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Full Report on Manufacturers' Shipments, Inventories and Orders December 2016

Summary

New orders for manufactured goods in December, up five of the last six months, increased \$6.1 billion or 1.3 percent to \$464.9 billion, the U.S. Census Bureau reported today. This followed a 2.3 percent November decrease.

Shipments, up nine of the last ten months, increased \$10.4 billion or 2.2 percent to \$475.8 billion. This followed a 0.3 percent November increase.

Unfilled orders, down six of the last seven months, decreased \$7.1 billion or 0.6 percent to \$1,119.5 billion. This followed a 0.2 percent November decrease. The unfilled orders-to-shipments ratio was 6.62, down from 6.75 in November.

Inventories, up five of the last six months, increased \$0.6 billion or 0.1 percent to \$625.6 billion. This followed a 0.5 percent November increase. The inventories-to-shipments ratio was 1.31, down from 1.34 in November.

New Orders

New orders for manufactured durable goods in December, down two consecutive months, decreased \$1.1 billion or 0.5 percent to \$227.1 billion, down from the previously published 0.4 percent decrease. This followed a 4.7 percent November decrease.

Transportation equipment, also down two consecutive months, drove the decrease, \$1.9 billion or 2.5 percent to \$73.5 billion.

New orders for manufactured nondurable goods increased \$7.2 billion or 3.1 percent to \$237.8 billion.

Shipments

Shipments of manufactured durable goods in December, up three of the last four months, increased \$3.3 billion or 1.4 percent to \$238.1 billion, virtually unchanged from the previously published increase. This followed a 0.4 percent November increase.

Transportation equipment, up following two consecutive monthly decreases, led the increase, \$1.9 billion or 2.4 percent to \$82.2 billion.

Shipments of manufactured nondurable goods, up nine of the last ten months, increased \$7.2 billion or 3.1 percent to \$237.8 billion. This followed a 0.2 percent November increase. Petroleum and coal products, up four of the last five months, led the increase, \$5.4 billion or 14.0 percent to \$44.2 billion.

Unfilled Orders

Unfilled orders for manufactured durable goods in December, down six of the last seven months, decreased \$7.1 billion or 0.6 percent to \$1,119.5 billion, virtually unchanged from the previously published decrease. This followed a 0.2 percent November decrease.

Transportation equipment, also down six of the last seven months, drove the decrease, \$8.7 billion or 1.1 percent to \$759.8 billion.

Inventories

Inventories of manufactured durable goods in December, down two of the last three months, decreased \$0.3 billion or 0.1 percent to \$383.9 billion, down from the previously published virtually unchanged increase. This followed a 0.2 percent November increase.

Transportation equipment, down following three consecutive monthly increases, drove the decrease, \$0.4 billion or 0.4 percent to \$123.5 billion.

Inventories of manufactured nondurable goods, up four of the last five months, increased \$0.9 billion or 0.4 percent to \$241.7 billion. This followed a 1.1 percent November increase. Petroleum and coal products, also up four of the last five months, drove the increase, \$1.2 billion or 4.3 percent to \$28.9 billion.

By stage of fabrication, December materials and supplies decreased 0.4 percent in durable goods and 0.9 percent in nondurable goods. Work in process was virtually unchanged in durable goods and increased 2.9 percent in nondurable goods. Finished goods increased 0.2 percent in durable goods and 0.1 percent in nondurable goods.

Figures in text are adjusted for seasonality, but not for inflation. Figures on new and unfilled orders exclude data for semiconductor manufacturing. For data, call (301) 763-4673 or go to www.census.gov/m3. The Advance Report on durable goods for January is scheduled for release on February 27, 2017 at 8:30 a.m. EST and the Full Report on March 6, 2017 at 10:00 a.m. EST. See back page for survey description. 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.

With the release of the January 2017 Advance Report on Durable Goods Manufacturers' Shipments, Inventories and Orders on February 27, 2017, the presentation of the release will change. The text portion of the release will be removed from Excel and reformatted. The layout and format of the tables are not currently changing, though some explanatory notes may move to the text portion of the document. The full text and tables will be available as a PDF, with the tables available separately in Excel.

[&]quot;Virtually unchanged" indicates that the change is less than 0.05 percent for a percent increase or decrease.

Table 1. Value of Manufacturers' Shipments for Industry Groups¹

[Estimates are shown in millions of dollars and are based on data from the Manufacturers' Shipments, Inventories, and Orders Survey.]

[Estimates are shown in millions of do	mar 3 and		asonally A		mail	aotui e	Ompili	onio, mve		Seasonally A			
		Monthly	,	<u> </u>	cent Cha	nge		Мо	nthly	,-		Year to date	
Industry	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Nov Dec.	Oct Nov.	Sep Oct.	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Dec. 2015	2016 ^p	2015	% Change 2016/ 2015
All manufacturing industries	475,843	465,427	464,095	2.2	0.3	0.2	466,743	454,305	469,757	451,055	5,533,605	5,619,673	-1.5
Excluding transportation	393,671	385,183	383,523	2.2			384,966	375,495	388,670	372,010	4,561,046	4,649,987	-1.9
Excluding defense	462,789	452,300	451,528	2.3			451,899 170,447	440,685	457,596	436,563	5,383,257	5,471,790	
With unfilled orders	169,062	166,877	166,255	1.3				161,401	165,729	165,054	1,990,611	1,997,276	
Durable goods industries	238,083	234,824	233,989	1.4	0.4	-0.2	235,921	227,379	235,753	230,858	2,806,164	2,820,620	-0.5
Wood products	8,891	8,745	8,507	1.7	2.8	1.0	7,754	8,087	8,891	6,989	100,616	95,814	5.0
Nonmetallic mineral products	10,057	10,049	9,971	0.1		0.8	8,661	9,698	10,681	8,526	119,223	114,180	
Primary metals	18,498	18,224	17,752	1.5		0.0	16,789	17,240	17,827	16,320	214,400	230,646	
Iron and steel mills Aluminum and nonferrous metals	8,345 8,728	8,133 8,674	7,937 8,414	2.6 0.6		0.6 -0.4	7,655 7,843	7,672 8,252	8,027 8,424	7,364 7,465	96,615 100,102	107,379 103,639	
Ferrous metal foundries	1,425	1,417	1,401	0.6		-1.6	1,291	1,316	1,376	1,491	17,683	19,628	
Fabricated metal products	30,754	30,837	30,445	-0.3		1.2	28,520	29,702	31,131	27,549	361,894	355,334	1.8
Machinery	30,800	30,317	29,959	1.6		-0.4	31,827	28,220	29,655	32,380	364,379	386,253	-5.7
Farm machinery Construction machinery	1,879 2,428	1,821 2,462	1,814 2,646	3.2 -1.4			1,667 2,459	1,335 2,415	1,673 2,803	1,722 3,270	21,596 32,430	24,638 43,579	
Mining, oil field, and	2,420	2,402	2,040	-1.4	-7.0	3.2	2,439	2,415	2,003	3,270	32,430	43,579	-23.0
gas field machinery	807	809	869	-0.2	-6.9	-11.1	921	801	899	1,494	11,479	20,477	-43.9
Industrial machinery	2,511	2,513	2,396	-0.1			3,056	2,197	2,416	2,950	29,199	29,049	
Photographic equipment	411	407	396	1.0	2.8	-0.3	507	425	406	539	5,083	5,179	-1.9
Ventilation, heating, air-conditioning, and refrigeration equipment	3,505	3,479	3,477	0.7	0.1	0.1	3,405	3,115	3,163	3,426	41,744	42,476	-1.7
Metalworking machinery	3,396	3,310	3,184	2.6			3,834	3,350	3,326	3,298	37,853	33,683	
Turbines, generators, and other													
power transmission equipment	4,290	4,049	3,886	6.0			4,106	3,984	3,910	3,794	48,557	52,096	
Material handling equipment	3,053 27,992	3,049 27,770	3,019 27,516	0.1 0.8		1.3 0.9	3,197 31,229	2,926 27,454	3,092 27,357	3,150 29,594	35,991 325,111	31,959 312,851	12.6 3.9
Computers and electronic products ² Computers	583	576	608	1.2		6.9	749	517	613	863	7,203	9,316	
Computer storage devices	526	571	586	-7.9			864	464	433	837	6,702	6,600	
Other peripheral equipment	579	620	617	-6.6			873	527	525	1,040	7,727	9,507	-18.7
Nondefense communications													
equipment Defense communications equipment	3,311 267	3,196 294	3,067 281	3.6 -9.2		-5.1 -6.0	4,168 270	2,915 308	2,780 283	3,833 403	37,802 3,480	37,195 3,848	
Audio and video equipment	402	367	368	9.5			543	467	461	445	4,391	3,468	
Electronic components	4,954	4,872	4,907	1.7		-1.1	4,940	4,539	4,854	4,520	57,470	51,612	
Nondefense search and navigation													
equipment	1,514	1,357	1,402	11.6	-3.2	0.5	1,595	1,364	1,334	1,523	16,658	15,537	7.2
Defense search and navigation equipment	2,560	2,533	2,537	1.1	-0.2	-0.2	2,852	2,689	2,581	2,845	30,619	30,420	0.7
Electromedical, measuring,	_,,	_,	_,				_,~~_	_,	_,	_,0.0	,		***
and control instruments	9,160	9,250	9,244	-1.0	0.1	0.8	10,517	9,018	8,776	10,222	109,179	103,227	5.8
Electrical equipment, appliances,	0.000	0.500	0.000	4.0	4.0	0.7	0.500	0.070	0.707	0.757	444 500	404 007	
and components Electric lighting equipment	9,620 1,034	9,506 1,038	9,632 1,049	1.2 -0.4		0.7 1.5	9,599 1,085	9,378 1,065	9,787 1,116	9,757 1,118	114,522 12,742	121,697 12,441	-5.9 2.4
Household appliances	1,407	1,364	1,407	3.2		-0.4	1,408	1,426	1,455	1,444	16,808	18,508	
Electrical equipment	2,914	2,935	2,909	-0.7			2,930	2,771	2,785	3,138	35,213	38,293	
Batteries	775	758	775	2.2		2.4 -1.6	843	874	877	870	9,487	10,141	-6.4
Transportation equipment Automobiles	82,172 8,852	80,244 8,948	80,572 8,803	2.4 -1.1			81,777 8,291	78,810 9,030	81,087 9,082	79,045 9,914	972,559 114,353	969,686 126,926	
Light trucks and utility vehicles	16,398	15,594	15,601	5.2			15,588	15,214	16,403	14,453	184,678	178,428	
Heavy duty trucks	2,021	2,050	2,000	-1.4		-4.1	1,816	1,930	2,067	2,218	26,272	31,711	-17.2
Motor vehicle bodies, parts,	00.450	20,020	00.070	4.0	0.0	0.0	05.055	07.075	00.707	22.000	220 400	200 450	0.7
and trailers Nondefense aircraft and parts	29,459 13,028	28,939 12,271	28,873 13,479	1.8 6.2			25,955 16,528	27,975 12,069	29,787 12,139	23,908 14,261	339,480 161,965	309,456 168,041	9.7 -3.6
Defense aircraft and parts	4,192	4,174	3,931	0.4			5,129	4,334	3,739	5,899	50,748		-14.0
Ships and boats	3,112		2,990				3,124	3,242	3,085				
Furniture and related products	6,371	6,367	6,382	0.1		0.5	6,260	6,121	6,263	6,163	75,766		
Miscellaneous durable goods	12,928	12,765	13,253	1.3	-3.7	1.1	13,505	12,669	13,074	14,535	157,694	160,925	-2.0
Nondurable goods industries	237,760	230,603	230,106	3.1	0.2	0.6	230,822	226,926	234,004	220,197	2,727,441	2,799,053	-2.6
Food products	65,561	64,826	64,553	1.1	0.4	-0.6	66,255	67,106	67,919	64,376	778,453	773,839	0.6
Grain and oilseed milling	8,164	8,022	7,946	1.8			8,497	8,667	8,697	8,572	96,612		
Dairy products	9,466	9,267	9,061	2.1			9,546	9,790	9,403	9,281	110,368		
Meat, poultry, and seafood products Beverage and tobacco products	17,750 12,356	17,584 12,339	17,529 12,448	0.9 0.1		-0.7 0.5	17,527 12,055	17,729 12,268	17,995 12,274	17,162 11,623	213,546 147,483	145,998	
Beverages	9,095	9,138	9,120	-0.5			8,794	9,067	8,946	8,673	110,894	108,525	
Tobacco	3,261	3,201	3,328	1.9	-3.8		3,261	3,201	3,328	2,950	36,589	37,473	-2.4
Textile mills	2,581	2,545	2,514	1.4		1.5	2,274	2,425	2,610	2,195	30,319		
Textile products	2,118 1,068	2,062 1,042	2,014 1,025	2.7 2.5		1.2 -2.1	1,871 1,035	1,975 1,196	2,043 1,191	1,732 999	24,050 12,655	24,477 12,097	
Leather and allied products	354	341	331	3.8			341	329	344	332	4,077	4,668	
Paper products	15,465	15,355	15,183	0.7		0.1	15,068	15,023	15,512	15,002	182,935	182,809	0.1
Pulp, paper, and paperboard mills	6,835	6,778	6,716				6,729	6,610	6,777	6,786	81,246		
Paperboard containers	4,801 6,942	4,778 6,984	4,694 7,041	0.5 -0.6		0.2 -1.4	4,521 6,875	4,642 7,154	4,832 7,383	4,394 7,296	56,294 85,434	55,465 86,058	
Petroleum and coal products	44,198	38,763	38,959	14.0			41,552	37,088	39,819	33,698	432,735		
Petroleum refineries	39,821	34,526	34,828	15.3	-0.9	5.4	37,917	33,149	35,522	30,961	387,046	485,047	-20.2
Chemical products	67,936	67,190	66,752	1.1		-0.1	65,980	64,201	65,312	65,476	798,894	783,931	1.9
Pesticides, fertilizers, and other	4.064	4,079	4 400	-0.4	-1.0	-0.5	3,393	3,245	2,924	3,485	49,073	46,628	F 0
agricultural chemicals Pharmaceuticals and medicines	4,061 22,565	4,079 22,147	4,120 21,814	-0.4 1.9			22,864	3,245 21,973	2,924	3,485 22,710	49,073 261,462	46,628 236,545	
Paints, coatings, and adhesives	3,807	3,790	3,713	0.4	2.1	1.5	3,206	3,266	3,652	2,995	44,018		
Plastics and rubber products	19,181	19,156	19,286	0.1	-0.7	-0.7	17,516	18,161	19,597	17,468	230,406	229,018	0.6
	1												

^p Preliminary ^r Revised data due to late receipts and concurrent seasonal adjustment.

¹ Estimates of shipments and new orders are for the duration of the period, while estimates of unfilled orders and total inventories are for the end of the period. Not seasonally adjusted estimates of shipments and new orders include adjusted data for non-calendar reporters. Seasonally adjusted estimates include concurrent adjustments for holiday and trading-day differences, where appropriate, as well as seasonal variation, based on the results of the latest annual review of the model parameters. Estimates are not adjusted for price changes.

See note at end of Table 2 relating to survey error and revision.

² Estimates and percent changes of shipments for the semiconductor industry are included in computers and electronic products, and all other applicable aggregate totals.

Table 2. Value of Manufacturers' New Orders for Industry Groups¹

[Estimates are shown in millions of dollars and are based on data from the Manufacturers' Shipments, Inventories, and Orders Survey,]

		;	Seasonally	Adjusted			Not Seasonally Adjusted								
	Monthly			Per	Percent Change			Mon	thly	Year to date					
Industry	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Nov Dec.	Oct Nov.	Sep Oct.	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Dec. 2015	2016 ^p	2015	% Change 2016/ 2015		
All manufacturing industries ²	464,868	458,795	469,636	1.3	-2.3	2.8	466,976	449,678	472,322	458,038	5,473,669	5,553,564	-1.4		
Excluding transportation ²	391,395	383,441	381,304	2.1	0.6	0.8	381,313	371,224	384,618	367,180	4,528,105	4,605,113	-1.7		
Excluding defense ²	453,158	442,502	457,150	2.4	-3.2	2.8	450,149	433,968	461,239	441,918	5,320,264	5,415,592	-1.8		
With unfilled orders ²	161,966	164,099	175,390	-1.3	-6.4	6.7	174,273	161,110	172,649	174,754	1,971,032	1,969,407	0.1		
Durable goods industries ²	227,108	228,192	239,530	-0.5	-4.7	5.0	236,154	222,752	238,318	237,841	2,746,228	2,754,511	-0.3		
Primary metals	18,625	18,754	18,191	-0.7	3.1	1.3	17,286	18,171	17,922	16,666	216,922	228,144	-4.9		
Iron and steel mills	8,469	8,490	8,211	-0.2	3.4	1.5	8,090	8,267	7,988	7,739	98,826	106,510	-7.2		
Aluminum and nonferrous metals	8,674	8,726	8,542	-0.6				8,489	8,530	7,344	99,844	102,290	-2.4		
Ferrous metal foundries	1,482	1,538	1,438	-3.6	7.0		1,406	1,415	1,404	1,583	18,252	19,344	-5.6		
Fabricated metal products	30,946	31,199	30,997	-0.8	0.7	3.1	28,001	29,125	30,913	27,140	363,026	352,667	2.9		
Machinery Construction machinery Mining, oil field, and	30,929 2,605	30,717 2,709	29,972 2,601	0.7 -3.8	2.5 4.2		30,927 2,696	28,541 2,734	29,781 2,770	29,528 3,198	360,509 31,253	377,492 40,104	-4.5 -22.1		
gas field machinery	812	809	824	0.4	-1.8	-11.6	651	806	917	93	8.926	17,019	-47.6		
Industrial machinery	2,478	2,545	2,179	-2.6	16.8		2,872	2,122	2,221	2,641	28,026	27,920	0.4		
Photographic equipment	469	502	423	-6.6	18.7	-7.8	485	528	423	426	5,212	5,308	-1.8		
Ventilation, heating, air-conditioning, and refrigeration equipment	3,496	3,550	3,362	-1.5	5.6	2.2	3,303	3,162	3,032	3,467	41,203	43,196	-4.6		
Metalworking machinery	3,369	3,254	3,219	3.5	1.1	1.8	3,664	3,299	3,333	3,217	38,335	33,140			
Turbines, generators, and other															
power transmission equipment	4,006	3,877	4,006	3.3	-3.2			3,857	3,963	3,793	48,327	50,160			
Material handling equipment	3,204	3,178	3,073	0.8	3.4			2,985	2,914	3,402	36,723	33,716			
Computers and electronic products ²	24,988	24,365	24,116	2.6	1.0		28,921	22,333	23,190	28,226	290,282	282,433			
Computers	568	589	610	-3.6	-3.4	3.0	734	530	615	836	7,177	9,483	-24.3		
Nondefense communications	0.000	0.404	0.400	0.4	0.0	4.0	4.570	0.004	0.000	4.000	40.400	44.000	4.0		
equipment	3,698 253	3,484 284	3,189 300	6.1 -10.9	9.3 -5.3			2,821 255	3,026 259	4,069 317	40,486 3,415	41,006 3,796	-1.3 -10.0		
Defense communications equipment Electronic components	4,947	4,855	4,866	1.9	-0.2	-2.6		4,391	4,835	4,718	57,430	52,169			
Nondefense search and navigation	4,547	4,000	4,000	1.5	-0.2	-2.0	4,310	4,551	4,000	4,710	37,430	32,103	10.1		
equipment	1,777	1,536	1,493	15.7	2.9	1.2	1,516	1,529	1,492	1,334	17,765	17,850	-0.5		
Defense search and navigation	· ·	,	,	-			,-	,-	, -	,	,	,			
equipment	2,570	2,370	2,442	8.4	-2.9	-1.2	3,414	2,162	2,258	3,587	31,254	29,954	4.3		
Electromedical, measuring,															
and control instruments	9,411	9,409	9,340	0.0	0.7	0.7	10,982	8,877	8,924	10,697	110,412	104,719	5.4		
Electrical equipment, appliances,															
and components	9,858	9,913	9,776	-0.6	1.4	1.6		9,569	9,803	9,833	116,204	121,248			
Electric lighting equipment	1,026	1,030	1,014	-0.4 0.4	1.6 -1.3		1,047	1,050 1,453	1,088 1,445	1,120	12,771	12,436	2.7 -8.9		
Household appliances Electrical equipment	1,367 2,945	1,362 2,985	1,380 2,910	-1.3	2.6			2,836	2,797	1,460 3,019	16,790 35,061	18,439 38,739	-8.9 -9.5		
Transportation equipment	73,473	75,354	88,332	-2.5	-14.7	12.3		78,454	87,704	90,858	945,564	948,451	-0.3		
Motor vehicle bodies, parts,	,	·		-2.5	-14./	12.3		·	01,104	30,036		J -1 U,4-31			
and trailers	29,409	29,054	28,541	1.2	1.8			28,700	29,148	24,140	337,903	309,020	9.3		
Nondefense aircraft and parts	6,102	4,295	21,903	42.1	-80.4	94.5		8,535	20,299	25,485	135,824	162,778	-16.6		
Defense aircraft and parts	2,738	7,611	3,823	-64.0	99.1	37.7	5,299	7,732	3,633	5,631	54,657	57,649	-5.2		
Ships and boats	3,696	3,087	3,060	19.7	0.9		3,852	2,918	2,888	2,292	34,914	24,204	44.2		
Furniture and related products	6,419	6,331	6,413	1.4	-1.3	-1.3	5,616	6,105	6,357	5,543	76,188	73,158	4.1		
Nondurable goods industries	237,760	230,603	230,106	3.1	0.2	0.6	230,822	226,926	234,004	220,197	2,727,441	2,799,053	-2.6		

^p Preliminary Revised data due to late receipts and concurrent seasonal adjustment.

Note: Estimates of manufacturers' shipments, inventories and orders are subject to survey error and revision. One major component of survey error is nonsampling error, which includes errors of coverage, response, and nonreporting. Since the survey panel is not a probability sample, estimates of sampling error cannot be calculated. For further details on survey design, methodology, and data limitations see http://www.census.gov/manufacturing/m3/>.

¹ Estimates of shipments and new orders are for the duration of the period, while estimates of unfilled orders and total inventories are for the end of the period. Not seasonally adjusted estimates of shipments and new orders include adjusted data for non-calendar reporters. Seasonally adjusted estimates include concurrent adjustments for holiday and trading-day differences, where appropriate, as well as seasonal variation, based on the results of the latest annual review of the model parameters. Estimates are not adjusted for price changes.

² Data on new orders are not available for the semiconductor industry. Estimates and percent changes for new orders exclude semiconductor industry data.

Table 3. Value of Manufacturers' Unfilled Orders for Industry Groups¹

[Estimates are shown in millions of dollars and are based on data from the Manufacturers' Shipments, Inventories, and Orders Survey.]

Lestimates are shown in millions of do	laro ana ar		Seasonally A		iotaroro c	mpmome	,		easonally Adj	usted	
		Monthly		Pe	rcent Chan	ge		Mon	ithly		% Change
Industry	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Nov Dec.	Oct Nov.	Sep Oct.	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Dec. 2015	December 2016/ 2015
All manufacturing industries ²	1,119,548	1,126,644	1,129,422	-0.6	-0.2	0.8	1,120,121	1,116,295	1,116,586	1,139,700	-1.7
Excluding transportation ²	359,758	358,155	356,043	0.4	0.6	0.4	352,258	352,318	352,253	344,842	2.2
Excluding defense ²	943,494	949,246	955,190	-0.6	-0.6	1.0	943,847	942,004	944,385	966,483	-2.3
Durable goods industries ²	1,119,548	1,126,644	1,129,422	-0.6	-0.2	0.8	1,120,121	1,116,295	1,116,586	1,139,700	-1.7
Primary metals	33,791	33,664	33,134	0.4	1.6	1.3	33,135	32,638	31,707	30,613	8.2
Iron and steel mills	19,265	19,141	18,784	0.6	1.9	1.5	18,571	18,136	17,541	16,360	13.5
Aluminum and nonferrous metals	10,439	10,493	10,441	-0.5	0.5	1.2	10,558	10,611	10,374	10,816	-2.4
Ferrous metal foundries	4,087	4,030	3,909	1.4	3.1	1.0	4,006	3,891	3,792	3,437	16.6
Fabricated metal products	75,238	75,046	74,684	0.3	0.5	0.7	72,579	73,098	73,675	71,447	1.6
Machinery	92,914	92,785	92,385	0.1	0.4	0.0	91,086	91,986	91,665	94,956	-4.1
Construction machinery	4,312	4,135	3,888	4.3	6.4	-1.1	4,218	3,981	3,662	5,395	-21.8
Mining, oil field, and gas field machinery	5.811	5,806	5.806	0.1	0.0	-0.8	5.617	5,887	5,882	8.170	-31.2
Industrial machinery	7,059	7,092	7,060	-0.5	0.5	-3.0	6,744	6,928	7,003	7,917	-14.8
Photographic equipmentVentilation, heating, air-conditioning,	1,466	1,408	1,313	4.1	7.2	2.1	1,404	1,426	1,323	1,275	10.1
and refrigeration equipment	6.014	6.023	5.952	-0.1	1.2	-1.9	5,787	5,889	5,842	6.328	-8.5
Metalworking machinery	7,329	7,356	7,412	-0.4	-0.8	0.5	7,101	7,271	7,322	6,619	
Turbines, generators, and other power transmission equipment	25,390	25,674	25,846	-1.1	-0.7	0.5	25,462	25,558	25,685	25,692	-0.9
Material handling equipment	12,566	12,415	12,286	1.2	1.0	0.3	12,365	11,996	11,937	11,633	6.3
				0.7	0.3	0.4		,	,		4.5
Computers and electronic products ²	130,812	129,937	129,488			_	129,719	128,434	129,219	124,191	
Computers Nondefense communications	2,421	2,436	2,423	-0.6	0.5	0.1	2,421	2,436	2,423	2,447	-1.1
equipment	33,614	33,227	32,939	1.2	0.9	0.4	33,209	32,807	32,901	30,525	8.8
Defense communications equipment	2,228	2,242	2,252	-0.6	-0.4	0.9	2,172	2,200	2,253	2,237	-2.9
Electronic components Nondefense search and navigation	12,089	12,096	12,113	-0.1	-0.1	-0.3	11,914	11,936	12,084	11,954	-0.3
equipment Defense search and navigation	18,438	18,175	17,996	1.4	1.0	0.5	18,232	18,311	18,146	17,125	6.5
equipment Electromedical, measuring,	28,016	28,006	28,169	0.0	-0.6	-0.3	27,990	27,428	27,955	27,355	2.3
and control instruments Electrical equipment, appliances,	34,006	33,755	33,596	0.7	0.5	0.3	33,781	33,316	33,457	32,548	3.8
and components	18,512	18,274	17,867	1.3	2.3	0.8	17,985	17,758	17,567	16,303	10.3
Electric lighting equipment	1,339	1,347	1,355	-0.6	-0.6	-2.5		1,335	1,350	1,268	2.3
Household appliances	1,146	1,186	1,188	-3.4	-0.2	-2.2		1,188	1,161	1,151	-1.6
Electrical equipment	7,890	7,859	7,809	0.4	0.6	0.0	7,711	7,789	7,724	7,863	-1.9
Transportation equipment	759,790	768,489	773,379	-1.1	-0.6	1.0		763,977	764,333	794,858	-3.4
and trailers	21,536	21,586	21,471	-0.2	0.5	-1.5	21,982	21,413	20,688	23,559	-6.7
Nondefense aircraft and parts	577,388	584,314	592,290	-0.2	-1.3	1.4	584,495	582,265	585,799	610,636	-4.3
Defense aircraft and parts	72,044	73,498	70,061	-2.0	4.9	-0.2	72,527	72,357	68,959	68,618	5.7
Ships and boats	17,139	16,555	16,602	3.5	-0.3	0.4	16,662	15,934	16,258	18,590	-10.4
Furniture and related products	8,253	8,205	8,241	0.6	-0.3	0.4	7,516	8,160	8,176	7,094	5.9
- cc. and rolated products	0,200	0,200	0,241	3.0	5.4	5.4	7,510	0,700	0,770	7,004	5.9

¹ Estimates of shipments and new orders are for the duration of the period, while estimates of unfilled orders and total inventories are for the end of the period. Not seasonally adjusted estimates of shipments and new orders include adjusted data for non-calendar reporters. Seasonally adjusted estimates include concurrent adjustments for holiday and trading-day differences, where appropriate, as well as seasonal variation, based on the results of the latest annual review of the model parameters. Estimates are not adjusted for price changes.

² Data on unfilled orders are not available for the semiconductor industry. Estimates and percent changes for unfilled orders exclude semiconductor industry data. See note at end of Table 2 relating to survey error and revision.

Table 4. Value of Manufacturers' Inventories for Industry Groups¹

			Seasonally A	djusted				Not S	easonally Adju	usted	
		Monthly		Pe	rcent Chan	ge		Mon	thly		% Change
Industry	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Nov Dec.	Oct Nov.	Sep Oct.	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Dec. 2015	December 2016/ 2015
All manufacturing industries	625,585	625,011	621,711	0.1	0.5	0.1	609,286	625,743	626,435	608,314	0.2
Excluding transportation	502,038	501,027	497,919	0.2	0.6	0.1	489,677	501,376	502,249	486,958	0.6
Excluding defense With unfilled orders	600,298 311,279	599,490 311,865	595,895 311,370	0.1 -0.2	0.6 0.2	0.0 -0.1	584,338 302,707	600,196 312,128	600,721 311,640	583,316 307,102	0.2 -1.4
Durable goods industries	383,872	384,178	383,424	-0.1	0.2	-0.1	373,512	384,499	383,706	377,498	-1.1
Wood products	11,704	11,575	11,462	1.1	1.0	0.5	11,589	11,570	11,404	11,123	4.2
Nonmetallic mineral products Primary metals	13,035 31,643	13,083 31,656	13,139 31,558	-0.4 0.0	-0.4 0.3	0.1 -0.2	12,752 31,533	12,690 31,550	12,817 31,554	12,652 33,208	0.8 -5.0
Iron and steel mills	17,372	17,359	17,326	0.0	0.3	0.2	17,399	17,384	17,465	18,694	-6.9
Aluminum and nonferrous metals	12,246	12,273	12,209	-0.2	0.5	-0.7	12,156	12,170	12,107	12,476	-2.6
Ferrous metal foundries Fabricated metal products	2,025 48,555	2,024 48,698	2,023 48,886	0.0 -0.3	0.0 -0.4	0.5 -0.1	1,978 47,785	1,996 48,294	1,982 48,607	2,038 48,341	-2.9 -1.2
Machinery	66,305	65,996	65,390	0.5	0.4	-0.1	63,891	66,480	65,388	64,750	-1.2
Farm machinery	3,250	3,230	3,144	0.6	2.7	3.1	3,369	3,302	2,836	3,358	0.3
Construction machinery	5,302	5,384	5,404	-1.5	-0.4	-1.4	5,191	5,375	5,475	5,663	-8.3
Mining, oil field, and gas field machinery	7,677	7,483	7,344	2.6	1.9	-0.6	7,357	7,381	7,249	7,355	0.0
Industrial machinery	6,572	6,484	6,337	1.4	2.3	-1.8	6,423	6,582	6,351	6,240	2.9
Photographic equipment	1,612	1,603	1,607	0.6	-0.2	1.1	1,543	1,650	1,626	1,488	3.7
Ventilation, heating, air-conditioning, and refrigeration equipment	4,632	4,604	4,535	0.6	1.5	-1.0	4,265	4,532	4,456	4,192	1.7
Metalworking machinery	4,632 5,745	5,727	4,535 5,763	0.8	-0.6	0.6	5,594	4,532 5,785	5,815	5,514	1.7
Turbines, generators, and other											
power transmission equipment	9,318	9,168	9,020 4,674	1.6 -0.2	1.6 -0.9	-2.7	8,747 4,307	9,418 4,710	9,322	9,251	-5.4 3.5
Material handling equipment Computers and electronic products ²	4,624 42,432	4,633 42,550	42,508	-0.2	0.1	0.4 0.1	40,954	42,759	4,809 42,729	4,160 41,151	-0.5
Computers	1,825	1,669	1,596	9.3	4.6	-1.4	1,641	1,650	1,599	1,301	26.1
Computer storage devices	1,026	944	942	8.7	0.2	-6.1	973	987	994	949	2.5
Other peripheral equipment Nondefense communications	1,030	1,035	1,015	-0.5	2.0	-1.1	960	1,079	1,007	1,005	-4.5
equipment	3,737	3,906	3,923	-4.3	-0.4	0.0	3,600	4,044	3,956	3,933	-8.5
Defense communications equipment	554	553	556	0.2	-0.5	1.3	554	553	556	646	-14.2
Audio and video equipment	784	691	664	13.5	4.1	-1.6	770	740	760	725	6.2
Electronic components Nondefense search and navigation	7,666	7,852	7,770	-2.4	1.1	1.0	7,411	7,743	7,733	7,343	0.9
equipment	3,043	3,083	3,074	-1.3	0.3	-0.3	2,966	3,050	3,125	3,005	-1.3
Defense search and navigation											
equipment Electromedical, measuring	3,134	3,107	3,080	0.9	0.9	0.0	3,038	3,058	3,037	2,734	11.1
and control instruments	14,011	14,063	14,175	-0.4	-0.8	0.2	13,493	14,373	14,250	13,888	-2.8
Electrical equipment, appliances,	·							-			
and components	16,217	16,217	16,241	0.0	-0.1 -1.4	-0.7	15,558	16,128	16,284	15,805	-1.6 2.0
Electric lighting equipment Household appliances	2,000 2,211	2,006 2,219	2,035 2,225	-0.3 -0.4	-1.4	-0.3 -0.9	1,919 1,992	1,988 2,149	2,042 2,275	1,882 2,052	-2.9
Electrical equipment	4,740	4,761	4,786	-0.4	-0.5	-1.5	4,624	4,824	4,768	4,872	-5.1
Batteries	1,295	1,305	1,304	-0.8	0.1	-1.8	1,191	1,270	1,327	1,252	-4.9
Transportation equipment	123,547 4,297	123,984 4,274	123,792 4,203	-0.4 0.5	0.2 1.7	0.1 -2.3	119,609 4,016	124,367 4,324	124,186 4,367	121,356 4,321	-1.4 -7.1
Light trucks and utility vehicles	4,220	4,312	4,368	-2.1	-1.3	-1.1	3,746	4,478	4,556	3,966	-5.5
Heavy duty trucks	2,090	2,019	1,919	3.5	5.2	2.2	1,960	2,004	1,926	2,049	-4.3
Motor vehicle bodies, parts,	24.444	24.245	24.020	0.5	0.0	0.0	22 502	24.245	22.072	22.244	4.0
and trailers Nondefense aircraft and parts	24,114 62,655	24,245 62,811	24,026 62,622	-0.5 -0.2	0.9 0.3	0.3 -0.2	23,582 60,578	24,245 62,748	23,973 62,600	23,344 61,877	1.0 -2.1
Defense aircraft and parts	11,021	11,140	11,220	-1.1	-0.7	1.2	10,841	11,145	11,206	11,084	-2.2
Ships and boats	2,816	2,853	2,861	-1.3	-0.3	0.2	2,815	2,871	2,836	2,632	7.0
Furniture and related products	7,225 23,209	7,198 23,221	7,219 23,229	0.4 -0.1	-0.3 0.0	0.7 0.3	7,022 22,819	7,207 23,454	7,209 23,528	6,891 22,221	1.9 2.7
	·										
Nondurable goods industries	241,713	240,833	238,287	0.4	1.1	0.3	235,774	241,244	242,729	230,816	2.1
Food products	53,825	53,815	53,407	0.0	0.8	-0.4	53,384	56,105	57,025	52,449	1.8
Grain and oilseed milling Dairy products	5,939 7,699	5,840 7,727	5,814 7,397	1.7 -0.4	0.4 4.5	0.5 -0.2	6,113 7,198	6,188 7,419	6,352 7,376	5,924 6,978	3.2 3.2
Meat, poultry, and seafood products	8,786	8,802	8,834	-0.4	-0.4	-0.2	8,529	9,033	9,101	8,790	-3.0
Beverage and tobacco products	20,567	20,490	20,475	0.4	0.1	-0.6	20,574	20,960	21,209	20,613	-0.2
Beverages	16,814	16,693	16,659	0.7	0.2	-0.6	16,664	16,987	17,309	16,526	0.8
Tobacco Textile mills	3,753 3,174	3,797 3,169	3,816 3,177	-1.2 0.2	-0.5 -0.3	-0.7 -0.2	3,910 3,118	3,973 3,136	3,900 3,175	4,087 3,052	-4.3 2.2
Textile products	3,076	3,070	3,066	0.2	0.1	0.4	2,995	3,041	3,056	2,988	0.2
Apparel	2,406	2,448	2,479	-1.7	-1.3	-0.2	2,263	2,382	2,540	2,355	-3.9
Leather and allied products	781 16.052	785 16 124	786 16 141	-0.5 -0.4	-0.1 -0.1	0.3	773 15 806	788 16.011	789 16 003	809 16 381	-4.4 -3.0
Paper products Pulp, paper, and paperboard mills	16,052 6,629	16,124 6,631	16,141 6,633	-0.4 0.0	-0.1 0.0	-0.1 -0.2	15,896 6,612	16,011 6,556	16,002 6,520	16,381 6,840	-3.0 -3.3
Paperboard containers	5,048	5,117	5,115	-1.3	0.0	0.0	5,019	5,081	5,085	5,178	-3.1
Printing	6,015	5,957	5,908	1.0	0.8	0.7	5,750	5,925	6,105	5,711	0.7
Petroleum and coal products	28,868	27,668	25,543	4.3	8.3	2.3	27,323	27,011	26,976	23,602	15.8
Petroleum refineries	24,381 81,478	23,193 81,761	20,963 81,701	5.1 -0.3	10.6 0.1	2.8 0.4	22,880 78,978	22,639 80,710	22,523 80,620	19,042 78,524	20.2 0.6
Pesticides, fertilizers, and other								-			
agricultural chemicals	4,189	4,168	4,232	0.5	-1.5	0.5	4,365	4,191	4,067	4,598	-5.1
Pharmaceuticals and medicines Paints, coatings, and adhesives	32,461 3,802	32,621 3,783	32,578 3,760	-0.5 0.5	0.1 0.6	-0.2 0.2	30,883 3,643	32,077 3,641	32,231 3,621	30,484 3,456	1.3 5.4
		3.703	3.700	0.5	0.0	0.2	3,043	3,041	3,021	3,430	J.4

^p Preliminary ^rRevised data due to late receipts and concurrent seasonal adjustment.

Testimates of shipments and new orders are for the duration of the period, while estimates of shipments and total inventories are for the end of the period. Not seasonally adjusted estimates of shipments and new orders include adjusted data for non-calendar reporters. Seasonally adjusted estimates include concurrent adjustments for holiday and trading-day differences, where appropriate, as well as seasonal variation, based on the results of the latest annual review of the model parameters. Estimates are not adjusted for price changes.

2 Estimates of inventories for the semiconductor industry data are included in computers and electronic products, and all other applicable aggregate totals.

See note at end of Table 2 relating to survey error and revision.

Table 5. Value of Manufacturers' Shipments, New Orders, Unfilled Orders, and Total Inventories for Topical Series^{1, 2}

[Estimates are shown in millions of dollars and are based on data from the Manufacturers' Shipments, Inventories, and Orders Survey.]

Estimates are shown in minions of a	Seasonally Adjusted							,		Seasonally			
		Monthly		Per	cent Cha	nge		Mon	thly		Year to	o date	
Industry	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Nov Dec.	Oct Nov.	Sep Oct.	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Dec. 2015	2016 ^p	2015	% Change ⁶ 2016/ 2015
SHIPMENTS													
All manufacturing industries	475,843	465,427	464,095	2.2	0.3	0.2	466,743	454,305	469,757	451,055	5,533,605	5,619,673	-1.5
Construction materials and supplies Information technology Computers and related products Motor vehicle and parts	47,847 23,060 1,688 56,730	47,528 22,862 1,767 55,531	46,878 22,903 1,811 55,277	0.7 0.9 -4.5 2.2	1.4 -0.2 -2.4 0.5	1.1 0.5 9.5 -0.8	42,292 26,536 2,486 51,650	44,885 22,246 1,508 54,149	48,754 22,108 1,571 57,339	41,177 26,083 2,740 50,493	561,397 272,639 21,632 664,783	549,485 270,492 25,423 646,521	2.2 0.8 -14.9 2.8
Capital goods	82,658 71,787 63,440 10,871	81,536 70,515 62,807 11,021	81,832 71,162 62,394 10,670	1.4 1.8 1.0 -1.4	-0.4 -0.9 0.7 3.3	-0.6 -1.1 -0.3 3.2	91,742 79,711 68,146 12,031	78,994 67,494 59,914 11,500	79,459 69,140 61,337 10,319	90,452 79,187 70,005 11,265	984,203 860,246 755,881 123,957	1,024,839 906,887 793,564 117,952	-4.0 -5.1 -4.7 5.1
Consumer goods	195,782 38,409 157,373	188,176 37,525 150,651	188,072 37,839 150,233	4.0 2.4 4.5	0.1 -0.8 0.3	0.9 0.1 1.1	192,425 36,901 155,524	187,968 36,936 151,032	193,224 38,833 154,391	182,679 37,646 145,033	2,227,264 456,992 1,770,272	2,293,126 461,953 1,831,173	-2.9 -1.1 -3.3
NEW ORDERS													
All manufacturing industries ⁵	464,868	458,795	469,636	1.3	-2.3	2.8	466,976	449,678	472,322	458,038	5,473,669	5,553,564	-1.4
Construction materials and supplies Information technology Computers and related products Motor vehicle and parts	47,965 24,255 1,673 56,680	47,755 23,790 1,780 55,646	47,052 23,370 1,813 54,945	0.4 2.0 -6.0 1.9	1.5 1.8 -1.8 1.3	2.0 1.4 8.1 -1.1	41,870 28,219 2,471 52,219	44,584 21,826 1,521 54,874	48,596 22,374 1,573 56,700	40,916 27,298 2,713 50,725	561,433 280,159 21,606 663,206	549,684 277,065 25,590 646,085	2.1 1.1 -15.6 2.6
Capital goods	76,189 66,670 64,586 9,519	78,597 64,293 64,133 14,304	91,266 80,210 63,044 11,056	-3.1 3.7 0.7 -33.5	-13.9 -19.8 1.7 29.4	12.5 14.8 0.5 -1.8	95,378 81,806 67,635 13,572	76,933 63,647 59,849 13,286	87,668 78,500 61,944 9,168	91,989 79,001 66,704 12,988	968,748 840,851 759,381 127,897	993,105 884,710 785,471 108,395	-2.5 -5.0 -3.3 18.0
Consumer goods	195,749 38,376 157,373	188,116 37,465 150,651	188,059 37,826 150,233	4.1 2.4 4.5	0.0 -1.0 0.3	0.8 -0.2 1.1	192,263 36,739 155,524	188,040 37,008 151,032	193,270 38,879 154,391	182,579 37,546 145,033	2,227,377 457,105 1,770,272	2,292,990 461,817 1,831,173	-2.9 -1.0 -3.3
UNFILLED ORDERS													
All manufacturing industries ⁵	1,119,548	1,126,644	1,129,422	-0.6	-0.2	0.8	1,120,121	1,116,295	1,116,586	1,139,700	(X)	(X)	-1.7
Construction materials and supplies Information technology Computers and related products Motor vehicle and parts	45,789 128,326 2,421 21,536	45,671 127,131 2,436 21,586	45,444 126,203 2,423 21,471	0.3 0.9 -0.6 -0.2	0.5 0.7 0.5 0.5	0.4 0.4 0.1 -1.5	44,343 127,053 2,421 21,982	44,765 125,370 2,436 21,413	45,066 125,790 2,423 20,688	44,307 119,533 2,447 23,559	(X) (X) (X) (X)	(X) (X) (X) (X)	0.1 6.3 -1.1 -6.7
Capital goods Nondefense capital goods ³ Excluding aircraft Defense capital goods ⁴	832,807 691,964 225,629 140,843	839,276 697,081 224,483 142,195	842,215 703,303 223,157 138,912	-0.8 -0.7 0.5 -1.0	-0.3 -0.9 0.6 2.4	1.1 1.3 0.3 0.3	835,421 695,077 221,186 140,344	831,785 692,982 221,697 138,803	833,846 696,829 221,762 137,017	850,876 714,472 217,686 136,404	(X) (X) (X) (X)	(X) (X) (X) (X)	-1.8 -2.7 1.6 2.9
Consumer goods	4,425 4,425	4,458 4,458	4,518 4,518	-0.7 -0.7	-1.3 -1.3	-0.3 -0.3	4,305 4,305	4,467 4,467	4,395 4,395	4,192 4,192	(X)	(X) (X)	2.7 2.7
TOTAL INVENTORIES	4,423	4,430	4,516	-0.7	-1.3	-0.3	4,303	4,407	4,393	4,192	(X)	(^)	2.1
All manufacturing industries	625,585	625,011	621,711	0.1	0.5	0.1	609,286	625,743	626,435	608,314	(X)	(X)	0.2
Construction materials and supplies	65,742	65,749	65,765	0.0	0.0	0.1	64,265	64,697	64,919	63,715	(X)	(X)	0.9
Information technology	36,917 3,881 34,721	36,766 3,648 34,850	36,707 3,553 34,516	0.4 6.4 -0.4	0.2 2.7 1.0	-0.2 -2.6 -0.1	35,562 3,574 33,304	37,277 3,716 35,051	36,965 3,600 34,822	35,622 3,255 33,680	(X) (X) (X)	(X) (X) (X)	-0.2 9.8 -1.1
Capital goods Nondefense capital goods ³ Excluding aircraft Defense capital goods ⁴	191,584 170,870 119,295 20,714	191,314 170,450 118,803 20,864	190,727 169,604 118,212 21,123	0.1 0.2 0.4 -0.7	0.3 0.5 0.5 -1.2	-0.1 -0.3 -0.3 1.6	185,302 164,747 115,228 20,555	192,518 171,633 120,168 20,885	191,243 170,208 118,849 21,035	186,922 166,676 115,938 20,246	(X) (X) (X) (X)	(X) (X) (X) (X)	-0.9 -1.2 -0.6 1.5
Consumer goods Consumer durable goods Consumer nondurable goods	180,359 29,527 150,832	179,269 29,522 149,747	176,664 29,464 147,200	0.6 0.0 0.7	1.5 0.2 1.7	0.0 -0.3 0.1	175,286 28,280 147,006	181,164 29,865 151,299	182,805 30,054 152,751	170,999 28,536 142,463	(X) (X) (X)	(X) (X) (X)	2.5 -0.9 3.2

X Not Applicable Preliminary

See note at end of Table 2 relating to survey error and revision.

Revised data due to late receipts and concurrent seasonal adjustment.

¹ Estimates of shipments and new orders are for the duration of the period, while estimates of unfilled orders and total inventories are for the end of the period. Not seasonally adjusted estimates of shipments and new orders include adjusted data for non-calendar reporters. Seasonally adjusted estimates include concurrent adjustments for holiday and trading-day differences, where appropriate, as well as seasonal variation, based on the results of the latest annual review of the model parameters. Estimates are not adjusted for price changes.

² Topical series are regroupings of the separate industry categories.

³ Nondefense capital goods industries include: small arms and ordnance; farm machinery and equipment; construction machinery; mining, oil, and gas field machinery; industrial machinery; vending, laundry, and other machinery; photographic equipment; metalworking machinery; turbines and generators; other power transmission equipment; pumps and compressors; material handling equipment; all other machinery; electronic computers; computer storage devices; other computer peripheral equipment; communications equipment; search and navigation equipment; electronedical, measuring, and control instruments; electrical equipment; other electrical equipment; search and components; heavy duty trucks; aircraft; railroad rolling stock; ships and boats; office and institutional furniture; and medical equipment and supplies.

⁴Defense capital goods industries include: small arms and ordnance; communications equipment; aircraft; missiles, space vehicles, and parts; ships and boats; and search and navigation equipment.

⁵ Estimates and percent changes exclude semiconductor industry data.

⁶ Based on year-to-date for shipments and new orders, but on same month prior year for unfilled orders and inventories.

Table 6. Value of Manufacturers' Inventories, by Stage of Fabrication, by Industry Group¹

			Seasonally A	djusted	Not Seasonally Adjusted						
		Monthly		Pe	rcent Chan	ge		Mor	ıthly		% Change
Industry	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Nov Dec.	Oct Nov.	Sep Oct.	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Dec. 2015	December 2016/ 2015
MATERIALS AND SUPPLIES											
All manufacturing industries	207,974	209,224	208,767	-0.6	0.2	0.2	206,822	208,955	209,290	205,987	0.4
Durable goods industries	129,037	129,583	129,703	-0.4	-0.1	-0.3	128,169	129,503	129,707	128,604	-0.3
Wood products Nonmetallic mineral products	4,886 5,249	4,811 5,212	4,654 5,297	1.6 0.7	3.4 -1.6	-0.6 0.4	4,996 5,220	4,916 5,162	4,785 5,278	4,676 5,151	6.8 1.3
Primary metals	12,612	12,705	12,679	-0.7	0.2	0.0	12,958	12,894	12,838	13,327	-2.8
Fabricated metal products	17,353 23,323	17,543 23,556	17,739 23,348	-1.1 -1.0	-1.1 0.9	-1.2 -1.5	17,385 22,602	17,471 23,461	17,663 23,268	17,920 24,450	-3.0 -7.6
Computers and electronic products	17,619	17,575	17,630	0.3	-0.3	1.1	17,406	17,537	17,572	16,798	3.6
Electrical equipment, appliances, and components	6,485	6,489	6,555	-0.1	-1.0	-0.3	6,374	6,475	6,552	6,601	-3.4
Transportation equipment	30,451	30,614	30,692	-0.5	-0.3	0.1	30,286	30,532	30,663	28,858	4.9
Furniture and related products Miscellaneous products	3,638 7,421	3,601 7,477	3,631 7,478	1.0 -0.7	-0.8 0.0	0.4 0.2	3,608 7,334	3,583 7,472	3,617 7,471	3,556 7,267	1.5 0.9
Nondurable goods industries	78,937	79,641	79,064	-0.9	0.7	0.8	78,653	79,452	79,583	77,383	1.6
Food products	18,245	18,541	18,249	-1.6	1.6	0.9	18,616	19,259	19,088	18,303	1.7
Beverage and tobacco products Textiles	4,789 1,161	4,865 1,165	4,955 1,159	-1.6 -0.3	-1.8 0.5	-1.3 0.2	4,879 1,150	4,940 1,153	5,005 1,147	5,100 1,163	-4.3 -1.1
Textile products	1,027	1,031	1,050	-0.4	-1.8	-0.7	1,016	1,018	1,040	1,059	-4.1
ApparelLeather and allied products	676 232	671 229	664 230	0.7 1.3	1.1 -0.4	1.2 -0.9	656 233	658 227	684 231	691 251	-5.1 -7.2
Paper products	8,178	8,256	8,291	-0.9	-0.4	0.1	8,184	8,228	8,180	8,468	-3.4
Printing Petroleum and coal products	2,771 6,176	2,743 6,387	2,731 5,836	1.0 -3.3	0.4 9.4	1.3 4.3	2,687 5,907	2,737 6,083	2,777 6,085	2,729 5,348	-1.5 10.5
Chemical products	25,822	25,805	25,773	0.1	0.1	1.1	25,525	25,345	25,366	24,314	5.0
Plastics and rubber products	9,860	9,948	10,126	-0.9	-1.8	0.0	9,800	9,804	9,980	9,957	-1.6
WORK IN PROCESS											
All manufacturing industries	193,580	192,187	191,088	0.7	0.6	-0.3	187,503	192,792	193,292	188,500	-0.5
Durable goods industries	143,519	143,542	143,262	0.0	0.2	-0.1	138,610	143,618	143,456	142,451	-2.7
Wood products Nonmetallic mineral products	2,304 1,485	2,278 1,500	2,368 1,480	1.1 -1.0	-3.8 1.4	2.6 0.2	2,246 1,408	2,242 1,420	2,346 1,409	2,165 1,390	3.7 1.3
Primary metals	9,196	9,124	9,040	0.8	0.9	-1.2	8,789	9,053	9,021	9,593	-8.4
Fabricated metal products Machinery	12,903 19,680	12,880 19,300	12,832 19,240	0.2 2.0	0.4 0.3	-0.1 0.0	12,636 18,667	12,938 19,799	12,927 19,571	12,600 17,406	0.3 7.2
Computers and electronic products	13,146	13,178	13,130	-0.2	0.4	-0.5	12,434	13,010	13,140	13,346	-6.8
Electrical equipment, appliances, and components	3,436	3,448	3,437	-0.3	0.3	-0.3	3,313	3,438	3,416	3,330	-0.5
Transportation equipment	76,243	76,724	76,643	-0.6	0.1	-0.1	74,168	76,604	76,506	77,964	-4.9
Furniture and related products Miscellaneous products	1,100 4,026	1,130 3,980	1,101 3,991	-2.7 1.2	2.6 -0.3	1.6 0.5	1,091 3,858	1,124 3,990	1,097 4,023	1,038 3,619	5.1 6.6
Nondurable goods industries	50,061	48,645	47,826	2.9	1.7	-0.7	48,893	49,174	49,836	46,049	6.2
Food products	6,131	5,818	5,821	5.4	-0.1	-3.9	6,617	6,664	6,902	6,402	3.4
Beverage and tobacco products Textiles	7,693 661	7,624 661	7,561 668	0.9 0.0	0.8 -1.0	-1.0 -0.3	8,025 640	8,001 657	8,128 675	7,889 653	1.7 -2.0
Textile products	433 326	432 331	434 321	0.2 -1.5	-0.5	0.5 -1.2	406 297	429 318	436 322	410 303	-1.0 -2.0
ApparelLeather and allied products	109	109	108	0.0	3.1 0.9	0.0	108	109	107	98	10.2
Paper products	1,251 1,476	1,254 1,462	1,255 1,465	-0.2 1.0	-0.1 -0.2	-0.1 -2.2	1,221 1,349	1,242 1,427	1,234 1,572	1,254 1,474	-2.6 -8.5
Petroleum and coal products	9,524	8,840	8,164	7.7	8.3	1.3	8,684	8,604	8,804	6,952	24.9
Chemical productsPlastics and rubber products	19,296 3,161	18,962 3,152	18,892 3,137	1.8 0.3	0.4 0.5	-0.7 1.9	18,510 3,036	18,609 3,114	18,572 3,084	17,793 2,821	4.0 7.6
·	3,101	3,132	3,137	0.5	0.5	1.3	3,030	5,114	3,004	2,021	7.0
FINISHED GOODS	224,031	222 600	224 056	0.2	0.0	0.3	214.061	222.006	222 052	213,827	0.5
All manufacturing industries	•	223,600	221,856	0.2	0.8	0.3	214,961	223,996			0.5
Durable goods industries Wood products	111,316 4,514	111,053 4,486	110,459 4,440	0.2 0.6	0.5 1.0	0.3 0.6	106,733 4,347	111,378 4,412	110,543 4,273	106,443 4,282	0.3 1.5
Nonmetallic mineral products	6,301	6,371	6,362	-1.1	0.1	-0.1	6,124	6,108	6,130	6,111	0.2
Primary metals Fabricated metal products	9,835 18,299	9,827 18,275	9,839 18,315	0.1 0.1	-0.1 -0.2	0.6 0.9	9,786 17,764	9,603 17,885	9,695 18,017	10,288 17,821	-4.9 -0.3
Machinery	23,302	23,140	22,802	0.7	1.5	-0.1	22,622	23,220	22,549	22,894	-1.2
Computers and electronic products Electrical equipment, appliances,	11,667	11,797	11,748	-1.1	0.4	-0.8	11,114	12,212	12,017	11,007	1.0
and components	6,296	6,280	6,249	0.3	0.5	-1.4	5,871	6,215	6,316	5,874	-0.1
Transportation equipment Furniture and related products	16,853 2,487	16,646 2,467	16,457 2,487	1.2 0.8	1.1 -0.8	1.2 0.7	15,155 2,323	17,231 2,500	17,017 2,495	14,534 2,297	4.3 1.1
Miscellaneous products	11,762	11,764	11,760	0.0	0.0	0.3	11,627	11,992	12,034	11,335	2.6
Nondurable goods industries	112,715	112,547	111,397	0.1	1.0	0.4	108,228	112,618	113,310	107,384	0.8
Food products Beverage and tobacco products	29,449 8,085	29,456 8,001	29,337 7,959	0.0 1.0	0.4 0.5	-0.4 0.2	28,151 7,670	30,182 8,019	31,035 8,076	27,744 7,624	1.5 0.6
Textiles	1,352	1,343	1,350	0.7	-0.5	-0.5	1,328	1,326	1,353	1,236	7.4
Textile products	1,616 1,404	1,607 1,446	1,582 1,494	0.6 -2.9	1.6 -3.2	1.1 -0.7	1,573 1,310	1,594 1,406	1,580 1,534	1,519 1,361	3.6 -3.7
Leather and allied products	440	447	448	-1.6	-0.2	0.9	432	452	451	460	-6.1
Paper products Printing	6,623 1,768	6,614 1,752	6,595 1,712	0.1 0.9	0.3 2.3	-0.4 2.4	6,491 1,714	6,541 1,761	6,588 1,756	6,659 1,508	-2.5 13.7
Petroleum and coal products	13,168	12,441	11,543	5.8	7.8	2.0	12,732	12,324	12,087	11,302	12.7
Chemical products	36,360	36,994	37,036 12,341	-1.7 0.0	-0.1 0.9	0.5 1.1	34,943 11,884	36,756 12,257	36,682 12,168	36,417 11,554	-4.0

Revised data due to late receipts and concurrent seasonal adjustment.

¹ Estimates of shipments and new orders are for the duration of the period, while estimates of unfilled orders and total inventories are for the end of the period. Not seasonally adjusted estimates of shipments and new orders include adjusted data for non-calendar reporters. Seasonally adjusted estimates include concurrent adjustments for holiday and trading-day differences, where appropriate, as well as seasonal variation, based on the results of the latest annual review of the model parameters. Estimates are not adjusted for price changes. See note at end of Table 2 relating to survey error and revisions.

Table 7. Ratios of Manufacturers' Inventories to Shipments and Unfilled Orders to Shipments, by Industry Group ¹

[Based on Seasonally Adjusted data from the Manufacturers' Shipments, Inventories, and Orders Survey.]

	Inve	ntory/Ship	ments ra	tio	Unfilled Orders/Shipments ratio ²					
Industry	Dec 2016 ^p	Nov 2016 ^r	Oct 2016	Sep 2016	Dec 2016 ^p	Nov 2016 ^r	Oct 2016	Sep 2016		
All manufacturing industries ³	1.31	1.34	1.34	1.34	(X)	(X)	(X)	(X)		
Durable goods industries ³	1.61 1.32 1.30 1.71 1.58 2.15 1.52 1.69 1.50 1.13	1.64 1.32 1.30 1.74 1.58 2.18 1.53 1.71 1.55 1.13	1.64 1.35 1.32 1.78 1.61 2.18 1.54 1.69 1.54	1.64 1.35 1.33 1.78 1.63 2.19 1.56 1.71 1.51 1.77	6.62 (X) (X) 1.83 2.52 3.30 5.85 2.09 13.84 1.54 (X)	6.75 (X) (X) 1.85 2.50 3.34 5.89 2.09 14.32 1.52 (X)	6.79 (X) (X) 1.87 2.52 3.37 5.87 2.02 14.28 1.53 (X)	6.70 (X) (X) 1.84 2.53 3.36 5.83 2.01 13.85 1.53 (X)		
Nondurable goods industries. Food products. Beverage and tobacco products. Textiles. Textile products. Apparel. Leather and allied products. Paper products. Paper products. Petroleum and coal products. Chemical products.	1.02 0.82 1.66 1.23 1.45 2.25 2.21 1.04 0.87 0.65 1.20	1.04 0.83 1.66 1.25 1.49 2.35 2.30 1.05 0.85 0.71 1.22 1.33	1.04 0.83 1.64 1.26 1.52 2.42 2.37 1.06 0.84 0.66 1.22 1.33	1.04 0.83 1.66 1.29 1.53 2.37 2.38 1.07 0.82 0.68 1.22 1.31	888888888888888888888888888888888888888	(X) (X) (X) (X) (X) (X) (X) (X) (X) (X)	888888888888888888888888888888888888888	(X)		

X Not Applicable Preliminary

Table 8. Revisions to Previously Published Monthly Percent Changes ¹

[Based on Seasonally Adjusted data from the Manufacturers' Shipments, Inventories, and Orders Survey.]

	Ship	ments	New C	Orders	Unfilled	Orders	Inven	itories	
Industry	Dec ² 2016	Dec ³ 2015- Nov 2016	Dec ² 2016	Dec ³ 2015- Nov 2016	Dec ² 2016	Dec ³ 2015- Nov 2016	Dec ² 2016	Dec ³ 2015- Nov 2016	
All manufacturing industries	(X)	0.2	(X)	0.3	(X)	0.1	(X)	0.1	
Durable goods industries Wood products Nonmetallic mineral products Primary metals Fabricated metal products Machinery Computers and electronic products Electrical equipment, appliances, and components Transportation equipment Furniture and related products Miscellaneous products Nondurable goods industries Food products Beverage and tobacco products	0.0 (X) 0.2 -0.2 -0.0 0.3 -0.5 -0.1 (X) (X) (X)	0.2 0.5 0.1 0.4 0.3 0.6 0.4 0.3 0.3 0.6 0.2	-0.1 (X) 0.2 0.0 0.3 0.2 -1.2 -0.3 (X) (X) (X)	0.5 (NA) (NA) 0.7 0.5 0.6 0.6 1.0 0.9 0.6 (NA) (NA)	0.0 (X) (X) 0.1 0.1 0.1 0.0 -0.5 0.0 (X) (X) (X)	0.1 (NA) (NA) 0.3 0.2 0.2 0.1 0.2 0.1 0.3 (NA) (NA)	0.1 -0.2 0.0 -0.2 -0.1 0.0 (X) (X)	0.2 0.3 0.4	
Beverage and tooacco products. Textiles. Textile products. Apparel. Leather and allied products. Paper products. Printing. Petroleum and coal products. Chemical products. Plastics and rubber products.	888888888888888888888888888888888888888	0.7 0.6 0.8 0.9 1.1 0.2 0.3 1.1 0.2	888888888888888888888888888888888888888	2	888888888888888888888888888888888888888	(AA) (AA) (AA) (AA) (AA) (AA) (AA) (AA)	(X) (X) (X) (X) (X) (X) (X) (X) (X)	0.3 0.3 0.4 0.5 0.2 0.4 1.7 0.1	

X Not Applicable

NA Not Available

Revised data due to late receipts and concurrent seasonal adjustment.

² Excludes the following industries with no unfilled orders: Wood products; nonmetallic mineral products; medical equipment and supplies; office supplies; other miscellaneous manufacturing; cutlery and handtools; farm and garden machinery; computer storage and peripheral devices; audio and video equipment; manufacturing and reproducing magnetic and optical media; batteries; automobiles; light trucks and utility vehicles; heavy duty trucks; and miscellaneous furniture.

³ Unfilled orders to shipments ratio excludes semiconductor manufacturing.

¹ Estimates of shipments and new orders are for the duration of the period, while estimates of unfilled orders and total inventories are for the end of the period. Not seasonally adjusted estimates of shipments and new orders include adjusted data for non-calendar reporters. Seasonally adjusted estimates include concurrent adjustments for holiday and trading-day differences, where appropriate, as well as seasonal variation, based on the results of the latest annual review of the model parameters. Estimates are not adjusted for price changes.

² The current month revisions are the difference between the advance percent change and the percent change as shown in this publication

³ The twelve month revisions are the differences between the month-to-month percent changes of the preliminary and final estimates. The monthly averages are the simple averages of the absolute values of the differences for the months specified. The advance to final percent change revisions for the durable goods industries are shown in the advance report for the month.

Survey Description

This report is compiled from results of the U.S. Census Bureau's Manufacturers' Shipments, Inventories, and Orders (M3) survey, which is a voluntary survey authorized by Title 13 of the United States Code. This survey provides statistics on a calendar-month basis for manufacturers' value of shipments, new orders (net of cancellations), end-of-month order backlog (unfilled orders), end-of-month total inventory (at current cost or market value), and inventories by stage of fabrication (materials and supplies, work-in-process, and finished goods). Data published from the M3 survey are based on a panel of approximately 4,800 reporting units that represent approximately 3,000 companies and provide an indication of month-to-month change for the Manufacturing Sector. These reporting units may be divisions of diversified large companies, large homogenous companies, or single-unit manufacturers in 92 industry categories, which are combined into 65 publication levels due to the small monthly panel size. The survey methodology assumes that the month-to-month changes of the total operations of the reporting units in the M3 panel effectively represent the month-to-month movements of all establishments that make up the category.

The companies for which shipments data are currently reported or imputed in the M3 survey represent approximately 61 percent of the total value of shipments for manufacturing establishments in the 2012 Economic Census, and these companies include almost two-thirds of the manufacturing companies with \$500 million or more in shipments in the 2012 Economic Census. The companies for which shipments data are currently reported in the M3 survey represent approximately 54 percent of the total value of shipments for manufacturing establishments in the 2012 Economic Census. Statistics based on the M3 panel differ from the results that would be obtained from a complete enumeration of all manufacturing companies. The M3 panel is not based on a probability sample; therefore, the sampling errors that are normally provided with sample surveys cannot be measured. Nonsampling errors are attributable to many sources. The use of company or divisional reports to estimate the monthly change for establishments is one source of nonsampling error. The use of primarily large companies to represent the month-to-month movement of all companies is another potential source. Any corrections will be published in the full report. Corrections received after the full report will be released in the next month's advance report. Any revisions made later than two months will be reflected in the annual benchmark publication.

Additional survey documentation can be found on our web site: http://www.census.gov/m3.

Benchmark notice

Revised historical data from the Manufacturers' Shipments, Inventories, and Orders (M3) Survey will be issued on May 18, 2017. These revisions result from:

- benchmarking the M3 shipments and inventories data to the 2015 Annual Survey of Manufactures (ASM) and revised 2014 ASM data on a 2012 NAICS basis;
- incorporating the unfilled orders to shipments ratios obtained from the 2015/2014 Manufacturers' Unfilled Orders (M3UFO) Survey by applying these ratios to the respective ASM shipments data, as well as incorporating revised unfilled orders to shipments ratios for prior years by applying them to the respective ASM data;
- adjusting the new orders data to be consistent with the benchmarked shipments and unfilled orders data;
- correcting monthly data for late receipts, reclassifications of reported data, and revisions to previously reported data;
- updating the seasonally adjusted data based on the results of benchmarking and the recent annual review of the seasonal adjustment models.

These revisions will span the seasonally adjusted data for January 2002 through March 2017 and the data not seasonally adjusted for January 2007 through March 2017. An updated Press Release will contain revised monthly tables for January 2017 through March 2017. Please call M3 staff on (301) 763-4832 with any questions.