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MONTHLY WHOLESALE TRADE: SALES AND INVENTORIES
JULY 2004

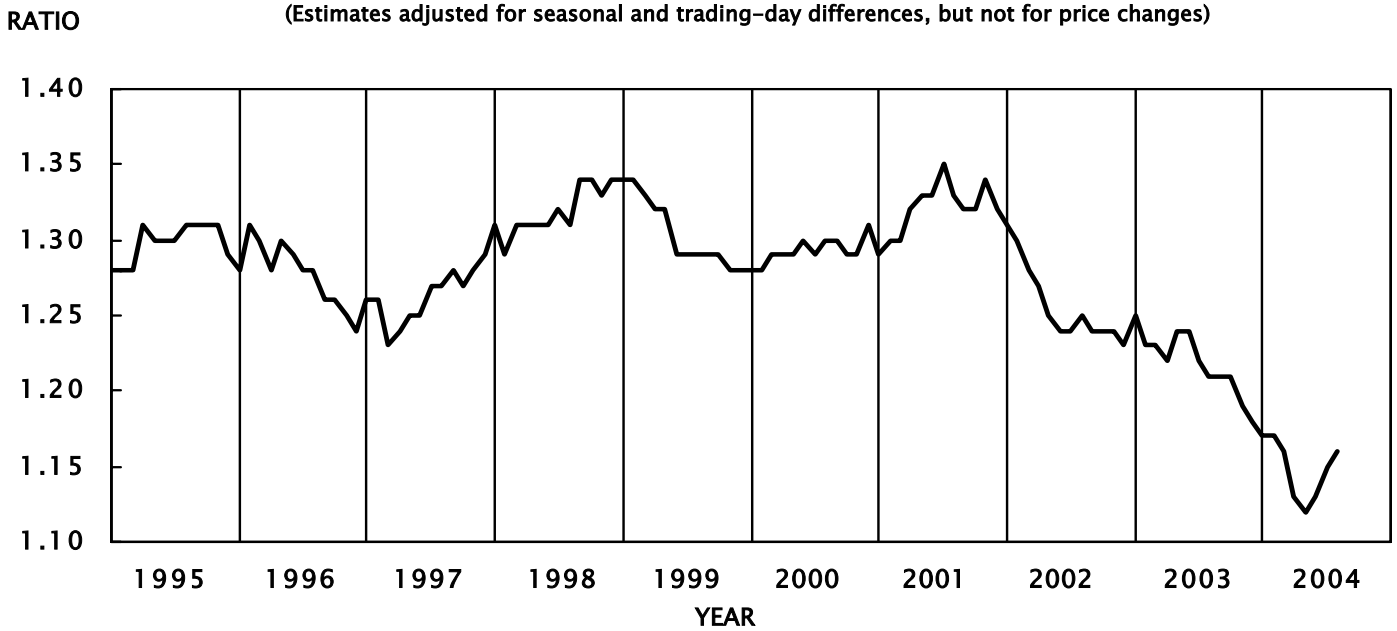
Sales. July 2004 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences but not for price changes, were $271.6 billion, up 0.5 percent (+/-0.7%) from the revised June level, and were up 13.8 percent (+/-1.3%) from the July 2003 level. The June preliminary estimate was revised upward $0.5 billion or 0.2 percent. July sales of durable goods increased 0.5 percent (+/-1.0%) from last month, and were up 17.9 percent (+/-1.3%) from a year ago. Compared to last month, sales of motor vehicle and motor vehicle parts and supplies were down 2.6 percent. July sales of nondurable goods increased 0.5 percent (+/-0.8%) from last month, and were up 10.0 percent (+/-1.7%) from last year. Sales of drugs and druggists' sundries increased 2.8 percent from last month and sales of petroleum and petroleum products increased 2.3 percent.

Inventories. Total inventories of merchant wholesalers, after adjustment for seasonal variations but not for price changes, were $313.8 billion at the end of July, up 1.3 percent (+/-0.3%) from last month, and were up 8.6 percent (+/-1.3%) from a year ago. The June preliminary estimate was revised upward $0.3 billion or 0.1 percent. End-of-month inventories of durable goods increased 1.3 percent (+/-0.5%) from June, and were up 10.7 percent (+/-1.2%) from last year. Inventories of metals and minerals, except petroleum increased 3.5 percent from last month and inventories of lumber and other construction materials increased 2.6 percent. End-of-month inventories of nondurable goods increased 1.3 percent (+/-0.7%) from June, and were up 5.5 percent (+/-3.0%) from last year. Inventories of petroleum and petroleum products increased 21.2 percent from last month and inventories of paper and paper products were up 3.6 percent.

Inventories/Sales Ratio. The July inventories/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.16. The July 2003 ratio was 1.21.

Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling error. A discussion of the reliability of the estimates and general survey methodology appears later in this report and in BW/03-A Current Business Reports.

Monthly Inventories/Sales Ratios of Merchant Wholesalers: 1995 to 2004
(Estimates adjusted for seasonal and trading-day differences, but not for price changes)



Monthly Wholesale Trade for August is scheduled to be released October 8, 2004 at 10:00 a.m.

Address inquiries concerning this report to Service Sector Statistics Division, U.S. Census Bureau, Washington, DC 20233, or call Nancy Piesto, (301) 763-2747.

This report is available on day of issue through the Department of Commerce's STAT-USA website; for information, call (202) 482-1986. The data are also available on the internet - http://www.census.gov/whl.

Table 1. Estimates of Monthly Sales, Inventories, and Inventories/Sales Ratios of Merchant Wholesalers

[Total sales and inventory estimates are shown in millions of dollars. Estimates are based on data from the Monthly Wholesale Trade Survey.]

NAICS[1] code	Kind of Business	Sales						Inventories						Inventories/Sales Ratios		
		Monthly total			Percent change			Monthly total			Percent change					
		Jul. 2004 (p)	Jun. 2004 (r)	Jul. 2003 (r)	Jul./ Jun.	Jun./ May	Jul. 04/ Jul. 03	Jul. 2004 (p)	Jun. 2004 (r)	Jul. 2003 (r)	Jul./ Jun.	Jun./ May	Jul. 04/ Jul. 03	Jul. 2004 (p)	Jun. 2004 (r)	Jul. 2003 (r)
Adjusted[2]																
42	**U.S. Total**	**271,629**	**270,235**	**238,762**	**0.5**	**0.2**	**13.8**	**313,792**	**309,744**	**289,037**	**1.3**	**1.1**	**8.6**	**1.16**	**1.15**	**1.21**
421	**Durable**	**133,863**	**133,139**	**113,568**	**0.5**	**0.6**	**17.9**	**190,872**	**188,350**	**172,500**	**1.3**	**1.4**	**10.7**	**1.43**	**1.41**	**1.52**
4211	Automotive	19,622	20,144	18,477	-2.6	0.8	6.2	27,895	27,280	25,102	2.3	0.8	11.1	1.42	1.35	1.36
4212	Furniture	4,131	4,081	3,842	1.2	-2.0	7.5	5,996	5,935	5,561	1.0	0.7	7.8	1.45	1.45	1.45
4213	Lumber	9,913	9,832	7,357	0.8	-0.7	34.7	10,233	9,972	7,495	2.6	0.0	36.5	1.03	1.01	1.02
4214	Prof. equip.	23,238	22,948	20,898	1.3	2.6	11.2	25,026	25,080	24,074	-0.2	2.0	4.0	1.08	1.09	1.15
42143	Comp. equip.	10,944	10,593	8,991	3.3	2.5	21.7	7,590	7,711	7,334	-1.6	5.2	3.5	0.69	0.73	0.82
4215	Metals	11,036	10,849	7,466	1.7	1.9	47.8	18,293	17,668	13,146	3.5	2.7	39.2	1.66	1.63	1.76
4216	Electrical	20,439	20,662	17,468	-1.1	-1.7	17.0	23,746	23,623	21,852	0.5	0.4	8.7	1.16	1.14	1.25
4217	Hardware	6,019	6,066	5,517	-0.8	2.1	9.1	10,837	10,688	10,333	1.4	1.0	4.9	1.80	1.76	1.87
4218	Machinery	23,117	22,514	19,290	2.7	1.9	19.8	46,389	46,088	44,826	0.7	2.3	3.5	2.01	2.05	2.32
4219	Misc. Durable	16,348	16,043	13,253	1.9	-0.9	23.4	22,457	22,016	20,111	2.0	1.2	11.7	1.37	1.37	1.52
422	**Nondurable**	**137,766**	**137,096**	**125,194**	**0.5**	**-0.3**	**10.0**	**122,920**	**121,394**	**116,537**	**1.3**	**0.7**	**5.5**	**0.89**	**0.89**	**0.93**
4221	Paper	6,867	6,835	6,346	0.5	0.4	8.2	7,162	6,911	6,346	3.6	5.6	12.9	1.04	1.01	1.00
4222	Drugs	24,478	23,821	22,163	2.8	-0.3	10.4	30,934	30,735	31,582	0.6	0.7	-2.1	1.26	1.29	1.42
4223	Apparel	7,283	7,410	7,101	-1.7	-0.8	2.6	11,779	11,664	12,474	1.0	-2.0	-5.6	1.62	1.57	1.76
4224	Groceries	35,012	35,343	35,229	-0.9	0.7	-0.6	22,959	22,783	21,616	0.8	-0.1	6.2	0.66	0.64	0.61
4225	Farm products	11,148	11,376	9,613	-2.0	-4.8	16.0	11,645	12,536	10,588	-7.1	-4.2	10.0	1.04	1.10	1.10
4226	Chemicals	5,705	5,649	5,235	1.0	3.3	9.0	5,964	5,882	5,979	1.4	0.5	-0.3	1.05	1.04	1.14
4227	Petroleum	24,062	23,526	18,076	2.3	-0.2	33.1	6,215	5,129	4,464	21.2	4.8	39.2	0.26	0.22	0.25
4228	Alcohol	7,204	7,293	7,257	-1.2	-1.6	-0.7	7,885	7,802	7,544	1.1	2.0	4.5	1.09	1.07	1.04
4229	Misc. Nondur.	16,007	15,843	14,174	1.0	0.1	12.9	18,377	17,952	15,944	2.4	3.7	15.3	1.15	1.13	1.12
Not Adjusted														**Sales to date**		
														2004	**2003**	
42	**U.S. Total**	**269,284**	**282,782**	**243,623**	**-4.8**	**6.3**	**10.5**	**313,342**	**306,791**	**288,497**	**2.1**	**1.4**	**8.6**	**1,860,487**	**1,645,249**	
421	**Durable**	**133,809**	**142,447**	**116,760**	**-6.1**	**10.0**	**14.6**	**194,334**	**189,791**	**175,467**	**2.4**	**1.5**	**10.8**	**908,118**	**776,092**	
4211	Automotive	19,387	21,494	18,810	-9.8	10.6	3.1	27,644	27,034	24,876	2.3	-0.2	11.1	137,941	126,969	
4212	Furniture	4,114	4,216	3,900	-2.4	4.8	5.5	6,188	5,982	5,750	3.4	1.6	7.6	27,841	25,350	
4213	Lumber	10,547	10,914	8,100	-3.4	6.0	30.2	10,376	10,271	7,600	1.0	-0.4	36.5	66,996	48,202	
4214	Prof. equip.	22,936	24,944	21,400	-8.1	18.4	7.2	25,602	25,005	24,580	2.4	3.1	4.2	155,843	143,872	
42143	Comp. equip.	10,802	11,769	9,162	-8.2	22.9	17.9	7,932	7,757	7,642	2.3	7.0	3.8	71,800	62,251	
4215	Metals	11,345	11,760	7,951	-3.5	12.0	42.7	18,695	17,809	13,409	5.0	2.5	39.4	73,750	51,695	
4216	Electrical	20,357	21,757	17,817	-6.4	7.8	14.3	24,221	23,788	22,245	1.8	0.5	8.9	137,778	117,246	
4217	Hardware	6,139	6,715	5,798	-8.6	11.7	5.9	11,032	10,848	10,509	1.7	0.6	5.0	41,837	38,481	
4218	Machinery	23,094	24,315	19,811	-5.0	8.0	16.6	47,827	47,148	46,126	1.4	2.7	3.7	155,904	131,633	
4219	Misc. Durable	15,890	16,332	13,173	-2.7	5.5	20.6	22,749	21,906	20,372	3.8	1.2	11.7	110,228	92,644	
422	**Nondurable**	**135,475**	**140,335**	**126,863**	**-3.5**	**2.8**	**6.8**	**119,008**	**117,000**	**113,030**	**1.7**	**1.3**	**5.3**	**952,369**	**869,157**	
4221	Paper	6,737	7,184	6,454	-6.2	10.0	4.4	7,205	6,925	6,352	4.0	4.7	13.4	46,432	44,465	
4222	Drugs	23,621	24,393	22,252	-3.2	7.6	6.2	30,594	30,305	31,235	1.0	3.5	-2.1	163,446	146,892	
4223	Apparel	7,232	7,521	7,378	-3.8	13.9	-2.0	12,344	11,909	13,060	3.7	2.2	-5.5	50,982	49,010	
4224	Groceries	35,852	36,156	36,673	-0.8	0.3	-2.2	22,683	22,510	21,335	0.8	0.6	6.3	246,565	242,256	
4225	Farm products	9,565	10,705	8,661	-10.6	-0.7	10.4	8,489	9,753	7,761	-13.0	-11.2	9.4	80,945	67,195	
4226	Chemicals	5,802	6,050	5,455	-4.1	12.1	6.4	6,071	5,911	6,087	2.7	-0.1	-0.3	39,657	37,106	
4227	Petroleum	23,509	23,973	17,931	-1.9	-0.6	31.1	6,035	4,929	4,348	22.4	8.4	38.8	162,784	132,581	
4228	Alcohol	7,406	8,051	7,729	-8.0	8.1	-4.2	8,019	7,919	7,657	1.3	3.4	4.7	48,963	46,838	
4229	Misc. Nondur.	15,751	16,302	14,330	-3.4	-3.7	9.9	17,568	16,839	15,195	4.3	1.9	15.6	112,595	102,814	

[p] Preliminary estimate. [r] Revised estimate.

[1] For a full description of the NAICS codes used in this table, see the 1997 NAICS manual or http://www.census.gov/epcd/www/naics.html.

[2] Estimates are adjusted for seasonal variation and, in the case of sales, also for trading-day differences. See Table 3 for the seasonal adjustment factors used. Cumulative seasonally adjusted sales estimates are not tabulated.

Note: Estimates have not been adjusted for price changes. Table 2 provides estimated measures of sampling variability. Additional information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions may be found at http://www.census.gov/svsd/www/mwtsreliability.html.

Table 2. Estimated Measures of Sampling Variability of Monthly Wholesale Sales and Inventory Estimates

[Estimates are shown as percents and are based on data from the Monthly Wholesale Trade Survey.]

NAICS code	Kind of Business	Median coefficient of variation for monthly total				Median standard error for percent change				Coefficient of variation for total		Standard error for percent change
		Preliminary estimates		Final estimates		Ratio of two consecutive months		Current month to current month last year		Sales to date		Current year sales to date to previous year sales to date
		Sales	Inv.	Sales	Inv.	Sales	Inv.	Sales	Inv.	Current year	Previous year	
42	**U.S. Total**	**1.1**	**1.6**	**1.1**	**1.6**	**0.4**	**0.2**	**0.8**	**0.8**	**1.1**	**1.0**	**0.7**
421	**Durable**	**1.2**	**1.6**	**1.2**	**1.6**	**0.6**	**0.3**	**0.8**	**0.7**	**1.1**	**1.1**	**1.1**
4211	Automotive	3.3	4.0	3.3	4.1	1.2	0.7	1.2	1.5	3.4	3.1	0.9
4212	Furniture	7.4	9.4	7.2	9.1	1.9	0.9	2.6	2.7	7.6	6.2	2.0
4213	Lumber	5.6	6.9	5.5	6.8	1.3	0.9	3.7	3.5	6.8	4.2	4.3
4214	Prof. equip.	5.1	6.5	5.0	6.7	1.3	0.7	2.2	2.1	4.1	5.0	3.0
42143	Comp. equip.	8.2	9.0	8.1	8.9	2.2	1.3	4.3	3.2	8.4	8.0	4.6
4215	Metals	7.6	10.4	7.7	10.3	1.9	0.7	4.1	2.4	7.3	6.6	4.5
4216	Electrical	3.6	4.8	3.6	4.8	1.1	0.6	2.1	1.7	3.7	3.5	1.8
4217	Hardware	8.0	10.4	8.0	10.4	1.2	0.6	1.5	1.7	7.6	7.9	0.9
4218	Machinery	4.2	3.6	4.1	3.5	1.7	0.5	2.2	1.0	3.9	3.7	1.3
4219	Misc. Durable	4.0	7.8	4.0	7.7	1.7	0.9	2.7	2.3	3.9	4.2	2.1
422	**Nondurable**	**1.9**	**2.4**	**1.9**	**2.4**	**0.5**	**0.4**	**1.0**	**1.8**	**1.8**	**1.7**	**0.8**
4221	Paper	4.8	3.8	4.8	3.8	1.1	0.6	1.3	1.6	4.6	4.2	0.8
4222	Drugs	5.7	5.4	5.7	5.4	1.3	0.5	1.4	1.8	5.2	5.3	0.9
4223	Apparel	5.1	4.9	5.2	4.8	1.9	0.8	2.4	2.8	4.9	4.5	1.8
4224	Groceries	3.6	8.2	3.6	8.2	0.9	0.8	1.2	1.5	3.1	3.4	0.8
4225	Farm products	7.7	9.1	7.7	9.1	2.1	2.2	3.2	3.7	7.4	7.2	2.4
4226	Chemicals	4.8	6.9	4.8	6.9	1.0	1.0	1.7	2.2	4.8	4.1	1.5
4227	Petroleum	7.2	8.8	7.2	8.9	1.1	1.6	2.1	3.1	7.7	6.9	2.0
4228	Alcohol	4.1	5.2	4.1	5.2	1.0	0.7	1.0	1.2	4.4	4.1	0.7
4229	Misc. Nondur.	8.6	8.9	8.4	8.8	2.0	0.8	4.5	4.7	8.6	6.6	4.1

Note: Estimated measures of sampling variability are based on estimates unadjusted for seasonal variation or trading-day differences. Medians are based on estimates for the most recent 12 months. Additional information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions may be found at www.census.gov/svsd/www/mwtsreliability.html.

Reliability of the Estimates

Because the estimates presented in this report are based on a sample survey, they may contain sampling error and nonsampling error.

Sampling error is the difference between the estimate and the result that would be obtained from a complete enumeration of the population conducted under the same survey conditions. This error occurs because only a subset of the entire population is measured in a sample survey. Standard errors and coefficients of variation, as given in Table 2 of this report, are estimated measures of sampling variation.

The margin of sampling error, as used on page 1, gives a range about the estimate which is a 90-percent confidence interval. If, for example, the percent change estimate is +1.2 percent and its estimated standard error is 0.9 percent, then the margin of sampling error is ±1.645 x 0.9 percent or ±1.5 percent, and the 90 percent confidence interval is -0.3 percent to +2.7 percent. If the interval contains 0, then one does not have sufficient evidence to conclude at the 90 percent confidence level that the estimated change was different from zero. For monthly totals, the median estimated coefficient of variation (CV) is given. The resulting confidence interval is the estimated value $\pm$ 1.645 $\times$ CV $\times$ (the estimated value). The Census Bureau recommends that individuals using estimates in this report incorporate this information into their analyses, as sampling error could affect the conclusions drawn from the estimates.

Nonsampling error encompasses all other factors that contribute to the total error of a sample survey estimate. This type of error can occur because of nonresponse, insufficient coverage of the universe of wholesale businesses, mistakes in the recording and coding of data, model error, and other errors of collection, response, coverage, or processing. Although not directly measured, precautionary steps are taken to minimize the effects of nonsampling error.

Table 3. Seasonal Adjustment Factors for Monthly Wholesale Sales and Inventory Estimates

[Seasonal adjustment factors are computed using the Census Bureau's X-12 ARIMA program and are based on data from the Monthly Wholesale Trade Survey.]

NAICS code	Kind of Business	Sales						Inventories					
		2004					2003	2004					2003
		Aug.	Jul.r	Jun.r	May	Apr.	Jul.r	Aug.	Jul.r	Jun.r	May	Apr.	Jul.r
42	**U.S. Total** [1]	**1.018**	**0.991**	**1.045**	**0.987**	**1.017**	**1.019**	**0.986**	**0.997**	**0.990**	**0.989**	**1.003**	**0.997**
421	**Durable**	**1.025**	**0.995**	**1.065**	**0.974**	**1.016**	**1.025**	**1.004**	**1.016**	**1.005**	**1.006**	**1.012**	**1.015**
4211	Automotive	1.011	0.988	1.067	0.972	1.060	1.018	0.947	0.991	0.991	1.001	1.024	0.991
4212	Furniture	1.068	0.996	1.033	0.966	1.009	1.015	1.031	1.032	1.008	0.999	0.983	1.034
4213	Lumber	1.089	1.064	1.110	1.040	1.059	1.101	1.005	1.014	1.030	1.034	1.033	1.014
4214	Prof. equip.	0.992	0.987	1.087	0.942	0.963	1.024	1.011	1.023	0.997	0.986	1.004	1.021
42143	Comp. equip.	0.991	0.987	1.111	0.927	0.943	1.019	1.017	1.045	1.006	0.989	1.027	1.042
4215	Metals	1.052	1.028	1.084	0.986	1.058	1.065	1.011	1.022	1.008	1.010	1.005	1.020
4216	Electrical	1.020	0.996	1.053	0.961	0.989	1.020	1.020	1.020	1.007	1.006	0.999	1.018
4217	Hardware	1.057	1.020	1.107	1.012	1.052	1.051	1.010	1.018	1.015	1.019	1.014	1.017
4218	Machinery	1.037	0.999	1.080	1.019	1.066	1.027	1.012	1.031	1.023	1.019	1.022	1.029
4219	Misc. Durable	1.003	0.972	1.018	0.956	0.994	0.994	1.016	1.013	0.995	0.995	0.999	1.013
422	**Nondurable**	**1.009**	**0.983**	**1.023**	**0.994**	**1.015**	**1.010**	**0.963**	**0.970**	**0.964**	**0.961**	**0.986**	**0.970**
4221	Paper	1.049	0.981	1.051	0.959	0.990	1.017	0.997	1.006	1.002	1.011	1.013	1.001
4222	Drugs	0.990	0.965	1.024	0.949	1.005	1.004	0.957	0.989	0.986	0.959	0.991	0.989
4223	Apparel	1.090	0.993	1.015	0.884	0.932	1.039	1.056	1.048	1.021	0.979	0.950	1.047
4224	Groceries	1.023	1.024	1.023	1.027	1.004	1.041	0.998	0.988	0.988	0.982	0.985	0.987
4225	Farm products	0.920	0.858	0.941	0.902	0.975	0.901	0.719	0.729	0.778	0.839	0.983	0.733
4226	Chemicals	1.021	1.017	1.071	0.987	1.037	1.042	0.998	1.018	1.005	1.011	0.999	1.018
4227	Petroleum	1.021	0.977	1.019	1.023	1.052	0.992	0.986	0.971	0.961	0.929	0.941	0.974
4228	Alcohol	1.062	1.028	1.104	1.005	0.993	1.065	0.986	1.017	1.015	1.001	1.009	1.015
4229	Misc. Nondur.	0.991	0.984	1.029	1.069	1.095	1.011	0.966	0.956	0.938	0.955	0.994	0.953

r Revised.

[1]Adjusted sales and inventory estimates for detailed kind-of-business levels in Table 1 are computed by dividing each unadjusted estimate by the seasonal adjustment factor for the corresponding kind of business and month. Adjusted estimates for broad kind-of-business levels are obtained by summing adjusted estimates at the appropriate detailed levels. Seasonal factors shown for broad kind-of-business levels may be used to approximate adjusted estimates at these levels, but the resulting estimates may differ slightly from the published estimates.

Note: The seasonal adjustment factors shown are estimates derived from a model that uses sample survey data as input. Therefore, these estimates may contain sampling error and nonsampling error. Additional information on the general form of the model and the X-12 ARIMA program may be found at http://www.census.gov/srd/www/x12a/.

Description of the Survey

The U.S. Census Bureau conducts the Monthly Wholesale Trade Survey (MWTS) to provide national estimates of monthly sales, end-of-month inventories, and inventory-to-sales ratios by kind of business for wholesale firms located in the United States. Specifically, the MWTS covers wholesale merchants (those that take title to the goods they sell) such as distributors, jobbers, and import/export merchants as defined by the 1997 North American Industry Classification System (NAICS).

The MWTS sample was selected using a stratified, one-stage design with strata defined by kind of business (e.g., Automotive, Furniture, Lumber, etc.) and annual sales size. The sample includes firms of all sizes and is updated on a quarterly basis to account for new wholesale firms, deaths, and other changes to the wholesale universe. Each month, questionnaires are mailed to a probability sample of approximately 4,000 employer firms. Data for nonresponding firms are imputed based on data for similar-sized firms classified in the same kind of business. Approximately 28% of the total sales estimate and 31% of the total end-of-month inventory estimate is based on imputed data. Monthly sales and inventory estimates are obtained by summing weighted data (either reported or imputed). The monthly estimates are benchmarked to annual survey estimates and are adjusted for seasonal variation and trading-day differences. Individuals who use estimates in this report to create new estimates should cite the Census Bureau as the source of only the original estimates. Additional information on the MWTS can be found on the Census Bureau website at: http://www.census.gov/econ/www/retmenu.html#WHOL.