

## A Multisource Inventory of NTMs for Analytical Purposes

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### Abstract

The USITC has developed a database including non-tariff measures for goods and services. This paper explains the primary elements of the database and presents a preliminary summary of the data. According to a preliminary review of the data of the 53 economies in the database, at least two-thirds have been cited in the following areas, investment policies, services policies, standards, testing, certification and labeling, and intellectual property rights. A large number of goods and services sectors are affected by NTMs.

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### Overview

The Office of Economics of the U.S. International Trade Commission is currently conducting research with the objective to improve the quantification of the effects of non-tariff measures (NTMs) on trade flows and other economic variables.<sup>2</sup> A central feature of this effort is the generation of a global database of NTMs for products (both goods and services products), including many economies in the Asia Pacific Economic Cooperation forum (APEC) and the proposed Free Trade Area of the Americas (FTAA).<sup>3</sup> The preliminary database includes information regarding NTMs that have been notified or alleged in 53 economies (Table 1). It also provides information on these goods and services products and on the sectors that are affected by NTMs as well as reference sources. The various elements of the database are discussed in this article, followed by a preliminary overview of the data.

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<sup>2</sup> Inclusion of a citation or item in the database does not constitute an opinion regarding the WTO-consistency or lack thereof, discriminatory impact or lack thereof, or economic effect of that item. The intended purpose of the database is for general research into the economic effects of NTMs in support of USITC's customers.

<sup>3</sup> The NTM database contains information for 19 of the 21 APEC economies and 14 of the 34 FTAA economies.

Table 1: Economies in the database

Argentina #	Hungary	Paraguay #
Australia *	Iceland	Philippines *
Azerbaijan	India	Poland
Bangladesh	Indonesia *	Romania
Brazil #	Israel	Russian Federation *
Cameroon	Japan *	Singapore *
Canada * #	Kenya	South Africa
Chile * #	Korea (Republic of) *	Switzerland
China *	Libya	Chinese Taipei *
Colombia #	Malaysia *	Thailand *
Costa Rica #	Mexico * #	Tunisia
Czech Republic	Morocco	Turkey
Ecuador #	New Zealand *	United States * #
Egypt	Nigeria	Uruguay #
European Union	Norway	Venezuela #
Gabon	Pakistan	Vietnam *
Guatemala #	Panama #	Zimbabwe
Hong Kong *	Papua New Guinea *	
* denotes APEC economies		
# denotes FTAA economies		

There are a number of other surveys which provide information on NTMs, however, the USITC NTM database is unique in its scope, content, and organization. More specifically, while the other surveys contain many entries, they differ in their definitions of NTMs and are limited in the number of NTM categories of barriers. The USITC database provides information on fifteen categories of non-tariff measures compared to fewer categories for the other surveys. In compiling the database, information has been obtained from several sources including the Office of the United States Trade Representative's (USTR) National Trade Estimate Report on Foreign Trade Barriers (NTE), the European Union's (EU) Market Access Database and the World Trade Organization's (WTO) Trade Policy Reviews.<sup>4</sup> The information contained in the NTE reports and the EU database survey foreign trade measures as reported by government officials and company representatives in the United States and the EU. The WTO Trade Policy Reviews provide information on an economy's trade regime as reported by the WTO Secretariat.

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<sup>4</sup> For access to the USTR database, see <http://www.ustr.gov>; for the EU database, see <http://www.mkacddb.eu.int>; and for the WTO database, see <http://docsonline.wto.org>.

There are strengths and limitations associated with each of the three reference sources. All of the sources generally include some of the same categories of NTMs; however, the descriptions of specific NTMs vary, as does their coverage. Some references contain information regarding only a few NTM categories. For example, the EU's Market Access Database contains information on NTMs for most economies prior to 2001, but includes only a few NTM categories and provides only general information for each category. The WTO reviews economies with varying frequencies and does not assess all of them annually. Therefore, the WTO Trade Policy Reviews do not provide information for every economy under consideration in the USITC NTM database. The USITC database includes only information from the Trade Policy Reviews conducted from 1998 to 2002. The Trade Policy Reviews are most detailed for such categories as import prohibitions, quotas, licensing, and standards. For many economies, the USTR's NTE report provides more in-depth information on NTMs, than does either the EU Market Access Database or the WTO Trade Policy Review.

A major element of the USITC database—in addition to the specific economy and product/sector information, as well as references—is information on the NTMs. There is no standard classification scheme for NTMs. However, several major different classifications have been developed by such as Robert Baldwin (1970, 1984),<sup>5</sup> UNCTAD (TRAINS, 2000), Deardorff and Stern (1985),<sup>6</sup> and OECD (2002).<sup>7</sup> The main problem with classifying NTMs is that they cover a very broad range of policies and practices, especially if all measures—other than tariffs—that impede trade or raise that the cost of trading

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<sup>5</sup> Baldwin, Robert E. (1984), "Trade Policies in Developed Countries," Chapter 12 in Handbook of International Economics Volume 1: International Trade, Jones, Ronald W., and Peter B. Kenen, eds., Elsevier Science Publishers, Amsterdam.

Baldwin, Robert E. (1970), Nontariff Distortions of International Trade, The Brookings Institution, Washington, DC.

<sup>6</sup> Deardorff, Alan V., and Robert M. Stern (1997), "Measurement of Non-Tariff Barriers," University of Michigan, OECD/GD(97)129.

<sup>7</sup> Fleiss, Barbara (2002), Trade Directorate, OECD, Paris, "Work at OECD on NTMs," WTO Seminar on Market Access, Geneva, May 30.

are included. Furthermore, NTMs can be formal, including governmental regulations, policies and administrative procedures or they can be informal practices. And, although not all categories of NTMs are applicable to all economies and sectors/products there are similarities in NTMs across categories, economies, and sectors/products.

The NTMs in the USITC database include both formal governmental regulations (e.g., customs regulations) and policies (e.g., investment-related measures), and informal barriers and practices (e.g., nontransparency, arbitrary enforcement, corruption). These formal and informal barriers may affect a different number of sectors and different tariff lines. For example, some economies may have formal governmental NTMs that affect only a few sectors or tariff lines while they have informal practices such as inadequate enforcement of anticompetitive practices or corruption which act as barriers to imports in many sectors. Table 2 lists the 15 classification categories in the USITC’s database. Most of the categories can be found in other classification systems, except for taxes, which is separated out in the USITC database.

Table 2 provides the fifteen (15) categories that are presented in the USITC NTM database.

Table 2: NTM Categories

Anticompetitive practices / competition policy
Corruption
Customs
Exports
Government procurement
Import licensing
Import prohibitions
Import quotas
Intellectual property rights
Investment
Sanitary and phytosanitary requirements
Services
Standards, testing, certification and labeling
State-trading
Taxes

**Explanation of Terminology and Composition of Database**

The following counts should be interpreted with caution, since the source data tend to reflect concerns about market access to large world markets, and perhaps to more readily identifiable policies. Problems of market access in smaller markets in developing economies may be under-represented, as are less transparent problems with market access. In particular, strong inferences about the prevalence or severity of particular types of measures based on comparative counts of entries in the database should not be made. These counts are presented here for illustrative purposes only.

The counts represent entries in the database. There are over 3300 individual entries currently in the database, including many related to agricultural products and to services products. Each entry includes information entered regarding: 1) an economy; 2) an NTM category; 3) a generic barrier, and; 4) product/sector. One example of an entry would be: 1) Australia; 2) sanitary and phytosanitary requirements; 3) inspection, and; 4) fruit (apples). In some cases the description of the sector is listed as “horizontal” if it contains many or all products or sectors. Individual measures are aggregated into NTM categories, however a measure can map to more than one of these categories. The purpose for constructing this database was to identify policies that influence industrial and agricultural market access so as to be able to utilize the information in economic modeling.

The information for each NTM is identified by economy, category, barrier (generic and specific), and product/sector. The database is not designed as a classification, but rather to be useful in modeling. And, while there is no unique aggregation scheme defined for the data, the data can be grouped in many different ways. Some examples will be provided.

Many NTM categories are affected by the same generic barriers or specific measures and therefore, generic barriers and specific measures appear across the range of NTM categories. The same is true for specific measures. These situations arise because the NTM categories do not relate either to particular products or to specific industries. A service product, such as the services of a foreign licensed accountant which might be thought to be unique to the “Services” NTM category, can actually appear

either in that category or in the “Standards, testing, certification and labeling” or the “Import prohibitions” NTM category or in all of the categories. The generic barrier in this example would be “certification.” Several other examples of generic barriers which cross NTM categories are presented in Table 3, e.g., some form of “approval” is reported in the NTM categories: 1) “Import licensing;” 2) “Sanitary and phytosanitary requirements,” and; 3) “Standards, testing, certification and labeling,” 4) “Services;” 5) “Exports;” 6) “Investment,” and; 7) “Customs.” It is quite likely that the approval process and its impact differs among these categories. Two other examples provided refer to the generic barriers of “licensing,” and “prohibitions.”

Table 3: Generic barriers

NTM category	count	Generic barrier	count
		approval	
Import licensing	62		
Sanitary and phytosanitary requirements	10		
Services	6		
Exports	5		
Investment	5		
Customs	3		
Standards, testing, certification and labeling	1		
		approval total	92
		certification	
Standards, testing, certification and labeling	58		
Sanitary and phytosanitary requirements	27		
Import licensing	4		
Customs	2		
Exports	2		
Services	1		
		certification total	94
		licensing	
Import licensing	81		
Exports	77		
Services	21		
Import prohibitions	5		
Standards, testing, certification and labeling	3		
Customs	1		
		licensing total	188
		prohibited	
Import prohibitions	327		
Exports	82		
Investment	50		
Services	38		
Sanitary and phytosanitary requirements	17		
Import licensing	15		
Customs	3		
Standards, testing, certification and labeling	3		
Anticompetitive practices / competition policy	1		
Intellectual property rights	1		

Another aspect of the database is the information on the specific products or sectors affected by NTMs. The USITC database contains both industrial sectors such as motor vehicles (automobiles) and pharmaceuticals as well as specific products such as alcoholic beverages (wine) and margarine. It also includes a large number of service sectors such as telecommunications, banking, and legal services. Some sectors or products are affected by more than one NTM. For example, a product such as wheat

may be affected by import prohibitions as well as state-trading. Many sectors or products are affected by the similar NTMs. For example, imports of cosmetics, medical equipment, and lighting fixtures are each affected by required inspections in some economies.

### **Preliminary Data Summary**

#### NTM categories

It may be noted that some NTM categories are more frequent identified among the 53 economies in the preliminary database than are others. According to the following tabulation, the data indicate that 46 economies were cited as having some inadequacy with regard to intellectual property rights protection—the greatest number of economies so notified. The next most widespread NTM categories were “Investment” (40 economies), “Standards, testing, certification and labeling” (38), “Services” (36), and “Import prohibitions” (34). “Corruption” was cited least, in only 15 economies.

Table 4: Entries

NTM category	NTM database		APEC economies	
	counts	economies	counts	economies
Exports	430	33	187	13
Import licensing	408	30	244	12
Standards, testing, certification and labeling	407	38	250	15
Import prohibitions	334	34	163	16
Services	297	36	166	15
Investment	280	40	183	15
Intellectual property rights	253	46	109	18
Customs	213	32	132	11
State-trading	174	29	74	11
Sanitary and phytosanitary requirements	156	25	67	12
Government procurement	109	33	52	11
Import quotas	94	17	64	8
Taxes	68	17	19	7
Anticompetitive practices / competition policy	55	17	35	8
Corruption	33	15	10	4

For the database as a whole, the measures with the greatest number of entries are found in the “Exports,” “Import licensing,” and “Standards, testing, certification and labeling” categories. With

regard to the latter category, technical regulations, standards, and conformity assessment procedures are covered under the WTO Agreement on Technical Barriers to Trade (“TBT Agreement”).<sup>8</sup> The TBT Agreement provides for certain exceptions to international standards for specific, legitimate objectives such as “to ensure the quality of ... exports, or for the protection of human, animal or plant life or health, of the environment, or for the prevention of deceptive practices” whenever international standards do not exist or are inadequate.<sup>9</sup>

The above categories do not necessarily reflect the way in which issues may be raised in trade negotiations. Several of the USITC NTM categories refer to topics as referenced in the Doha Declaration under areas other than “industrial market access.” Others, four of the USITC NTM categories (intellectual property rights, investment-related measures, government procurement, and competition policy) are referenced under major headings of the Declaration, one (customs procedures) is arguably related to “trade facilitation” by reference to particular GATT articles, and one (sanitary and phytosanitary standards) is referenced in Doha under “trade and environment.” Thus, terminology and aggregation schemes do differ.

#### Products and sectors

The count of leading products and sectors in the database presented in Table 5 is very preliminary. Most of these are goods products, however the predominant one “services,” which refers to the aggregation of services products wherever in the NTM categories those services appear. In constructing the database clearly related products and sectors have been grouped together and an attempt

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<sup>8</sup> WTO, “Agreement on Technical Barriers to Trade,” *The Results of the Uruguay Round of Multilateral Trade Negotiations* (Geneva:WTO, 1995). See, for example, the Preamble and TBT Article 1 (General Provisions), at Art. 1.6.

<sup>9</sup> WTO, “Agreement on Technical Barriers to Trade,” *The Results of the Uruguay Round of Multilateral Trade Negotiations* (Geneva:WTO, 1995), TBT Art. 1; and additional information from WTO, “Agreement on Technical Barriers to Trade,” found at Internet address [http://www.WTO.org/english/docs\\_e/legal\\_e/17-tbt.pdf](http://www.WTO.org/english/docs_e/legal_e/17-tbt.pdf), retrieved on Aug. 26, 2002.

to standardized the nomenclature was made. No attempt has been made to exclude entries referring to policies which may be WTO-consistent, or related to obvious health, safety, or national security concerns.

Table 5: Products and sectors

products / sectors	count
services	430
horizontal	389
agricultural products, fruits, grains, and dairy products	250
animal products and meat	157
pharmaceuticals, medicines, etc.	97
textiles and apparel	90
motor vehicles and parts	89
animals	79
alcoholic beverages	73
weapons	67
machinery, equipment, and appliances (except electrical or electronic)	60
fish	45
wood and wood products	44
electrical/electronic equipment and products, including telecom equipment	42
chemicals	39
petroleum and petroleum products	39
computer software	38
recordings (audio & video)	30
footwear and parts	20
toys	14
tires	14
medical devices	14
fertilizers	13
cosmetics	11

### Services products

There are a large number of different service sectors affected by NTMs. According to the database, there are more than 100 different services products enumerated in this USITC database that are affected by NTMs.<sup>10</sup> The services range from accounting services to water services and these occur

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<sup>10</sup> Services products are different from the “Services” category, because many services products are entered in other categories.

across the NTM categories. For example, 13 NTMs on service products were identified as present in the category “Anticompetitive practices/competition policy,” 7 in “Corruption,” etc. ( Table 6).

Table 6: Services products

NTM category	NTM database	APEC economies
	count	count
Services	229	13
Investment	72	48
State-trading	43	5
Intellectual property rights	42	22
Government procurement	16	11
Anticompetitive practices / competition policy	13	8
Corruption	7	1
Standards, testing, certification and labeling	4	4
Exports	3	2
Sanitary and phytosanitary requirements	1	0

#### Horizontal NTMs

Many (389) categories of NTMs are horizontal, that is, they affect many or almost all products. This appears to be particularly true of “Government procurement,” “Customs,” “Investment,” “Exports,” “Intellectual property rights,” and “Anticompetitive practices/competition policy,”. “Standards, testing, certification and labeling,” while often cited as “horizontal,” more often affect specific products or sectors.

Table 7: Horizontal NTMs

NTM category	NTM database	APEC economies
	count	count
Government procurement	62	20
Customs	60	20
Investment	59	25
Exports	58	18
Intellectual property rights	39	9
Standards, testing, certification and labeling	37	13
Anticompetitive practices / competition policy	22	13
Corruption	13	2
Import prohibitions	12	7
Taxes	8	3
Import licensing	7	0
State-trading	6	4
Sanitary and phytosanitary requirements	5	2
Services	1	0

Some additional insights can be gained from looking at multiple citation patterns relating to major categories of NTMs to products, such as was presented in Table 6. For example,

- Motor vehicles and parts are particularly affected by import licensing, import prohibitions (particularly for parts and used vehicles) and import quotas.
- Import licensing also affects chemicals, equipment and machinery, fish, petroleum, and weapons.
- Chemicals, pharmaceuticals, and recordings are particularly affected by intellectual property.
- Pharmaceuticals are also affected by product standards in many economies, as are cosmetics, equipment, motor vehicles, and textiles.
- Customs procedures are particularly important for textiles and footwear.
- Sectoral entries for investment-related measures refer primarily to services. Significant references for industrial products include motor vehicles and weapons.

In conclusion, the USITC’s database is in its preliminary stages of development. Therefore, final conclusions cannot be drawn based on its contents at the present time, although a broad summary of the data as it currently stands has been provided here. The most frequently cited non-tariff measure *overall* is classified as “Standards, Testing, Certification, and Labeling,” perhaps because this type of NTM is

very broad and may affect many individual products goods and services products. Finally, the data show that a very large number of services sectors are currently affected by NTMs. The sectors range from broad areas such as telecommunications and legal services to specific professions such as accountants to journalist.