EXTERNAL SECTOR LIBERALIZATION, FINANCIAL DEVELOPMENT AND INCOME IN SOUTH ASIA

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The paper provides an analysis on the impact of external sector openness and financial sector development on per capita income in the South Asian economies of Bangladesh, Bhutan, India, Nepal, Pakistan and Sri Lanka. For the annual series from 1980 to 2015, the instrumental variable model using a generalized method of moments (GMM) approach is estimated. The results show that liberalizing the external sector raises per capita income, conditional on the level of financial sector development. The large-economy influence analysis shows that India will benefit the most from external sector liberalization and other economies involved in this study still need to focus on financial sector development as opposed to on liberalizing capital flows. It further indicates that premature external liberalization in small and poor economies tends to be beneficial to the large neighbouring economy, which in this case is India, leading to resource exploitation. Accordingly, unless financial markets and institutions are strong enough to effectively deal with domestic resource mobilization, opening up the external sector alone may impede the economic development process.

JEL classification: F21, F36, O19

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I. INTRODUCTION

The economic liberalization policies initiated during 1980s are still being implemented by many developing and emerging economies. The major policy objective of those policies, which deal with trade, finance and technology, is to achieve higher economic growth (Temple, 1999; Thirlwall, 2004). Specifically, the objective

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of efforts to liberalize trade is to attain a competitive advantage in tradable goods while for capital, the objective is to facilitate inward financial flows so as to stimulate investment and thereby boost productivity.

Many researchers have favoured openness in an economy to foster rapid development. Santos-Paulino and Thirlwall (2004) and Hur and others (2006) argue that economic liberalization reduces inefficiencies in the production process by allocating resources efficiently through competition and supporting an increase in human and physical capital. In the high-performing Asian economies,[1] two common features have been observed: a stable macroeconomic environment; and a high share of trade in gross domestic product (GDP) (Krugman and Obstfeld, 2011) as they embarked on an export-led growth strategy.

It should be noted, however, that trade liberalization alone may not reap the benefits of economic liberalization. Some researchers argue that it is desired to also have financial sector development and trade facilitation (Atje and Jovanovic, 1993; Levine and Renelt, 1992; Roubini and Sala-i-Martin, 1991). Comparative advantage, the major source of international trade, can only be achieved if trade liberalization and financial sector development are carried out in a similar pace. Furthermore, liberalization positively affects financial development politics as incumbent opposition weakens when an economy allows cross-border trade and capital flow (Rajan and Zingales, 2003).

Financial integration is beneficial in risk-sharing and efficiency-allocation, as it enhances the growth prospects of an economy by fostering productive use of capital (Rogoff and others, 2006; Edison and others, 2002; García-Herrero and others, 2008). Similarly, trade liberalization can affect financial development, as an underdeveloped financial market may restrict the flows of international trade through external capital constraints to exporters (Manova, 2013). An imperfect financial market may also affect the availability and cost of the credit required for the export-oriented industries. Furthermore, external sector liberalization may foster financial sector development, as increasing global financial integration raises the need to strengthen the financial infrastructure (Buiter, 2003) and introduce innovative products.

Basically, external liberalization helps to promote growth in the developing countries through direct and indirect channels. The direct benefits are increased saving, lower production costs and technology transfer, while the indirect benefits are improvements in the macroeconomic policies and better risk management practices (Prasad and

[1] World Bank (1993) has identified Japan; the "Four Tigers", namely Hong Kong, China, the Republic of Korea, Singapore, and Taiwan Province of China; and the three newly industrializing economies of South-East Asia, Indonesia, Malaysia, and Thailand, as the eight high-performing Asian economies in the study entitled *The East Asian Miracle: Economic Growth and Public Policy*.

others, 2003). A developed financial sector is necessary for the efficient and effective intermediation of resources, whatever the source. Furthermore, higher investment requirements need to be supported by the domestic financial system through mobilizing savings.

External liberalization and the financial sector can be linked through the credit channel. Allowing foreign capital flow increases the amount of funds available for domestic credit that boosts aggregate spending. Furthermore, the inflow of foreign funds depends on domestic interest rates, as higher interest rates attract increased flows of foreign funds. In contrast, volatility in the capital flow can affect relative prices through appreciation and depreciation in the real exchange rates (Sen, 1999). Accordingly, external liberalization is directly and indirectly related to the status of financial development.

More liberalized economies tend to have developed at a more rapid pace. For example, it is argued that without the openness to the external world, China and India could not have achieved their current level of economic success (Stiglitz, 2006). However, it should also be noted that economies that have liberalized with controls have benefited much than those that have been more open, based on analyses conducted on the reform policies of China and India (Goyal, 2012). Although in the 1980s and 1990s, the pace of liberalization in South Asia was asymmetric, major economic reforms can be attributed to stabilization and structural adjustments (Dev, 2000).

The argument that openness makes everyone better off is questionable (Schott, 2011; Kose and others, 2006). Free trade may, for example, result in lost jobs for labourers, farmers to quit farming and erode natural heritages. (Economist, 2016; Scott, 2003). Similar arguments are made for international capital flows. Foreign capital flows may further pose additional challenges by transmitting economic shocks and risks in the domestic economy (OECD, 2011). The major concern is pro-cyclicality of capital flows (Rogoff and others, 2006) and contagion of risks. Developing economies with imperfect markets may further worsen if there is a premature openness without the required financial infrastructures being in place. It may also make an economy vulnerable to currency and financial shocks.

In South Asia, the countries are very diversified in terms of economics, politics, religion and geography. India is the centrepoint for the subregion because it has the largest economy and population, promising economic growth, shares its border with most of the other countries in the subregion and is the dominating power in terms of trade and finance. Smaller and poorer economies that have liberalized in a similar pace to India may not be able to reap the benefits of liberalization. This is because many reform activities need to be synchronized with domestic economic conditions. For example, capital liberalization should also be carried out in alignment with domestic

financial conditions in order to attain an inclusive and deepened financial system with adequate financial infrastructures in place (Goyal, 2012).

In this backdrop, a scientific tripartite analysis of liberalization, financial development and income is conducted in the South Asian region. The effect of liberalization of a large economy on its smaller neighbours can serve as a good example of liberalization-contagion. The examination of the role of external openness, its nexus with financial development and its impact on the income in South Asian economies provides a policy input for future economic reforms. Furthermore, identification of the influence of those variables while excluding India from the panel is also important for determining whether to harmonize their economic policies with those implemented by India. Likewise, the issue of premature liberalization and reaping its benefits also needs to be explored further.

The following section contains a summary of the pattern and trend of income, financial development and trade in South Asia. Section three consists of a description of the methodology of the study. In the next section, the models and an explanation of the results obtained are given. Finally, the paper concludes with observations and policy prescriptions.

II. STATUS OF INCOME, FINANCIAL DEVELOPMENT AND EXTERNAL LIBERALIZATION IN SOUTH ASIA

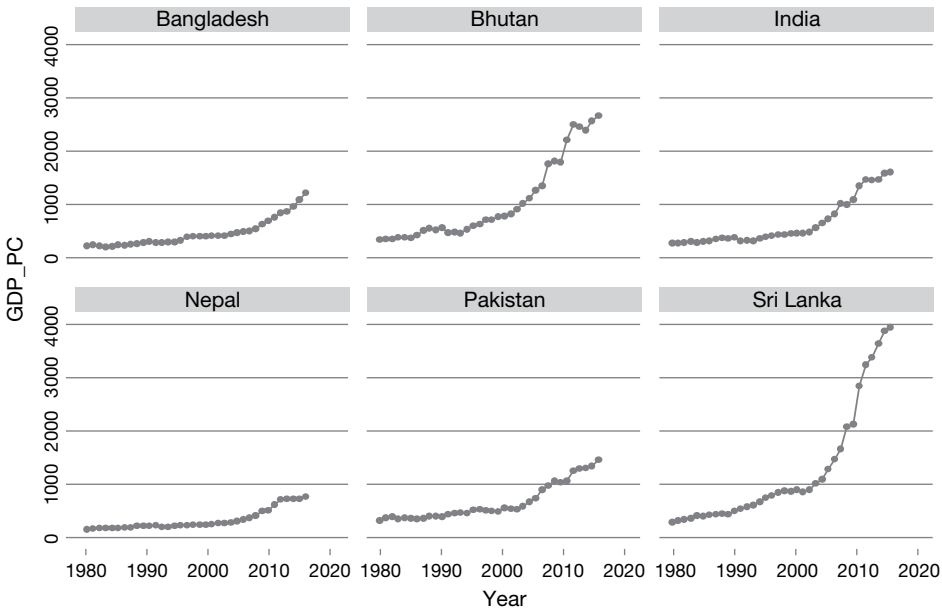
It is generally agreed that liberalization and globalization have a positive influence on economic growth and development. Some developing countries have transformed their economies into emerging economies having a higher growth trajectory characterized by rapid integration at the regional and global levels (Sinha and Pradhan, 2008; Akin and Kose, 2007). From the mid-1980s to the 1990s, most of the South Asian economies were liberalized. The Government of India introduced the New Economic Policy in 1990-1991 by opening the capital account with the aim to boost exports and ultimately growth (India, 1991). Similarly, Nepal implemented several reforms during the period 1984-2000 to transition to a market-based economy. Many of those reforms were also related to financial sector reform (Ozaki, 2014).

With the exception to Bangladesh and Nepal, the per capita income of South Asian economies have increased significantly[2] as a result of an initiative aimed at liberalization. For example, income rose substantially in Bhutan and Sri Lanka the post-2000 years (figure 1). Most of the economies had a significant turning point in

[2] For the analytical purpose, the six major South Asian economies are used throughout the paper. Details about the data and sources used are explained in section 3.

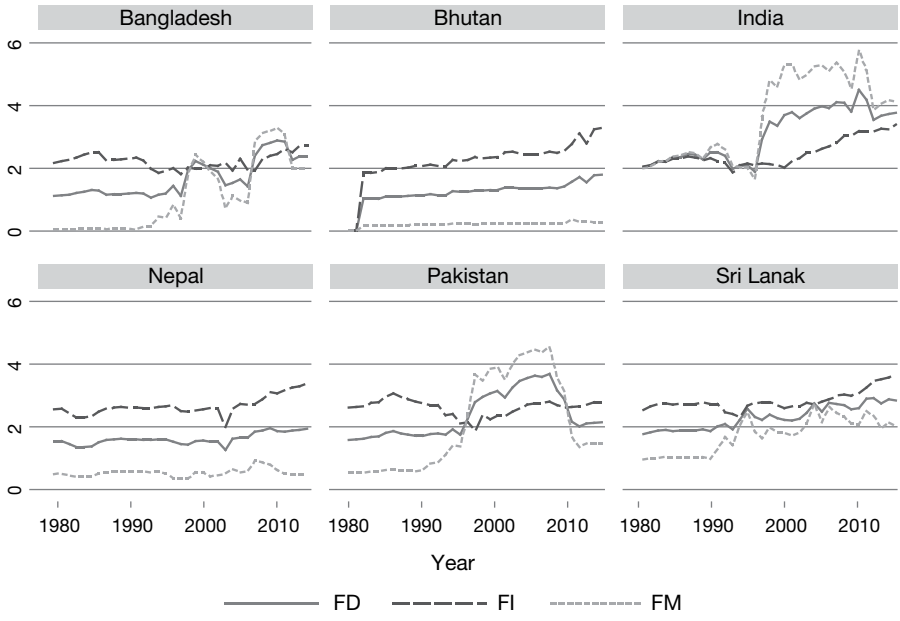
financial development in the mid-1990s. However, it appears that there were substantial changes in financial development in Bhutan and Nepal. Their financial markets, based on specific indicators, were found to be much less developed compared to the countries' institutions during the sample period. On the other hand, India and Pakistan exhibited better developed financial markets compared to their institutions during that period (figure 2).

Figure 1. Per capita income by country



Source: Word Bank (2016), World Development Indicators; Databank.

Figure 2. Status of financial development by country

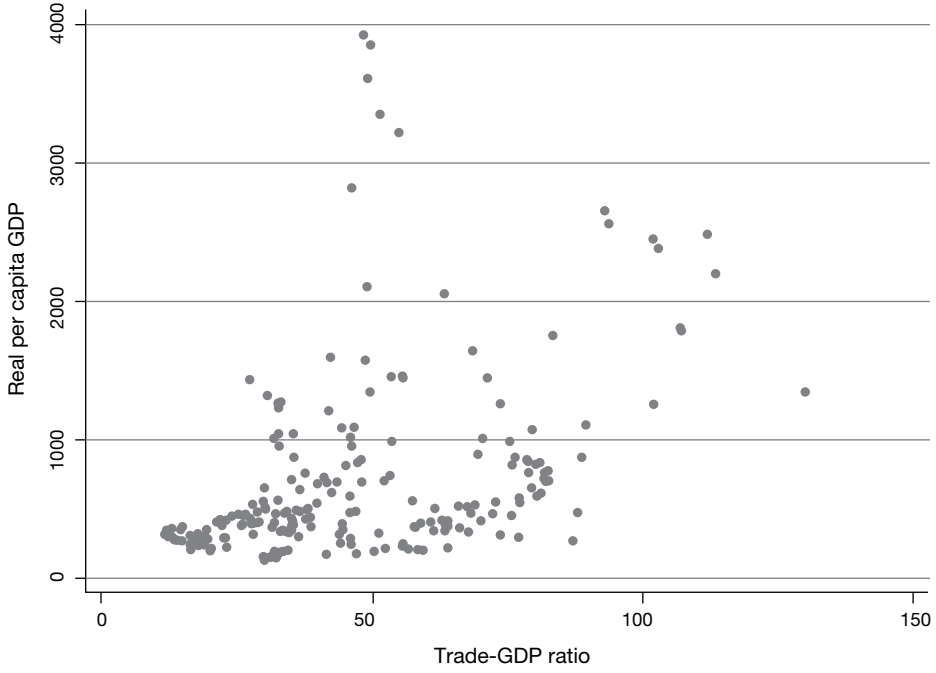


Source: Svirydzenka (2016); IMF (2016), IMF data.

Note: FD stands for financial development, which consists of FI (financial institutions) and FM (financial markets).

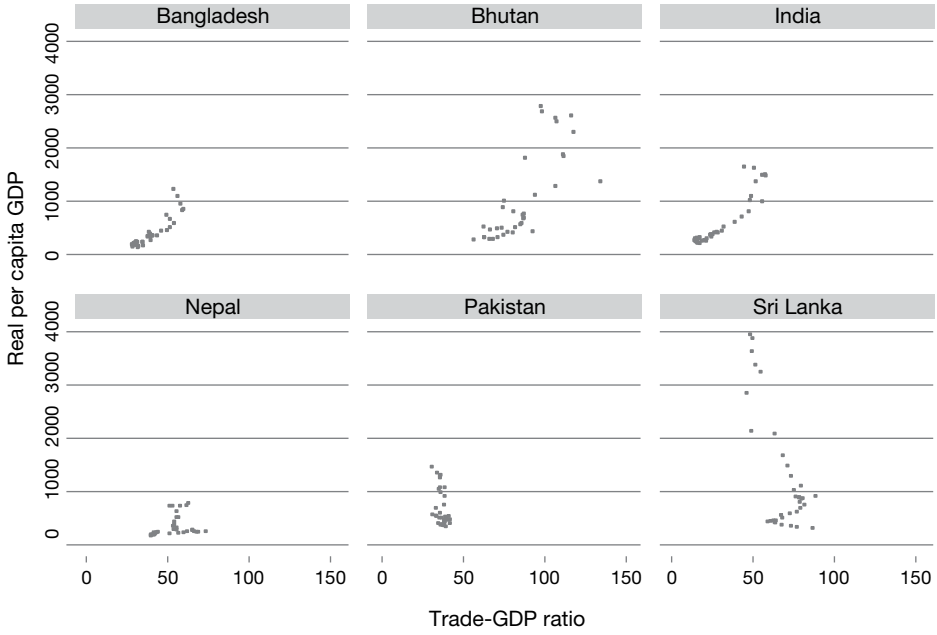
Despite divergence in income level and pace of growth, a positive upward relationship is seen between income and international trade in South Asia (figure 3). The graphical observation shows that Bangladesh, Bhutan and India have a very strong relationship in terms of international trade to per capita income. In contrast, that relationship was insignificant in the three other economies examined, Nepal, Pakistan and Sri Lanka (figure 4).

Figure 3. Relationship of income to trade openness in South Asia



Source: World Bank (2016), World Development Indicators; Databank.

Figure 4. Relationship of income and trade openness by country



Source: World Bank (2016), World Development Indicators; Databank.

The geographical size and the size of the economy along with historical, political, economic and cultural relations influence the pattern of trade in South Asian economies. For this study, India continued to be the centre of the analysis because of its strategic location, the size of its economy and population, and the country's capacity to exert influence at the regional and global levels. Table 1 shows the pattern of international trade within the region.

Table 1. International trade in South Asia (three-year averages, 2013-2015)

Volume in million of United States dollars

Country	Total trade		Share of India			
			Export		Import	
	Export	Import	Volume	Percentage	Volume	Percentage
Bangladesh	34 123	38 812	582	1.7	5 921	15.3
Bhutan	188	352	155	82.5	308	87.3
India	306 179	438 720	17115	5.6	2 480	0.6
Nepal	808	6 885	571	70.7	3 747	54.4
Pakistan	23 977	45 103	489	2.0	2 065	4.6
Sri Lanka	10 580	18 714	683	6.5	5 074	27.1

Source: International Trade Centre, Trade Map. Available from www.trademap.org/tradestat/Bilateral_TS.aspx.

Note: The share of export and import for India is calculated based on the sum of imports and exports by the five other sample countries for this study.

A preliminary observation of the Indian influence in the South Asian region can be seen in table 1. Out of the total exports from India to the rest of the world, the other five South Asian countries account for about 6 per cent. However, the share of Indian imports, exports from the other five countries to India, is below 1 per cent. The bilateral data also provides further evidence of this. For example, more than 80 per cent of all imports to Bhutan are from India, while, in Nepal, the share exceeds 50 per cent. Meanwhile, the shares for Sri Lanka, Bangladesh, and Pakistan are 27 per cent, 15 per cent and, at least, 5 per cent, respectively.

The share of exports is minimal from Bangladesh, Pakistan and Sri Lanka to India and significant from Bhutan and Nepal. These analyses indicate that the policy to open up trade in India substantially affects the other South Asian economies because of their high dependence on India as compared with the dependence of India on them.

III. METHODOLOGY

Data and sources

Popular global datasets pertaining to trade and capital openness may not be suitable for analyses of South Asian economies, due to the divergent nature. Accordingly, data are collected from different sources. Total capital flows and total trade volume are assumed to be major proxy indicators of external liberalization.

To estimate the impact of capital account liberalization on economic growth, the standard practice is to augment the growth identity[3] with a measure of capital account openness. Furthermore, as indicated by Levine and Renelt (2001), two measures: total capital inflows as percentage of GDP (*tcf*); and total trade as percentage of GDP (*trade_GDP*) can represent greater external sector openness.

The dependent variable *gdp_pc* is real per capita GDP. The control variables are *gfcf*, namely gross fixed capital formation as a share of GDP (representing investment in physical capital) and financial development, *fd*, which includes the status of financial institutions and financial markets.

The annual series of *gdp_pc, fd, gfcf, trade_GDP* and *tcf* during the period 1980-2015 of six South Asian countries, Bangladesh, Bhutan, India, Nepal, Pakistan and Sri Lanka, are incorporated in the analysis. The logic behind choosing 1980 as a benchmark year is that liberalization policies, especially with regard to international trade, were introduced during the 1980s in most of the economies included in the sample. Two other South Asian countries, Afghanistan and Maldives, are excluded because of problems with attaining sufficient data. Trade and capital variables are indexed to GDP to neutralize the size bias. Series are in log to measure the elasticity.

Series of *gdp_pc, gfcf* and *trade_GDP* are extracted from the World Bank database. The *tcf* variable is self-calculated using the extracted data of capital inflows and outflows under various titles. The financial development variable, *fd*, is taken from a recent International Monetary Fund (IMF) paper in which the financial development index is developed based on the two major factors that influence it: financial markets; and financial institutions (Svirydzenka, 2016). Under each factor, depth, access and efficiency are considered . Similarly, as instruments of financial development, the exchange rate stability index (*ersi*) and monetary independence index (*mii*) are taken from the updated series of the Trilemma Index of Aizenman and others (2010).

The detail variable definition and data sources are listed in the annex.

[3] See Levine and Renelt (1992) for details.

Based on the assumption of cross-sectional dependence among the series and due consideration of fixed and random effects (Hausman, 1978; Greene, 2003; Hansen, 1982), generalized methods of moments (GMM) is applied with instrumental variables (IV) as proposed by (Baum and others, 2003). Thus, as proposed by Baum and others (2003), the efficient GMM estimator is:

$$\hat{\beta}_{EGMM} = (X'ZS^{-1}Z'X)^{-1}X'Z\,S^{-1}Z'y \quad (1)$$

Where,

$\hat{\beta}$= The coefficient of gdp_pc_{it}

X = n × K matrix of regressors fd_{it}, $gfcf_{it}$, $trade\_GDP_{it}$ and tcf_{it}

Z = *Instrumental variables* which are $ersi_{it}$ and mii_{it}

S = the optimal weighting matrix, which is given by

$$S = \frac{1}{n} E(Z'\Omega\, Z)^{5} \quad (2)$$

n = number of observations.

Ω = n × n covariance matrix

Also, the asymptotic variance is:

$$V(\hat{\beta}_{EGMM}) = \frac{1}{n} (Q'_{XZ}\, S'\, Q_{XZ}\, S)^{-1} \quad (3)$$

Where,

$Q_{xz} = E(X'_i\, Z_i)$

The model (1) and (2) are estimated in the Stata econometric software.

[4] Baum and others (2003) have assumed that there would be S^{-1}optimal weighting matrix W for the efficient GMM estimator, and $S = \frac{1}{2} E(Z'\Omega\, Z)$. Here, Ω is an assumption factor for the covariance matrix of the distribution term.

IV. RESULT ANALYSIS

Various econometric tests, including the Hausman test, Breusch-Pagan LM Test of Independence and the Pesaran test favour the application of the IV model with the GMM approach. The coefficients are estimated based on the methods proposed by Baum and others (2003).

As illustrated in the methodology, $lngdp\_pc_{it}$ is incorporated as a dependent variable and, $lngfcf_{it}$, $lnfd_{it}$, $lntrade\_gdp_{it}$, and $lntcf_{it}$ are incorporated as regressors. External sector openness is represented by $lntrade\_gdp_{it}$ and $lntcf_{it}$. Furthermore, the financial development variable, $lnfd_{it}$, is instrumented by two instruments: $lnmii_{it}$ (monetary independence index) and $lnersi_{it}$ (exchange rate stability index), as they are presumed to be key to fostering financial development in an economy.

For the observation of Indian influence on other South Asian economies, the whole analysis is conducted including India (all samples) and excluding India. Similarly, the analysis is further expanded by including trade and capital flows as external sector openness indicators and then assuming only the single variable: either trade or capital flows, as an indicator of such openness.[5]

All variables case

In the all variables case, the most substantial factor influencing South Asian per capita GDP is capital formation. The elasticity coefficient of $gfcf_{it}$ is as high as 0.584. Similarly, the financial development variable can influence income by more than 50 per cent ($lnfd_{it}$= 0.582), but the variable is significant only at the 10 per cent level. Both variables of the openness criterion of the economy: $lntrade\_gdp_{it}$; and $lntcf_{it}$, are significant with an expected positive sign. The coefficients are valid in line with the theoretical context and previous literature. The impact of capital flows on per capita income is observed to have a lesser impact compared to impact of international trade (table 2).

[5] It can be argued that in some economies, capital account is highly regulated, such as in Nepal, while current account is fully convertible. Accordingly, although incorporating capital and trade flow variables is a good idea, separate analysis may also give unique information.

Table 2. IV-GMM estimates, all variables case

All samples		Excluding India	
Variable	**Coefficient**	**Variable**	**Coefficient**
lnfd	0.582* (1.92)	lnfd	1.283** (3.24)
lngfcf	0.584** (4.38)	lngfcf	0.88** (5.08)
lntcf	0.070** (2.33)	lntcf	0.033 (1.1)
lntrade_gdp	0.375** (3.90)	lntrade_gdp	0.154 (1.53)
Constant	1.049 (0.98)	Constant	-0.92 (-0.74)
F-Stat :	52.6	F-Stat :	52.6
P-Value:	0.000	P-Value:	0.000
Centered R^2 :	0.615	Centered R^2 :	0.610
Instrumented:	lnfd	Instrumented:	lnfd
Instruments:	lnmii, lnersi	Instruments:	lnmii, lnersi

Note: * Significant at 10 per cent level of significance, ** significant at 5 per cent or lower level of significance. Data in parenthesis ( ) are robust Z-stats.

Nevertheless, if India, an emerging market economy, which is the largest in South Asia, is excluded, openness does not support the income. Both external openness indicators: $lntcf_{it}$; and $lntrade\_gdp_{it}$ are insignificant. However, financial development has a multiplier effect, with the coefficient of $lnfd_{it}$, being 1.28. Similarly, capital formation is also a substantial factor for raising income (table 2).

The results indicate that external liberalization does not affect the economic growth of the other five countries. This may be because the dominance of India in trade and capital flows have shadowed the impact on other neighbouring countries. India has a size and location advantage coupled with being the dominating culture in the subregion. Even though some of the other economies, such as Bangladesh and Sri Lanka, produce some globally competitive products, they may not be strong enough to have an impact on growth.

Diagnostics tests of the model confirm an *i.i.d* error terms with proper model identification and correct instruments chosen. Kleibergen-Paap rk LM statistic for the under-identification test indicates that the model is correctly identified. At the 5 per cent level of significance, the null hypothesis that the model is under-identified is rejected. Similarly, as given in Stock-Yogo (2005), the Cragg-Donald Wald F statistic for weak identification test shows that F-stat is above the critical values from OLS bias. The null hypothesis of weak model identification is rejected in

both 10 per cent and 20 per cent maximal IV size. Finally, the null hypothesis of J = 0, a Hansen J statistic for over-identification tests for all instruments is not rejected. This indicates that the over-identification restrictions are true, showing the validity of the instruments included in the model.

Only trade as an openness variable

Next, the capital variable is dropped from the estimation, assuming that trade-GDP ratio can alone represent the external openness.[6] In the all country-sample case, the impact of financial development becomes dominant, similar to the all variables case excluding India (table 3). This indicates that financial development may be a prerequisite to foreign capital flows thereby making a contribution to economic growth. The impact of gross capital formation eases, showing that external financing in South Asia plays a role in total capital formation.

The India excluded sample shows an interesting result; $Intrade\_gdp_{it}$ is insignificant. This further proves that with the exception of India, none of the sample countries have benefited from external trade liberalization. Financial development and capital formation are found to be primary sources of income for those economies (table 3).

Table 3. IV-GMM estimates with only trade as an openness indicator

All samples		Excluding India	
Variable	**Coefficient**	**Variable**	**Coefficient**
lnfd	1.01** (5.42)	lnfd	1.752** (4.87)
lngfcf	0.454** (3.59)	lngfcf	1.02** (5.12)
lntrade_gdp	0.53** (8.42)	lntrade_gdp	0.49 (0.36)
Constant	-0.171 (-0.25)	Constant	-2.15 (1.90)
F-Stat :	63.05	F-Stat :	45.81
P-Value:	0.000	P-Value:	0.000
Centered R^2 :	0.575	Centered R^2 :	0.6257
Instrumented:	lnfd	Instrumented:	lnfd
Instruments: l	nmii, lnersi	Instruments:	lnmii, lnersi

Note: * Significant at 10 per cent level of significance, ** significant at 5 per cent or lower level of significance.

[6] It is also possible to have validity of trade-GDP ratio than capital flows because unlike the trade-GDP ratio, the capital flows are more pro-cyclical and might be influenced by non-economic factors.

The diagnostic tests of the model show an *i.i.d* error terms with proper model identification and correct instruments chosen in the case of the all-countries sample. Nevertheless, when India is excluded in the sample (remember the capital variable is excluded here), the model identification does not confirm the validity. This shows some degree of negative spillover of trade liberalization on other South Asian countries.[7]

Only capital flows as an openness indicator

Next, the trade-GDP variable from the estimation model is excluded in order to compare the result with only capital liberalization. In the all country-sample case, financial development *(fd_{it})* is insignificant. In that case, *$Intcf_{it}$* has a slightly larger impact than before and the impact of gross capital formation is stronger (table 4).

Table 4. IV-GMM estimates, only capital flows as openness indicator

All samples		Excluding India	
Variable	**Coefficient**	**Variable**	**Coefficient**
lnfd	0.55 (1.56)	lnfd	1.276** (2.87)
lngfcf	0.931** (7.29)	lngfcf	1.02** (7.89)
lntcf	0.096** (3.01)	lntcf	0.039 (1.16)
Constant	1.35 (1.14)	Constant	-0.76 (-0.53)
F-Stat :	47.29	F-Stat :	58.95
P-Value:	0.000	P-Value:	0.000
Centered R2 :	0.56	Centered R2 :	0.6055
Instrumented:	lnfd	Instrumented:	lnfd
Instruments:	lnmii, lnersi	Instruments:	lnmii, lnersi

Note: * Significant at 10 per cent level of significance, ** significant at 5 per cent or lower level of significance.

In the without India sample, as before, capital flow has nothing to do with economic growth. Although the sample countries, with the exception of Bhutan and Nepal, have capital account convertibility, it appears that capital liberalization does play a significant role in the economic growth. However, from the financial

[7] While there is trade and a capital variable, the model is robust in the all-country sample and excluding India. However, when India and the total capital flows variable are excluded, the coefficient of *$Intrade\_gdp_{it}$* GDP is also insignificant. As weak model identification and weak instruments are indicated, it can be inferred that Indian trade liberalization would have no impact (or a negative impact) on the per capita income of the other five countries.

development channel, a larger impact on economic growth can be witnessed than before ($lnfd_{it}$ = 1.276) when India is excluded in the estimation (table 4). This provides another indication that financial development is a precondition for external sector liberalization.

V. CONCLUSION

The objective of economic liberalization policies in general are to enhance economic growth and, in turn, the development of a country. However, fulfillment of prerequisites and sequencing of the liberalization play a substantial role in reaping the benefits of economic reforms, especially those related to external openness. In addition to openness to external sectors, the objective of regional economic unions are to share development initiatives and complementarity in using resources. It is commonly understood that despite some issues, higher growth trajectory would be challenging without the rapid and phased integration of a country into regional and global economic unions.

For this paper, an analysis of the impact of external openness and financial development on economic growth in South Asian economies is conducted. To compliment this, the influence of a large dominating economy on other neighbouring countries is also observed. For the study, annual series of capital formation, financial development and external openness covering the period 1980-2015 are modeled at an instrumental variable (IV) model using a GMM approach to identify the impact on per capita GDP. A monetary independence index and an exchange rate stability index are chosen as instruments for financial development. The South Asian economies of Bangladesh, Bhutan, India, Nepal, Pakistan and Sri Lanka are incorporated in the analysis.

The estimates show that external liberalization contributes substantially to the per capita GDP, but financial development is a prerequisite to realize the benefits. Capital formation is found to be the most substantial component of higher income followed by financial development. Similarly, external openness variables are also significant, but capital liberalization is less effective than trade liberalization.

An altered analysis, either excluding largest and emerging market economy, India, or by incorporating only one variable of openness, trade or capital flow, portrays a slightly different context. Except in India, external liberalization does not support income growth, as both external openness indicators are found to be insignificant in the India-excluded sample. However, financial development has a multiplier effect in the five economies as compared to India.

If the capital flows variable is omitted, the impact of financial development becomes dominant over foreign trade (in all country-sample), which is a similar result obtained in the all variables case excluding India. The trade-GDP variable is insignificant if India is excluded from the estimation. Accordingly, it shows no impact on trade liberalization in the five economies. This indicates that financial development is necessary for international trade to boost economic growth.

Finally, with only capital flow as an external openness indicator (while excluding the trade variable), the financial development variable is insignificant in the all-country estimation. Interestingly, the financial development variable becomes significant if India is excluded from the analysis. It has been further clarified that financial development is the most significant prerequisite for capital account liberalization in South Asian economies, except India.

In line with the discussion by Ito (2005), while financial development spurs investment through different channels, including the equity market, trade openness can be a prerequisite for the development of the financial sector. The sequencing of economic liberalization should start with trade liberalization and financial sector development together and then entail capital account liberalization as an ultimate end of the process.

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ANNEX: VARIABLE DEFINITION AND DATA SOURCES

Variable	***Description***
GDP_Gr	Annual percentage growth rate of GDP at market prices based on constant local currency
GDP_PC	GDP per capita (constant 2005 $)
Trade_GDP	Trade (percentage of GDP), the sum of exports and imports of goods and services measured as a share of GDP
TCF	Net FDI Inflow plus Portfolio investment (debt +equity) net, (percentage of GDP)
CAB	Current account balance (percentage of GDP)

Source: World Bank (2016).

Financial Development Index

FD	Financial Development

Source: Svirydzenka; IMF (2016).

Trilemma Index

ERSI	Exchange rate stability index
MII	Monetary independence index

Source: Aizenman, Menzie and Ito (2010).