

## The trade-growth nexus in the developing countries: A quantile regression approach

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### NON-TECHNICAL SUMMARY

It is a widely accepted view that among the driving factors of long-run growth, trade plays an important role in shaping economic and social performance. Policy recommendations based on export-led growth and trade liberalization have been at the heart of poverty reduction strategies for many years, and developing countries were encouraged to reduce trade barriers in order to allow for comparative advantages to develop. Theoretical foundations of the positive links between trade openness strategies, growth and poverty reduction come at least from two sources. On the one hand, the neoclassical approach explains the gains from trade liberalization by comparative advantages, be they in the form of resource endowment (as in the Heckscher-Ohlin model) or differences in technology (as shown by the Ricardian model). On the other hand, the endogenous growth literature asserts that trade openness positively affects per capita income and growth through economies of scale and technological diffusion between countries.

The empirical investigation of these theoretical foundations points to a large variation in the distribution of the benefits from trade openness to growth or to economic development. Asian and some Latin American countries that managed to develop export-based strategies have been rewarded with high economic growth, while African countries have remained trailing behind despite efforts to emulate the export-led growth model. To explain this, one strand of the literature emphasizes the conditional aspect of the trade-growth link: trade openness may not be conducive to growth in the absence of an appropriate economic, social and political environment.

Despite the theoretical interest, empirical investigation of this hypothesis of a heterogeneous trade-growth nexus conditional on the country's structural characteristics has not yet received enough attention. In this paper, we examine the relationship

between openness and growth for 75 developing countries in the period of 1980-2006. Such a relationship may be plagued by two problems: (i) inconsistent estimates due to omitted variables and/or endogenous variables that are incorrectly considered as exogenous and (ii) model uncertainty coming from the lack of clear theoretical guidance concerning the choice of regressors. Here, we tackle these two problems by, first, explicitly conducting a formal robustness analysis to identify the growth determinants, using the Bayesian Model Averaging methodology. Second, we address the issue of parameter heterogeneity in the trade-growth relationship by employing a quantile regression analysis which allows to identify possible differences in the trade elasticities of high and low-growth countries. Our results suggest that conditioning on the identified robust determinants, openness has a higher impact on growth among low-growth countries relative to high-growth countries. In addition, we find evidence of significantly larger short-run and long-run effects for the same group of countries. Both of these results support the idea of a heterogeneous trade-growth nexus among the developing countries. Overall, our findings suggest that while low-growth countries can benefit the most from openness in the long-run, they are also likely to suffer the most from short-run effects of openness.

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