

Mainstreaming the Key Elements of Economic Integration in the PRSPs and the Implications for Poverty Reduction in Asia

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Abstract

This paper examines the extent to which the key elements of global economic integration, such as trade, foreign direct investment (FDI), foreign aid, international migration and international tourism, have been mainstreamed into the poverty reduction strategy paper (PRSP) of the selected developing countries from Asia. Applying the content analysis technique it finds that the trade openness gained the highest priorities followed by the FDI, and tourism. In addition, to check the real impact of such factors on poverty reduction, this paper analyzes the quantitative data from the World Development Indicators (WDI) and Human Development Indicators (HDI). Applying the multivariate regression analysis method the paper finds international trade, migration and tourism are significant to human poverty reduction. Thus, the first choice of trade openness in PRSP is quite rationale for poverty reduction in Asia.

(Key words: trade, economic integration, poverty reduction, Asia)

1. Introduction

In the discourse of international development poverty has been considered as an increasingly serious problem and poor countries' development plans as well as donor communities' development assistance focus on poverty reduction. Millennium Development Goals (MDGs) of the United Nations (UN) together with the country driven Poverty Reduction Strategy Paper (PRSP) of Bretton Woods institutions (IMF and the World Bank) are the focal point of current international as well as national development agenda on which all the national and international efforts are streamlined, particularly in developing countries. In the context of rapidly globalizing world, countries' openness towards the rest of the world is one of the most important strategic areas of poverty reduction on which donor communities, business communities, including multinationals and even for the mass population of the world, has greater interest and impacts. Countries' openness is the key area that accelerates the process of global economic integration on the one hand and achieving the most desirable developmental goal of poverty reduction on the other hand. In this context, this study reviews the PRSPs of selected Asian countries from the view point of global economic integration as a poverty reduction strategy (PRS). In addition, to check the consistency of strategic choices with the actual situation, the study tries to find out the impacts of trade, foreign direct investment (FDI), foreign aid, international migration and international tourism on poverty reduction in Asia.

The rest of the paper proceeds as follows. The remaining part of the Section 1 highlights the general background of the study and introduces the working hypotheses, research questions and objectives. Section 2 discusses on the methodology used with explanation of the data and the variables. Section 3 presents the results and Section 4 concludes the paper.

1.1 General Background

Poverty reduction is a recent focus as the central goal of international development. "Shaping the 21st Century: The Contribution of Development Co-operation" was the first document adopted by the Thirty-fourth High Level Meeting of the Organization for Economic Co-operation and Development (OECD), Development Assistance Committee (DAC) in which poverty reduction had been given top priority with definite target. Particularly, "in terms of economic well-being" the document placed the foremost development goal as- "a reduction by one-half in the proportion of people living in extreme poverty by 2015" (OECD 1996). Based on the

lessons from the past 50 years it was the new policy set forth for the first part of the 21st century. Consequently, in the same year 1996, the World Bank and IMF introduced the Heavily Indebted Poor Country (HIPC) initiative taking immediate action to help the poorest, most heavily indebted countries escape from unsustainable debt. The initiative was design to enable poor countries to focus their energies on building their policy and institutional foundation for sustainable development and poverty reduction.

More comprehensively, several initiatives by the World Bank and IMF gave a basic framework for the PRS process in 1999. In January, the World Bank introduced the Comprehensive Development Framework (CDF) aiming to correct the previous sector-based development strategy. In September, the WB and the IMF expanded the HIPC initiative to strengthen its focus on poverty reduction, and finally, the PRSP was introduced in December as a device to ensure the proper use of concessional loan and debt relief. Furthermore, the MDGs adopted by the UN Millennium Summit in September 2000 provided more precious objectives and targets for the PRS process.

From the view point of developing countries, PRSP is a modified development planning document which incorporates the common regional and global interests. In this sense, the key elements of economic integration in the global economy, such as trade, FDI, foreign aid, international migration, and tourism should be the major issues in PRSPs. How are the poor countries recognizing these factors as catalyst for poverty reduction? Among the factors, which are the most integrated in PRSPs and what is the impact of such factors on poverty? As the PRS approach has been experienced nearly 8 years and many countries are in the process of preparing second generation PRSP, to answer such questions is useful in placing strategic priority on poverty reduction as well as the countries toward regional and global economic integration. Below is a brief summary of the discussion in the current literature on global economic integration (or globalization) and poverty reduction.

Theoretically, integrating with the global economy opens up national markets and ensures competition thereby removing inefficiencies and leading to greater growth (Solow, 1956; Swan, 1956).¹ Poor countries are generally labor abundant and capital scarce. Thus, openness, in theory, provides an effective means of poverty reduction

¹ However, this argument of the neoclassical theory of trade has been questioned by number of economists. For example; Rodrik (1988) and Devarajan and Rodrik (1989) argue that scale economies and imperfect competition are prevalent in developing countries which complicate the welfare impact of trade liberalization. The theoretical possibility of a welfare-reducing impact from trade liberalization in the presence of imperfect competition and increasing returns to scale has been pointed out in other studies such as Ocampo and Taylor (1998) and Eaton and Grossman (1986).

through enhanced employment of labor, attraction of capital and lower of commodity prices. Market forces ensure that specialization takes place in areas of comparative advantage. According to the endogenous growth theory, trade liberalization can impact on income and long-run growth through (i) scale effects-increasing the size of market; (ii) allocation effects-efficient reallocation of scarce resources; (iii) spillover effects-the diffusion and integration of technological knowledge; and (iv) redundancy effects-reducing the unnecessary waste of resources (Grossman and Helpman, 1990, 1991).²

Empirically, the World Bank (2002) study of Globalization, Growth and Poverty came up with three significant findings. First, poor countries with around 3 billion people broke into the global market for manufactures and services. The study noted a shift in developing country exports over a twenty year period from a predominant share of primary commodities to that of manufactures and services. This successful shift of exports, an element of global integration, generally supported poverty reduction. The study found examples of this integration among Chinese provinces, Indian states, and the countries of Bangladesh and Vietnam. The second finding concerned inclusion of marginalized people and area both across countries and within them. One of the most disturbing global trends of the past two decades was that a number of countries (with around 2 billion people) were in danger of becoming marginal to the world economy. Incomes in these countries had been falling, poverty had been rising, and they participated less in trade than they had 20 years earlier. The world therefore has a large stake in helping countries integrate with the global economy and facilitate the greater inclusion of countries in globalization today. A third issue identified by the World Bank study concerned standardization or homogenization. Opinion polls in diverse countries revealed the concern that economic integration would lead to cultural or institutional homogenization despite the fact that societies that were fully integrated into the global economy differed enormously with culturally and institutionally.

The study concludes that “nations that integrated (i.e., those that opened up to international trade and investments) grew more rapidly than advanced nations (thus reducing the gap with advanced nations) during the past two decades, while nations that did not globalize grew less rapidly than the integrated and advanced nations, thus increasing their gap with respect to the others”.

² For the details of each effect of endogenous growth theory of trade liberalization see also Rivera-Batiz and Romer (1991), Lucas (1988), Rebelo (1991), Jones and Manuelli (1990), and Barro and Sala-i-Martin (1995, Chapter 8).

Many independent scholars also favor global economic integration with their empirical studies. For example, Urata and Yokota (1994) concluded that the policy to liberalize trade and foreign direct investment, as well as antitrust laws and other policies to strengthen competition in the domestic market are important for bringing about an increase in productivity and which in turn has importance in economic development. Similarly, Dollar and Kraay (2004) claim that “the evidence from individual cases and cross-country analysis supports the view that globalization leads to faster growth and poverty reduction in poor countries”. Similarly, Barraud and Calfat (2008) found in their case study of Argentina that “The overall impact of trade liberalization on the poor does not appear to be negligible. More interestingly, poverty falls and there is a reduction in inequality among the poor”.

Some of the positive features of global economic integration stem from the effects of increased competition, and some of the negative aspects can be offset through international agreements on policy or through the development of new international institutions. Thus, while globalization can cause international conflicts, it can also contribute to their containment through the beneficial effects of competition and the potential of global cooperation to treat economic and other threats facing the planet (Intriligator, 2004).

On the other hand, while most economists have tended to view globalization as a basically benign phenomenon, it may have extremely painful consequences. Some groups of people and some nations (including advanced ones) may suffer economic damage (Gomory and Baumol, 2004). More specifically, Stiglitz (2004) noted that in cases where the globalization process had not been managed well it resulted in adverse effects on growth and even led to increased poverty in some countries. Nissanke and Thorbecke (2006) raised the issue as to whether the present form of globalization/integration was conducive to the growth-cum-structural transformation process, which was capable of engendering and sustaining pro-poor economic growth and favorable distributional consequences. Contrary to the income convergence thesis, they claim that it is possible for globalization to generate adverse distributional consequences at the national and global levels which could slow down or even reverse the present poverty alleviation trend.

In sum, global economic integration can contribute much to poverty reduction both directly and by accelerating growth. With respect to poverty reduction, the contributions of redistributive policies are very likely to be less than the contribution of greater access to markets, more competitive insurance and financial markets, and

improved institutions. The potential effect of greater international economic integration on poverty reduction, however, is limited by domestic policy failures in developing countries and also by continued protectionism, particularly in developed countries (Srinivasan and Wallack, 2004). On the background of these different views and research findings, this study tries to find out the impact of key elements of economic integration on poverty reduction in developing Asia.

1.2 *Working Hypotheses*

Based on the above research findings and theoretical considerations, this paper assumes openness has a positive impacts on poverty reduction. Specifically, the study tests the following hypotheses.

- International trade, FDI, foreign aid, international migration and tourism issues are in the mainstream of national development policy (i.e. in PRSPs) of developing countries in Asia.
- These elements have significant positive impact on poverty reduction in the region.

1.3 *Research Question*

To examine the above hypotheses, this study tries to answer the following two questions;

- East Asia and South Asia alone are home to two thirds of the world's poor (Chen and Ravallion, 2008), therefore, their strategies toward solving poverty problems are vital for the progress on peace and prosperity not only for the region but also for the world. As regional and global economic integration is moving faster and faster over time, poor countries' appropriate response towards this issue could lead to rapid poverty reduction and greater integration of the world economy. How are Asian countries responding to these trends? Are the key elements of economic integration appropriately mainstreaming in their PRSPs?
- The second research question is related to the relationship between the economic integration and poverty. As we discussed, the existing literature is inconsistent about the relationship between the key elements of global economic integration and poverty reduction. The relationship could be different for each region and even for each country. What relationships exist actually between the elements of economic integration and the human poverty in

developing Asia? Are these factors significant to reduce poverty?

1.4 Objectives

The main objective of this study is to find out how appropriately the policy makers in the low income countries in Asia are prioritizing their policy options to attain the most desirable developmental goal of poverty reduction. More specifically, the objectives of the paper are as follows:

- ❑ To assess the degree of mainstreaming of the key elements of “economic integration” in the national PRSPs in developing Asia.
- ❑ To analyze the *relationship* and *impacts* of such elements with human poverty.
- ❑ To make some policy recommendations to the national governments and to the donor communities concerned.

2. Methodology

The study follows two different methodologies to identify the degree of mainstreaming of the key elements of economic integration in PRSPs and the relationships and impacts of such elements on poverty. Firstly, it uses *content analysis* technique to assess the qualitative data. Secondly, it undertakes *multivariate regression analysis* to analyze the quantitative data.

2.1 Content Analysis

One of the appropriate techniques for the first research objective is content analysis, a systematic, replicable data reduction technique (Stemler, 2001) that can be used to determine the presence of a particular concept (in this case, trade, FDI, foreign aid, international migration, and tourism) within a body of text (in this case, the published PRSPs from Asian countries). Ekbohm and Bojo (1997), inspired by earlier works by Bojo and Chee (1995), World Bank (1996) and Loksha (1996), elaborated an elementary filter of 13 criteria grouped into five sequential sections when analyzing how environmental issues had been mainstreamed into World Bank Country Assistance Strategies (CAS). Applying this filter in undertaking a “content analysis” of 34 CAS, they concluded that not only had environmental issues made some inroads into CAS documentation, but that the *filter was, moreover, a useful analytic tool for reviewing the extent to which the issues had been successfully incorporated*. Modified versions of Ekbohm and Bojo’s assessment framework were then appropriated and adapted by Bojo and Reddy (2003) who employed four criteria, measured on a four-point scale, to

evaluate the extent to which environmental factors were integrated into 50 Full and Interim PRSPs.

Assessment Methods: This paper amends the framework adopted by Bojo and Reddy, in effect substituting the environmental variables with the key elements of economic integration globally and regionally (see Box 1 for the key elements), and employs content analysis techniques to analyze the extent to which the elements of economic

Box 1: Key elements of economic integration

Among a number of elements and issues related to global and regional economic integration, this study selects the 5 following key elements:

1. *Trade:* Exports and imports of goods and services, which is considered as the central issue of economic integration.
2. *Foreign Direct Investment (FDI):* Flow of international capital within the country, which depends on the range of openness policy and investment environment.
3. *Foreign Aid:* Development aid from the donor community to the low income country is another element which could be the catalyst not only for international development but also for global/regional economic integration.
4. *International migration:* Movement of people crossing borders, especially from underdeveloped countries to developed countries is another factor that helps the process of economic integration. It also helps in cultural exchange and integration.
5. *Tourism:* Tourism sector, especially flows of tourists from developed countries to developing countries, contribute to the recipient's economy and also facilitates cultural integration such as international migration.

integration have been integrated into the eleven PRSPs of East and South Asian countries as follows.

- ❑ Criterion 1 (*Issue*): Were economic integration related issues included in the analyzed PRSPs?
- ❑ Criterion 2 (*Causal Links*): Were the causal linkages between economic integration and poverty related issues analyzed within the PRSPs?
- ❑ Criterion 3 (*Responses*): Were economic integration related responses/actions defined in the PRSPs?
- ❑ Criterion 4 (*Process*): Were links between the PRSP formulation process and economic integration (regionally/globally) related policy and planning processes detailed in the PRSP itself?

Each of the four criteria is given a numeric value where;

- 0 = no mention
- 1 = mentioned, but not elaborated
- 2 = elaborated
- 3 = Best Practice

This permits an average aggregate score to be computed for each analyzed PRSP (See Annex 3), values with ranging from 0 (the sector is not mentioned in the document at all) to 3 (good practice evident on all four counts).

2.2 *Multivariate Regression Analysis*

When we know from the content analysis which factors of economic integration received due attention from the national government of low income countries and from the donor communities, it is worthwhile to assess the impacts of such variables on poverty reduction. To find out the direct impacts of each factor of economic integration the study employs the multivariate regression analysis technique as follows.

Data: Human Poverty Index (HPI-1) for developing countries is taken as the measure of poverty. It is a more comprehensive measure than that of income criteria of \$1 per day. HPI-1 is collected from the Human Development Reports from 1998 to 2007/08. Similarly, trade, FDI, Foreign aid, international migration and the tourism related data are taken from the World Development Indicators (WDI) online database. Further explanations of the variables are given in Box 2.

Box 2: Explanation of data and variables:

Eight countries are taken for the quantitative analysis; 4 from each region: East Asia (i.e. Cambodia, Lao PDR, Mongolia, and Vietnam) and South Asia (Bangladesh, Nepal, Pakistan, and Sri Lanka)

- ❑ **Dependent variable:** *Poverty* is the dependent variable, which is represented by the Human Poverty Index for developing countries (HPI-1). The HPI-1 is taken from the Human Development Reports from 1998 to 2007/08 published each year by the UNDP.
- ❑ **Independent variables:** The independent variables are listed below. All the variables are taken from the World Development Indicator (WDI) online database.
 1. *International Trade:* The merchandise trade which is the sum of exports and imports of goods and services measured as a share of GDP is taken as the proxy of this variable.
 2. *Foreign Direct Investment (FDI):* A net inflow of FDI as a share of GDP is taken to measure this variable.
 3. *Foreign aid:* The total aid in percent of GNI is a measure of foreign aid in this study.
 4. *Int'l migration:* Workers' remittances and compensation of employees received in percent of GDP is taken to measure the effect of this variable.
 5. *International tourism:* An international tourism receipt in percent of total exports is considered to represent this variable.
 6. *Growth:* Per capita GDP growth rate is also taken to measure the combined effect of the rest of the variables that affect poverty.

Note: Detail definitions and explanations of each variable are presented in Annex 2.

The model: The following multivariate regression model is used to analyze the data:³

$$P_{ct} = \alpha + \beta^1(G_{ct}) + \beta^2(Z_{ct}) + \varepsilon \quad \text{----- [1]}$$

Where,

P is the measure of poverty (in this case HPI-1); G is the growth (in this case GDP per capita growth); Z is the other factors that determine poverty in addition to growth (in this case the 5 variables of economic integration); β^{1-n} is the coefficient that explains the strength and direction of the impact of the independent variables on poverty; n is the number of independent variables considered; c is the number of countries and t is the number of years that the data cover (in this case $n = 11$ years, from 1995 to 2005); α is the constant; and ε is the error term.

3. Results

3.1 Results of Content Analysis

The rating on the mainstreaming of economic integration in PRSPs is summarized in Table 1 (next page). The following findings stand out from the table and the analysis. First, there is a considerable variation in the degree of mainstreaming: from a high score of 2.5 (Sri-Lanka) to a low of 0.5 (Indonesia). Countries with a score of 2 or higher are Cambodia, Laos PDR, Mongolia, Maldives and Nepal. While scores should not be seen as precise measurements, they do indicate that the level of attention given to the issues varies considerably. Some variation is legitimate and to be expected. However, there is no reason to believe that the low scoring countries are free from concerns of global economic integration issues linked to poverty.

Second, the average score is about 1.6 on the 0-3 point scale. This is a broad indicator of the level of attention paid to the aspects of global economic integration. In the context of many competing issues in PRSPs there may be more or less good reasons for not mentioning or elaborating on each issue. It is difficult to make in-depth judgment on each case. These scores suggest the need for more detailed country-specific analyses.

Finally, good practices do exist, and this paper provides some examples that can serve to inspire future work. As examples below will illustrate, the standard for "good practice" is not extraordinarily demanding, and should be easily achievable if

³ This model is used by Jalilian H. and J. Weiss, "Infrastructure and poverty: cross-country evidence", In Weiss and Khan, *Poverty Strategies in Asia*. The joint publication of the Asian Development Bank Institute and Edward Elgar Publishing, 2006.

sufficient attention is given to global economic integration.

Table 1: Summary of scores by country (economic integration into selected PRSPS)

S.N.	Country	Region	Average Rating
1	Sri-Lanka	South Asia	2.5
2	Cambodia	East Asia	2.2
3	Laos PDR	East Asia	2
4	Mongolia	East Asia	2
5	Maldives	South Asia	2
6	Nepal	South Asia	2
7	Bangladesh	South Asia	1.7
8	Vietnam	East Asia	1.5
9	Bhutan	South Asia	1
10	Pakistan	South Asia	0.8
11	Indonesia	East Asia	0.5
Average Score			1.6

For instance, Cambodian case can be considered as a good practice regarding trade issues. The national government nicely places the trade priorities with recognizing the sector of comparative advantages, which elaborates as; “Linking production to consumption or producers to consumers, trade is a powerful and important catalyst for socio-economic development. Promotion of trade for Cambodian products has been among top priorities. If market outlets are available, investments would flow to encourage and enhance production of goods and services using the country's natural advantages as has happened in the garment industry, and as could be achieved in agriculture, agro-processing, handicraft and other areas.” The PRSP further explains the past initiatives, current challenges and futures steps clearly; “Various initiatives and reform measures taken to implement it culminated in dynamic export performance and integration of the country in numerous regional bodies and accession to WTO in 2004. Government has also successfully negotiated free and/or favorable trade agreements with many countries. However, there are still many bottlenecks similar to those in private investment in industries which inhibit growth in this sector. ... Various reforms that RGC will pursue in governance, legal and judicial sector and in public

administration, as well as rehabilitation of basic infrastructure, would no doubt contribute to a better climate for Trade and Investment by private sector.”

Similarly, Sri Lankan PRSP also exhibits good practice in mainstreaming the trade issues. The document explains; “No country has ever been able to significantly increase the economic well being of its people without succeeding in international trade. An open, efficient system for trade establishes important linkages between domestic and international markets and provides the competitive pressures that spur productive economic growth.” The PRSP emphasizes the increasing opportunities for small and medium scale enterprises to broaden their markets through international trade. The document clearly commits to further reforms to eliminate remaining barriers to trade and specifies the nation’s strategy as; “Sri Lanka is well placed to significantly increase its presence in regional trade in both goods and services. This will begin by building upon the existing trade agreement with India and the soon to be completed free trade agreement with Pakistan. It is also important to pursue other markets outside of the region. An initial step has already been taken to develop improved trade with major traditional trading partners, such as the EU and US, and plans are being developed to approach other developed and developing countries for improved market access.”

Disaggregated analysis of the overall mainstreaming of the economic integration score into component scores can provide additional insights. However, rather than explaining the score of each of four criteria as explained in section 2.1, the paper presents the following discussion on the basis of average score gained on the 0-3 point scale shown in Table 2 below.

Table 2: Summary of scores by factors (economic integration into selected PRSPs)

S.No.	Variables	Average Score
1	International Trade	2.5
2	FDI	2
3	International Tourism	1.7
4	Foreign Aid	1.6
5	Donors' Participation	1.2
6	International Migration	0.8
Overall average		1.6

There is strong heterogeneity in the issues covered in PRSPs, with *trade*

receiving the highest attention demonstrating many good practices, while *FDI* receives relatively higher attention with elaboration. Trade and FDI scored 2.5 and 2 respectively, on the 0-3 point scale (Table 2). Tourism, foreign aid and donors' participation in PRSP preparation are often mentioned with some elaboration with the average score of 1.7, 1.6 and 1.2 respectively. Issues of international migration are rarely discussed at length although a few countries (e.g. Nepal) recognize this as an important tool for poverty reduction. It received the average score of 0.8.

3.2 Results of Multivariate Regression Analysis

Equation 1 in page 9 is the basis of the regression analysis. Although there are a relatively large number of observations for most of the variables, for certain key variables there are some missing values. The interpolation technique is used to obtain the missing values. The data set contains 88 observations for 8 countries, 4 from each region, East and South Asia. A summary of the data and variables is presented in Table 3 below.

Table-3 Summary statistics of the data

Variable	Obs	Mean	Std. Dev.	Min	Max
Poverty (HPI-1)	88	33.81023	11.27279	14	54.1
Growth	88	3.76625	2.314638	-1.97	11.55
Int'l Trade	88	61.51205	28.75593	26.87	130.73
FDI	88	2.578977	2.600093	0	9.71
Foreign Aid	88	8.018523	6.496929	.95	24.55
Int'l Migration	88	4.121023	3.192753	.03	14.8
Int'l Tourism	88	10.58614	7.513661	.56	26.04

Table 4 reports the results of a multivariate regression analysis of the importance of economic integration for poverty reduction. The result demonstrates the statistical significance of the overall model as the p-value of the F-test is zero up to four decimal places. The R-squared is 0.5955, meaning that approximately 60% of the variability of Human Poverty Index (HPI-1) is accounted for by the variables in the model. Note that this is an overall measure of the strength of association, and does not reflect the extent to which any particular independent variable is associated with the dependent variable.

Table 4 Result of the multivariate regression

Equation	Obs	Parms	RMSE	"R-sq"	F	P
	88	7	7.430646	0.5955	19.87167	0.0000
(HPI-1)	Coef.	Std. Err.	t	P> t 	[95% Conf. Interval]	
Growth	0.3060575	0.4721785	0.65	0.519	-0.6334296	1.245545
Int'l Trade	-0.2622101	0.0416856	-6.29	0.000	-0.3451513	-0.1792689
FDI	0.326239	0.3975539	0.82	0.414	-0.4647685	1.117246
Foreign Aid	-0.2427922	0.1966091	-1.23	0.220	-0.6339826	0.1483983
Int'l Migr.	-1.000798	0.3030924	-3.30	0.001	-1.603857	-0.3977389
Int'l Tourism	0.462362	0.1318303	3.51	0.001	0.2000611	0.7246629
_cons	49.12177	2.431871	20.20	0.000	44.28311	53.96043

Notes: (See Annex 2 for the detail definition and explanation of each variables)

The coefficients for each of the variables indicates the amount of change one could expect in HPI-1 given a one-unit change in the value of that variable, given that all other variables in the model are held constant. For example, if we consider the “international trade”, a decrease of 0.26 in the HPI-1 can be expected for every one unit increase in international trade, if all the other variables in the model are held constant. Actually, these are the values for the regression equation for predicting the dependent variable from the independent variable. Thus, the regression equation to predict the HPI-1 expressed in terms of the variables used in this study is:

$$\begin{aligned} \text{“HPI-1”}_{\text{predicted}} = & 49.12 + 0.31(\text{GDP Growth}) - 0.26(\text{Int'l Trade}) + 0.33(\text{FDI}) \\ & - 0.24 (\text{Foreign Aid}) - 1.001(\text{Int'l Migration}) + 0.46(\text{Int'l Tourism}) \end{aligned}$$

P value presented in the column P>|t| is the crucial value to test the hypotheses of this study. The variable which has the P value less than the ‘alpha’ is statistically significant. In the case of 95 percent degree of confidence, value of alpha is 0.05. Thus, among the 5 variables of global economic integration, only 3 variables—trade, migration and tourism—are found statistically significant on poverty reduction as they have P value less than 0.05. These three variables are even significant for the degree of confidence at 99 percent (in this case the alpha value is 0.01) as their P values are even far below 0.01. The rest of the two variables; FDI and foreign aid are found not to be significant. In addition, per capita GDP growth is also found not to be significant to human poverty reduction.

The correlation matrix presented in Table 5 further clarifies the interactions between poverty and the elements of economic integration. Most of the variables (except tourism) have a negative correlation with poverty meaning that an increase in the independent variables is associated with a decrease in dependent variable, i.e., poverty. Among the key elements of economic integration, trade has the strongest negative correlation i.e., -0.66, followed by migration (-0.37), FDI (-0.27), foreign aid (-0.08) and so on. As we see there are no high correlations among the dependent variables (no more than 0.8 -as a general rule), the effect of multicollinearity is not significant in this model.

On the basis of these results from the quantitative analysis, it is quite rational to place highest priority on trade in PRSPs in Asia. However, it is surprising that they have given the least priority on international migration which is an equally significant for poverty reduction.

Table 5 Correlation coefficient matrix for poverty, growth and economic integration proxies (Number of observation used is 88)

	Poverty (HPI-1)	Growth	Int'l Trade	FDI	Foreign Aid	Int'l Migration	Int'l Tourism
Poverty (HPI-1)	1.0000						
Growth	-0.2465	1.0000					
Int'l Trade	-0.6577	0.5481	1.0000				
FDI	-0.2689	0.4927	0.5429	1.0000			
Foreign Aid	-0.0840	0.0579	0.3759	0.3443	1.0000		
Int'l Migration	-0.3731	0.0854	0.1472	-0.0338	-0.4326	1.0000	
Int'l Tourism	0.2395	0.1705	0.0981	0.0863	0.5037	-0.1770	1.0000

Surprisingly, international tourism, which is statistically significant to poverty, is found to have positive relationship with poverty as its correlation with HPI-1 as well

as the coefficient in the regression equation is positive. This means an increase in international tourism helps to increase poverty. One reason for this controversial result could be the nature of the tourism variable. The total receipt from international tourism is based on the percent of exports, and if export growth is greater than the growth of tourism receipt, then the reported tourism variable declines. Actually, WDI online data set provides the data based on exports for tourism receipts, rather than based on GDP. On the other hand, the correlation matrix above shows the very low correlation (i.e. 0.098) between the trade and tourism variables, which also seems illusive as tourism is measured on the basis of exports. In fact, this is quite a controversial result and further research is necessary on this particular issue.

4. Conclusion

Among the five selected key elements of global economic integration, trade issues are mainstreaming well in the selected PRSPs in Asia. It covers a wide range of international trade issues and good elaborations and analysis are found regarding the casual linkage between the trade issues and poverty reduction, among others. In addition, quantitative analysis has shown that international trade is one of the most significant elements for poverty reduction. In this point, applied policy matches the economic reality that exists in Asia.

Similarly, international migration has a significant impact on human poverty reduction. However, this issue received the least priority attention in PRSPs. It might be due to the developed countries' reluctance to accept migrant workers and the donor community's discouragement to put this issue in priority. The paper strongly recommends that the labor market should be open especially for unskilled workers from developing countries to industrialized countries. It is one of the most important issues for global economic integration which also contributes directly on cultural and social aspects of global and regional integration. This paper strongly recommends including this issue in PRSPs with high priority and also to open up their labour market in developed as well as relatively developed countries.

There are a several issues for further investigation. Firstly, the positive coefficient of tourism factor in regression equation as well as correlation matrix is hard to accept. This might be due to the inappropriate selection of proxy for the variable. Search for appropriate proxy can give the reliable result. Secondly, FDI and foreign aid found insignificant to poverty reduction, which is undesirable. In low income countries, FDI could be insignificant on poverty reduction. However, by nature and its aim,

foreign aid should be significant, where foreign aid still contributes the large proportion of their national budget. Finally, the major limiting assumption of the cross-country analysis is that the findings are assumed to be universal regardless of countries' uniqueness. Therefore, specific country cases are recommended for further research.

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All PRSPs are obtained from the World Bank poverty net website <<http://www.worldbank.org/poverty/strategies/index.htm>>, except Nepalese PRSP which is obtained from the National Planning Commission (NPC), Government of Nepal.

ANNEX 1. List of countries having PRSP and PRSP progress reports as of Aug 31, 2007

Board Presentations of PRSP Documents As at August 31 2007												
	Country	Region	I-PRSP	PRSP	PR 1	PR 2	PR 3	PR 4	PRSP II	PR 1	PR 2	
1	Benin	AFR	13-Jul-00	20-Mar-03	10-Jun-05						28-Jun-07	
2	Burkina Faso **	AFR		30-Jun-00	06-Dec-01	05-Nov-02	16-Mar-04	05-May-05	05-May-05	28-Aug-06	24-May-07	
3	Burundi	AFR	22-Jan-04	13-Mar-07								
4	Cameroon	AFR	10-Oct-00	31-Jul-03	26-May-05	07-Mar-06	27-Apr-06					
5	Cape Verde	AFR	09-Apr-02	25-Jan-05	02-Aug-06							
6	CAR	AFR	18-Jan-01									
7	Chad	AFR	25-Jul-00	13-Nov-03	15-Jun-05							
8	Comoros	AFR	16-May-06									
9	Congo, DR	AFR	11-Jun-02	31-May-07								
10	Congo, Republic of	AFR	07-Dec-04									
11	Cote D'Ivoire	AFR	28-Mar-02									
12	Ethiopia	AFR	20-Mar-01	17-Sep-02	17-Feb-04	26-Oct-05				28-Aug-07		
13	Gambia	AFR	14-Dec-00	16-Jul-02	25-Apr-05	27-Jun-06				19-Jul-07		
14	Ghana	AFR	24-Aug-00	08-May-03	13-Jul-04	15-Jun-06				15-Jun-06		
15	Guinea	AFR	22-Dec-00	25-Jul-02	26-Aug-04	08-Sep-06	03-Jul-07					
16	Guinea Bissau	AFR	14-Dec-00	10-May-07								
17	Kenya	AFR	01-Aug-00	06-May-04	20-Mar-07	20-Mar-07						
18	Lesotho	AFR	06-Mar-01	12-Sep-05								
19	Liberia	AFR	24-May-07									
20	Madagascar	AFR	19-Dec-00	18-Nov-03	21-Oct-04	26-Jul-06				06-Mar-07		
21	Malawi	AFR	21-Dec-00	29-Aug-02	23-Oct-03	10-Aug-05	31-Aug-06			16-Jan-07		
22	Mali	AFR	07-Sep-00	06-Mar-03	22-Jun-04	21-Dec-05						
23	Mauritania	AFR		06-Feb-01	18-Jun-02	11-Jul-03				16-Jan-07		
24	Mozambique	AFR	06-Apr-00	25-Sep-01	29-Jul-03	06-Jul-04	21-Jun-05			19-Dec-06		
25	Niger	AFR	20-Dec-00	07-Feb-02	19-Nov-03	03-Mar-05	11-Jan-07	11-Jan-07				
26	Nigeria	AFR		01-Nov-05	21-Jun-07							
27	Rwanda	AFR	21-Dec-00	08-Aug-02	08-Jun-04	14-Apr-05	18-Apr-06					
28	Sao Tome & Principe	AFR	27-Apr-00	25-Apr-05	20-Oct-06							
29	Senegal	AFR	20-Jun-00	23-Dec-02	07-Dec-04	23-Nov-05				30-Jan-07		
30	Sierra Leone	AFR	25-Sep-01	06-May-05	14-Dec-06							
31	Tanzania	AFR	04-Apr-00	30-Nov-00	27-Nov-01	27-May-03	08-Jun-04			09-May-06		
32	Uganda	AFR		02-May-00	31-May-01	23-Jul-02	09-Sep-03			28-Jul-05	15-Jun-07	
33	Zambia	AFR	04-Aug-00	23-May-02	15-Jun-04	11-Apr-05	31-Jan-07			21-Aug-07		
34	Cambodia	EAP	18-Jan-01	20-Feb-03	09-Sep-04					17-Jul-07		
35	Indonesia	EAP	21-Apr-03									
36	Lao	EAP	24-Apr-01	30-Nov-04								
37	Mongolia	EAP	27-Sep-01	09-Sep-03	26-Sep-05							
38	Timor Leste	EAP		14-Jun-05								
39	Vietnam	EAP	12-Apr-01	02-Jul-02	19-Feb-04	08-Aug-05	22-Jun-06			05-Dec-06		
40	Albania	ECA	08-Jun-00	20-Jun-02	10-Jul-03	12-Jul-04	11-Jan-06					
41	Armenia	ECA	22-May-01	20-Nov-03	12-May-05	03-Aug-06						
42	Azerbaijan	ECA	05-Jul-01	27-May-03	10-Sep-04	25-Aug-05						
43	Bosnia-Herzegovina*	ECA	12-Nov-02	15-Jun-04	28-Jun-07							
44	Georgia	ECA	11-Jan-01	06-Nov-03	13-Jun-05	21-Sep-06						
45	Kyrgyz Republic	ECA	04-Dec-01	27-Feb-03	29-Jun-04	04-May-06				22-May-07		
46	Macedonia, FYR	ECA	14-Dec-00									
47	Moldova	ECA	19-Dec-00	11-Nov-04	08-May-06							
48	Serbia & Montenegro	ECA	08-Aug-02	16-Mar-04	30-Mar-06							
49	Tajikistan	ECA	31-Oct-00	05-Dec-02	29-Jun-04	11-Nov-05						
50	Uzbekistan	ECA	24-May-05									
51	Bolivia	LAC	27-Jan-00	05-Jun-01								
52	Dominica	LAC	29-Dec-03	01-Aug-06								
53	Guyana	LAC	14-Nov-00	19-Sep-02	27-Jul-04	27-Apr-06						
54	Grenada	LAC	18-Apr-06									
55	Haiti	LAC	21-Nov-06									
56	Honduras	LAC	06-Jul-00	11-Oct-01	26-Feb-04	20-Apr-05	17-Jul-07	17-Jul-07				
57	Nicaragua	LAC	21-Dec-00	25-Sep-01	16-Dec-02	22-Jan-04				09-Feb-06		
58	Djibouti	MENA	27-Nov-01	08-Jun-04								
59	Yemen	MENA	27-Feb-01	01-Aug-02	15-May-06							
60	Afghanistan	SAR	25-May-06									
61	Bangladesh	SAR	19-Jun-03	26-Jan-06								
62	Bhutan	SAR		08-Feb-05								
63	Nepal	SAR		18-Nov-03	02-Dec-05	08-Dec-06						
64	Pakistan	SAR	04-Dec-01	11-Mar-04								
65	Sri Lanka	SAR		01-Apr-03								
Sub Total:		AFR	33	29	28	24	18	10	2	13	2	1
		EAP	6	5	5	3	1	1	0	2	0	0
		ECA	11	11	9	9	6	1	0	1	0	0
		LAC	7	7	5	3	3	1	1	1	0	0
		MENA	2	2	2	1	0	0	0	0	0	0
		SAR	6	3	5	1	1	0	0	0	0	0
Total			65	57	54	41	29	13	3	17	2	1

*Bosnia's IPRSP was not formally discussed by the Board; it was summarized alongside the CAS Progress Report.

** Burkina Faso's PR 1 on August 28, 2006 focused on the 2004 implementation aspects of the first full PRSP.

Source: <http://siteresources.worldbank.org/INTPRS1/Resources/boardlist.pdf> Accessed in Sep. 10, 2008.

ANNEX 2. Definition of terms and variables

- 1 Human Poverty Index for developing countries (HPI-1):** The human poverty index for developing countries (HPI-1) concentrates on deprivations in three essential dimensions of human life already reflected in the HDI—longevity, knowledge and a decent standard of living. The first deprivation relates to survival—the vulnerability to death at a relatively early age. The second relates to knowledge—being excluded from the world of reading and communication. The third relates to a decent living standard in terms of overall economic provisioning.

In constructing the HPI-1, the deprivation in longevity is represented by the percentage of people not expected to survive to age 40 (P_1), and the deprivation in knowledge by the percentage of adults who are illiterate (P_2). The deprivation in a decent living standard in terms of overall economic provisioning is represented by a composite (P_3) of three variables—the percentage of people without access to safe water (P_{31}), the percentage of people without access to health services (P_{32}) and the percentage of moderately and severely underweight children under five (P_{33}).

The composite variable P_3 is constructed by taking a simple average of the three variables P_{31} , P_{32} and P_{33} . Thus

$$P_3 = \frac{P_{31} + P_{32} + P_{33}}{3}$$

Following the analysis in chapter 1 of this Report and technical note 1 in *Human Development Report 1997*, the formula of the HPI-1 is given by:

$$HPI = \{(P_1^3 + P_2^3 + P_3^3)\}^{\frac{1}{3}}$$

(Source: Human Development Report 1998)

- 2 GDP per capita growth (annual %):** Annual percentage growth rate of GDP per capita based on constant local currency. GDP per capita is gross domestic product divided by midyear population. GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

(Source: World Bank national accounts data, and OECD National Accounts data files. In WDR online database)

- 3 Merchandise trade (% of GDP):** Trade is the sum of exports and imports of goods and

services measured as a share of gross domestic product.

(*Source:* World Bank national accounts data, and OECD National Accounts data files. In WDR online database)

- 4 Foreign direct investment, net inflows (% of GDP):** Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net inflows in the reporting economy. Data are in current U.S. dollars.

(*Source:* International Monetary Fund, International Financial Statistics and Balance of Payments databases, and World Bank, Global Development Finance. In WDR online database)

- 5 Aid (% of GNI):** Aid includes both official development assistance (ODA) and official aid. Ratios are computed using values in U.S. dollars converted at official exchange rates.

(*Source:* Development Assistance Committee of the Organization for Economic Co-operation and Development. In WDR online database)

- 6 Workers' remittances and compensation of employees, received (% of GDP):** Workers' remittances and compensation of employees comprise current transfers by migrant workers and wages and salaries earned by nonresident workers. Workers' remittances are classified as current private transfers from migrant workers who are residents of the host country to recipients in their country of origin. They include only transfers made by workers who have been living in the host country for more than a year, irrespective of their immigration status. Compensation of employees is the income of migrants who have lived in the host country for less than a year. Migrants' transfers are defined as the net worth of migrants who are expected to remain in the host country for more than one year that is transferred from one country to another at the time of migration.

(*Source:* World Bank, Global Development Finance, and World Bank and OECD GDP estimates. In WDR online database)

- 7 International tourism, receipts (% of total exports):** International tourism receipts are expenditures by international inbound visitors, including payments to national carriers for international transport. These receipts include any other prepayment made for goods or services received in the destination countries.

(*Source:* World Bank, Global Development Finance, In WDR online database)

ANNEX 3. The extent to which the key elements of economic integration are mainstreamed into the PRSPs in Asian countries.

Countries/ Regions	Trade	FDI	Foreign Aid	Int'l Migration	Tourism	Participation	Total Average
<i>East Asia</i>	2.6	2	1.6	0.2	2.2	1.2	1.6
Cambodia	3	2	3	0	3	2	2.2
Indonesia	1	1	0	0	1	0	0.5
Lao PDR	3	2	3	0	3	1	2
Mongolia	3	2	1	0	3	3	2
Vietnam	3	3	1	1	1	0	1.5
<i>South Asia</i>	2.4	2	1.6	1.3	1.3	1.3	1.6
Bangladesh	3	2	1	2	1	1	1.7
Bhutan	2	2	1	0	1	0	1
Maldives	2	3	1	2	2	2	2
Nepal	2	2	3	2	2	1	2
Pakistan	2	1	1	0	0	1	0.8
Sri Lanka	3	2	3	2	2	3	2.5
Total Average	2.4	2	1.6	0.8	1.7	1.3	1.6