

EXIM BANK: RESEARCH BRIEF

TRADE LIBERALIZATION, PRODUCT VARIETY AND GROWTH



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In commemoration of Jawaharlal Nehru Birth Centenary (1889 - 1989), Export-Import Bank of India instituted the International Economic Research Annual (IERA) Award in 1989. The objective of the award is to promote research in International Economics, Trade, Development and Related Financing, by Indian nationals at universities and academic institutions in India and abroad, leading to a doctoral degree. The study titled 'Trade Liberalization, Product Variety and Growth' is based on the IERA 2013 Award winning thesis by Dr. Anwesha Aditya, Assistant Professor of Economics, Department of Humanities and Social Sciences, Indian Institute of Technology Kharagpur.

INTRODUCTION

The relationship between exports and economic growth is a much researched area in international economics. Recent empirical evidence suggests that *what a country exports* may matter more than *how much it exports*. The developing countries in general suffer from high commodity concentration, dependence on primary products and poor quality of exports. Whereas, increased variety and improved quality of exports are considered as two important dimensions behind the success stories of some of the fast growing developing countries like China and India during the 1980s and 1990s. During this period, many of the developing countries,

including the fast growing countries, have opened up their domestic markets significantly through liberal trade policies. Given these observations, a necessary question that arises is what implications may such trade liberalization policies have regarding diversification and composition of export basket of a country. If trade liberalization increases variety and improves quality of export basket, it will not only indicate whether but also how trade liberalization may actually foster growth of outward oriented countries. However, these issues have remained relatively less explored in the existing literature.

The study has attempted to shed some light on the link between trade

liberalization, diversification and composition of export basket and economic growth, both theoretically and empirically. In particular, the study first examines the implications of trade liberalization policies on diversification and quality content of export baskets of small and large open economies in alternative theoretical frameworks. Second, it provides further evidence on growth implications of these dimensions of exports by refining the methodology for empirical estimation like using a different country classification, a two-stage approach of estimation and a new set of control variables. It also investigates whether the trade-growth relationship may depend on

institutions, like multilateral and regional trading arrangements and country-specific institutions such as political regimes of countries, and the productivity constraints, like human capital, and research and development (R&D).

TRADE LIBERALIZATION, PRODUCT VARIETY AND QUALITY

Increased variety and improved quality of exports are two important aspects behind the success of many fast growing Asian countries like China and India. The study examines how trade liberalization affects export diversification and composition through the development of new product varieties and improvement of quality – both across and within sectors for small and large open economies. In case of trade liberalization in a small open economy, tariff reduction leads to product diversification. Also, a reduction of tariff on the homogeneous import good raises the quality of the export good. The increase in the number of varieties of the other export good, however, depends on the capital intensity of the horizontally-differentiated good relative to that of the homogeneous import-competing good.

TRADE LIBERALIZATION, EXPORT DIVERSIFICATION AND COMPOSITION

The implications of tariff reductions for diversification of exports of many goods and many varieties

have been examined in the study. In case of unilateral tariff reduction by the home country, it is more likely that the export basket of the foreign country will get diversified whereas the export basket of the home country may not. A reduction of tariff by the home country makes the tariff-inclusive price of foreign goods lower in the home country. Due to this pro-competitive effect of tariff reduction, a lower set of goods will now be produced in the home country. Tariff reduction by the home country lowers the set of goods domestically produced through the pro-competitive effect and establishes comparative advantage in a larger set (and in relatively higher qualities) of goods by lowering the relative home wage. If this wage effect is weaker, a tariff reduction implies a smaller set of the homogeneous good will be produced in the home country. This is more likely the case, if initially the home tariff was very high, because then a one percent reduction in the home tariff will generate a very large pro-competitive effect causing the subset of goods produced in the home country to contract. But in case of stronger wage effect in the home country, exports of the homogeneous goods by the foreign country become less diverse due to contraction of its exports. For bilateral tariff reductions, on the other hand, the country in whose favour the ratio of national wages moves is more likely to have a diversified export basket.

EXPORT DIVERSIFICATION, COMPOSITION AND ECONOMIC GROWTH

When a country's export basket is highly concentrated, any change in the world prices of those goods will produce a similar change in the country's export price leading to export instability of the countries which are dependent on these products. Economic growth not only depends on higher trade, but export diversification or specialization and the nature of export composition is the key to growth across countries. The export basket should not only be sufficiently diversified but it should contain high value addition products to experience more sustained growth effect of openness. However, the level of exports too matters, as the impact of export diversification is stronger when exports of a country are greater than world average exports. The impact of export composition also gets stronger for those countries whose level of manufacturing exports is greater than the world average or is growing at a faster rate.

The study establishes a critical level of export concentration beyond which increasing export specialization leads to higher growth. Below this critical level, diversification of exports matters for GDP growth. Thus, countries trying to augment growth through exports need to emphasize upon on what they export. Whether they should encourage diversification or specialization depends, however, on their current level of diversification.

TRADE, GROWTH AND INSTITUTIONS

The role of productivity constraints and institutions in the trade-growth relationship is examined by the study. The export-GDP growth relationship may not work well if there are other constraints on economic growth. Apart from investment and infrastructure, another important constraint that may influence the export-growth relationship is the productivity constraint. Two types of productivity constraints considered include the availability of skilled labour or human capital and the R&D constraint. Also the study has focussed on country specific institutions like political regimes; regional factors like formation of regional trading arrangements and free trade areas (RTAs/FTAs) and universal/ multilateral factors like formation of GATT/WTO, which facilitate trade. The impact of political regime is incorporated with the objective to examine whether in trade-growth relationship political institution plays any role or not.

It is found that country specific institutions like political regime and universal factors like accession to WTO play an important role in the trade-growth relation for different country groups. Moreover, diversification and composition of export baskets are important determinants of the trade-growth nexus even after controlling

for the impact of productivity constraints like human capital and R&D and different types of institutions like political regime and WTO accession.

A comparative study of regional growth experiences of Asia and Latin America for the period 1975-2005 identifies the major determinants of economic growth in the two regions which has important implications for policy formulation. The estimation results suggest that the common determinants of growth in the two regions are exports, investment, public debt, human capital and diversification and composition of exports. On the other hand, the differentiating factors on the diverging growth experiences of Asia and Latin America are infrastructure, regional integration and institutional aspects like patent protection, and WTO. Diversification within the manufacturing sector is important only for Asia.

POLICY IMPLICATIONS

There are some far reaching policy implications of the results obtained in the study. From the theoretical exercises emerge the following specific trade policy implications:

1. Unilateral tariff reductions by the importing countries can promote their export growth through increased variety and improved quality of their export baskets.

Thus, tariff reductions appear as export promotion policies.

2. Tariff reductions have significant impacts on diversification of the export basket both within and across sectors for large countries that can influence the world prices of goods they trade. This means, to the extent to which output growth rates are augmented by diversification of a country's export basket, trade liberalization or tariff reduction policies may promote output growth.
3. The liberal trade policies that India is pursuing since the mid 1990s have the potential to make Indian exports more sophisticated in terms of increased varieties as well as improved qualities of export goods, both of which are important preconditions of export-led growth in the present era of globalization.
4. In the context of bilateral or multilateral trade liberalization, which is particularly relevant for formation of regional trade blocs and multilateral negotiations at the WTO level, trading nations may have different tariff-reduction induced export-led growth experience since export basket of countries may not be diversified symmetrically.
5. For India, it means that entering into regional or bilateral trade

agreements might be favourable for its growth objective.

Further, the results obtained from the cross-country empirical investigation conducted in the study have the following implications for the export-led growth hypothesis:

1. *What a country exports*, rather than *how much does it export*, is the important factor for ensuring higher output growth rates. That is, it is not just important to export more, but it is important to diversify the export basket and improve quality of its export goods. The export basket should not only be sufficiently diversified but it should contain high value addition products to experience more sustained growth effect of openness.
2. The volume of exports may still matter as it strengthens the impact of export composition. In particular, export diversification has a stronger impact for those countries whose level of manufacturing exports is greater than the world average or is growing at a faster rate.
3. Diversification of export basket from a very concentrated one is needed to step up growth. Whether countries should

adopt policies to promote diversification or not, depends on their current level of diversification itself. For fast growing developing countries like India, Indonesia, and Sri Lanka, export diversification appears to be more important in sustaining their high growth momentum. On the contrary, developed economies like USA, Australia and Germany gain from specialization. Again, export diversification seems to be more important for growth in the Asian region as compared to Latin America for which specialization matters.

4. Productivity constraints play an important role in the trade-growth nexus. However, human capital explains more variation in GDP compared to patent protection or IPR across country groups. That means to foster economic growth, countries should adopt policies for human capital formation, such as investing more in higher education and skill formation.
5. Public investment in infrastructure development is important since improved infrastructure does facilitate exports and consequently can be instrumental in making the export-led growth effect stronger. This is particularly

important for the Asian countries, and, therefore, for India.

6. Faster output growth can also be achieved through accession to WTO and regional trade agreements provided both ensure larger market access for exporters. Though the gains from greater market access after WTO formation has been found to be higher for Latin American countries than for Asian countries, this does not undermine the potential effects of larger market access for Indian exporters (through WTO accession and regional trade agreements) to step up India's growth. In fact, trade creation effect being dominating over trade diversion effect that a non-member country may face, makes regional trade agreements all the more important.

The contents of the publication are based on information available with Export-Import Bank of India and on primary and desk research through published information of various agencies. Due care has been taken to ensure that the information provided in the publication is correct. However, Export-Import Bank of India accepts no responsibility for the authenticity, accuracy or completeness of such information.

Publication is available with:
 Dharmendra Sachan
 Chief Knowledge Officer
 EXPORT-IMPORT BANK OF INDIA
 Centre One Building, Floor 21,
 World Trade Centre Complex,
 Cuffe Parade, Mumbai - 400 005, India.
 Phone : +91 22 2218 0379
 Fax : +91 22 2218 3070
 E-mail : dharmendra@eximbankindia.in
 Website : www.eximbankindia.in

Contact Numbers : Ahmedabad : (079) 2657 6852, Bangalore : (080) 2558 5755, Chandigarh : (0172) 2641910, Chennai : (044) 2852 2830, Guwahati : (0361) 223 7607, Hyderabad : (040) 2330 7816, Kolkata : (033) 2283 3419, Mumbai : (022) 2217 2600, New Delhi : (011) 2347 4800, Pune : (020) 2640 3000, Addis Ababa : (251) 116 630079, Dubai : (971) 43637462, Johannesburg : (27) 11 3265103/13, London : (44) 20 73538830, Singapore : (65) 653 26464, Washington D. C. : (1) 202 2233238, Yangon : (95) 94236 94109