experiences with MDGs. For instance, MDGs proposed targets such as poverty reduction but did not cover the processes and drivers such as industrialization, employment creation and economic growth. SDGs cover these processes and drivers. SDGs also build on MDGs in terms of environmental sustainability which was covered perfunctorily earlier. Finally even though MDGs had a goal (MDG 8) about global partnership, it was spelt out in best endeavor terms. SDGs build on it and seek to spell out elements of global partnership and specific means of implementation that will lend themselves to monitoring like other Goals and targets.

The MDGs experience may also be helpful in implementation and coordination mechanisms. Firstly, in view of a very cross-cutting agenda that SDGs cover, a coordinating agency is very important. Secondly, effective SDGs implementation requires outcome-based approaches rather than input or expenditure based approaches. Decentralization of administration to empower local administrations right down to districts and village councils would be important to give stake to people in SDGs achievement. It is also important to undertake institutional reforms to incentivize changes in regulations, institutional culture, markets and mindsets. The importance of strong institutions at all levels along with peace and justice has been emphasized under SDG-16. Finally, one lesson of MDGs' experience has been that what is not measured is not achieved. Data, monitoring and review at national and subnational levels is critical. For this, governments need to

invest in development of statistical capacity that leaves no one behind. The governments in developing countries and LDCs need to be supported in building statistical capacity.

SANEM: What are the major challenges and constraints to achieve the SDGs for the Asia-Pacific countries?

NK: The key constraints on the ability of developing countries in Asia and the Pacific in achieving the SDGs include finance, technology, market access, capacity building and systemic vulnerabilities. An agenda, as comprehensive as SDGs, will require huge amount of resources. UNESCAP has estimated that Asian countries will need to invest between 10-20 percent of their GDP for achieving just the social SDGs. Closing the infrastructure gaps would need US\$ 1 trillion per year as per the estimates available. Finally, enhancing the environmental sustainability of development would require additional resources, as the governments have indicated in their submissions on intended nationally determined contributions under the UNFCCC (United Nations Framework Convention on Climate Change). India has, for instance, estimated that it will need to spend US\$ 2.5 billion to achieve its Nationally Determined Contributions under the Paris Agreement by 2022.

Technology is going to be another key constraint, especially for switching over to the low carbon and low natural resource intensive pathways to development. The bulk of the emissions arise in energy production based on fossil fuels. The available clean coal technologies have the potential to bring down the emissions dramatically. These technologies need to be made available to countries that need to deploy them on easier terms. The problem arises because the new technologies are often proprietary in nature and are closely held mostly by corporations based in a handful of industrialized and newly industrialized countries that dominate the innovative activity and patent ownerships. Developing countries will also need to invest in their

absorptive capacity to deploy and harness environmentally sensitive technologies and products. In this context South Asian countries could harness the potential of their so-called frugal engineering technologies for evolving low carbon affordable products and processes.

As observed earlier, statistical capacity will need to be enhanced. Developing countries and LDCs will need to be provided with market access to build their supply capacities. The Lehman Brothers crisis of 2008/09 also showed that developing countries are vulnerable to global financial and economic conditions even though they may not be responsible for these outcomes. International policy coordination needs to be pursued in a manner that takes care of the impacts on poorer countries.

SANEM: What are the potential sources of financing for the Asia-Pacific countries?

NK: Financial resources for implementing the SDGs in Asia and the Pacific countries have to be raised from both domestic and international resources. Firstly, the potential of domestic resource mobilization has to be exploited fully through expanding the tax base, enhancing the efficiency of tax administration. The tax-to-GDP ratios are low in many Asian countries especially in South Asia indicating the potential of raising more revenues. New and innovative sources of revenue have to be tapped. India is funding few of the SDGs such as universal education, sanitation, through specific cases (taxes on taxes). Potential of public private partnerships (PPPs) can be harnessed for closing the infrastructure gaps. A number of Asian countries are now developing their regulatory frameworks for harnessing the potential of PPPs. Corporate social responsibility (CSR) can also supplement the public investment in meeting the social development in a useful manner as some countries are now observing.

SANEM: What should be the role of the developed countries in global partnership and cooperation for helping the developing countries in Asia and Pacific in achieving SDGs?

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NK: The developed countries need to support the achievement of SDGs by developing countries and LDCs by providing development finance, technology, market access and capacity building. There have been a number of commitments made in this regard including the 0.7 percent target for ODA as a proportion of GNI, and US\$ 100 billion in new and additional resources annually for the Green Climate Fund and provision of technology on fair and equitable terms, among others. These commitments, if delivered, will assist developing countries and LDCs implement the agenda in a very substantial manner. The global partnership should also extend to develop new innovative sources of international revenue for development. For instance, a global financial transaction tax can generate annual revenues of US\$ 650 billion in conservative terms besides moderating the volatility of short terms capital flows. Asia has demonstrated leadership by establishing two new multilateral development banks namely AIIB and NDB. These initiatives are certainly very important ones in enhancing the supply of development finance. But, there may be room for more such institutions given the scale of foreign exchange reserves accumulated by Asian countries. Finally, South-South and triangular development cooperation can fruitfully complement the traditional development cooperation as has been demonstrated by the emerging countries of Asia and the Pacific with the emergence of China and India among the sources of development partnership.

SANEM: What should be the role of UNESCAP in helping the Asia and Pacific developing countries in achieving SDGs?

NK: As the regional commission of the United Nations for Asia and the Pacific with universal membership of the countries of the

region and with its convening authority, UNESCAP can assist the member countries achieve the SDGs in a number of respects. Firstly, in capacity building for statistics and data and in creating a regional follow up and review (FUR) feeding into the High-Level Political Forum of EcoSoc. Secondly, it can help foster regional cooperation in support of SDGs. These include strengthening regional transport and ICT connectivity and development of regional markets to facilitate regional value chains in support of SDG 8 and 9. Similarly, strengthening energy connectivity can support achievement of SDG 7 on sustainable energy to all. UNESCAP's regional institutes could support the capacity building activities of developing countries and LDCs in different areas including technology transfer and sustainable agriculture. Finally, UNESCAP can facilitate sharing of good practices and development experiences in achieving SDGs across the region.

SANEM: Thank you so much for your time.

NK: You are most welcome.

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“..regional cooperation to face challenges of climate change..”

INTERVIEW OF
AMBASSADOR SHAFQAT KAKAKHEL

SANEM interviews Ambassador Shafqat Kakakhel on global climate change issues. Shafqat Kakakhel is a former member of Pakistan's Diplomatic Service. He also served as Deputy Executive Director of the UN Environment Program for nearly a decade. Currently, he is the Chairman of Sustainable Development Policy Institute (SDPI), Pakistan. This interview is taken in February, 2015.

SANEM: What are the recent debates on global environment and climate change issues?

SK: The most important recent debate on global environment and climate change issues took place at the 20th conference of parties and the UN framework convention on climate change (UNFCCC) in Lima (Peru) in December, 2014. The Lima conference was expected to approve the first draft of a new international agreement to be negotiated and adopted at the forthcoming conference scheduled to be held in Paris in December this year. Regrettably the Lima meeting failed to fulfill this hope and instead agreed, at the last minute, a hastily prepared document called the *Lima Call to Climate Action* containing a set of elements for

consideration at a series of negotiations culminating in the adaptation of a new agreement in Paris.

From the perspective of developing countries which have been and are likely remain the major victims of the negative impacts of climate change, the Lima call represents yet another evidence of the erosion of political will in the developed countries to fulfil their obligations under the Convention. Anchored in the principle of common but differentiated responsibilities and capabilities of countries at different levels of development, the convention had proclaimed the commitment of the rich countries to take the lead in reducing their emissions of carbon dioxide and the Green House Gases (GHG) which had created the problem of climate change. Developed countries had also agreed to provide adequate financial and technological support to the developing countries to adapt to the negative impacts of climate change. The developed countries have neither carried out drastic reductions in their GHG emissions nor provided finance and technology to the poor countries most vulnerable to climate change impacts. Instead they have tried to shift the responsibility of mitigation on to the developing countries especially the emerging economies led by China, India and Brazil. Developing countries have agreed to the weakening of the connection mainly due to their desire to preserve a modicum of global solidarity and multilateral cooperation for addressing global challenges.

The Lima outcome provides for emission cuts by all countries according to their national circumstances thereby abolishing the differentiation between developed and developing countries. The Lima call refers to the previous decisions on finance, technology and capacity buildings well as a mechanism for compensating developing countries for damage caused by climate change related extreme events but doesn't spell out relevant details regarding the resources needed to operationalize these arrangements.

The negotiations in the run up to and at the Paris conference are expected to be protracted and acrimonious but eventually culminate in a new agreement unlikely to either achieve climate stability or assist the victims of climate change in the developing world.

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SANEM: How vulnerable South Asia is in terms of climate change?

SK: The fourth and fifth assessments carried out by the inter-governmental panel on climate change (IPCCC) in 2007 and 2013-14 respectively and other assessments by various national and international organizations have confirmed the acute vulnerability of South Asian countries to nearly all the adverse consequences of climate change. The negative impacts enumerated by the IPCCC include reduced availability of fresh water caused by receding glaciers in the Himalayas feeding the rivers and erratic patterns of the monsoon rains; sea level rise which could submerge low-lying coastal regions and islands, and increase in the frequency, duration and intensity of extreme events such as floods, droughts, tsunamis, hurricanes and wind storms and increase in infectious diseases from higher temperature. Reduced water supplies will threaten the drinking water, food and energy security of South Asian countries already facing water shortages.

SANEM: Are initiatives in South Asia adequate or effective?

SK: Nearly all South Asian countries have developed policies, strategies and action plans aimed at alleviating the adverse effects of climate change on their economies, societies and communities. However, the technological, financial and human resources mobilized to translate the policies and plan of actions into tangible actions do not match the scale and magnitude of the threats posed by climate change.

In addition to efforts to enhance domestic efforts to adapt to irreversible negative effects of climate change, South Asian countries have actively contributed to the global discussions on climate change in order to strengthen the institutional architecture on adaptation, technology transfer, capacity development and protection of forests. They have also sought to promote regional co-operation in addressing the multi-faceted challenges of climate change, in the framework of the South Asian Association for Regional Cooperation (SAARC).

SANEM: How could regional cooperation address these issues in this region?

SK: The burgeoning literature on climate change has emphasized the need for, and efficacy of, cooperation at regional level to promote mitigation and adaptation. The two notable regional mechanisms of cooperation in South Asia are (i) the SAARC, and (ii) the South Asia Cooperative Environment Program (SACEP) whose functions include serving as the secretariat of the South Asia Regional Seas Program.

Significant SAARC initiatives on environment and climate change include over a dozen meetings of the ministers of Environment since the late 1980's such as the 1997 meeting at which the first SAARC Environment Action Plan was adopted; the 2005 meeting which agreed a regional cooperation framework on disaster management; the 2008 meeting at which a declaration and Action Plan on climate change were adopted, and the 16th SAARC summit in Thimphu in 2010 at which a statement calling for wide ranging cooperation on climate change was agreed. At the Thimphu summit, a broad-based SAARC convention on environment was also signed which has since been ratified by most member states.

Given the enormity of the challenges posed by climate change, South Asian countries need to pay greater attention to the effective implementation of the 2008 and 2010 decisions related to climate change. Existing SAARC centers need to be strengthened and new institutions setup in order to supplement efforts at national level to deal with the negative impacts of climate change, especially in areas such as disaster management, integrated cooperative management of shared trans-boundary watercourses, energy conservation and efficiency and development of clean, renewable sources of energy, and climate induced heat hazards.

SANEM: Thank you very much.

SK: You are welcome.

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“..the biggest challenge we are facing now is the lack of appropriate human resources..”

INTERVIEW OF DR. SHAMSUL ALAM

Dr. Shamsul Alam is the Member (Senior Secretary) of the General Economics Division of the Bangladesh Planning Commission. He obtained his M.A. in Economics from the Thammasat University, Thailand and Ph.D. from the University of Newcastle Upon Tyne, UK. He led the preparation of First Perspective Plan (2010-2021) and the 6th and 7th Five Year Plans of Bangladesh. Dr. Alam talks to SANEM about inclusive growth in Bangladesh and challenges for human capital development. This interview is taken in July, 2016.

SANEM: What is the nexus between human capital development and inclusive growth?

SA: Inclusive growth means that the benefits of any growth or economic transformation must be shared by all segments of the population; particularly the poorer, underprivileged class and the ethnic minorities, that is, all be benefitted from economic growth. To attain inclusive growth we need to give priority to human capital development. By human capital development we mean enhancing the capabilities of people, developing marketable skills, and educating them so that they can enjoy the fruits of economic development. Education is the only way to enable people to move

ahead in the society. To attain inclusive growth we have to ensure access to quality education for everyone in the society. Poor must have access to free education.

SANEM: How is human capital development incorporated in the 7th Five-year-plan of Bangladesh?

SA: In the current 7th Five-year-plan, the top-most priority is given to human capital development along with infrastructural development, energy-security etc. This year the highest amount of budgetary allocation went to education sector; also, the health sector budget has been increased substantially. In the Five-year-plan we laid out several strategies that should be followed in achieving the Plan-goals. We particularly emphasized on demand led technical skill development. Skill development will help then poorer class most. As they cannot afford higher education, skill development will help them get better jobs with higher remuneration. We also need to develop marketable skills for our growing industries. Over the last couple of years, the Government has established myriads of technical institutes, technical schools and colleges, and even technical universities. Many nursing institutes have been established - marine academies as well. Therefore, all major kinds of technical education that relate to the market demand have been emphasized in the 7th Five-year-plan.

SANEM: How can skill development programs influence the process of improving the quality of employment?

SA: Technical education should emphasize on market demand based skill development, as I said. Trainings should be provided and courses should be offered as per the demand of the industries and the market. Providing technical education which, do not have any market demand will be useless. We need to increase the percentage of technically educated people. At least 20% of the population should receive technical education and skill development trainings during the 7FYP. If education is linked to

market demand then they will get quality jobs. It is essential that skill development programs be closely linked to industries.

SANEM: Does the government have any plan to improve the skills of expatriating labor?

SA: It's difficult to provide any kind of training to those who are already working abroad. However, the government is providing trainings to the prospective expatriates through the BMET and other institutions before they leave. There are several courses that these training institutions offer to the potential migrant workers to equip them with required skills. The number of training recipients has been increasing over the years. It is less rewarding for Bangladesh to send unskilled and semi-skilled labor as they earn less than what workers from other countries like Philippines or Vietnam earns. Therefore, it is imperative that we train prospective migrant workers so that they get better jobs and salaries in the destination countries. Such skill development will also reduce the vulnerability of the migrant workers.

SANEM: What are the government policies to accrue the benefits of the demographic dividend?

SA: We can say that the actual phase of demographic dividend began 6 to 8 years from now. As we understand, the benefits of demographic dividend will start to decline from 2035-36. From then on the dependent population will be increasing, particularly the old-age population. This is a one-time opportunity for a nation. For that reason, we emphasized a lot on human resource development in the 7th Five-year-plan. In particular, we have targeted the young generation, those who will be in the labor market within a couple of years. Keeping in mind our opportunity to reap the benefits of demographic dividend we must create job opportunities for the youth population. We have emphasized on growth with decent job creation, not just mere growth.

SANEM: What are the major challenges for human capital development in Bangladesh?

SA: Regarding policy implementation, the biggest challenge we are facing is the lack of appropriate human resources. The economy is transforming rapidly, businesses are expanding and industrial sector is having growth rate of more than 10%. To cope with the growing market demand, human capability and skill level need to grow fast as well. We cannot match the pace of the fast growing economy, as education needs time to inculcate. Bureaucratic capacity needs to be enhanced, quality of education and training must be improved and market-oriented. There are technical institutes, technical colleges, which suffer from lack of expert teachers. If we don't have skilled teachers and expert manpower in technical and educational institutions then developing skilled manpower will be a challenge. Moreover, improvements in education equality should be a social movement along with the government effort. The courses and curricula need to fit the market demand. A social movement participated by intellectuals, civil society, and teachers will make the government efforts more fruitful. Therefore, there should be an all-round movement for improved standard of life and quality education, good morality and forward-looking attitude to make the country a welfare state.

SANEM: Thank you very much for your time.

SA: You are welcome.

“..analytical foundation of the SDGs is deeply anchored into the human development paradigm..”

INTERVIEW OF DR. SELIM JAHAN

Dr. Selim Jahan is the Director, Human Development Report Office, New York. He was Deputy Director of the Human Development Report Office and was a member of the Core Team that authored nine global Human Development Reports (1993-2001). Before joining UNDP in 1992, Dr. Jahan held several positions, including Professor of Economics and Director of the Economic Research Unit, University of Dhaka, Bangladesh (1984-92); Economic Adviser, Planning Commission, Government of Bangladesh, (1989-90); Visiting Scholar, School Of Public Policy, University of Maryland, USA (1992) and Lecturer, Department of Economics, McGill University, Montreal, Canada (1983-84). Dr. Jahan also worked as Adviser and Consultant to various international organizations including ILO, UNDP, UNESCO, and the World Bank during the 1980s and the early 1990s. This interview is taken in July, 2016.

Human capital development and SDGs: At the outset, it is important to distinguish between human capital development and human development. Human capital development treats human beings as an input to the production process and as such refers to human resource development. Human development on the other

hand refers to enlargement of human choices—both in terms of processes as well as outcomes. Human development is thus a broader concept and human capital development, focusing on enhancing human capabilities, is just a subset of human development. That said, human capital development is critically important for the attainment of the Sustainable Development Goals (SDGs). And, the nexus can be seen from the perspective that better human capabilities, achieved through better human capital formation, can contribute to more efficient and effective institutional framework – so critical for realizing the SDGs. Better educated people can also make more informed decisions, which may affect SDGs through the environmental, economic, and social routes.

Human development, through enhancing economic, social, political and environmental choices of people, can also impact the SDGs positively. Furthermore, the analytical foundation of the SDGs is deeply anchored into the human development paradigm, which is linked to human rights, human security and human freedom. Measures of human development can also inform and influence the measurement of the SDG indicators.

Challenges for countries like Bangladesh: In terms of human capital development, the three main challenges in Bangladesh are the quality of education, inadequate and relevant skill formation leading to a mismatch between skills demanded and supplied and lack of higher-level innovative and creative human capital, which can compete globally in future years. We have to remember while focusing on human capital development, first, we have to be futuristic and shall have to look globally, beyond our borders; second, we must not discriminate against women and third, we cannot compete in tomorrow's world with yesterday's knowledge.

From the human development perspective, the three main challenges are: first, consolidate and accelerate the impressive progress that Bangladesh has made on different fronts of human development over the years; second, remove the unevenness and disparities in human development progress on various planes (e.g. rural-urban, men and women, various regions); and third, reduce the human deprivations that still persist in various areas of human lives.

Way forward: In moving forward, five things need to be focused and pursued. First, draw from the lessons of successes and failures of past initiatives; second, identify the constraints that hinder or slow progress; third, formulate a policy matrix, through broader dialogues with different stakeholders, conducive to human capital development and human development with the necessary resource framework and clear implementation mechanisms; fourth, develop or strengthen institutions and develop an alliance with different development actors; and finally, create a monitoring and evaluation system with necessary benchmark surveys, indicators, data and reporting mechanisms.

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PART V

POLITICAL ECONOMY

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Transitions between growth episodes: Do institutions matter and do some institutions matter more?

SELIM RAIHAN, SABYASACHI KAR AND
KUNAL SEN

A large literature has examined the role of institutions in explaining economic growth. While the earlier literature has examined the role of institutions in determining long-run per capita income, a new literature examines the determinants of growth accelerations and deceleration episodes – which are large discrete changes in medium term growth rates that are common in developing countries. Some of these studies examine the onset of growth accelerations while others examine the onset of growth decelerations. However, these studies look at only the timing of the shift in the growth rate (either as an acceleration or a deceleration), and the econometric methodology they use are probit models (where the year of the break is taken as one, with other years as zero) to study the likelihood a growth break occurring in a given year, for a set of correlates. An important limitation of these studies is that they do not differentiate between the different growth episodes that a country is transitioning from or to. For example, when a country moves from a growth collapse to rapid growth, it is a different growth transition qualitatively

than when it moves to an episode with slightly positive but slow growth rates.

In this paper, we investigate the role of economic and political institutions in determining the likelihood of a country transitioning from one growth episode to another. In contrast to the previous literature, in this paper, we provide a richer characterisation of the growth process where a country may move between six different types of growth episodes, ranging from growth collapses to rapid growth episodes. By doing so, we are better able to capture the episodic nature of growth and that many countries tend to switch frequently between growth collapses to slow growth episodes to rapid growth episodes.

We differentiate between six types of growth episodes - from growth collapses (where the episode specific per capita real GDP growth rate, g , is -2 per year), to negative growth (g between -2 and 0), stagnation (g between 0 and $+2$), stable growth (g between $+2$ and $+4$), moderate growth (g between $+4$ and $+6$), and rapid growth (g over $+6$). Using multinomial logit models, in the context of a panel dataset of 125 countries from 1984 to 2010, we examine the likelihood of switching from one growth episode to another growth episode. We examine the role of contract viability (as a measure of the quality of economic institutions) and the role of democracy and bureaucratic quality (as measures of political institutions) in explaining the switches that countries experience between different types of growth episodes. The data on contract viability, democracy and bureaucratic quality are derived from the ICRG database (www.prsgroup.com).

We find that though bureaucracy quality has a positive effect while switching from negative growth episode to positive growth episodes, it doesn't matter in most of the cases while switching from lower order growth episodes to higher order growth

episodes. Both contract viability and democratization can explain the switching from negative growth episode to positive growth episodes. Contract viability and democracy can also explain the movements from lower positive growth episodes to higher positive growth episodes. However, while contract viability is important for moving from stable growth episode to rapid growth episodes, democracy is not important in explaining this switch. This suggests that while better economic and political institutions matter in taking a country from growth collapses to stable growth, economic institutions matter more than the political institutions for the switching from stable growth to rapid growth.

Our results suggest that, democratic episodes do not necessarily witness transitions to rapid growth episodes from moderately positive growth episodes. However, democratic episodes do witness a transition from negative to positive growth episodes, indicating that democratization does prevent the worst type of growth episode that a country can experience. We also find that improving state capacity in the form of the quality of the bureaucracy can help in taking a country out of negative growth episodes but that higher state capacity does not increase the likelihood of rapid growth episodes. This finding suggests that previous research that has found a positive role of bureaucratic quality in fostering economic growth needs to differentiate between phases of growth, and that the relationship between bureaucratic quality and economic growth may not be monotonic.

We find that the most important institutional determinant of switching to higher order growth episodes from lower ones, and in particular, to rapid growth episodes, is the nature of property rights institutions – that is, the extent to which investors trust the viability of contracts. In contrast to the previous literature on the determinants of growth accelerations, we find that not only does institutional quality matter in bringing about a growth acceleration, it is the case that the greater the quality of property

rights institutions, the higher is the likelihood of a transition to a rapid growth phase.

Our findings have clear policy implications. For a country in a growth decline or collapse, it is important to stress improvements in both political and economic institutions, such as bureaucratic quality, viability of contracts and democratization to move into an episode of positive growth. However, once the country is in a stable or moderate positive growth episode, further movements into rapid growth episodes need larger emphasis on improving the quality of property rights institutions than enhanced democratization or state capacity. Economic institutions trump political institutions in bringing about rapid growth episodes, though they both matter in reversing growth collapses.

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Is there any Bangladesh Growth 'Paradox'?

SELIM RAIHAN AND MIRZA M. HASSAN

Over the past 40 years since independence, notwithstanding many external and internal shocks, Bangladesh has increased its per capita income four-fold, cut poverty by more than half, and is well set to achieve most of the Millennium Development Goals. Bangladesh's economic growth rates in recent years have been higher than most of the South Asian countries and many of the Sub-Saharan African countries. These positive development experiences provide the basis for optimism that despite many remaining policy and institutional constraints and despite the global uncertainties, Bangladesh is expected to make inroads in improving the living standards of its citizens.

Such high growth performance and social development have been perceived as a 'paradox' or 'development surprise' by the economists at the World Bank as well as by other close observers of Bangladesh's development (World Bank, 2007; World Bank, 2010; Mahmud et al 2008). "The *Bangladesh Paradox* of good growth despite weak governance is frequently posed as a serious puzzle" (World Bank, 2007, p 25). "Relatively strong progress on development has occurred within a challenging governance

environment, characterized by paralyzing political rivalry, weak checks and balances among branches of government, weak accountability, inadequate systems for public resource management and a widespread culture of corruption.” (World Bank, 2010, p ii).

There are however two problems with such ‘paradox’ or ‘development surprise’ arguments. The first problem relates to the question on “how weak the governance structure in Bangladesh is”; and the second problem relates to the question on the “nature of the institutional reform measures required for higher growth”.

On the first question we have looked into the 12 political risks variables from the International Country Risk Guide (ICRG) database (for details see: www.prsgroup.com) and their changes over time for Bangladesh during 1984 and 2010 (since ICRG data are available from 1984). These variables are: Bureaucracy Quality, Government Stability, Democratic Accountability, Control of Corruption, Law and Order, Military in Politics, Investment Profile, Internal Conflict, External Conflict, Religion in Politics, Socioeconomic Conditions and Ethnic Tensions. We have considered only the 88 non-OECD countries because of the comparable status of development of these countries. As shown in Table 90.1, out of these 12 indicators, Bangladesh made progress in index values of 10 indicators, indicating the improvement in the institutional environment in the absolute sense. However, during this time period other countries also made progress, and therefore, we looked into progress in the relative rankings of Bangladesh. In six indicators (Bureaucracy Quality, Government Stability, Democratic Accountability, Control of Corruption, Law and Order and Military in Politics), Bangladesh’s relative rankings improved, indicating to the fact that Bangladesh made progress in these areas of governance more than many other countries during this time period. For example, in 2010, Bureaucracy quality of Bangladesh was as good as of those in Brazil, China, Indonesia, South Africa,

Is there any Bangladesh growth 'paradox'?

Sri Lanka and Thailand; Government stability was better than those in Brazil, India, Indonesia, South Africa, Malaysia, Philippines and Thailand; Democratic accountability was better than those in Singapore, China and Vietnam; Control of corruption was as good as of that in Brazil, and was better than those in South Africa, Vietnam, India, Malaysia, China and Philippines; Law and order was better than that in Brazil and was very close to those in Philippines, South Africa and Thailand; and Military in politics was better than that in Indonesia and was very close to those in Philippines and Vietnam. However, in other areas, Bangladesh is lagging behind many other countries. The conclusion we can draw from here is that Bangladesh's so called growth and development 'paradox' was not a 'paradox' at all. Bangladesh made mixed progress in institutional quality during 1990s and 2000s, and economic growth and social development, to some extents, can be explained by the relative progress in its institutional environment in a number of areas. However, for a fuller explanation, we need to understand the critical role of "growth enhancing" institutions, which are largely informal.

Table 90.1: Ranking of Bangladesh in PRS variables

Between 1984 and 2010 (among 88 non-OECD countries)		
Bangladesh's Index	Absolute value	Relative ranking
Bureaucracy Quality	↑	↑
Government Stability	↑	↑
Democratic Accountability	↑	↑
Control of Corruption	↑	↑
Law and Order	↑	↑
Military in Politics	↑	↑
Investment Profile	↑	↓
Internal Conflict	↑	↓
External Conflict	↑	↓
Religious Tension	↑	↓
Socioeconomic Conditions	↓	↓
Ethnic Conflict	↓	↓

Data source: www.prsgroup.com

The problem with the ‘paradox’ argument is that it assumes *only* conventional *market enhancing* institutional reforms (leading to the establishment of formal property rights and rule of law, etc) to explain improvement in the effectiveness of the institutions. However, countries in East and South East Asia in the past decades and a few countries in Africa in the recent years have experienced moderate to high growth where improvement in the effectiveness of institutions came along due to unconventional and creative reforms, together with the conventional reforms, leading to the creation of *de facto* enabling conditions for such higher and sustainable growth rate in these countries. Institutional reforms in these countries also focused on *growth enhancing governance* reforms which allowed states in these countries to promote growth by developing its capabilities to ‘navigate through the property rights instability of early development, manage technological catching up, and maintain political stability in a context of endemic and structural reliance of patron-client politics’ (Khan 2008, p, 93). This approach emphasizes institutional functions over institutional form.

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Do institutions have higher returns in South Asia than in East Asia?

S E L I M R A I H A N

The link between growth and institution is a much debated issue in the recent growth literature. There is now a considerable size of empirical literature which has shown the important contribution of quality of institutions on economic growth. Most of these studies illustrate how institutions affect economic growth in the cross-country growth regression models. Literature on institution and growth has however argued that the most important channels through which institutions affect growth are capital accumulation and the rise in total factor productivity (TFP).

In order to see the impact of the quality of institutions on capital accumulation, we have run fixed-effect cross-country panel regression models for capital stock as the dependent variable and institutions as the explanatory variables. Variables, such as initial GDP per capita, initial capital stock, initial human capital (years of schooling in 1990), government expenditure as percentage of GDP, official development assistance (ODA) as percentage of GDP, and trade as percentage of GDP are taken as control variables. Apart from the institutional variables all other variables are considered in natural logarithm. Data of capital stock (at constant

2005 national prices in million US\$) are derived from the Penn World Table (PWT 8.0) where capital stocks are estimated based on cumulating and depreciating past investments using the perpetual inventory method. Data on most of the control variables are taken from the World Development Indicators of the World Bank, and years of schooling data are taken from Barro-Lee database (www.barrolee.com). Six institutional variables are considered from the International Country Risk Guide (ICRG) database: Bureaucracy Quality, Corruption, Investment Profile, Law and Order, Democratic Accountability and Government Stability (for details see: www.prsgroup.com). The higher the score value of these variables the higher the quality of institution. The ICRG data are available from 1984 and our panel regression models have the time dimension from 1984 to 2010 for 113 countries. With a view to seeing whether South Asia and East Asia behave differently in the regression models, two interaction dummy variables are introduced: the first one is the interaction between South Asia region dummy (Bangladesh, India, Pakistan and Sri Lanka) and the institution variable, and the second one is the interaction between East Asia region dummy (China, Hong Kong, Indonesia, Japan, Malaysia, Philippines, Singapore, South Korea, Taiwan and Thailand) and the institution variable. We have run six separate regressions considering six institutional variables.

The regression results (Table 91.1) suggest that, in most cases, initial capital stock, government expenditure as percentage of GDP and trade-GDP ratio have positive and statistically significant effect, initial human capital and ODA as percentage of GDP have negative and significant effect, and initial GDP per capita has no significant effect on the capital accumulation. The regression results also suggest that higher bureaucracy quality, control of corruption, higher investment profile and better law and order have positive significant effects, democracy (democratic accountability) has a negative significant effect, and government stability doesn't have any significant effect on the capital accumulation.

Table 91.1: Impact on capital accumulation

Explanatory variables	Main coefficient	South Asia interaction dummy	East Asia interaction dummy	Remarks
Bureaucracy Quality	positive significant	positive significant	positive significant	positive effects larger for South Asia
Control of Corruption	positive significant	insignificant	negative significant	positive effects larger for South Asia
Investment Profile	positive significant	positive significant	insignificant	positive effects larger for South Asia
Democratic Accountability	negative significant	positive significant	insignificant	positive effects larger for South Asia
Law and Order	positive significant	positive significant	positive significant	positive effects larger for East Asia
Government Stability	insignificant	positive significant	positive significant	positive effects larger for East Asia

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Source: Cross-country panel regression results

The results for the interaction dummies presented in Table 91.1 show that bureaucracy quality, control of corruption and investment profile have larger positive effects on capital accumulation in South Asia than in East Asia. In the case of democratic accountability, South Asia interaction dummy is positive and significant and the net effect for South Asia is positive, while the East Asia interaction dummy is not significant, which suggests that democracy plays a positive role in capital accumulation in South Asia, while it is not important in East Asia. Though government stability variable is statistically insignificant, the interaction dummies for South Asia and East Asia are positive and significant, suggesting that, for these two regions, government stability has a positive significant effect on the capital accumulation, and the effect is larger for East Asia than for South Asia. In the case of law and order, both the interaction dummies are positive and significant, and East Asia appears to have a larger positive effect than South Asia. These results show that institutions play an important role in the accumulation of capital,

and the returns from institutional development in the cases of bureaucracy quality, control of corruption, better investment profile and democracy are higher for South Asia than for East Asia. We have conducted similar exercises considering log of the capital-labor ratio as the dependent variable and the results are very similar.

The exercise involving log of total factor productivity (TFP) as the dependent variable has a similar set of control variables with an addition of log of the capital-labor ratio variable. The data of TFP (at constant 2005 national prices) are derived from the Penn World Table (PWT 8.0) where a measure of TFP is estimated based on the second-order approximation to the production function, and the real GDP measure that accounts for differences in the terms of trade, leading to a time series of TFP levels that are comparable across countries. Our panel regression models now have the data for 86 countries. The South Asia region dummy now includes two countries: India and Sri Lanka as TFP data for other South Asian countries are not available in the PWT database. The East Asia dummy maintains all the 10 countries.

The regression results (Table 91.2) suggest that, in most cases, initial human capital, capital intensity (capital-labor ratio) and trade-GDP ratio have positive and significant effect, initial GDP per capita, initial capital stock and ODA as percentage of GDP have negative and significant effect, and government expenditure as percentage of GDP has no significant effect on the rise in TFP. The regression results also suggest that better investment profile, democracy, better law and order and government stability have a positive and significant effect, while, bureaucracy quality, despite a positive coefficient, doesn't have any significant effect, and control of corruption has a negative and significant effect on the rise in TFP. The results for the interaction dummies show that though bureaucracy quality variable is insignificant, the interaction dummy for South Asia is positive and significant and that for East

Asia, it is negative and significant, suggesting that South Asia has a larger positive effect of bureaucracy quality on the rise in TFP. In the cases of investment profile, democratic accountability, law and order, and government stability, South Asia has larger positive effects than East Asia. The East Asia interaction dummy for democracy is negative and significant, and the net effect for East Asia is negative, which shows TFP growth in East Asia has been associated with lack of democracy. In the case of control of corruption, South Asia interaction dummy is insignificant while East Asia interaction dummy is negative and significant indicating larger negative effect of control of corruption on the rise in TFP in East Asia.

Table 91.2: Impact on total factor productivity

	Main coefficient	South Asia interaction dummy	East Asia interaction dummy	Remarks
Bureaucracy Quality	insignificant	positive significant	negative significant	positive effects larger for South Asia
Control of Corruption	negative significant	insignificant	negative significant	negative effects larger for East Asia
Investment Profile	positive significant	positive significant	negative significant	positive effects larger for South Asia
Democratic Accountability	positive significant	positive significant	negative significant	positive effects larger for South Asia
Law and Order	positive significant	positive significant	insignificant	positive effects larger for South Asia
Government Stability	positive significant	positive significant	insignificant	positive effects larger for South Asia

Source: Cross-country panel regression results

The aforementioned analysis implies that, in the cross-country contexts, while better investment profile and better law and order are essential for both capital accumulation and the rise in TFP, bureaucracy quality and control of corruption are more important

for capital accumulation. Democracy has a negative impact on capital accumulation, and has a positive effect on the rise in TFP. Though government stability is not critical for capital accumulation, it is important for the rise in TFP. In most cases, South Asia and East Asia behave differently from the cross-country estimated relations, and institutions have larger positive impacts in these two regions. However, positive effects of institutions appear to be larger in South Asia than in East Asia.

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How to tackle 'entitlement failure' in infrastructure?

S E L I M R A I H A N

In the discourse on infrastructure and economic growth the dominant area of discussion is on the quantity and quality of infrastructure and how countries differ in these respects. While most of the countries emphasize a lot on investing in raising the quantity (and quality) of infrastructure, there is a fundamental concern whether rising supply of infrastructure ensures the access to infrastructure. This problem is manifested through the fact that due to a variety of reasons enhanced supply of infrastructure may not solve the problem of 'entitlement failure' in terms of effective access to infrastructure, as the people/sectors in dire need of improved infrastructure may not have the access even with an increased supply.

There appears to be a consensus among researchers and policy makers that infrastructure is a key contributing factor to economic growth. The importance of infrastructure for economic development originates from the fact that it provides both final consumption services to households and key intermediate consumption items in the production process. The deficiency of some of the most basic infrastructure services is an important

dimension of poverty; and therefore, increasing level of infrastructure stock has a direct bearing on poverty reduction. Furthermore, while it is generally accepted that economic diversification is a necessary condition for a sustained and long term growth of the economy and job creation, infrastructure development is a prerequisite for economic diversification. What is the significance of economic diversification as far as 'inclusive growth' is concerned? If inclusive growth is defined as the inclusiveness in economic opportunities, economic diversification can help attain inclusive growth. However, several supply-side constraints related to weak infrastructure can restrict economic diversification. Some of these constraints are broadly 'general' in nature and some are critically 'sector-specific'. Interconnection and complementarities between general and sector-specific infrastructures are key elements for increasing service efficiency, supporting the adoption of innovative technologies, promotion of economic diversification and supporting inclusive growth.

Yet, policymakers in the developing countries are so inclined to improvement in the broad general infrastructure, i.e., enhanced supply of electricity, improvement in roads, improvement in port facilities, etc. that the development of critical sector-specific infrastructure are largely overlooked. Embarking on developing broad general infrastructure are relatively easy, whereas solving sector-specific infrastructure problems involves identifying priorities in the policy making process and addressing a number of political economic issues. Failure to deal with sector-specific infrastructure problems leads to a scenario where a large number of potential inclusive-growth enhancing sectors fail to enjoy the benefit from the improvement in broad general infrastructure, and thus end up with 'entitlement failure'.

One such example is the leather industry in Bangladesh which accounts for around one billion US\$ in exports and which has huge potentials in generating employment and growth by

increasing export of higher value-added products. However, this sector has not yet reached its full potential primarily due to operating constraints stemming from its production base in Hazaribagh of Dhaka city where there are minimal waste management systems and inadequate industrial layout planning. The Hazaribagh-centric tannery industry is now legally bound to relocate all the factories to a new environmentally compliant tannery estate (under construction) on the outskirts of Dhaka city. However, such relocation has been stuck for many years with unresolved decisions on cost sharing of various components of the new industrial estate. Yet, there is no denying the fact that unless this relocation is effectively done, the leather sector will continue to suffer from 'entitlement failure' despite significant improvements in broad general infrastructure.

Factors responsible for such entitlement failure include the lack of resources to undertake sector-specific infrastructure development, lack of reliable data to determine finance and manpower requirements of projects, lack of infrastructure development framework that adequately delineate links between general and sector specific infrastructure requirements, inadequate planning, inadequate supporting institutions, and unstable political environments. However, on top of all these, the major critical factor behind the failure to address sector-specific infrastructure problems is the inability of the political system to deliver a political consensus around strategic plans for such sector-specific infrastructure and stable policy frameworks to support their implementation.

How to deal with this entitlement failure? A major part of the sector-specific infrastructure problems needs to be solved through public investment. The priorities in the industrial and related policies need to be realigned to the country's long term economic growth strategy in the changing world economy. There is a need for generating political capital for such realignment. However, the

task of developing such infrastructure facilities cannot be left to the government alone. It is binding on policy makers to come forward with strategies and mechanisms to encourage private sector participation in such sector-specific infrastructure developments. Such mechanisms should not only provide paper strategies, but also practical ways of turning into tangible projects through the provision of adequate finance.

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Does institution matter for human capital development?

S E L I M R A I H A N

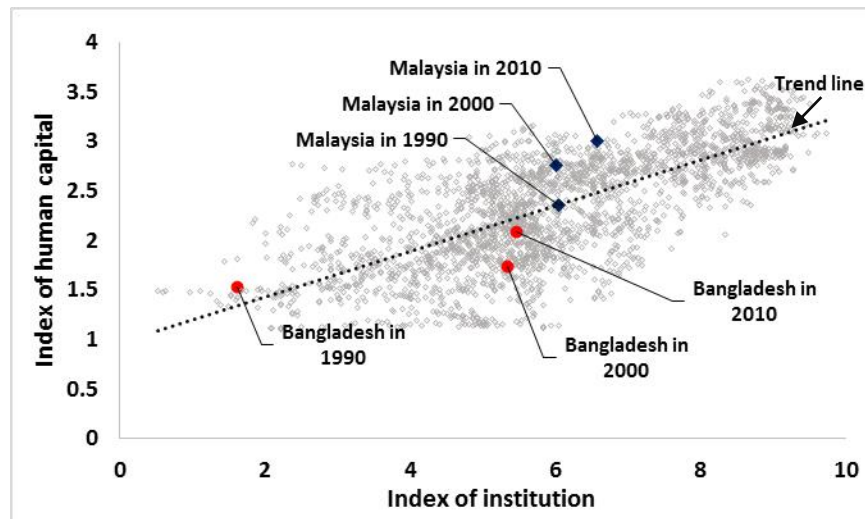
A fundamental proposition of new growth theories is that human capital is a key driver of economic growth. Development of human capital for the people of a country encompasses not only the diffusion and assimilation of available knowledge, but also the generation of new knowledge-the source of innovation and technological change- which boosts economic growth.

It is rather a challenging task to measure a country's stock of human capital. Popular indicators, used to measure human capital, include adult literacy rate, school enrolment rates, average years of schooling, quality of schooling etc. The Penn World Table version 8.1 provides a dataset on an index of human capital (HCI) for 134 countries over a period of 6 decades. HCI is an index of human capital per person which is related to the average years of schooling and the return to education. In 2010, United States had the highest HCI value (3.62) and Mozambique had the lowest one (1.27). In that year, among the 134 countries, 33 countries had HCI values higher than 3; 48 countries had values between 2.5 and 2.99; 28 countries had values between 2 and 2.49; and 25 countries had values less than 2. In South Asia, in 2010, the HCI

values for Bangladesh, India, Nepal, Pakistan and Sri Lanka were 2.07, 1.93, 1.71, 1.99 and 3.16 respectively.

Why do some countries have higher level of human capital than others? Empirical literature have looked at different factors such as spending (both public and private) on education and health, and differences in income levels; but hardly there has been any emphasis on differences in institutional capabilities among the countries. However, quality of institution, as it affects economic growth process, can also have a bearing on the quality of human capital. Therefore, a valid question can be asked: does institution matter for human capital development? Of course there could be a bi-directional causality between human capital and quality of institution, where quality of institution could also be influenced by the level of human capital. Nevertheless, leaving aside the causality, here we are more interested to know about the association between these two.

Figure 93.1: Institution and human capital



Data source: The Penn World Table version 8.1 and www.prsgroup.com

The scatter-plot, as presented in Figure 93.1, has been generated using the data of index of human capital and index of institution for 93 countries over a period of 1984-2010 with over 2500 observations. We have constructed the index of institution using the data of six major ICRG (www.prsgroup.com) variables, namely bureaucracy quality, control of corruption, investment profile, democratic accountability, government stability, and law and order. As values of these six ICRG variables have different scales, we have rescaled them between 0 and 10. The aggregate institution index is the average of these six indicators with the range between 0 and 10, where 0 and 10 respectively indicate the lowest and highest levels of quality of institution.

The scatter-plot suggests a very strong positive association between quality of institution and level of human capital, which signifies the importance of better institution for higher level of human capital. Interestingly, if we compare Bangladesh with Malaysia, levels of both institution and human capital of Bangladesh in 1990 (1.62 and 1.52 respectively) were much lower than those of Malaysia in 1990 (6.05 and 2.31 respectively). Despite the fact that during 1990 and 2010, Bangladesh made some notable progresses in both fronts, by 2010, the levels of these two indices of Bangladesh (5.52 and 2.07 respectively) were below than what Malaysia had in 1990!

Results from a more sophisticated cross-country panel econometric regression reinforces this association. In this regression, the index of human capital has been considered as the dependent variable. We have also created two institutional indices: economic institution and political institution. The economic institution index is comprised of three ICRG indicators – bureaucracy quality, control of corruption and investment profile; whereas the political institution index consists of other three ICRG indicators - democratic accountability, government stability and law and order. Other explanatory variables include

initial GDP per capita, public expenditure on education as a percentage of GDP, and under-five mortality rate. The regression results indicates that after controlling for initial GDP per capita (which has a positive significant association with human capital index), public expenditure on education has a statistically significant positive association and under-five mortality rate has a statistically significant negative association with the human capital index. The highly significant and positive coefficients of both economic and political institution indices suggest strong positive associations between these institutional variables and human capital index. The z-score regression analysis, however, refers to larger importance of political institution over economic institution in human capital development.

The aforementioned analysis points to the fact that better economic and political institutions matter for human capital development. While countries need to make critical spending for human capital development, improvement in institutional environment is unequivocally essential.

The political economy of special economic zones (SEZs) in Bangladesh

S E L I M R A I H A N

Special Economic Zones (SEZs) are geographically delineated 'enclaves' in which regulations and practices related to business and trade differ from the rest of the country and therefore all the units therein enjoy special privileges. SEZs can generate both static and dynamic benefits. Static benefits include employment creation, export growth and rise in government revenues; whereas dynamic benefits include economic diversification, innovation and transfer of technology through foreign direct investment (FDI), and skills upgrading.

The basic idea of SEZs emerges from the fact that, while it might be very difficult to dramatically improve infrastructure and business environment of the overall economy 'overnight', SEZs can be built in a much shorter time, and they can work as efficient enclaves to solve these problems. With these aforementioned objectives in consideration, Bangladesh Economic Zones Authority (BEZA) was instituted by the government in November 2010, based on the Bangladesh Economic Zones Act, 2010, with the aim of establishing 100 SEZs across the country by 2030.

Weak infrastructure and poor business environment are critical problems for Bangladesh to attract both domestic investment and FDI. According to the 2017 Doing Business index of the World Bank, Bangladesh ranks 176th among 190 countries. In terms of sub-components of the Doing Business index, Bangladesh's worst performances are observed in the areas of 'enforcing contracts', 'getting electricity' and 'registering property' with rankings of 189th, 187th and 185th respectively.

There is no denying that rapid and sustained economic growth is very critical for the Bangladesh economy on its way towards a middle income country. The importance of SEZs, aimed at propelling both domestic investment and FDI for rapid and sustained economic growth in Bangladesh, can't be undermined. However, to make the SEZ initiatives successful, several issues need to be addressed carefully.

First, SEZs have to deliver what they promise. The standards of infrastructure and business environment within SEZs have to be up to the global marks. Delays in implementation and unsatisfactory delivery of services would make the SEZs unsuccessful. One important issue related to the faster implementation of SEZs is the solution of the land issue. In Bangladesh, with a huge scarcity of land and overwhelming disputes over land, this will however remain a big challenge. In this context, the contrasting experiences of China and India are very relevant. While China was very successful in establishing well-functioning SEZs by effectively addressing infrastructural and land issues, India in most cases failed to do the same. It is, therefore, very important to understand why India's SEZs haven't been successful so far, and what lessons Bangladesh can draw from those experiences.

Second, while SEZs are aimed at creating 'efficient' enclaves, improvements in the business environment and infrastructure of the overall economy can't be overlooked. If there are vast differences in the quality of infrastructure and business environment between SEZs and rest of the economy, then excessive and continued external support would be needed for the survival of SEZs, which can have large financial implications.

Third, the SEZs would need to be connected to 'efficient' sea and land ports. Otherwise, many of the benefits of the SEZs would be lost. Therefore, port infrastructure and its efficiency would need to be improved substantially. Furthermore, the quality of roads, connecting SEZs and ports, would need to be upgraded. In contrast to India, China's success was in establishing SEZs nearby efficient ports and developing much improved road networks connecting SEZs with those ports. Likewise, SEZs in Bangladesh should also be located keeping in mind the ongoing efforts of regional connectivity and economic corridors involving many South and Southeast Asian countries.

Fourth, SEZs in Bangladesh should aim for facilitating economic and export diversification leading to progressive structural transformation of the economy. Emphasis should be on production of high value-added and diversified products. Therefore, sectors with high potentials of economic and export diversification should get the priority in the SEZs.

Fifth, with respect to the question on which sectors to get the priority in SEZs, it should be kept in mind that apart from very weak country-wide infrastructural and business environment related problems, many potential sectors also suffer from some very sector-specific problems. Unless and until these sector specific problems are solved, many potential sectors would not be

able to enjoy large part of the opportunities provided by the SEZs, and the prospect of economic diversification would be lost.

Sixth, the whole issue of the management of SEZs is very important. The gravity of institutional aspects for the well-functioning of SEZs can't be underestimated. Therefore, it has to be ensured that the institutions governing the operations of SEZs are competent enough.

Seventh, the government has invited Japan, China and India to set up SEZs, and these countries have also shown their interests in doing so. If properly materialized, these SEZs will have the potentials of receiving substantial FDIs from these countries. However, given the dismal experience of the Korean export processing zone (EPZ) in Bangladesh, it is very important that the government understands what went wrong with the Korean EPZ, and necessary measures are undertaken to avoid such lapses in the future.

Finally, there is a need for strong commitments from the political elites in Bangladesh for necessary economic and institutional reforms towards realizing the bright prospects of SEZs. In this context, political stability and avoidance of economic policy reversal can ensure the success of the SEZs.

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The political economy of regional Integration: Where do we stand in South Asia?

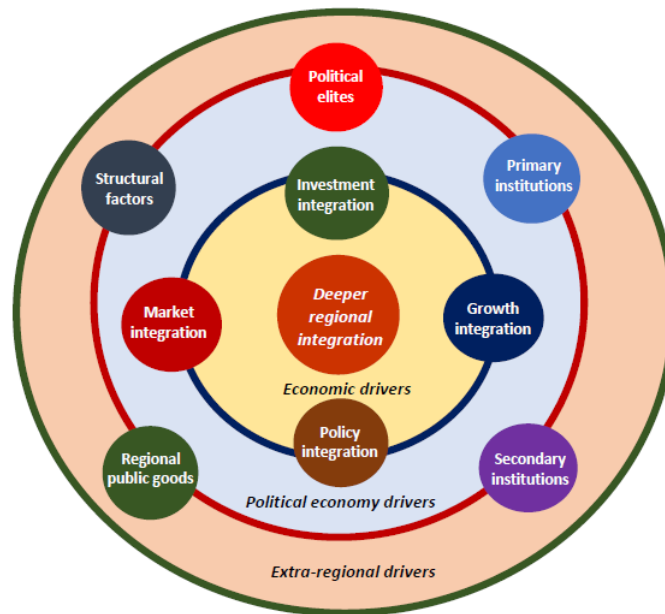
S E L I M R A I H A N

The aspiration for deeper regional integration is high on the political agenda of most of the leaders in South Asia. Since the early 1980s, SAARC has been working as an economic and geopolitical organization for South Asian countries with the aim of deeper regional integration and cooperation in areas of economic, trade and other common regional issues. Until now, there have been some achievements. Still, frustration prevails, as actual implementation of agreements often does not match the declared ambitions. The resulting implementation gap is most commonly attributed to the lack of political will and leadership, institutional weaknesses and capacity and resources constraints.

The dominant literature has looked primarily at the narrow economic factors influencing regional integration. However, to have a better and systematic assessment of the factors driving and constraining regional integration, it is important to explore the political economy dimensions. While policy makers and stakeholders are often aware of such political economy dimensions, they are generally discussed only informally or in ad

494 | hoc manner. A systematic discussion of the political economy factors around the regional integration agenda can generate a broader awareness among stakeholders that may ultimately lead to more realistic and effective regional policy design and processes. From a political economy perspective, there could be three interconnected drivers for a deeper regional integration. These are economic drivers, political economy drivers and extra-regional drivers (Figure 95.1).

Figure 95.1: Drivers of deeper regional integration



Source: Author

The economic drivers include four integration processes: market integration, investment integration, growth integration and policy integration. 'Market integration' emphasizes on the integration in trade in goods and services through the removal of tariff and non-tariff restrictions. 'Growth integration' is the integration of economic growth processes of the respective countries in a way

that growth in one country benefits growth processes in other member countries. The 'investment integration' calls for promotion of regional investment and trade nexus. Finally, the 'policy integration' is the harmonization of economic and trade policies of the countries for a deeper regional integration.

However, the aforementioned four integration processes need favorable political economy (PE) drivers. The political-economy perspective considers how various players influence the national and regional decision-making context, and what impact their actions (or lack of action) have on the integration agenda. The first PE driver is the 'primary institution' which are the official institutions at the regional level and in respective countries entrusted to carry out the agenda of regional integration. In South Asia, the SAARC Secretariat and relevant ministries in the member countries are such institutions. The second PE driver is the 'secondary institution' which are the private sector associations, civil society organizations and media. The third PE driver is the 'regional public good' which includes regional infrastructure and the status of regional trade facilitation. In South Asia, status of such 'regional public good' is very weak. 'Structural factor' is the fourth PE driver which includes historical processes and geographic factors that shape the types of political, economic and socio-cultural institutions. In South Asia, landlockedness of Nepal, Bhutan and Afghanistan, political rivalry between India and Pakistan, and huge differences in the sizes of the countries where India accounts for around 80percent of the regional GDP, are such structural factors. The final PE driver is the role of the 'political elite'. Strong and visionary leaderships are needed from the political elites to eliminate any 'trust deficit', which can emerge as a result of a variety of the 'structural factors' mentioned above. In South Asia, such 'trust deficit' is often highlighted as one of the major barriers for a deeper regional integration.

Finally, the extra-regional drivers include a wide range of global economic and political factors that can have influence over the region. In South Asia, countries are at different levels and with different patterns of integration with the extra-regional drivers.

There are now convincing evidences that a deeper regional integration is needed for generating and sustaining economic growth and reducing poverty in South Asia. Intra-regional trade in South Asia has been low, but there are signs of huge potentials. For a deeper market integration in goods, full implementation of SAFTA is needed with emphasis on reduction in the sensitive list and establishing effective mechanisms to deal with the NTMs/NTBs.

Intra-regional services trade and intra-regional investments are also low in South Asia. Promotion of intra-regional investments and attracting extra-regional FDIs in goods and services sectors in general, and energy and infrastructural sectors in particular will be very crucial for South Asia to integrate further. There is a continued need for a greater integration in trade, macro, financial and industrial policies in the region.

A deeper regional integration in South Asia requires clear and visible leadership from the political elites in this region, especially from India, in taking the agenda forward. The political elites have to be convinced and act accordingly to reduce the 'trust deficit'. Regional institutions, like SAARC Secretariat, have to be institutionally reformed and reoriented with much stronger engagements from the respective ministries and relevant organizations of the member countries. Business associations, civil society organizations and media have to pursue the regional integration agenda in South Asia more pro-actively than ever.

“..‘bottom up’ view has more salience
for countries like Bangladesh..”

INTERVIEW OF DR. KUNAL SEN

SANEM interviews Dr. Kunal Sen, Professor of Development Economics at the IDPM at the University of Manchester, UK. Professor Sen is also the Joint Research Director of ESID (Effective States and Inclusive Development), a research centre at the IDPM. His main research areas are economic growth, the analysis of poverty and labour markets, international trade and finance. His current research examines the political economy determinants of economic growth, and the role of institutions in economic development. This interview is taken in October, 2014.

SANEM: Why are institutions important for economic growth?

KS: Institutions such as the protection of property rights allow investment to take place and innovations to occur – so institutions are important for economic growth both by influencing the rate of capital accumulation and total factor productivity growth. Other institutions such as well-functioning courts and a well-designed legal system are essential for economic exchange to occur. While there is considerable debate on the extent to which institutions affect economic growth as the relationship is clearly two-way, it is difficult to identify a growth success story where institutions (both

macro and micro) have not played an important part in the growth process.

SANEM: What kind of institutions affect economic growth more than others?

KS: An issue that has been of considerable interest is the role of formal versus informal institutions in economic growth in developing countries. Recent experience of transition and developing countries with market-based reforms suggests that these reforms are unlikely to be successful if the appropriate institutions that 'support economic activity and dispense its fruits' are not in place. However, there remains considerable debate on what the right institutions are for economic development to occur. This debate is to a large extent on the role of *formal* institutions – laws and regulations, the court system, written contracts – versus *informal* institutions – unwritten rules of behavior, kinship ties, social norms – in bringing about economic growth, especially in low income countries. An influential school of thought has argued that well-functioning *formal* institutions are necessary if not sufficient for economic development. It argues that a functioning legal system matters significantly for growth in the long run. According to this view, informal institutions can play a complementary role to formal institutions in supporting economic activity by making the latter function more effectively. In contrast, there are others who have argued that strong informal institutions such as social and business networks can help solve the problems of economic exchange, even in contexts where formal institutions do not exist or are ineffective. Finally, even among those who agree that strong informal institutions can contribute in the early stages of economic development by being a substitute for ineffective formal institutions, there is disagreement on whether these informal institutions will play an equally important role as the economy in question matures over time and continues to grow. One view is that as economic exchange becomes more complex with the process of economic development, informal institutions wither away as more efficient formal institutions take their place.

An alternate view, most clearly articulated by Douglas North, states that informal institutions are slow-moving, and that while as Douglas North argued ‘formal rules may change overnight as a result of political or judicial decisions, informal constraints embodied in customs, traditions and codes of conduct are much more impervious to deliberative policies’. Thus, there is disagreement on whether informal institutions persist or wither away in the process of formal institutional change. In my view, informal institutions matter in the early stage of economic growth, but the emergence of well-functioning formal institutions is essential for growth to be sustained.

SANEM: In your view, what kind of institutional reforms are needed in countries like Bangladesh for economic growth to sustain?

KS: There are two contrasting views of the world exist in the policy community on institutions. The ‘top down’ view sees institutions as being determined by laws written by political leaders while the ‘bottom up’ view sees institutions as emerging spontaneously from the social norms, customs, traditions, beliefs and values of the individuals within the society. Historical evidence and contemporary research suggest that the ‘bottom up’ view has more salience for countries like Bangladesh, and that attempts at rapid, top down change can have negative consequences. A focus on best-practice institutions not only leads policy-makers to overlook institutional reforms that can achieve the desired ends at lower costs, but can also backfire.

SANEM: Thank you so much.

KS: My pleasure.

LET'S THINK ALOUD, SHALL WE?

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Editor



Dr. Selim Raihan is a Professor at the Department of Economics, University of Dhaka and the Executive Director of the South Asian Network on Economic Modeling (SANEM). He holds a PhD from the University of Manchester, UK. Dr. Raihan possesses vast expertise in research on international trade, labour market dynamics, poverty, economic growth and political economy analysis of growth and development. He has a long experience in teaching international trade, economic modeling, quantitative economics, econometrics, development economics and poverty dynamics at the University of Dhaka. He is the editor of a monthly digest *Thinking Aloud*, published from SANEM. Dr. Raihan has a number of publications in reputed journals, and has also written several books and book-chapters published by reputed publishers in London, New York, New Delhi and Dhaka. Dr. Raihan has worked for several national and international organizations including the Asian Development Bank, the World Bank, UNDP, UNESCAP, UNCTAD, IFPRI, the Commonwealth Secretariat, FAO, European Commission, ILO, IDRC, DFID, etc.

This book titled ***Let's Think Aloud, Shall We?*** is a compilation of the articles and interviews published in SANEM's monthly digest *Thinking Aloud*. SANEM's *Thinking Aloud* embarked its journey in June, 2014. The inception of *Thinking Aloud* coined with the intention to address contemporary economic problems of Bangladesh and other developing countries that need persistent attention from several angles and perspectives. Over the years, it has presented articles backed by rigorous theoretical and empirical researches, reviews of publications, and interviews of eminent personalities from home and abroad. This book covers a wide range of contemporary economic issues in the areas of macro economy, growth, poverty, regional integration, foreign direct investment, labor market, sustainable development goals (SDGs), and political economy.



ISBN 978-984-34-2255-2



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