

CRS Report for Congress

U.S. Furniture Manufacturing: Overview and Prospects

May 14, 2007

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Prepared for Members and
Committees of Congress

U.S. Furniture Manufacturing: Overview and Prospects

Summary

In terms of output and sales, the domestic U.S. furniture manufacturing industry has been a large and growing industry since 1990. The gross output of furniture and related products grew steadily from about \$40 billion to \$74 billion in the ten years between 1991 and 2001. Output fell with the recession in 2001, but buoyed by the boom in residential housing, furniture output growth soon resumed. By 2005, total furniture output had reached more than \$85 billion. Household furnishings accounted for \$48 billion, and office furniture and fittings another \$26 billion.

However, the furniture industry is highly segmented, and patterns of growth have not been experienced equally by all sectors of the industry since 2000. Also, in most product classes, manufacturing employment has fallen, and has not recovered to the peak years around 2000. Domestic manufacturing employment has been most severely affected in the wood household furniture product class (case goods), where total manufacturing employment has fallen by almost half, from 130,000 to 70,000, since 2000. Large consolidators acquired many traditional manufacturers, closed and rationalized domestic plants, and shifted the focus to distribution and retail activities. This product class has been severely affected by imports, which now account for more than 50% of U.S. consumption. By contrast, employment in upholstered furniture has not declined nearly as much, about 20% or 20,000 jobs, in part because imported products have been much less of a factor. In the third major product category under household furnishings, wood kitchen cabinets and countertops, there has been a boom in both output and employment.

Hardest hit by job losses in residential furniture manufacturing has been the largest producing state, North Carolina, which lost about 19,000 jobs between 2000 and 2005, about 28% of total employment in the industry. Other states, especially California, the number two producer, have also suffered high job losses. On the other hand, Mississippi, a major center of upholstered furniture production and the third-biggest producing state, has seen more modest job losses.

China has become the major import supplier of furniture products during the last decade, and more than a third of total imports from this source are wood household furniture products. An antidumping order was imposed on wooden bedroom furniture from China, and many U.S. manufacturers are receiving disbursements of the collected duties under the terms of the "Byrd Amendment" (Continued Dumping and Subsidy Offset Act, 19USC §1675C). After being found to contravene the rules of the World Trade Organization, the law was repealed by Congress, effective October 1, 2007. Future trade remedy cases may be less likely, as many wood furniture manufacturers are also heavily involved in importing.

U.S. office furniture manufacturing has been less affected by import competition, but was seriously affected by the "dot.com" bust in the recession of 2001. Job losses were particularly severe in Michigan, the center of the industry and in California, the number two state. Overall, the prospects of the office furniture industry going forward appear more attractive than in household furnishings.

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U.S. Furniture Manufacturing: Overview and Prospects

Introduction: A Segmented Industry

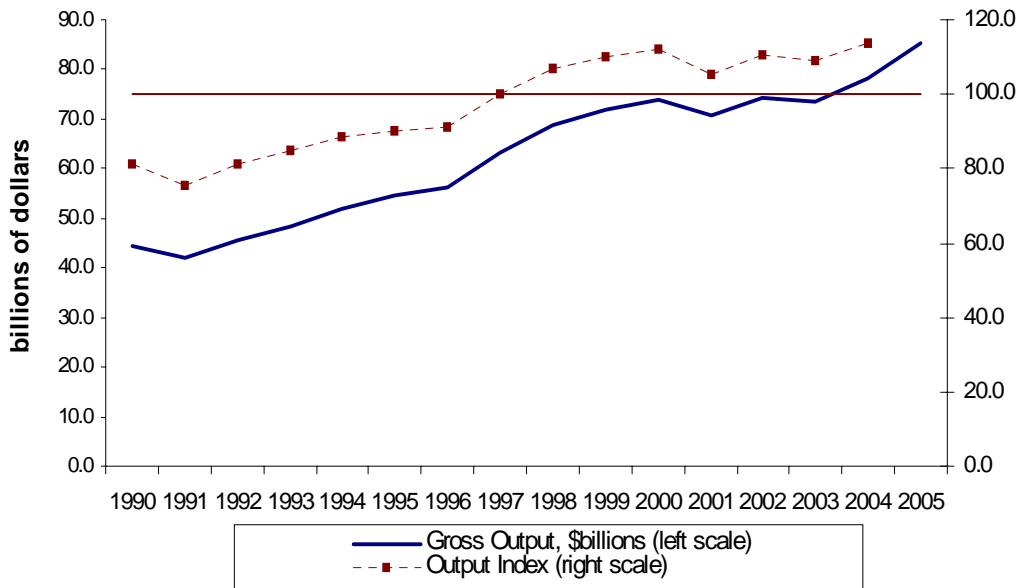
Domestic furniture manufacturing is really a collection of different industries, centered in different locales round the country. The largest group of products is “household and institutional furniture.” The leading state in terms of production within this category is North Carolina, with \$6.1 billion out of total shipments of \$48.5 billion in 2005, according to the latest available data in the Census Bureau’s *Annual Survey of Manufactures*. California ranked second in shipments at \$4.8 billion, while Mississippi was third at \$3.7 billion. But, whereas North Carolina predominantly supplies wooden “case goods,” such as dining room suites and bedroom furniture, Mississippi specializes more in upholstered furniture. As will be shown below, North Carolina has been far more heavily affected by job losses and plant closings than Mississippi in recent years.

The predominant state in manufacturing office furniture, the second major product group, is Michigan. It shipped \$6.3 billion out of a U.S. total of \$26.3 billion in 2005. Here, also, the number two state is California at \$2.3 billion; no other state shipped significantly more than \$1 billion. Both of these states have experienced heavy job losses in office furniture manufacturing between 2000 and 2005, as will be shown below – Michigan down 31%, California down 27% (California also sustained major job losses in residential furniture manufacturing). Unlike the residential furniture market, the office furniture market was much slower to recover from the recession of 2001, in which the “dot.com bust” had a major impact on office furniture sales.

In terms of output and sales, U.S. furniture manufacturing as a whole has been a large and growing industry since 1990.¹ After the recession of 1991, the gross output of furniture and related products grew steadily from about \$40 billion to \$74 billion over the next ten years. Output fell with the recession in 2001, but buoyed by the boom in residential housing, total furniture output growth quickly resumed. By 2005, the latest year for which gross domestic product industry data are available, total furniture output had reached more than \$85 billion (**Figure 1**). The output index, corrected for inflation, also started growing again after 2001, and by 2004 had topped the previous peak of 2000.

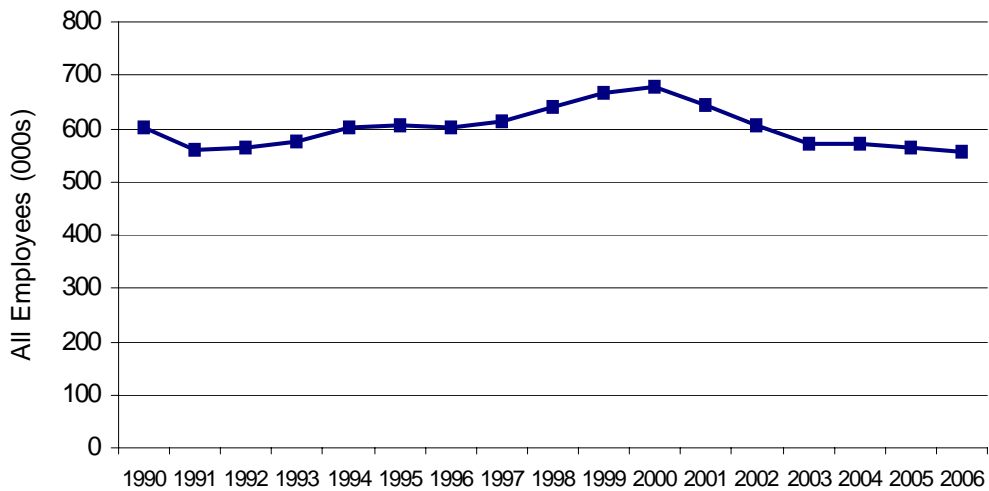
¹ North American Industry Classification System (NAICS) 337, “Furniture and Related Products.”

Figure 1. U.S. Furniture Manufacturing Output



Sources: Gross output, U.S. Department of Commerce, Bureau of Economic Analysis, Gross Product-by-Industry series; Output index, U.S. Department of Labor, Bureau of Labor Statistics (NAICS 337).

Figure 2. U.S. Employment in Furniture Manufacturing



Source: U.S. Department of Labor, Bureau of Labor Statistics.

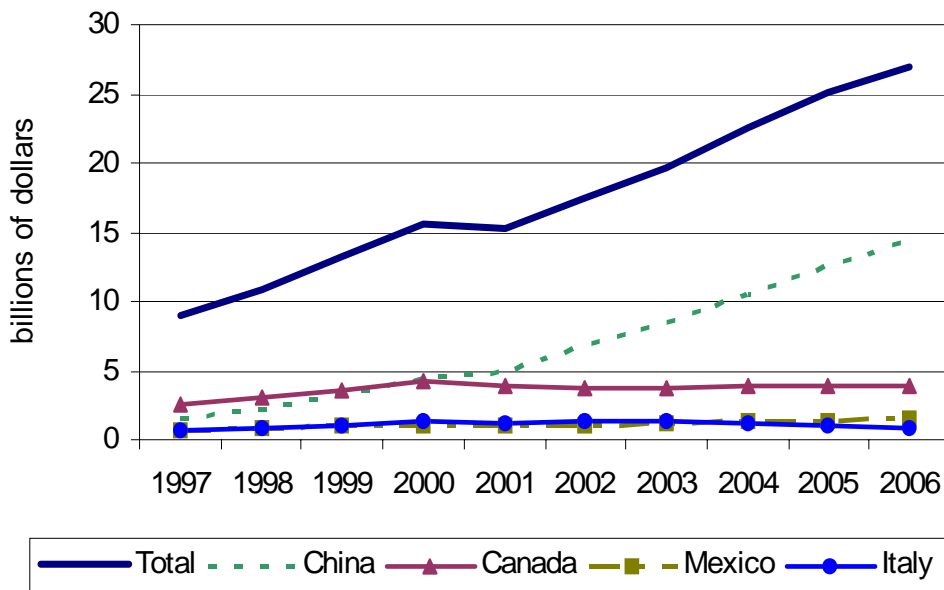
Note: Furniture and related products manufacturing (NAICS 337).

The same pattern – sustained growth, resuming after a brief hiccup occasioned by the 2001 recession – cannot be seen with respect to employment. Employment in furniture manufacturing, defined in its broadest terms, grew from 601,000 to 680,000 between 1990 and 2000, a rate of growth of nearly 1.25% per year. Employment fell by almost 40,000 in the recession year of 2001, and the decline has

continued since then. By 2006, employment in the industry was 556,000, a decline of almost 125,000 jobs from the peak just six years earlier, at an annual rate of decline of 3.3% (**Figure 2**). As will be shown later, the employment decline affected virtually all major product areas, including wooden household furniture, which has been heavily impacted by imports, and office furniture, where imports are not such a major factor. The only product segment within NAICS 337 to exhibit employment growth since 2000 has been wood kitchen cabinets and countertops.

With respect to competition from abroad, the key development over the past decade has been the emergence of China as the dominant supplier. By 1997, China was already number two to Canada as the leading exporter of furniture of all types to the U.S. market. By 2006, Chinese exports of \$14.4 billion to the United States were more than three times the value of imports of \$4 billion from Canada, now in second place. Mexico, at \$1.5 billion, was the only other import source greater than \$1 billion. Italy, the traditional European leader in furniture exporting, ranked next at \$892 million. China is the leading import supplier in most major product categories, but its role in wooden residential furniture is particularly notable. More than a third of the imports from China – \$5.1 billion in 2006 – apparently were in this category. The only residential product in which China was not the leading import source was wooden kitchen cabinets and countertops, a relatively minor trade category, in which China ranked a distant second to Canada. The growth of China as the dominant source of U.S. furniture imports is shown in **Figure 3**.

Figure 3. U.S. Furniture Imports



Source: U.S. International Trade Commission Trade Dataweb, using U.S. Department of Commerce data.

Note: Import data NAICS 337.

Household Furnishings

Output and Employment Trends

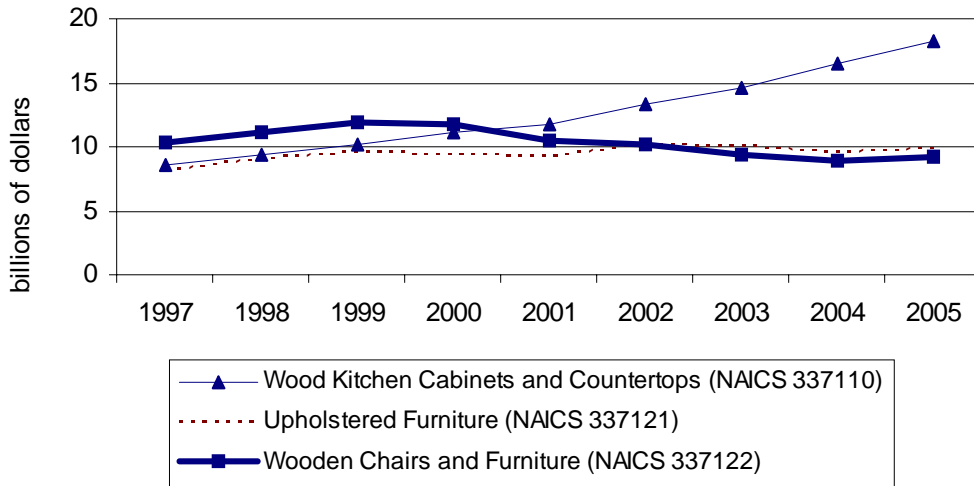
Household furnishings are the largest product grouping in both U.S. furniture manufacturing output and consumption. In 2005, the latest data year in the *Annual Survey of Manufactures*, household furnishings (including institutional products) accounted for \$48.5 billion of the \$84.3 billion in shipments reported for NAICS 337 (57.5%). Within household furnishings (NAICS 3371), three product classes have accounted for the bulk of product output and shipments. They are: *wood kitchen cabinets and countertops* (NAICS 337110); *upholstered household furniture* (NAICS 337121); and *nonupholstered wood household furniture* (NAICS 337122), sometimes also referred to as “case goods.” The last category would include, for example, dining room chair sets, even though the backs and seats may contain some upholstery.

While these are the three largest classes of products within the category of household furnishings, their recent histories with respect to U.S. production and manufacturing employment have been radically different, as illustrated in **Figures 4** and **5**.

- The domestic manufacture of *wood kitchen cabinets and countertops* has benefitted from the recent boom in residential construction and remodeling. Along with that, “custom kitchens” are frequently “made to measure,” discouraging production, shipping and delivery from overseas sources, so most of the market has been captured by domestic producers. Also, this product class was relatively little affected by the recession of 2001. Product shipments increased from \$8.5 billion in 1997, to more than \$11 billion in both 2000 and 2001, and to \$18.3 billion by 2005. Employment was 124,000 in 1997. It stalled around 149,000 in the first three years of the new century, but then grew again to 177,000 by 2005.
- Domestic shipments of *nonupholstered wood household furniture* were more than \$10 billion in 1997, almost \$2 billion higher than cabinets and countertops in that year. But they fell more than \$1 billion in 2001, and have not substantially recovered since. In 2005, shipments of these products (\$9.2 billion) were barely half the level of cabinets and countertops. Employment has fallen from a peak level of about 130,000 in 2000 to 70,000 in 2006, a loss of nearly half of all jobs. The key development in this part of the industry, as will be discussed more below, has been the closing of many production facilities, and transition to more of a retail and distribution mode, based on a high rate of imported products.
- Manufacturers of *upholstered furniture*, which includes sofas and living room suites, have not enjoyed the extended boom of the cabinet industry, but have seen shipments stabilize around \$10 billion per year after moderate growth in 1998-2002. Employment

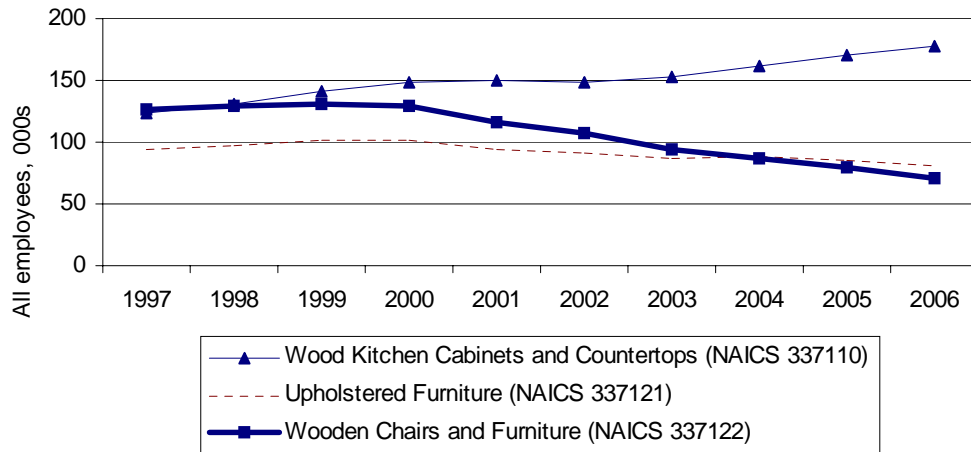
has also fallen, but not as precipitously as in wood furniture manufacturing. About 20,000 jobs have been lost since 2000, a decline of about 20%. As one source explains it, bulky upholstered furniture costs more to ship long distances than wood furniture. This may absorb most of the labor cost differential with China for ready-made lower-cost products. For higher end products, customers appear to prefer to choose and customize covering fabrics, which places a premium on domestic manufacturing.²

Figure 4. Household Furniture: Value of Product Shipments



Source: U.S. Department of Commerce, U.S. Census Bureau. *Annual Survey of Manufactures*.

Figure 5. Household Furniture: Manufacturing Employment



Source: U.S. Department of Labor, Bureau of Labor Statistics.

² CRS interview with Wallace W. Epperson of Mann, Armistead and Epperson, April 16, 2007.

Competition from Imports

The worst loss of employment in U.S. household furniture manufacturing has been in wood furniture and case goods, and it is this product class that has been especially affected by imports. Such products can be shipped partially assembled and stacked flat in containers. According to one estimate, “by 2004, at least 54% of the wood household furniture consumed in the United States was imported.”³ In the last decade, the predominant business model in the industry has been characterized by industry consolidators who have bought up domestic brands, rationalized U.S. production facilities, and focused instead on the retail and distribution end of the business. They have used traditional brand names to target particular price levels and market segments in large single-brand stores. The largest of these consolidators has been Furniture Brands International, which has acquired such old-line furniture manufacturing brands as Lane, Broyhill, Thomasville, Henredon, Drexel-Heritage, and others.⁴ As a result of such changes, for example, the “American Furniture Manufacturers Association” changed its name to the “American Home Furnishings Alliance,” thus reflecting the shift in focus of many members from the manufacturing to the distribution end of the business.⁵

China has been the principal source of imports in this product class, as has been noted earlier. One independent industry analyst, using data from the Commerce Department, reported imports of wood household furniture from China at \$5.2 billion for 2006. That was 35% of total imports of \$14.4 billion from China in NAICS category 337 reported by the U.S. International Trade Commission Trade Dataweb. By comparison, the industry analyst reports imports of upholstered furniture from China at \$1.6 billion for the same year.⁶

One antidumping case has been brought against wooden bedroom furniture imported from China. On January 4, 2005, the Commerce Department announced a final determination in the case of dumping margins of 6.65% against most Chinese producers for the U.S. market that it investigated. For two other companies the rate was somewhat higher.⁷ The levels of anti-dumping margins is under review in 2007. With the new industry business model focused on distribution and retail trade, and with much product sourced from abroad, there may be less likelihood of trade remedy

³ Shawn T. Grushecky, *et al.* “Decline in the U.S. Furniture Industry: A Case Study of the Impacts to the Hardwood Lumber Supply Chain,” *Wood and Fiber Science*, XXXVIII:2 (April 2006), p. 366, citing the *Hardwood Market Report*.

⁴ Tables U, V, and W in Mann, Armistead and Epperson’s *Furniture Digest* (February 2006) list some of the major consolidators, the brands that they own, and the price/quality level at which each brand is aimed.

⁵ See AHFA website at [<http://www.ahfa.us>].

⁶ Data on Chinese imports of wood and upholstered residential furniture from Mann, Armistead and Epperson, *Furnishings Digest Newsletter* (March 2007).

⁷ *Federal Register*, vol. 70, no. 2 (January 4, 2005), pp. 329-333. The “all others” rate for companies from the People’s Republic of China not investigated by Commerce was nearly 200%, based on surrogate third-country costs of production, since China was defined as a nonmarket economy.

cases in the future. Under the U.S. “Byrd Amendment” law, \$32 million in 2006 penalty duties from this case will be distributed to U.S. furniture manufacturers. This source of income will disappear, however. After an adverse ruling from the World Trade Organization, Congress repealed the law and no further distributions will be made from duties collected after October 1, 2007.⁸

Another issue that has arisen in China’s furniture and wood products trade is the source of wood for Chinese products. According to an expose in the *Washington Post*, official Chinese concerns about the impact of deforestation led to much tighter restrictions on timber cutting and a major replanting effort in 2000-2005. As a consequence, imports of logs to support Chinese wood products industries have risen to more than \$5 billion annually. The *Post* reports that much of this wood comes from Burma and Russia, where, in both cases, it may be harvested illegally. The private sector Forest Stewardship Council operates a program to certify that wood used in furniture and other products is legally harvested. Some leading U.S. retailers of wood products (such as the furniture seller Ikea) participate in this program, but others do not. In any case, the amount of wood certified by the program appears to be only a fraction of that used by major retailers (4% in the case of Ikea) – and other companies do not participate in the program at all.⁹

Employment Impact by State

The impact of these trends in the household furniture industry have been particularly significant for North Carolina and, to a lesser degree, the neighboring states of Virginia and Tennessee. According to an analysis of furniture industry plant closings published by two academic authors in the *Forest Products Journal*, North Carolina had by far the most plant closings in the furniture industry between 2000 and 2003, according to data derived from non-official sources. That state saw a total of 73 plant closings during the period. Virginia was second with 15 closings, and Tennessee reported 10. California, which was noted above as the second-leading state in household furniture production, had nine plant closings.¹⁰

These plant closings include all types of furniture production, but it should be noted that the three leading companies in terms of plant closures were also reported in *Furnishings Digest* as among the leading residential furniture industry consolidators. They were: Furniture Brands International (19 closures); La-Z-Boy (13 closures), and LifeStyles Furnishings (12 closures). Klaussner Furniture, tied for

⁸ The “Byrd Amendment” is formally the Continued Dumping and Subsidy Offset Act (19 USC §1675c). See discussion in CRS Report RL32014, *WTO Dispute Settlement: Status of U.S. Compliance in Pending Cases*, by Jeanne Grimmett. Data on wooden bedroom furniture disbursements from U.S. Customs and Border Protection. *FY2006 CDSOA Annual Disbursement Report*, pp. 143-144.

⁹ Peter S. Goodman and Peter Finn, “Corruption Stains Timber Trade,” *Washington Post* (April 1, 2007), p. A1.

¹⁰ Henry J. Quesada and Rado Gazo, “Mass Layoffs and Plant Closures in the U.S. Wood Products and Furniture Manufacturing Industries,” *Forest Products Journal*, LVI:10 (October 2006), p. 105 and fig. 6.

sixth with five closures, was also on the *Furnishings Digest* consolidators' list.¹¹ Professors Quesada and Gazo in the *Forest Products Journal* article state:

Companies such as FBI and La-Z-Boy had reported in their annual stockholder reports that closing of plants resulting from consolidating or reorganizing and offshore outsourcing were sometimes their only viable options to remain competitive. Much of the production of companies such as FBI has shifted to offshore locations ... due to the leverage of manufacturing costs and the search for competitive advantage such as outsourcing.¹²

The following table summarizes the changes in level of employment and production in household furniture manufacturing in the leading producer states. It shows all the states with employment of more than 10,000 persons in household furniture manufacturing, as of 2005.

Table 1. Leading States in Household Furniture Manufacturing
(NAICS 3371)

State	2000		2005		Job Gain/Loss	
	Employ.	Product Shipments	Employ.	Product Shipments	Total	% Chg.
		(\$ bils.)		(\$ bils.)		
NC	66,572	6.6	47,771	6.1	-18,801	-28
CA	48,737	4.5	39,792	4.8	-8,945	-18
MS	26,682	3.0	24,434	3.7	-2,248	-8
VA	18,305	2.0	17,389	2.7	-916	-5
TX	17,272	1.8	17,341	2.2	69	0
OH	17,096	2.6	15,706	3.2	-1,390	-8
PA	17,809	2.0	15,059	2.1	-2,750	-15
TN	20,114	2.0	14,564	1.7	-5,550	-28
IN	15,301	2.0	14,448	2.7	-853	-6
NY	11,997	1.2	12,383	1.4	386	3
U.S. TOTAL	416,134	43.3	354,613	48.5	-61,521	-17

Source: U.S. Dept. of Commerce. U.S. Census Bureau. *Annual Survey of Manufactures*.

¹¹ *Ibid.*, tab. 7; *Furnishings Digest* (February 2006), tab. U.

¹² Quesada and Gazo, "Mass Layoffs," p. 105.

The table highlights the impact especially on North Carolina from the decline in wood furniture manufacturing. While it is the largest state in terms of production and employment, the state lost nearly 19,000 jobs in the industry in just a five-year period, a 28% employment decline. A North Carolina state commission lists furniture and related products as one of four industries that together accounted for 56,000 of the 72,000 manufacturing jobs lost in the state between 2002 and 2005 (the biggest loser was textiles, and the other two product areas were apparel and, perhaps surprisingly, computer and electronics manufacturing).¹³ California, with a much larger employment base than North Carolina, lost 18% of its household furniture manufacturing jobs, but at about 9,000, the total of such jobs lost was less than half that in North Carolina.

Two other states had comparable percentage losses. Tennessee lost 5,550 jobs in household furniture manufacturing, like North Carolina 28% of its workforce in the industry. While being fourth among states in such jobs in 2000, with employment more than 20,000, by 2005 it had fallen to eighth. Wisconsin, not shown in the table, lost 37% of its household furniture manufacturing jobs, as employment fell from nearly 11,000 in 2000 to less than 7,000 by 2005.

Few states showed any increase of jobs in this category. Among the leading states shown in the table, New York and Texas gained relatively small numbers of jobs. Two states employing in the 5,000-10,000 job range in this industry, Florida and Iowa, also reported modest employment gains of 5% or less.

Also interesting were states which did not report large job losses. Virginia was listed earlier as the number two state in unofficially counted plant closures in 2003, but the net job loss reported for the state by the Bureau of Labor Statistics was less than 1,000, or about 5%, in 2000-2005. And although Mississippi, the third-ranking producer of residential furniture in the nation did report a loss of 2,200 jobs (8%), that was much lower than the other leading states. As was mentioned earlier, this may be due to Mississippi's greater specialization in upholstered furniture.

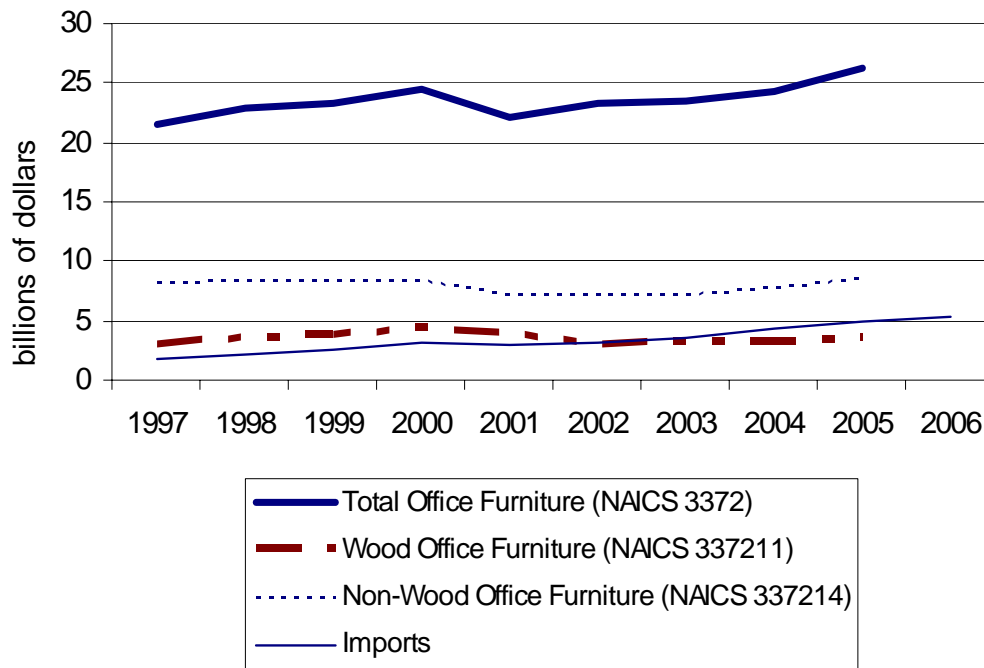
¹³ North Carolina Commission on Workforce Development. *State of the North Carolina Workforce: An Assessment of the State's Labor Force Demand and Supply, 2007-2017* (January 2007), fig. 9.

Office Furniture

Output and Employment Trends

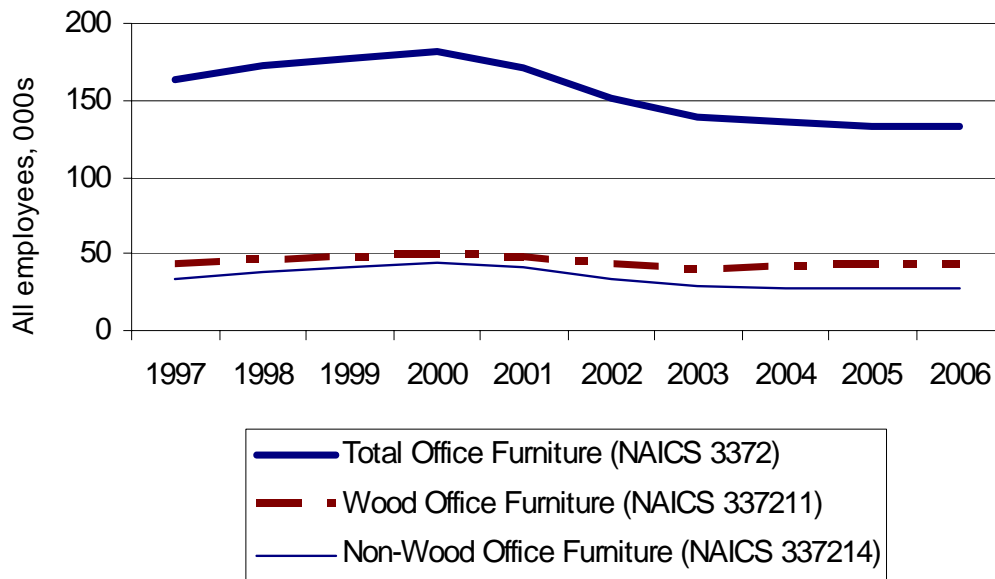
The other major category of products under the general heading of furniture and related products is office furniture, including fixtures, NAICS 3372. Shipments from this product group in 2005 were \$26.3 billion. NAICS 3372 includes office furniture made of wood and other materials, including panels and modular systems. It also includes a diverse group of products used in commercial, office and industrial locations, such as showcases, shelving, partitions, and lockers. The category also includes custom architectural millwork. From the point of view of the Business and Institutional Furniture Manufacturers Association (BIFMA), however, the industry is essentially defined by NAICS 337211, wood office furniture, and NAICS 337214, office furniture made of material other than wood.¹⁴

Figure 6. Office Furniture: Value of Product Shipments



Source: U.S. Dept. of Commerce. U.S. Census Bureau. *Annual Survey of Manufacturers*. Imports from USITC Trade Dataweb.

¹⁴ CRS interview with Mike Reagan, BIFMA, April 10, 2007.

Figure 7. Office Furniture: Manufacturing Employment

Source: U.S. Department of Labor, Bureau of Labor Statistics

Figure 6 tracks the total value of shipments of NAICS 3372 over the past decade. It grew from \$21.5 billion to \$24.4 billion, or about \$3 billion, between 1997 and 2000. NAICS 3372 shipments then dropped more than \$2 billion in 2001, before recovering by 2004-5. About half of the shipments were office furnishings made of wood and other materials, about \$4 billion is from the millwork category, and most of the rest consists of showcase, locker, partition, and shelving products.

Looking more closely at the key office furniture products, one sees that shipments of wood office furniture peaked at \$4.4 billion in 2000, fell to less than \$3 billion in 2002, and have since recovered to about \$3.5 billion, almost \$1 billion less than the high point of 2000. Non-wood furniture exhibited a similar pattern, falling \$1.3 billion from the peak reached in the years 1998-2000, down to about \$7 billion in 2001. However, shipments then enjoyed a somewhat more robust recovery than shipments of wood products, attaining a new peak of \$8.5 billion in 2005. Using its own adjusted data, BIFMA calculates that after three negative growth years in 2001-2003, U.S. production of office furniture, under their definition, grew at 5% in 2004, 12.7% in 2005 and a further 7.1% in 2006. The industry association projects both domestic production and consumption to increase in the 7-8% range in 2007-2008.¹⁵

Competition from Imports

Added to **Figure 6** is a line representing the level of imports, which reached more than \$5 billion in 2005 and 2006, or the equivalent of about 20% of U.S.

¹⁵ BIFMA. "Value of U.S. Office Furniture Market" and "Current U.S. Office Furniture Market Forecast," at [<http://www.bifma.org/statistics>].

domestic product shipments under the broadest definition (NAICS 3372). As with residential furniture, China has also become the leading source in this category of goods. Imports of about \$2.5 billion from China in 2006 accounted for 43% of the total.

Though the rise of imports has been significant, it has not been as serious a cause of industry concern as in the case of household furniture. In the office furniture markets measured by BIFMA, U.S. production in 2006, net of exports of less than \$500 million, was equal to more than 80% of apparent domestic consumption. While China is the overall leading foreign supplier for NAICS 3372 as a whole, within the wood and non-wood office furniture market, “the chief ... trading partner with the U.S. is Canada ... currently providing about 45% of all office furniture brought into the United States,” according to BIFMA. The organization further notes that Canada’s share has declined from closer to 60% of imports in the late 1990s, and that China, particularly, has increased its share of the import market.¹⁶ But, overall, the BIFMA board does not see trade as a major issue, and believes that imports will “level off.”¹⁷

Employment Impact by State

While industry prospects may have recovered, or are recovering following the down years after 2000, **Figure 7** shows that employment has not followed suit. The entire NAICS 3372 product sector has lost about 50,000 manufacturing jobs since 2000, from a peak of more than 180,000 to 132,000 in 2006. But over the last three years, the employment decline has virtually stopped. In fact, in wood office furniture there has been a small reversal in the downward trend. Employment fell from a peak of 48,700 in 2000 to less than 40,000 by 2003, but increased back to 43,400 nationwide by 2006. In non-wood office furniture, the downward trend has also almost halted, falling from 43,700 at the 2000 peak to something over 27,000 annually in 2004-2006.

Seven major companies control about 60-65% of industry output of wood and non-wood office furniture. The three largest are all headquartered in western Michigan, the center of the industry: Steelcase, Herman Miller and Haworth. Three others are located in the Midwest: HNI (Iowa), Kimball (Indiana) and KI (Wisconsin). The seventh, Knoll, is headquartered in Pennsylvania.¹⁸ With the “dot.com” crash and the recession of 2001, the industry experienced a sharp shakeout out of employment and a new push to leaner productivity.

The case of Herman Miller Inc. provides a good example. Their CEO is quoted as saying, “We had a two- or three-year period where business dropped 45%; that was like an industry heart attack ... In 1995 when I took over, sales were under \$1 billion. By 2000, they were \$2.2 billion. By 2003, they were down to \$1.3 billion.”

¹⁶ BIFMA. “Imports/Exports” at [<http://www.bifma.org/statistics>].

¹⁷ Reagan interview. For example, the BIFMA website does not list concern regarding trade or imports as a “Government Issue.”

¹⁸ CRS interview with Mike Reagan, BIFMA, May 8, 2007.

To return the company to profitability, he was forced to lay off 38% of the company's workforce (4,500 workers), sell more than one million square feet of real estate, including a signature Frank Gehry-designed building, and close or sell several business divisions.¹⁹ Herman Miller is included in the list of top 10 furniture plant closures of all types, compiled from non-official sources by Quesada and Gazo; it is listed tenth, with four closures. Also on the list representing the office furniture industry are: Kimball (number four, nine closures); and Haworth and Steelcase, tied for sixth with five closures each.²⁰

Table 2. Leading States in Office Furniture Manufacturing
(NAICS 3372)

State	2000		2005		Job Gain/Loss	
	Employ.	Product Shipments	Employ.	Product Shipments	Total	% Chg.
		(\$ bils.)		(\$ bils.)		
MI	24,434	5.0	17,127	6.3	-7,709	-31
CA	18,152	2.6	13,298	2.3	-4,854	-27
IN	9,111	1.3	9,302	1.4	191	2
IL	11,489	1.5	7,976	1.3	-3,513	-31
NC	11,277	1.2	7,956	1.1	-3,321	-29
NY	8,032	0.9	7,921	1.1	-111	-1
PA	7,377	1.3	6,186	1.0	-1,191	-16
OH	6,852	0.8	5,135	0.7	-1,717	-25
U.S. TOTAL	177,914	24.6	137,709	26.3	-40,025	-23

Source: U.S. Dept. of Commerce. U.S. Census Bureau. *Annual Survey of Manufactures*.

Table 2 illustrates the overall profile of the entire office furniture and furnishings sector, showing all states with more than 5,000 employed in the industry as of 2005. As noted earlier, the industry is dominated by Michigan, which alone accounted for \$6.3 billion in shipments, or about a quarter of the U.S. total. But Michigan has also suffered the largest job loss in the sector, nearly 8,000 jobs or 31% of its office furniture sector total. California, the number two state was also hard hit, losing nearly 5,000 jobs or 27% of its total employment. Illinois and North Carolina were the other two relative big losers. Illinois, formerly number three in employment

¹⁹ Linda Tischler, "Herman Miller's Leap of Faith," *Fast Company* (June 2006), p. 52.

²⁰ Quesada and Gazo, "Mass Layoffs," tab. 7.

lost 3,500 jobs (31%) and North Carolina, formerly fourth, lost 3,300 jobs (29%). Indiana actually gained a few jobs and moved into third place, with more than 9,000 employed in the industry. New York suffered minimal job declines in the industry while Pennsylvania and Ohio were proportionally much larger job losers.

On the whole, office furniture is much more centered on the Midwest-Northeast manufacturing belt than household furniture, although California and North Carolina are two major outliers. The recovery of output in the sector overall from the recession of 2001 has not yet seen a significant increase in employment, although the two key product classes, wood and non-wood office furniture, have at least showed an end to declines in employment.

Prospects and Outlook

As stated in the introduction, the U.S. furniture industry is highly segmented, not only between office and residential products, but also among different classes of products within each of these sectors. In general, industry analysts appear to be somewhat pessimistic with respect to the prospects of residential furniture manufacturing in the United States, but more positive with respect to office furniture manufacturing.

Wood household furniture manufacturing is not only under serious pressure from import competition, especially from China, but also is in transition as the owners of major domestic brands have transformed their business models in response to perceived globalization of the industry. In the early 2000s, some industry observers suggested that these challenges could be met by a strategy of “mass customization,” wherein domestic manufacturers could take advantage of closer location to the customer to bundle orders in specialized products that still catered to individual tastes and measurements (somewhat similar to the strategy that has worked well with respect to kitchen cabinets and countertops). Such a strategy might have offset U.S. competitive disadvantages, such as higher labor costs and more restrictive – therefore higher cost – forest management practices.²¹ Whatever the merits of such alternative strategies, in terms of revealed competitiveness they do not appear to have reduced the effective threat of foreign competition or saved domestic jobs.

A more pessimistic assessment of the current situation views that the worst – in terms of plant closures and job losses – may be yet to come. A number of manufacturing plants may currently be continuing to operate with skeleton crews only so that the owners – who may include the large consolidators discussed above – can continue to collect customs disbursements under the Byrd Amendment. Once the benefits of that program are terminated, plant operators may move to complete

²¹ U.S. Dept. of Agriculture. Forest Service Northeastern Research Station. Albert Schuler and Urs Buehlmann, “Identifying Future Competitive Business Strategies for the U.S. Residential Wood Furniture Industry: Benchmarking and Paradigm Shifts,” General Technical Rept. NE-304 (March 2003). Rado Gazo and Henry J. Quesada, “A Review of Competitive Strategies of Furniture Manufacturers,” *Forest Products Journal*, LXV:10 (October 2005), pp. 4-12.

closure. The same source also foresees increasing pressure from Chinese competitors in upholstered furniture, as they develop strategies to gain larger shares of the U.S. market in that product class as well.²²

Gazo and Quesada in their article reviewing manufacturers' strategies conclude that, "It appears that companies in the kitchen cabinet and office furniture sectors are far less prone to be outperformed by Asian manufacturers. The possible critical success factors for these sectors is service."²³ But even cabinet manufacturers, insulated from foreign competition because "cabinet products come with a design service to integrate the cabinets in the total kitchen design,"²⁴ may see a fall in growth prospects owing to recent declines in home sales and the general cooling off of the residential real estate market.

Gazo and Quesada contrast the experience of the office and residential furniture industries:

The office furniture industry often provides whole-office organization systems. Increasingly, office furniture customers require solutions that are ready to use, including design, planning, production, delivery, and installation. On the other hand, the household furniture industry tends to focus on the product itself.²⁵

Evidence for this assertion can be found on the BIFMA website, where a statistical table lists office furniture production by product categories: seating, desks, storage, files, tables, systems, and a small residual "other" category. The share of annual production for each category has been relatively stable for the entire period 1990-2005.²⁶ While office furniture manufacturing also saw an employment decline following the recession of 2001, there is evidence that industry employment has stabilized. This prospect may be enhanced by the continuing strong growth in non-residential construction, the relatively low share of imports in the product sector, and the industry's own forecast of solid consumption growth in 2007-08.

²² CRS interviews with Wallace W. Epperson, April 16 and May 2, 2007.

²³ Gazo and Quesada, "Review of Competitive Strategies," p. 11.

²⁴ *Ibid.*

²⁵ *Ibid.*

²⁶ See "Annual U.S. Production by Product Category," at [<http://www.bifma.org/statistics>].