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**EXPORT PERFORMANCE AND ITS DETERMINANTS:
SUPPLY AND DEMAND CONSTRAINTS**

by

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ABSTRACT

What are the major determinants of export performance? Does the importance of these determinants vary with export performance itself? Using quantile regression techniques this study investigates the contribution towards the performance of the external sector of linkages to international markets relative to internal supply-side conditions. Results indicate that, while trade barriers continue to be of concern, poor supply-side conditions have often been the more important constraint on export performance in various regions, in particular in Africa and the Middle East, despite a generalized deepening of international trade integration. Beside strong linkages to international markets, good transport infrastructures, macroeconomic soundness and good quality institutions appear to be major determinants in the development process of the external sector.

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NON-TECHNICAL SUMMARY

A strong and performing external sector is found in most country experiences to be the companion of a growing economy. The most striking and well-known example is the East Asian countries experience. Identifying the elements that significantly affect export performance should facilitate the design of policies to improve performance and ultimately overall economic growth. Such policies may also help to contain the negative effects on the trade balance that often occur immediately following trade liberalization.

Determinants of export performance can be split into internal and external components. External factors are related to market access conditions and other factors affecting import demand. Apart from trade barriers and competition factors foreign market access is also determined by transportation costs, which include geography and physical infrastructures. Internal factors refer to supply-side conditions. Supply capacity is also affected by location-related elements, which may for example, affect access to raw materials and other resources. It also depends upon factor costs such as labour and capital. Beside resource endowment, factor costs are essentially the outcome of economic policy and the institutional environment. Access to technology, which is likely to affect the productivity of the external sector, may also be an important determinant.

In order to examine these issues, an econometric model of bilateral trade flows using gravity techniques, was constructed. This model was tested using data series representing foreign market access and supply capacity for a sample of 84 countries. It is thus possible to decompose export performance and identify the extent to which it has been constrained by its components.

The main findings are as follows: first, in the aggregate, all regions have benefited from the greater integration of the world economy in the 1985-99 period. Access to extra-regional markets in particular has been a key factor explaining export performance. However, intra-regionally-generated foreign market access has also been important in most regions, possibly underscoring the increasing significance of regional trade agreements. However, this is not the case for the Sub-Saharan African countries whose intra-regional trade declined in all periods but 1992-95. In addition, African and Middle Eastern countries appear to have faced severe supply capacity constraints over the last two decades, while their access to foreign markets has remained largely unchanged. East Asian and Pacific countries' export performance has been driven by equal improvements by both supply capacity and foreign market access. The export growth of South Asian countries can mainly be explained by an important increase in their supply capacities.

The impact on export performance of various supply capacity factors controlling for foreign market access is investigated. This analysis used econometric techniques, namely quantile regression techniques that allow the consideration of possible non-linearities in the relationship between export performance, supply capacity factors and foreign market access. It is thus possible to observe relationships between export performance and its components that vary with the level of export performance. It is also possible to place the analysis in a development process framework, although limited, by considering three successive periods.

It was found that limitations on foreign market access are major contributors to poor export performance. However, good performers in the second half of the 1990s also faced higher external constraints but were able to overcome them.

There is also evidence that exports can be expected to respond less than proportionally to a variation in import demand from abroad, although this not always true. In general theoretically, a rise in exports would tend to increase factors of production prices, which contain exports expansion.

Internal transport infrastructure captured by the percentage of paved roads is an important supply capacity element and is found to have a significant and positive impact in raising performance, as does a good macroeconomic environment. The contribution of foreign direct investment to capital formation is included in order to include a technology-related element, possibly linked to the structure of the external sector. The finding is that FDI is significant and has a positive impact on export performance at all levels.

The empirical results also suggest that foreign market access and the structure of the external sector interact. So as the external sector expands and diversifies, domestic producers make an effort to overcome supply capacity constraints and increase their capacity to meet new market opportunities. The evolving structure of the external sector also makes a difference at all stages of development and could dominate the role of international linkages at an intermediate stage of structural change. However, once a sector has reached structural “maturity”, as it seemed to be the case for the best export performers among developed countries in the late 1990s, the significance of foreign market access logically increases. In the present study, the institutional framework is of much less importance than has been suggested in other recent studies in the empirical growth literature.

The general policy implication is that foreign market access and supply capacity have to be considered equally important along the development process of the external sector. Simultaneous efforts to improve both supply capacity and foreign market access enhances the performance of and the structural deepening of the external sector. Important elements of supply capacity at the early stage of development of the external sector are transport infrastructure and macroeconomic stability. FDI is a significant determinant at all levels of export performance.

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