Do households with international remittances have different expenditure patterns?

Selim Raihan, Tasneem Siddiqui & 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 1972 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.

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What do international remittances mean for the South Asian countries?

Selim Raihan

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. During 2000 and 2013, international remittances as % of GDP increased from 4.2% to 9.2% in Bangladesh, from 2.7% to 3.7% in India, from 2% to 28.8% in Nepal, from 1.5% to 6.3% in Pakistan and from 7.1% to 9.6% 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. 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 to the 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% in all five South Asian countries.

The macroeconomic effects of this scenario suggest that 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%.

Bangladesh would have the second largest effect with a rise in real GDP by 2.4%. The least positive effect would be observed for India with the rise in real GDP by only 0.32%. 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%, in Pakistan and Sri Lanka by more than 1% and in India by less than 0.5%. 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. Terms of trade (ToT) would improve, and Nepal and Bangladesh would have much larger rises in the ToT compared to other South Asian countries.

Rise in remittances inflow would lead to rising household demand. For Nepal, such rise would be 4.7% while for Bangladesh it would be 3.4%. 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 remittances 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.

At the sectoral level, there would be some important reallocation effects. In Bangladesh, textile and clothing is the major export-oriented sector and its output would have reduced by 2.3%. 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%. 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 effects would be observed for textile and clothing sector, and some small positive impacts on other 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.

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Remittance as % of GDP

Data source: WDI, World Bank

Macroeconomic Impacts (% change from the base)

<table>
<thead>
<tr>
<th>Variable</th>
<th>BGD</th>
<th>IND</th>
<th>NEP</th>
<th>PAK</th>
<th>LKA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP</td>
<td>2.41</td>
<td>0.32</td>
<td>3.71</td>
<td>0.44</td>
<td>0.66</td>
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<tr>
<td>Real exchange rate</td>
<td>-1.49</td>
<td>-0.11</td>
<td>-1.94</td>
<td>-0.20</td>
<td>-0.23</td>
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<tr>
<td>Exports</td>
<td>-4.07</td>
<td>-0.46</td>
<td>-4.08</td>
<td>-1.33</td>
<td>-1.03</td>
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<td>Import</td>
<td>6.82</td>
<td>0.98</td>
<td>7.85</td>
<td>1.88</td>
<td>2.25</td>
</tr>
<tr>
<td>Terms of trade</td>
<td>2.09</td>
<td>0.22</td>
<td>2.20</td>
<td>0.66</td>
<td>0.47</td>
</tr>
<tr>
<td>Household demand</td>
<td>3.42</td>
<td>0.64</td>
<td>4.74</td>
<td>0.74</td>
<td>1.49</td>
</tr>
<tr>
<td>Domestic demand</td>
<td>0.90</td>
<td>0.27</td>
<td>2.09</td>
<td>0.27</td>
<td>0.66</td>
</tr>
<tr>
<td>Gross production</td>
<td>0.48</td>
<td>0.18</td>
<td>1.62</td>
<td>0.18</td>
<td>0.32</td>
</tr>
<tr>
<td>GDP deflator</td>
<td>1.51</td>
<td>0.11</td>
<td>1.98</td>
<td>0.20</td>
<td>0.23</td>
</tr>
</tbody>
</table>

Note: BGD = Bangladesh; IND = India; NEP = Nepal; PAK = Pakistan; LKA = Sri Lanka
“They can transcend their social classes through migration”

SANEM had a conversation with Dr. Tasneem Siddiqui on Migration and Remittance issues related to Bangladesh. Dr. Tasneem Siddiqui is Professor of Political Science and Founding Chair of the Refugee and Migratory Movements Research Unit (RMMRU), University of Dhaka.

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, 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 migration and 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 way. 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 immeasurably 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 condition. 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 in the sack 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. 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 government has 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. Bangladesh has also signed the G2G for cost effectiveness and brought some initiatives that encourage migrants for innovation and mechanisation and 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 et cetera. 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.
SANEM organizes book launching event


Prof. Selim Raihan (Executive Director, SANEM) delivered a welcome speech and inaugurated the event. Dr. Raihan’s introductory speech was followed by the official launching of the book where honorable panelists and the Chief Guest un-wrapped the books and launched it officially in front of the distinguished audience. Prof. Shamsul Alam (Member, GED, Planning Commission), Dr. Sultan Hafeez Rahman (Executive Director, BIGD), Prof. Bazlul Haque Khondker (Chairman, SANEM), Dr. Ahsan Mansur (Executive Director, PRI) and Dr. Edgard Rodriguez (Sr. Program Specialist, IDRC, Canada) adored the event with their special remarks and valuable comments on the book. Prof. Kunal Sen (Joint Research Director, ESID, University of Manchester) provided a brief introduction on the book that generated further discussions among panelists and audience. The Chief Guest, Professor Wahiduddin Mahmud provided his opinions regarding different issues highlighted in the book. Researchers from the leading think tanks of Bangladesh, faculties from different universities, government officials and postgraduate students from the Department of Economics, Dhaka University attended the event.

SANEM’s mid-term workshop on the project with IDRC held on December 09, 2014

SANEM organized a mid-term workshop regarding its three year long IDRC project on “Changing Labor Markets in Bangladesh: Understanding Dynamics in Relation to Economic Growth and Poverty” on December 09, 2014 at the BRAC Center Inn, Mohakhali, Dhaka. During this workshop, the initial drafts of the papers under this project were presented. The presentation topics included “Social Protection and Labor Force Participation in Bangladesh”, “Labor Force Participation and Poverty”, “SAM 2012: Methodology, Data and Results”, “Projection of the Labor Force Participation on Bangladesh”, “Female Labor Market Participation in Bangladesh: Structural Changes and Determinants of Labor Supply”, “What Determines the Switch Between Farm and Nonfarm Employment in Rural Bangladesh?” and “Dynamics of Employment in the Urban Informal Sector in Bangladesh”.

SASEC workshop held at Bangkok, Thailand

South Asia Sub regional Economic Cooperation (SASEC) Trade Facilitation Workshop: Sanitary/Phytosanitary and Technical Barriers to Trade was held at Bangkok, Thailand on 1-3 December, 2013. Dr. Selim Raihan (Executive Director, SANEM) presented on “Analysis of NTBs (Non-Tariff Barriers) was constructed and its benefits were highly appreciated by the panelists of the conference.

SANEM is a non-profit research organization registered with the Registrar of Joint Stock Companies and Firms in Bangladesh. Launched in January 2007 in Dhaka, it is a network of economists and policy makers in South Asia with a special emphasis on economic modeling. The organization seeks to produce objective, high quality, country- and South Asian region-specific policy and thematic research. SANEM contributes in governments’ policy-making by providing research supports both at individual and organizational capacities. SANEM has maintained strong research collaboration with global, regional and local think tanks, research and development organizations, universities and individual researchers.