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# Intra-Industry Trade Indexes for Canada, Mexico, and the United States, 1962-87

Tracy Hart  
Bradley J. McDonald

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### Abstract

Intra-industry trade is the simultaneous importing and exporting of goods from the same industry classification. It is a phenomenon that is often identified with product differentiation and aspects of imperfect competition. Existing theoretical and empirical analysis often suggests that the level of intra-industry trade may have implications for trade liberalization. This report presents intra-industry trade indexes for Canada, Mexico, and the United States, three countries currently involved in negotiations to form a North American Free Trade Area.

**Keywords:** Intra-industry trade; imperfect competition; North American Free Trade Area

### Acknowledgments

We thank Mary Wright for assistance with the United Nations trade data. Carlos Arnade, Danny Pick, Praveen Dixit, Vern Roningen and participants in the Agriculture and Trade Policy Branch seminar series gave helpful comments and provided thorough reviews.

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# Intra-Industry Trade Indexes for Canada, Mexico, and the United States, 1962-87

Tracy Hart  
Bradley J. McDonald

## Introduction

Over the past three decades, trade economists have noticed that a substantial and growing share of international trade takes place within, rather than across, industries. This simultaneous importing and exporting of goods within the same industry is known as intra-industry trade. The level of intra-industry trade is considered high when a country's imports are nearly equal to its exports within an industry.

In traditional Heckscher-Ohlin trade theory, international trade is viewed as a result of differences among countries in their endowments of productive factors. For example, countries that are relatively well endowed with capital are expected to export goods that are relatively capital intensive. The traditional theory does not easily explain intra-industry trade, however, and the empirical importance of intra-industry trade has led to modifications of trade theory that help explain nontraditional intra-industry trade. These modifications are largely being made within the new models of industrial organization and trade, models that incorporate economies of scale, product differentiation, and imperfect competition.

Besides helping to spur on research into industrial organization/trade, intra-industry trade has developed into a research area of its own. Important topics within the area include the measurement of intra-industry trade, its explanation, and the determination of its effects on trade liberalization and economic integration.<sup>1</sup>

The role of intra-industry trade under trade liberalization and economic integration is particularly relevant for public policy. It is also an area that poses great research challenges. Because industrial organization/trade models are often the ones most suited to explaining intra-industry trade, the determination of the effects of trade liberalization and economic integration under intra-industry trade can often best be made by appealing to such models. Unfortunately, these models are typically quite complicated and, for many types of questions, are sensitive to the modelers' assumptions.<sup>2</sup>

Why study intra-industry trade? First, models incorporating intra-industry trade often yield different policy conclusions than do traditional models (although different models of intra-industry trade may themselves lead to contradictory results). Second, empirical models, many of which incorporate the structure of the industrial organization/trade theoretical

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<sup>1</sup>Greenaway and Milner (1986) is an excellent introduction to this area of research.

<sup>2</sup>An excellent introduction to this literature is Helpman and Krugman (1989).

models, suggest that trade liberalization is likely to be especially beneficial in the presence of imperfect competition,<sup>3</sup> and that the adjustment faced by firms and industries under liberalized trade is likely to be reduced in a differentiated product industry. To the extent that intra-industry trade can be taken as an indicator of imperfect competition (a topic of debate), trade liberalization in industries with high intra-industry trade should be especially rewarding. Third, high intra-industry trade indicates that there exist both domestic importers and domestic exporters, each with interests in trade policy; exporters may help offset the pressure for protection often brought by importing firms. Fourth, intra-industry trade has been growing over time and appears to be positively correlated with per capita income; this correlation suggests that intra-industry trade will continue to grow as incomes do. Finally, the measurement of intra-industry trade can help suggest the importance of including two-way trade flows in economic models: the higher intra-industry trade is in an industry, the more important it is to realistically capture intra-industry trade flows. Modelers may wish to consider the level of intra-industry trade when determining the industry detail of their models, in considering the use of "net trade" versus "gross trade" models,<sup>4</sup> and in deciding whether to model features such as seasonal trade, transportation costs, and imperfect competition.

## Methodology

In this report we compile intra-industry trade indexes for Canada, Mexico, and the United States over the period 1962-87.<sup>5</sup> We include here both multilateral (for example, Canadian trade with the rest of the world) and bilateral (for example, Canadian trade with the United States) indexes. While others have calculated indexes for various years, to the best of our knowledge this report includes the first substantial time-series of intra-industry trade indexes.

Following traditional methodology, we use the Grubel-Lloyd formula for intra-industry trade:<sup>6</sup>

$$B_j = 1 - \frac{|X_j - M_j|}{X_j + M_j} \quad (1)$$

where  $B_j$  is the Grubel-Lloyd measure of intra-industry trade for industry  $j$ ,  $X_j$  is the country's exports in industry  $j$ , and  $M_j$  is the country's imports in industry  $j$ . This measure of intra-industry trade reaches its maximum of one when exports equal imports, and its minimum of zero when either exports or imports equal zero. The index is neutral to a trade surplus or deficit of an industry.

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<sup>3</sup>Richardson (1989) offers a very nice review of this empirical work. He concludes that, although there are some isolated examples where restricting trade may be beneficial, on average the case for free trade is even more compelling under imperfect competition than it is under perfect competition.

<sup>4</sup>Net trade models omit intra-industry trade and deal only with the difference between exports and imports. For example, suppose that a country's imports in a particular industry are \$7 million and that its exports in that industry are \$3 million. Net trade is then \$4 million, although gross trade is \$10 million. In this example, the Grubel-Lloyd intra-industry trade index, explained later, will be 40, indicating that a net trade model will fail to include 40 percent of total trade and will therefore understate the importance of trade.

<sup>5</sup>The 1966 data for some series were unavailable.

<sup>6</sup>Grubel and Lloyd (1975).



In the appendixes, we present the indexes at three different levels of aggregation (all are developed from the same three-digit SITC data). In appendixes B and E, we report bilateral and multilateral indexes according to three-digit SITC categories using equation 1.

Then, in appendixes C and F, we report bilateral and multilateral indexes for two-digit SITC categories. These adjusted Grubel-Lloyd indexes are weighted averages of the three-digit Grubel-Lloyd indexes, with the weights being (country- and industry- specific) shares of gross trade. Specifically, in equation 2, let  $j$  be the index for the three-digit "sub-industries" that are the components of two-digit industry  $J$ . The *adjusted* Grubel-Lloyd index for  $J$  is:

$$B_J = \sum_j w_j B_j, \quad w_j = \frac{X_j + M_j}{\sum_i X_i + \sum_i M_i}, \quad \forall i, j \in J \quad (2)$$

where  $B_j$  is as defined in equation 1.<sup>7</sup>

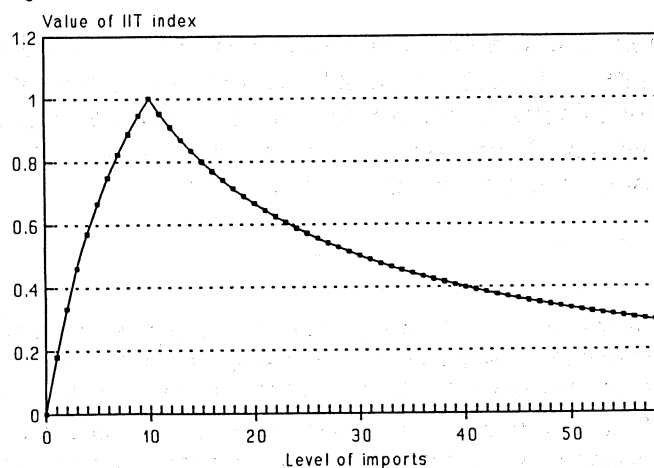
Finally, in appendixes D and G, we report indexes for six highly aggregated economic classifications: agriculture, agricultural inputs, other primary commodities, manufactures, textiles, and miscellaneous goods. Equation 2 is used for the calculation of these indexes in the same manner as for the two-digit industries.

There are several points to keep in mind when analyzing the indexes. First, while the Grubel-Lloyd index is bounded by zero and one, the adjusted Grubel-Lloyd index can reach the maximum of one only if trade is balanced in the industry; otherwise its maximum value is less than one. Some authors have suggested modifications to address this, but it is not clear whether the modifications are theoretically appropriate, nor even whether this characteristic of the index is problematic (Kol and Mennes, 1989). Second, it is possible that the industry categories used for the aggregation of the trade statistics may not be those we would choose for our purposes. That is, one may disagree with the definition of an "industry." This is referred to throughout the literature as the problem of "categorical aggregation." Finally, we should note the scaling of the Grubel-Lloyd index,  $B_j$ . Given a fixed amount of exports, figure 1 illustrates how  $B_j$  varies when imports change. One would get the same results holding imports constant and varying exports. Note that, for example, if imports are half of exports,  $B_j$  takes on a value of 2/3.

### Description of the Data

Data were obtained from the United Nations Trade Data System and downloaded into both hard copy and computer spreadsheet form.

Figure 1--Form of the Grubel-Lloyd IIT index



Exports held constant at 10

<sup>7</sup>This measure gives a different result than one would get by applying equation 1 to two-digit industry trade data.

For purposes of calculating the indexes, import value was used in all bilateral and multilateral indexes. For example, for the multilateral indexes of U.S. intra-industry trade, U.S. imports from "All Reporters" and "All Reporters" imports from the United States constitute data needed to calculate the indexes.

Canadian import data values are f.o.b. (free on board), while Mexican import data values are c.i.f. (cost, insurance, and freight). U.S. import data values are f.o.b. from 1962 to 1981 and c.i.f. from 1982 to 1987. No attempt was made to adjust the trade values for these different reporting systems, so all indexes are approximate to the extent that they mix different calculations of import value. However, given 26 years of data, the time series of indexes should accurately reflect trends in intra-industry trade.

Commodities are classified according to the *Standard International Trade Classification, Revision 1* (United Nations). As commodity names are not always clear in the tables, readers may consult appendix A, which lists commodity classification titles in full. Commodity data were downloaded at the three-digit SITC classification level for all merchandise sectors of the economy. While different countries may classify the same product with the use of a different classification, these differences are minimal in the case of Canada, Mexico, and the United States.

## Results

In describing the results, we will focus on appendixes D and G, indexes for our six broad economic industry classifications, which cover the whole of merchandise trade.<sup>8</sup> These tables allow for easy comparison of the results for agriculture with the results for other areas of the economy. Since this report is primarily aimed at *measuring* North American intra-industry trade, we do not perform an extensive analysis of the results nor develop policy recommendations from them.<sup>9</sup>

Figures 2-5 plot the intra-industry trade indexes for agriculture and for manufactures of the three countries under study, using data from appendixes D and G. Several conclusions can be drawn. First, intra-industry trade tends to be higher for the United States and for Canada, the more economically developed countries in the group, than for Mexico. This supports the finding of Balassa and Bauwens, among others, that intra-industry trade is positively correlated with per capita income. Second, the level of intra-industry trade in bilateral trade between the two developed countries is much greater than that between either Mexico and the United States or Mexico and Canada. This supports an often-cited hypothesis in the literature that intra-industry trade is negatively correlated with per capita income differences between countries (that is, intra-industry trade between countries of similar income levels will be higher).<sup>10</sup>

The third point is that intra-industry trade for agricultural industries is lower than that for manufacturing, yet, at least for Canada and the United States, intra-industry trade in

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<sup>8</sup>In cases where a country neither exported nor imported goods from an industry, the notation "NA" is used in the tables to indicate that the intra-industry trade index cannot be applied.

<sup>9</sup>All indexes reported in the appendixes have been multiplied by 100; they therefore range from zero to 100 rather than from zero to one.

<sup>10</sup>This empirical observation is reflected in some theoretical models. One example is Helpman and Krugman (1985), who state (p. 173) that "on the average the more similar countries are in per capita income, the larger the share of intra-industry trade in their bilateral trade volume."

Figure 2--Multilateral IIT in agriculture

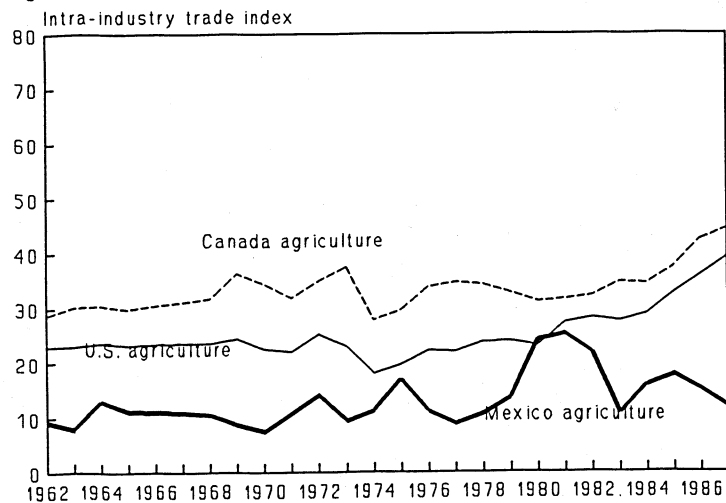
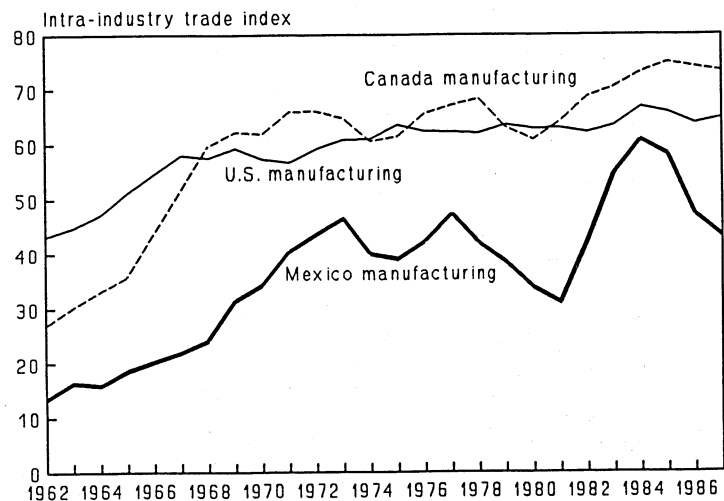


Figure 3--Multilateral IIT in manufacturing



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Figure 4--Bilateral IIT in agriculture

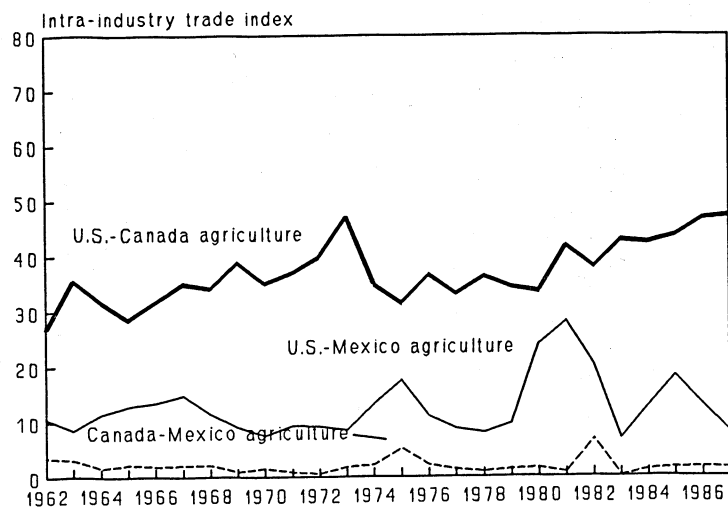
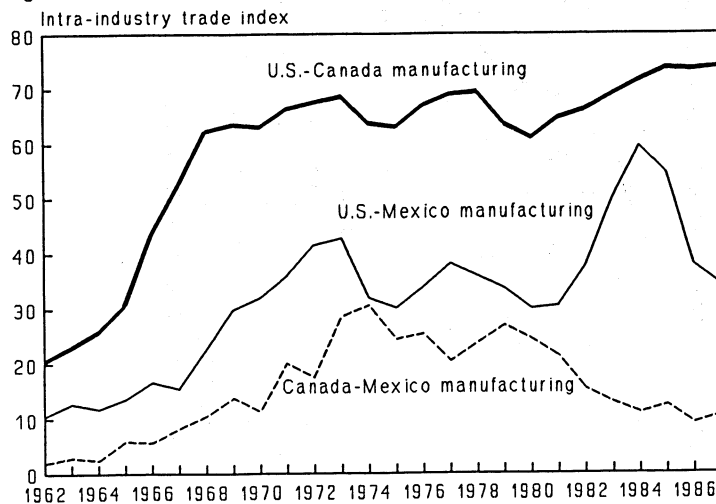


Figure 5--Bilateral IIT in manufacturing



agriculture is substantial. Agriculture has been neglected in most previous studies because intra-industry trade in agriculture was expected to be negligible.<sup>11</sup> Our data suggest that, at least at the three-digit SITC level of aggregation, it is not. The implications of this finding depend on the sources of agricultural intra-industry trade, a topic that should be addressed in future research.<sup>12</sup>

Finally, intra-industry trade increased throughout the 1960's and 1970's, and then leveled off in the 1980's. The increase is most clear in the area of manufactures trade, but is also evident in agriculture. Several other studies have reached this conclusion with the use of intra-industry trade data from only a few years. Our time series data confirm their findings.

## Applications

The objectives of this report are to make data on intra-industry trade available and to explain the methodology underlying our calculation of the indexes. In this concluding section we suggest potential applications of these indexes.

One important issue involves the empirical explanation of intra-industry trade. As mentioned above, often-cited hypotheses in the literature are that intra-industry trade increases with per capita income and that bilateral intra-industry trade decreases with income differences between countries. The intra-industry trade data set developed in this report can be of further use in testing these hypotheses because it provides a substantial multi-country time-series on intra-industry trade and covers all of merchandise trade. An example of empirical work that could be pursued along these lines would be regressing the intra-industry trade index (or changes in the intra-industry trade index) on a measure of per capita real income (or income changes), along with other explanatory variables.<sup>13</sup> Our bilateral intra-industry trade indexes could be used in a time-series test of whether income differences between countries influence the level of intra-industry trade.

There may be explanations other than real income changes for the increase in intra-industry trade that occurred during the 1960's and 1970's. Changes in trade policies over this period may have influenced intra-industry trade. The relationship of tariffs and nontariff barriers to intra-industry trade could be analyzed at the three-digit SITC industry level using the intra-industry trade data in this report.

Marvel and Ray (1987) argue that in fact the level of intra-industry trade helps to determine the amount of protection. Using a cross-section of 314 U.S. manufacturing

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<sup>11</sup>McCorrison and Sheldon (1991) concentrate on intra-industry trade and intra-industry specialization among processed agricultural product trade of the United States and European Community.

<sup>12</sup>If intra-industry trade goes away as industry definitions are modified or disaggregated, the implication that should be drawn is that these definitions may be more appropriate for modeling. Intra-industry trade that is largely due to seasonality indicates a need to model the features that drive the seasonal trade. Where intra-industry trade is due to product differentiation or economies of scale, one should consider modeling these.

<sup>13</sup>Globerman and Dean (1990) used a similar regression equation with data from 16 member countries of the Organization for Economic Cooperation and Development (OECD). They mixed this cross-section with observations across 4 years at 5-year intervals (1970, 1975, 1980, and 1985) and ran separate regressions, first using 1970 and 1980 data, then 1975 and 1985 data. With their specification and data, average annual income growth contributed only slightly and, statistically speaking, insignificantly to changes in intra-industry trade in manufacturing industries.

industries, they find evidence for their hypothesis that export-oriented firms in industries characterized by high intra-industry trade help offset the protectionist pressures brought by import-competing firms.<sup>14</sup> Combined with industry data on trade barriers, our intra-industry trade data could be used to analyze whether changes in intra-industry trade have contributed to changes in trade policies over time.

These are but a few of the many possible empirical applications of this data. We intend to address some of these in the future and also plan to extend the data set. Likely extensions include the development of indexes for the European Community, a re-aggregation of indexes in the agricultural sector based on the level of processing, and the development of indexes within agriculture using more disaggregated industry definitions.

## References

Balassa, Bela. "The Determinants of Intra-Industry Specialization in United States Trade." *Oxford Economic Papers* 38(1986): 220-233.

Balassa, Bela, and Luc Bauwens. *Changing Trade Patterns in Manufactured Goods: An Econometric Investigation*. New York: North-Holland, 1988.

Drabek, Zdenek, and David Greenaway. "Economic Integration and Intra-Industry Trade: The EEC and CMEA Compared." *Kyklos* 37(1984): 444-469.

Globerman, Steve, and James W. Dean. "Recent Trends in Intra-Industry Trade and Their Implications for Future Trade Liberalization." *Weltwirtschaftliches Archiv* 126(1990): 25-49.

Gray, H. Peter. "Intra-industry Trade: An Untidy Phenomenon." *Weltwirtschaftliches Archiv* 124(1988): 221-229.

Greenaway, David. "Intra-Industry Trade, Intra-Firm Trade and European Integration: Evidence, Gains and Policy Aspects." *Journal of Common Market Studies* 26(1987): 153-172.

Greenaway, David, and Chris Milner. "Intra-Industry Trade: Current Perspectives and Unresolved Issues." *Weltwirtschaftliches Archiv* 123(1987): 39-57.

Greenaway, David, and Chris Milner. *The Economics of Intra-industry Trade*. New York: Basil Blackwell, 1986.

Grubel, H.G., and P.J. Lloyd. *Intra-Industry Trade: The Theory and Measurement of International Trade in Differentiated Products*. London: Macmillan, 1975.

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<sup>14</sup>In their words (p. 1286), "Import-competing manufacturers in search of tariff protection will find the task of prevailing more difficult if they must counter not only the interests of consumers of their products but also those of producers of related goods sold for export. Exporters are likely to perceive that protection is linked within industries so that the response of foreign governments to increased domestic protection is likely to include particularly stringent measures against closely related products.... [P]rotection patterns in the developed market economies suggest that a fear of retaliation against related products is well grounded in current practice."



Helpman, Elhanan, and Paul R. Krugman. *Market Structure and Foreign Trade*. Cambridge, MA: The MIT Press, 1985.

Helpman, Elhanan, and Paul R. Krugman. *Trade Policy and Market Structure*. Cambridge, MA: The MIT Press, 1989.

Kol, Jacob, and L.B.M. Mennes. "Corrections for Trade Imbalance: A Survey." *Weltwirtschaftliches Archiv* 125(1989): 703-717.

Marvel, Howard P., and Edward John Ray. "Intraindustry Trade: Sources and Effects on Protection." *Journal of Political Economy* 95(1987): 1278-1291.

McCorriston, Steve, and Ian M. Sheldon. "Intra-Industry Trade and Specialization in Processed Agricultural Products: The Case of the US and the EC." *Review of Agricultural Economics* 13(1991): 173-184.

Pagoulatos, Emilio, and R. Sorenson. "Two-Way International Trade: An Econometric Analysis." *Weltwirtschaftliches Archiv* 111(1975): 454-465.

Richardson, J. David, "Empirical Research on Trade Liberalization with Imperfect Competition: A Survey," *OECD Economic Studies*, Spring 1989.

Sheldon, Ian. *Intra-industry Trade and Specialisation in Processed Agricultural Products: Theory and Issues*. NC-194 Occasional Paper Series, OP-2, October 1989.

United Nations. "Classification of Commodities by Industrial Origin: Relationship of the Standard International Trade Classification to the International Standard Industrial Classification." Statistical Paper M43, 1966.

**Appendix A--Industry Classifications**  
**Table A1--Standard International Trade Classification (SITC)**  
**Code**

00	Live Animals
001	Live animals
01	Meat and Meat Preparations
011	Meat, fresh, chilled or frozen
012	Meat, dried salted or smoked, whether or not in airtight containers
013	Meat in airtight containers, not elsewhere specified (n.e.s.) and meat preparations, whether or not in airtight containers
02	Dairy Products and Eggs
022	Milk and cream
023	Butter
024	Cheese and curd
025	Eggs
03	Fish and Fish Preparations
031	Fish, fresh and simply preserved
032	Fish, in airtight containers, n.e.s. and fish preparations, whether or not in airtight containers (including crustacea and mollusks)
04	Cereals and Cereal Preparations
041	Wheat (including spelt) and meslin, unmilled
042	Rice
043	Barley, unmilled
044	Maize, unmilled
045	Cereals, unmilled, other than wheat, rice, barley, and maize
046	Meal and flour of wheat or of meslin
047	Meal and flour of cereals, except meal of flour and starch of fruits and vegetables
048	Cereal preparations and preparations of flour and starch of fruits and vegetables
05	Fruits and Vegetables
051	Fruit, fresh, and nuts (not including oil nuts), fresh or dried
052	Dried fruit (including artificially dehydrated)
053	Fruit, preserved and fruit preparations
054	Vegetables, fresh, frozen or simply preserved (including dried leguminous vegetables), roots, tubers and other edible vegetables, n.e.s., fresh or dried
055	Vegetables, roots and tubers, preserved or prepared, n.e.s., whether or not in airtight containers
06	Sugar, Sugar Preparations and Honey
061	Sugar and honey
062	Sugar confectionery and other sugar preparations (except chocolate confectionery)

Table A1--SITC Code--continued

07	Coffee, Tea, Cocoa, Spices, and Manufactures Thereof
071	Coffee
072	Cocoa
073	Chocolate and other food preparations containing cocoa or chocolate, n.e.s.
074	Tea and mate
075	Spices
08	Feeding Stuff for Animals (not including unmilled cereals)
081	Feeding stuff for animals (not including unmilled cereals)
09	Miscellaneous Food Preparations
091	Margarine and shortening
099	Food preparations, n.e.s.
11	Beverages
111	Nonalcoholic beverages, n.e.s.
112	Alcoholic beverages
12	Tobacco and Tobacco Manufactures
121	Tobacco, unmanufactured
122	Tobacco manufactures
21	Hides, Skins, and Fur Skins, Undressed
211	Hides and skins (except fur skins), undressed
212	Fur skins, undressed
22	Oilseeds, Oil Nuts and Oil Kernels
221	Oilseeds, oil nuts and oil kernels
23	Crude Rubber (including synthetic and reclaimed)
231	Crude rubber (including synthetic and reclaimed)
24	Wood, Lumber and Cork
241	Fuel wood and charcoal
242	Wood in the rough or roughly shaved
243	Wood, shaped or simply worked
244	Cork, raw and waste
25	Pulp and Paper
251	Pulp and waste paper
26	Textile Fibers (not manufactured into yarn, thread, or fabrics) and their waste
261	Silk
262	Wool and other animal hair
263	Cotton
264	Jute
265	Vegetable fibers, except cotton and jute
266	Synthetic and regenerated (artificial) fibers
267	Waste materials from textile fabrics (including rags)

Table A1--SITC Code--continued

27	Crude Fertilizers and Crude Minerals (excluding coal, petroleum and precious stones)
271	Crude fertilizers
273	Stone, sand, and gravel
274	Sulphur and unroasted iron pyrites
275	Natural abrasives (including industrial diamonds)
276	Other crude minerals
28	Metalliferous Ores and Metal Scrap
281	Iron ore and concentrates
282	Iron and steel scrap
283	Ores and concentrates of nonferrous base metals
284	Nonferrous metal scrap
285	Silver and platinum ores
286	Ores and concentrates of uranium and thorium
29	Crude Animal and Vegetable Materials, n.e.s.
291	Crude animal materials, n.e.s.
292	Crude vegetable materials, n.e.s.
32	Coal, Coke, and Briquettes
321	Coal, coke, and briquettes
33	Petroleum and Petroleum Products
331	Petroleum, crude and partly refined for further refining (excluding natural gasoline)
332	Petroleum products
34	Gas, Natural and Manufactured
341	Gas, natural and manufactured
35	Electric Energy
351	Electric energy
41	Animal Oils and Fats
411	Animal oils and fats
42	Fixed Vegetable Oils and Fats
421	Fixed vegetable oils and fats
422	Other fixed vegetable oils
43	Animal and Vegetable Oils and Fats, Processed, and Waxes of Animal or Vegetable Origin
431	Animal and vegetable oils and fats, processed, and waxes of animal or vegetable origin
51	Chemical Elements and Compounds
512	Organic chemicals
513	Inorganic chemicals, elements, oxides and halogen salts
514	Other inorganic chemicals
515	Radioactive and associated materials

Table A1--SITC Code--continued

52	Mineral Tar and Crude Chemicals from Coal, Petroleum, and Natural Gas
521	Mineral tar and crude chemicals from coal, petroleum, and natural gas
53	Dyeing, Tanning, and Coloring Materials
531	Synthetic organic dyestuffs, natural indigo and color lakes
532	Dyeing and tanning extracts, and synthetic tanning materials
533	Pigments, paints, varnishes, and related materials
54	Medicinal and Pharmaceutical Products
541	Medicinal and pharmaceutical products
55	Essential Oils and Perfume Materials, Toilet, Polishing and Cleansing Preparations
551	Essential oils, perfume and flavor materials
553	Perfumery and cosmetics, dentifrices and other toilet preparations (except soaps)
554	Soaps, cleansing and polishing preparations
56	Manufactured Fertilizers
561	Manufactured fertilizers
57	Explosives and Pyrotechnic Products
571	Explosives and pyrotechnic products
58	Plastic Materials, Regenerated Cellulose, and Artificial Resins
581	Plastic materials, regenerated cellulose, and artificial resins
59	Chemical Materials and Products, n.e.s.
599	Chemical materials and products, n.e.s.
61	Leather, Leather Manufactures, n.e.s. and Dressed Fur Skins
611	Leather
612	Manufactures of leather or of artificial or reconstituted leather, n.e.s.
613	Fur skins, tanned or dressed (including dyed)
62	Rubber Manufactures, n.e.s.
621	Materials of rubber
629	Articles of rubber
63	Wood and Cork Manufactured (Excluding Furniture)
631	Veneers, plywood boards, improved or reconstituted wood and other wood, worked, n.e.s.
632	Wood manufactures, n.e.s.
633	Cork manufactures
64	Paper, Paperboard and Manufactures Thereof
641	Paper and paperboard
642	Articles made of paper pulp, of paper or paperboard



Table A1--SITC Code--continued

65	Textile Yarn, Fabrics, Made-up Articles and Related Products
651	Textile yarn and thread
652	Cotton fabrics, woven (not including narrow or special fabrics)
653	Textile fabrics, woven (not including narrow or special fabrics), other than cotton fabrics
654	Tulle, lace, embroidery, ribbons, trimmings, and other small wares
655	Special textile fabrics and related products
656	Made-up articles, wholly or chiefly of textile materials, n.e.s.
657	Floor coverings, tapestries, etc.
66	Nonmetallic Mineral Manufactures, n.e.s.
661	Lime, cement and fabricated building materials, except glass and clay materials
662	Clay construction materials and refractory construction materials
663	Mineral manufactures, n.e.s.
664	Glass
665	Glassware
666	Pottery
667	Pearls and precious and semiprecious stones, unworked or worked
67	Iron and Steel
671	Pig iron, spiegeleisen, sponge iron, iron and steel powders and shot and ferro alloys
672	Ingots and other primary forms (including blanks for tubes and pipes) of iron and steel
673	Iron and steel bars, rods, angles, shapes and sections (including sheet pilings)
674	Universals, plates, and sheets of iron and steel
675	Hoop and strip of iron or steel
676	Rails and railway track construction material of iron and steel
677	Iron and steel wire (excluding wire rod)
678	Tubes, pipes, and fittings of iron or steel
679	Iron and steel castings and forgings, unworked, n.e.s.
68	Nonferrous Metals
681	Silver, platinum and other metals of the platinum group
682	Copper
683	Nickel
684	Aluminum
685	Lead
686	Zinc
687	Tin
688	Uranium and thorium and their alloys
689	Miscellaneous nonferrous base metals employed in metallurgy

Table A1--SITC Code--continued

69	Manufactures of Metals, n.e.s.
691	Finished structural parts and structures, n.e.s.
692	Metal containers for storage and transport
693	Wire products (excluding electric) and fencing grills
694	Nails, screws, bolts, rivets, and similar articles of iron, steel, or copper
695	Tools for use in the hand or in machines
696	Cutlery
697	Household equipment of base metals
698	Manufactures of metal, n.e.s.
71	Machinery, Other than Electric
711	Power generating machinery, other than electric
712	Agricultural machinery and implements
714	Office machines
715	Metalworking machinery
717	Textile and leather machinery
718	Machines for special industries
719	Machinery and appliances (other than electrical) and machine parts, n.e.s.
72	Electrical Machinery, Apparatus and Appliances
722	Electric power machinery and switchgear
723	Equipment for distributing electricity
724	Telecommunications apparatus
725	Domestic electrical equipment
726	Electric apparatus for medical purposes and radiological apparatus
729	Other electrical machinery and apparatus
73	Transport Equipment
731	Railway vehicles
732	Road motor vehicles
733	Road vehicles other than motor vehicles
734	Aircraft
735	Ships and boats
81	Sanitary, Plumbing, Heating, and Lighting Fixtures and Fittings
812	Sanitary, plumbing, heating, and lighting fixtures and fittings
82	Furniture
821	Furniture
83	Travel Goods, Handbags, and Similar Articles
831	Travel goods, handbags, and similar articles
84	Clothing
841	Clothing (except fur clothing)
842	Fur clothing (not including headgear) and other articles made of furskins, artificial fur and articles thereof

Table A1--SITC Code--continued

85	Footwear
851	Footwear
86	Professional, Scientific and Controlling Instruments, Photographic and Optical Goods, Watches and Clocks
861	Scientific, medical, optical, measuring and controlling instruments and apparatus
862	Photographic and cinematographic supplies
863	Developed cinematographic film
864	Watches and clocks
89	Miscellaneous Manufactured Articles, n.e.s.
891	Musical instruments, sound recorders and reproducers and parts and accessories therefor
892	Printed matter
893	Articles of artificial plastic materials, n.e.s.
894	Perambulators, toys, games and sporting goods
895	Office and stationery supplies, n.e.s.
896	Works of art, collectors' pieces and antiques
897	Jewelry and goldsmiths' and silversmiths' wares
899	Manufactured articles, n.e.s.
90	Commodities and Transactions not classified according to kind
911	Postal packages not classified according to kind
931	Special transactions not classified according to kind
941	Animals, n.e.s. (including zoo animals, dogs and cats)
951	Firearms of war and ammunition therefor
961	Coin (other than gold coin), not being legal tender

**Table A2**  
**Classification into Six Industry Groups**  
**(Three-digit SITC Rev. 1)**

Agriculture	Agricultural inputs	Other primary commodities	Manufactures	Textiles & related	Other
001-025	560-562	030-039	110-112	650-659	351
040-099	712	230-251	122	831-851	896-897
120-121		273-341	266-267		911-961
211-223		667	510-554		
261-265			570-642		
271			661-666		
411-431			671-711		
			714-719		
			722-726		
			728-821		
			861-895		
			899		

**Agriculture:** Food and live animals, excluding fish; unmanufactured tobacco; hides and skins; crops; textile fibers (silk, wool, cotton, etc.); unprocessed animal and vegetable oils.

**Agricultural inputs:** Manufactured fertilizers; agricultural machinery.

**Other primary commodities:** Fish; rubber and wood; crude fertilizers and crude minerals; ores and metal scrap; crude animal and vegetable materials; coal, coke and briquettes; petroleum and petroleum products; natural and manufactured gas; pearls and stones.

**Manufactures:** Beverages; manufactured tobacco; manufactured textiles; chemicals; explosives; plastics; leather; manufactured rubber products; wood and cork manufactures; manufactured paper products; nonmetallic mineral manufactures; metals and steel; nonagricultural machinery and appliances; transport equipment; fixtures and fittings; furniture; instruments; miscellaneous manufactured items, excluding works of art and jewelry.

**Textiles and related items:** Textile yarn and fabrics; travel goods and handbags; clothing; footwear.

**Other:** Electric energy; works of art; jewelry.









Appendix B--Bilateral Indexes for Three-Digit SITC Industries (continued)  
 Table B1--Canada-Mexico Bilateral Trade (concluded)

Canada-Mexico Bilateral Trade	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
896--Works of art etc	0	7	3	19	10	7	3	3	2	3	2	5	1	20	85	0	2	4	0	6	61	1	0	11	21	0
897--Gold,silver ware,jewelry	0	9	0	7	74	0	8	0	8	38	96	25	5	1	18	0	19	0	4	5	56	24	40	14	7	41
899--Other manufactured goods	4	5	89	20	8	33	5	10	4	22	12	46	62	7	1	2	2	4	5	11	4	0	1	24	1	6
931--Special transactions	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	0	0	0	1	0	1	0	0
941--Zoo animals,pets	NA	NA	0	NA	0	NA	NA	0	100	0	NA	NA	50	0	0	0	0	NA	50	2	0	0	27	32	0	0
951--War firearms,ammunition	NA	0	0	0	0	0	NA	NA	NA	NA	NA	0	0	NA	NA	0	0	NA	0	0	NA	0	NA	NA	NA	0
961--Coin nongold,noncurrent	NA	NA	NA	NA	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	NA	0	NA	0	NA	NA	NA	0
--All commodities	77	68	53	80	87	86	77	81	96	98	84	99	89	78	96	96	93	96	89	71	59	45	39	42	33	50









Appendix B--Bilateral Indexes for Three-Digit SITC Industries (continued)  
 Table B2--Canada-United States Bilateral Trade (concluded)

Canada-U.S. Bilateral Trade	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
892--Printed matter	8	11	12	12	12	14	15	17	22	24	28	28	30	26	29	27	31	27	34	33	35	43	48	54	62	65
893--Articles of plastic nes	5	11	24	24	47	42	53	52	59	56	55	62	49	50	53	64	68	68	67	66	79	85	92	98	91	88
894--Toys, sporting goods, etc	42	54	37	37	42	48	59	75	80	81	71	67	54	38	32	36	36	39	46	54	49	37	70	72	68	57
895--Office supplies nes	2	2	5	13	13	12	16	15	15	16	17	16	12	10	17	18	17	19	23	20	19	19	25	27	25	22
896--Works of art etc	54	77	75	92	83	75	75	85	73	97	83	94	90	97	66	95	100	52	22	27	22	21	22	31	42	56
897--Gold, silver ware, jewelry	5	4	1	2	3	3	6	21	22	14	19	13	19	12	7	11	20	18	16	19	31	25	20	29	34	41
899--Other manufactured goods	36	35	4	8	8	19	22	23	25	28	41	41	23	23	23	22	17	20	23	22	24	32	35	38	35	39
931--Special transactions	85	78	93	95	89	72	65	43	40	39	43	47	44	46	55	44	29	45	56	55	54	44	55	49	53	59
941--Zoo animals, pets	0	83	88	93	98	96	99	92	100	94	93	84	98	98	86	84	78	87	81	96	97	81	80	72	58	51
951--War firearms, ammunition	11	40	61	58	79	94	84	47	63	74	88	100	99	94	56	81	55	14	31	53	69	57	62	64	59	85
961--Coin nongold, noncurrent	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0	0	0
--All commodities	95	96	94	93	96	98	97	96	92	92	93	96	99	98	99	97	92	99	100	99	91	91	89	88	90	91







**Appendix B--Bilateral Indexes for Three-Digit SITC Industries (concluded)**  
**Table B3--Mexico-United States Bilateral Trade (concluded)**

Mexico-U.S. Bilateral Trade	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
864--Watches and clocks	0	0	0	0	0	0	0	0	1	1	8	15	69	55	39	66	77	64	98	94	59	51	72	55	53	77
891--Sound recorders, products	91	48	58	52	44	43	54	77	93	90	95	98	55	47	41	35	33	61	71	86	69	53	76	87	65	44
892--Printed matter	64	47	39	62	62	75	70	75	68	70	68	68	72	82	97	81	89	76	73	53	63	94	65	54	59	70
893--Articles of plastic nes	9	2	8	18	5	10	28	55	39	56	44	48	93	48	37	33	77	68	52	45	59	34	34	36	69	59
894--Toys, sporting goods, etc	6	7	9	17	24	65	84	86	71	78	77	79	30	26	20	20	20	53	91	100	45	53	69	69	21	22
895--Office supplies nes	0	0	1	1	3	0	1	4	28	8	2	0	1	1	1	1	60	27	24	16	9	9	21	16	70	90
896--Works of art etc	73	30	75	58	61	29	21	48	54	35	24	9	0	2	1	3	1	2	4	1	1	14	2	9	14	0
897--Gold, silver ware, jewelry	96	89	94	95	81	98	82	66	60	86	89	90	37	17	6	4	17	49	66	98	66	16	29	14	9	7
899--Other manufactured goods	89	86	75	80	98	85	62	91	83	82	82	89	85	92	71	80	73	94	80	51	79	73	76	75	90	94
931--Special transactions	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
941--Zoo animals, pets	0	64	44	35	57	66	52	55	51	59	86	42	92	94	40	8	7	21	36	20	30	37	59	93	49	10
951--War firearms, ammunition	0	4	0	0	0	92	48	96	31	49	26	61	12	87	100	85	71	83	70	60	1	87	70	67	9	18
961--Coin nongold, noncurrent	0	NA	NA	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
--All commodities	82	79	74	77	84	81	84	88	87	92	96	94	95	85	98	86	88	94	99	93	74	61	71	73	52	47



**Appendix C--Bilateral Indexes for Two-Digit SITC Industries (continued)**  
**Table C1--Canada-Mexico Bilateral Trade (concluded)**

Canada-Mexico Bilateral Trade	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
95--Firearms,ammunition	NA	0	0	0	0	0	NA	NA	NA	NA	NA	0	0	NA	NA	0	0	0	NA	0	NA	0	NA	NA	NA	0
96--Coin nongold,noncurrent	NA	NA	NA	NA	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0	0	NA	0	0	NA	NA	0
--All commodities	9	7	6	10	10	12	11	11	12	18	14	20	19	20	18	15	19	21	15	7	7	6	7	9	8	10





**Appendix C--Bilateral Indexes for Two-Digit SITC Industries (continued)**  
**Table C2--Canada-United States Bilateral Trade (concluded)**

Canada-U.S. Bilateral Trade	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
94--Zoo animals,pets	0	83	88	93	98	96	99	92	100	94	93	84	98	98	86	84	78	87	81	96	97	81	80	72	58	51
95--Firearms,ammunition	11	40	61	58	79	94	84	47	63	74	88	100	99	94	56	81	55	14	31	53	69	57	62	64	59	85
96--Coin nongold,noncurrent	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0	0	0
--All commodities	25	28	31	34	43	48	54	55	54	57	57	58	52	51	55	57	58	54	53	55	56	58	61	63	65	66



**Appendix C--Bilateral Indexes for Two-Digit SITC Industries (concluded)**  
**Table C3--Mexico-United States Bilateral Trade (concluded)**

Mexico-U.S. Bilateral Trade	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
94--Zoo animals,pets	0	64	44	35	57	66	52	55	51	59	86	42	92	94	40	8	7	21	36	20	30	37	59	93	49	10
95--Firearms,ammunition	0	4	0	0	0	92	48	96	31	49	26	61	12	87	100	85	71	83	70	60	1	87	70	67	9	18
96--Coin nongold,noncurrent	0	NA	NA	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
--All commodities	14	15	15	16	18	18	21	25	25	29	31	32	24	25	26	25	23	25	22	24	24	26	36	35	28	26

### Appendix D--Bilateral Indexes for Six Economic Sectors

	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Canada-Mexico Bilateral Trade																										
Agriculture	4	3	2	2	2	2	2	1	2	1	1	2	2	5	2	1	1	1	2	1	7	0	1	2	2	2
Agricultural Inputs	0	0	1	0	0	0	0	0	0	0	2	2	0	1	0	0	0	0	0	0	0	65	5	3	3	0
Other Primary Commodities	44	36	36	40	42	37	37	38	38	52	47	49	44	34	32	34	41	40	15	2	3	4	4	5	8	14
Manufactures	2	3	2	6	6	8	11	14	11	20	17	29	31	24	25	20	24	27	24	21	15	13	11	12	9	11
Textiles	66	13	12	14	22	24	20	10	14	9	7	10	7	2	1	1	8	10	5	16	19	2	3	5	8	6
Other	3	4	1	3	10	2	2	1	1	2	8	5	1	11	27	0	2	48	1	2	5	3	5	6	2	9
Canada-U.S. Bilateral Trade																										
Agriculture	27	36	32	29	32	35	34	39	35	37	40	47	35	31	37	33	36	34	34	42	38	43	42	44	47	47
Agricultural Inputs	58	58	71	70	75	75	73	78	71	63	67	68	63	62	61	61	57	58	56	47	48	51	55	52	52	61
Other Primary Commodities	22	23	24	22	23	23	21	21	22	21	19	19	16	17	18	22	26	31	35	31	28	25	26	22	28	29
Manufactures	21	23	26	31	44	53	62	63	63	66	68	69	64	63	67	69	69	63	61	65	66	69	72	74	73	74
Textiles	12	15	20	29	30	27	34	35	39	41	40	39	32	26	23	27	28	24	28	29	38	39	47	48	53	57
Other	79	75	88	91	87	71	65	44	42	41	44	50	47	49	54	45	33	45	46	48	50	41	50	48	52	59
Mexico-U.S. Bilateral Trade																										
Agriculture	11	8	11	13	13	15	11	9	8	9	9	9	13	18	11	9	8	10	24	28	20	7	13	18	13	8
Agricultural Inputs	6	7	3	2	2	2	2	8	10	14	17	22	32	45	50	45	12	11	7	4	11	60	16	3	20	48
Other Primary Commodities	28	31	30	29	29	26	26	26	27	25	22	19	20	18	17	13	9	7	10	12	10	6	11	10	16	19
Manufactures	10	13	12	14	17	15	23	30	32	36	42	43	32	30	34	38	36	34	30	30	38	50	59	55	38	34
Textiles	23	25	24	27	36	46	65	68	62	63	56	50	23	10	7	6	8	36	38	53	49	42	47	47	15	15
Other	6	4	4	3	4	2	3	4	2	4	5	5	1	1	1	1	1	77	3	2	1	2	1	3	2	1









Appendix E--Multilateral Indexes for Three-Digit SITC Industries (continued)

Table E1--Canada Multilateral Trade (concluded)

Canada Multilateral Trade (No data for 1966)	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
719--Machines nes nonelectric	20	23	33	35	0	38	42	44	49	50	47	49	48	51	51	57	58	59	57	57	64	65	75	67	63	62
720--UN special code	0	0	0	0	NA	NA	NA	0	NA	0	0	NA	NA	0	0	NA	NA	0	0	0	0	0	0	0	0	0
721--Elect mach equip	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
722--Elec pwr mach,switchgear	26	33	43	38	0	47	55	48	58	53	48	49	58	59	55	62	60	65	76	72	76	71	83	88	88	
723--Electr distributing mach	98	97	79	71	0	75	55	65	39	63	70	76	91	99	95	93	88	88	91	98	83	89	84	74	71	
724--Telecommunications equip	67	72	65	70	0	67	84	79	82	68	43	47	52	55	41	44	57	57	62	61	74	69	78	77	69	
725--Domestic electric equip	15	24	30	29	0	19	22	28	29	16	17	23	22	20	16	20	24	26	28	25	28	32	28	26	30	
726--Electro-medcl,xray equip	16	15	30	24	0	27	34	37	35	29	27	27	29	34	42	40	54	56	41	45	50	43	44	36	33	
729--Electrical machinery nes	52	62	38	43	0	46	56	45	57	52	50	56	49	52	45	48	54	60	67	66	70	59	63	62	66	
730--UN special code	NA	NA	NA	NA	NA	NA	NA	NA	0	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0	0	NA	NA	NA	NA	
731--Railway vehicles	53	45	58	60	0	84	84	78	77	89	80	60	79	72	100	90	94	65	77	99	91	95	77	65	90	
732--Road motor vehicles	12	16	24	39	0	85	94	100	96	98	98	96	91	88	93	94	98	86	87	89	95	98	96	99	96	
733--Road vehicles non-motor	32	53	38	30	0	24	25	20	27	18	17	18	23	20	13	30	28	27	27	35	30	24	19	21	18	
734--Aircraft	66	91	96	74	0	86	78	72	96	88	95	78	67	60	76	88	72	57	71	73	96	86	94	87	96	
735--Ships and boats	59	50	97	70	0	85	63	71	77	35	97	99	96	77	67	89	81	76	59	43	98	22	52	83	100	
812--Plumbg,heatng,lightng equ	16	17	19	19	0	11	11	12	15	16	19	17	14	16	16	16	19	22	23	22	23	21	25	34	32	
821--Furniture	18	31	37	67	0	94	70	52	46	44	58	74	90	86	88	85	78	78	75	83	63	60	53	50	53	
831--Travel goods,handbags	10	18	46	52	0	42	49	45	42	24	23	25	25	20	13	12	15	18	24	17	20	19	16	22	20	
841--Clothing not of fur	19	23	24	23	0	22	22	31	39	42	36	35	31	23	15	17	19	18	24	19	18	16	15	18	16	
842--Fur etc clothes,prod	72	25	8	9	0	13	12	18	11	12	12	15	16	18	25	30	17	26	20	21	20	28	28	29	38	
851--Footwear	46	38	30	26	0	25	25	27	33	27	26	30	23	22	21	23	29	27	22	18	21	18	19	20	15	
860--UN special code	NA	NA	NA	NA	NA	0	0	0	NA	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
861--Instruments,apparatus	11	13	15	23	0	17	24	20	20	24	21	21	17	19	22	19	24	23	24	23	23	26	27	39	37	
862--Photo,cinema supplies	20	22	18	20	0	10	20	29	41	40	44	42	43	41	47	37	38	45	49	46	44	46	43	48	56	
863--Developed cinema film	10	11	45	38	0	17	15	16	24	23	29	32	29	32	29	36	21	32	58	41	32	47	46	64	83	
864--Watches and clocks	14	17	17	17	0	20	20	21	32	33	28	27	24	26	32	20	21	17	18	14	13	10	9	9	8	
890--UN special code	NA	NA	0	NA	NA	0	NA	NA	0	0	NA	NA	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
891--Sound recorders,products	11	12	12	13	0	10	10	11	19	13	11	10	10	10	10	12	22	25	33	25	22	16	15	20	22	
892--Printed matter	9	12	13	13	0	14	15	17	22	23	27	27	29	26	29	30	30	27	34	33	35	41	46	51	57	
893--Articles of plastic nes	10	27	37	46	0	44	54	51	58	53	52	58	48	49	50	60	61	62	62	62	73	77	82	86	93	
894--Toys,sporting goods,etc	30	42	35	35	0	35	39	49	56	63	63	52	47	36	29	29	32	34	45	48	39	29	41	37	37	
895--Office supplies nes	11	15	13	19	0	18	20	21	18	19	24	25	24	21	24	25	23	28	33	25	24	20	22	23	20	
896--Works of art etc	43	65	59	77	0	48	58	56	63	76	72	80	81	97	81	85	93	74	33	43	33	33	33	45	60	
897--Gold,silver ware,jewelry	11	12	16	21	0	37	22	28	32	30	32	33	26	16	18	27	29	40	41	46	33	26	23	25	33	
899--Other manufactured goods	44	64	37	23	0	29	33	34	30	41	62	47	39	43	42	33	27	39	42	31	59	37	52	38	52	
911--Mail not classed by kind	0	0	0	0	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
931--Special transactions	88	81	97	99	0	77	72	51	50	49	58	56	51	53	72	59	43	58	65	65	63	54	66	59	62	
941--Zoo animals,pets	21	86	90	92	0	93	98	88	94	100	99	95	94	97	89	88	81	90	81	97	95	84	81	73	64	
951--War firearms,ammunition	30	33	53	60	0	100	91	56	73	85	88	84	96	80	47	42	13	3	18	45	69	51	63	54	53	
961--Coin nongold,noncurrent	0	0	NA	0	NA	0	0	0	0	0	0	0	0	0	0	0	60	58	46	11	18	14	23	84	56	
--All commodities	99	98	98	100	0	98	95	96	90	92	96	96	98	98	100	97	94	98	96	100	92	94	93	94	98	98







Appendix E--Multilateral Indexes for Three-Digit SITC Industries (continued)

Table E2--Mexico Multilateral Trade (concluded)

Mexico Multilateral Trade	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	
(No data for 1966)																											
733--Road vehicles non-motor	2	9	1	10	0	2	0	2	9	7	45	95	78	91	75	69	98	82	39	6	19	2	6	4	96	47	
734--Aircraft	1	1	1	5	0	1	2	3	0	5	50	59	63	66	71	8	2	1	1	28	37	15	20	17	19	12	
735--Ships and boats	1	1	31	2	0	13	3	10	11	33	11	16	8	8	12	6	15	8	2	5	6	10	12	18	16	28	
812--Plumbing, heating, lighting equipment	13	24	76	96	0	78	89	88	88	64	39	44	51	68	56	42	45	57	84	86	74	27	28	43	24	25	
821--Furniture	46	53	87	67	0	35	39	29	34	34	20	28	20	33	26	15	12	16	20	38	29	9	9	9	8	5	
831--Travel goods, handbags	97	93	77	65	0	86	69	64	56	49	38	17	17	16	14	7	6	7	16	22	23	4	4	18	4	6	
841--Clothing not of fur	20	22	19	21	0	61	83	90	96	94	82	69	27	30	35	27	32	44	63	90	91	49	55	56	16	13	
842--Fur etc clothes, products	100	0	53	4	0	7	25	15	37	19	21	63	70	75	50	12	15	12	44	43	87	73	75	50	10	14	
851--Footwear	82	86	83	85	0	63	57	43	31	30	33	28	14	15	12	8	10	13	18	18	7	1	2	4	1	1	
860--UN special code	NA	NA	NA	NA	NA	NA	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
861--Instruments, apparatus	5	7	7	5	0	9	6	9	10	14	13	16	23	28	39	44	60	43	45	40	45	79	71	67	80	81	
862--Photo, cinema supplies	1	1	1	2	0	0	1	0	1	28	47	46	53	65	83	98	97	85	71	67	87	85	91	80	81	96	
863--Developed cinema film	87	92	93	98	0	50	85	74	62	69	61	45	50	44	35	43	62	97	73	55	80	66	52	95	87	85	
864--Watches and clocks	0	0	0	0	0	1	1	0	0	2	7	7	39	90	97	70	30	29	36	51	80	90	37	28	30	42	
891--Sound recorders, producers	72	52	59	52	0	39	48	64	81	80	86	84	80	81	74	72	62	84	83	79	97	65	92	89	87	69	
892--Printed matter	78	71	54	71	0	98	84	95	89	72	59	64	71	78	82	95	79	59	57	41	55	96	71	56	54	68	
893--Articles of plastic nes	16	20	20	33	0	21	35	57	42	61	49	52	80	93	83	76	83	68	55	47	59	36	36	37	76	65	
894--Toys, sporting goods, etc	6	8	7	25	0	57	99	99	75	81	78	90	43	74	66	56	52	60	60	84	61	51	66	68	88	82	
895--Office supplies nes	4	7	25	11	0	11	20	29	25	19	31	27	43	56	65	78	68	49	38	19	27	34	30	20	53	82	
896--Works of art etc	25	50	55	91	0	43	43	62	52	65	65	19	1	5	6	5	3	4	6	3	2	69	93	75	14	1	
897--Gold, silver ware, jewelry	71	92	90	99	0	72	58	55	65	69	80	85	31	47	27	22	34	40	67	99	66	21	63	25	11	10	
899--Other manufactured goods	84	81	80	86	0	84	55	79	96	86	88	87	81	88	78	74	84	98	84	60	86	96	93	78	96	97	
911--Mail not classified by kind	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
931--Special transactions	3	1	1	0	NA	0	0	0	0	0	0	0	5	0	0	0	0	86	0	0	0	0	0	0	5	16	
941--Zoo animals, pets	92	70	58	45	0	91	43	60	44	49	66	74	71	60	20	10	12	34	30	14	18	27	53	79	35	22	
951--War firearms, ammunition	0	3	0	1	0	49	85	29	49	56	48	18	5	72	46	40	25	26	21	33	1	42	40	32	9	13	
961--Coin nongold, noncurrent	0	0	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
--All commodities	90	89	82	85	0	86	86	91	84	87	89	88	89	81	92	91	99	96	96	98	72	56	66	72	56	50	













**Appendix F--Multilateral Indexes for Two-Digit SITC Industries (continued)**  
**Table F1--Canada Multilateral Trade (concluded)**

Canada Multilateral Trade (No data for 1966)	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
93--Special transactions	88	81	97	99	0	77	72	51	50	49	58	56	51	53	72	59	43	58	65	65	63	54	66	59	62	67
94--Zoo animals,pets	21	86	90	92	0	93	98	88	94	100	99	95	94	97	89	88	81	90	81	97	95	84	81	73	64	55
95--War firearms,ammunition	30	33	53	60	0	100	91	56	73	85	88	84	96	80	47	42	13	3	18	45	69	51	63	54	53	70
96--Coin nongold,noncurrent	0	0	NA	0	NA	0	0	0	0	0	0	0	0	0	0	0	60	58	46	11	18	14	23	84	56	73
--All commodities	32	34	37	38	0	47	52	54	53	56	57	56	54	56	56	56	56	53	51	52	57	60	63	64	65	65



Appendix F--Multilateral Indexes for Two-Digit SITC Industries (continued)  
 Table F2--Mexico Multilateral Trade (concluded)

Mexico Multilateral Trade (No data for 1966)	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
93--Special transactions	3	1	1	0	NA	0	0	0	0	0	0	0	5	0	0	0	0	86	0	0	0	0	0	0	5	16
94--Zoo animals,pets	92	70	58	45	0	91	43	60	44	49	66	74	71	60	20	10	12	34	30	14	18	27	53	79	35	22
95--War firearms,ammunition	0	3	0	1	0	49	85	29	49	56	48	18	5	72	46	40	25	26	21	33	1	42	40	32	9	13
96--Coin nongold,noncurrent	0	0	0	1	0	5	0	0	0	0	0	0	0	NA	0	0	0	0	0	0	0	0	0	0	0	0
--All commodities	14	16	17	18	0	20	22	25	28	33	35	35	31	32	33	34	31	31	26	23	23	25	33	34	32	31



**Appendix F--Multilateral Indexes for Two-Digit SITC Industries (concluded)**  
**Table F3--United States Multilateral Trade (concluded)**

U.S. Multilateral Trade (No data for 1966)	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
93--Special transactions	56	53	63	63	0	50	43	39	37	39	43	44	45	48	53	53	51	70	70	66	65	64	66	63	57	50
94--Zoo animals,pets	0	81	80	78	0	74	74	79	78	76	86	88	99	96	100	82	71	91	81	79	84	81	84	79	68	67
95--War firearms,ammunition	15	15	23	19	0	42	52	69	59	64	57	59	58	36	21	24	40	26	58	53	51	34	46	59	65	61
96--Coin nongold,noncurrent	6	0	0	0	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
--All commodities	39	40	42	44	0	49	48	50	49	48	50	49	46	47	47	46	47	48	47	48	49	50	53	54	54	55

## Appendix G--Multilateral Indexes for Six Economic Sectors

	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Canada Multilateral Trade																										
Agriculture	29	30	30	30	0	31	32	36	34	32	35	38	28	30	34	35	34	33	31	32	32	35	34	37	42	44
Agricultural Inputs	57	55	69	68	0	69	67	71	65	56	59	60	56	56	58	58	53	53	50	43	46	47	49	45	43	50
Other Primary Commodities	37	38	39	37	0	37	35	34	34	39	41	40	52	57	45	38	34	36	35	33	38	44	45	43	44	44
Manufactures	27	30	33	36	0	52	60	62	62	66	66	65	61	61	66	67	68	63	61	64	69	70	73	75	74	73
Textiles	19	21	23	25	0	23	27	27	31	31	28	29	27	23	19	21	24	24	30	25	27	23	24	25	25	29
Other	80	75	90	90	0	73	68	50	50	50	58	56	53	55	68	57	44	54	55	58	59	50	60	56	60	66
Mexico Multilateral Trade																										
Agriculture	9	8	13	11	0	11	10	9	7	11	14	9	11	17	11	9	11	14	24	25	22	11	16	18	15	12
Agricultural Inputs	9	8	5	4	0	7	8	13	18	33	33	29	33	55	48	64	29	19	13	8	13	60	23	4	22	61
Other Primary Commodities	28	31	30	28	0	26	28	27	30	27	29	22	30	22	21	21	15	13	13	11	7	5	9	10	13	14
Manufactures	13	16	16	19	0	22	24	31	34	40	43	46	40	39	42	47	42	38	34	31	42	55	61	58	47	43
Textiles	30	31	27	28	0	51	65	68	70	68	60	50	33	29	30	24	32	42	58	73	71	41	46	47	17	16
Other	8	6	6	7	0	5	6	7	5	8	12	11	3	4	3	2	3	71	4	4	2	18	21	20	6	14
U.S. Multilateral Trade																										
Agriculture	23	23	24	23	0	24	24	24	23	22	25	23	18	20	22	22	24	24	23	27	28	28	29	33	36	39
Agricultural Inputs	64	62	62	63	0	70	66	71	80	78	74	73	78	65	73	78	81	80	75	75	80	96	97	92	91	85
Other Primary Commodities	40	42	43	41	0	44	40	40	42	38	34	33	24	23	21	20	24	24	22	22	26	26	25	28	32	33
Manufactures	43	45	47	51	0	58	57	59	57	57	59	61	61	63	62	62	62	63	63	63	63	62	67	66	64	65
Textiles	55	55	54	50	0	48	43	39	40	36	38	44	52	44	44	41	34	39	44	39	31	23	21	18	17	17
Other	50	48	57	56	0	48	44	44	42	43	47	52	43	47	50	49	46	57	52	57	55	53	54	52	51	49

Note: No 1966 multilateral trade data



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