U.S. Census Bureau News

U.S. Department of Commerce • Washington, D.C. 20233

FOR IMMEDIATE RELEASE TUESDAY, NOVEMBER 10, 2015 AT 10:00 A.M. EST

CB15-186

William Abriatis/ Nicole Davis Economic Indicators Division (301) 763-6856

MONTHLY WHOLESALE TRADE: SALES AND INVENTORIES September 2015

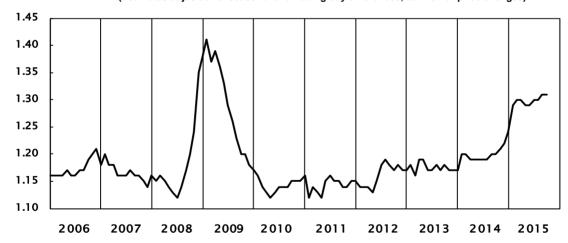
Sales. The U.S. Census Bureau announced today that September 2015 sales of merchant wholesalers, except manufacturers' sales branches and offices, after adjustment for seasonal variations and trading-day differences but not for price changes, were \$448.0 billion, up 0.5 percent (+/-0.7%)* from the revised August level, but were down 3.9 percent (+/-1.2%) from the September 2014 level. The August preliminary estimate was revised upward \$0.5 billion or 0.1 percent. September sales of durable goods were up 0.7 percent (+/-1.1%)* from last month, but were down 0.8 percent (+/-1.8%)* from a year ago. Sales of computer and computer peripheral equipment and software were up 3.8 percent from last month and sales of electrical and electronic goods were up 2.8 percent. Sales of nondurable goods were up 0.3 percent (+/-0.9%)* from August, but were down 6.7 percent (+/-1.6%) from last September. Sales of drugs and druggists' sundries were up 1.7 percent from last month, while sales of petroleum and petroleum products were down 4.6 percent.

Inventories. Total inventories of merchant wholesalers, except manufacturers' sales branches and offices, after adjustment for seasonal variations but not for price changes, were \$588.1 billion at the end of September, up 0.5 percent (+/-0.4%) from the revised August level and were up 4.7 percent (+/-1.6%) from the September 2014 level. The August preliminary estimate was revised upward \$1.3 billion or 0.2 percent. September inventories of durable goods were down 0.4 percent (+/-0.4%)* from last month, but were up 2.8 percent (+/-1.9%) from a year ago. Inventories of metals and minerals, except petroleum were down 2.2 percent from last month. Inventories of nondurable goods were up 1.9 percent (+/-0.5%) from August and were up 7.7 percent (+/-2.3%) from last September. Inventories of farm product raw materials were up 6.7 percent from last month and inventories of drugs and druggists' sundries were up 4.4 percent.

Inventories/Sales Ratio. The September inventories/sales ratio for merchant wholesalers, except manufacturers' sales branches and offices, based on seasonally adjusted data, was 1.31. The September 2014 ratio was 1.20.

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 can be found at: http://www.census.gov/wholesale/www/how_surveys_are_collected/monthly_methodology.html.

Monthly Inventories/Sales Ratios of Merchant Wholesalers, Except Manufacturers'
Sales Branches and Offices: 2006 to 2015
(Estimates adjusted for seasonal and trading-day differences, but not for price changes)



Monthly Wholesale Trade for October is scheduled to be released December 9, 2015 at 10:00 a.m. EST.

For additional survey information, including customizable time series by industry, visit http://www.census.gov/wholesale.

To learn more about this release and the other indicators the U.S. Census Bureau publishes, join us for the Investigating Economic Indicators Webinar Series. For more information, visit http://www.census.gov/econ/webinar.

To receive the latest updates on the nation's key economic indicators, download the America's Economy app for Apple and Android smartphones and tablets.

The U.S. Census Bureau updated its Application Programming Interface (API) with monthly and quarterly economic indicators. The API allows developers to combine Census Bureau statistics with other data sets to create tools for research on a variety of topics. For more information, visit http://www.census.gov/developers.

^{*} The 90 percent confidence interval includes zero. The Census Bureau does not have sufficient statistical evidence to conclude that the actual change is different from zero.

Table 1. Estimates of Monthly Sales, Inventories, and Inventories/Sales Ratios of Merchant Wholesalers, Except Manufacturers' Sales Branches and Offices

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

	Kind of	Sales						Inventories							ntories/	Sales
NAICS ¹			Monthly	Percent change			Monthly				Percent change			Ratios		
code	Business	Sep.	Aug.	Sep.	Sep./	Aug./	Sep. 15/	Sep.	Aug.	Sep.	Sep./	Aug./	Sep. 15/	Sep.	Aug.	Sep.
code	business	2015	2015	2014	Aug.	Jul.	Sep. 14	2015	2015	2014	Aug.	Jul.	Sep. 14	2015	2015	2014
	1	(p)	(r)	(r)				(p)	(r)	(r)				(p)	(r)	(r)
Adjusted																
42	U.S. Total	448,004	445,911	466,332	0.5	-0.9	-3.9	588,120	585,198	561,881	0.5	0.3	4.7	1.31	1.31	1.20
423	.Durable	217,269	215,802	219,124	0.7	-0.8	-0.8	358,425	359,871	348,597	-0.4	0.2	2.8	1.65	1.67	1.59
4231	Automotive	36,941	36,127	35,164	2.3	-2.0	5.1	64,023	63,704	56,807	0.5	0.1	12.7	1.73	1.76	1.62
4232	Furniture	6,692	6,880	6,386	-2.7	2.4	4.8	11,243	11,094	10,370	1.3	0.2	_	1.68	1.61	1.62
4233	Lumber	9,486	9,422	9,352	0.7	0.3	1.4	14,623	14,656	14,411	-0.2	0.4		1.54	1.56	1.54
4234	Prof. equip.	37,145	36,865	37,468	0.8	-2.2	-0.9	39,539	39,911	39,970	-0.9	0.2	-1.1	1.06	1.08 0.86	1.07
42343 4235	Comp. equip.	19,406 12,583	18,704 12,915	19,521 16,407	3.8 -2.6	-4.1 0.6	-0.6 -23.3	15,728 29,027	16,003 29,670	16,032 31,576	-1.7 -2.2	1.8 -2.0		0.81 2.31	2.30	0.82 1.92
4233	Electrical	49,451	48,126	46,663	2.8	1.9	6.0	48,105	48,259	45,598	-0.3	0.8		0.97	1.00	0.98
4237	Hardware	10,720	10,759	10,464	-0.4	0.6	2.4	22,980	22,857	21,089	0.5	0.6		2.14	2.12	2.02
4238	Machinery	35,687	35,607	36,556	0.2	-2.9	-2.4	102,147	103,115	100,747	-0.9	0.2		2.86	2.90	2.76
4239	Misc. Durable	18,564	19,101	20,664	-2.8	-1.6	-10.2	26,738	26,605	28,029	0.5	1.2	-4.6	1.44	1.39	1.36
424	.Nondurable	230,735	230,109	247,208	0.3	-0.9	-6.7	229,695	225,327	213,284	1.9	0.5	7.7	1.00	0.98	0.86
4241	Paper ³	7,968	7,967	7,657	0.0	-1.2	4.1	7,590	7,582	7,496	0.1	-2.6	1.3	0.95	0.95	0.98
4242	Drugs	53,505	52,635	46,717	1.7	1.2	14.5	56,967	54,586	49,872	4.4	-0.9	14.2	1.06	1.04	1.07
4243	Apparel	15,120	14,845	14,568	1.9	2.3	3.8	30,846	30,156	26,970	2.3	1.9	14.4	2.04	2.03	1.85
4244	Groceries	51,891	51,193	51,258	1.4	0.8	1.2	33,833	34,085	31,763	-0.7	0.5		0.65	0.67	0.62
4245	Farm products	18,933	18,274	19,115	3.6	-2.7	-1.0	24,475	22,937	20,338	6.7	2.4	20.3	1.29	1.26	1.06
4246	Chemicals ³	10,550	10,498	10,868	0.5	-2.2	-2.9	12,877	13,088	12,381	-1.6	1.4	4.0	1.22	1.25	1.14
4247	Petroleum	39,618	41,545	65,253	-4.6	-6.2	-39.3	17,984	18,084	21,995	-0.6	-1.4	_	0.45	0.44	0.34
4248	Alcohol	11,513	11,443	10,731	0.6	1.0	7.3	15,571	15,637	14,952	-0.4	1.5		1.35	1.37	1.39
4249	Misc. Nondur.	21,637	21,709	21,041	-0.3	-0.1	2.8	29,552	29,172	27,517	1.3	1.3	7.4	1.37	1.34 les to da	1.31
Not Adj	<u>usted</u> 													201		2014
42	U.S. Total	457,641	439,706	474,909	4.1	-3.5	-3.6	582,786	574,610	557,582	1.4	-0.6	4.5	3,996		1,139,024
423	.Durable	227,139	214,103	229,501	6.1	-2.1	-1.0	359,323	359,944	349,734	-0.2	-0.4		1,930	•	,907,927
4231	Automotive	36,682	36,127	34,637	1.5	-3.0	5.9	62,807	61,220	55,671	2.6	-4.3	12.8	•	,904	306,043
4231	Furniture	7,033	6,997	6,724	0.5	2.6	4.6	11,670	11,438	10,764	2.0	0.9			,193	54,859
4233	Lumber	10,150	10,166	9,997	-0.2	-4.0	1.5	14,404	14,788	14,152	-2.6	-0.9	_		,022	83,065
4234	Prof. equip.	40,042	34,911	40,465	14.7	-8.9	-1.0	39,934	40,190	40,370	-0.6	0.9			,467	326,854
42343	Comp. equip.	20,997	17,245	21,102	21.8	-15.1	-0.5	16,043	16,051	16,385	0.0	1.3	-2.1	168	3,267	170,559
4235	Metals	12,961	12,941	16,834	0.2	-1.5	-23.0	28,940	29,729	31,513	-2.7	-2.4	-8.2		,694	139,350
4236	Electrical	52,913	46,827	49,883	13.0	2.6	6.1	49,356	49,562	46,829	-0.4	2.6	5.4		,267	399,589
4237	Hardware	11,149	11,211	10,903	-0.6	-2.8	2.3	22,934	22,971	21,047	-0.2	0.1	9.0		,068	91,146
4238	Machinery	36,401	36,070	37,762	0.9	-1.3	-3.6	101,738	102,909	100,546	-1.1	-0.4			,984	322,510
4239	Misc. Durable	19,808	18,853	22,296	5.1	-0.6	-11.2	27,540	27,137	28,842	1.5	2.4			3,958	184,511
424	.Nondurable	230,502	225,603	245,408	2.2	-4.8	-6.1	223,463	214,666	207,848	4.1	-0.8		2,066		2,231,097
4241	Paper	8,303	8,150	7,986	1.9	-0.6	4.0	7,590	7,582	7,496	0.1	-2.6			,393	69,499
4242 4243	Drugs Apparel	54,468 17,237	50,898 16,018	47,558 16,214	7.0 7.6	-4.1 4.4	14.5 6.3	57,309 33,098	54,477 32,237	50,221 28,912	5.2 2.7	-1.8 2.6			0,697	398,909 124,448
4243 4244	Groceries	52,306	51,500	51,719	1.6	-1.2	1.1	34,171	33,642	32,049	1.6	0.3	6.6		,920	451,028
4245	Farm products	17,172	15,186	17,165	13.1	-11.5	0.0	17,842	14,152	14,806	26.1	-8.6			,156	185,466
4246	Chemicals	10,655	10,613	10,977	0.4	-5.7	-2.9	12,877	13,088	12,381	-1.6	1.4			,064	100,649
4247	Petroleum	38,865	42,542	63,817	-8.6	-9.1	-39.1	17,696	17,939	21,643	-1.4	-5.0		393	,919	619,008
4248	Alcohol	11,893	11,180	10,656	6.4	-5.2	11.6	15,633	15,528	14,997	0.7	-0.6	4.2	98	3,360	93,010
4249	Misc. Nondur.	19,603	19,516	19,316	0.4	-8.3	1.5	27,247	26,021	25,343	4.7	2.6	7.5	198	3,645	189,080
Footnotes	:															

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/wholesale/www/how_surveys_are_collected/monthly_methodology.html.

^p Preliminary estimate.

^r Revised estimate.

 $^{^{1} \} For a full \ description \ of the \ NAICS \ codes \ used \ in this \ table, see the 2007 \ NAICS \ manual \ or \ \underline{http://www.census.gov/eos/www/naics.}$

² Except where indicated, sales and inventories estimates are adjusted for seasonal variation. Estimates of sales are also adjusted for trading-day differences and moving holidays. See Table 3 for the combined adjustment factors. Adjusted sales-to-date estimates are not tabulated.

³ No significant seasonal pattern for this NAICS code was detected in the latest annual review of the seasonal adjustment for inventories. Consequently, the "Adjusted" inventories estimates are equal to the "Not Adjusted" estimates.

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.]

			nt of variati				dard error f		Coeffic variation	Standard error for percent change		
NAICS code	Kind of Business	Preliminar	y estimates	Final estimates			of two ve months		month to nonth last ar	Sales to date		Current year sales to date to
		Sales	Inv.	Sales	Inv.	Sales	Inv.	Sales	Inv.	Current year	Previous year	previous year sales to date
42	U.S. Total	1.0	1.5	1.0	1.6	0.4	0.2	0.7	0.9	0.9	1.1	0.7
423	.Durable	1.4	1.9	1.1	2.0	0.6	0.2	1.0	1.1	1.1	1.1	0.7
4231	Automotive	2.8	4.4	2.9	4.6	0.6	0.5	1.3	2.0	3.0	2.4	1.3
4232	Furniture	7.3	6.6	6.8	6.6	1.8	0.9	4.4	5.7	6.8	5.2	4.2
4233	Lumber	5.5	5.6	5.9	5.5	0.7	0.4	2.1	1.1	5.2	4.3	1.6
4234	Prof. equip.	4.0	4.4	3.1	4.4	1.6	0.5	2.5	2.0	3.4	3.4	1.9
42343	Comp. equip.	4.9	6.4	4.0	6.8	1.4	0.5	2.6	1.8	4.0	3.5	2.3
4235	Metals	4.5	8.5	5.5	8.6	1.3	0.5	2.3	2.0	4.8	5.6	1.7
4236	Electrical	2.9	4.1	2.7	4.1	1.2	0.4	2.0	1.9	2.5	1.6	1.6
4237	Hardware	2.6	3.9	2.6	3.8	1.2	0.4	1.8	3.6	2.4	2.2	2.1
4238	Machinery	2.9	4.3	3.3	4.3	1.8	0.5	3.0	2.1	2.8	2.9	1.5
4239	Misc. Durable	4.3	5.4	5.1	5.4	1.5	0.8	4.1	3.3	3.9	3.9	3.3
424	.Nondurable	1.8	1.6	1.8	1.6	0.5	0.3	0.9	1.3	1.7	2.1	0.9
4241	Paper	4.6	6.6	4.7	6.6	0.7	0.3	1.3	1.9	4.6	4.2	1.4
4242	Drugs	2.9	3.5	2.9	3.6	0.2	0.3	1.6	2.6	2.9	3.0	1.5
4243	Apparel	7.9	6.8	8.0	6.5	3.1	1.1	3.5	2.6	7.0	5.4	3.3
4244	Groceries	3.7	5.5	3.3	5.6	0.7	0.5	1.8	3.2	3.3	3.9	1.4
4245	Farm products	4.3	5.9	2.6	5.1	2.7	1.9	3.2	3.4	2.7	2.2	1.8
4246	Chemicals	3.8	5.3	4.1	5.1	1.2	0.7	1.8	3.3	3.9	4.3	2.0
4247	Petroleum	5.7	4.5	6.1	4.5	0.4	0.4	1.2	2.6	6.1	5.9	1.1
4248	Alcohol	4.8	5.4	4.9	5.3	1.1	0.7	1.5	1.7	4.8	3.8	1.8
4249	Misc. Nondur.	3.8	6.0	4.0	6.0	1.4	0.5	3.2	2.7	3.6	4.2	3.5

Note:

Estimated measures of sampling variability are based on estimates not adjusted for seasonal variation, trading-day differences, or moving holidays. Additional information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions may be found at http://www.census.gov/wholesale/www/how_surveys_are_collected/monthly_methodology.html.

Reliability of the Estimates

Because the estimates presented in this report are based on a sample survey, they 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 sampling frame conducted under the same survey conditions. This error occurs because only a subset of the entire sampling frame is measured in a sample survey. Standard errors and coefficients of variation (CV), 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 can be used to construct a 90-percent confidence interval. If, for example, the percent change estimate is ± 1.2 percent and its estimated standard error is 0.8 percent, then the margin of sampling error is $\pm 1.753 \times 0.8$ percent or ± 1.4 percent, and the 90 percent confidence interval is 1.2 ± 1.4 or ± 1.4 percent to 2.6 percent. If the interval contains 0, then one does not have sufficient statistical evidence to conclude at the 90 percent confidence level that the actual change is different from zero. Estimated changes shown in the text are statistically significant unless otherwise noted. For a monthly total, the estimated coefficient of variation is given. The resulting confidence interval is the estimated monthly total $\pm 1.753 \times \text{CV} \times \text{(the estimated monthly total)}$. 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 nonsampling error is not measured directly, the Census Bureau employs quality control procedures throughout the process to minimize this type of error.

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

[Combined adjustment factors are computed using the Census Bureau's X-13 ARIMA-SEATS program and are based on data from the Monthly Wholesale Trade Survey.]

NAICS	Kind of	Sales							Inventories					
code	Business	2015					2014	2015					2014	
		Oct.	Sep.r	Aug.r	Jul.	Jun.	Sep.r	Oct.	Sep.r	Aug.r	Jul.	Jun.	Sep.r	
42	U.S. Total ²	1.043	1.018	0.987	1.016	1.049	1.019	1.010	0.991	0.982	0.990	0.986	0.991	
423	.Durable	1.060	1.047	0.992	1.006	1.061	1.048	1.006	1.004	1.002	1.007	1.000	1.004	
4231	Automotive	1.030	0.993	1.000	1.010	1.042	0.985	1.011	0.981	0.961	1.005	0.998	0.980	
4232	Furniture	1.099	1.051	1.017	1.015	1.032	1.053	1.025	1.038	1.031	1.024	0.996	1.038	
4233	Lumber	1.081	1.070	1.079	1.128	1.160	1.069	0.952	0.985	1.009	1.022	1.035	0.982	
4234	Prof. equip.	1.062	1.078	0.947	1.017	1.100	1.080	1.015	1.010	1.007	1.000	0.994	1.010	
42343	Comp. equip.	1.104	1.082	0.922	1.042	1.124	1.081	1.021	1.020	1.003	1.008	1.012	1.022	
4235	Metals	1.048	1.030	1.002	1.024	1.058	1.026	0.981	0.997	1.002	1.006	1.005	0.998	
4236	Electrical	1.090	1.070	0.973	0.966	1.045	1.069	1.024	1.026	1.027	1.009	0.995	1.027	
4237	Hardware	1.053	1.040	1.042	1.078	1.129	1.042	0.988	0.998	1.005	1.010	1.010	0.998	
4238	Machinery	1.027	1.020	1.013	0.997	1.065	1.033	0.996	0.996	0.998	1.004	1.001	0.998	
4239	Misc. Durable	1.091	1.067	0.987	0.977	1.020	1.079	1.040	1.030	1.020	1.008	0.990	1.029	
424	.Nondurable	1.030	0.994	0.984	1.023	1.033	0.993	1.020	0.970	0.950	0.961	0.965	0.970	
4241	Paper ³	1.053	1.042	1.023	1.017	1.042	1.043	1.000	1.000	1.000	1.000	1.000	1.000	
4242	Drugs	1.019	1.018	0.967	1.020	1.027	1.018	1.005	1.006	0.998	1.007	0.992	1.007	
4243	Apparel	1.156	1.140	1.079	1.058	0.969	1.113	1.012	1.073	1.069	1.061	1.019	1.072	
4244	Groceries	1.033	1.008	1.006	1.027	1.015	1.009	1.037	1.010	0.987	0.988	0.983	1.009	
4245	Farm products	1.114	0.907	0.831	0.913	0.944	0.898	1.155	0.729	0.617	0.691	0.748	0.728	
4246	Chemicals ³	1.009	1.010	1.011	1.049	1.063	1.010	1.000	1.000	1.000	1.000	1.000	1.000	
4247	Petroleum	0.988	0.981	1.024	1.056	1.023	0.978	0.979	0.984	0.992	1.030	1.047	0.984	
4248	Alcohol	1.031	1.033	0.977	1.041	1.136	0.993	1.030	1.004	0.993	1.014	1.015	1.003	
4249	Misc. Nondur.	0.980	0.906	0.899	0.979	1.157	0.918	0.953	0.922	0.892	0.881	0.918	0.921	

Footnotes:

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-13 ARIMA-SEATS program may be found at http://www.census.gov/srd/www/x13as/.

Description of the Survey

The Census Bureau conducts the Monthly Wholesale Trade Survey (MWTS) to provide national estimates of monthly sales, end-of-month inventories, and inventories-to-sales ratios by kind of business for wholesale firms located in the United States. Specifically, the MWTS covers wholesale merchants who sell goods on their own account and include such businesses as wholesale merchants or jobbers, industrial distributors, exporters, and importers. Sales offices and branches maintained by manufacturing, refining, or mining firms for the purpose of marketing their products are not covered in this report. Also excluded is NAICS Industry Group 4251: Wholesale Electronic Markets and Agents and Brokers.

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 employer firms selected in a probability sample of approximately 4,200. Approximately 68% of those mailed provided data for this reporting period. Data for nonresponding firms are imputed based on data for similar-sized firms classified in the same kind of business. Approximately 31% of the total sales estimate and 32% of the total end-of-month inventories estimate is based on imputed data.

Monthly sales and inventories 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/wholesale.

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¹ Combined factors for sales include the effects of seasonal variation, trading day differences, and moving holidays. Combined factors for inventories include only the effects of seasonal variation.

² Adjusted sales and inventories estimates for detailed kind-of-business levels in Table 1 are computed by dividing each "Not Adjusted" estimate by the combined 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. Combined 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.

³ No discernible seasonal pattern for this NAICS code was detected in the latest annual review of the seasonal adjustment for inventories. Therefore, the combined adjustment factors for inventories are set to one for this NAICS code.