Does Trade Actually Helps to Build Capabilities: The Case of Asia.

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1. Introduction
There is a difference between growth and development. While growth is a univariate concept measured purely on the basis of growth of per capita Gross Domestic Product (GDP), development is a multivariate concept and refers to achievement of quality life for the average citizen of a region. United Nations Development Program (UNDP) has a way to examine development of a country (region), and they do it through Human Development Index (HDI). The HDI is calculated as the simple average of life expectancy index, education index, and the per capita GDP index, of a country. Development is therefore a broader concept than growth.

A country with a better growth prospects but which neglects development cannot grow in the long-run. Improved standards of living cannot be ensured through increased growth rate alone. For example, during the sixties and the seventies, Brazil witnessed higher growth but as distribution of income along with other quality indicators of life, such as health and education were neglected, policymakers eventually had to follow populist policies in the fear of losing power in the parliament. Because there was a lesser element of development; the larger have not group was neglected, and the ruling parties in Brazil were repeatedly thrown out of power. This has put a halt to Brazil’s reform programs and prevented them from achieving higher full employment level of output. So the initial reform process although resulted in higher growth during the seventies could not be sustained during the eighties. Hence rising inequality can actually stall economic liberalization, further limiting the ability of economies of benefits from globalization.

Generally Human Development Index (HDI) reflects the level of development in a particular country. However, merely taking into account the simple average of life expectancy, education and the per capita GDP – as presently been done to calculate HDI, might hide some richer information in the context of well-being. For example, South Africa is ranked in the group of middle income countries with a per capita gross national income of 3562 USD in 2006 (World Bank Atlas Method), but the income distribution is very unequal - the poorest 10 percent of the population account for 1.4 percent of national income, and the richest 10 percent for 44 percent (Human Development Report, UNDP, 2006, p. 29). There is therefore a need to construct a Social Development Index (SDI) by considering income distribution as a separate variable in addition to the other variables that are considered in HDI.

An initial effort trying to examine relationship between growth and inequality was undertaken by Simon Kuznets (Kuznets, 1955). Better known as the Kuznets-U hypothesis, it states that when beginning from a low level of economic development as measured by per capita income, income distribution tends at first to become less equal and then more equal as income levels rise.

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However this study by Kuznet did not consider the effect of trade on inequality. There might be a link between trade and inequality, and it might happen because trade has an effect on autarkic level of income. It has been widely established that countries that open up, and hence trade more, have better economic performance in terms of growth rate of GDP than others (Srinivasan and Bhagwati, 1999).

Recently, many economies in Asia – China, India, and Viet Nam, in particular – are growing at a fast rate. The reason for this faster growth is attributed to reforms. One major aspect of economic reforms is globalization and this is usually reflected in terms of higher value of trade. In the present context, as both growth of per capita income and distribution of income, enter as components for constructing SDI, it makes sense to examine how trade affects SDI. This aspect has not been examined in the current literature. The rest of the paper is structured as follows: (a) understanding income inequality; (b) constructing SDI; (c) examining relationship between trade and SDI; and finally, (e) conclusion.

2. Understanding Inequalities
Inequality (in terms of income earned) can primarily be because of circumstantial reasons, or due to policy failure. Circumstantial reasons are exogenous and cannot be controlled by policy measures. Examples about circumstances led poverty may be because of: (a) caste, (b) natural disaster, (c) gender, and (d) wars. For instance, people taking birth in some lower castes in India (schedule tribes, or castes) are most likely to start with limited opportunities and hence have a lower steady state level of income (read, poor). Similarly, considering case of Bangladesh, which many times are frequented by natural disasters, like flood and tornados - witness a loss in physical capital/assets and hence tend to be poor. Gender inequality is another classic case. While 200 million women entered the global workforce in the decade before 2003, 60 per cent of the one billion poorest people are women (human Development Report, UNDP, 2007). Lastly, war has an effect in terms of loss of human and physical capital. Much of the poor GDP growth rate in Viet Nam during eighties and more recently the fall in per capita income in Iraq, is because of wars, and political and economic isolation that followed.

Fortunately, much of the other causes of inequality are endogenous and can be addressed. Most Asian economies have a majority share of their population dependent on the agriculture sector. Persistence of equal or unequal income distribution depends much on how policy makers in the region are focusing on their agriculture sector. For example, in Viet Nam the impact of doi moi (reform process) beginning in 1986, have benefitted the rural workers by linking domestic coffee and rice market with the international market (Klump, 2006). The close integration of rural and urban labor market, facilitated by rural financial market intermediation has made economic growth pro-poor in Bangladesh (Timmer, 2006).

However in recent times, as reported by publications from two major multilateral organizations – International Monetary Fund (IMF) and Asian Development Bank (ADB) – inequality is on rise in Asia. For example, IMF Regional and Economic Outlook has this to comment, ‘Over the last ten years or so, 13 out of 18 Asian countries for which data are available have recorded increases in income inequality, ranging from around 5 to 35 per cent’ (IMF Regional and Economic Outlook, 2006, p. 63). ADB, in its latest 2007 report titled, ‘Inequality in Asia’, writes that the story of rising income inequality in Asia can be best portrayed as rich getting richer faster than the poor are getting richer – although there has been a stark fall in poverty (by head count measures) in the Asian region.
Despite the fall in poverty the benefit of growth is unequally shared by people. The ADB report (Inequality in Asia, 2007) attributed the reasons for growing inequality to a number of factors. In China the reasons for unequal income distribution has to do with market-oriented reforms where coastal areas have a greater concentration of investment, and hence growth, compared to rural hinterlands. In India disparity in attainment of education has given skilled workers more opportunities compared to the less educated/unskilled workers in a newly globalized environment. In Viet Nam income disparity has been more on the basis of circumstances, where mass exodus of ethnic Chinese from industrially developed South Viet Nam to predominantly agriculture prevalent North Viet Nam, has created spatial inequality. In general, people living in rural areas in China and India, have less earning potential compared to their urban counterparts because of slow growth of agriculture vis-à-vis industry and services sectors. Chaudhuri and Ravallion (2007) argue that post-reform growth in both China and India has not been pro-poor.

3. Constructing SDI
Given the discussion in our last section it makes sense to consider both growth and the resultant income distribution, to comment about well-being of any particular nation. This we do by constructing SDI by adding distribution of income to the existing three dimensions of human welfare, namely, income, education and health. As we are using Principal Component Analysis (PCA), distribution of income is captured through equality coefficient.

When ranking of countries in Asia are done on the basis of growth rate of GDP alone; India, China, Hong Kong China and Viet Nam take the first six positions. However, when we do ranking in terms of well-being of average citizens (that is, in terms of DAPCHDI), these countries lags behind – Viet Nam (11), India (19) and China (10). The number in the parenthesis refers to rank out of a sample of 22 Asian countries.

Hong Kong, China however does well occupying third position. Japan and Republic of Korea do well in terms of distribution of resources towards its average citizen and in terms of other development criteria. In the other extreme we have countries, like, Bangladesh, Indonesia and Nepal, which are not only growing slowly but also are performing bad in terms of income distribution. The findings therefore tend to suggest that fast growing economies could have done better in improving their development indicators.

4. Does Trade Matter?
Under condition when rising income inequality across Asia is a cause of concern among policy makers, it might be interesting to study the impact of trade on income inequality. Primarily, trade induced change in distribution of income can happen through: (a) income channel, and/or (b) consumption channel. Trade policy influences household welfare by changing relative prices of goods, which in turn affect labor income and consumption. Because households typically differ in terms of their composition of consumption bundle and education endowment, a change in relative prices and demand for labors resulting from external sector reform (read increase in trade), will have an impact on income distribution. For instance, poor households generally spend a higher share of budget on basic food items, and are less educated than the richer households. If trade leads to higher price of food items and lower the price of technology intensive luxury items, then richer tend to benefit relative to the poor households. Similarly, product quality upgrading in response to trade openness increase demand for more educated (read, skilled) laborers, and hence increase their
payoffs relative to the less skilled labors. Another channel through which trade may affect industry wages is suggested by models of imperfect competition and bargaining power of trade union. If profitable industries share part of their rents with workers because of union bargaining power, tariff cuts in these industries may lead to lower wages, as industry rent disappear from globalization.

To comment about the relationship between SDI and trade we start with basic Kuznets formulation, that is:

$$ sdi_j = \beta_0 + \beta_1 y_j + \beta_2 y_j^2 + \delta_j $$

where, $sdi_j$ represents SDI of country $j$ and $y_j$ represents estimated per-capita income (in logs) of country $j$. To overcome problem associated with endogenity we use estimates of $y_j$ obtained from an instrumental variable and auto regressive time series structure for instrumentation purposes. We use per capita GDP data for individual countries between 1991 until 2006. As income rises inequality in terms of capability increases initially and subsequently falls as income increases further. The term $\delta_j$ represents the deviation of individual country observations from the Kuznets-U hypothesis. For the purpose of this study, we augment the above formulation in the following fashion:

$$ sdi_j = \beta_0 + \beta_1 y_j + \beta_2 y_j^2 + \beta_3 imi_j + \delta_j $$

where, $imi_j$ stands for input measure index component in the trade development index (TDI) of country $j$. $imi$ is computed using two broad sets of determinant falling under two broad categories. The first one is structural and institutional index, and comprise of data on physical infrastructure, financial intermediation, domestic finance, intermediation, domestic finance, international finance, institutional quality, economic structure, macroeconomic stability, environmental sustainability and human capital. The second component of $imi$ is trade policies and process index, and comprise of data on openness to trade and market access. It is to be noted that TDI measure is developed by UNCTAD and provides an analytical framework to identify how well trade and development are integrated in an individual country. Testing hypothesis on the sign and significance of $\beta_3$ will reveal whether trade leads to social development. Since $imi$ scores are not available for all the 122 countries for which we have calculated SDI we have to drop 17 countries. In total we have 105 data points which are accessed from the UNCTAD report titled, ‘Developing countries in international trade’, 2007 (available at: http://www.unctad.org/en/docs/ditctab20072_en.pdf, p. 54-56), and Human Development Report database, 2007 (URL http://hdr.undp.org/statistics/data). Upon regressing, the results indicate that trade helps to build to capabilities in terms of opportunities to earn income and hence, better access to health and education.

5. Conclusion
Although, some of the Asian economies, like, China, India and Viet Nam, are growing at a faster pace they are not doing well in terms of development of basic capabilities in terms of education, health and skill formation. This we found when we ranked countries in terms of Social Development Index and compared them with ranking in terms of GDP growth rate alone. In fact, the not so fast growing economies, like, Japan and Republic of Korea, are doing well in terms of distribution
of resources towards its average citizen and in terms of other development criteria. Much of the cause of inequality in Asia results from inability to absorb predominantly rural based population into urban centric manufacturing and services sector and not because of trade. In fact, trade helps to build capabilities in the region. Upon regressing Social Development Index on Input Measure Index (a constituent of Trade Development Index as developed by UNCTAD), the coefficient on the latter came out to be positively statistically significant, indicating trade having a beneficial effect in building capabilities of a region. Capabilities are synonymous with freedom – freedom from hunger, freedom from dying prematurely, freedom from getting oppressed, freedom from ignorance, freedom from crime, and freedom from ecological disaster. Poor people are concerned not only about lack of opportunities to earn income but also having access to quality education, health care, drinkable water, public transport system, financial intermediation, transparent bureaucracy and living in a less polluted environment. Trade helps to build capabilities in two primary ways. First, trade affects mean income positively. Rising income can be instrumental behind getting access to quality health, education and other attributes of good life. Second, trade also embodies flow of resources that can be used to set up both healthcare and education type services, and to build necessary infrastructure in the form of power, water supply, roads and ports.

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