Trade Issue Brief

WORLD BANK, WASHINGTON, DC **July 2008**

Benjamin J. Taylor and John S. Wilson[i]

Harmonized International Standards Do Matter to Developing Country Exports[ii]

Standards and technical regulations are an increasingly prominent part of the international trade policy debate. As many of the least-developed countries have duty-free access to major developed-country markets, the trade effects of non-tariff barriers have assumed greater importance. Recent analysis has focused on how standards and regulations affect trade costs and export prospects for developing country firms exporting into developed markets. In short, new work indicates that standards harmonized to international ones have a less negative effect on developing country exports than do non-harmonized or regionally harmonized standards.

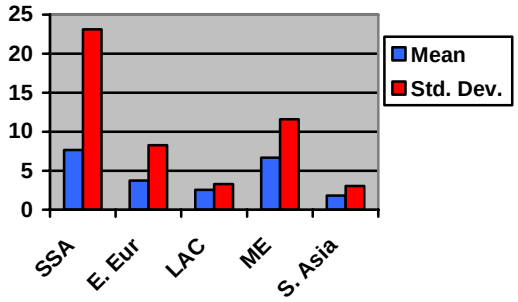
Chen, Wilson, and Otsuki (2004) find that testing procedures and lengthy inspection lower the exports of developing countries by 9 and 3 percent, respectively, and that standards reduce the likelihood of exporting to more than three markets by 7 percent. In a study on the effects of mutual recognition agreements (MRAs) for testing procedures and harmonization initiatives, Baller (2007) finds that MRAs are more effective in promoting developing country exports and that regionally harmonized standards have little to no benefit for developing country firms. Finally, Czubala, Shepherd, and Wilson (2007) find that internationally harmonized standards exert less of an impact on African exports than non-harmonized standards, but that the share of such standards in certain developed markets has fallen in recent years. Together, these studies demonstrate the effects standards have on both the volume of exports from firms and the number of firms engaged in exporting.

Public Disclosure Authorized

Standards, Costs, and Export Propensity

According to the World Bank's Technical Barriers to Trade Database, developing country firms face a much higher cost-to-sales ratio than developed-country firms do when investing in technical requirement compliance. Firms based in Sub-Saharan Africa, for example, face an average cost that represents 7.65 percent of sales, with a range extending from 0.01 percent to 124 percent. According to CSW (2007), this variation is largely due to differences in firm size and productivity differences—with the smallest and least productive firms feeling the largest impacts.

CHART 1: AVERAGE COSTS TO COMPLY WITH TECHNICAL REQUIREMENTS (% OF FIRM SALES BY REGION)



In support of this view, CWO (2004) find that firms for which testing procedures have affected their ability to export have an export share that is almost 9 percentage points lower than that of other firms. Similarly, firms that face "information inquiry difficulty" in one or more of their major destination markets export 18 percent less of their total sales than other firms do. Interestingly, CWO (2004) find that firms that are completely domestically owned are much more

affected by testing procedures and report more instances of difficulty in obtaining information on technical requirements.

In terms of the export market diversification of developing country firms, CWO (2004) find that the presence of standards and "information inquiry difficulty" are again the most statistically significant determinants. This is likely due to the fact that compliance with different standards across markets translates into fixed market-entry costs, which, in turn, lead to diseconomies of scale. This would explain why larger firms in the sample tend to export to more countries than smaller firms; total employment was the most statistically significant positive determinant with respect to export market diversification.

The Best Solution – MRAs versus Harmonization

Despite the fact that standards produce significant compliance costs for exporters, the trade policy dialogue has focused on how to mitigate the negative spillovers of legitimate product standards versus a reduction of standards, as most are not protectionist in intent and serve to protect consumers against poor product quality, health hazards, and/or other negative externalities. Moreover, there is evidence that certain standards increase and expand trade opportunities in certain sectors.

Baller (2007) adds to the policy dialogue surrounding standards and developing country exporters in a study that analyzes the effects of MRAs and harmonization initiatives on bilateral trade flows. Her analysis of more than 40,000 observations shows that MRAs have a strong positive influence on both the export probability (the likelihood that a firm will export to a given market) and trade volumes (the amount exported by firms that already trade with a given market) for partner countries. However, she notes that few developing countries are partners to MRAs, as most lack the institutional capacity to enforce such agreements.

With respect to harmonization initiatives, Baller (2007) finds that third-party developing countries do not seem to benefit from the market integration effect brought about by integration in other regions. By contrast, third-party OECD countries benefit immensely from harmonization in other regions; the effect on export diversification for OECD firms is particularly strong.

In light of these effects, Baller (2007) suggests that MRAs could be a supportive policy instrument in encouraging market diversification of export firms by lowering fixed costs. Since MRAs for testing procedures only apply to the export sector, their enforcement would be less costly than the enforcement of a certain harmonized standard across an entire sector. However, developing countries must first build an accreditation infrastructure before industrialized countries will find it in their interest to negotiate such agreements.

What Can Developed Countries Do to Help?

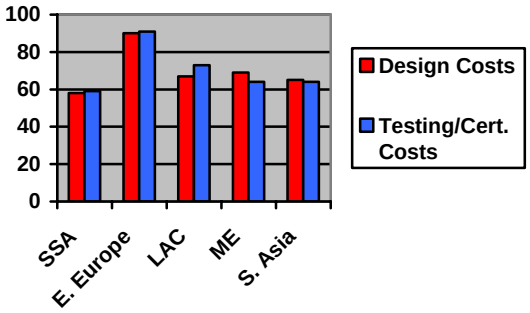
In light of the fact that attempts to integrate standards across developed markets do little to mitigate the disproportionate negative effects of standards on developing country exporters, CSW (2007) look to see which policy options available to developed markets have the least negative effects on developing-market exporters. They construct a new database of European Union product standards in order to identify standards that are aligned with International Organization for Standardization (ISO) standards (as a proxy for de facto international standards). They then use a gravity model to examine the impact EU standards have on African textiles and clothing exports.

In their analysis, CSW (2007) find that non-harmonized standards reduce African exports in these sectors, whereas standards harmonized to ISO standards are less trade restricting. Their results support the conclusion of Baller (2007) that standards affect trade by raising both variable and fixed costs for developing country exporters. However, by harmonizing their standards to de facto international standards, developed countries can substantially mitigate this cost burden. CSW (2007) therefore propose the international harmonization of standards as an important complimentary policy in support of recent efforts to extend more generous and easily accessible preferences to the developing world.

This finding is particularly noteworthy given that CSW (2007) also find that the share of internationally harmonized EU standards consistently decreased from the year 1995 to the year 2003. The percentage of EU harmonized standards in the clothing and fabrics sectors stood at 20 and 30 percent, respectively, as of 2003. Although movement across all sectors has been

small across the sample period, Shepherd (2007) finds that a 10 percent increase in the number of EU standards is associated with a 6 percent decrease in the range of product varieties exported to the European Union by its trading partners.

CHART 2: REASONS FOR NOT EXPORTING (% OF SURVEYED FIRMS BY REGION)



Conclusion

The above findings suggest a number of considerations for the efforts of exporting nations to address technical regulations imposed by importing countries. Negotiating on testing procedures toward mutual recognition with importing countries could stimulate exports. Building the capacity of exporters to meet standards could help firms diversify their export markets and improve the stability of their sales given the uncertainty in international markets. Facilitating information exchange with importing developed economies on standards and technical regulations could also stimulate the propensity of firms to export. With respect to developed countries, efforts should be made to harmonize standards to international norms whenever possible in order to mitigate the negative effects imposed on developing country exporters. Building on the framework of the World Trade Organization's Agreement on Technical Barriers to Trade to support further harmonization should also be explored.

Further Reading

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[i] The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the view of the World Bank, its Executive Directors, or the countries they represent.

[ii] This brief draws on research under a project on Trade Facilitation and Economic Development at the World Bank, with support of the U.K. Department for International Development. It is also aligned with work under the Multi-Donor Trust Fund Trade Project on "Trade Costs and Facilitation."

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