Peak Trade? An Anatomy of the Recent Global Trade Slowdown

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Global trade growth has recently been sluggish, after decades of rapid expansion. Since 2011, growth in exports of merchandise has not been faster than growth in global GDP, suggesting that globalisation has reached a †peakâ€[™]. Indeed, the 1990s and 2000s might have been exceptional periods in world history with rapid evolution of international supply chains. As the elasticity of trade to global GDP reverts back from its peak value we might be seeing the end of hyper-globalisation. Has globalisation really reached its peak, or is sluggish trade growth merely reflecting weak demand in the aftermath of the 2008 financial crisis? To date current research does not provide a consensus, as shown by various contributions to a recent book on this topic edited by Bernard Hoekman. Various explanations have been offered which can be grouped into two major classes: cyclical factors, related to the structure of global demand and structural factors, mainly related to changes in international production structures.

Existing research relies heavily on econometric estimation of long- and short-run trade-elasticities of GDP, basically relating imports to GDP at the country level. This approach is based on a model of the world with trade in final goods only. At the same time, the studies try to determine changes in international production structures through a variety of ad-hoc methods and pieces of evidence. Importantly, the analyses of the effects of demand and production changes are separately carried out. In contrast, in this paper we provide an ex-post accounting of the effects of changes in both demand and in international production systems in one coherent modelling framework. The key to derive these import elasticities is through tracing all stages of production in an exogenous demand driven model in the Leontief tradition, which has by now become an established methodology in measuring value added in trade. We trace all imports in all stages of production needed for a particular product. In contrast to previous work these include not only imports by the country itself to satisfy domestic demand, but also imports that were needed to make by other countries in earlier stages of production. It is the change in these total import elasticities that provides novel information on changes in GVC trade.

Having derived the elasticities, we will employ a novel structural decomposition analysis of the annual change in global imports. By keeping the structure of global demand fixed, we find the contribution of changes in import elasticities of production. Conversely by keeping elasticities constant we derive the contribution of changes in structure of global demand. By grouping products and countries we can test the various alternative explanations for the global trade slow down since 2000. Using an update of the World Input-Output Database (WIOD) through 2014 we will for the first time be able to make an anatomy of post-crisis world trade. It decomposes changes in global imports into changes in the structure of world GDP and changes in the import elasticity of production. This will for the first time offer insight into the relative magnitudes of the various cyclical and structural determinants of the recent global trade slowdown, derived in one coherent framework.