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**Agriculture or Industry:
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Ex-post and Ex- Ante Analysis of Pakistan's falling
Competitiveness in Its Main Export Items**

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Abstract:

The paper undertakes an evolutionary analysis of Pakistan's national competitiveness with special reference to exports from 1950-2010. The analysis suggests that post 1980s trade liberalization, some visible improvements can be seen in production efficiencies in Pakistan but they were not translated into improved agriculture or industry competitiveness. The major export items like garments and rice have seen a steady decline in value over the years.

1. How Trade Policy is Measured

The first relevant question that arises: how do economists view the notion of *free trade*? Thankfully, there is a consensus among all opinions¹ that openness to international trade is imperative for economic development. Many studies show that trade is not only the engine of growth but it also sustains it (for example, Srinivasan and Bhagwati 2001; Dollar and Kraay 2004). Proponents of *free markets* believe that the countries, developing as well as developed, that opened up their economies farther, achieved better economic performance through forward linkages such as improved export competitiveness. The accession of the global economy indeed brought prosperity to different areas of the world. (Sen 2002) There is also an assertion that the non-globalizing part of the developing world is falling further and further behind because their production patterns are not competitive as an outcome. (Dollar and Kraay 2004)

The processes of free trade are captured by trade liberalization or open trade policy stance. Literature has introduced various concepts of trade liberalization. Following is the taxonomy for outcome based and incidence based measures of trade following the grouping offered by Rose (2002):

1. openness (e.g. the ratio of trade or imports to GDP), an outcome based measure,
2. trade flows, adjusted for country-characteristics (outcome based),
3. tariffs (policy incidence-based)
4. non-tariff barriers (NTBs) (incidence based),
5. informal or qualitative measures,
6. composite indices, and,
7. measures based on price on price outcomes.

Rose (2002) provides a nice summary of all these variables. For the readers comfort, we provide a brief nevertheless:

The core openness variable remains the overall trade share (the ratio of nominal imports plus exports to GDP), which has been extensively used in the literature. (Frankel and Romer 1999; Acemoglu, Johnson and Robinson 2001; Alcalá and Ciccone 2002; Dollar and Kraay 2002; Rodrik et al. 2004) There are many indicators of trade restrictiveness (incidence based) acting as measures of trade policy. (Edwards 1998; Greenaway et al. 2001; Rose 2002) Literature recommends using simple averages of taxes on imports and exports (Rodriguez and Rodrik, 2000). Simple import duties as a percentage of imports (*Tariffs*) are available from World Development Indicators (WDI) from 1970 to the end of the sample in 1998. Sachs and Warner provide (1995) constructed a composite measure of openness by using tariffs on intermediate inputs and capital goods. Edwards (1998) collected data on total

¹ Dani Rodrik, though, critical to Dollar and Kraay (2002; and 2003), accept that trade liberalisation and growth are positively related. (see Rodriguez and Rodrik 2000) However he also emphasises that it should not be considered a substitute for other development strategy/ies.

revenues from taxes on international trade as a proportion of total trade. Pritchett (1996) provides weighted average of total import charges, as well as sectoral categories of import charges (manufacturing, agriculture and resources). They can all be considered good proxies of trade restrictiveness and have been employed in the analysis.

The coverage of Non Tariff Barriers (NTBs) in terms of total imports is another widely used measure of trade policy. Sachs and Warner (1995) include frequency of non trade barriers on intermediate inputs in his index. Pritchett (1996) collects data on non-tariff barrier coverage for developing countries from UNCTAD (United Nations Conference on Trade and Development). They are available for four different categories —manufacturing, agriculture and resources respectively. Leamer (1988) used an empirical Heckscher-Ohlin model with nine factors to estimate net trade flows and trade intensity ratios for 183 commodities at the three digit SITC (Standard International Trade Classification) level for 53 countries. He took the differences between predicted and actual trade intensity ratios as indicators of trade barriers. A less structural approach is taken by Hiscox and Kastner (2002). They use fixed country-year residual effects from two gravity models of trade (a simple version which links imports to GDP and distance, and an augmented one which adds measures of wealth, land and capital) to derive measures of trade policy orientation. Sachs and Warner (1995) and Harrison (1996) have utilised a number of price-based measures of trade policy. The black market foreign exchange premium is one of them.

In this paper we are primarily concerned with export competitiveness of Pakistan's export sector viz a viz its economy in general and three sectors (Rice, Readymade Garments, Marble and Granite) in particular

2. Competitiveness of Pakistan's Export Sector:

The competitiveness is usually equated with strong performance of economies relative to other countries where strong performance can mean economic growth, success in exports and increased well being. A popular definition of competitiveness is that 'the degree to which a nation can, under free and fair market conditions, produce goods and services which meet the test of international markets, while simultaneously maintaining and expanding the real incomes of its people, over the long term' (OECD, 1992: 237). Trade theory has significantly contributed in explaining competitiveness and each definition of competitiveness has trade as a core notion. Though in the classical realm of comparative advantage competitiveness is captured by differences in technological efficiency or cross country variations in factor endowments which leads to lower production costs for host country when compared to another country or rest of the world, dynamic comparative advantage best captures competitiveness through endogenous growth and trade models where learning by doing produces growth and may also reinforce patterns of specialization over time.

There can be two kinds of measures of competitiveness (a) Ex-post indicators which capture outcomes (b) Ex-ante indicators which measure the determining process. In this section we would focus on Ex-post or outcome based measures of competitiveness.

A simple and linear relationship exists between trade and competitiveness which captures the share of the market (domestic or foreign) by capturing growth performance matrix, terms of

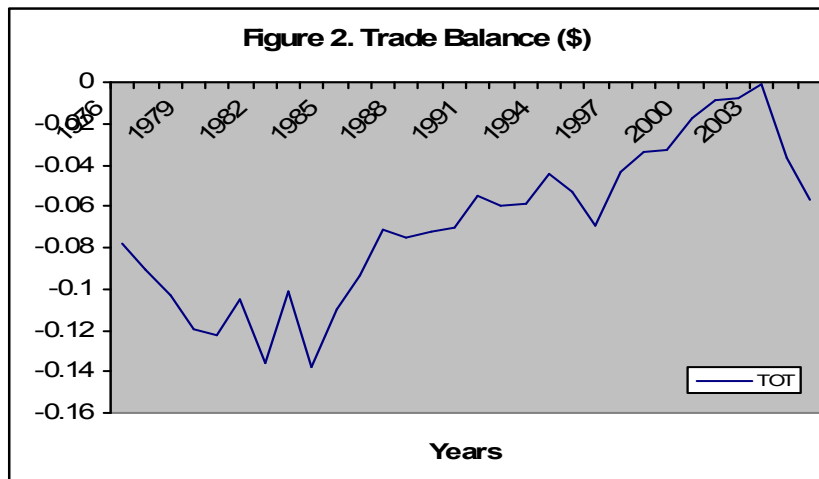
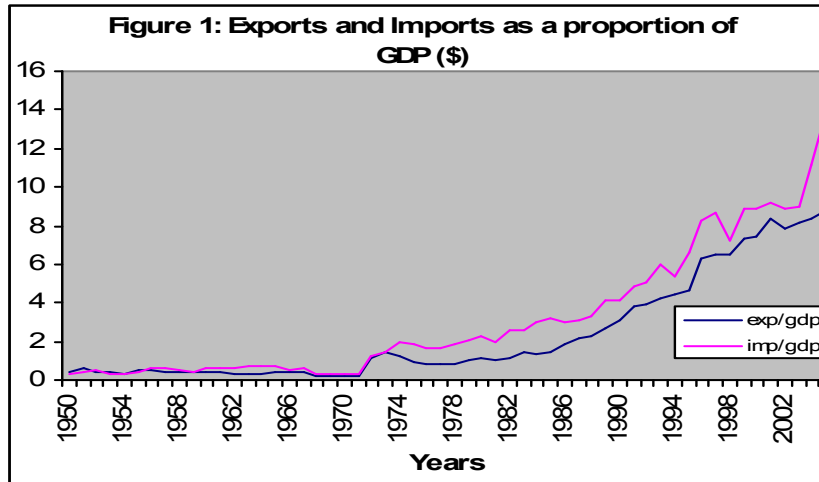
trade or other market performance indicators. The real exchange rate is a measure which can help assessing international competitiveness of an economy because it shows the relative costs of the common reference basket of goods between countries (or price ratio of tradeables to non-tradeables) converted into common currency (Obsfeld and Rogoff, 2002). Other indicators which can assess the general wellbeing or attractiveness of a country can be foreign direct investment and real income per capita in addition to some other performance based matrices.

For larger developing countries, two opposing trading regimes could be followed. The first one is associated with import substitution (IS) which is associated with the package of policies that aim at protecting the infant industries and discriminating against exports. Such policies include over valued exchange rate system, import controls, high tariffs and quantitative restrictions on imports. The export promotion (EP) strategy on the other hands encourage exports by developing deeper links between domestic and world economy by liberalizing the goods markets. EP is followed by ever increasing tradable sector within overall economic activity which may be captured by rising trade shares. The countries that pursued outward oriented strategy between 1965 and 1990 grew about 2 percentage points faster per year, on average than counties that pursued IS strategy i.e., the East and Southeast Asian economies had better growth performance due to their outward oriented strategy (Khan, 1998).

Pakistan since its since inception in 1947 had been following highly protective and restrictive trading regime and overvalued exchange rate to promote import substitution. Though during the 1960s, some signs of EP emerged when the government introduced the export bonus scheme with import liberalization. Pakistani rupee as devalued in 1970s which was overvalued in last two decades due to fixed exchange rate policy. During 1980s explicit import quotas on non-capital imports were removed and banned or restricted imports were slowly liberalized. As a consequence by 1986, about 29 percent against 41 percent in 1980 of the domestic industrial value added was protected by imports ban and only 3.7 percent in 1986 as opposed to 22 percent in 1980 of import restrictions were still prevalent.

After 1988 however successive governments have pursued a yet more vigorous trade liberalization and also undertaken a range of export promotion measures. As a result almost all NTBs have been replaced with tariffs; the maximum level of tariffs has been reduced to 45 percent in 1997-98 from 225 percent in 1986-87 and all items are now importable except for a few whose entry is conditional on religious, health or security considerations.

Following lines, we under take a brief analysis to gauge the effects of export promotion on competitiveness of exports in particular and Pakistani economy in general. As the above discussion suggests, both exports and Imports have become more competitive in Pakistan with each decade of relative liberalization while witnessing a steep peak after 2000.



Imports have risen more sharply than the exports, which have led to negative terms of trade. Though, Figure 2 suggests that trade balance has moved in favor of exports in later years of last 50 years especially after 1988 trade reforms showing increased competitiveness of Pakistani export sector in wake of trade liberalization. Nevertheless, a deteriorating trade balance may mean that real exchange rate for importing sector has moved in opposite to the real exchange rate for the exporting sector as feared by Khan (1998).

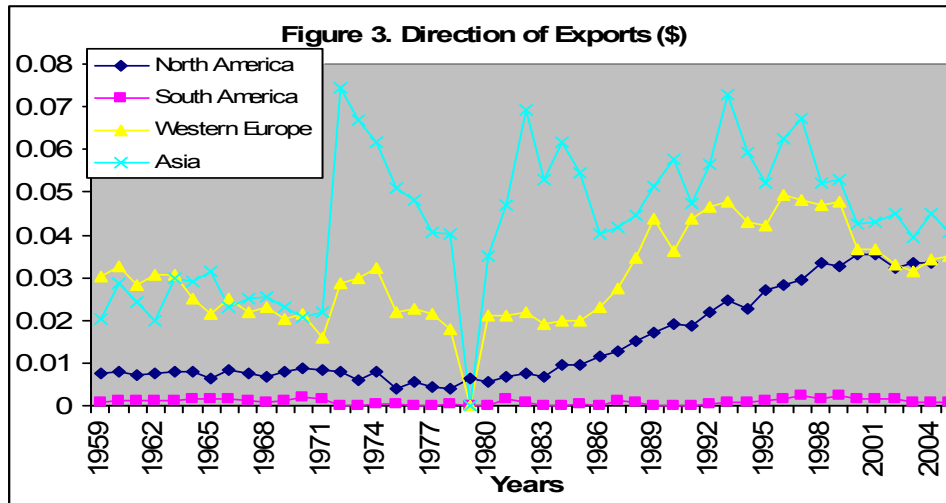


Figure 3 shows direction of exports of Pakistan to North America, South America, Western Europe and Asia. Exports to Asia and Western Europe have been volatile, whereas exports to North America show a steady increase suggesting improved competitiveness for the region over time while exports to South America in comparison to other regions have been negligible at best.

Figure 4. Ex post Competitive Indicators:

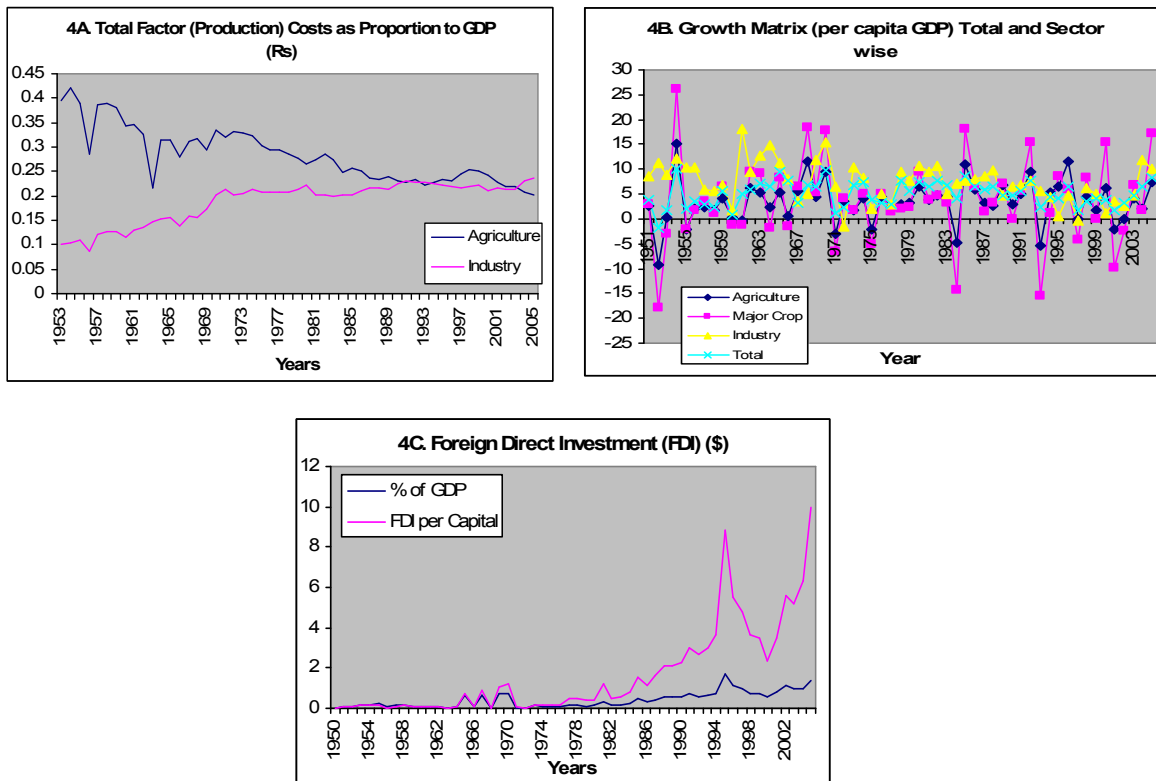
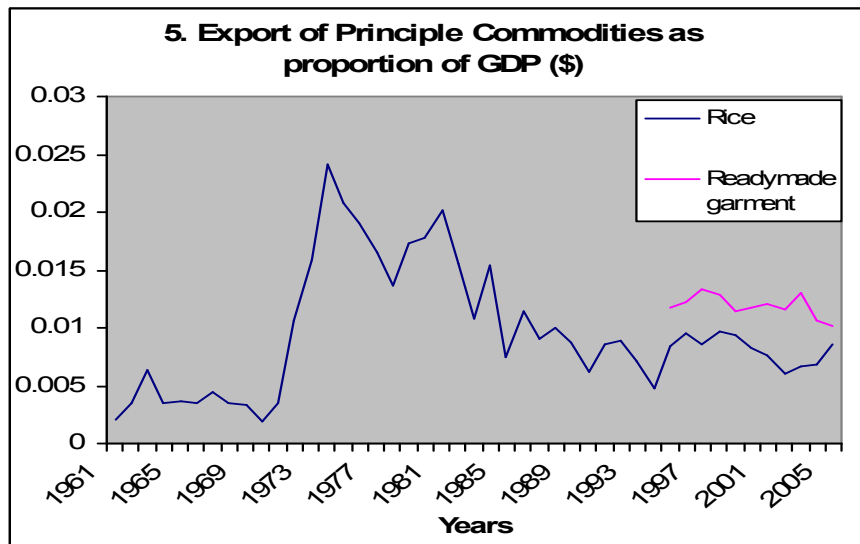


Figure 4a suggests that Production costs for agriculture have been declining but that of the industry are increasing. The growth matrix in 4B reveals that agriculture sector despite decreasing production costs have a highly volatile output growth whereas in most of the years it has also been noticed to have been negative following the bad harvests of Pakistan's major crops including Rice. FDI has only improved recently but still at very low levels of GDP. The performance of all these indicators suggest that Pakistani goods whether industrial or Agriculture would not be highly competitive in global markets though the situation has improved in recent years especially post 1990s. Rice and Readymade Garments are both considered as principle commodities in Pakistani tradable sector. The data for Rice exports are available since 1961 whereas the data for Readymade garments was attainable only after 1995. Unfortunately the trends show a visible decline in exports of both commodities suggesting loss of competitiveness.(The data used in this section have been obtained from subsequent Economic surveys of last 30 years conducted by Ministry of Finance, Government of Pakistan).



3. Conclusions:

Trade reforms of early 1980s improved the performance of the external sector with a visible improvements of both exports and imports for Pakistani economy. However, the competitiveness of domestic productivity could not keep pace with the domestic demand and over the years trade deficit witnessed a steep rise especially after 2002. Pakistani exports became relatively uncompetitive in North American and European markets. In contrast Pakistan's neighbors like China, India and Bangladesh saw a visible rise in their exports to these destinations. In addition, these countries also improved their trade balance within the region and more South-South trade showed that many of the domestic trade partners of these countries exploited trade as a means to improve domestic competitiveness. Though the production costs of the industrial sector in Pakistan declined visibly over the years, the production patterns expanded horizontally than vertically so suggesting lack of diversification. Despite Pakistan being a predominantly agricultural economy, the costs per hectare harvest in agriculture increased even after liberalization in 1980s. The growth patterns of both agriculture and industry have been very volatile through out 1950 to 2010. Post 2000, foreign direct investment trends showed a clear improvement but soon after 2008, they came back to low levels.

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