



# Manufacturers' Shipments, Inventories, and Orders

**September 1998**

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U. S. Department of Commerce  
Economics and Statistics Administration  
BUREAU OF THE CENSUS

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Note: All figures in text are in seasonally adjusted current dollars

## Summary

New orders for manufactured goods in September increased \$1.4 billion or 0.4 percent to \$339.2 billion, the Department of Commerce, Bureau of the Census reported today. This follows a 0.9 percent August increase and is the sixth increase in the last seven months. Excluding transportation, new orders increased 1.3 percent, the third increase in the last four months. Year to date, new orders are 2.6 percent above the same period a year ago; third quarter new orders are 1.3 percent above the second quarter.

Shipments increased \$3.0 billion or 0.9 percent to \$339.4 billion, following a 0.3 percent August increase. This is the fourth consecutive monthly increase. Year to date, shipments are 3.2 percent above the same period a year ago; third quarter shipments are 0.7 percent above the second quarter.

Unfilled orders, down four of the last five months, decreased \$0.2 billion to \$530.2 billion, following a 0.3 percent August increase. The unfilled orders-to-shipments ratio was 2.71, down from 2.74 in August.

Inventories increased \$0.2 billion to \$468.6 billion. This is the twentieth increase in the last twenty-one months. The inventories-to-shipments ratio was 1.38, down from 1.39 in August.

## New Orders

New orders for manufactured durable goods in September increased \$1.5 billion or 0.8 percent to \$191.8 billion, revised from the previously published 0.9 percent increase. This follows a 2.0 percent August increase and is the fourth consecutive monthly increase. Industrial machinery and equipment, up three of the last four months, had the largest increase, \$1.7 billion or 4.6 percent to \$39.2 billion. This follows a 0.5 percent August decrease. Electronic and other electrical equipment, up three of the last four months, increased \$1.7 billion or 5.5 percent to \$32.8 billion, mostly due to communication equipment. This follows a 5.2 percent August decrease. Transportation equipment, down for the first month since June, decreased \$2.3 billion or 4.9 percent to \$44.5 billion; declines in aircraft and parts and railroad equipment more than offset increases in shipbuilding and tanks and motor vehicles and parts. This follows a 17.5 percent August increase.

New orders for nondurable goods, down for the second consecutive month, decreased \$0.1 billion or 0.1 percent to \$147.4 billion. This follows a 0.5 percent August decrease. Declines in paper and allied products, printing and publishing, and textile mill products more than offset increases in food and kindred products, chemicals and allied products, and petroleum and coal products.

## Shipments

Shipments of durable goods in September increased \$3.3 billion or 1.7 percent to \$192.1 billion, revised from the previously

published 1.5 percent increase. This follows a 1.0 percent August increase and is the fourth consecutive monthly increase. Transportation equipment, up for the second consecutive month, had the largest increase, \$1.8 billion or 4.1 percent to \$46.2 billion. This follows a 9.5 percent August increase. Electronic and other electrical equipment, up for the fourth consecutive month, increased \$1.0 billion or 3.2 percent to \$32.2 billion, following a slight August increase.

Shipments of nondurable goods, down five of the last six months, decreased \$0.3 billion or 0.2 percent to \$147.3 billion, following a 0.6 percent August decrease. Paper and allied products, down three of the last four months, decreased \$0.5 billion or 3.7 percent to \$13.2 billion. This follows a 1.2 percent August decline. Food and kindred products, up three of the last four months, increased \$0.3 billion or 0.8 percent to \$41.4 billion, following a 1.4 percent August increase.

## Unfilled Orders

Unfilled orders for durable goods in September decreased \$0.3 billion or 0.1 percent to \$505.9 billion, revised from the previously published 0.1 percent increase. This follows a 0.3 percent August increase. Transportation equipment, down four of the last five months, had the largest decrease, \$1.8 billion or 0.7 percent to \$251.1 billion. This follows a 0.9 percent August increase. Primary metals, down seven consecutive months, decreased \$0.9 billion or 3.0 percent to \$30.7 billion. This follows a 2.0 percent August decrease. Industrial machinery and equipment, up for the second consecutive month, had the largest increase, \$2.5 billion or 3.4 percent to \$75.9 billion, following a 1.0 percent August increase.

## Inventories

Inventories of durable goods in September increased \$0.1 billion to \$297.0 billion, following a 0.4 percent August increase. This is the ninth consecutive monthly increase and the nineteenth in the last twenty-one months. Fabricated metal products, up eight of the last nine months, had the largest increase, \$0.1 billion or 0.3 percent to \$31.0 billion. This follows a slight August increase. Transportation equipment declined 0.2 percent to \$75.6 billion, following eight consecutive monthly increases.

Inventories of nondurable goods, up eight of the last nine months, increased \$0.1 billion or 0.1 percent to \$171.6 billion, following a 0.3 percent August decrease. Increases in printing and publishing, tobacco products, and apparel and related products more than offset declines in chemicals and allied products and petroleum and coal products.

By stage of fabrication, September finished goods increased 0.6 percent in durables and 0.1 percent in nondurables. Work in process decreased 0.6 percent in durables and 0.5 percent in nondurables. Materials and supplies increased 0.4 percent in durables and 0.3 percent in nondurables.

Our internet address is: <http://www.census.gov/ftp/pub/indicator/www/m3>

**Table 1. VALUE OF MANUFACTURERS' SHIPMENTS FOR INDUSTRY GROUPS**  
(Millions of dollars)

Industry	Seasonally adjusted						Not seasonally adjusted <sup>1</sup>						
	Monthly			Percent Change			Monthly				Percent change	Year to date	
	Sept. 1998 <sup>p</sup>	Aug. 1998 <sup>r</sup>	July 1998	Aug.-Sept.	July-Aug.	June-July	Sept. 1998 <sup>p</sup>	Aug. 1998 <sup>r</sup>	July 1998	Sept. 1997		Sept. 98/97	1998 <sup>p</sup>
All manufacturing industries . . . . .	339,412	336,445	335,380	+0.9	+0.3	+0.1	363,202	337,377	302,131	356,369	+1.9	3,017,139	2,923,353
Manufacturing Industries with unfilled orders . . . . .	195,390	193,667	194,476	+0.9	-0.4	+0.5	212,044	191,882	172,719	205,688	+3.1	1,728,866	1,639,276
without defense capital goods . . . . .	332,886	329,757	328,885	+0.9	+0.3	0.0	356,159	330,915	296,440	349,845	+1.8	2,959,258	2,868,448
Durable goods industries . . . . .	192,069	188,789	186,907	+1.7	+1.0	+0.2	208,453	186,058	158,992	200,122	+4.2	1,683,327	1,601,774
With unfilled orders . . . . .	158,812	156,165	156,164	+1.7	0.0	+0.3	173,358	152,886	135,900	166,143	+4.3	1,392,607	1,315,730
Stone, clay, and glass products . . . . .	8,138	8,014	8,104	+1.5	-1.1	+0.9	8,728	8,424	8,249	8,261	+5.7	72,110	67,841
Primary metals . . . . .	15,002	15,056	14,968	-0.4	+0.6	-0.5	15,394	14,961	13,580	16,379	-6.0	139,119	142,818
Blast furnaces, steel mills . . . . .	5,954	6,104	6,006	-2.5	+1.6	-1.9	6,009	6,058	5,460	6,538	-8.1	56,703	58,307
Iron and steel foundries . . . . .	1,512	1,473	1,469	+2.6	+0.3	+1.2	1,590	1,495	1,240	1,501	+5.9	13,696	12,580
Nonferrous and other primary metals . . . . .	7,536	7,479	7,493	+0.8	-0.2	+0.3	7,795	7,408	6,880	8,340	-6.5	68,720	71,931
Fabricated metal products . . . . .	20,246	20,114	20,309	+0.7	-1.0	+2.8	21,464	20,575	18,129	20,423	+5.1	178,901	168,862
Industrial machinery and equipment . . . . .	36,689	36,711	37,810	-0.1	-2.9	-0.3	40,498	34,028	32,255	39,131	+3.5	332,021	303,737
Engines and turbines . . . . .	2,210	2,267	2,245	-2.5	+1.0	-2.8	2,464	2,008	1,608	2,325	+6.0	19,649	17,542
Farm and garden machinery . . . . .	1,959	1,951	2,109	+0.4	-7.5	-2.6	1,763	1,562	1,669	1,945	-9.4	19,680	18,263
Construction, mining and material handling equipment . . . . .	4,230	4,308	4,540	-1.8	-5.1	-0.9	4,216	4,120	4,188	3,931	+7.3	38,716	34,132
Metalworking machinery . . . . .	3,530	3,464	3,455	+1.9	+0.3	+0.7	4,058	3,298	2,932	4,138	-1.9	30,401	30,172
Computer and office equipment . . . . .	10,831	10,981	11,246	-1.4	-2.4	+0.5	13,737	9,818	8,687	12,320	+11.5	95,348	81,587
Electronic and other electrical equipment . . . . .	32,224	31,228	31,216	+3.2	0.0	+1.1	36,589	30,345	27,019	34,583	+5.8	272,508	256,763
Electrical transmission and distribution equipment and industrial apparatus . . . . .	3,919	3,719	3,805	+5.4	-2.3	+5.7	4,415	3,633	3,392	4,146	+6.5	33,353	31,029
Household appliances . . . . .	2,114	2,077	2,196	+1.8	-5.4	+3.1	2,279	2,097	2,041	2,188	+4.2	18,829	17,327
Electric lighting and wiring equipment . . . . .	2,278	2,245	2,242	+1.5	+0.1	+2.0	2,520	2,219	1,882	2,502	+0.7	19,870	19,324
Household audio and video equipment . . . . .	974	1,004	1,033	-3.0	-2.8	-0.6	1,188	1,065	898	1,254	-5.3	8,653	8,292
Communications equipment . . . . .	7,550	7,007	6,784	+7.7	+3.3	-6.8	8,696	6,321	5,664	7,576	+14.8	60,758	54,961
Electronic components . . . . .	13,157	12,983	12,982	+1.3	0.0	+3.1	14,887	12,855	11,412	14,176	+5.0	112,337	105,881
Transportation equipment . . . . .	46,225	44,403	40,556	+4.1	+9.5	-0.7	49,264	44,265	28,518	44,609	+10.4	388,632	371,334
Motor vehicles and parts . . . . .	30,898	30,017	27,092	+2.9	+10.8	+1.2	32,774	30,383	16,637	30,386	+7.9	263,117	257,693
Aircraft, missiles, space vehicles, and parts . . . . .	11,708	11,069	10,566	+5.8	+4.8	-0.9	12,571	10,505	9,374	10,978	+14.5	97,346	88,098
Shipbuilding and tanks . . . . .	1,059	1,011	894	+4.7	+13.1	-6.2	1,109	1,003	832	878	+26.3	8,403	7,918
Instruments and related products . . . . .	14,113	13,749	14,042	+2.6	-2.1	-1.2	15,478	13,346	12,608	15,477	0.0	125,079	120,370
Search and navigation equipment . . . . .	3,009	3,116	3,085	-3.4	+1.0	+1.6	3,334	3,038	2,753	3,240	+2.9	27,094	24,556
Measuring and controlling devices . . . . .	3,941	3,824	4,062	+3.1	-5.9	+0.1	4,288	3,780	3,565	4,757	-9.9	36,331	37,262
Medical instruments and supplies . . . . .	4,598	4,350	4,474	+5.7	-2.8	-4.3	5,053	4,215	4,076	4,849	+4.2	40,090	37,501
Photographic goods . . . . .	2,108	2,009	1,969	+4.9	+2.0	-0.3	2,327	1,866	1,763	2,179	+6.8	17,444	17,257
All other durable goods . . . . .	19,432	19,514	19,902	-0.4	-1.9	+0.3	21,038	20,114	18,634	21,259	-1.0	174,957	170,049
Nondurable goods industries . . . . .	147,343	147,656	148,473	-0.2	-0.6	-0.1	154,749	151,319	143,139	156,247	-1.0	1,333,812	1,321,579
With unfilled orders . . . . .	36,578	37,502	38,312	-2.5	-2.1	+1.5	38,686	38,996	36,819	39,545	-2.2	336,259	323,546
Food and kindred products . . . . .	41,435	41,117	40,562	+0.8	+1.4	-0.2	43,304	41,924	39,068	40,822	+6.1	364,718	349,559
Meat products . . . . .	8,796	8,821	8,696	-0.3	+1.4	-0.6	8,945	9,148	8,591	8,708	+2.7	78,405	77,024
Dairy products . . . . .	6,567	6,282	6,156	+4.5	+2.0	-0.8	6,743	6,330	5,976	5,030	+34.1	54,923	44,024
Beverages . . . . .	6,357	6,094	6,068	+4.3	+0.4	-1.0	6,559	6,553	6,378	6,145	+6.7	55,683	53,109
All other foods, except fats and oils . . . . .	17,686	17,870	17,696	-1.0	+1.0	+1.0	19,028	17,843	16,177	18,925	+0.5	157,109	157,553
Tobacco products . . . . .	3,489	3,479	3,444	+0.3	+1.0	-3.3	3,472	3,611	3,357	3,335	+4.1	30,658	28,489
Textile mill products . . . . .	6,571	6,694	6,940	-1.8	-3.5	+4.5	7,244	7,040	6,292	7,828	-7.5	61,545	63,051
Broadwoven fabrics and other textiles . . . . .	3,889	3,966	4,150	-1.9	-4.4	+2.4	4,258	4,086	3,596	4,706	-9.5	37,234	38,484
Paper and allied products . . . . .	13,248	13,761	13,929	-3.7	-1.2	+0.4	13,678	14,037	13,580	14,229	-3.9	124,839	120,048
Pulp, paper, and paperboard mill products . . . . .	4,918	5,267	5,310	-6.6	-0.8	0.0	5,055	5,383	5,251	5,693	-11.2	48,222	47,881
Paperboard containers and boxes . . . . .	3,449	3,586	3,724	-3.8	-3.7	+1.1	3,516	3,666	3,593	3,489	+0.8	32,553	30,000
Miscellaneous converted paper products . . . . .	4,881	4,908	4,895	-0.6	+0.3	+0.3	5,107	4,988	4,736	5,047	+1.2	44,064	42,167
Chemicals and allied products . . . . .	32,364	32,204	32,468	+0.5	-0.8	-1.6	33,650	31,647	30,935	33,821	-0.5	295,395	293,406
Industrial chemicals . . . . .	14,652	14,685	14,956	-0.2	-1.8	-1.3	14,883	14,726	14,475	16,527	-9.9	137,291	146,561
Drugs, soaps, and toiletries . . . . .	14,032	13,897	13,788	+1.0	+0.8	-1.3	15,604	13,690	13,008	14,050	+11.1	121,463	110,399
Petroleum and coal products . . . . .	11,890	11,759	12,153	+1.1	-3.2	-2.1	12,427	12,364	12,428	15,437	-19.5	111,644	133,843
Rubber and plastics products . . . . .	13,281	13,196	13,104	+0.6	+0.7	+0.8	13,860	13,451	12,150	13,713	+1.1	119,650	118,096
All other nondurable goods . . . . .	25,065	25,446	25,873	-1.5	-1.7	+1.7	27,114	27,245	25,329	27,062	+0.2	225,363	215,087

<sup>p</sup> Preliminary. <sup>r</sup> Revised.

<sup>1</sup> Shipments and new orders are the totals for the period and are adjusted for trading-day and calendar-month variations.

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

**Table 2. VALUE OF MANUFACTURERS' NEW ORDERS FOR INDUSTRY GROUPS**  
(Millions of dollars)

Industry	Seasonally adjusted						Not seasonally adjusted <sup>1</sup>						
	Monthly			Percent Change			Monthly				Percent change Sept. 98/97	Year to date	
	Sept. 1998 <sup>p</sup>	Aug. 1998 <sup>r</sup>	July 1998	Aug.-Sept.	July-Aug.	June-July	Sept. 1998 <sup>p</sup>	Aug. 1998 <sup>r</sup>	July 1998	Sept. 1997		1998 <sup>p</sup>	1997
All manufacturing industries . . . . .	339,220	337,815	334,821	+0.4	+0.9	+1.1	358,215	335,916	306,253	352,126	+1.7	3,010,424	2,933,766
Manufacturing industries with unfilled orders . . . . .	195,198	195,037	193,917	+0.1	+0.6	+2.3	207,057	190,421	176,841	201,445	+2.8	1,722,151	1,649,689
without defense capital goods . . . . .	332,223	332,882	329,299	-0.2	+1.1	+1.2	351,031	332,342	302,334	346,744	+1.2	2,959,612	2,886,400
Durable goods industries . . . . .	191,813	190,304	186,617	+0.8	+2.0	+2.0	204,082	185,341	162,637	196,429	+3.9	1,677,473	1,610,524
With unfilled orders . . . . .	158,556	157,680	155,874	+0.6	+1.2	+2.5	168,987	152,169	139,545	162,450	+4.0	1,386,753	1,324,480
Stone, clay, and glass products . . . . .	8,112	7,967	8,187	+1.8	-2.7	-0.1	8,664	8,345	8,361	8,188	+5.8	72,352	67,704
Primary metals . . . . .	14,053	14,413	14,273	-2.5	+1.0	-1.2	13,687	14,148	12,753	16,962	-19.3	134,349	146,998
Blast furnaces, steel mills . . . . .	5,441	5,523	5,382	-1.5	+2.6	-8.0	5,054	5,356	4,805	6,365	-20.6	53,991	59,574
Iron and steel foundries . . . . .	1,383	1,592	1,370	-13.1	+16.2	+7.2	1,361	1,564	1,089	1,572	-13.4	13,576	13,340
Nonferrous and other primary metals . . . . .	7,229	7,298	7,521	-0.9	-3.0	+2.7	7,272	7,228	6,859	9,025	-19.4	66,782	74,084
Fabricated metal products . . . . .	19,902	19,693	20,132	+1.1	-2.2	+2.1	20,924	20,076	18,222	20,571	+1.7	178,800	171,464
Industrial machinery and equipment . . . . .	39,184	37,450	37,636	+4.6	-0.5	+1.9	43,068	34,642	32,179	39,174	+9.9	333,671	303,999
Engines and turbines . . . . .	5,405	3,541	2,645	+52.6	+33.9	+33.0	6,139	3,423	2,187	2,677	129.3	23,696	16,664
Construction, mining and material handling equipment . . . . .	3,873	3,876	4,290	-0.1	-9.7	-6.3	3,854	3,503	3,702	4,073	-5.4	38,257	34,788
Metalworking machinery . . . . .	3,329	3,479	3,503	-4.3	-0.7	+5.4	3,857	3,313	2,980	3,737	+3.2	30,386	29,674
Computer and office equipment . . . . .	10,897	11,112	11,261	-1.9	-1.3	+0.4	13,607	9,897	8,850	12,095	+12.5	95,750	80,003
Electronic and other electrical equipment . . . . .	32,812	31,116	32,840	+5.5	-5.2	+9.2	34,743	29,587	32,182	32,609	+6.5	277,052	263,179
Electrical transmission and distribution equipment and industrial apparatus . . . . .	3,893	3,725	3,764	+4.5	-1.0	+3.0	4,261	3,634	3,377	3,984	+7.0	33,132	31,125
Electric lighting and wiring equipment . . . . .	2,077	2,224	2,212	-6.6	+0.5	+4.5	2,319	2,198	1,852	2,384	-2.7	19,928	19,533
Communications equipment . . . . .	8,096	6,779	6,463	+19.4	+4.9	-11.6	9,262	6,084	5,332	8,056	+15.0	63,783	57,695
Electronic components . . . . .	13,439	13,245	15,158	+1.5	-12.6	+28.0	12,981	12,314	17,083	12,059	+7.6	114,299	107,826
Transportation equipment . . . . .	44,452	46,745	39,768	-4.9	+17.5	+1.1	47,108	45,717	27,428	43,187	+9.1	383,641	363,587
Aircraft, missiles, space vehicles, and parts . . . . .	9,009	13,106	10,172	-31.3	+28.8	+20.0	9,576	11,650	8,432	8,908	+7.5	92,835	81,294
Shipbuilding and tanks . . . . .	2,093	519	373	303.3	+39.1	-76.6	2,218	456	285	1,027	116.0	8,020	6,336
Instruments and related products . . . . .	13,721	13,385	13,970	+2.5	-4.2	-1.6	14,833	12,764	12,623	14,486	+2.4	122,318	121,558
Search and navigation equipment . . . . .	2,709	2,743	2,701	-1.2	+1.6	-15.5	2,980	2,433	2,129	2,790	+6.8	24,577	24,579
Measuring and controlling devices . . . . .	3,793	3,850	4,195	-1.5	-8.2	+8.5	4,140	3,806	3,698	4,408	-6.1	35,613	37,158
Medical instruments and supplies . . . . .	4,681	4,344	4,849	+7.8	-10.4	+0.6	4,943	4,237	4,809	4,695	+5.3	41,196	37,892
All other durable goods . . . . .	19,577	19,535	19,811	+0.2	-1.4	-1.3	21,055	20,062	18,889	21,252	-0.9	175,290	172,035
Nondurable goods industries . . . . .	147,407	147,511	148,204	-0.1	-0.5	0.0	154,133	150,575	143,616	155,697	-1.0	1,332,951	1,323,242
With unfilled orders . . . . .	36,642	37,357	38,043	-1.9	-1.8	+1.8	38,070	38,252	37,296	38,995	-2.4	335,398	325,209

<sup>p</sup> Preliminary. <sup>r</sup> Revised.

<sup>1</sup> Shipments and new orders are the totals for the period and are adjusted for trading-day and calendar-month variations.

(n) When new orders for a prior month are negative because of cancellations, the percentage change calculation is algebraically negative, even though there is a net dollar increase from the prior month to the current month.

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. Further details on survey design, methodology, and data limitations are contained in our most recent annual benchmark publication, Current Industrial Reports: M3-1(96), "Manufacturers' Shipments, Inventories, and Orders: 1987-1996."

**Table 3. VALUE OF MANUFACTURERS' UNFILLED ORDERS FOR INDUSTRY GROUPS**  
(Millions of dollars)

Industry	Seasonally adjusted						Not seasonally adjusted				
	Monthly			Percent Change			Monthly				Percent change Sept. 98/97
	Sept. 1998 <sup>P</sup>	Aug. 1998 <sup>r</sup>	July 1998	Aug.- Sept.	July- Aug.	June- July	Sept. 1998 <sup>P</sup>	Aug. 1998 <sup>r</sup>	July 1998	Sept. 1997	
All manufacturing industries . . . . .	530,167	530,359	528,989	0.0	+0.3	-0.1	524,843	529,830	531,291	519,365	+1.1
Manufacturing industries without defense capital goods . . . . .	433,080	433,743	430,618	-0.2	+0.7	+0.1	429,696	434,824	433,397	417,200	+3.0
Durable goods industries . . . . .	505,857	506,113	504,598	-0.1	+0.3	-0.1	500,480	504,851	505,568	493,075	+1.5
Stone, clay, and glass products . . . . .	6,424	6,450	6,497	-0.4	-0.7	+1.3	6,418	6,482	6,561	6,367	+0.8
Primary metals . . . . .	30,720	31,669	32,312	-3.0	-2.0	-2.1	29,568	31,275	32,088	33,447	-11.6
Blast furnaces, steel mills . . . . .	12,303	12,816	13,397	-4.0	-4.3	-4.5	11,646	12,601	13,303	13,167	-11.6
Iron and steel foundries . . . . .	5,521	5,650	5,531	-2.3	+2.2	-1.8	5,356	5,585	5,516	5,062	+5.8
Nonferrous and other primary metals . . . . .	12,896	13,203	13,384	-2.3	-1.4	+0.2	12,566	13,089	13,269	15,218	-17.4
Fabricated metal products . . . . .	26,179	26,523	26,944	-1.3	-1.6	-0.7	26,249	26,789	27,288	26,505	-1.0
Industrial machinery and equipment . . . . .	75,917	73,422	72,683	+3.4	+1.0	-0.2	75,075	72,505	71,891	73,332	+2.4
Engines and turbines . . . . .	16,393	13,198	11,924	+24.2	+10.7	+3.5	16,581	12,906	11,491	12,096	+37.1
Construction, mining and material handling equipment . . . . .	10,309	10,666	11,098	-3.3	-3.9	-2.2	9,907	10,269	10,886	9,275	+6.8
Metalworking machinery . . . . .	7,134	7,335	7,320	-2.7	+0.2	+0.7	7,134	7,335	7,320	7,717	-7.6
Computer and office equipment . . . . .	8,069	8,003	7,872	+0.8	+1.7	+0.2	8,034	8,164	8,085	8,396	-4.3
Electronic and other electrical equipment . . . . .	59,389	58,801	58,913	+1.0	-0.2	+2.8	57,850	59,696	60,454	54,719	+5.7
Electrical transmission and distribution equipment and industrial apparatus . . . . .	6,416	6,442	6,436	-0.4	+0.1	-0.6	6,297	6,451	6,450	6,707	-6.1
Electric lighting and wiring equipment . . . . .	4,985	5,186	5,207	-3.9	-0.4	-0.6	4,985	5,186	5,207	4,719	+5.6
Communications equipment . . . . .	17,357	16,811	17,039	+3.2	-1.3	-1.8	17,356	16,790	17,027	15,160	+14.5
Electronic components . . . . .	24,914	24,632	24,370	+1.1	+1.1	+9.8	23,502	25,408	25,949	21,561	+9.0
Transportation equipment . . . . .	251,108	252,881	250,539	-0.7	+0.9	-0.3	249,526	251,682	250,230	241,404	+3.4
Aircraft, missiles, space vehicles, and parts . . . . .	215,155	217,854	215,817	-1.2	+0.9	-0.2	213,609	216,604	215,459	208,558	+2.4
Shipbuilding and tanks . . . . .	17,985	16,951	17,443	+6.1	-2.8	-2.9	18,047	16,938	17,485	17,882	+0.9
Instruments and related products . . . . .	47,905	48,297	48,661	-0.8	-0.7	-0.1	47,368	48,013	48,595	48,845	-3.0
Search and navigation equipment . . . . .	27,119	27,419	27,792	-1.1	-1.3	-1.4	26,726	27,080	27,685	28,741	-7.0
Measuring and controlling devices . . . . .	10,135	10,283	10,257	-1.4	+0.3	+1.3	10,135	10,283	10,257	10,324	-1.8
Medical instruments and supplies . . . . .	9,682	9,599	9,605	+0.9	-0.1	+4.1	9,530	9,640	9,618	7,917	+20.4
All other durable goods . . . . .	8,215	8,070	8,049	+1.8	+0.3	-1.1	8,426	8,409	8,461	8,456	-0.4
Nondurable goods industries . . . . .	24,310	24,246	24,391	+0.3	-0.6	-1.1	24,363	24,979	25,723	26,290	-7.3

<sup>P</sup> Preliminary. <sup>r</sup> Revised.

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

**Table 4. VALUE OF MANUFACTURERS' INVENTORIES FOR INDUSTRY GROUPS**  
(Millions of dollars)

Industry	Seasonally adjusted						Not seasonally adjusted				
	Monthly			Percent Change			Monthly				Percent change Sept. 98/97
	Sept. 1998 <sup>p</sup>	Aug. 1998 <sup>r</sup>	July 1998	Aug.-Sept.	July-Aug.	June-July	Sept. 1998 <sup>p</sup>	Aug. 1998 <sup>r</sup>	July 1998	Sept. 1997	
All manufacturing industries . . . . .	468,642	468,445	467,636	0.0	+0.2	+0.2	467,790	471,596	469,220	451,811	+3.5
Manufacturing industries with unfilled orders . . . . .	315,273	314,994	313,620	+0.1	+0.4	+0.2	314,740	318,882	316,461	300,725	+4.7
without defense capital goods . . . . .	449,852	449,439	448,801	+0.1	+0.1	+0.1	448,752	452,163	450,000	434,621	+3.3
Durable goods industries . . . . .	297,016	296,913	295,669	0.0	+0.4	+0.2	296,212	299,838	297,154	283,984	+4.3
With unfilled orders . . . . .	273,500	273,472	272,043	0.0	+0.5	+0.1	272,896	276,614	274,042	260,598	+4.7
Stone, clay, and glass products . . . . .	9,238	9,164	9,112	+0.8	+0.6	0.0	9,043	9,118	9,176	8,867	+2.0
Primary metals . . . . .	24,929	24,859	24,763	+0.3	+0.4	+0.6	24,905	24,933	24,851	24,333	+2.4
Blast furnaces, steel mills . . . . .	12,428	12,437	12,335	-0.1	+0.8	+1.4	12,460	12,485	12,349	11,731	+6.2
Iron and steel foundries . . . . .	1,569	1,583	1,570	-0.9	+0.8	+0.5	1,540	1,556	1,557	1,541	-0.1
Nonferrous and other primary metals . . . . .	10,932	10,839	10,858	+0.9	-0.2	-0.2	10,905	10,892	10,945	11,061	-1.4
Fabricated metal products . . . . .	31,047	30,944	30,939	+0.3	0.0	+0.6	30,839	30,970	31,152	29,131	+5.9
Industrial machinery and equipment . . . . .	61,006	60,958	60,903	+0.1	+0.1	0.0	60,458	61,693	61,030	59,209	+2.1
Engines and turbines . . . . .	3,987	4,135	4,179	-3.6	-1.1	+2.5	4,014	4,320	4,196	4,048	-0.8
Farm and garden machinery . . . . .	3,786	3,733	3,688	+1.4	+1.2	+1.6	3,545	3,486	3,431	3,235	+9.6
Construction, mining and material handling equipment . . . . .	8,781	8,753	8,711	+0.3	+0.5	+0.3	8,685	8,692	8,653	7,828	+10.9
Metalworking machinery . . . . .	7,999	7,925	7,761	+0.9	+2.1	+2.4	8,103	8,285	7,980	7,332	+10.5
Computer and office equipment . . . . .	9,298	9,464	9,625	-1.8	-1.7	-4.2	9,074	9,984	9,891	10,862	-16.5
Electronic and other electrical equipment . . . . .	40,377	40,526	40,345	-0.4	+0.4	-1.2	40,143	41,197	40,866	39,807	+0.8
Electrical transmission and distribution equipment and industrial apparatus . . . . .	5,275	5,275	5,283	0.0	-0.2	-0.4	5,241	5,309	5,299	5,603	-6.5
Household appliances . . . . .	2,391	2,378	2,363	+0.5	+0.6	+1.6	2,285	2,342	2,364	2,336	-2.2
Electric lighting and wiring equipment . . . . .	3,507	3,486	3,458	+0.6	+0.8	+1.6	3,463	3,561	3,544	3,313	+4.5
Household audio and video equipment . . . . .	1,055	1,014	980	+4.0	+3.5	+4.3	1,111	1,109	1,060	1,102	+0.8
Communications equipment . . . . .	10,290	10,385	10,407	-0.9	-0.2	-0.8	10,263	10,596	10,491	10,534	-2.6
Electronic components . . . . .	14,266	14,398	14,317	-0.9	+0.6	-3.3	14,168	14,547	14,448	13,296	+6.6
Transportation equipment . . . . .	75,636	75,812	75,032	-0.2	+1.0	+0.6	76,016	76,819	75,256	69,911	+8.7
Motor vehicles and parts . . . . .	16,710	16,511	16,790	+1.2	-1.7	-1.5	16,894	16,842	17,022	16,863	+0.2
Aircraft, missiles, space vehicles, and parts . . . . .	53,291	53,572	52,529	-0.5	+2.0	+1.2	53,503	54,179	52,504	47,923	+11.6
Shipbuilding and tanks . . . . .	1,876	1,844	1,739	+1.7	+6.0	-2.2	1,871	1,828	1,729	1,600	+16.9
Instruments and related products . . . . .	26,575	26,651	26,659	-0.3	0.0	-0.1	26,582	27,121	27,010	25,973	+2.3
Search and navigation equipment . . . . .	6,717	6,721	6,773	-0.1	-0.8	+0.4	6,716	6,890	6,988	6,499	+3.3
Measuring and controlling devices . . . . .	8,022	8,092	8,033	-0.9	+0.7	-1.8	7,982	8,212	8,127	7,960	+0.3
Medical instruments and supplies . . . . .	8,517	8,503	8,526	+0.2	-0.3	+1.1	8,458	8,614	8,554	8,237	+2.7
Photographic goods . . . . .	2,618	2,629	2,622	-0.4	+0.3	0.0	2,734	2,695	2,634	2,637	+3.7
All other durable goods . . . . .	28,208	27,999	27,916	+0.7	+0.3	+0.8	28,226	27,987	27,813	26,753	+5.5
Nondurable goods industries . . . . .	171,626	171,532	171,967	+0.1	-0.3	+0.2	171,578	171,758	172,066	167,827	+2.2
With unfilled orders . . . . .	41,773	41,522	41,577	+0.6	-0.1	+0.6	41,844	42,268	42,419	40,127	+4.3
Food and kindred products . . . . .	37,096	37,115	37,424	-0.1	-0.8	0.0	37,975	36,828	36,333	37,314	+1.8
Meat products . . . . .	4,036	4,040	4,083	-0.1	-1.1	-0.1	3,987	3,956	4,087	3,885	+2.6
Dairy products . . . . .	3,761	3,775	3,786	-0.4	-0.3	+1.4	3,745	3,844	3,926	3,384	+10.7
Beverages . . . . .	8,140	8,183	8,190	-0.5	-0.1	+0.8	8,292	7,993	7,987	7,992	+3.8
All other foods, except fats and oils . . . . .	19,301	19,289	19,467	+0.1	-0.9	-0.7	20,236	19,368	18,521	20,579	-1.7
Tobacco products . . . . .	5,686	5,563	5,665	+2.2	-1.8	-0.9	5,555	5,234	5,210	5,553	0.0
Textile mill products . . . . .	10,310	10,245	10,285	+0.6	-0.4	+0.3	10,114	10,317	10,428	9,997	+1.2
Broadwoven fabrics and other textiles . . . . .	6,416	6,370	6,393	+0.7	-0.4	+0.6	6,266	6,389	6,461	6,138	+2.1
Paper and allied products . . . . .	16,682	16,643	16,584	+0.2	+0.4	+0.5	16,506	16,602	16,513	15,845	+4.2
Pulp, paper, and paperboard mill products . . . . .	6,732	6,716	6,711	+0.2	+0.1	+0.2	6,668	6,704	6,648	6,425	+3.8
Paperboard containers and boxes . . . . .	4,341	4,343	4,328	0.0	+0.3	+0.4	4,308	4,320	4,327	3,889	+10.8
Miscellaneous converted paper products . . . . .	5,609	5,584	5,545	+0.4	+0.7	+1.0	5,530	5,578	5,538	5,531	0.0
Chemicals and allied products . . . . .	46,323	46,535	46,382	-0.5	+0.3	+0.7	45,748	46,489	46,483	42,656	+7.2
Industrial chemicals . . . . .	20,245	20,330	20,381	-0.4	-0.3	-0.1	20,137	20,284	20,393	19,879	+1.3
Drugs, soaps, and toiletries . . . . .	20,387	20,504	20,441	-0.6	+0.3	+1.2	20,210	20,806	20,783	17,775	+13.7
Petroleum and coal products . . . . .	10,629	10,759	10,906	-1.2	-1.3	-0.3	10,721	10,828	11,066	12,791	-16.2
Rubber and plastics products . . . . .	16,662	16,699	16,650	-0.2	+0.3	-0.3	16,308	16,508	16,646	16,018	+1.8
All other nondurable goods . . . . .	28,238	27,973	28,071	+0.9	-0.3	+0.4	28,651	28,952	29,387	27,653	+3.6

<sup>p</sup> Preliminary. <sup>r</sup> Revised.

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

**Table 5. VALUE OF MANUFACTURERS' SHIPMENTS AND NEW ORDERS  
FOR TOPICAL SERIES<sup>1</sup>  
(Millions of dollars)**

Industry	Seasonally adjusted						Not seasonally adjusted <sup>2</sup>						
	Monthly			Percent Change			Monthly				Percent change Sept. 98/97	Year to date	
	Sept. 1998 <sup>p</sup>	Aug. 1998 <sup>r</sup>	July 1998	Aug.- Sept.	July- Aug.	June- July	Sept. 1998 <sup>p</sup>	Aug. 1998 <sup>r</sup>	July 1998	Sept. 1997		1998 <sup>p</sup>	1997
<b>SHIPMENTS</b>													
All manufacturing industries . . . . .	339,412	336,445	335,380	+0.9	+0.3	+0.1	363,202	337,377	302,131	356,369	+1.9	3,017,139	2,923,353
Market categories :													
Automotive equipment . . . . .	15,116	14,777	13,344	+2.3	+10.7	+1.0	16,290	15,005	8,370	15,062	+8.2	128,112	125,410
Home goods and apparel . . . . .	18,848	18,928	19,329	-0.4	-2.1	+1.8	21,252	20,034	17,945	21,421	-0.8	169,844	163,315
Consumer staples . . . . .	69,801	69,369	69,212	+0.6	+0.2	-0.5	73,746	70,871	67,118	71,651	+2.9	618,337	601,115
Machinery and equipment . . . . .	66,122	63,815	63,235	+3.6	+0.9	-2.0	72,807	60,645	52,850	67,385	+8.0	569,445	524,548
Business supplies . . . . .	25,314	25,432	25,623	-0.5	-0.7	+0.4	26,416	25,674	24,196	26,691	-1.0	228,093	224,640
Construction materials and supplies . . . . .	21,709	21,656	22,063	+0.2	-1.8	+1.0	23,233	22,766	21,640	23,145	+0.4	195,213	190,072
Defense products . . . . .	6,828	6,975	6,792	-2.1	+2.7	+2.2	7,358	6,784	6,027	6,912	+6.5	60,968	58,278
Other materials, supplies and and intermediate products . . . . .	115,674	115,493	115,782	+0.2	-0.2	+0.9	122,100	115,598	103,985	124,102	-1.6	1,047,127	1,035,975
Durable goods industries :													
Nondefense capital goods <sup>3</sup> . . . . .	53,044	51,222	51,316	+3.6	-0.2	-2.1	59,497	47,823	44,305	55,042	+8.1	456,363	414,171
Excluding aircraft and parts . . . . .	44,761	43,715	44,124	+2.4	-0.9	-2.0	50,613	40,798	37,828	47,435	+6.7	389,600	355,124
Defense capital goods <sup>4</sup> . . . . .	6,526	6,688	6,495	-2.4	+3.0	+3.0	7,043	6,462	5,691	6,524	+8.0	57,881	54,905
Durables excluding capital goods . . . . .	132,499	130,879	129,096	+1.2	+1.4	+1.0	141,913	131,773	108,996	138,556	+2.4	1,169,083	1,132,698
Miscellaneous series :													
Producers' durable equipment . . . . .	125,489	122,178	120,398	+2.7	+1.5	-0.2	136,905	119,098	97,546	128,916	+6.2	1,087,763	1,023,616
Household durable goods . . . . .	9,280	9,247	9,629	+0.4	-4.0	+1.6	10,593	9,288	8,281	10,620	-0.3	82,899	77,365
Information technology industries . . . . .	25,160	24,628	24,835	+2.2	-0.8	-1.8	29,875	22,636	20,382	27,703	+7.8	216,928	197,143
Health care equipment and products . . . . .	12,216	11,895	11,962	+2.7	-0.6	-2.4	13,513	11,654	11,130	12,480	+8.3	106,088	97,582
<b>NEW ORDERS</b>													
All manufacturing industries . . . . .	339,220	337,815	334,821	+0.4	+0.9	+1.1	358,215	335,916	306,253	352,126	+1.7	3,010,424	2,933,766
Market categories :													
Automotive equipment . . . . .	15,097	14,733	13,276	+2.5	+11.0	+0.5	16,210	14,994	8,363	14,985	+8.2	127,896	125,638
Home goods and apparel . . . . .	19,014	19,141	19,105	-0.7	+0.2	+0.4	21,327	20,143	17,919	21,510	-0.9	169,888	165,259
Consumer staples . . . . .	69,833	69,360	69,283	+0.7	+0.1	-0.5	73,545	70,786	67,646	71,446	+2.9	618,742	601,407
Machinery and equipment . . . . .	67,587	67,303	62,709	+0.4	+7.3	-1.2	73,663	63,811	52,752	66,901	+10.1	576,225	528,966
Business supplies . . . . .	25,337	25,378	25,666	-0.2	-1.1	+0.1	26,173	25,567	24,501	26,359	-0.7	228,618	224,979
Construction materials and supplies . . . . .	21,396	21,523	21,986	-0.6	-2.1	+0.9	22,842	22,543	21,569	23,083	-1.0	195,247	191,260
Defense products . . . . .	7,443	5,342	5,901	+39.3	-9.5	-3.4	7,645	4,068	4,423	5,687	+34.4	53,769	50,720
Other materials, supplies and and intermediate products . . . . .	113,513	115,035	116,895	-1.3	-1.6	+4.1	116,810	114,004	109,080	122,155	-4.4	1,040,039	1,045,537
Durable goods industries :													
Nondefense capital goods <sup>3</sup> . . . . .	53,469	55,371	50,763	-3.4	+9.1	-0.6	59,901	51,767	43,832	54,923	+9.1	461,332	416,104
Excluding aircraft and parts . . . . .	47,714	44,785	43,708	+6.5	+2.5	-1.6	53,545	41,663	37,492	48,410	+10.6	393,937	359,988
Defense capital goods <sup>4</sup> . . . . .	6,997	4,933	5,522	+41.8	-10.7	-2.4	7,184	3,574	3,919	5,382	+33.5	50,812	47,366
Durables excluding capital goods . . . . .	131,347	130,000	130,332	+1.0	-0.3	+3.2	136,997	130,000	114,886	136,124	+0.6	1,165,329	1,147,054
Miscellaneous series :													
Producers' durable equipment . . . . .	127,701	124,620	119,173	+2.5	+4.6	-0.3	138,284	121,434	97,641	128,171	+7.9	1,093,315	1,031,620
Household durable goods . . . . .	9,390	9,388	9,373	0.0	+0.2	-1.4	10,708	9,443	8,249	10,715	-0.1	82,646	79,138
Information technology industries . . . . .	25,418	24,340	24,505	+4.4	-0.7	-4.1	29,934	22,290	20,212	27,372	+9.4	218,994	199,803
Health care equipment and products . . . . .	12,300	11,888	12,336	+3.5	-3.6	-0.5	13,403	11,675	11,864	12,326	+8.7	107,196	97,989

<sup>p</sup> Preliminary. <sup>r</sup> Revised.

<sup>1</sup> Topical series are regroupings of the separate industry categories.

<sup>2</sup> Shipments and new orders are the totals for the period and are adjusted for trading-day and calendar-month variations.

<sup>3</sup> Nondefense capital goods industries include : ordnance and accessories; steam, gas and hydraulic turbines; internal combustion engines; construction, mining, and material handling equipment; metalworking machinery; special industry machinery; general industrial machinery; computer and office equipment; refrigeration, heating and service industry machinery; electrical transmission and distribution equipment; electrical industrial apparatus; communications equipment; aircraft, missiles, space vehicles, and engines and parts; ships and tank components; railroad equipment; and search and navigation equipment.

<sup>4</sup> Defense capital goods industries include : ordnance and accessories; communications equipment; aircraft, missiles, space vehicles, and engines and parts; ships, tanks and tank components; and search and navigation equipment.

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

**Table 6. VALUE OF MANUFACTURERS' UNFILED ORDERS AND TOTAL INVENTORIES  
FOR TOPICAL SERIES<sup>1</sup>  
(Millions of dollars)**

Industry	Seasonally adjusted						Not seasonally adjusted				
	Monthly			Percent Change			Monthly				Percent change Sept. 98/97
	Sept. 1998 <sup>p</sup>	Aug. 1998 <sup>r</sup>	July 1998	Aug.- Sept.	July- Aug.	June- July	Sept. 1998 <sup>p</sup>	Aug. 1998 <sup>r</sup>	July 1998	Sept. 1997	
<b>UNFILED ORDERS</b>											
All manufacturing industries . . . . .	530,167	530,359	528,989	0.0	+0.3	-0.1	524,843	529,830	531,291	519,365	+1.1
Market categories :											
Automotive equipment . . . . .	2,295	2,314	2,358	-0.8	-1.9	-2.8	2,271	2,351	2,361	2,550	-10.9
Home goods and apparel . . . . .	8,385	8,219	8,007	+2.0	+2.6	-2.7	8,600	8,526	8,418	9,092	-5.4
Consumer staples . . . . .	2,311	2,279	2,288	+1.4	-0.4	+3.2	2,453	2,655	2,739	2,377	+3.2
Machinery and equipment . . . . .	250,396	248,931	245,443	+0.6	+1.4	-0.2	249,522	248,666	245,501	229,547	+8.7
Business supplies . . . . .	6,891	6,868	6,922	+0.3	-0.8	+0.6	6,957	7,200	7,307	6,826	+1.9
Construction materials and supplies . . . . .	17,683	17,996	18,129	-1.7	-0.7	-0.4	17,660	18,051	18,274	17,596	+0.4
Defense products . . . . .	92,250	91,634	93,267	+0.7	-1.8	-0.9	90,346	90,059	92,775	97,443	-7.3
Other materials, supplies and and intermediate products . . . . .	149,956	152,118	152,575	-1.4	-0.3	+0.7	147,034	152,322	153,916	153,934	-4.5
Durable goods industries :											
Nondefense capital goods <sup>3</sup> . . . . .	267,008	266,583	262,434	+0.2	+1.6	-0.2	266,185	265,781	261,837	249,104	+6.9
Excluding aircraft and parts . . . . .	108,332	105,379	104,309	+2.8	+1.0	-0.4	107,509	104,577	103,712	101,084	+6.4
Defense capital goods <sup>4</sup> . . . . .	97,087	96,616	98,371	+0.5	-1.8	-1.0	95,147	95,006	97,894	102,165	-6.9
Durables excluding capital goods . . . . .	141,762	142,914	143,793	-0.8	-0.6	+0.9	139,148	144,064	145,837	141,806	-1.9
Miscellaneous series :											
Producers' durable equipment . . . . .	289,477	287,265	284,823	+0.8	+0.9	-0.4	288,666	287,287	284,951	268,399	+7.6
Household durable goods . . . . .	5,343	5,233	5,092	+2.1	+2.8	-4.8	5,530	5,415	5,260	6,227	-11.2
Information technology industries . . . . .	40,073	39,815	40,103	+0.6	-0.7	-0.8	40,036	39,977	40,323	38,869	+3.0
Health care equipment and products . . . . .	9,723	9,639	9,646	+0.9	-0.1	+4.0	9,572	9,682	9,661	7,963	+20.2
<b>TOTAL INVENTORIES</b>											
All manufacturing industries . . . . .	468,642	468,445	467,636	0.0	+0.2	+0.2	467,790	471,596	469,220	451,811	+3.5
Market categories :											
Automotive equipment . . . . .	8,338	8,330	8,535	+0.1	-2.4	0.0	8,393	8,555	8,630	8,444	-0.6
Home goods and apparel . . . . .	32,087	31,724	31,564	+1.1	+0.5	+0.8	32,056	32,355	32,501	30,571	+4.9
Consumer staples . . . . .	72,491	72,611	73,016	-0.2	-0.6	+0.3	73,093	72,505	72,164	71,324	+2.5
Machinery and equipment . . . . .	120,570	120,861	119,846	-0.2	+0.8	+0.4	119,974	122,311	119,920	114,675	+4.6
Business supplies . . . . .	28,364	28,140	28,210	+0.8	-0.2	+0.6	28,568	28,490	28,621	27,498	+3.9
Construction materials and supplies . . . . .	28,821	28,752	28,542	+0.2	+0.7	+0.6	28,583	28,760	28,666	27,974	+2.2
Defense products . . . . .	18,518	18,740	18,573	-1.2	+0.9	+2.2	18,706	19,105	18,898	16,966	+10.3
Other materials, supplies and and intermediate products . . . . .	159,453	159,287	159,350	+0.1	0.0	-0.4	158,417	159,515	159,820	154,359	+2.6
Durable goods industries :											
Nondefense capital goods <sup>3</sup> . . . . .	112,720	112,969	111,963	-0.2	+0.9	+0.1	112,263	114,503	112,277	108,050	+3.9
Excluding aircraft and parts . . . . .	71,740	71,949	71,834	-0.3	+0.2	-0.2	71,298	73,188	72,464	71,160	+0.2
Defense capital goods <sup>4</sup> . . . . .	18,790	19,006	18,835	-1.1	+0.9	+2.2	19,038	19,433	19,220	17,190	+10.8
Durables excluding capital goods . . . . .	165,506	164,938	164,871	+0.3	0.0	0.0	164,911	165,902	165,657	158,744	+3.9
Miscellaneous series :											
Producers' durable equipment . . . . .	193,184	193,215	192,212	0.0	+0.5	+0.3	192,416	195,391	193,150	184,532	+4.3
Household durable goods . . . . .	16,393	16,164	16,041	+1.4	+0.8	+1.4	16,375	16,459	16,351	15,156	+8.0
Information technology industries . . . . .	32,700	33,013	33,119	-0.9	-0.3	-2.0	32,473	33,956	33,680	34,218	-5.1
Health care equipment and products . . . . .	19,561	19,613	19,601	-0.3	+0.1	+1.1	19,406	19,883	19,812	17,885	+8.5

See footnotes at end of table 5.

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

**Table 7. VALUE OF MANUFACTURERS' INVENTORIES, BY STAGE OF FABRICATION,  
BY INDUSTRY GROUP  
(Millions of dollars)**

Industry	Seasonally adjusted						Not seasonally adjusted				
	Monthly			Percent Change			Monthly				Percent change Sept. 98/97
	Sept. 1998 <sup>p</sup>	Aug. 1998 <sup>r</sup>	July 1998	Aug.- Sept.	July- Aug.	June- July	Sept. 1998 <sup>p</sup>	Aug. 1998 <sup>r</sup>	July 1998	Sept. 1997	
<b>MATERIALS AND SUPPLIES</b>											
All manufacturing industries . . . . .	156,174	155,669	156,118	+0.3	-0.3	+0.4	156,317	155,901	156,626	151,057	+3.5
Durable goods industries . . . . .	93,381	93,042	93,445	+0.4	-0.4	+0.3	93,955	93,739	93,984	90,361	+4.0
Stone, clay, and glass products . . . . .	3,138	3,081	3,031	+1.9	+1.6	+1.0	3,157	3,110	3,038	2,974	+6.2
Primary metals . . . . .	8,093	8,016	8,034	+1.0	-0.2	-0.1	8,192	8,074	8,039	7,949	+3.1
Fabricated metal products . . . . .	10,846	10,675	10,780	+1.6	-1.0	+0.5	10,872	10,682	10,804	10,223	+6.3
Industrial machinery and equipment . . . . .	19,760	19,717	20,005	+0.2	-1.4	+1.0	19,914	20,082	20,141	19,587	+1.7
Electronic and other electrical equipment . . . . .	15,604	15,729	15,719	-0.8	+0.1	+0.1	15,643	15,947	15,957	15,421	+1.4
Transportation equipment . . . . .	15,607	15,556	15,737	+0.3	-1.2	+0.4	15,625	15,535	15,956	14,877	+5.0
Instruments and related products . . . . .	9,236	9,297	9,223	-0.7	+0.8	-0.9	9,250	9,388	9,280	8,700	+6.3
Lumber, furniture and miscellaneous durable goods . . . . .	11,097	10,971	10,916	+1.1	+0.5	-0.1	11,302	10,921	10,769	10,630	+6.3
Nondurable goods industries . . . . .	62,793	62,627	62,673	+0.3	-0.1	+0.5	62,362	62,162	62,642	60,696	+2.7
Food and kindred products . . . . .	11,470	11,464	11,529	+0.1	-0.6	+1.7	11,217	11,103	11,291	10,775	+4.1
Tobacco products . . . . .	4,939	4,820	4,886	+2.5	-1.4	-1.3	4,839	4,619	4,597	4,878	-0.8
Textile mill products . . . . .	2,986	2,981	2,977	+0.2	+0.1	-0.4	2,914	2,978	3,022	2,990	-2.5
Paper and allied products . . . . .	8,191	8,162	8,154	+0.4	+0.1	+0.5	8,167	8,110	8,080	7,684	+6.3
Chemicals and allied products . . . . .	15,594	15,526	15,385	+0.4	+0.9	+0.4	15,587	15,527	15,504	14,812	+5.2
Petroleum and coal products . . . . .	3,206	3,320	3,364	-3.4	-1.3	+5.0	3,171	3,324	3,392	3,790	-16.3
Rubber and plastics products . . . . .	6,853	6,841	6,790	+0.2	+0.8	0.0	6,807	6,758	6,849	6,430	+5.9
Apparel, printing and publishing and leather goods . . . . .	9,554	9,513	9,588	+0.4	-0.8	-0.8	9,660	9,743	9,907	9,337	+3.5
<b>WORK IN PROCESS</b>											
All manufacturing industries . . . . .	151,290	152,137	151,045	-0.6	+0.7	-0.1	151,817	154,284	151,705	145,039	+4.7
Durable goods industries . . . . .	122,151	122,862	121,367	-0.6	+1.2	0.0	122,349	124,932	122,063	115,950	+5.5
Stone, clay, and glass products . . . . .	1,338	1,357	1,351	-1.4	+0.4	+2.7	1,304	1,362	1,366	1,279	+2.0
Primary metals . . . . .	8,581	8,613	8,613	-0.4	0.0	+1.0	8,581	8,668	8,737	8,737	-1.8
Fabricated metal products . . . . .	8,979	9,019	9,063	-0.4	-0.5	-0.2	9,076	9,176	9,182	8,759	+3.6
Industrial machinery and equipment . . . . .	22,807	23,112	22,622	-1.3	+2.2	-0.5	22,811	23,586	22,743	22,212	+2.7
Electronic and other electrical equipment . . . . .	14,238	14,279	14,101	-0.3	+1.3	-3.0	14,165	14,470	14,192	13,895	+1.9
Transportation equipment . . . . .	51,049	51,258	50,301	-0.4	+1.9	+0.8	51,253	52,093	50,191	45,678	+12.2
Instruments and related products . . . . .	9,873	9,937	10,003	-0.6	-0.7	+0.4	9,826	10,213	10,275	10,029	-2.0
Lumber, furniture and miscellaneous durable goods . . . . .	5,286	5,287	5,313	0.0	-0.5	-0.3	5,333	5,364	5,377	5,361	-0.5
Nondurable goods industries . . . . .	29,139	29,275	29,678	-0.5	-1.4	-0.5	29,468	29,352	29,642	29,089	+1.3
Food and kindred products . . . . .	5,429	5,551	5,726	-2.2	-3.1	-1.5	5,598	5,176	5,217	5,988	-6.5
Tobacco products . . . . .	102	108	121	-5.6	-10.7	+1.7	106	108	114	106	0.0
Textile mill products . . . . .	2,656	2,669	2,677	-0.5	-0.3	+0.3	2,664	2,681	2,690	2,692	-1.0
Paper and allied products . . . . .	1,620	1,609	1,584	+0.7	+1.6	+0.6	1,604	1,621	1,596	1,599	+0.3
Chemicals and allied products . . . . .	8,608	8,681	8,720	-0.8	-0.4	+0.3	8,572	8,792	8,869	7,523	+13.9
Petroleum and coal products . . . . .	2,584	2,471	2,578	+4.6	-4.2	-1.3	2,609	2,491	2,594	2,887	-9.6
Rubber and plastics products . . . . .	2,226	2,228	2,207	-0.1	+1.0	-1.5	2,225	2,229	2,174	2,293	-3.0
Apparel, printing and publishing and leather goods . . . . .	5,914	5,958	6,065	-0.7	-1.8	-0.8	6,090	6,254	6,388	6,001	+1.5
<b>FINISHED GOODS</b>											
All manufacturing industries . . . . .	161,178	160,639	160,473	+0.3	+0.1	+0.4	159,656	161,411	160,889	155,715	+2.5
Durable goods industries . . . . .	81,484	81,009	80,857	+0.6	+0.2	+0.4	79,908	81,167	81,107	77,673	+2.9
Stone, clay, and glass products . . . . .	4,762	4,726	4,730	+0.8	-0.1	-1.3	4,582	4,646	4,772	4,614	-0.7
Primary metals . . . . .	8,255	8,230	8,116	+0.3	+1.4	+0.9	8,132	8,191	8,075	7,647	+6.3
Fabricated metal products . . . . .	11,222	11,250	11,096	-0.2	+1.4	+1.4	10,891	11,112	11,166	10,149	+7.3
Industrial machinery and equipment . . . . .	18,439	18,129	18,276	+1.7	-0.8	-0.4	17,733	18,025	18,146	17,410	+1.9
Electronic and other electrical equipment . . . . .	10,535	10,518	10,525	+0.2	-0.1	-0.4	10,335	10,780	10,717	10,491	-1.5
Transportation equipment . . . . .	8,980	8,998	8,994	-0.2	0.0	-0.1	9,138	9,191	9,109	9,356	-2.3
Instruments and related products . . . . .	7,466	7,417	7,433	+0.7	-0.2	+0.4	7,506	7,520	7,455	7,244	+3.6
Lumber, furniture and miscellaneous durable goods . . . . .	11,825	11,741	11,687	+0.7	+0.5	+2.3	11,591	11,702	11,667	10,762	+7.7
Nondurable goods industries . . . . .	79,694	79,630	79,616	+0.1	0.0	+0.3	79,748	80,244	79,782	78,042	+2.2
Food and kindred products . . . . .	20,197	20,100	20,169	+0.5	-0.3	-0.6	21,160	20,549	19,825	20,551	+3.0
Tobacco products . . . . .	645	635	658	+1.6	-3.5	+1.5	610	507	499	569	+7.2
Textile mill products . . . . .	4,668	4,595	4,631	+1.6	-0.8	+0.7	4,536	4,658	4,716	4,315	+5.1
Paper and allied products . . . . .	6,871	6,872	6,846	0.0	+0.4	+0.6	6,735	6,871	6,837	6,562	+2.6
Chemicals and allied products . . . . .	22,121	22,328	22,277	-0.9	+0.2	+1.1	21,589	22,170	22,110	20,321	+6.2
Petroleum and coal products . . . . .	4,839	4,968	4,964	-2.6	+0.1	-3.0	4,941	5,013	5,080	6,114	-19.2
Rubber and plastics products . . . . .	7,583	7,630	7,653	-0.6	-0.3	-0.2	7,276	7,521	7,623	7,295	-0.3
Apparel, printing and publishing and leather goods . . . . .	12,770	12,502	12,418	+2.1	+0.7	+1.9	12,901	12,955	13,092	12,315	+4.8

<sup>p</sup> Preliminary. <sup>r</sup> Revised.

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

**Table 8. RATIOS OF MANUFACTURERS' INVENTORIES TO SHIPMENTS AND UNFILLED ORDERS TO SHIPMENTS, BY INDUSTRY GROUP**  
(Based on seasonally adjusted data)

Industry	Inventory / Shipments ratio				Unfilled Orders / Shipments ratio <sup>1</sup>			
	Sept. 1998 <sup>p</sup>	Aug. 1998 <sup>r</sup>	July 1998	June 1998	Sept. 1998 <sup>p</sup>	Aug. 1998 <sup>r</sup>	July 1998	June 1998
All manufacturing industries . . . . .	1.38	1.39	1.39	1.39	2.71	2.74	2.72	2.74
Durable goods industries . . . . .	1.55	1.57	1.58	1.58	3.19	3.24	3.23	3.24
Stone, clay, and glass products . . . . .	1.14	1.14	1.12	1.13	0.83	0.84	0.84	0.84
Primary metals . . . . .	1.66	1.65	1.65	1.64	2.05	2.10	2.16	2.19
Fabricated metal products . . . . .	1.53	1.54	1.52	1.56	1.38	1.40	1.41	1.46
Industrial machinery and equipment . . . . .	1.66	1.66	1.61	1.61	2.19	2.11	2.04	2.04
Electronic and other electrical equipment . . . . .	1.25	1.30	1.29	1.32	1.84	1.88	1.89	1.86
Transportation equipment . . . . .	1.64	1.71	1.85	1.83	9.77	10.35	11.00	10.80
Instruments and related products . . . . .	1.88	1.94	1.90	1.88	3.39	3.51	3.47	3.43
Nondurable goods industries . . . . .	1.16	1.16	1.16	1.15	0.66	0.65	0.64	0.65
Food and kindred products . . . . .	0.90	0.90	0.92	0.92	(X)	(X)	(X)	(X)
Tobacco products . . . . .	1.63	1.60	1.64	1.61	(X)	(X)	(X)	(X)
Textile mill products . . . . .	1.57	1.53	1.48	1.54	(NA)	(NA)	(NA)	(NA)
Paper and allied products . . . . .	1.26	1.21	1.19	1.19	(NA)	(NA)	(NA)	(NA)
Chemicals and allied products . . . . .	1.43	1.45	1.43	1.40	(X)	(X)	(X)	(X)
Petroleum and coal products . . . . .	0.89	0.91	0.90	0.88	(X)	(X)	(X)	(X)
Rubber and plastics products . . . . .	1.25	1.27	1.27	1.28	(X)	(X)	(X)	(X)

<sup>p</sup> Preliminary. <sup>r</sup> Revised. (X) Not applicable. (NA) Not available.

<sup>1</sup> Excludes the following industries with no unfilled orders: Wood and lumber products; glass containers; metal cans, barrels and drums; farm and garden machinery; motor vehicle assembly operations; other transportation equipment; foods and related products; tobacco; knitting mill products; apparel and related products; chemicals; petroleum and coal products; and rubber and plastics products.

**Table 9. REVISIONS TO PREVIOUSLY PUBLISHED MONTHLY PERCENT CHANGES**  
(Based on seasonally adjusted data)

Industry	Shipments			New orders			Unfilled orders			Inventories		
	Sept. <sup>1</sup> 1998	Sept. <sup>2</sup> 1993-1997	Sept. 1997-Aug. 1998	Sept. <sup>1</sup> 1998	Sept. <sup>2</sup> 1993-1997	Sept. 1997-Aug. 1998	Sept. <sup>1</sup> 1998	Sept. <sup>2</sup> 1993-1997	Sept. 1997-Aug. 1998	Sept. <sup>1</sup> 1998	Sept. <sup>2</sup> 1993-1997	Sept. 1997-Aug. 1998
All manufacturing industries . . . . .	(X)	0.1	0.2	(X)	0.1	0.2	(X)	0.0	0.1	(X)	0.1	0.1
Durable goods industries . . . . .	0.2	0.1	0.2	-0.1	0.2	0.3	-0.2	0.0	0.1	(X)	0.1	0.1
Stone, clay, and glass products . . . . .	(X)	0.5	0.3	(X)	0.6	0.6	(X)	0.3	0.5	(X)	0.1	0.2
Primary metals . . . . .	-0.4	0.2	0.4	-0.2	1.0	0.7	0.0	0.5	0.2	(X)	0.1	0.1
Fabricated metal products . . . . .	(X)	0.3	0.2	(X)	0.5	0.4	(X)	0.2	0.2	(X)	0.2	0.1
Industrial machinery and equipment . . . . .	0.7	0.5	0.3	0.2	0.6	0.3	-0.3	0.1	0.1	(X)	0.1	0.1
Electronic and other electrical equipment . . . . .	0.2	0.4	0.6	0.1	0.7	0.9	-0.1	0.2	0.5	(X)	0.2	0.1
Transportation equipment . . . . .	0.1	0.6	0.6	-0.5	0.8	0.7	-0.1	0.1	0.0	(X)	0.2	0.3
Instruments and related products . . . . .	(X)	0.4	0.4	(X)	1.2	0.9	(X)	0.3	0.2	(X)	0.4	0.1
Nondurable goods industries . . . . .	(X)	0.2	0.2	(X)	0.2	0.1	(X)	0.5	0.1	(X)	0.1	0.0
Food and kindred products . . . . .	(X)	0.4	0.2	(X)	(X)	(X)	(X)	(X)	(X)	(X)	0.3	0.2
Tobacco products . . . . .	(X)	0.0	0.0	(X)	(X)	(X)	(X)	(X)	(X)	(X)	0.0	0.1
Textile mill products . . . . .	(X)	0.2	0.4	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	0.1	0.1
Paper and allied products . . . . .	(X)	0.3	0.2	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	0.2	0.1
Chemicals and allied products . . . . .	(X)	0.3	0.3	(X)	(X)	(X)	(X)	(X)	(X)	(X)	0.2	0.1
Petroleum and coal products . . . . .	(X)	0.2	0.2	(X)	(X)	(X)	(X)	(X)	(X)	(X)	0.2	0.1
Rubber and plastics products . . . . .	(X)	0.2	0.1	(X)	(X)	(X)	(X)	(X)	(X)	(X)	0.2	0.3
Capital goods industries :												
Nondefense . . . . .	0.8	0.5	0.3	0.2	0.7	0.5	-0.1	0.0	0.1	(X)	0.0	0.2
Defense . . . . .	1.0	0.8	0.8	-3.1	2.5	2.0	-0.2	0.1	0.1	(X)	0.4	0.2

(X) Not applicable. (NA) Not available.

Note: The five year and 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.

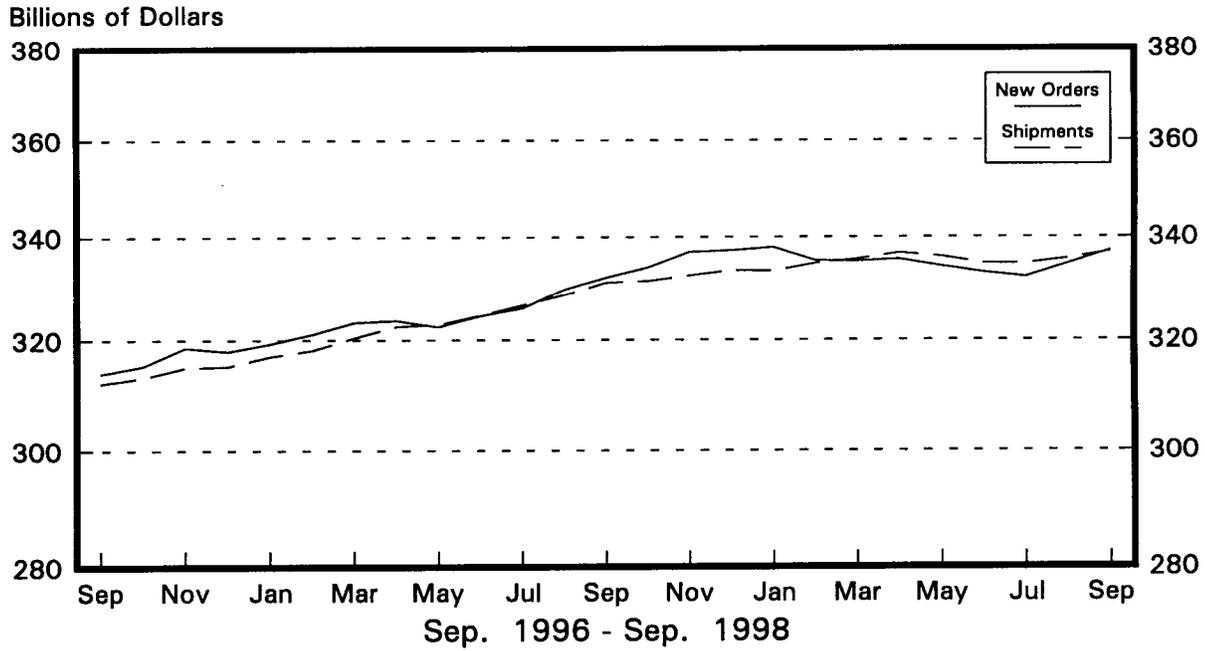
<sup>1</sup> The current month revisions are the difference between the advance percent change and the percent change as shown in this publication.

<sup>2</sup> Average for this month for the last five years.

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

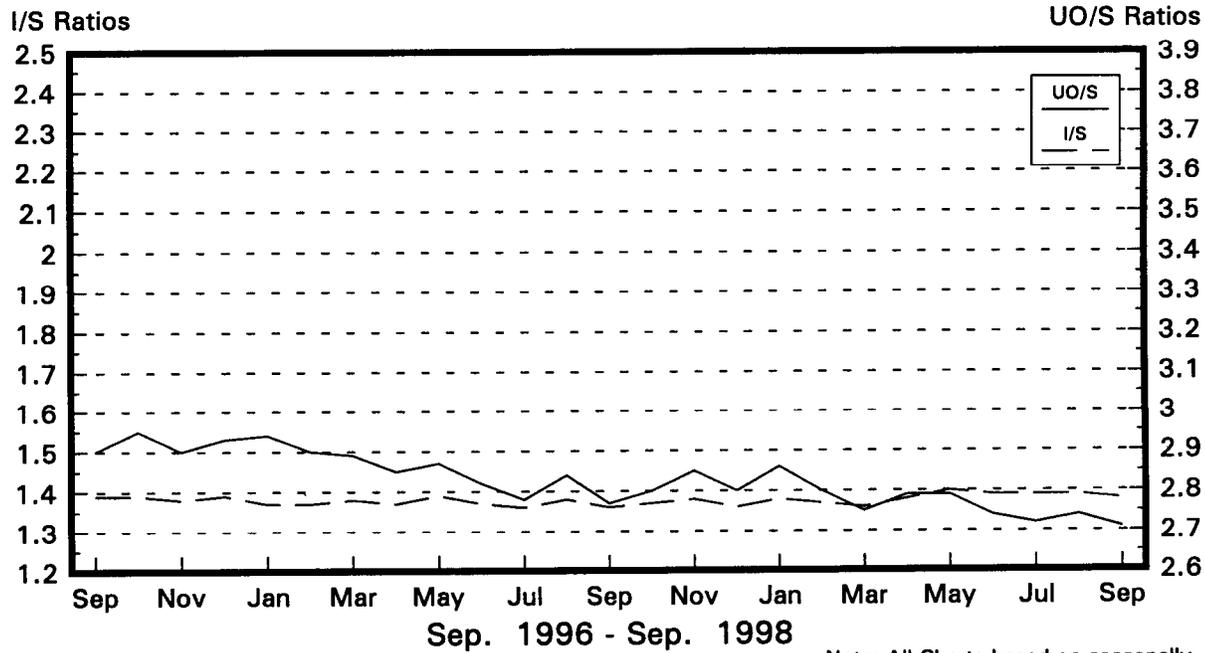
## Total Manufacturing

New Orders and Shipments  
Three Month Moving Averages



## Total Manufacturing

Ratio of Unfilled Orders and  
Inventories to Shipments

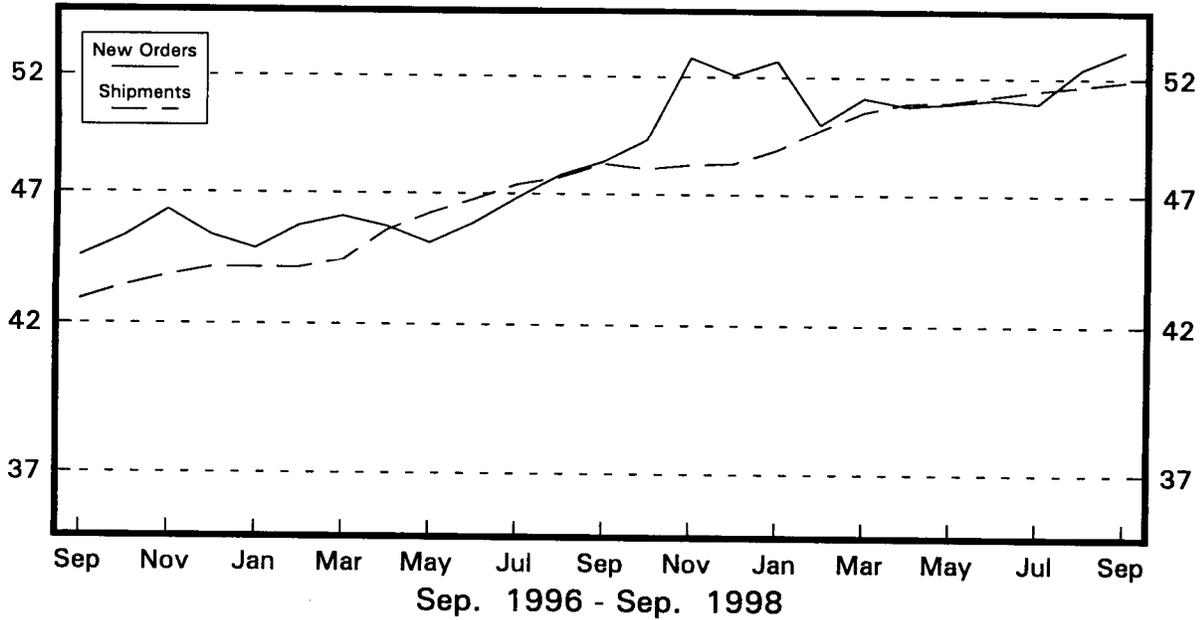


Note: All Charts based on seasonally adjusted current dollars.

# Nondefense Capital Goods

New Orders and Shipments  
Three Month Moving Averages

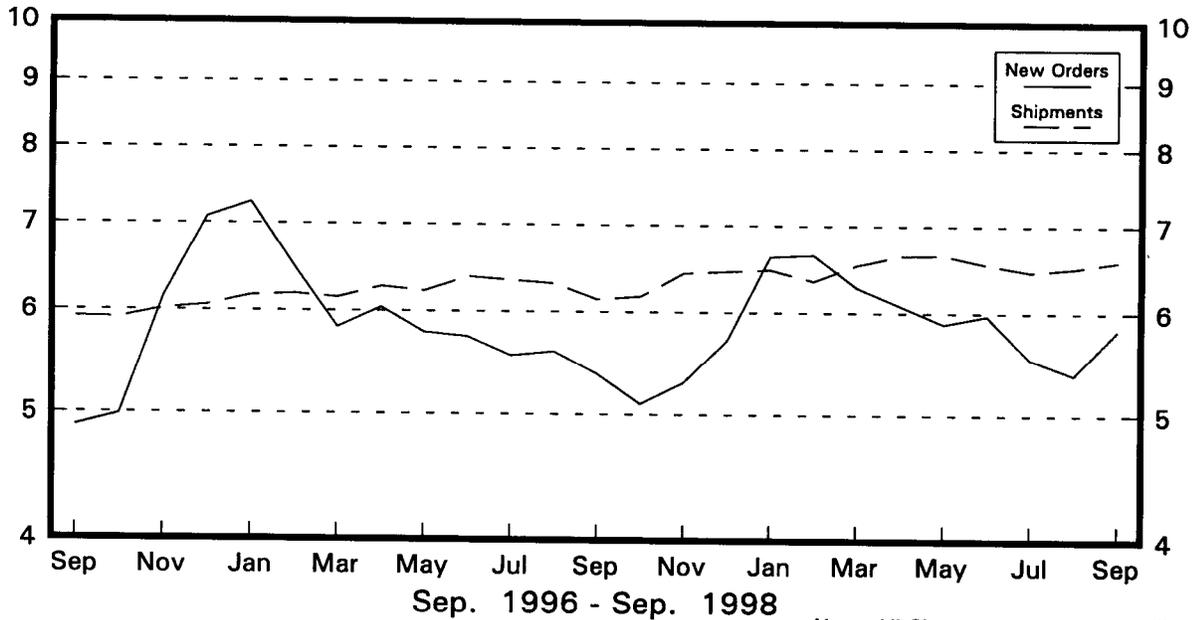
Billions of Dollars



# Defense Capital Goods

New Orders and Shipments  
Three Month Moving Averages

Billions of Dollars



Note: All Charts based on seasonally adjusted current dollars.