

# Effects of Trade Liberalization on Developing Economies

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**Abstract:** *This paper examines the impact of trade liberalization on the merchandise trade balance for a sample of developing countries that have adopted trade liberalization policies. The impact is differentiated according to the destinations and origins of the exports and imports, whether they are developing or industrial countries. This is important as one of the arguments for protection is based on the assumption of asymmetry in the elasticities of products traded between developing and industrial countries, and this asymmetry leads to disparity in economic growth. The paper shows that the impact on the merchandise trade balance differs between the two groups of trading partners; there is weak evidence that the trade balance worsens (increase in deficit) for trade with developing countries, but the trade balance improves (increase in surplus) for trade with industrial countries*

**Keywords:** Elasticities Products Traded, Exports, Imports, Balance Worsens, Increase Deficit, Trade Liberalization, Trade Balance

## I. INTRODUCTION

The objective of the paper is to empirically examine the impact of trade liberalization on developing countries' trade balance with industrial and developing countries. Many developing countries have liberalized their trading regime with the hope of gaining static and dynamic gains from trade, and that the liberalization will increase both the growth of exports and imports, and, consequently, improve welfare. However, trade barriers are still relatively high in many developing countries. This is because a more liberal trade regime may invite the possibility of worsening trade balance, as the impact of liberalization depends on the relative increase in the growth of imports and exports and the prices of the product traded (Santos-Paulino and Thirlwall, 2004). In spite of claims of the irrelevancy of current account deficits; for instance, Corden (1994) argued that an increase in the current account deficit should not be a matter of concern. But Khan and Zahler (1985) have shown that payment deficits due to liberalization are unsustainable and changes in the real exchange rate are too slow to rectify the problem. Furthermore, Edwards (2002) shows that current account reversal due to prolonged current account deficits may lower economic growth; it may even lead to economic crisis. Milesi-Ferretti and Razin (2000) emphasized the dangers of large current account deficits that must be compressed when external financing dries up. Hence, even though trade liberalization may promote growth from the supply side for example, by encouraging competition and more efficient use of resources if the current account worsens due to greater increase in import than export growth, economic growth may be thwarted from the demand side (McCombie and Thirlwall, 1994). Thus, knowing the impact of trade liberalization on trade balance is important, as it will affect economic growth. Another important consideration with respect to the impact of trade liberalization on the trade balance and economic growth is that the income elasticity of products traded between developing and industrial countries are different. The Prebisch-Singer (PS) hypothesis, which leads to the push for the import substitution policy, assumes that the income elasticity of products traded by developing and industrial countries is different. Developing countries are exporting low-income elasticity products, while importing high-income elasticity products; industrial countries are importing low-income elasticity products while exporting high-income elasticity products. If the trade liberalization process further strengthens the differences in the income elasticity, it may further increase the income and growth disparity. If the PS hypothesis presumption holds true, developing countries which liberalized their trading regime will have a much faster growth of imports from industrial countries than their exports to industrial countries; consequently, the liberalization process will increase developing countries' trade deficit with industrial countries. And

this “lack” of demand from industrial countries will limit developing countries’ economic growth relative to industrial countries. Given that the effect of trade liberalization on the trade balance is uncertain as the impact will depend on the relative growth of exports and imports, the issue is an empirical one. The results of the study have policy implications relating to the “sequencing” of export and import liberalization, and on the question of whether there is justification for protection against products from industrial countries because of the asymmetry in elasticity of products traded.

## **II. TRADE LIBERALIZATION AND THE TRADE BALANCE**

Theoretically, the effect of a change in tariff on the trade balance is ambiguous (Thirlwall and Gibson, 1992; Santos-Paulino and Thirlwall, 2004), as the impact will depend on the relative change of import and export growth. The literature survey of Ostry and Rose (1992) on the effects of trade tariffs on the economy based on different theoretical frameworks concludes that there is no clear conclusion about the effect. They show that the effect depends on the behavior of real wages, exchange rate, a variety of elasticity, the degree of capital mobility, and whether the tariff shocks are perceived as temporary or permanent. Given the ambiguity, the impact of trade liberalization on the trade balance needs to be studied empirically. Empirically, there are only a few cross-country studies that examine the impact of trade liberalization on the trade balance (Santos-Paulino and Thirlwall, 2004; Wu and Zeng, 2008). Santos-Paulino and Thirlwall (2004) show that for the period 1972–1997, trade liberalization worsened the trade balance of developing countries. They also show that trade liberalization caused both imports and exports to grow faster, but the growth of imports was faster than that of exports for a panel of 22 developing countries. Wu and Zeng (2008) show that both imports and exports increased after trade liberalization, however, the evidence that trade liberalization worsens trade balance was not robust for the trade liberalization dates. Parikh (2006) concludes that trade liberalization promotes growth in most cases, but the growth itself has a negative impact on the trade balance and this in turn could have negative impacts on growth through deterioration in the trade balance and adverse terms of trade. UNCTAD (1999) studied the effect of trade liberalization on the trade balance for 15 developing countries over the period 1970 to 1995 and found a significant negative relationship. Studies have also examined the impact of trade liberalization on imports and exports separately. Santos-Paulino (2002a), Melo and Vogt (1984), and Bertola and Faini (1991) showed that the impact on imports have been positive. However, the findings of empirical studies on the effects of trade liberalization on exports have been mixed. Santos-Paulino (2002b) and Thomas and Nash (1991) showed a positive impact but Greenaway and Sapsford (1994) and Jenkins (1996) found little evidence of such a relationship.

## **III. IMPACT ON TRADE WITH INDUSTRIAL AND DEVELOPING COUNTRIES**

Another related and important concern is the impact of trade liberalization on the trade balance with developing and industrial countries. These are important because in arguing for the import substitution industrialization policy, Prebisch (1950, 1959) and Singer (1950) pointed to the unequal distribution of gain from trade between developing and industrial countries. They assume that developing countries are importing high-income elasticity products from, while exporting low-income elasticity products to the industrial countries, and that the industrial countries are exporting high incomes elasticity products to and importing low-income elasticity products from the developing countries. Given that trade must balance in the long term, the asymmetry leads to an unequal distribution of income between the two groups of countries. This is because as income grows there will be more demand for industrial countries’ products relative to developing countries’ products. The asymmetry in the trade elasticity means that economic growths of developing countries are constrained by demand instead of supply. The asymmetry in gain is further supported with the declining terms of trade for primary commodities (Grilli and Yang, 1988; Reinhart and Wickham, 1994; Lutz, 1999). Recently, the literature on the terms of trade decline is not only looking at a specific product, but at developing countries’ declining terms of trade. Kaplinsky (1993) showed that by specializing in unskilled labor-intensive products the Dominican Republic had suffered from “immiserizing” employment growth. This is further supported by UNCTAD (2002), which showed that even though developing countries’ share in world export of manufacturing increased from 10.6% to 26.5% from 1980 to 1997, their share in world manufacturing value added decreased from 26.6% to 23.8% in the same period.

#### IV. RESULTS

Table 1 tabulates the overall averages for the merchandise trade balance over GDP ratio for trade with developing and industrial countries, pre and post liberalization episode (Appendix A tabulates the averages by country). On average, the trade balance is in surplus with industrial but in deficit with developing countries. The surpluses in the average trade balance with industrial countries are higher after liberalization. However, the deficits with developing countries worsen after liberalization. Before liberalization the average trade balance over GDP ratio with industrial countries is 1.75 and it is 2.39 after liberalization. For trade with developing countries, the average trade balance over GDP ratio before liberalization is -2.08 and is -5.14, after liberalization. These preliminary analyses do not concur with the finding of previous studies that the trade balance deteriorates after liberalization. Only the trade balance with developing countries deteriorated, but the trade balance with industrial countries improved. The ratios also disagree with the PS analysis in that industrial countries will gain more after liberalization as a greater amount of the increase in trade is with developing instead of industrial countries. Furthermore, industrial countries are in deficit instead of surplus with the developing countries, which means that the developing countries may not be constrained by demand, at least for trade with industrial countries. Hence, the fallacy of composition does not hold for the period.

Period	Pre-Liberalisation	Post-Liberalisation
Average Trade Balance with:		
Developing Countries	-2.08 (5.50)	-5.14 (11.84)
Industrial Countries	1.75 (9.89)	2.39 (10.65)

**Notes:** Figures in parenthesis are the standard deviation.

**Table 1- Average Trade Balance, Import/GDP and Export/GDP for Pre and Post Liberalisation**

Even though the simple statistics are indicative of a change in the trade structure, they do not control for other factors that may affect trade. Hence, regression analyses are used to control for the income of trading partners and prices of the traded goods.

	Random Effects	LSDV	OLS	Dynamic LSDV	System GMM	System GMM
Inertia			0.9686** (0.012)	0.8548** (0.018)	0.9147** (0.097)	0.9304** (0.093)
Trade Liberalization	-0.0304** (0.003)	-0.0304** (0.003)	-0.0029 (0.002)	-0.006** (0.002)	-0.0035 (0.003)	-0.003 (0.003)
Foreign GDP Growth	0.2771** (0.112)	0.2792** (0.112)	-0.0731 (0.068)	-0.0289 (0.067)	-0.1490 (0.092)	-0.2896* (0.160)
Lag Foreign GDP Growth						0.0665 (0.448)
Domestic GDP Growth	-0.0813** (0.035)	-0.0845** (0.03)	-0.0104 (0.020)	-0.0265 (0.021)	-0.0191 (0.031)	0.0613 (0.059)
Lag Domestic GDP Growth						0.5339** (0.172)
Change in Real Effective Exchange Rate	-0.0005 (0.008)	-0.0005 (0.008)	-0.0037 (0.005)	-0.0034 (0.005)	-0.0064 (0.007)	-0.0028 (0.007)
Change in Terms of Trade	0.0001 (0.000)	0.0001 (0.000)	0.0002* (0.000)	0.0002* (0.000)	0.0001 (0.000)	0.0002* (0.000)
Adj. R-square	0.06	0.54	0.83	0.83		
Log Likelihood		1977.45	2624.18	2668.15		
F-statistics	16.56	35.45	1056.47	151.51		
Durbin Watson	0.40	0.41	2.22	2.13		
Hansen					0.293	0.537
1 <sup>st</sup> order serial correlation					0.001	0.000
2 <sup>nd</sup> order serial correlation					0.890	0.742

**Notes:** \* and \*\*, represent statistical significant at 10% and 5% level. Robust standard errors calculated using the Windmeijer (2005) correction.

**Table 2- Impact of Trade Liberalization on Trade Balance- Trade with Developing Countries**

Table 2 reports the results of the regressions for the trade balance with developing countries. The random and the static fixed effects show that trade liberalization worsen the trade deficit with developing countries. Foreign and domestic GDP growth have the expected sign when the random and fixed effects are used, which is positive for foreign GDP and negative for domestic GDP. This means that higher domestic GDP growth leads to deterioration in the trade balance as import increases, while higher foreign GDP growth leads to improvement in the trade balance as exports increase. The change in the REER and TOT are not statistically significant. However, the Durbin- Watson statistics point to a serial correlation problem. We include the lag of the dependent variable, which solves the problem. The inclusion of the lag made the coefficient for trade liberalization dummy insignificant when the OLS with the lag term and the system GMM were used. However, the trade liberalization dummy is still significant when using the dynamic LSDV. The other control variables are also not robust to the different specifications used.

## V. CONCLUSION

One of the concerns of developing countries in deciding whether to liberalize their trading regime is whether the liberalization could lead to the deterioration of the trade balance or too fast of an increase in imports. We find evidence that the trade liberalization episodes had improved the developing countries' trade balance with industrial countries, but it weakly worsens their trade balance with other developing countries. The finding for the trade balance is not in agreement with previous studies, nor the assumptions that form the basis for the argument for the import substitution policy. But unlike previous studies, we differentiate the trading partners into developing and industrial countries. The results show that the worsening of the trade balance after liberalization is due to a deficit with developing countries not industrial countries. The fact that the trade balance with industrial countries increased after liberalization means that the fear of the "fallacy of composition" due to developing countries competing for exports in the same products to industrial countries is not a matter of concern (see Ghani, 2006). This may mean that developing countries have also opened up their market for imports from other developing countries, thus increasing the size of the market. However, developing countries still need to increase their openness, to further increase the size of the market, as the deficits with developing countries are growing. Greater openness will make it easier for developing countries to export their products to other developing countries, reducing the trade balance deficit. More importantly, as long as industrial countries have a trade deficit with developing countries, the developing countries will not be constrained from the demand side, at least with industrial countries, but it is the developing countries which are constraining the developing countries.

## REFERENCES

- [1] Arrelano, M. and Bond, S. R. (1991). Some test of specification for panel data: Monte Carlo evidence and an application to employment equations. *Review of Economic Studies*, 58(2), pp. 277-297.
- [2] Blundell, R. W. and Bond, S. R. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics*, 87(1), pp. 115-143.
- [3] Bertola, G. and Faini, R. (1991). Import demand and non-tariff barriers the impact of trade liberalisation. *Journal of Development Economics*, 34(1-2), pp. 269-286.
- [4] Baunsgaard, T. and Keen, M. (2005). Trade Revenue and (or?) Trade Liberalisation. IMF, Working Paper No. 05/112.
- [5] Bond, S. (2002). Dynamic Panel Data Models: A Guide to Micro Data Methods and Practice. IFS CEMMAP Discussion Paper.
- [6] Corden, W. M. (1994). *Economic Policy, Exchange Rates, and the International System*. Oxford: Oxford University Press and Chicago: The University of Chicago Press.
- [7] De Gregorio, J. and Lee, J. W. (2003). *Economic Growth and Adjustment in East Asia and Latin America*. Banco Central de Chile, Documento de Trabajo No. 245.
- [8] Edwards, S. (2002). Does the Current Account Matter? In Edwards, S. and Jeffrey A. F. (Eds.), *Preventing Currency Crises in Emerging Markets* (pp. 21-75). Chicago: The University of Chicago Press.
- [9] Eichengreen, B., Rose, A. K. and Wyplosz, C. (1995). Exchange Market Mayhem: The Antecedents and Aftermath of Speculative Attacks. *Economic Policy*, 10(21), pp. 249-312.



- [10] Ghani, G. (2006). Export promotion policies and the crowding out effect in developing countries. *Asian Economic Journal*, 20(3), pp. 319-331.
- [11] Greenaway, D. and Sapsford, D. (1994). What does liberalisation do for exports and growth? *Review of World Economics*, 127(1), pp. 157-74.
- [12] Grilli, E. and Yang M. C. (1988). Primary Commodity Prices, Manufactured Goods Prices And Terms Of Trade Of Developing Countries: What Does The Long-Run Show. *World Bank Economic Review*, 2(1), pp. 1-48.
- [13] Holtz-Eakin, D., Newey, W., and Rosen, H. S. (1988). Estimating vector autoregressions with panel data. *Econometrica*, 56(6), pp. 1371-1395.
- [14] Jenkins, R. (1996). Trade liberalisation and export performance in Bolivia. *Development and Change*, 27(4), pp. 693-716.
- [15] Judson, R. A. and Owen, A. L. (1996). Estimating Dynamic Panel Models: A Practical Guide for Macroeconomists. Mimeo Federal Reserve Board of Governors.
- [16] Kaminsky, G. L. and Reinhart, C. M. (1999). The Twin Crises: The Causes of Banking and Balance of Payments Problems. *American Economic Review*, 89(3), pp. 473-500.
- [17] Kaplinsky, R (1993). Export Processing Zones in the Dominican Republic: Transforming Manufactures into Commodities. *World Development*, 21(11), pp. 1851-1865.
- [18] Khan, M. S. and Zahler, R. (1985). Trade and financial liberalisation given external shocks and inconsistent domestic policies. *IMF Staff Papers*, 32(3), pp. 22-55.
- [19] Li, Xiangming (2004). Trade liberalisation and real exchange rate movement. *IMF Staff Papers* 51(3), pp. 553-584.
- [20] Lutz, M. (1999). A general test of the prebisch-singer hypothesis. *Review of Development Economics*, 3(1), 44-57.
- [21] McCombie, J. S. L. and Thirlwall, A. P. (1994). *Economic Growth and the Balance of Payments Constraint*. New York: St. Martin's Press.
- [22] Melo, O., and Vogt, M. G. (1984). Determinants of the demand for imports of Venezuela. *Journal of Development Economics*, 14(3), pp. 351-358.
- [23] Milesi-Ferretti, G. M. and Razin, A. (2000). Current Account Reversals and Currency Crises: Empirical Regularities. In P. Krugman (Eds.), *Currency Crises* (pp. 285-326). Chicago: University of Chicago Press.
- [24] Ostry, D. J and Rose, A.K. (1992) An Empirical Evaluation of the Macroeconomic Effects of Tariffs. *Journal of International Money and Finance*, 11(1), pp. 3-79.
- [25] Parikh, A. (2006). Relationship between trade liberalisation, growth and balance of payments in developing countries: an econometric study. *International Trade Journal*, 20(4), pp. 429-467.
- [26] Prebisch, R. (1950). *The Economic Development of Latin America and Its Principal Problems*. Lake Success: United Nations Department of Economic Affairs.
- [27] Prebisch, R. (1959). Commercial policy in underdeveloped countries. *American Economics Review*, 49(2), pp. 251-273.
- [28] Reinhart, C. and Wickham, P. (1994). Commodity prices: cyclical weakness or secular decline? *IMF Staff Papers*, 41(2), pp. 175-213.
- [29] Roodman, D. (2009). How to do xtabond2: An introduction to difference and system GMM in Stata. *Stata Journal*, 9(1), pp. 86-136.