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Bridging the Standards Divide:

Recommendations for Reform from a Development Perspective

John S. Wilson
Development Economics Research Group
The World Bank

Background Paper for the World Development Report 2001 / 2002

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SUMMARY

The impact of standards and technical regulations on trade is at the forefront of public policy discussions. Developing nations face constraints in absorbing best-practice information on standards and mobilizing resources necessary to adopt process and production methods. As traditional trade protection measures such as tariffs, quotas, and voluntary export restraint (VER) agreements have been liberalized, barriers to trade reflected in domestic technical regulations have become more important channels through which trade is blocked. Domestic regulations affecting imports through technical requirements, testing, certification, and labeling represent one of the most important new areas of focus in continuing liberalization efforts. This paper outlines why this is the case and presents recommendations for taking action to bridge the standards divide. In addition, the paper also addresses the important challenges confronting developing countries in voluntary standards systems, with recommendations for strengthening their ability to adopt and absorb information on standards to enhance economic performance.

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- Work in Progress -

Introduction

The impact of standards and technical regulations on trade is at the forefront of public policy discussions.[2] This is particularly true considering the challenges confronting developing nations in world markets. In regard to voluntary standards, such as those in the International Organization for Standardization (ISO) 9000 series on quality, developing nations face constraints in absorbing best-practice information on standards and mobilizing resources necessary to adopt process and production methods (Wilson 2000a). In addition, as traditional trade protection measures such as tariffs, quotas, and voluntary export restraint (VER) agreements have been liberalized, barriers to trade reflected in domestic technical regulations have become more important channels through which trade is blocked.[3]

The conclusion of the Uruguay Round trade negotiations in 1994 highlighted the importance of addressing standards as non-tariff barriers (NTBs). Not all market-access commitments in the World Trade Organization (WTO) Agreements have been fully implemented or enforced.[4] Other barriers to trade, such as subsidies to agricultural

[1] This paper draws on several recent papers and reports, including; "Quantifying the Impact of Technical Barriers to Trade: A Framework for Analysis," Keith E. Maskus, John S. Wilson, and Tsunehiro Otsuki, World Bank Policy Research Working Paper, WPS 2512, December 2000, and "A Review of Past Attempts and the New Policy Context," Keith E. Maskus and John S. Wilson, in Quantifying the Impact of Technical Barriers to Trade: Can it Be Done? Keith E. Maskus and John S. Wilson, eds., University of Michigan Press, forthcoming, 2001.

[2] Subjects addressed here focus on product or process standards related to goods and agricultural commodities. It does not address standards as they may be applied in the service sector or labor markets.

[3] A number of recent studies assess changes in barriers to trade in non-tariff areas, including those of particular importance to developing countries. See Hertel and Martin (1999) and Hertel, Hoekman, and Martin (2000).

[4] For an overview of the status of implementation of Uruguay Round commitments of particular importance to developing countries see Finger and Schuler (1999). Wilson (2000) outlines specific implementation difficulties faced by developing countries in the Agreement on Technical Barriers to Trade. See also "Technical Barriers to Trade: Challenges and Opportunities for Developing Countries," Statement of the World Bank to the Technical Barriers to Trade Committee, World Trade Organization, Geneva, 24

production, or prohibition on foreign investment in services, have not been completely eliminated. It is clear, however, that domestic regulation affecting imports through technical requirements, testing, certification, and labeling represent one of the most important new areas of focus in continuing liberalization efforts (World Bank 2000c). This paper outlines why this is the case and presents recommendations for taking action to bridge the standards divide. In addition, the paper addresses the important challenges confronting developing countries in voluntary standards systems, with recommendations for strengthening their ability to adopt and absorb information on standards to enhance economic performance.

Product and Process Standards: A Primer[5]

Standards may be categorized first by function. Product standards refer to characteristics that goods should possess. These include, for example, minimum nutrition content, maximum pesticide residue on agricultural products, performance requirements, or interoperability with telecommunications networks (National Research Council 1995, Wilson 1995).

Process standards refer to conditions under which products are manufactured, packaged, or refined. Such standards may be directly related to the product itself, for example, rules of production for processed foods. They may be targeted at production conditions that are not directly related to the final good. This includes processes which affect the environment, for example. A related standard involves labeling requirements, which mandate provision of information about product characteristics or conditions of production. The use of eco-labeling for genetically modified foods, for example. There is also the debate currently over "non-trade" attributes in agriculture, such as animal welfare standards advanced in proposals by the European Commission in the talks on agriculture at the WTO.[6]

Standards arise for many reasons. In principle, they are designed to facilitate production and exchange, reduce transaction costs, guarantee quality, and achieve the provision of public goods. They may also operate, by design or by circumstance, to restrain competition.

Mandatory technical regulations are necessary as they contribute to the provision of public goods. This is particularly true for developing countries as they strive to improve living conditions. For example, building and construction standards designed to ensure

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World Bank to the Technical Barriers to Trade Committee, World Trade Organization, Geneva, 24 February 2000.

[5] A regulation is a mandatory requirement imposed by public authorities. Standards are voluntary specification emanating from market forces. Thus, competitors must comply with a regulation but may choose not to comply with a standard. While this distinction is useful for policy purposes, in this paper the term standards to refer to both mandatory requirements and voluntary specifications.

[6] Committee on Agriculture, Special Session, World Trade Organization, G/AG/NG/W/19, 28 June, 2000.

strength and durability of materials can contribute to public safety. Emissions standards and fuel-economy requirements contribute to cleaner air. Health and sanitation requirements can raise average health status in an economy, with spillover benefits into higher productivity. Mandatory interoperability standards set by international consensus by governments expand the gains from global communications and information networks. These network standards can aid directly in provision of services in the least developed countries, via tele-medicine or advance warnings of floods and other natural disasters.

Standards may be public goods themselves. Standards must appeal to a group facing a similar problem, generating consumption benefits (Casella, 1996; Kindleberger, 1983). In that context, standards may be non-rival in consumption. They are not necessarily non-excludable. Market and technical mechanisms may provide a sufficient return to development costs associated with standards. Therefore, an important issue arises as to whether purely private provision of standards is sufficient – and under what circumstances.

Voluntary standards, in contrast to *mandatory technical regulations*, can be highly efficient tools for satisfying market preferences. They change over time providing flexibility in circumstances where new technology is introduced or market demands change. Moreover, standards differ across countries. Demands for public goods vary with income levels, relative endowments of factors, information, technologies, and other variables. Accordingly, the derived demand for standards may be quite different in various countries – particularly different between countries at different levels of development.

Consider the potential market difficulties that standards overcome. First, standards can improve information flows between suppliers and consumers regarding the inherent characteristics and quality of products, thereby facilitating market transactions. For example, failing adequate information about products, consumers are vulnerable to the "lemons problem" (Akerlof, 1970). More generally, standardization may reduce the costs of uncertainty that consumers face in assessing product quality (Jones and Hudson, 1996). Costs include the time and effort consumers devote to search. Standards facilitate comparisons by consumers across products with common essential characteristics. Standards can increase demand for complementary goods. Users may mix and match components within a system; thereby permitting them to choose based on broader characteristics. In consequence, demand for both systems and components may rise.

Standards can also raise the elasticity of substitution in demand between versions of similar products (Harrison, et al, 1996). Because essential characteristics are standardized and quality and performance are guaranteed, products become closer substitutes. An important implication is that trade liberalization generates a more elastic increase in demand for imported goods under standardization than under non-standardization.

By permitting producers to settle on a limited range of product characteristics or processes, standards and targeted regulation can promote economies of scale. Sectors that

had been segmented by variable standards can be rationalized by greater output scale, albeit at the potential cost of reduced product variety. Standards may provide focal points around which firms can organize their production processes. For example, the ability of enterprises to interchange inputs can reduce inventory costs and raise flexibility. Moreover, because intermediates may be subject to quality or performance standards, characteristics of final goods attain greater certainty.

Technical standards serve as benchmarks for technological capability and guarantees of compatibility with other components or with networks (OECD, 1999; David and Greenstein, 1990). Thus, countries may choose to keep their telecommunications or information networks open to entry of new devices and technologies but would require such devices to operate effectively within the network.

The essential point of standards is to support market development and facilitate efficient transactions. They may also promote integration with global markets – a key factor in moving up the development ladder. The impacts may be both static and dynamic in nature over time. Adopting standards can improve resource allocation and help diffuse technical information embodied in products and processes. Indeed, standards themselves may embody considerable information about technical knowledge. Adherence to recognized standards provides incentives for firms to upgrade the quality and reliability of their products to required levels.

One of the most visible forms of this process is evident in networked industries. This is where standards are needed to promote the growth of attached users (Wilson 1998). An externality arises in that the value to any user of connection with the network depends positively on the number of other users. This indicates that networks may be under-provided in private markets. Technical standards for interoperability with the network can overcome this difficulty.

Some voluntary standards and all mandatory regulations also aim at overcoming market failures associated with public goods. These purposes include environmental protection, sanitation, and plant, animal, and human health. It is unlikely that an individual firm would absorb the costs of investing in such standards. While the firm might try to signal its investment through some distinguishing marks or marketing programs, other firms could free ride on the development costs.

Thus, in a wide variety of circumstances it is likely that the social marginal values of standards exceed their private marginal values. Public intervention may be required to establish appropriate standards and requirements in cases where the objective is attainment of public goods.[7] In other cases, coordinated private solutions may be available through standards-setting bodies.

[7] Standards may not be the most efficient mechanism available for this purpose. For example, effluent fees or emission permits may be expected to achieve a target reduction in emissions at lower cost than mandated technical specifications (Perroni and Wigle, 1999).

Theory vs. Real World Application of Standards

As outlined above, voluntary standards aim at overcoming market failures. Unless they discriminate between sources of supply, standards do not embody secondary trade costs. In this case, they may be the least-trade-restricting policies available. Standards may even expand trade, particularly market-driven voluntary standards. Any efficiency costs of standards are the investment societies make in achieving beneficial regulation. It is not clear, therefore, that the trade impacts of all technical barriers are inefficient or should be the subject of multilateral negotiations. Efforts to remove technical regulations are not necessarily associated with efficiency gains sufficient to overcome losses from weaker social protection. In sum, there is no analogue to the claim that free trade in goods is globally optimal when considering standards.

Despite this *theoretical* view of technical regulations in the abstract, history and case studies strongly demonstrate that countries do use standards in practice to block trade. Mandatory regulations may discriminate against foreign suppliers, both in their construction and in their outcomes. They may be used to gain strategic international trade advantages for domestic firms over foreign competitors. They may be non-transparent and needlessly force firms to duplicate certification costs.

Consider the case of Japan's imposition of individual fumigation tests for each variety of imported fruit. Previous to a ruling against Japan by its trading partners in the WTO, Japan mandated separate tests for pests in each variety of imported fruit, although there was no scientific or other evidence of the need for such tests (Hufbauer, Kotschwar, and Wilson 2000). Developing country exporters seeking to enter the Japanese market were at an especially severe disadvantage in meeting these costly requirements.

In addition, mandatory technical regulations imposed by governments may be written to exclude both domestic and foreign entrants into a particular market, serving to support entrenched monopolies. *Finally, technical regulations may be stronger than necessary to achieve a particular level of social protection, imposing excess costs on consumers and impeding the economic progress promised to developing countries in liberalized trade markets.* Australia continued a 1960's era ban on imports of fresh salmon from Canada, citing outdated scientific evidence and risk assessment, until a WTO ruling in the late 1980s (Roberts 1999). A recent example from trade in agriculture serves to further illustrate the excessive and unjustified costs of certain technical regulations.

A Bank study estimates a trade loss of $670 million to major food exporting nations in Africa with new European food safety standards on aflatoxin. This loss covers only trade in nuts and cereals. The regulation in Europe is set at a much higher level than international standards would suggest and above those in other developed countries, such as the United States and Canada. The European standard would lower risks by approximately 1.4 cancer deaths per billion per year. Table 1 shows differing trade flows from Africa to Europe, under conditions in which Europe adopted a standard suggested by an international (CODEX) standard, vs. the harmonized European standard set in 2001.

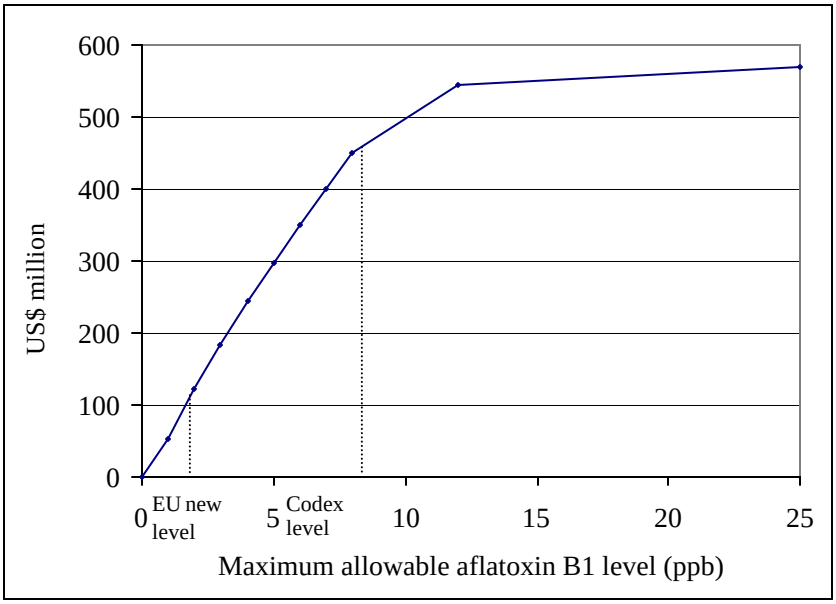
Table 1. Comparison of predicted trade flow under alternative scenarios: cereals, dried fruits and nuts from Africa (US$ million)

	Baseline value of import (1998 base)	Predicted value of import		Predicted change in value of import from the baseline value		Difference between the two scenarios
		EU standard	CODEX standard (assumed level)	EU standard	CODEX standard (assumed level)	
Cereals and cereal preparations	298	120	500	-178(-59%)	+202(+68%)	380 (76%)
Dried fruits and nuts	472	252	539	-220(-47%)	+67(+14%)	287 (53%)

Source: "Measuring the Effect of Food Safety Standards on Trade: A Case Study," Tsunehiro Otsuki, John S. Wilson, and Mirvat Sewadeh, in Kym Anderson, Cheryl McRae, and David Wilson (eds.), The Economics of Quarantine and the SPS Agreement, Center for International Economic Studies University of Adelaide and AFFA Biosecurity Australia, 2001.

Figures 1 and 2 show how differing levels of regulatory stringency on aflatoxin affect trade for cereals, fruits, and nuts. Europe, the U.S., Australia, and other countries set standards all along these curves. The costs associated with lack of consensus on an international standard can be high, especially for the least developed countries seeking to expand food exports.

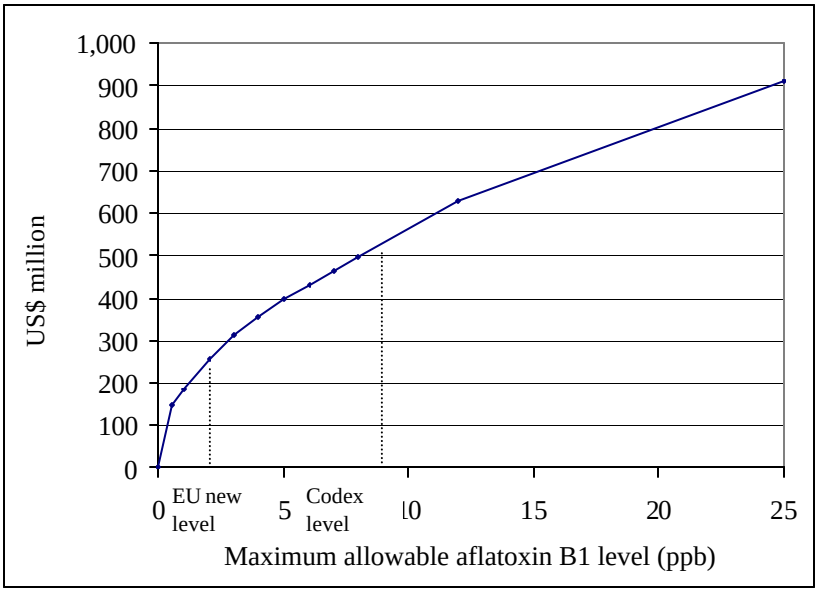
Figure 1. Predicted Trade Flow under Varying Maximum Allowable Aflatoxin B1 Level: Cereals and Cereal Preparations



Note: The Codex level of maximum allowable aflatoxin B1 standard is assumed to be 9 ppb.

Source: "Measuring the Effect of Food Safety Standards on Trade: A Case Study," Tsunehiro Otsuki, John S. Wilson, and Mirvat Sewadeh, in Kym Anderson, Cheryl McRae, and David Wilson (eds.), The Economics of Quarantine and the SPS Agreement, Center for International Economic Studies University of Adelaide and AFFA Biosecurity Australia, 2001.

Figure 2. Predicted Trade Flow under Varying Maximum Allowable Aflatoxin B1 Level : Dried Fruits and Nuts



Note: The Codex level of maximum allowable aflatoxin B1 standard is assumed to be 9 ppb.

Source: "Measuring the Effect of Food Safety Standards on Trade: A Case Study," Tsunehiro Otsuki, John S. Wilson, and Mirvat Sewadeh, in Kym Anderson, Cheryl McRae, and David Wilson (eds.), The Economics of Quarantine and the SPS Agreement, Center for International Economic Studies University of Adelaide and AFFA Biosecurity Australia, 2001.

Consider also another case that illustrates the variability of standards and differing levels of regulation protection currently in place. The WTO has 135 member governments. Among these members, none are allowed to export fresh, chilled, or frozen poultry meat to Australia. Canada allows one country to export, the U.S. allows five, and the EC allows 15.[8] Is this an optimal framework for trade, especially considering the need to continue market access expansion for developing countries with a comparative advantage in agricultural production?

Rationalizing international regulations can produce significant net welfare and trade benefits. This is particularly true for developing countries that confront the challenges of scarce resources to meet differing, duplicative, or discriminatory standards. *An international focus on rationalization of technical regulations worldwide would involve a commitment to the following:*

- Ending discriminatory treatment
- Removing duplicative testing requirements
- Recognizing that foreign standards could achieve the same level of social or consumer protection as domestic standards
- Making regulation more transparent, and

[8] Referenced in Roberts, Orden and Josling 1999, "WTO Disciplines on Technical Barriers to Agricultural Trade: Progress, Prospects, and Implications for Developing Countries, paper for the World Bank conference on Agriculture and the New Trade Agenda in the WTO 2000 Negotiations, October 1-2, Geneva.

- Scaling them at levels that do not impose excess costs on consumers and firms.

What is needed is a new mechanism to inform and advise governments on whether their regulations depart significantly from the least-trade-restricting standards available for a given policy objective. In turn, governments could be urged to adopt less restrictive policies. The global trading system also requires a strengthened framework within which governments can assess the damages to their country's trade benefits from foreign regulations that deviate in a fundamental way from international norms. These ideas are developed further in the following sections.

Regulation and Trade: Are We Balancing Costs and Benefits?

Mandatory regulations imposed by governments at the border can produce serious distortions in commercial markets. For example, domestic regulatory systems may restrain trade and limit market entry through environmental, health, or safety mandates that are not based on international norms. These requirements may also be discriminatory within the context of WTO disciplines, including commitments undertaken by WTO members in the Agreement on Technical Barriers to Trade (TBT) or the Agreement on the Application of Sanitary and Phytosanitary Standards (SPS). In sum, technical regulations imposed on traded goods and agricultural products affect trade patterns, the ability of producers to enter new export markets, and consumer costs.

Technical regulations include specific performance requirements; such as how much pressure brake pads in automobiles can withstand before replacement. They also involve food safety requirements, such as those on the amount of lead permissible in fresh fish. Regulations extend into conformity assessment rules, which involve testing, certification, laboratory accreditation, and related labeling requirements for products. [9]

The key challenge for the international community in 2001 is to design programs to streamline and rationalize the complex and often discriminatory web of domestic and international regulations. *The key concept here is "rationalization" in preference to "elimination"*. The former approach may be designed to facilitate trade without sacrificing common, important social and economic objectives. The latter approach, in some cases, may be economically inappropriate and socially costly.

Consider for example that standards and regulations differ fundamentally from taxes and quotas on trade. These traditional trade barriers are inefficient and pose discriminatory taxes on foreign sources of economic activity. They raise costs to consumers and producers, inefficiently allocate resources, and protect entrenched domestic market power. Economic analysis demonstrates that countries mutually benefit from negotiating their removal or reduction. For their part, regulatory barriers exist *in principle* to achieve important objectives under-served in the private market. This could include, for example, public-health maintenance or environmental protection. Elimination of such regulations

[9]For a comprehensive discussion of these procedures see National Research Council (1995).

under certain conditions may produce social losses in excess of any economic efficiency gains.

In fact, this distinction is more complex. Tariffs and quotas may exist for purposes of economic and social regulation. As they are indirect means and embody a protectionist and discriminatory element, however, they erect costs that would not arise from non-discriminatory regulations aimed directly at the underlying goals. Thus, it has been relatively straightforward for the global trade community to establish the principle that border restraints are inappropriate methods of regulation. They should be removed if there are more direct means available for achieving regulatory purposes.

The most obvious problem is that costs of complying with standards may be higher for foreign firms than for domestic firms. This implicitly erects a trade barrier. Compliance involves one-time costs of product re-design and building an administrative system. It also involves recurrent costs of maintaining quality control and testing and certification. Consider that regulation in the European Community requires that dairy products be produced from milk by cows both raised on farms and milked mechanically. The regulation effectively bans imports from developing countries that lack technology to milk cows mechanically.

Moreover, there may be indirect costs, such as reformulating the ingredients of a food product because of a requirement to list nutrition characteristics. A wide range of cost-raising possibilities exists, therefore, in which varying regulatory requirements in standards can raise entry barriers (higher up-front costs) or diminish the ability to compete (higher marginal costs). A variant of this problem is that firms must decide whether to establish a costly platform design that may be modified slightly to accommodate particular markets, or to design a product initially solely for the home market but with costly modifications required for export. The former strategy is more common among larger enterprises, while the latter characterizes smaller firms (OECD, 1999). Thus, compliance costs can provide an advantage to large multinational firms in global competition.

Costs may be distinguished also between meeting the precise technical regulations and verifying that regulations are met. The latter task is *conformity assessment*, and it presents the largest potential technical barrier to trade. Governments in importing countries may refuse to recognize tests performed by exporting firms or their public authorities and may not accept conformity declarations. In Russia, for example, many low risk consumer products are subject to mandatory third party testing. *This included regulations on sofas that mandated expiration dates – a shelf-life for furniture*. A review of the system in Ukraine by the World Bank also found similar problems with regulation of low risk consumer products (World Bank 2000a). In many other countries such products circulate under conditions of manufacturers' declaration of conformity.

Government authorities may also insist on performing inspections of exporter premises and inspecting imported shipments. Conformity assessment is clearly vulnerable to bureaucratic and non-transparent rulemaking. It is highly susceptible to capture by

domestic companies seeking protection. Time delays are particularly problematic for products subject to short technical life cycles. Moreover, the costs of uncertainty in complying with such procedures can reduce the willingness to compete.

One illustration of the clearly excessive duplication of testing and certification regulations worldwide is data from the Asia Pacific region. A review of standards, testing, and certification requirements conducted in 1995 among 18 member governments of the Asia Pacific Economic Cooperation (APEC) found a significant degree of differences in the way in which regulations were imposed. In many instances, lack of a harmonized international standards was cited as the rationale for "national" regulations in sectors such as building supplies, food safety, transport equipment, and consumer protection (Wilson 1995 and APEC 1994). The lack, therefore, of concerted progress on international consensus standards provides the foundation for continued divergence in regulation and no incentives to drive reform.

Box 1. The Implications of a Growing Standards Divide

Developing countries lag behind developed countries in their capacity to support modern testing, certification, and laboratory infrastructure. This situation has important implications. Developing countries find it difficult – if not impossible – to enter into mutual recognition agreements (MRAs) with other nations in order to have their tests accepted abroad (Wilson, 1995). Developed countries may not have trust in inspection procedures in developing countries. The developed countries can collaborate on standards and MRAs which exclude developing country interests. *The potential for trade and investment diversion, therefore, in today's environment is real and significant.*

Divergent national standards can serve to segment markets, raising market power and erecting entry barriers. For example, a simple requirement that product packaging or instructions be stated only in the importer's language makes it to transmit goods to higher-priced markets with different languages.

It is also evident that governments and firms establish strategic standards to achieve market closure, alter the terms of competition in favor of domestic firms, and improve the terms of trade (Matutes and Regibeau, 1996; Fischer and Serra, 2000). In one example, if costs of converting to a new network are large, a subgroup of countries might find it advantageous to form closed systems, to the detriment of excluded countries (Gandal and Shy, 1999). Standards not only could achieve static market exclusion but also could strengthen dynamic market power.

Pro-Competitive Principles: Standards and Trade Expansion

A set of principles should be used when considering the role of standards in restraining trade. If a standard or its enforcement is purely cost raising (e.g., through delays in inspection or arbitrary fees) it is inefficient and should be removed. If a standard is set at a level that is stronger than needed to achieve a particular policy goal, it may have protectionist intent by virtue of reducing foreign profits at the expense of domestic profits. One mechanism for defining such a protectionist standard is to ask whether it exceeds the regulation a government would choose if all producers were domestic

(Fischer and Serra, 2000). Another mechanism is found in the WTO definitions on "least trade distorting" and "non-discrimination" in the TBT and SPS Agreements.

In addition, if a technical regulation is discriminatory in application or effect between domestic and imported firms, the margin of discrimination could be viewed as unnecessary protection and removed. The international community should also question whether a standard is chosen that is least disruptive to trade among available policies. Finally, a standard might be considered protectionist if it mandates excessive caution in relation to scientific and reliable measures of risk. Note that the principles in here are largely reflected in both the TBT and SPS agreements. *These agreements should be strengthened with these principles as a starting point for discussion.*

The specific reference and use of the "precautionary principle" in the WTO Agreements, however, will not serve to advance progress. This principle suggests that action should be taken to restrain economic activity and technological advance even when cause and effect relationships have not been proven scientifically. The precautionary principle has been implemented in the Rio Declaration of the UN Conference on Environment and Development. Formal adoption of the principle is under discussion at the Codex Alimentarius Commission for food safety standards.

The precautionary principle is not based in international scientific objectivity or principles reflected in the TBT or SPS Agreements. The multilateral trading system should build upon use of sound science, risk assessment, and economic analysis in reducing barriers.

International Standards Development: The Need for Action

As noted above, standards vary naturally across countries because of different levels of development, technological capabilities, endowments, and preferences. International harmonization of all technical standards is virtually impossible. A new form of international coordination could, however, expand market access for both the developed and developing countries by targeting the most important areas lacking international standards and taking action to drive consensus agreement on these standards.

Addressing this problem would also provide a way for developing countries to ensure more effective representation at the deliberations of international standards-setting bodies. The standards can have exclusionary effect when set by a small set of national or industry interests. It should be noted, however, that from an economic efficiency perspective, there is no reason why developing countries need to construct domestic capacities for standards development in all industrial sectors. By moving toward a more harmonized regulatory approach worldwide, developing countries would directly absorb the technological knowledge inherent in standards and also promote inward technology transfer.

Recommendations for Change

What is specifically needed to bridge the standards divide and address the problems confronting developing countries in voluntary standards? The first part of an action plan in standards involves a long-term plan to support infrastructure modernization and enhanced access for developing countries to *voluntary* standards development activities. There is currently no coordinated international framework for addressing critical development needs in standards.

A Standards Development Forum. The global community should support the formation of a Standards Development Forum (SDF). This forum could be coordinated with assistance of the World Bank, in cooperation with other multilateral institutions. Its mission would be to develop the framework for a targeted financial assistance plan in modernization of standards infrastructures for the least developed countries. This process could start with countries engaged in the Poverty Reduction Strategy Papers (PRSP) process and then build upon experience gained in these countries.

Box 2. What About World Bank Investments in Standards and Regulatory Reform?

The Bank has focused trade policy lending away from traditional border policy measures to "second generation" or "beyond border" policies. While the Bank has become less active in the area of border policy measures its lending for trade "facilitation and promotion" measures accounted for 25-30 percent of total policy lending in FY99 ($15.449 billion). In specific, through Bank project lending, trade-related funded constituted 23% of the total amount of these types of loans ($13.5445 billion).[10] It is estimated, therefore, that a total of $6.9 billion was spent on trade-related projects. As part of this work, the Bank has invested in projects related to standards and technical regulations, including initiatives aimed at enhancing access to international standards, for example, among bank borrowing members.

It is estimated that in FY99 project funding with the direct and indirect goals of support for standards infrastructures totaled $419.2 million. Standards-related projects included goals such as; (1) adoption of international conventions directives relating to standardization/ simplification of documents accompanying trade in goods and services; (2) investment in standards infrastructure, metrology, calibration, laboratory accreditation systems; (3) assisting firms in adoption of international quality standards (ISO 9000) and environmental management standards (ISO 14000); (4) supporting access to business information technology and providing advice on packaging and quality control; and (5) government regulatory reform projects, health, safety, environmental regimes across industry sectors.

[10] Foroutan, Faezeh. *The Trade Database: What Have We Found*?. The World Bank, mimeo, Washington, D.C. :May, 2000

Table 2. Estimated Bank Lending Related to Product Standards – FY99 (in millions of U.S. Dollars)

	Structural Adjustment	Investment Lending	Total	
1-Investment in standards	0.00	48.00	**Direct standards related lending**	**Total direct and indirect standard related lending**
2-Assist in adopting standards	0.00	102.25	150.25	419.20
3-Government	268.95	0.00	**Indirect standards-related Projects**	
			268.95	**Total with customs**
4-Customs	573.8	36.90	**Total Customs** 610.70	925.35

[1]Investment in standards infrastructures, metrology, calibration, laboratory accreditation systems, testing, certification programs, and other mechanisms
[2]Assist firms to adopt/comply with international standards, including implementation of quality standards programs.
[3]Government regulatory reform projects, health, safety, environmental regimes across industry sectors.
[4]Reduction of red tape in customs clearance; simplification of export/import procedures; modernization of customs infrastructure

In addition to infrastructure modernization, developing countries lack to capacity to absorb and adopt best practice international standards. The SDF would also, therefore, develop a strategic plan to ensure developing countries are able to participate in standards development activities. Innovative ways to achieve this goal, including use of global information technology networks should be explored.[11] Funding to support investments by the SDF would be contributed by bilateral and multilateral donors in a Trust Fund administered by partners in the SDF.

Recommendations on a plan of action and establishment of a global trust fund to finance this work could be ready for discussion, for example, at the G-8 summit in 2002. A working group of senior officials should be formed to provide the high-level leadership necessary to ensure successful launch of the SDF. *The United States is currently debating a $2 trillion tax cut over a 10 year period. Discussion of a fraction of this amount contributed by donors to a new fund for Standards merits discussion.*

[11] Leveraging information technology networks to assist developing countries in absorbing best practice information on standards and expand access is being examined in Sub-Saharan Africa through a new Trust Fund established by the United States at the Bank.

Examples from FY99 World Bank Lending

1. Turkey's Industrial Technology Project

- Increased economic integration with Europe has been a priority for policy makers in Turkey. The EU is also the country's major trading partner, and its share of Turkey's trade is expected to grow as a result of a customs union agreement signed between the two parties in 1996. In order for Turkish industries to benefit from the growing trade with the EU, they need to improve the quality of their products and develop new products and processes. Specifically, Turkish industries have to meet quality standards and technical regulations adopted by the EU if they are to expand their markets in Europe or compete locally with European manufacturers.

- With a total cost of $155 million dollars, the Technology Development Project, is aimed at helping improve Turkish technology infrastructure and services. The project has four standards-related components: 1) Assisting in harmonizing Turkey's International Property Rights regime with WTO and ECU standards; 2) Investing in Turkey's metrology infrastructure to serve a larger section of Turkish industry and gain acceptance from European institutions; 3) Supporting restructuring of industry institutions to help them become industry oriented; 4) Supporting loans for technology development and promoting information dissemination to small and medium-sized enterprises (SMEs).[12]

2. Ghana Trade and Investment Gateway

- The primary objective of the project is to attract export-oriented investors to Ghana and enhance export-led growth. To achieve this goal it was necessary to address trade facilitation measures including those related to technical regulations and standards. The Trade and Investment Gateway project allocated $2.25 million dollars to finance the implementation of Customs Excise and Preventive Services (CEPS) which covered, among other things, changes in operational procedures and ISO 9000 compliance.[13]

3. Cape Verde Privatization and Regulatory Capacity Building Project

- The objective of the project is to achieve higher, private sector-based economic growth through: a) Changing the role of the government to one that provides the necessary environment for private sector growth; b) Increasing private sector participation in key economic sectors such as utilities, trade and transport.

In addition to the projects outlined above, in FY99 the Bank invested $610.7 million in modernization of customs infrastructure and simplification of customs procedures.

[12] Project Appraisal Document No 18351-TU May 1999

[13] Project Appraisal Document No 17736-GH

Though not directly linked to standards and technical regulations, modernization of customs regimes can improve countries' ability to implement reform in regulatory systems and related conformity assessment regimes focused on imports and import control.

Promoting Institutional and Regulatory Reform. The second part of an action plan to address standards and development centers on promoting trade expansion through regulatory reform and removal of technical barriers in discriminatory standards, testing, and certification regimes. This work is in the long-term economic benefit of both the developed and developing countries. WTO members, with the G-8 leading this process, could endorse the wider use of "supplier's declaration of conformity" to regulatory requirements.

A systematic review of products subject to mandatory government testing and certification that can be moved to declaration of conformity status should be undertaken. A multilateral "Global Conformity Agreement" (GCA) should then be developed based on this list for negotiation and agreement at the WTO. *It is critical that developing countries benefit from and participate in this agreement. A plan to provide technical assistance and funds to support mechanisms such as post-market surveillance systems in developing countries must be part of this initiative.*

A Ten Year Plan to Develop International Standards. In agricultural trade, the lack of progress toward harmonized, internationally accepted standards has the potential to seriously erode the gains made through removal of traditional barriers. The wide range of differing sanitary and phytosanitary standards imposed by importers that lack a foundation in sound science and are not based on risk are particularly costly to developing countries dependant upon agricultural exports.

Differences in standards for similar agricultural products in export markets also increases costs. For example, differing standards on aflatoxin imposed worldwide diverts trade toward regions where regulations are less restrictive and consumption is growing (ECA, Africa, LAC). Standards affecting nuts increase trade between industrialized countries, where regulation is already restrictive (Otsuki and Wilson 2001). Lack of consensus on an international standard based in sound science provides strong conditions in which developing country exports may be restricted – at a high net welfare cost over time.

With the leadership of a consortium of development agencies (World Bank, UNCTAD, regional development banks) and standards developing organizations, a 10-year plan to accelerate the creation and adoption of international standards can be designed. In order to support continued expansion in agricultural and horticultural trade – of key importance to developing countries – harmonized standards covering important product attributes are needed. This would involve a plan to set new internationally-recognized food safety standards by the Codex Alimentarius Commission, new animal health standards set by the International Office of Epizootics, and those for plants set by the International Plant Protection Convention (IPPC). This work is directly relevant to the interests of all

members of the WTO and reduction in the number of disputes in SPS measures and future negotiations to strengthen disciplines in the SPS Agreement.

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