

Enhancing export diversification through trade facilitation

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Trade facilitation has come to be widely recognized as an important part of regional and multilateral efforts at promoting trade integration. This policy brief suggests that developing countries may have more to gain from trade facilitation than at first thought. By influencing the fixed costs that make it difficult for firms to access global markets, trade facilitation efforts can make it possible for firms to export new products and enter new markets. By identifying and promoting aspects of trade facilitation policies with particular impacts on fixed costs, developing country policymakers can make concrete progress towards the long-held goal of export diversification.

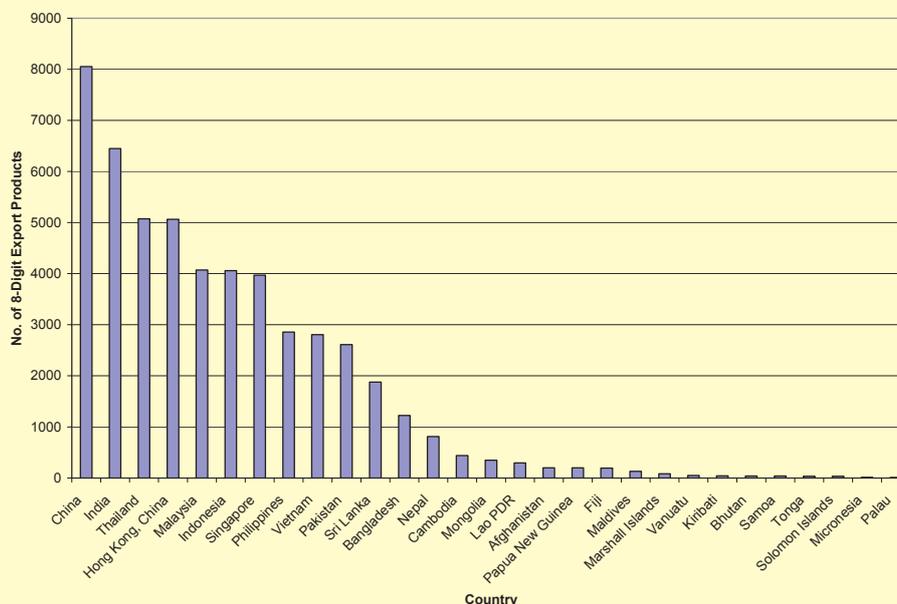
Background: Trade Facilitation and Trade Flows

The term “trade facilitation” has been used in a variety of different senses. In this policy brief, trade facilitation is considered to be the full set of policy measures used to

reduce the costs of trading internationally. This is a much broader definition than the one used in the Doha Round negotiations, which largely focus on customs procedures. However, it is in line with the way in which trade facilitation has come to be understood in other forums, particularly the Asia Pacific Economic Cooperation (APEC).

There is now a large body of work suggesting that trade facilitation, understood broadly, can have major impacts on regional and global trade flows and economic welfare. Indeed, computable general equilibrium (CGE) model simulations under plausible assumptions as to the cost reducing potential of trade facilitation tend to show that the potential gains from trade facilitation may be even larger than those from liberalization of goods and services markets, and that improved trade facilitation can be highly complementary to liberalization.¹

Figure 1: Export diversification (number of 8-digit products exported) in the Asia-Pacific, 2005.



Source: Dennis and Shepherd, 2007.

¹ For examples, see Walkenhorst and Yasui (2004), and Hertel and Keeney (2006).

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This work on trade facilitation is widely known, and has served to structure a good deal of the policy discourse in this area. However, it suffers from the major limitation that the only trade flows considered are those of existing export products between current trading partners. Trade facilitation can also have significant scope for creating new trade flows: either the introduction of previously untraded products into existing trading relationships, or the expansion of trade in existing products to new geographical markets. In the jargon of trade economists, the development of trade flows involving new products and/or new markets is referred to as trade growth at the extensive margin. This type of trade growth is of special interest to developing countries, since it provides an ideal framework for better understanding and harnessing the process of export diversification.

Export Diversification: Current State of Play in the Asia-Pacific

Many developing countries view export diversification as an important policy objective. It has two dimensions: exporting a wider variety of products ("product diversification"), and serving more overseas markets ("geographical diversification"). Figure 1 presents some basic data on the extent of product diversification across the Asia-Pacific region. Product diversification is measured by counting the number of 8-digit products each country exports to the EU in a given year. Geographical diversification is measured by counting the number of foreign markets to which each country exports.

The product and geographical dimensions of export diversification both exhibit striking heterogeneity within the region. Populous countries like India and particularly China tend to export a large number of products to a wide range of countries, as do relatively wealthy countries like Japan. Interestingly, a number of mid-size countries such as Thailand and Malaysia appear to have very diversified export portfolios, whereas smaller economies in the Pacific and South Asia are highly concentrated on a few export products and markets.² This variation suggests that while country size and resource abundance might play an important role in promoting export diversification, they probably cannot explain everything: policy might also be a significant factor.

By diversifying their export portfolios, developing countries can potentially access a more stable revenue stream than by concentrating on just a few products and markets. Demand shocks are usually not perfectly correlated across sectors and countries, so diversified economies have scope to offset income losses in one area with potential gains, or at least stability, in another. Highly concentrated economies do not have that luxury. There is a tension, however: standard economic theory suggests that trade can benefit the national economy by promoting specialization. Policymakers need to be acutely aware of the dangers involved in promoting over-diversification / under-specialization, and attempt

to find a middle ground between these two aims.

Recent empirical work provides some support for the long-standing concern of developing countries to diversify their economies. There is an emerging body of evidence suggesting that more diversified economies tend to grow faster, and have higher per capita incomes. One paper finds that export diversity grew by around 3% annually in a sample of 48 countries over the period 1980-2001, and that this change is linked to productivity growth of approximately the same magnitude over the full twenty year period.³ However, consistent with the tension noted in the previous paragraph, there is also evidence that countries at a relatively high level of per capita income reach a "turning point" at which the gains from specialization outweigh those from diversification.⁴

Facilitating Export Diversification

What can policymakers do to support the process of export diversification?

One approach is to lower the trade costs faced by exporters. In particular, lower fixed (investment) costs of exporting can do much to expand the range of products that developing countries export. The reason fixed costs are so important is that they are the primary determinants of firm entry into particular overseas product markets. By contrast, the variable (per unit) costs of trade, like tariffs, primarily influence the quantity of goods a firm sells once it has made the decision to make a product, and enter a given market.

Trade facilitation can have a significant impact on the range of products that countries export (see Figure 2). Concretely, a 10% improvement in trade facilitation—as measured by the Doing Business dataset's cost of exporting—is associated with product diversity gains of the order of 3%-4%. Moreover, there is evidence that differentiated goods (such as manufactures) have stronger diversification responses to trade facilitation than do homogeneous goods (such as agricultural products). Successful export promotion programs have been found to increase trade flows largely through the product diversification channel.⁵

A similar pattern holds true for the geographical dimension of diversification. A 10% improvement in trade facilitation is associated with a 5%-6% increase in the number of foreign markets served. In other words, geographical export diversification appears to respond considerably more strongly to trade facilitation than does product diversification.

A Broad Approach to Trade Facilitation: Entry Costs and Product Standards

What other types of policy measures might be relevant to facilitating export diversification through reductions in trade transactions costs, in particular fixed (investment) costs?

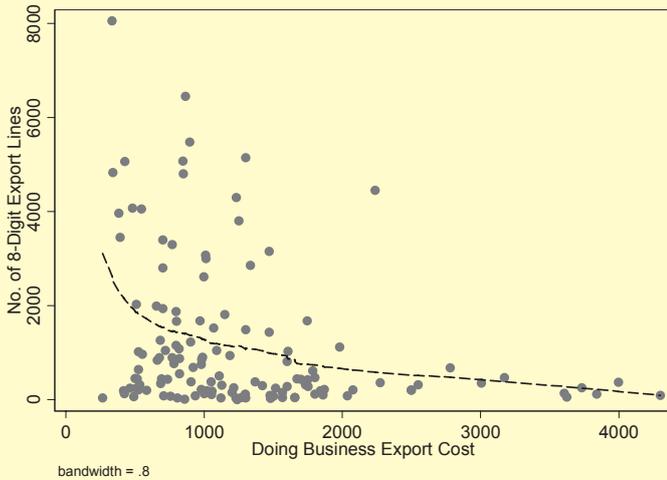
² These data probably exaggerate the level of export diversification in economies like Hong Kong China, and Singapore where re-exports account for a significant part of total trade.

³ See Kee and Feenstra (2008).

⁴ See Cadot et al. (2007).

⁵ See: Dennis and Shepherd (2007); Persson (2008); and Volpe Martincus and Carballo (2008).

Figure 2: Relationship between export diversification (number of products exported) and the dollar cost of exporting a container load of goods in a sample of 136 countries



Source: Dennis and Shepherd, 2007.

One possibility is the startup costs businesses face before entering the domestic market. These costs include legal and administrative fees an entrepreneur must pay before being allowed to operate a business, such as those related to obtaining necessary licenses or permits, and registering the company with the authorities. The idea is that higher costs result in a smaller number of active firms, and thus fewer exporters and export products. The research papers discussed above find evidence that higher market entry costs are indeed associated with a less diverse export bundle, as well as some weak indications that higher costs might also be associated with exporting to a narrower range of foreign countries. However, the association is weaker than for

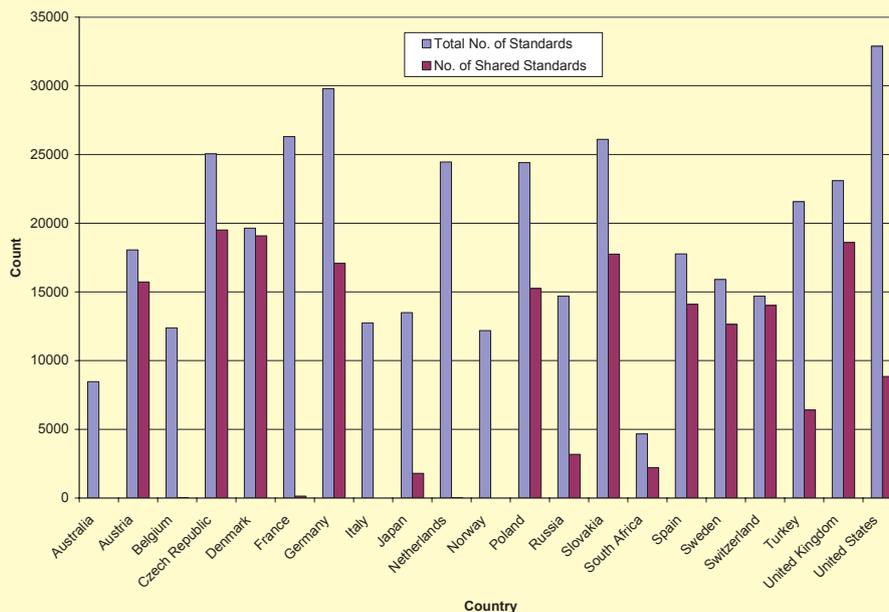
trade facilitation: a 10% reduction in domestic market entry costs is associated with a 1% increase in export product diversity.⁶

Data from the World Bank's Doing Business project show that performance in the Asia-Pacific region on lowering the costs of market entry and exporting is quite mixed. Some countries, such as Singapore, score well on both measures. However, poorer developing countries in the region, as well as landlocked countries, tend to have very high export costs. The costs of market entry, on the other hand, tend to be highest in absolute terms in small countries—a particularly significant problem given the difficulty of exploiting economies of scale in such environments.

Product standards are another policy factor that can affect export diversification. Of all the policies commonly thought to affect trade, product standards have the clearest capacity to act as fixed, rather than variable, trade costs. This is because the costs imposed by standards are primarily manifest in the need to redesign products or production systems to meet import market requirements. Of course, increased (variable) costs of testing and certification can also be an issue, in particular for developing country exporters, but the overall level of expenditures implied by these requirements is likely to be considerably smaller than the upfront costs involved in product and process redesign.

There is indeed evidence that standards and harmonization policies—i.e., adoption of the same standard in multiple markets—can impact export diversification overseas.⁷ Interestingly, the nature and size of this impact depends crucially on the exporting country's development level: foreign standards and harmonization have virtually no impact on export product diversity in high income exporting countries, but

Figure 3: The total number of product standards in force in selected countries, and the number of those standards that are harmonized with standards prevailing elsewhere.



Source: World Trade Report 2005, drawing on Perinorm data.

⁶ See: Dennis and Shepherd (2007), and Shepherd (2008).

⁷ See: Shepherd (2007); Chen and Mattoo (2008); and Baller (2007).

significant impacts on developing country exporters. For an average low income country, a reduction of 10% in the number of foreign product standards is associated with an increase in export product diversity of around 8%. Similarly, increasing the proportion of internationally harmonized standards in the importing country by ten percentage points is associated with increased export product diversity of around 2%.

Recent research therefore suggests that policies such as harmonization and mutual recognition of product standards and testing procedures have a role to play in limiting the fixed trade costs facing exporters. They have significant potential to promote export diversification. A number of initiatives in this area are underway in the Asia-Pacific region, in particular through APEC, as well as elsewhere around the world. Indeed, the WTO Agreement on Technical Barriers to Trade encourages members to use internationally harmonized standards whenever possible. Although data on product standards are very scarce, Figure 3 suggests that some of the Asia-Pacific region's main trading partners in Europe and the Americas employ a large number of product standards—over 20,000 in a number of cases—but that performance on harmonization is extremely mixed. Relying to a greater extent on international harmonization could be one way that large, developed country markets could help promote diversification in the developing parts of the Asia-Pacific.

Key Policy Implications

Policymakers have been aware for some time of the importance of trade facilitation measures as a means of promoting regional and global economic integration. The recent research presented in this policy brief suggests that trade facilitation can also be a useful way for developing countries to promote export diversification.

An important benefit of trade facilitation relative to other possible diversification policies is that it does not artificially discriminate between sectors or market actors: it applies across the board, and tends to promote, rather than inhibit, a market-based process of diversification. As a result, it can be pursued regionally or even unilaterally, yet implemented in a way that is consistent with the broader principles of the multilateral trading system.

Summarizing, there are three key policy messages that flow from this research:

- Existing quantitative assessments of trade facilitation probably understate the benefits to developing countries, since they do not take account of its potential to promote export diversification.
- To be effective in promoting export diversification, trade facilitation measures should pay particular attention to the fixed cost barriers to international trade. The full range of policies that affect trade transactions costs need to be taken into account, both at- and behind-the-border.
- Priority areas for policy interventions aimed at promoting export diversification include simplifying border procedures, pursuing international harmonization of product standards, and reducing the costs of starting a business.

Selected References

See Draft note on trade facilitation and export diversification available at

<http://www.unescap.org/tid/artnet/mtg/gravity.asp>.



What is ARTNeT? The Asia-Pacific Research and Training Network on Trade (ARTNeT) is an open regional network of research and academic institutions specializing in international trade policy and facilitation issues. Network members currently include over 20 leading national trade research and academic institutions from as many developing countries from East, South, and Southeast Asia and the Pacific. IDRC, UNCTAD, UNDP, UNESCAP and the WTO, as core network partners, provide substantive and/or financial support to the network. The Trade and Investment Division of UNESCAP, the regional branch of the United Nations for Asia and the Pacific, provides the Secretariat of the network and a direct regional link to trade policymakers and other international organizations.

ARTNeT aims at increasing the amount of policy-oriented trade research in the region by harnessing the research capacity already available and developing additional capacity through regional team research projects, enhanced research dissemination mechanisms, increased interactions between trade policymakers and researchers, and specific capacity-building activities catering to researchers and research institutions from least developed countries. A key feature of the network's operation is that its research programme is discussed and approved on an annual basis during a consultative meeting of policymakers, research institutions and other stakeholders. For more information, please contact the ARTNeT Secretariat or visit www.artnetontrade.org.