THIRTY-NINE YEARS OF U.S. WOOD FURNITURE IMPORTING: SOURCES AND PRODUCTS

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In this study we analyze changes in United States imports of wood furniture over the 39-year period from 1972 to 2010. In 1972, Canada and the former Yugoslavia were the most important sources of imported wood furniture, and Europe accounted for nearly 60 percent of total imports. Shipments of low-cost wood furniture from Taiwan started to increase in the 1970s, and by 1978, Taiwan was the most important source of imported wood furniture. Overall, low-cost sources in Asia displaced Europe in 1987. Taiwan continued to be the most important source until 1994. Canada became the most important source of imported wood furniture from 1994 to 2000 as the Canadian dollar declined in value against the United States dollar. In 2001, China became the most important source of wood furniture imports. More recently furniture imports from an emerging source, Vietnam, have increased dramatically. One reason why Asian manufacturers have been so successful in the U.S. market has been that furniture consumers were influenced mainly by price. By contrast, success in some segments of the U.S.-based furniture industry indicates that models enabling consumers to make styling and pricing decisions also can be competitive.

Keywords: Wood furniture; Imports; United States; Europe; Taiwan; Canada; China; Vietnam

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INTRODUCTION

The U.S. wood furniture industry faced import pressures for much of the latter-half of the twentieth century, but the impact on overall domestic production was limited. For example, although import market share in the wood household furniture (WHF) industry was 6 percent in 1979, 13 percent in 1983, and 25 percent in 1989 (Sinclair 1992), U.S. WHF production remained relatively constant between 1977 and 1997. This suggests that imports supplemented rather than substituted for domestic production during that period (Luppold and Bumgardner 2009).

More recently, rapid shifts in comparative advantage among international manufacturing regions have radically affected trade competitiveness in the wood furniture industry (Han et al. 2009). These shifts have had profound impacts on the U.S. industry (Dasmohapatra 2009). In 1999, employment in furniture and related products industries (NAICS 3133700) less kitchen cabinets was 537 thousand workers, but employment in these industries had declined to 251 thousand workers by 2010 (USDL 2011). By far, the greatest decline occurred in the WHF sector (NAICS 337122) of the overall furniture industry, which employed 130 thousand workers in 1999 but only 39 thousand workers in 2010. While the great recession of 2009 contributed to this decline, most of it was the result of international competition, as documented by Schuler and Buehlmann (2003), Quesada and Gazo (2006), and others.

Understanding the shifts and historical development of wood furniture imports into the United States is important for industry practitioners and observers when anticipating the future competitiveness of the U.S. furniture industry. While it is generally recognized that wood furniture imports have had a dramatic affect on the U.S.-based manufacturing industry in the early 21st century, less has been reported regarding the procession of sources and products that have preceded the current environment. The objectives of this paper were to examine changes in the source regions and countries for U.S. wood furniture imports, the types of products imported, and the factors that caused these changes over a 39-year period beginning in 1972. Before proceeding, the characteristics of available furniture import data are discussed.

MATERIALS AND METHODS

This analysis utilized data reported by The Center for International Data at UC Davis (CIDUCD), the U.S. Department of Commerce, Bureau of the Census (USDC, BOC), the U.S. Department of Commerce, and International Trade Administration (USDC, ITA) to determine changes in the source and type of wood furniture being imported into the U.S. Prior to 1989, imports of products for domestic (U.S.) consumption were classified by the USDC, ITA under the Tariff Schedule of the United States Annotated system (TSUSA). In 1989, the U.S. adopted the Harmonized System (HS). The HS is based on the international nomenclature structure of the Harmonized Commodity Description and Coding System, pursuant to a convention administered by the World Customs Organization (USITC 2010).

The Trade Policy Import System (TPIS) developed by the USDC, ITA is a detailed database that provides import data for products classified under the TSUSA system from 1978 to 1988 and for products classified under the HS for 1989 onward (USDC, ITA 2011). Data prior to 1978 was obtained from USDC, BOC (for 1973 to 1978) and CIDUCD (for 1972). A detailed analysis of these databases, which is presented in the Appendix, concluded that it was not possible to separate WHF from office, institutional, and commercial furniture prior to 1989, and that is was not possible to separate WHF from institutional and commercial furniture after 1989. Therefore it was decided to use the term “wood furniture” imports for the remainder of this analysis, with the corresponding product type categories shown in Table 1.

The HS began in 1989, but the current product categories were not fully implemented until 1990. Therefore most of the analysis will concentrate on the period 1990 to 2010. In order to set the stage, we also briefly examine U.S. furniture imports prior to 1990, starting with 1972, which is the first year import data was available under TSUSA. The analysis is based on value of wood furniture imports, adjusted for inflation to 1982 dollars. The results are presented either as dollar totals or as percents of value total for different source countries and product types.

RESULTS AND DISCUSSION

Wood Furniture Imports Prior to 1990

In 1972, 67 percent of wood furniture imports were from six countries: Canada, the former Yugoslavia, Denmark, Japan, Italy, and Taiwan (CIDUCD 2011). Still, these imports were less than 400 million constant 1982 dollars (Fig. 1). From 1973 to 1977, the former Yugoslavia was the most important source of wood furniture, and wooden chairs were the most important product imported from that country (USDC, BOC 1974, 1978). Europe remained the source for 59 to 65 percent of imports throughout the mid-1970s, but shipments from a new lowest cost producer, Taiwan, started to increase in 1976 (USDC, BOC 1977). By 1978, Taiwan had become the most important source of wood furniture imports with chairs and parts being the most important products imported from Taiwan (USDC, ITA 2011). Some of these imported parts were assembled into finished furniture in U.S factories.

Table 1. Definition of Categories (established for the current analysis) for Wood Furniture and Related Products

Categories	Harmonized Code	Product Description
Seats and chairs (Chairs)	9401692010	Household seats with wooden frame, bentwood, exc[1] uphl[2]
	9401692030	Seats with wooden frame, bentwood, exc uphl
	9401694010	Household seats with wooden frame, chair teak, exc uphl
	9401694030	Seats with wooden frame, chair teak, exc uphl
	9401696010	Household seats with wooden frame for chairs, exc uphl nesoi[3]
	9401696030	Seats with wooden frame for chairs, exc uphl nesoi
	6401698010	Household seats with wooden frame, exc uphl nesoi
	9401698030	Seats with wooden frame, exc uphl nesoi
Tables	9403409040	Wooden dining tables of a kind used in the kitchen
	9403608040	Wooden dining tables, nesoi
Bedroom furniture (Bedroom)	9403504000	Bentwood furniture of a kind used in the bedroom
	9403509040	Wooden beds of a kind used in the bedroom
	9403509080	Wooden furniture of a kind used in the bedroom, nesoi
Furniture parts (Parts)	9401901500	Parts of bentwood seats
	9401904000	Seat parts of wood
	9403907000	Furniture parts of wood
Wood office (Office)	9403300000	Wooden furniture of a kind used in offices
Other furniture (Other)	9403404000	Bentwood furniture of a kind used in the kitchen
	9403409080	Wooden furniture of a kind used in the kitchen, nesoi
	9403604000	Bentwood furniture, nesoi
	9403608080	Wooden furniture, nesoi

[1] "Except"
[2] "Upholstered"
[3] "Not elsewhere specified or included"

In 1984, U.S. wood furniture imports exceeded 1 billion constant 1982 dollars (Fig. 1). Taiwan, Canada, Denmark, and the former Yugoslavia were the most important source countries (USDC, ITA 2011). Taiwan remained the most important single source of imports during the 1980s, and by 1990 it accounted for nearly a third of the wood furniture imported into the U.S. (Table 2). Imports from Canada and Mexico also increased during the 1980s as imports from Europe declined. By 1989, wood furniture imports amounted to approximately 1.5 billion constant 1982 dollars (Fig. 1), and Europe, Asia, and North America were the sources of 32, 45, and 20 percent of these wood furniture imports, respectively (USDC, ITA 2011). Most of the furniture imported was in the form of labor-intensive chairs, items that could be broken down for shipping such as tables, or higher end specialty products such as walnut or teak Danish modern furniture, antique furniture, and stylish Italian furniture.

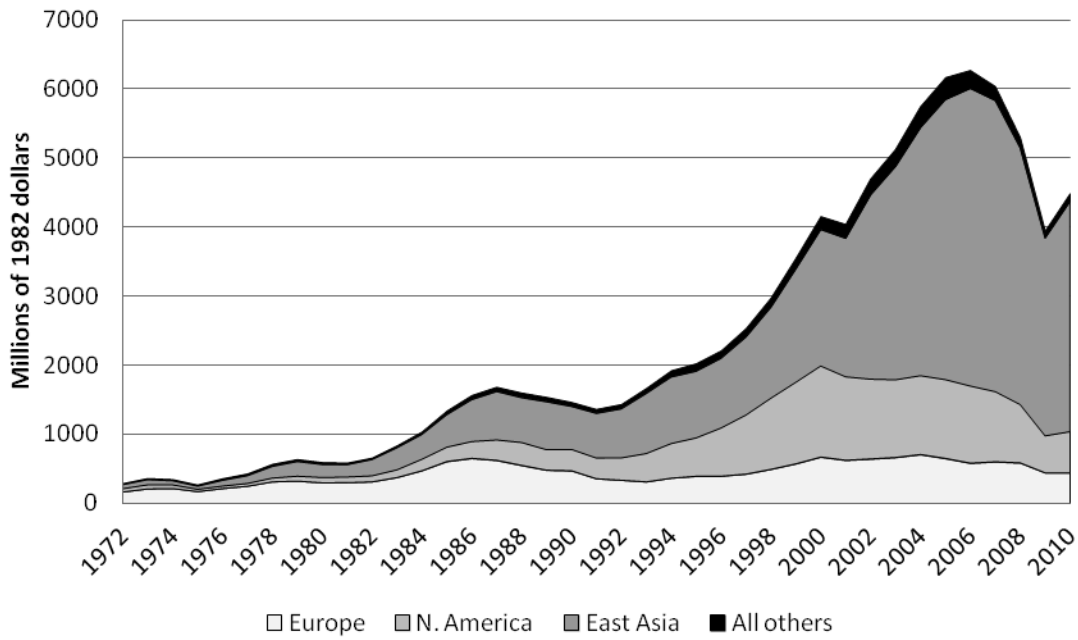

Fig. 1. Value of U.S. imports of wood furniture by world region (in constant 1982 dollars), 1972-2010 (CIDUCD 2011; USDC BOC 1974 to 1978; USDA, ITA 2011)

Wood Furniture Imports - 1990 and Beyond

In 1990, over 50 percent of wood furniture imports originated from three countries, Taiwan, Canada, and Italy, but imports of specific furniture products also came from Yugoslavia, Thailand, and Demark. In 1990, chairs accounted for 17 percent of total imports, with Taiwan, the former Yugoslavia, and Italy being the major source countries (Table 2, Fig. 2). Tables accounted for 5 percent of imports, with Taiwan being the largest source for this product. Canada, Italy, and Taiwan were the major sources of bedroom furniture, and bedroom products accounted for 15 percent of total imports. Furniture parts were primarily imported from Canada, Taiwan, and Mexico, and parts accounted for 9 percent of total imports. By far, Canada was the largest supplier of wood office furniture. Taiwan was the most important source of the catch-all category, “other” furniture, with smaller amounts being imported from Canada and Mexico.

In the early 1990s wood furniture imports from Canada, China, and Malaysia continued to increase, and imports from Europe decreased (Fig. 1). Taiwan remained the most important source of imported furniture during the early 1990s even though shipments decreased by 16 percent between 1990 and 1995. In 1995, Malaysia was the largest source for chairs and tables (Table 2), and a high proportion of these products were manufactured using the wood from rubber trees (Hevea brasiliensis, Willd. ex A. Juss. Muell. Arg.) that had reached the end of their productive lifespan for latex production.

Table 2. Top Three Sources of Wood Furniture Imported by the United States (based on percent of total value imported) by Year (USDC, ITA 2011)

Product Categories	Year	Rank 1		Rank 2		Rank 3		Top 3 Total
		Country	Percent	Country	Percent	Country	Percent	Percent
Chairs	1990	Taiwan	27.8	Yugoslavia	23.0	Italy	11.2	62.0
	1995	Malaysia	22.5	Taiwan	15.7	China	13.7	51.9
	2000	China	22.7	Malaysia	17.6	Canada	10.2	50.5
	2005	China	36.8	Malaysia	13.1	Indonesia	11.3	61.2
	2010	China	35.0	Vietnam	16.6	Malaysia	13.5	65.1
Tables	1990	Taiwan	46.3	Thailand	9.0	Italy	7.8	63.1
	1995	Malaysia	30.9	Taiwan	18.4	China	13.5	62.8
	2000	China	28.1	Malaysia	23.3	Taiwan	10.1	61.5
	2005	China	45.3	Malaysia	15.3	Vietnam	8.6	69.2
	2010	China	38.3	Vietnam	24.2	Malaysia	14.8	77.3
Bedroom	1990	Canada	19.4	Italy	19.3	Taiwan	16.6	55.3
	1995	Canada	33.0	Italy	15.5	Mexico	11.9	60.4
	2000	Canada	27.0	China	23.8	Italy	11.1	61.9
	2005	China	44.1	Vietnam	11.6	Canada	10.2	65.9
	2010	Vietnam	33.7	China	25.1	Malaysia	10.7	69.5
Parts	1990	Canada	20.5	Taiwan	19.2	Mexico	11.6	51.3
	1995	Canada	26.9	Taiwan	14.8	Malaysia	10.0	51.7
	2000	Canada	36.2	China	17.5	Taiwan	7.6	61.3
	2005	China	36.1	Canada	22.6	Mexico	11.0	69.7
	2010	China	30.8	Canada	14.6	Vietnam	12.8	58.2
Office	1990	Canada	57.8	Denmark	9.6	Taiwan	7.6	75.0
	1995	Canada	59.6	Mexico	8.9	China	7.6	76.1
	2000	Canada	65.4	China	10.4	Mexico	4.1	79.9
	2005	Canada	49.3	China	28.6	Mexico	3.0	80.9
	2010	Canada	46.3	China	36.8	Mexico	4.1	87.2
Other	1990	Taiwan	34.9	Canada	10.1	Mexico	8.1	53.1
	1995	Taiwan	17.6	Canada	17.5	China	14.2	49.3
	2000	China	29.6	Canada	20.5	Italy	5.9	56.0
	2005	China	49.4	Canada	13.5	Italy	3.7	66.6
	2010	China	46.3	Vietnam	7.3	Canada	7.0	60.6
Total	1990	Taiwan	29.1	Canada	14.3	Italy	9.2	52.6
	1995	Canada	21.4	Taiwan	14.7	China	11.0	47.1
	2000	Canada	25.9	China	24.5	Italy	6.6	57.0
	2005	China	43.9	Canada	19.1	Malaysia	5.6	68.6
	2010	China	41.6	Vietnam	16.7	Canada	9.8	68.1

In 1995, wood furniture imports exceeded 2 billion constant 1982 dollars (Fig. 1), and Europe, Asia, and North America were the sources of 20, 48, and 28 percent of these wood furniture imports, respectively (USDC, ITA 2011). Canada displaced Taiwan as the largest supplier of wood furniture imports in 1995 and China became the third largest supplier (Table 2). The increase in Canadian exports to the U.S. coincided with a substantial decline in the Canadian dollar relative to the U.S. dollar in the 1990s. Another factor that helped Canadian producers retain U.S. import share in both wood office and other furniture was the adoption of small batch flexible manufacturing (Luppold 2009).

Canada remained the largest source of wood furniture imports in 2000, but imports from China and Italy surpassed Taiwan that year (Table 2). Canada continued to be the leading source of bedroom furniture, office furniture, and furniture parts. China displaced Malaysia as the largest supplier of chairs and tables, as well as Taiwan in the "Other" furniture category.

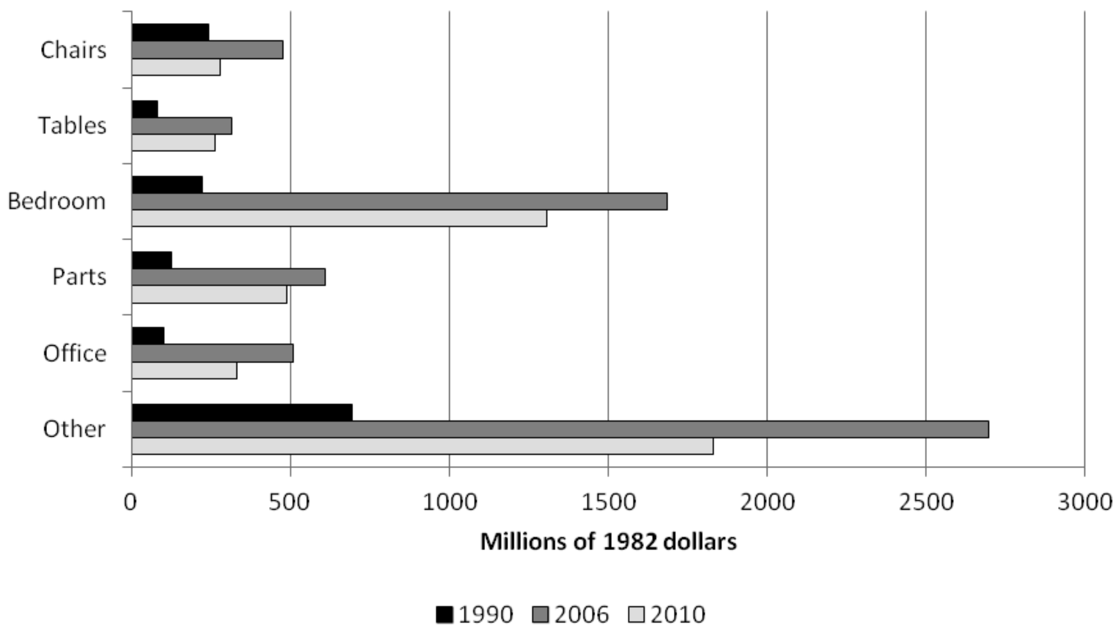

Fig. 2. Value of imports of wood furniture (in constant 1982 dollars) by product category, 1990, 2006, and 2010 (USDC, ITA 2011)

Wood furniture imports from Canada remained relatively stable between 2000 and 2005 but imports from China increased by 166 percent during this period. Furniture imports reached their highest level in 2006, and China remained the principal supplier of all categories of furniture with the exception of wood office (Table 2). China was able to quickly dominate the furniture export market with low wages and investments in large-scale modern plants. Much of the investment in furniture plants was the result of Taiwanese companies moving their production capabilities, including state-of-the-art facilities and extensive experience in furniture exporting and business management, to mainland China, as labor costs in Taiwan increased rapidly in the early 1990s (Cao et al.

2004). While Malaysia became the third most important source of wood furniture imports in 2005, imports from Vietnam had increased from 4 million dollars in 2000 to over 333 million dollars in 2005.

In the 1980s and early 1990s, much of the furniture imported from Asia included labor-intense chairs, parts, or products that could be broken down such as tables and beds. Many U.S. manufactures combined Asian table and chair imports with domestically produced china cabinets and hutches in their dining room suites and imported beds with domestically produced chests and dressers in their bedroom suites. With improvement in transportation during the first decade of this century and the ability of Chinese and Vietnamese manufacture's to produce low-cost case goods, entire suites of furniture could be imported. Once this occurred, U.S. furniture production and employ-ment plummeted (Luppold and Bumgardner 2010).

One of the primary factors that allowed Chinese imports to penetrate U.S. markets so markedly in the early 2000s was that U.S. consumers were motivated by low prices (Engardio and Roberts 2004), facilitated by U.S. manufacturers' use of price-point marketing in the preceding decades (Sinclair 1992). Specific product attributes such as wood species seemingly were less important. One of the few segments of the furniture industry that remains in the U.S. are manufacturers who employ custom or semi-custom production systems that facilitate numerous styles, species, and finish options at prices that are, in part, determined by consumer willingness to pay (Buehlmann and Schuler 2009, Bumgardner et al. 2011, Bullard and West 2002). Other research has suggested that U.S. competitive advantages now lies in ready availability of replacement parts and ability to process small orders (Buehlmann et al. 2006).

Imports of wood furniture peaked in 2006 at over 6 billion constant 1982 dollars (Fig. 1). In that year, China accounted for over 46 percent of U.S. imports and Vietnam became the third-largest source for wood furniture. By 2006, combined U.S. imports from China, Vietnam, Malaysia, Indonesia, Thailand, the Philippines, and Taiwan accounted for over 65 percent of wood furniture imports. Also by 2006, bedroom furniture had become the most important import category next to the catch-all "Other" category (Fig. 2).

Between 2006 and 2010, imports of wood furniture declined by 21 percent in nominal terms, but this decline was not uniformly distributed over regions and countries. Chinese imports declined by 28 percent due to a variety of factors including government policies discouraging exports of wood furniture, currency appreciation, declining export sales due to the global recession, recent and emerging trade barriers (both technical and tariff-based), and increasing costs associated with raw materials, transportation, and labor (Sanchez et al. 2008; Han et al. 2009). Imports from Canada also declined by 47 percent, but imports from Europe declined by only 16 percent. By contrast, shipments from Vietnam doubled during this period, allowing it to become the leading source for bedroom furniture (Table 2), and indicating the next major player in the procession of furniture importers to the United States.

An important factor in the growth of furniture imports from Vietnam has been the U.S. anti-dumping duties on wood bedroom furniture from China, which has redirected considerable investment to Vietnam. Studies have also shown the comparative advan-tages associated with Vietnam: a country with a large production and exporting capacity in wood furniture, abundant cheap labor, and costs low enough to offset proximity disadvantages to major markets, or transportation costs (Han et al. 2009). To illustrate, the United States accounted for nearly 40 percent of total wood furniture exports from Vietnam in 2006 (Huong and Dao 2007). Going forward, one factor that might affect Vietnamese sources and others is enforcement of the amended Lacey Act of 2008, which will require importers to declare the species and source of wood used in furniture products imported into the United States (Combs 2010) in an effort to curtail the use of illegally logged material.

CONCLUSIONS

1. Since 2000, much of the U.S. wood furniture manufacturing industry has largely succumbed to lower-cost Asian competition, but this decline of U.S. furniture manufacturing has been developing for nearly 40 years. In the 1970s, U.S. furniture producers started to import low-cost chairs, first from Yugoslavia and later from Taiwan. The U.S. has always imported specialty furniture products, but imports from the 1980s and beyond appear to have been low-cost products primarily from Asia and Canada. Canada’s ability to compete against Asian producers was augmented by a low exchange rate between the Canadian and U.S. dollar. As the furniture industry moved from Taiwan to other lower-cost Asian producers, Canadian firms were able to continue to ship furniture into the U.S. market with adoption of modern production technology. Still, by the mid-2000s, Canadian manufactures generally could no longer compete with low wage Asian producers who manufactured furniture in modern plants and often sold this furniture under a fixed exchange rate.
2. The types of wood furniture products imported into the U.S. also have changed considerably over time. In 1972, chairs represented 32-percent of these imports (CIDUCD 2011). While wood furniture is a labor-intense product in general, chairs are particularly labor-intensive relative to the volume of wood consumed in their construction. In the 1970s and 1980s, imported chairs were often sold in combination with dining tables and case goods manufactured in the U.S. Eventually, Asian producers were exporting entire suites of furniture to the U.S. By 2010, chairs represented only 7 percent of furniture imports, while imports of most other furniture products increased in both nominal and deflated (relative) terms (USDC, ITA 2011).
3. One of the primary reasons why Asian manufacturers have been able to dominate the U.S. wood furniture market is that consumers generally have been motivated by the relatively low prices of imported furniture (Engardio and Roberts 2004). For U.S. companies, success has come, in part, from offering customized products. If furniture is not treated as a commodity but rather as a product in which the consumer can make styling decisions and be part of the pricing process, there may be the potential for U.S. manufacturers to re-enter this traditional market for U.S. hardwoods products (Buehlmann and Schuler 2009). Even if some lost market share is recaptured by the U.S. industry, history suggests that imports will continue to play a major role in the furniture sector, even though the procession of players and products will likely continue to change over time.

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APPENDIX– DETAILED ANALYSIS OF THE DATABASES USED IN THIS STUDY

There are four major classes of wood furniture products, including household furniture (WHF), commercial furniture (store fixtures, etc.), institutional furniture (schools, libraries, public building, hotels, restaurants, etc.), and office furniture (WOF). Some of the ambiguities associated with wood furniture import statistics are due to differences in how the Tariff Schedule of the United States Annotated (TSUSA) and the Harmonized System (HS) classify specific furniture products. Additional issues are associated with the classification of institutional and commercial furniture.

The TSUSA system was instituted in 1972 and ran through 1988. An examination of TSUSA data (CIDUCD 2011) found five products that could be identified as wood furniture in 1972: 7271500 – bentwood, 7273020 – chairs wood folding, 7273040 chairs wood NSPF, 7273500 – furniture wood NSPF, and 7274000 furniture parts wood NSPF. By 1987, the number of wood furniture categories increased to 15 (Appendix Table 1). There is no way to separate WHF from wood office, institutional, and commercial furniture using the TSUSA product groups.

Appendix Table 1. Wood Furniture Products Listed in the 1987 Tariff Schedules of the United States Annotated 1987 (USITC 1988)

TSUSA Code	Product Description
7271500	Furniture and parts bentwood
7272300	Folding directors wood chairs
7272500	Other folding wood chairs
7272700	Chairs of teak wood, nspf[1]
7272900	Wood chairs, nspf
7273525	Desks and desk extensions, of wood
7273530	Dining tables, wood
7273535	Tables, nspf of wood
7273545	Beds and headboards, wood
7273550	Bedroom furniture, wood, nspf
7273555	Wall systems, buffets, etc, of wood
7273560	Shelving of wood
7273590	Wood furniture, nspf
7273900	Parts of chairs, of wood
7274140	Wood furniture parts, nspf

[1] "Not specifically provided for"

Import data was collected using the Harmonized System (HS) system starting in 1989, but the current product categories were implemented in 1990. An examination of products definitions for the HS found 22 products that could be classified as wood furniture. Seven of these products most likely can be classified as WHF, ten of these products likely contain a high proportion of WHF, and five products most likely are not WHF (Appendix Table 2). Most problematic of the ten products that likely contain a high proportion of WHF are bedroom furniture that could be used in an institutional application such as motels and hotels, wooden dining tables that could be used in restaurants, and furniture parts that can be used in any type of furniture.

Examination of these TSUSA and HS product categories found five major groupings that appear to contain similar products: bentwood furniture, chairs and seats, dining tables, bedroom furniture, and furniture parts (Appendix Table 3). The remaining five TSUSA and the three HS product categories probably contain some proportion of WOF or institutional furniture. The most difficult HS product is *wooden furniture, nesoi* because it apparently contains shelving and unidentified tables, which could be used in institutions such as libraries, public buildings, and stores. The conclusion of this analysis of TSUSA and HS data is that it is not possible to separate WHF from office, institutional, and commercial furniture prior to 1989, and that it is not possible to separate WHF from institutional and commercial furniture after 1989.

Appendix Table 2. Wooden Furniture that Is Definitely Wood Household Furniture, Likely to Have a High Proportion of Wood Household Furniture, and Likely Does Not Contain Wood Household Furniture for Calendar Year 1990 (USDC, ITA 2011)

Harmonized Code	Product Description	Million Dollars
	Most likely wood household furniture	
9401692010	Hshld[1] seats with wooden frame, bentwood, exc[2] uphl[3]	4.8
9401694010	Hshld seats with wooden frame, chair teak, exc uphl	5.6
9401696010	Hshld seats with wooden frame for chairs, exc uphl nesoi[4]	209.2
6401698010	Hshld seats with wooden frame, exc uphl nesoi	13.5
9403409040	Wooden dining tables of a kind used in the kitchen	21.7
9403404000	Bentwood furniture of a kind used in the kitchen	0.4
9403409080	Wooden furniture of a kind used in the kitchen, nesoi	28.6
	Likely to contain a high proportion of wood household furniture	
9401901500	Parts of bentwood seats	0.9
9401904000	Seat parts of wood	32.9
9403604000	Bentwood furniture, nesoi	1.8
9403608040	Wooden dining tables, nesoi	83.8
9403504000	Bentwood furniture of a kind used in the bedroom	0.6
9403509040	Wooden beds of a kind used in the bedroom	79.7
9403509080	Wooden furniture of a kind used in the bedroom, nesoi	210.8
9403608080	Wooden furniture, nesoi	884.8
9403907000	Furniture parts of wood	132.1
	Likely not wood household furniture	
9401692030	Seats with wooden frame, bentwood, exc uphl	6.2
9401694030	Seats with wooden frame, chair teak, exc uphl	4.0
9401696030	Seats with wooden frame for chairs, exc uphl nesoi	61.0
9401698030	Seats with wooden frame, exc uphl exc	15.1
9403300000	Wooden furniture of a kind used in offices	136.2
	Total	1933.7

[1] "Household"
[2] "Except"
[3] "Upholstered"
[4] "Not elsewhere specified or included"

Appendix Table 3. Comparison of Tariffs Schedule USA (TSUSA) and the Harmonized System (HS) by Similar and Dissimilar Categories for 1988 (last year of TSUSA) and 1990 (first complete year of HS)

Grouping, category and classification system, product	1988	1990
	--- million dollars ---	
Products that have similar TSUSA and HS classifications and products		
Bentwood furniture		
TSUSA classification(s)		
7271500-Furniture and parts bentwood	8.7	NA
Similar HS classification(s)		
9401692010 - Hshld[1] seat w wooden frame, bentwood, exc[2] uphl[3]	NA[4]	4.8
9401692030 - Seats with wooden frames, bentwood, exc uphl	NA	6.2
9403404000 - Bentwood furniture of a kind used in the kitchen	NA	0.4
9403504000 - Bentwood furniture of a kind used in the bedroom	NA	0.6
9403604000 - Bentwood furniture, nesoi[5]	NA	1.8
9401901500 - Parts of bentwood seats	NA	0.9
Total bentwood	NA	14.7
Chairs and seats		
TSUSA classification(s)		
7272300 - Folding directors wood chairs	5.7	NA
7272500 - Other folding wood chairs	10.1	NA
7272700 - Chairs of teak wood, nspf[6]	18.4	NA
7272900 - Wood chairs, nspf	409.8	NA
Total chairs	444.0	NA
Similar HS classification(s)		
9401694010 - Hshld seats with wooden frame, chairs, teak exc uphl	NA	5.6
9401694030 - Seats with wooden frame, chairs, teak exc uphl	NA	4.0
9401696010 - Hshld seats with wooden frame for chairs, exc uphl nesoi	NA	209.2
9401696030 - Seats with wooden frame for chairs, exc uphl nesoi	NA	61.0
6401698010 - Hshld seats with wooden frame, exc uphl nesoi	NA	13.5
9401698030 - Seats with wooden frame, exc uphl nesoi	NA	15.1
Total seats	NA	308.4
Dining tables		
TSUSA classifications(s)		
7273530 - Dining tables, wood	94.5	NA
Similar HS classification(s)		
9403409040 - Wooden dining tables of a kind used in the kitchen	NA	21.7
9403608040 - Wooden dining tables furniture, nesoi	NA	83.8
Total dining tables	NA	105.5
Bedroom furniture		
TSUSA classification(s)		
7273545 - Beds and headboards, wood	87.2	NA
7273550 - Bedroom furniture, wood, nspf	130.9	NA
Total bedroom	218.1	NA
Similar HS classification(s)		
9403509040 - Wooden beds of a kind used in the bedroom	NA	79.7
9403509080 - Wooden furniture of a kind used in the bedroom, nesoi	NA	210.8
Total bedroom	NA	290.5

Appendix Table 3 - continued

Grouping, category and classification system, product	1988	1990
	---- million dollars ----	
Furniture parts		
TSUSA classification(s)		
7273900 - Parts of chairs, of wood	28.1	NA
7274140 - Wood furniture parts, nspf	119.9	NA
Total Parts	148.0	NA
Similar HS classification(s)		
9401904000 - Seat parts of wood	NA	32.9
9403907000 - Furniture parts of wood	NA	132.1
Total parts	NA	165.0
TSUSA and HS classifications and products that are not comparable		
TSUSA classification(s)		
7273525 - Desks and desk extensions, of wood	90.4	NA
7273535 - Tables, nspf of wood	339.7	NA
7273555 - Wall systems, buffets, etc, of wood	468.8	NA
7273560 - Shelving of wood	11.1	NA
7273590 - Wood furniture, nspf	261.3	NA
Total TSUSA not comparable products	1171.3	NA
HS classification(s)		
9403409080 - Wooden furniture of a kind used in the kitchen, nesoi	NA	28.6
9403300000 - Wooden furniture of a kind used in offices	NA	136.2
9403608080 - Wooden furniture, nesoi	NA	884.8
Total HS not comparable products	NA	1049.6
Total similar (comparable)	913.3	884.1
Total dissimilar (not comparable)	1171.3	1049.6
Total similar and dissimilar	2084.6	1933.7

[1] "Household"
[2] "Except"
[3] "Upholstered"
[4] "Not applicable"
[5] "Not elsewhere specified or included"
[6] "Not specifically provided for"

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