

Trade and Growth in the Post-2008/2009 Crisis World

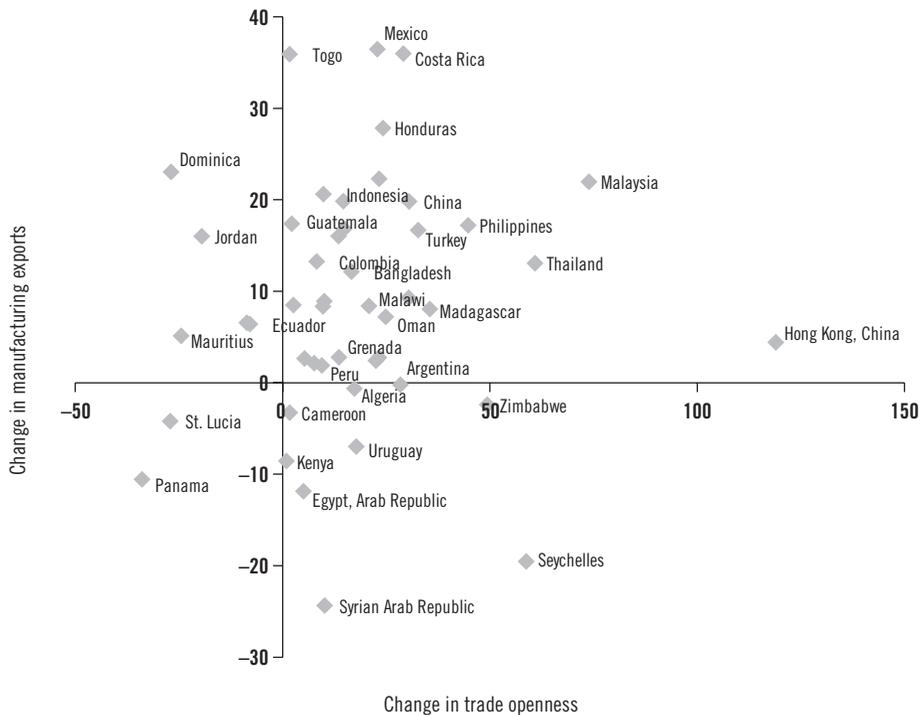
Ronald U. Mendoza

The nexus between trade and growth is the holy grail for many development planners. A country's trade linkages influence its long-term growth in a number of ways, including by opening up channels of communication that could facilitate the transmission of technical information; exposing the country's producers to competition, thus inducing them to generate new ideas and technologies in order to stay competitive (thus also alleviating duplication of research effort); enlarging the size of the market for firms, enabling them to benefit from scale; and triggering the reallocation of resources in a way that frees more resources for the innovating sector (Grossman & Helpman 1991; Hausmann *et al.* 2007; Rodrik 2007; Goldberg *et al.* 2008; Harrison & Rodriguez Claire 2009). The search for the magic formula of successful trade and industrial policy has preoccupied policymakers and academia for some time now, particularly given the important focus on policies around economic openness. The track record on openness is clearly mixed, with some developing countries seeing their manufactured exports contract after opening (as predicted by early endogenous growth theories), while others' exports surge (Figure 1). In other words, the link between trade and growth is a conditional one. But what precisely are the conditions for success?



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Figure 1: Trade openness by manufacturing exports (difference between 1990 and 2004, in %)



Note: The sample contains 47 developing countries for which data are available. The horizontal axis shows the difference between trade openness (i.e. exports plus imports scaled by GDP and expressed in %) in 2004 and 1990. The vertical axis shows the difference between the share of manufacturing in total exports (expressed in %) between 2004 and 1990.

Source: World Bank, *World Development Indicators Online*

The elephant's trunk, tail and leg

Instead of searching for one magic formula for trade success, it may be more productive to piece together parts of the evidence that point to stronger growth and development outcomes. The most recent empirical evidence suggests three main parts of the truth we seek:

1. *trading matters*, as firms might be able to increase their productivity due to export and import linkages, i.e. learning opportunities, with both buyers and suppliers

2. *with whom you trade matters*, as richer and more technologically advanced trading partners offer more scope for trade-induced learning, and
3. *what products you trade matters*, as more sophisticated exports with greater variety, or R&D-intensive capital goods imports could be linked to more intensive ‘learning’, which implies greater ‘discovery’ of new economic activities.

It is possible that these explanations are not mutually exclusive, and could in fact reflect a potentially distinct trading pattern – one that is more conducive to smoother technology transmission, faster industrial catch-up and better economic performance. I refer to this as the ‘three blind economists and the elephant’ hypothesis (Mendoza 2010a). Akin to the well-known parable of the three blind men touching the elephant’s trunk, tail and leg, but missing the revelation that these are parts of one and the same elephant, it might be possible that the nexus between trade and growth lies in a trading structure that maximises trade-induced learning along these three dimensions.

Tigers or elephants?

The so-called tiger economies in Asia, and notably China, display trade patterns conducive to learning. It is critical to step back from their ‘tiger-like’ aggressive growth performance and re-examine these successful performers for their ‘elephant-like’ subtle learning features. The vertically integrated production and trade structure that has emerged in the Asian region in recent years suggests the potential for a high-learning environment, and this could be a key factor behind the region’s success. Analyses by the United Nations Conference on Trade and Development (UNCTAD) of the most dynamic exports in the world (based on a composite measure reflecting rate of export growth, volatility of this growth rate, rate of growth in export value and the average share of a product in total world exports) revealed that three main product categories top the list during the period 1980–2000: (1) electrical and electronic goods; (2) goods from other technology-intensive industries; and (3) labour-intensive products, particularly clothing. In each of these categories, and to varying degrees, Asian emerging market economies have gained large market shares of total world exports.

Of the top 20 developing countries in the world with the most rapid growth in total exports (and also with a total export value exceeding \$5 billion) during the period 1980–2000, ten were Asian emerging market economies: China, Hong Kong (China), Indonesia, India, Republic of Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand. What separated this group from the rest of the top 20 seemed to be their dominance in electronics and electronic goods, parts and components production. Product groups in this broad production category ranked at or near the top of the world's most dynamic product list (Mayer *et al.* 2004).

Intra-regional trade in the Asian region has grown markedly. The IMF (2007, p. 43) reports that trade in Asia led global growth in trade: while trade flows outside Asia tripled between 1990 and 2006, inter-regional trade involving Asia rose five-fold, and intra-regional trade within emerging Asia more than eight-fold. In many cases, China has emerged as either the main gateway to the industrialised countries' markets, or as a hub for final assembly of various intermediate inputs, for eventual re-export to the rest of the world through entrepôts like Hong Kong or Singapore. Other Asian countries have also increased their exports of intermediate manufactures to China. In the last decade, for example, Indonesia's exports of components to China have increased five-fold, Thailand by 15-fold, Malaysia by 19-fold, and the Philippines by 60-fold (Haddad 2007, p. 14).

A large part of the story behind Asia's intra-regional trade is linked with the rise of global production networks (GPNs), which seem to be more ubiquitous and prolific in this particular region. These GPNs have played a critical role in transferring knowledge from technology leaders to followers, as well as facilitating the formation of domestic capabilities among firms in the latter type of countries. Part of the reason for this is that increased competition, as well as trade and investment liberalisation and advancements in information and communications technologies (ICTs), combined with shorter product life cycles (i.e. around six months and, in some cases, even less), require, and also enable, faster and more effective transmission and absorption of knowledge that is critical for production (Ernst & Kim 2002). Production-sharing arrangements facilitated a higher degree of specialisation among these emerging market economies in Asia, allowing these countries to import the relevant technology, more quickly expand their export-orientated industries, increase their penetration into

the industrialised countries' markets, and ascend the export sophistication ladder. These were all strong foundations for learning.

An elephant charge after the global crisis?

The recent global crisis may create forces that could accentuate both the need for learning, as well as opportunities for it. First, the cost pressure on export products during a period of tepid export market demand may underscore the comparative advantages created through production networks. Cost-effective methods of production and technology management by these GPNs will be key. Nevertheless, fuel and transport costs, as well as tepid developed market demand, may force a much more regional outlook. Furthermore, if developing countries – notably large emerging market economies – are going to look more into internal markets as part of efforts to 'rebalance growth' as many expect (e.g. Spence 2010), the onus will be on product technologies that are much more marketable there, spanning cheaper manufactured products and other goods and services geared towards Asia's burgeoning middle class. Defined illustratively by the Asian Development Bank as those with incomes between \$2 and \$20, the middle class in Asia made up 21% of the population in 1990 (565 million people) and more than doubled its share to 56% of the population by 2008 (1.9 billion people). When examining individual Asian countries, large countries like India, Indonesia and China do stand out;

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but even the relatively smaller ones (by population or economic output size) have also seen a marked increase in the number as well as the population share of the middle class (e.g. Pakistan, the Philippines and Vietnam). The average change in yearly expenditures also indicates the growing purchasing power represented by this group (see Table 1).

Make no mistake that part of the Southern middle class is still vulnerable. Literally millions of poor families are one food price shock or job loss away from poverty (Mendoza 2010b). Nevertheless, the middle class, should it continue to grow as projected, collectively represents a strong

Table 1: Changes in the relative and absolute size of the middle class, and change in aggregate yearly expenditure of the middle class, by country (1990–2008, based on household survey means)

Country	Percentage point change in population share	Change in population (million)	Change in yearly expenditures (\$ million)
Armenia	76.5	2.3	3.6
Azerbaijan	35.1	3.1	4.5
Bangladesh	8.3	18.5	24.3
Cambodia	24.0	4.0	5.8
PRC	61.4	844.6	1,825.0
Georgia	4.0	0.0	1.3
India	12.8	205.0	256.0
Indonesia	46.3	113.7	168.1
Kazakhstan	-6.7	-2.2	-19.8
Kyrgyz Republic	-14.9	-0.1	0.0
Lao PDR	28.9	1.9	2.4
Malaysia	5.6	6.5	22.3
Mongolia	24.4	1.0	1.9
Nepal	-5.8	-0.6	-0.5
Pakistan	36.5	65.9	80.5
Philippines	12.0	23.6	48.3
Sri Lanka	-10.1	-0.9	-0.4
Tajikistan	-3.9	0.3	-0.5
Thailand	17.6	17.2	55.3
Turkmenistan	15.2	0.9	9.0
Vietnam	57.4	49.3	77.2

Source: ADB (2010, p. 8)

(and growing) engine of domestic demand, particularly for products that provide good value for money.

The onus for ‘frugal innovation’ will be much stronger in the immediate aftermath of the global economic slowdown for at least two reasons. First, as companies focus more on the Southern middle class, there may be an increasing shift towards more of these frugal innovations. Already, we are seeing the production of much cheaper, more robust and often very simplified products, spanning mobile phones, computers, cars and healthcare equipment to be used by the majority of the lower-income

population. In addition, because numerous industrial countries are not expected to mount robust economic recoveries in the coming years due to debt and other problems, cash-strapped consumers in these markets may also increasingly demand product innovations in this space.

Perhaps the coming decade could be characterised by a vastly different trade landscape. If large developing countries turn also to internal markets, and if the global economy will be driven in part by the Southern poles of growth (e.g. Brazil, China and India), then the key to success in these markets, along with much of the developing world, would be to focus on the majority of these countries' populations – the so-called base of the economic pyramid. Tiger economies may have once looked to the North to break into their high-technology and high-value added markets, but elephant economies will now need to look to the South to produce high-value-for-money products. To do this successfully, trade-induced learning of a more South–South flavour is likely to prove critical.

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