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Non-Tariff Trade Barriers in Agriculture

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Abstract

As trade agreements lower tariff rates throughout the world, other barriers to trade emerge. These non-tariff barriers can be just as troublesome for exporting companies. Non-tariff barriers include technical measures, customs rules and procedures, transport regulations or costs, lack of knowledge of regional markets, and import policies. The objective of this study is to identify non-tariff barriers faced by U.S., and more specifically North Dakota, exporting businesses, especially those involved in agriculture, and to identify difficulties involved in exporting products. A survey of North Dakota businesses is conducted to identify important trade barriers. Phytosanitary regulations and railroad problems are two frustrating issues that create barriers to export for North Dakota agribusinesses. Other non-tariff barriers mentioned in the survey include labeling, paperwork, registration, and language differences. When entering new markets, the biggest problems exporters have are making contacts, resolving credit issues, and competing with low-cost competitors from foreign countries.

Keywords: non-tariff barriers, trade, survey, North Dakota exporters

NON-TARIFF TRADE BARRIERS IN AGRICULTURE

Jeremy W. Mattson, Won W. Koo, and Richard D. Taylor*

INTRODUCTION

As multilateral and bilateral trade agreements decrease tariffs throughout the world, other barriers to trade emerge. These non-tariff barriers (NTBs) can be just as troublesome for exporting companies. Non-tariff trade barriers include any of a number of hindrances that restrict the ability of companies to export. Surveys conducted across the world in a number of industries indicate that businesses feel constrained in their ability to access foreign markets by a broad set of NTBs and other obstacles (OECD 2003). These constraints include technical measures, customs rules and procedures, transport regulations or costs, lack of knowledge of regional markets, import policies, etc. As tariffs decrease, these non-tariff restrictions to trade become more important. Non-tariff measures may now have a greater impact on trade than tariffs. This may be partly due to an increase in the use of NTBs by countries pressured into protecting domestic industries that are no longer protected by tariffs, or it may be partly due to previously existing NTBs that are becoming more visible as the traditional trade barriers (tariffs and quotas) are removed.

Some trade restrictions may be necessary for countries to ensure the safety of the food supply and the health of plants, animals, and the environment. However, it is sometimes the case that governments go beyond what is necessary to protect domestic industries. Hillman (1996) notes that countries have the right to adopt policies to protect the welfare of their citizens, but the purpose of these measures must be to contribute to a legitimate domestic objective, and regulations must be applied equally to domestically produced products and imports. Otherwise, the policies are mainly for protecting domestic industries.

The objective of this study is to identify NTBs commonly faced by U.S. exporters and to examine the nature of the barriers in agricultural trade. The next section of this paper reviews previous studies that have addressed NTB issues. Types of NTBs faced by U.S. exporters are identified, the methods for identifying and quantifying these trade barriers are discussed, and the treatment of these issues in trade agreements is examined. This is important because, according to a study by the OECD (2003), simply identifying non-tariff measures is a difficult task. The OECD study outlined the contributions a business survey can make to this process. Therefore, the third section of this paper presents the findings of a survey of North Dakota agribusiness exporters. This section includes a discussion of survey method, characteristics of businesses surveyed, major NTBs faced by these companies, difficulties in establishing new markets, and types of export assistance received. Conclusions are discussed in the final section.

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NON-TARIFF BARRIERS UNDER TRADE LIBERALIZATION

Types of Non-Tariff Barriers

Non-tariff barriers (NTBs) can include any policy other than tariffs that distorts trade. Hillman (1991) reports that non-tariff measures have been classified into three types. Type I measures are those in which "the specific intent is to restrict imports and to stimulate exports in a manner that will inevitably cause trade distortion." Type II measures have "the primary intent of dealing with economic, social, and political problems, but they are occasionally used to restrict imports or stimulate exports." Type III measures "are not intended to be instruments of trade protection but nevertheless inadvertently cause trade distortion." Hillman states that the non-tariff measures which are most frequently used to control agricultural imports are quantitative restrictions, variable import levies, and health and sanitary regulations.

Table 1 provides lists of NTBs identified by Deardorff and Stern (1997), the U.S. Trade Representative (USTR) (2003), and the OECD (2003). Deardorff and Stern categorize non-tariff measures into 1) quantitative restrictions and similar specific limitations, 2) non-tariff charges and related policies affecting imports, 3) government participation in trade, restrictive practices, and more general government policies, 4) customs procedures and administrative practices, and 5) technical barriers to trade. Among the specific non-tariff measures which they list, those trade barriers that may be important to U.S. agricultural exporters include import quotas, licensing, antidumping and countervailing duties, subsidies, state trading, health and sanitary regulations, safety standards, and packaging and labeling regulations.

Table 1. Major Categories of Non-Tariff Barriers

Deardorff and Stern	USTR	OECD
Quantitative restrictions and similar specific limitations	Import policies	Technical measures
Import quotas	(including quantitative restrictions, import	Food safety and health requirements
Export limitations	licensing, customs barriers)	Sanitary and phytosanitary requirements
Licensing		Labeling regulations
Voluntary export constraints		Quarantines
Exchange and other financial controls	Standards, testing, labeling, and certification	Certification and testing requirements
Prohibitions		Customs rules and procedures
Domestic content and mixing requirements		Excessive documentation required
Discriminatory bilateral agreements	Government procurement	Unpredictability
Countertrade		Slow customs clearance
Non-tariff charges and related policies affecting imports		Complex regulations
Variable levies	Export subsidies	Arbitrary enforcement of rules
Advance deposit requirement		Lack of harmonization
Antidumping duties		Internal taxes or charges
Countervailing duties	Lack of intellectual property protection	Competition-related restrictions on market access
Border tax adjustments		Quantitative import restrictions
Government participation in trade, restrictive practices, and more general government policies	Service barriers	Procedures and administration (general)
		Public procurement practices
Subsidies and other aids		Subsidies and related government supports
Government procurement policies		Investment restrictions or requirements
State trading, government monopolies, and exclusive franchises	Investment barriers	Transport regulations or costs
Government industrial policy and regional development		Restrictions of services (general)
Government financed research and development and other technology policies	Anti-competitive practices with trade effects tolerated by foreign governments	Restrictions on mobility of business people or labor
		Trade defense instruments
National systems of taxation and social insurance		Antidumping duties
Macroeconomic policies		Countervailing duties
Competition policies	Trade restrictions affecting electronic commerce	Safeguards
Foreign investment policies		Local marketing regulations
Foreign corruption policies		
Immigration policies		
Customs procedures and administrative practices	Others	
Customs valuation procedures		
Customs classification procedures		
Customs clearance procedures		
Technical barriers to trade		
Health and sanitary regulations and quality standards		
Safety and industrial standards and regulations		
Packaging and labeling regulations, including trademarks		
Advertising and media regulations		

Source: Deardorff and Stern, 1997, p. 54-57.; USTR, 2003; and OECD, 2003.

Evolution of Non-Tariff Barriers in Agriculture

Hillman (1996) describes the evolution of non-tariff trade barriers in agriculture. Prior to World War I, there were very few NTBs in agriculture, and they mostly consisted of embargoes. In the 1920s and 1930s, a number of protectionist measures emerged, including quotas, licensing, exchange controls, export subsidies, bilateral arrangements, state trading, voluntary agreements, and more restrictive regulations on health, safety, and sanitation. Tariffs also increased during this period. Agricultural protection increased considerably after World War II. Since 1947, in each round of GATT negotiations the focus has been on reducing tariffs, but little attention was given to NTBs until the Uruguay Round. According to Hillman (1991), NTBs increased considerably after tariffs were reduced during the Kennedy Round of negotiations in 1962-67. He remarks that since this period, NTBs have been recognized as being greater barriers to trade than tariffs. NTBs received significant attention for the first time during the Uruguay Round of GATT negotiations in 1986-94. During this round, many quantifiable NTBs were converted into tariffs or TRQs. Non-quantifiable NTBs were dubbed "technical barriers" (Hillman 1991). NTBs have also received attention during the recent Doha Round of WTO negotiations.

Foreign Trade Barriers in Major U.S. Export Markets

The USTR annually publishes a *National Trade Estimate Report on Foreign Trade Barriers*, which surveys significant foreign barriers to U.S. exports. The USTR classifies trade barriers into 10 categories: import policies (e.g., tariffs and other import charges, quantitative restrictions, import licensing, customs barriers); standards, testing, labeling, and certification; government procurement; export subsidies; lack of intellectual property protection; services barriers; investment barriers; anti-competitive practices with trade effects tolerated by foreign governments; trade restrictions affecting electronic commerce; and other barriers (Table 1). The report examines a number of export markets for the United States and covers the significant trade barriers. Some of the barriers are consistent with current trade laws, but they are nevertheless worth identifying. Barriers inconsistent with trade laws are especially worth identifying, since they can be challenged through U.S. trade law or the WTO.

Table 2 presents some of the trade barriers the USTR examined in the 2003 report for five of the largest U.S. export markets: Canada, Mexico, the European Union, Japan, and China. The NTBs presented in this table are important to agriculture and to trade in general.

Table 2. Non-Tariff Barriers in Major Export Markets

Canada	Mexico	European Union	Japan	China
Restricts imports of supply managed agricultural products (dairy products, eggs, poultry) through TRQs.	Antidumping and/or countervailing duties limit U.S. access to Mexico for live swine, beef, apples, and rice.	Restrictions affecting U.S. wine exports.	Highly regulated and non-transparent distribution system for imported rice.	Problematic implementation of the TRQ system for wheat, corn, rice, cotton, wool, sugar, vegetable oils, and fertilizer, resulting in delays.
Horticultural import restrictions.	Import verification inspections for meat and poultry must be conducted in Mexico.	Individual EU member states have their own customs procedures.	Japan requires that wheat be imported through the Ministry of Agriculture, Forestry, and Fisheries' (MAFF) Food Agency, which then releases wheat to Japanese flour millers at prices that are substantially above import prices.	Most products subject to quotas or TRQs require licenses, which increases the burden on importers and potentially causes trade distortions.
Varietal controls restrict U.S. grain exports.	SPS standards have created barriers for U.S. exports of certain agricultural products, including grains, seed products, apples, stone fruit, pork, poultry, citrus, wood, avocados, and table eggs.	Differences in U.S. and EU regulatory policies and procedures can have significant implications on U.S. trade.	Japanese corn starch manufacturers must blend potato starch with corn starch in manufacturing corn sweeteners. The blending requirement discourages imports of corn.	China''s inspection and quarantine agency (AQSIQ) requires importers to obtain quarantine inspection certificates before agricultural goods can enter China''s market, and traders have reported that AQSIQ has imposed quantitative restrictions and time limits in connection with them, as in the case of, for example, imported poultry and pork.
The Canadian Wheat Board has government-sanctioned monopoly status as well as other privileges that restrict competition.	SPS procedural requirements for inspections at the border often do not reflect agreements between USDA officials and the Mexican Secretariat of Agriculture, resulting in delays.	The moratorium on the approval of modern biotechnology has hindered U.S. exports of corn and threatens exports of other products.	Bans imposed on U.S. poultry in 2002 due to the detection of low pathenogenic strains of avian influenza in limited areas in the United States.	
Restrictions on fortification of foods.	Problems with Mexican administrative procedures and customs practices including lack of sufficient prior notification of procedural changes; inconsistent interpretation of regulatory requirements for imports at different border posts; requirements that particular goods enter only through certain ports; discriminatory and uneven enforcement of Mexican standards and labeling rules; and long and burdensome inspection and clearance procedures.	Several member states have imposed marketing bans on some biotechnology products despite existing EU approvals.	Ban on fresh potatoes imports from the United States, alleging that such a ban is necessary to prevent the introduction of golden nematode and potato wart into Japan.	China restricts the types and numbers of entities with the right to trade. Only firms with trading rights may imports goods into China. Imports of some goods, such as grains, cotton, vegetable oils, and sugar, is reserved primarily for STEs.
Softwood lumber export subsidies.		Ban on beef from cattle treated with growth promoting hormones.	Ban on fresh bell peppers and fresh eggplant based on concerns over tobacco blue mold.	Product certification is a difficult, time-consuming, and costly process.
		Ban on U.S. poultry exports since 1997 due to U.S. poultry producers use of low-concentration chlorine as an antimicrobial treatment (AMT).	Ban on imports of rendered livestock products due to BSE.	Issuance of quarantine inspection permits to place quantitative restrictions on meat imports, and a "'zero tolerance"' standard for certain pathogens in imported uncooked meat.
		Animal by-products legislation.	Trying to expand mandatory labeling of foods made from the products of biotechnology.	
		Transmissible Spongiform Encephalopathies (TSE) regulations.	Requirement for unnecessary fumigation for a number of imported fresh horticultural products, which adds costs and results in produce deterioration.	Quarantine officials required special treatment of some wheat imported from the Pacific Northwest.
		Subsidies for fruit and canned fruit distort world markets to the detriment of U.S. producers.	Fresh apples quarantine requirements for fireblight.	Phytosanitary barriers also continued to block imports of several other U.S. products in 2002, including stone fruit, several varieties of apples, pears, and fresh potatoes.
	A 20% consumption tax on certain beverages sweetened with ingredients other than cane sugar, including HFCS, creates a barrier for U.S. corn and HFCS exports to Mexico.		Overly restrictive list of food additives still limits imports of U.S. food products, especially processed food.	
			Feed additive ban.	New laws for labeling of processed products with transgenic material, such as soybeans and corn.
			Pork and beef safeguards.	
			Species-specific import quotas for fish products.	Extensive meat labeling requirements.
			Failure to approve biotech potatoes.	Export subsidies for corn.

Source: USTR, 2003 National Trade Estimate Report on Foreign Trade Barriers

Canada has import policies which restrict imports of supply-managed agricultural products (including dairy products, eggs, poultry), horticultural products, and grain. For example, Canada requires that each variety of grain be registered and have visual characteristics for its class. However, the USTR reports that since U.S. varieties may not be visually distinct, they are not registered in Canada, and so U.S. wheat is being sold in Canada as "feed" wheat at sharp price discounts. The report also comments that the Canadian Wheat Board restricts competition. Gray and Buckingham (1997) discuss the implementation of end-use certificates (EUCs) for wheat as a possible trade-distorting administrative barrier. They note that administrative trade barriers will play an increasing role in trade protection in the future, and that they are less transparent than other forms of protections such as tariffs and quotas. Both the United States and Canada require EUCs for imports of wheat. These create a barrier to trade, but they are allowed under NAFTA and the WTO. EUCs are considered trade distorting because they increase transaction costs and increase handling and reporting requirements. Gray and Buckingham argue that the EUCs for U.S. wheat exported to Canada may be more trade-distorting than the EUCs for Canadian wheat exported to the United States because the Canadian EUCs are more complex and commercially difficult to meet.

Mexico has recently implemented a number of new barriers to block imports of agricultural products from its NAFTA partners. According to the USTR, these barriers include dumping orders, safeguards, illegitimate use of sanitary and phytosanitary (SPS) measures, and unsubstantiated questions about compliance with customs procedures.

In the European Union, barriers exist in the form of bans on U.S. products due to health concerns, a moratorium on the approval of modern biotechnology (e.g., genetically modified organisms), differences in U.S. and EU regulatory policies and procedures, and differences in customs procedures between EU countries.

Japan has also banned a number of U.S. products due to health concerns. U.S. products that have been affected by bans or burdensome quarantine restrictions in Japan include poultry, rendered livestock products, fresh apples, potatoes, fresh bell peppers, and feed additives. Similar to the EU, Japan has restrictions regarding biotech foods. They have failed to approve biotech potatoes and are trying to expand mandatory labeling of foods made from the products of biotechnology. Japan also has import systems for rice and wheat, as well as blending requirements for industrial use of corn, that restrict U.S. exports of these commodities, according to the USTR report.

In China, the USTR reports, antidumping and countervailing duties and safeguard measures have increased as tariffs have decreased. With its accession to the WTO, China is obligated to address many of its NTBs. Some progress has been made, but some NTBs remain in place, and others are increasing. Increasing barriers include quarantine certificates for agricultural imports, regulations on biotech products, and the use of technical standards and SPS measures to control import volumes (USTR).

Measuring the Extent of Non-Tariff Barriers

Unlike tariffs and quotas, many NTBs are difficult to quantify, and their effects on trade and welfare are more difficult to estimate. Economists have attempted to quantify NTBs through use tariff equivalents, frequency measures, and surveys. Methods of estimating the effects of NTBs include gravity models, general and partial equilibrium models, and risk-assessment-based cost-benefit measures.

Tariff equivalents

Some economists have attempted to quantify NTBs in tariff equivalents, which means estimating tariffs that would have the same effect as the NTB. Calculating tariff equivalents, however, is not always easy. Beghin and Bureau (2001) present methodologies and an extensive survey of literature for modeling and quantifying NTBs (specifically, sanitary, phytosanitary, and technical regulations) in the agricultural and food sectors. One means of doing so is the price-wedge method, which relies on the idea that NTBs can be measured in terms of their impact on the domestic price in comparison to a reference price. This method is used to provide a tariff equivalent. However, Beghin and Bureau contend that because of data limitations, analysis with this method has been successful in only a few case studies.

Frequency measures

The second method Beghin and Bureau examine is the inventory-based approach. Measures under this approach include the number of restrictions, frequency ratios (the number of product categories subject to an NTB as a percentage of the total number of product categories in the classification), and the import coverage ratio (the value of imports of each product subject to an NTB as a percentage of total imports of that product). These are known as frequency measures; they identify the incidence of NTBs, but not the impact. For example, Bora (2003) uses frequency measures to demonstrate that, worldwide, non-tariff measures are more prevalent for agricultural and fishery products than for manufacturing products.

Surveys

A third approach is the survey. Surveys allow the possibility of prioritizing the different types of instruments, and they can be used to determine which specific NTBs are important to the exporter. Surveys have shown that important NTBs include labeling, quality assurance, quarantine, lack of transparency, discrimination in the application of standards, excessive documentation, slow customs clearance, lack of predictability, arbitrary enforcement of rules, and lack of harmonization and simplification of clearance procedures (Bora).

The 2003 study published by the OECD compiles and analyzes findings from surveys from around the world. The most reported NTBs in these surveys include technical measures, customs rules and procedures, import licensing and quotas, transport regulations or costs, internal taxes or charges, and competition-related restrictions on market access (Table 1). Specific technical measures mentioned in these surveys include additional costs to render products compatible with national specifications; problems relating to local standards; labeling;

quality assurance/food safety and health/SPS/inspection and testing requirements; quarantine issues; arbitrary enforcement of requirements; and discrepancy in quality standards for domestic and imported products. Problems mentioned with customs rules and procedures include too much documentation, lack of predictability, slow customs clearance, overly complex customs regulations, arbitrary enforcement of rules, and lack of harmonization.

Estimating the effect of non-tariff barriers on trade and welfare

Beghin and Bureau also discuss methods that could be used to estimate the effects of an NTB on trade and welfare. Such methods include gravity models, general equilibrium and partial equilibrium models, and risk-assessment-based cost-benefit measures. They note that a gravity model can be used to estimate, among other things, how much trade is foregone because of the border effect. Information on regulations (obtained from frequency measures or surveys) could be used in the model as explanatory variables. Partial equilibrium models can also be used to analyze the sectoral effect of standards and technical regulations on trade. Risk-assessment-based cost-benefit measures can be used to indicate which regulations are trade barriers on the basis of the effect on welfare. The costs of the regulations can be compared to the gains associated with the reduction of any negative externality in order to determine the efficiency and protectionist effect of the regulations. The main limitation of this approach, Beghin and Bureau note, is uncertainty regarding the level of risks and the economic consequences. For example, when performing cost-benefit analysis of an SPS regulation, the probability of contamination or spreading of a disease or pest and the associated costs would have to be estimated.

Treatment in Trade Agreements

New trade agreements, including WTO negotiations, are addressing non-tariff issues such as services, investment measures, competition policy, intellectual property rights, government procurement, standards, customs procedures, and trade facilitation. The non-agricultural market access (NAMA) negotiations in the WTO address both tariff and non-tariff barriers, and there are other parts of the Doha Development Agenda that address topics such as investment measures, services, competition policy, trade facilitation, government procurement, etc. (Ferrantino 2003). WTO negotiations on trade facilitation focus on issues such as excessive documentation, inadequate use of information technology, lack of transparency, unclear import and export requirements, inadequate procedures, and lack of cooperation among customs and other government agencies (Bora 2003). Bora states that practical guidelines to foster transparency, predictability, and uniformity that would be consistent within WTO rules include harmonization of laws and regulations, simplification of administrative and commercial procedures and documents, and standardization of transport means.

The WTO agreement on Technical Barriers to Trade (TBT) tries to ensure that regulations, standards, testing, and certification procedures do not create unnecessary obstacles. A technical regulation is an unnecessary obstacle to trade when it is more restrictive than necessary to achieve the given objective or when it does not fulfill a legitimate policy objective. Technical

regulations and standards set out specific characteristics of a product - such as its size, shape, design, functions and performance, or the way it is labeled or packaged before it is put on sale. The principles of the TBT Agreement are avoidance of unnecessary obstacles to trade, non-discrimination and national treatment, harmonization, equivalence of technical regulations, mutual recognition of conformity assessment procedures, and transparency. Article 2.2 of the agreement specifies that legitimate objectives of a technical regulation include inter alia: national security requirements, prevention of deceptive practices, and the protection of human health or safety, protection of animal and plant life or health or the environment.

An issue that the WTO has attempted to address is how countries can assure their customers that the food they are receiving is safe to eat by the standards each country deems appropriate, and at the same time, ensure that strict health and safety regulations are not being used as an excuse to protect domestic producers. The WTO's *Agreement on the Application of Sanitary and Phytosanitary Measures* sets out the basic rules for food safety and animal and plant health standards. It allows countries to set their own standards and methods of inspection. However, the regulations must be based on science, they should be applied only to the extent necessary to protect human, animal, or plant life or health, and they should not arbitrarily or unjustifiably discriminate between countries where similar conditions prevail. Common SPS measures include requirements for products to come from a disease-free area, inspection of products, specific treatment or processing of products, setting maximum allowable levels of pesticide residues, and limits on the permitted use of certain additives in food. A country can challenge an SPS measure in another country on the grounds that there is not sufficient scientific evidence to support the need for the trade restriction.

SURVEY OF NORTH DAKOTA AGRIBUSINESSES

A survey of North Dakota exporting businesses involved in agriculture was conducted to better understand which specific barriers are important to agricultural exporters in this region. Surveys not only identify trade barriers but can provide information about the importance of specific barriers to exporters and the level of success that these business have in confronting restrictions.

Survey Method

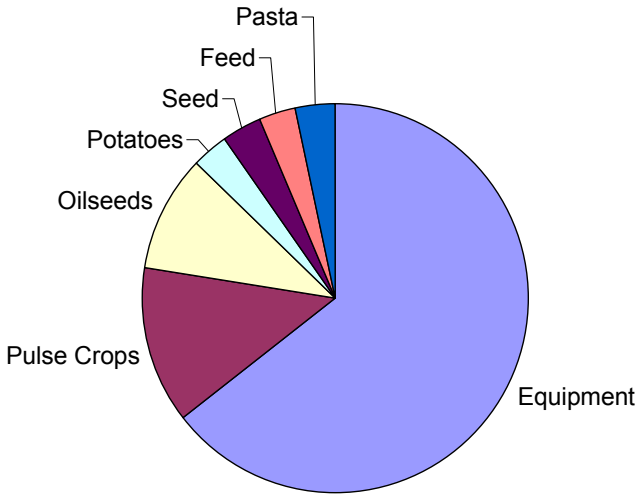
A list of exporting North Dakota businesses was obtained from Export North Dakota's website. Export North Dakota, a service of the North Dakota District Export Council, is in the process building an online, searchable database listing North Dakota companies that export products or services. It is not a complete list of all exporting firms, though. From this online database were drawn the names and phone numbers of many companies involved in agricultural processing and manufacturing. These companies were contacted and surveyed by phone. The survey included general questions about the business - such as the number of years engaged in exporting, types of products exported, major destinations of exports, modes of transportation used, and percentage

of annual sales from exports - followed by questions on NTBs, the degree of competition from other exporting firms, potential markets, difficulties in establishing new markets, and types of assistance received from either the government or private firms (see Appendix). A total of 31 businesses responded to the survey.

Characteristics of Businesses Surveyed

Of the 31 businesses surveyed, 20 firms manufacture agricultural equipment (Figure 1). The Export North Dakota listing of exporters included a large number of agricultural equipment manufacturers, which is reflected in the survey sample. The other 11 responses came from firms exporting products such as pulses, livestock feed, seed, soybeans, sunflowers, pasta, and potatoes. Pulse crops were most represented among this group. Two respondents are exporters of edible beans; another is an exporter of peas, lentils, and chick peas; and another buys pulse crops from local growers and cleans, processes, and bags them before exporting. No responses were obtained from grain producers. Wheat is a major commodity in North Dakota, but most grain farmers are not exporters since they sell their grain to elevators who, in turn, sell to grain trading companies.

Figure 1. Types of Products Exported by Survey Respondents

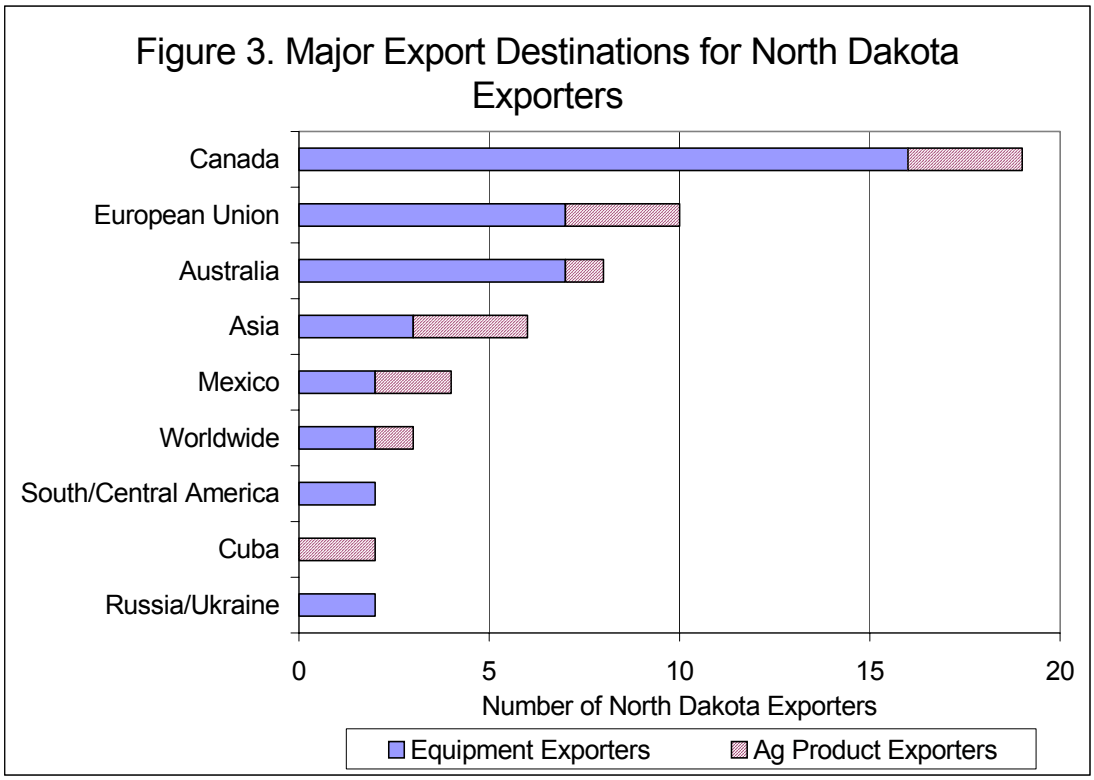


The experience these companies have in exporting ranges from one year to over 20 years (Figure 2). Seven companies have been in the exporting business for three years or less, six have been exporting for four to seven years, six have been exporting for about 10 years, five have been exporting for about 15 years, six have been exporting for 20 or more years, and one simply said their firm has been exporting for over 10 years. The range of experience is fairly similar

between ag-product exporters and equipment exporters. Of the six firms that have been exporting for 20 years or more, three produce agricultural products and three produce equipment. Among companies that have less than 10 years of experience, four produce agricultural products and eight produce equipment.

The importance of exports for these companies also varies. Fourteen respondents said that 10% or less of their total sales are from exports, nine said that exports comprise about 11 - 30% of their total sales, three said that about half of their total sales are from exports, while four rely on exports for 70% or more of their total sales. In general, the companies producing agricultural commodities and processed products rely on exports more than the equipment manufacturers.

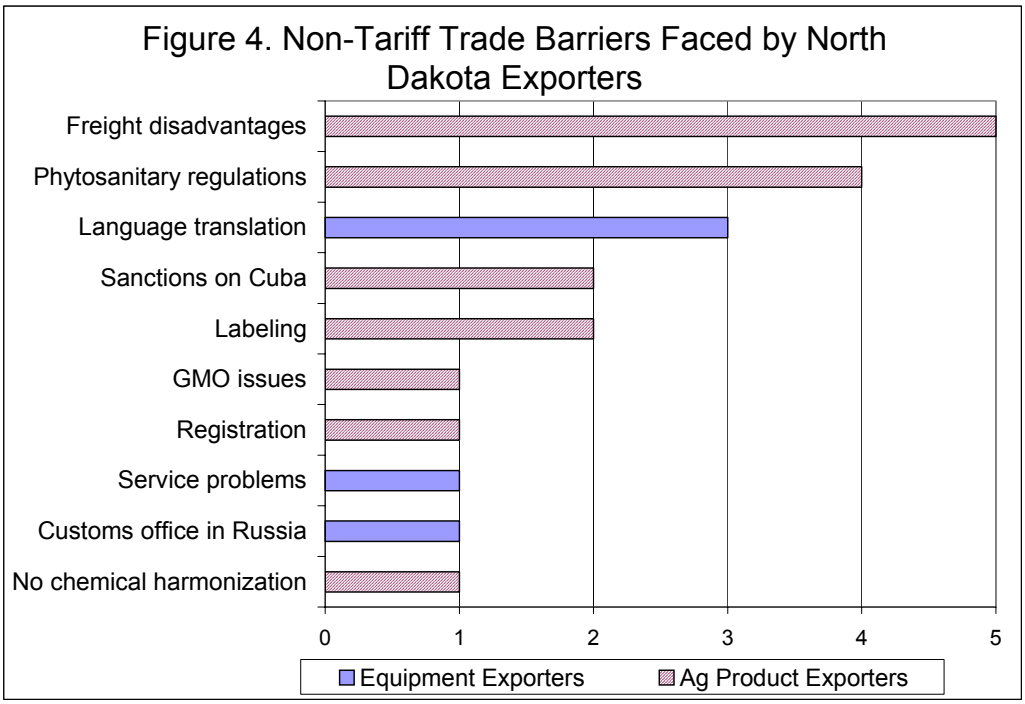
The goods these companies produce are shipped all over the world (Figure 3). The most common market for the equipment exporters is Canada; 16 of the 20 equipment businesses mentioned Canada as one of their most important export destinations. Australia was mentioned by seven of these 20 respondents, while Europe, Russia, Ukraine, Mexico, Asia, and South America were also mentioned as destinations. Exports of agricultural commodities and products are also shipped all over the world, with destinations including Canada, Mexico, Europe, Japan, and Cuba.



Major Non-Tariff Barriers

All but two of the 11 exporters of agricultural commodities or processed products reported some type of NTB. Some of these were only minor problems, which the respondents said they were usually able to settle. However, many companies find that when one problem is resolved, a new one usually emerges, and some problems are more difficult to resolve than others. Two of the most common and significant barriers mentioned include phytosanitary regulations and railroad disadvantages (Figure 4).

Exporters of agricultural equipment appear to face fewer NTBs. In fact, only six of the 20 companies mentioned any NTB. The NTB mentioned the most among these exporters was the language barrier.



Phytosanitary and food safety regulations

Exporters of food-grade soybeans, edible beans, peas, and lentils mentioned difficulties with food safety regulations and problems obtaining phytosanitary certificates. An exporter of dry edible beans to Mexico mentioned that there are a number of recurring obstacles, and that the phytosanitary issue is an ongoing problem. Another respondent who also exports edible beans to Mexico said that obtaining a phytosanitary certificate is almost impossible. This is particularly true, in their view, for North Dakota, compared to other states. An exporter of peas, lentils, and chick peas stated they ship by hopper to Vancouver before shipping overseas. This exporter discussed difficulties in getting a phytosanitary certificate from either the United States or Canada. This was a workable issue, but required considerable effort. The exporter commented that the United States needs to take the lead in this issue.

Food safety standards are a significant obstacle for one exporter of food-grade soybeans to Japan. This respondent said that Japan also imports from China, and that China has a very unsafe food system. Because of poor food quality in China, Japan enacted food safety standards for all of its imports, including those from the United States. The respondent's argument was that U.S. food is the highest quality food in the world, and that importers need to recognize the safety of the U.S. food system when applying food safety regulations.

Railroad problems and freight disadvantages

Another source of frustration for exporters is the railroad. Complaints include high freight rates and unavailability of cars. These problems put North Dakota exporters at a disadvantage

compared to exporters from Canada and other parts of the United States. In addition, one exporter said that the quality of hopper cars is very poor and that the railroad assigns exporters the responsibility of repairing them. These repair costs became an additional, major expense for exporters. Another respondent remarked that it is very important to maintain a viable local hub for export containers. One business reported hiring an individual specifically to deal with railroad issues. Subsidized freight in competing countries was also cited as a problem. A producer of dry pasta who recently began exporting to Cuba said that subsidized freight from Italy puts the business at a disadvantage.

Others

Three exporters of equipment stated that translating manuals and similar language barriers create difficulty. These businesses have hired translators to deal with the problem. One exporter mentioned credit issues as a barrier; a number of other exporters also mentioned credit issues when asked about difficulties in establishing new markets.

An exporter of sugarbeet equipment expressed difficulties in dealing with Customs officials in Russia. This company has had to hire agents in Russia to deal with this problem. Also, a company that exports equipment to Canada is restricted because they do not have a service center located in Canada; the difficulty in crossing the border to service their equipment creates a barrier to trade.

Other barriers mentioned by respondents include product registration, labeling requirements, paperwork, GMO issues, and sanctions on Cuba. An exporter of livestock feed to Canada mentioned the need to register products, but stated it was a minor issue which affected only one product. Some companies listed labeling requirements as a barrier, and one mentioned increased paperwork caused by demand for identity-preserved products. This exporter downplayed the importance of the issue in their own case, stating the company has exported products for a number of years and is secure with its customer base. The respondent did say, however, that the labeling requirements could be a big issue for other exporters without a secure customer base. GMO issues were a problem for an exporter of food-grade soybeans to the Pacific Rim, but they are not as much of a problem right now. U.S. sanctions on Cuba were also mentioned as a trade barrier since a few of the companies surveyed have started to export to the country. One respondent who exports mostly to Mexico said that Mexico has the tendency to occasionally just shut down the border.

General trend in non-tariff barriers

All of the exporters who face non-tariff trade barriers said that these barriers are either increasing or remaining the same; none said that they are decreasing. About half of those who responded to this question said that these barriers are increasing, while the remainder said they are remaining constant. Those respondents who reported increasing levels of barriers are exporters of products such as soybeans, pulse crops, feed, and seed. They reported that problems with the railroad have been increasing, and that recent terrorist acts have led to increased security and additional documentation. Equipment exporters did not see any trend in NTBs.

Potential Markets and Difficulties in Establishing New Markets

A number of exporters said that they are interested in increasing their presence in some markets and expanding into new markets. All but six exporters mentioned some market that they are interested in entering or expanding.

Potential markets

Exporters of pulse crops and pasta mentioned Cuba as a potential market. They said that the opening of Cuba is a good opportunity for them. Current U.S. sanctions, however, restrict their ability to export to the country. Among the exporters of agricultural commodities or products, three businesses mentioned Mexico, one mentioned Africa, and three mentioned parts of Asia, including China, Japan, Korea, Southeast Asia, India, and Pakistan. Exporters of agricultural equipment most commonly said they are interested in the Middle East (mentioned by six respondents), while South America (mentioned three times), Russia (three), Mexico (two), Ukraine (one), Asia (one), and the European Union (one) were also noted. Three respondents said they are interested in expanding exports all over the world.

Difficulties in establishing new markets

Exporters seem to face many difficulties in establishing new markets. One exporter said they have been surprisingly successful in finding new markets, and a few others did not mention any specific problems, but most respondents commented on some difficulties they face. Exporters most commonly responded that making contacts was the biggest difficulty in establishing new markets. Learning the right regulations in each country and the proper documentation is an issue. One exporter said that a lack of familiarity, distance, and the language barrier made it difficult to resolve problems. A few other exporters also mentioned the language barrier.

Distribution logistics within the new country can also be an issue, and freight is an issue. A few exporters mentioned that freight rates and rail dependability creates difficulties for North Dakota exporters.

Two respondents said that the biggest difficulty they face is low-cost competition from other countries, especially China. One of these exporters commented on the poor quality of products from these low-cost competitors, and that importers do not recognize the quality advantage of U.S. products.

Many exporters of agricultural equipment mentioned credit issues as the biggest difficulty they face in establishing new markets. Importers typically buy on credit, and this can be a problem for exporters trying to enter new markets, especially in places such as Russia and the Middle East. The Ex-Im Bank helps with the credit issues, but has not been able to help with exports to Russia. One exporter of agricultural equipment who is looking at markets in the Middle East said that political problems are a difficulty in exporting to Iran, while trust is an issue in exporting to Turkey.

Trend in competition

The degree of competition among exporting firms appears to be increasing. Out of 27 responses to this question, 17 said that competition is increasing, while 10 said that it is remaining about the same. Exporters of all types of products said that competition is increasing. Stiff competition from low-cost producers in China was specifically mentioned by a few exporters. Others mentioned that they compete with producers from Canada.

Export Assistance

The exporters were asked if they receive any export assistance from the government or from private firms. One equipment exporter mentioned the Ex-Im bank, but no other exporters of agricultural equipment mentioned any assistance. In fact, two exporters of equipment said that they have tried to get assistance from the government, but received none. Some exporters of commodities and processed goods mentioned that they have received assistance from the government. Four exporters said they received assistance at trade shows, and three mentioned that they have received help from the Mid-America International Agri-Trade Council (MIATCO). One exporter said that in addition to trade shows, they have received grants from the government that have helped considerably. The exporter said the government has some good programs that give the necessary education to potential exporters. A few exporters also mentioned benefitting from the food aid program (PL 480). North Dakota exporters can obtain assistance from MIATCO, the North Dakota Agriculture Department's Marketing Services, and the North Dakota District Export Council.

Most exporters said that they do not receive any assistance from private firms, although a few mentioned getting help from local banks and financial institutions. One cited help from an export company, and one said that the national commodity association and its lobbyists in Washington help.

CONCLUSIONS

The objective of this study is to identify non-tariff barriers (NTBs) and difficulties in establishing new markets that U.S., specifically North Dakota, agricultural exporters face. As tariffs have received increasing global attention, non-tariff issues have become more important as barriers to trade. Non-tariff measures include those that have the specific intent of restricting imports or stimulating exports; those that have the primary intent of dealing with economic, social, and political problems but are occasionally used to restrict imports or stimulate exports; and those that are not intended to be used for trade protection but which inadvertently cause trade distortion. Common NTBs in agriculture include health and sanitary or phytosanitary regulations; import quotas; licensing, packaging and labeling regulations; and customs rules and procedures.

The general consensus among North Dakota exporters of commodities and processed goods is that they do face a number of obstacles. It may take some time and effort, but most businesses are able to solve the problems. However, when one issue is resolved, another one often emerges. Some of the trade barriers are more troublesome than others, and occasionally they cannot be resolved. A few businesses hire people to deal with these issues. Phytosanitary regulations and railroad problems are two issues of frustration that create export barriers for North Dakota businesses. Railroad issues may not fit the definition of NTBs since they are not government-implemented policies, but they nevertheless are serious issues that restrict the ability of businesses to export. Because Burlington Northern Sante Fe is the only major railroad serving North Dakota, railroad rates are relatively higher than those in other areas. This makes North Dakota exporters less competitive in foreign markets. Other NTBs mentioned in the survey of North Dakota exporters include labeling, paperwork, registration, and language differences.

When entering new markets, the major problems experienced by exporters are making contacts, resolving credit issues, and competing with low-cost competitors from foreign countries. Cuba was mentioned by a few exporters as a market they would like to enter or one in which they would like to increase their presence. A few North Dakota businesses are receiving assistance from the government, but it appears that many are not taking advantage of the assistance the government provides.

Responses from businesses that export agricultural commodities and processed goods indicate that NTBs are increasing. To prevent an increasing trend in NTBs, the multilateral and regional free trade agreements are expected to deal with reductions of NTBs as well as tariffs. Developing a harmonized system of regulations for port entry, SPS regulations, customs rules and procedures, inspections systems, etc., could enhance trade flows among countries.

In North Dakota, a few factors would help exporters overcome NTBs. First, government programs exist in order to provide necessary information to assist the agribusiness industry in exporting their products, but these programs could be better utilized. Second, North Dakota exporters would benefit from rail competition and better railroad service. Third, universities, including North Dakota State University, could provide increased technical assistance to enhance the quality of products produced in the state. Finally, the state could be more helpful to exporters trying to comply with sanitary and phytosanitary rules.

APPENDIX

Non-Tariff Trade Barrier Survey

Name of Firm:

Address:

1. Years in export business:

2. Types of agricultural products and/or equipment exported:

   Processed Agricultural Goods _____

   Raw Commodities (e.g. wheat, corn, soybeans, etc.) _____

   Agricultural Equipment _____

   Other _____

3. Major destinations of your exports:

   a.
   b.
   c.
   d.

4. What types of transportation do you commonly use?

   a. Air
   b. Vessel
   c. Other _____

5. Average annual export sales: $

6. Major non-tariff trade barriers you have faced in the past 5 years:

    a.
    b.
    c.
    d.

7. General trend in the non-tariff barriers is

    a. Increasing
    b. Decreasing
    c. About the same

8. How have you dealt with the non-tariff trade barriers?

9. Degree of competition with other exporting firms is

    a. Increasing
    b. Decreasing
    c. About the same

10. Potential markets/regions for your exports in the near future:

11. Major difficulties in establishing new markets:

12. What types of assistance have you received from the U.S./local government?

13. What types of assistance have you received from private firms (e.g. marketing consulting firms)?

14. Comments:

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