I can’t understand the tariff dataset…

C2

C2. Background on Trade Policy Measures in WITS

This section of the module introduces you to different types of protection data that are available through WITS. We will cover the following issues:

- The different types of tariffs (bound vs. applied; MFN vs. preferential)
- The importance of binding coverage and binding overhangs
- Different forms of tariff rates (Ad Valorem, specific and compound) and using WITS to estimate Ad Valorem equivalents
- Types of non-tariff measures available through WITS

C2.1. Sources of Protection Data

WITS includes three databases that contain protection data disaggregated to the tariff-line level.

- UNCTAD’s Trade Analysis Information System (TRAINS)
- WTO’s Integrated Database (IDB)
- WTO’s Consolidated Tariff Schedules Database (CTS)

The matrix below shows the different measures that each of these databases currently contains, plus the number of countries for which the database has information. You can identify the coverage for each given year by looking at the catalogs under the Support Materials menu by going to Data Availability.

Information Available in Each Database

	MFN applied tariffs	Preferential applied tariffs	WTO-bound tariffs	Non-tariff measures
TRAINS	161	88	95	91
IDB	120	43		
CTS			131	

Note: Figures represent the number of countries for which the source database has information as of 31 January 2011.

C2.2. Types of Tariffs

Most-Favored Nation Tariffs

In current usage, MFN tariffs are what countries promise to impose on imports from other members of the WTO, unless the country is part of a preferential trade agreement (such as a free trade area or customs union). This means that, in practice, MFN rates are the highest (most restrictive) that WTO members charge one another.

Some countries impose higher tariffs on countries that are not part of the WTO. In some rare cases, WTO members/GATT contracting parties have invoked the “Non-Application Clause” of WTO/GATT agreements and chosen not to extend MFN treatment to certain other countries.

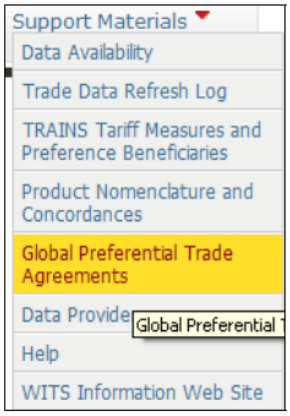
Preferential Tariffs

Virtually all countries in the world joined at least one preferential trade agreement, under which they promise to give another country's products lower tariffs than their MFN rate. In a customs union (such as the Southern Africa Customs Union or the European Community) or a free trade area (e.g., NAFTA), the preferential tariff rate is zero on essentially all products. **These agreements are reciprocal**: All parties agree to give each other the benefits of lower tariffs. Some agreements specify that members will receive a percentage reduction from the MFN tariff, but not necessarily zero tariffs. Preferences therefore differ between partners and agreements. Many countries, particularly the wealthier ones, give developing countries **unilateral preferential treatment**, rather than through a reciprocal agreement. The largest of these programs is the Generalized System of Preferences (GSP), which was initiated in the 1960s. The European Union, Japan and the United States offer multiple unilateral preference programs. The EU's Everything But Arms (EBA) program is one example.

Exporting countries may have access to several different preference programs from a given importing partner and for a given product.

Global Preferential Trade Agreements

WITS provides a link to the database of the Global Preferential Trade Agreements developed by the World Bank and the Centre for International Business. The link is provided through the menu tab Support Materials as to be seen below:



It can be also be directly accessed using the url http://wits.worldbank.org/gptad and needs no username or password to access the application.

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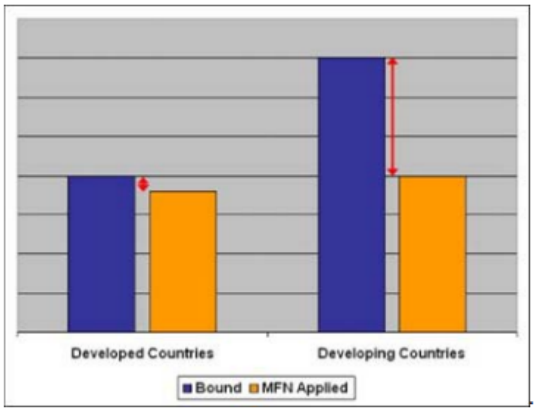
Bound Tariffs

Bound tariffs are specific commitments made by individual WTO member governments. The bound tariff is the **maximum MFN tariff level** for a given commodity line. When countries join the WTO or when WTO members negotiate tariff levels with each other during trade rounds, they make agreements about bound tariff rates, rather than actually applied rates.

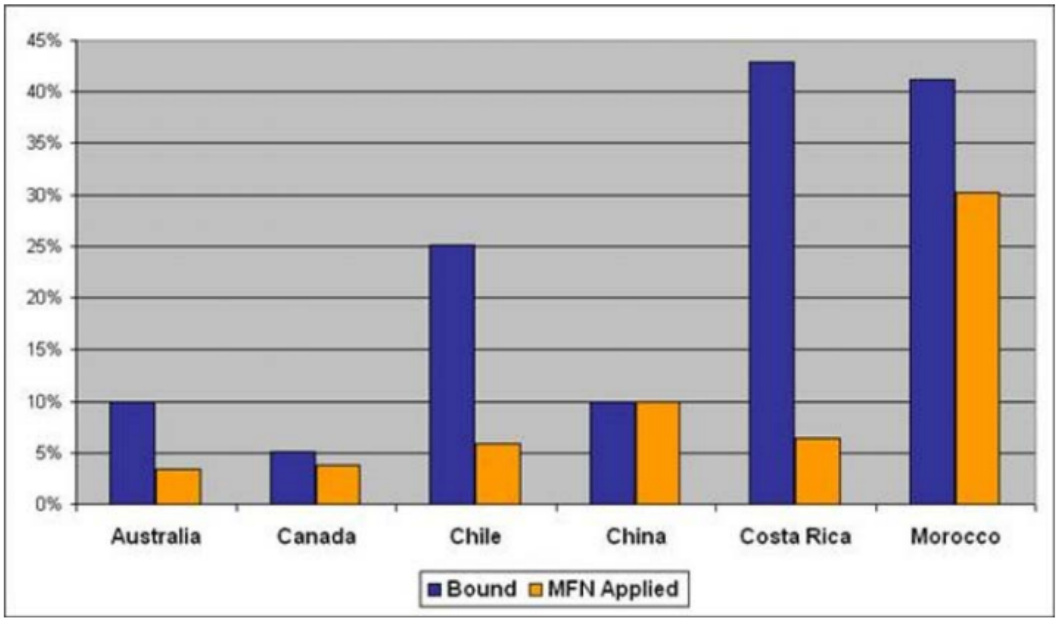
Bound tariffs are not necessarily the rate that a WTO member applies in practice to other WTO members' products. Members have the flexibility to increase or decrease their tariffs (on a non-discriminatory basis) so long as they did not raise them above their bound levels. If one WTO member raises applied tariffs above their bound level, other WTO members can take the country to dispute settlement. If the country did not reduce applied tariffs below their bound levels, other countries could request "compensation" in the form of higher tariffs of their own. In other words, **the applied tariff is less than or equal to the bound tariff** in practice for any particular product.

The gap between the bound and applied MFN rates is called the **"binding overhang"**. Trade economists argue that a large binding overhang makes a country's trade policies less predictable. This gap tends to be small on average in industrial countries and often fairly large in developing countries as illustrated below.

Binding Overhang Principle



Bound and MFN Applied Simple Average Tariff for All Products

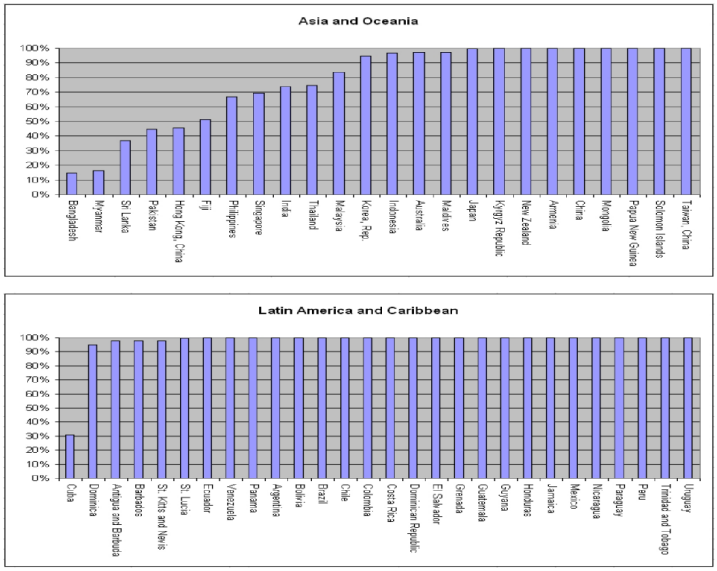


The **binding coverage** - the share of tariff lines with WTO-bound rates - also varies across countries. Until the Uruguay Round of the GATT, which ended in 1994, countries agreed to bind tariffs only on manufactured goods; trade in agricultural products was excluded from the GATT when it was written in the late-1940s. Even within manufactured products, countries were not obligated to bind all tariff lines.

Reflecting their relative lack of participation in previous trade rounds, developing countries tended to bind fewer tariff lines than industrial countries. During the Uruguay Round, countries committed to bind tariffs on all agricultural products. New members of the WTO have been asked to bind all manufactured tariff lines as well.

The binding coverage varies by region. In Latin America, practically all countries bind all tariff lines. In Asia, the binding coverage varies from less than 15 percent in Bangladesh to 100 percent in Mongolia.

Binding Coverage by Country (All Products)

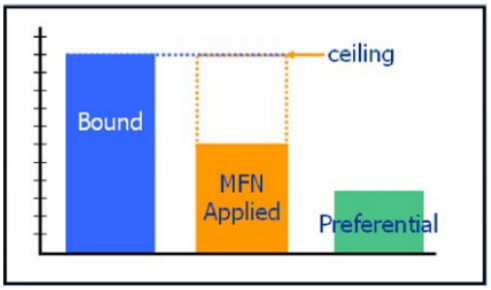


When you use WITS to conduct simulations of the Doha Development Agenda's tariff-cutting exercise, you will need to take into consideration differences in binding coverage across countries.

Comparing Types of Tariffs

The 3 types of tariffs may exist for the same commodity line. In general, the bound rate is the highest tariff, the preferential the lowest one and the MFN applied is generally somewhere in between the other two as illustrated below.

3 Types of Tariff for a Given Product



Effectively Applied Tariff

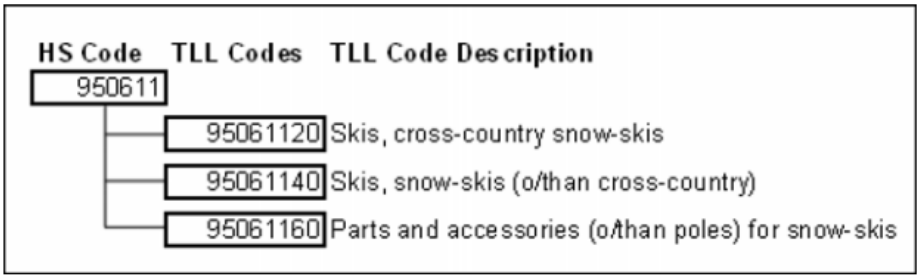
When analyzing the effects of preferential tariffs on trade flows you will need to be careful with assumptions about which tariff rate is actually applied to a particular import. The importing country will apply the MFN tariff if the product fails to meet the country's rules that determine the product's country of origin. For example, some former European colonies find it easier to satisfy the rules of origin under the Cotonou Agreement rather than the Everything But Arms (EBA) program, even where preferential tariffs are lower under the EBA.

WITS uses the concept of effectively applied tariff which is defined as the lowest available tariff. If a preferential tariff exists, it will be used as the effectively applied tariff. Otherwise, the MFN applied tariff will be used.

National Tariff Line Level (TLL)

Each national tariff schedule defines products in slightly different ways. Countries generally base their tariff schedules on the World Customs Organization's Harmonized System (HS) nomenclature, which emerged through international cooperation during the 1970s and 1980s as a trade facilitation measure. (See http://www.wcoomd.org/ie/En/AboutUs/fiche2%20A%20ng.pdf for more information).

The HS specifies products using six digits, from 010110 (purebred breeding live horses, asses and ninnies) to 970600 (antique works of art exceeding 100 years in age). Countries then append additional digits to distinguish between different tariff lines. The graphic below shows that the 2005 U.S. tariff schedule has three different tariff lines under the HS sub-heading 950611 (Skis).



Some countries disaggregate tariff lines even further for statistical purposes. For example, the U.S. tariff line is disaggregated to 8 digits.

C2.3. Forms of Import Tariffs

Regardless of whether a tariff is bound or applied on preferential versus non-discriminatory basis, the tariff can take several forms. The most common is an **Ad Valorem** tariff, which means that the customs duty is calculated as a percentage of the value of the product. Many countries' tariff schedules also include a variety of **Non-Ad Valorem** tariffs.

- **Specific tariffs** are computed on the physical quantity of the good being imported, e.g. Australia's 2005 schedule includes a tariff of $1.22/kg on certain types of cheeses and the United States charges $0.68 per live goat. The physical quantity may be expressed in ways that are difficult to determine without laboratory equipment. The European Union charges duties on certain dairy products based on the weight of lactic matter in the product and the United States charges a tariff on raw cane sugar that varies with the sucrose content of sugar: "1.4606 cents/kg less 0.020668 cents/kg for each degree under 100 degrees (and fractions of a degree in proportion) but not less than 0.943854 cents/kg."
- **Mixed tariffs** are expressed as either a specific or an Ad Valorem rate, depending on which generates the most (or sometimes least) revenue. For example, Indian duties on certain rayon fabrics are either 15 percent Ad Valorem or Rs. 87 per square meter, whichever is higher.
- **Compound tariffs** include both Ad Valorem and a specific component. For example, Pakistan charges Rs. 0.88 per liter of some petroleum products *plus* 25 percent Ad Valorem.
- **Tariff rate quotas** are made up of a low tariff rate on an initial increment of imports (the within-quota quantity) and a very high tariff rate on imports entering above that initial amount.

Trade economists typically argue that these **Non-Ad Valorem tariffs are less transparent and more distorting,** i.e. that they drive a bigger wedge between domestic and international prices. In addition, their economic impact changes as world prices change. The share of tariff lines with Non-Ad Valorem rates varies across countries. WITS Advanced Query can compute the share of Non-Ad Valorem tariff lines when it profiles a county's tariff schedule.

C4.2.7. Selecting Tariffs

This option allows you to select one or multiple duty types.

Use AVE

This option decides whether or not to include estimated Ad Valorem Equivalents (AVE) in the results.

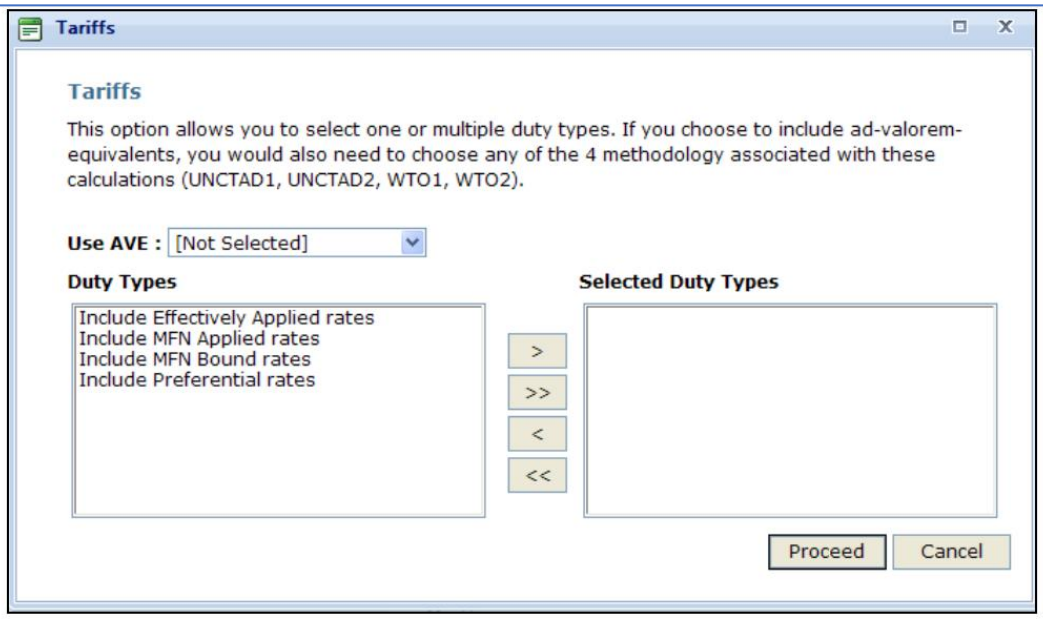
For more information on AVEs, see C2.4. Ad Valorem Equivalents of Non-Ad Valorem Tariffs and C3.1.4. Defining a Query: Ad Valorem Equivalent Tariffs.

If you choose to include Ad Valorem equivalents, you would also need to choose any of the 4 methodology associated with these calculations. More specifically, the Ad Valorem Estimation methods you can choose from are: UNCTAD Method - 1, UNCTAD Method - 2, WTO Agriculture Method and WTO NAMA Method (see C2.4. Ad Valorem Equivalents of Non-Ad Valorem Tariffs for details).

Results will be affected only if AVEs are available for the selected reporter/year. Note that AVEs are not available for WTO based queries.

Duty Types

The Duty Types that can be chosen from consist of: Include Effectively Applied rates, Include MFN Applied rates, Include MFN Bound rates and Include Preferential rates (see C2.2. Types of Tariffs for details).



Please note that you can select all duty types from this box by clicking on >>.

Note that effectively applied rates are defined as the minimum tariff granted by a reporter to a partner for the considered product. Effectively Applied tariff is equal to the MFN Applied tariff unless a Preferential tariff exists.

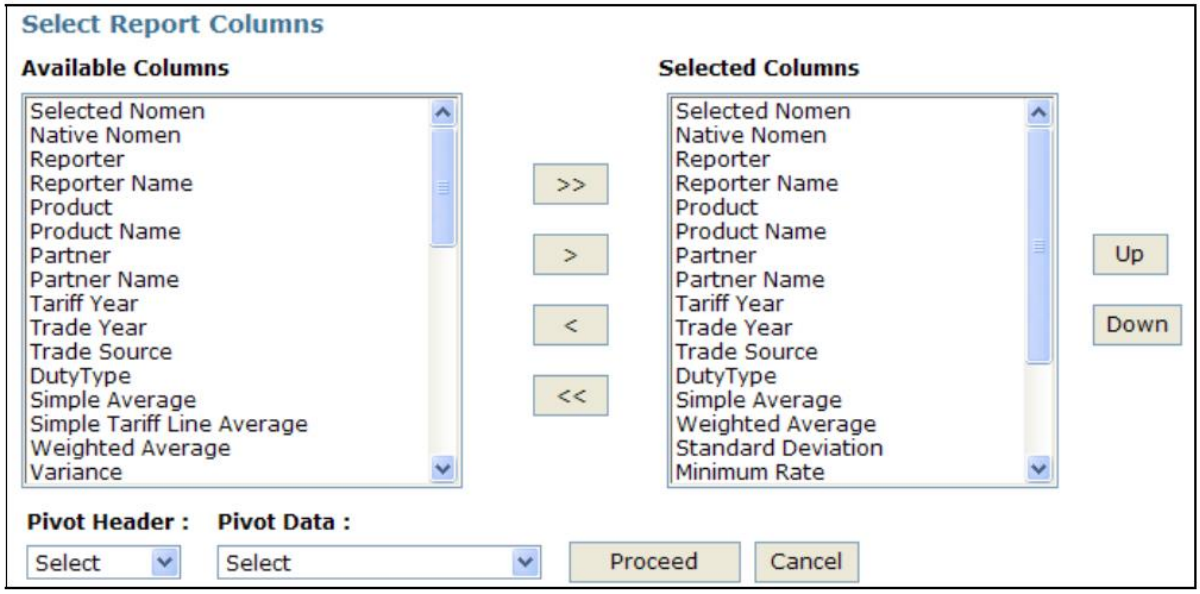
WITS will return a separate row for each selected tariff type.

For example, if you select Albania as reporter, Algeria as partner and Effectively Applied rates as tariff, WITS will retrieve Albania's effectively applied tariff rate from Algeria.

C4.4

C4.4. Advanced Query - Tariff and Trade Analysis - The Results Table

When clicking on the magnifying glass in the Status window, the following window will be displayed:



Information is organized in rows and contains the following fields (column headings):

Column Heading	Description
Selected Nomen	nomenclature used for selecting products (GP for GTAP for example);
Native Nomen	native nomenclature (H2 for HS 2002 for example) from which the Selected Nomenclature was converted to produce results;
Reporter	reporter 3-digit alphabetic country code (ARG for example) or country group code (ANDEAN for example);
Reporter Name	full name of the reporting country (Argentina) or group of countries (ANDEAN – ANDEAN country group);
Product	product code or product group code;
Product Name	description of the product or group of products;
Partner	partner 3-digit alphabetic country code (WLD) or country group code;
Partner Name	full name of the partner country or country group;
Tariff Year	year of the tariff data;
Trade Year	year of the trade data. If available, WITS takes the same year for trade as for tariffs, if not it uses any closest alternative year);

Trade Source	database used for trade data (CMT for COMTRADE, INV for inverted COMTRADE trade (partner's mirroring), TRN for TRAINS and WTO for WTO IDB);
Duty Type	code of the considered type of tariffs (BND for bound tariffs, MFN for MFN applied tariffs, PRF for preferential tariffs or AHS for effectively applied tariffs);
Simple Average	(in percentage points) simple average tariff of included 6-digit lines. The 6-digit tariff is itself an average of included tariff line level lines. The Simple Tariff Line Average, which is the average of the tariff line level lines, is also calculated by WITS and can be included in the table (see B4.5. Advanced Query – Tariff and Trade Analysis - Customizing Output Tables for more information);
Simple Tariff Line Average	simple average tariff calculated based on tariff line level tariff values. Simple Average and Simple Tariff Line Average may differ when several 6-digit products are aggregated as illustrated in the table below.

Tariff Line	Rate	6D level	Average Tariff	4D level	Simple Average	Simple Tariff Line Average
01010110	5					
		010101	(5+5)/2			
01010120	5		=**5**	0101	(5+10)/2	(5+5+10)/3
					=**7.5**	=**6.66**
01010210	10					
		010102	10/1=**10**			

Weighted Average	(in percentage points) average of tariffs weighted by their corresponding trade value;
Variance	statistical measure of how widely tariffs are dispersed;
Sum of rates	sum of tariffs calculated at tariff line level;
Sum_Of_SAvgRates	sum of 6-digit level simple average tariffs;
Sum_Of_SAvgRates _Cases	number of 6-digit level simple average tariffs included in Sum_of_SAvgRates;
Sum_Of_Squared Rates	sum of tariff line level squared tariff values;
Minimum Rate	(in percentage points) lowest tariff value at the tariff line level within the product category;
Maximum Rate	(in percentage points) highest tariff value at the tariff line level within the product category;
Nbr of AVE Lines	is the number of tariff line level lines with estimated Ad Valorem Equivalents of Non-Ad Valorem tariffs;
Nbr of NA Lines	is the number of tariff line level lines with no Ad-Valorem tariff (Non-Ad Valorem tariffs unless missing duties);
Nbr of Free Lines	is the number of tariff line level lines with 0% tariff;
Nbr of Dutiable Lines	is the number of tariff line level lines with tariff above 0%;
Nbr of Total Lines	number of tariffs at the tariff line level;
Nbr of DomesticPeaks	number of tariffs at the tariff line level which value is Peaks above 3 times the simple average tariff;
Nbr of International	number of tariffs at the tariff line level which value is Peaks above 15;

Peaks	
Nbr Line 0 to 5	number of tariff line level lines with tariff between 0 and 5%;
Nbr Line 5 to 10	number of tariff line level lines with tariff between 5 and 10%;
Nbr Line 10 to 20	number of tariff line level lines with tariff between 10 and 20%;
Nbr Line 20 to 50	number of tariff line level lines with tariff between 20 and 50%;
Nbr Line 50 to 100	number of tariff line level lines with tariff between 50 and 100%;
Nbr Line more than 100	number of tariff line level lines with tariff above 100%;
SumRateByWghtTrd Value	sum of 6-digit level tariffs multiplied by their respective trade value;
SumWghtTrdValue4 NotNull	sum of 6-digit level trade values where tariff is not null;
Free Imports	trade value facing a 0% tariff;
Dutiable Imports	trade value facing a tariff above 0%;
Specific Duty Imports	trade value facing a Non-Ad Valorem tariff
Binding Coverage	number of bound lines divided by the total number of lines.

You can select other than already by default selected columns by clicking on the ones you want to select out of the left-hand side list and press the > button. Additionally, you can choose Pivot Header and Pivot Data as described in C4.5.3. Pivoting a Table. In order to finally submit your results, click on Proceed.

Your results will be displayed as below:

Reporter Name	Product	Product Name	Partner	Partner Name	Tariff Year	Trade Year	Trade Source	DutyType	Simple Average
Brazil	26	Textile fibres (other than wool tops and other com		ALL OECD members --- OECD	2007	2007	CMT	AHS	11.77
Brazil	26	Textile fibres (other than wool tops and other com		ALL OECD members --- OECD	2008	2008	CMT	AHS	12.92
Brazil	26	Textile fibres (other than wool tops and other com		ALL OECD members --- OECD	2009	2009	CMT	AHS	13.63
Brazil	26	Textile fibres (other than wool tops and other com	000	World	2007	2007	CMT	AHS	10.26
Brazil	26	Textile fibres (other than wool tops and other com	000	World	2008	2008	CMT	AHS	12.49
Brazil	26	Textile fibres (other than wool tops and other com	000	World	2009	2009	CMT	AHS	12.46
Brazil	26	Textile fibres (other than wool tops and other com	036	Australia	2008	2008	CMT	AHS	10.00
Brazil	26	Textile fibres (other than wool tops and other com	036	Australia	2009	2009	CMT	AHS	17.22
Brazil	264	Jute and other textile bast fibres, n.e.s., raw or	000	World	2007	2007	CMT	AHS	8.00
Brazil	264	Jute and other textile bast fibres, n.e.s., raw or	000	World	2008	2008	CMT	AHS	8.00

The number of Items returned is given below the table (70 items in 2 pages in our example).