



Monthly Survey of Manufacturing

September 2003



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Monthly Survey of Manufacturing Section

Monthly Survey of Manufacturing

September 2003

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- .. not available for a specific reference period.
- ... not applicable.
- x suppressed to meet the confidentiality requirements of the Statistics Act.

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Estimates in this publication are subject to revision to accommodate newly received information. It is advisable to always use data from the most recent issue.

In the following tables, some components may not add exactly to the total, because of rounding.

For a complete description of concepts, methodology and definitions, please refer to the "Survey Documentation" section at the end of this publication or consult Statistics Canada's Website at www.statcan.ca/english/sdds/2101.htm .

A note on CANSIM

The data published in Monthly Survey of Manufacturing (Tables 304-0014 and 304-0015) (Catalogue No. 31-001-XIE) are also available in machine-readable form through CANSIM (Canadian Socio-Economic Information Management System). Users interested in accessing data via CANSIM should contact one of Statistics Canada's regional centres at the numbers listed on the inside front cover of this Publication, or contact the Marketing Division, Statistics Canada R.H. Coats Building, Ottawa, Ontario, K1A 0T6 (613) 951-8200.

Acknowledgement

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Highlights

Higher shipments, rising orders, and the fifth successive decline in inventories were the highlights reported by manufacturers in September, as Ontario rebounded from the affects of August's electrical blackout. Shipments soared 5.2% to \$43.0 billion in September, the highest level since March.

In September, manufacturers made up lost ground from the adverse impact of the electrical blackout of August 14. The Ontario economy was notably affected by the power outage and the following week of energy conservation. Assembly lines were shut down, plants and offices worked on reduced schedules and refineries closed. August's 4.9% decrease in total shipments was a one-time occurrence, largely due to the blackout.

Widespread increases in September

Increases were broadly based in September, as 17 of 21 manufacturing industries, representing 84% of total shipments, reported higher production. Ontario's rebound (+\$1.8 billion) from the blackout led the nine provinces reporting increases in September. Even excluding Ontario's significant impact on the Canada total, manufacturing shipments still rose a healthy 1.8%.

Quebec (+\$177 million), British Columbia (+\$71 million) and Saskatchewan (+\$38 million) also reported strong increases in September.

Quarterly shipments remain negative

Despite the upbeat tone of the September report, manufacturers were left with a dismal third quarter, rocked by the blackout in August. Shipments declined 0.4% in the third quarter, following a 3.9% drop in the second.

Manufacturers upbeat about their prospects for the fourth quarter

Manufacturing employment was little changed in the month of October, following a decrease in September (-15,000). A drop in employment by Ontario manufacturers was offset by slight increases in most other provinces. Since the start of 2003, the number of manufacturing jobs has fallen by an estimated 77,000 (-3.3%).

However, manufacturers were more upbeat about their employment and production prospects for the fourth quarter, according to the Business Conditions Survey for October. The vast majority of manufacturers (86%) indicated that they would maintain or add to their workforce in the coming quarter. The report also indicated that 34% of manufacturers would increase production in the fourth quarter.

Shipments by province and territory

	August 2003	September 2003	August to September 2003
Seasonally adjusted			
	\$ millions		% change
Newfoundland and Labrador	200	220	10.0
Prince Edward Island	97	124	27.6
Nova Scotia	711	712	0.1
New Brunswick	1,099	1,091	-0.7
Quebec	9,795	9,972	1.8
Ontario	21,058	22,844	8.5
Manitoba	951	983	3.4
Saskatchewan	603	641	6.4
Alberta	3,515	3,515	0.0
British Columbia	2,832	2,903	2.5
Yukon, Northwest Territories and Nunavut	6	5	-22.9

Also encouraging was the fact that, in September, manufacturers loaded their books with an 8.0% boost in new orders, and noted that there was a rise in unfilled orders (+1.1%), the first since August 2002. Unfilled orders are often considered a key determinant of future shipments.

Some concerns linger

The Canadian economy has faced numerous challenges in 2003. The SARS virus, mad cow disease, forest fires and the electrical blackout have taken a toll on various sectors of the economy. Meanwhile, two of Canada's major manufacturing industries, motor vehicles and aerospace, continue to face diminished market demand, which has already contributed to substantial cuts in production.

There has been unease about the rapidly appreciating value of the Canadian dollar, which soared to a 10-year high in October. There are also some concerns regarding the US economy and the sustainability of its current recovery as the United States faces deficit challenges.

Big increases in shipments across the board

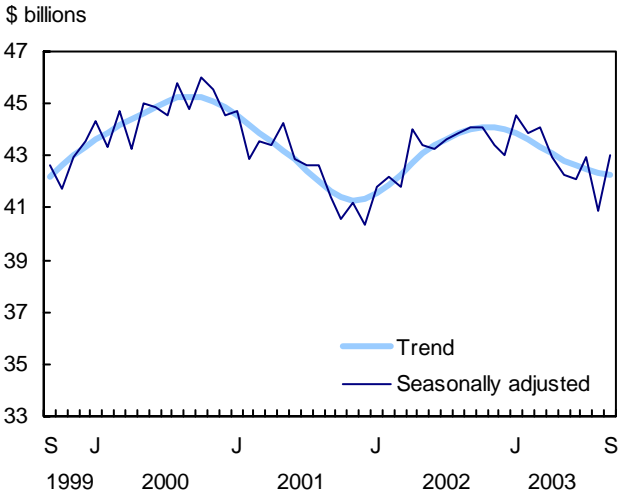
Motor vehicles (+16.2%), chemical products (+9.5%), computer and electronic products (+17.0%) and automotive parts (+7.1%) manufacturing were among the majority of industries reporting significant gains in September.

Manufacturers of motor vehicles recovered approximately two-thirds of the shipments lost in August (-23.1%) as a result of the blackout. Shipments increased to \$5.2 billion in September, but on a year-to-date basis, they remain 4.2% off levels of one year ago.

Shipments of chemical products improved to \$3.4 billion in September, the highest level since March. Manufacturers of petrochemical and pharmaceutical products contributed to the gains.

A quarter-end boost in computer manufacturing resulted in a stellar September for the otherwise beleaguered industry. Shipments of computer and electronic products climbed 17.0% to \$1.7 billion in September, marking the third increase in the last four months.

Shipments bounce back in September



Manufacturers continue to slice inventories

In September, manufacturers trimmed another 0.7% from inventories, the fifth consecutive decline. Inventories were \$60.9 billion, the lowest level since April 2000 (\$60.8 billion).

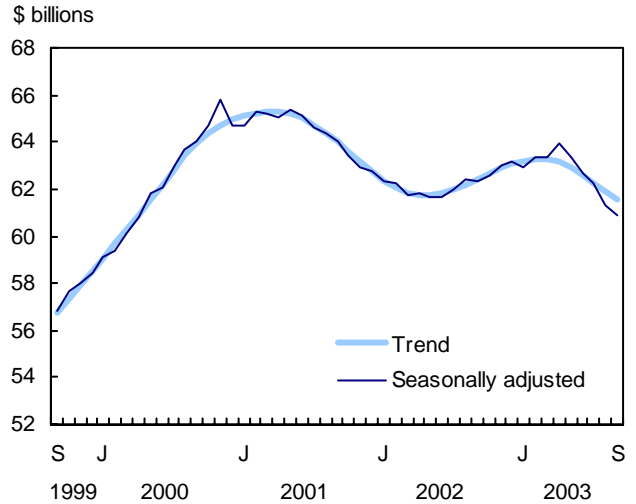
Manufacturers have successfully reduced inventory levels in recent months. Inventories were down 4.7% from April's recent high of \$63.9 billion. All three stages of fabrication, including raw materials (-1.1%), goods-in-process (-0.7%) and finished-products (-0.2%), declined in September.

Finished-products inventories continue to drop

Manufacturers' finished-product inventories, which have been trending down throughout 2003, edged back to \$19.0 billion in September, a 13-month low. Although lower levels of finished-product inventories are encouraging, the recent appreciation in the value of the Canadian dollar may be a key obstacle to further advances in demand from the United States, Canada's largest trading partner. This could hinder further reductions in finished-product inventories.

The main contributors to September's decrease included primary metals (-3.0%), aerospace (-1.6%) and petroleum and coal products (-7.3%).

Inventories continue to shrink



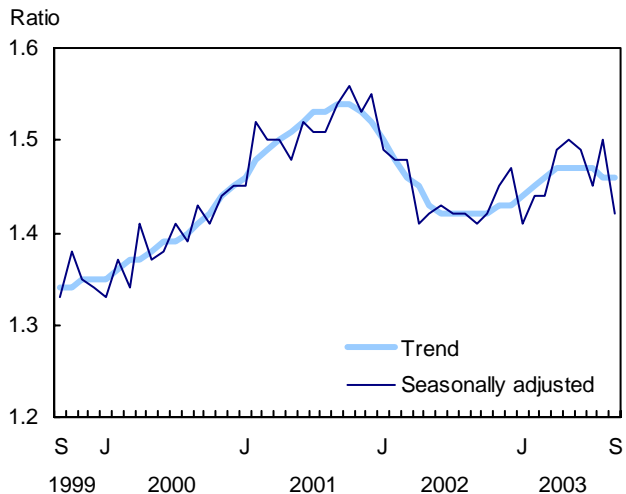
Higher shipments improve the inventory-to-shipment ratio

Strong shipment activity coupled with lower inventories contributed to a notable drop in the inventory-to-shipment ratio to 1.42 in September from August's 1.50, the high for the year. The ratio has been quite volatile in recent months, the result of ongoing fluctuations in demand and the impacts of several external shocks. Since late 2002, the inventory-to-shipment ratio has been edging up.

The finished-product inventory-to-shipment ratio fell back to 0.44 in September from 0.47. September's solid rise in shipments surpassed the much smaller decline in finished-product inventories. The trend, which had been rising since mid-2002, has shown a more moderate movement in recent months.

The finished-product inventory-to-shipment ratio is a measure of the time that would be required in order to exhaust finished-products if shipments were to remain at their current level.

The inventory-to-shipment ratio improves



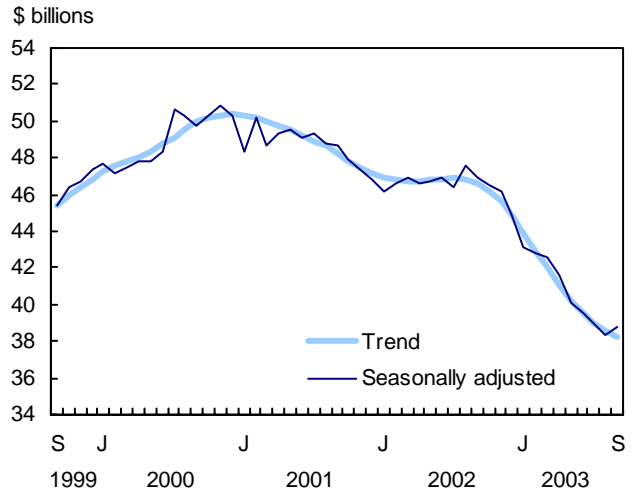
Unfilled orders increase for the first time in a year

Burdened by lacklustre demand and order cancellations since mid-2002, unfilled orders have weakened substantially in the last year. In September, manufacturers posted the first increase (+1.1%) in unfilled orders in over one year, to \$38.8 billion.

Several industries benefited by September's rise in unfilled orders. A recent string of new order announcements by telecommunications manufacturers resulted in a 10.8% jump in unfilled orders for the computer and electronic products industry. Orders were \$4.0 billion, the highest level in six months. The fabricated metal products (+6.4%) and plastics and rubber products (+14.1%) industries also reported strong increases in September.

Another noteworthy factor in the rise of unfilled orders was the aerospace products and parts industry. Since late 2001, aerospace manufacturing had been pummelled by the downward spiral of the global aviation market. In September, Canadian aerospace manufacturers eked out the first increase in unfilled orders since August 2001. Orders rose 0.4% to \$11.3 billion.

Unfilled orders rise



New orders rocket ahead

Manufacturers reported an 8.0% rise in new orders to \$43.4 billion in September. This marked the third increase in the last four months for new orders, a possible good omen for future prospects. Widespread increases were reported, including motor vehicles, computers and aerospace manufacturing.

Note to readers

In addition to current-month estimates, data for the previous three months are regularly revised. Factors influencing revisions include late receipt of company data, incorrect information reported earlier, replacement of estimates with actual figures (once available), and seasonal adjustments. Consult the appropriate CANSIM tables for revised data.

Non-durable goods industries include food, beverage and tobacco products, textile mills, textile product mills, leather and allied products, paper, printing and related support activities, petroleum and coal products, chemicals and plastic and rubber products.

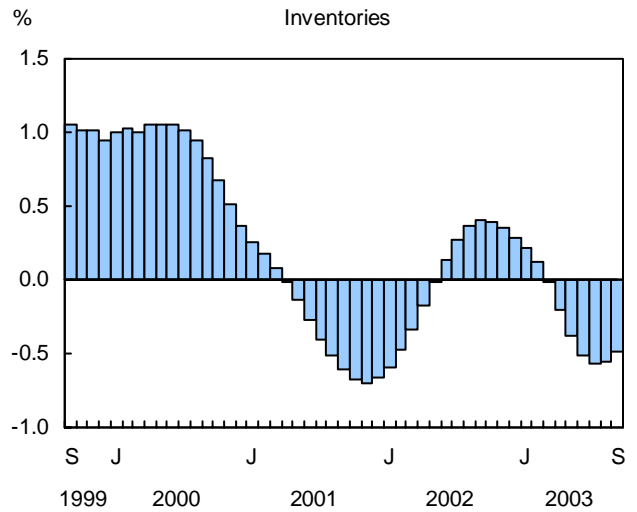
Durable goods industries include clothing, wood products, non-metallic mineral products, primary metals, fabricated metal products, machinery, computer and electronic products, electrical equipment, appliance and components, transportation equipment, furniture and related products and miscellaneous manufacturing.

Unfilled orders are a stock of orders that will contribute to future shipments assuming that the orders are not cancelled.

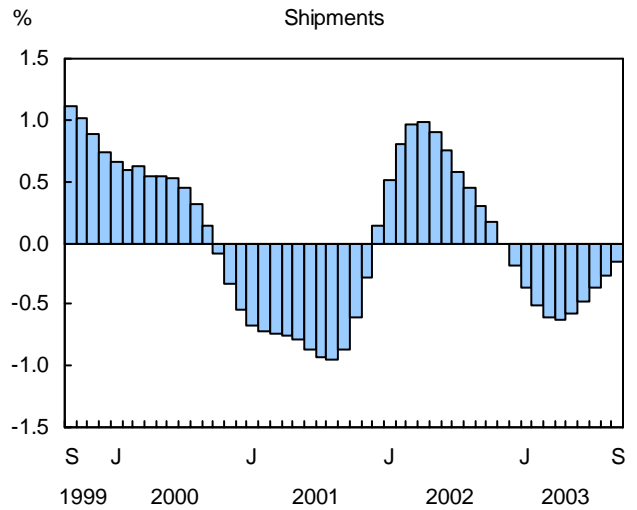
New orders are those received whether shipped in the current month or not. They are measured as the sum of shipments for the current month plus the change in unfilled orders. Some people interpret new orders as orders that will lead to future demand. This is inappropriate since the "new orders" variable includes orders that have already been shipped. Readers should take note that the month-to-month change in new orders may be volatile. This will happen particularly if the previous month's change in unfilled orders is closely related to the current month's change.

Not all orders will be translated into Canadian factory shipments because portions of large contracts can be subcontracted out to manufacturers in other countries.

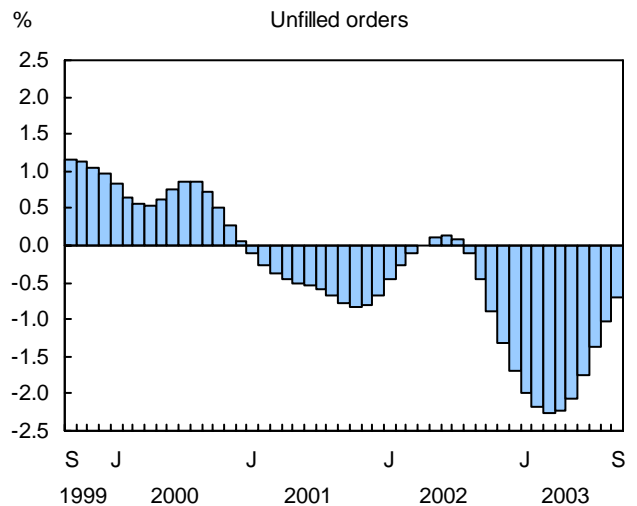
Monthly change in trend



Monthly change in trend



Monthly change in trend



Products and Services

Related Products and Data Sources

- Manufacturing Industries of Canada, 31-203-XPB
- Business Condition Survey, CANSIM (\$) tables 302-0007 and 302-0008
- Perspectives on Labour and Income, 75-001-XIE or 75-001-XPE
- Industrial Product Price Indexes, 62-011-XIE or 62-011-XPB
- Industrial Capacity Utilization Rates CANSIM II table 028-0002

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December 16, 2003
January 21, 2004
February 13, 2004

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Table 1
All manufacturing industries

Period	Unadjusted				Seasonally adjusted					
	Shipments	Inventories	Unfilled orders	New orders	Shipments	Inventories	Unfilled orders	New orders		
\$ millions										
September 2002	45,149	62,193	47,324	44,308	44,134	62,320	46,963	43,541		
October 2002	47,191	62,295	46,773	46,640	44,132	62,580	46,491	43,660		
November 2002	44,305	63,129	46,202	43,734	43,385	62,989	46,127	43,021		
December 2002	39,721	62,389	44,536	38,054	42,998	63,161	44,820	41,690		
January 2003	41,879	62,601	42,643	39,986	44,520	62,929	43,123	42,823		
February 2003	40,817	63,980	42,588	40,762	43,901	63,307	42,807	43,584		
March 2003	45,280	64,512	42,467	45,159	44,070	63,368	42,616	43,879		
April 2003	43,482	64,595	41,315	42,330	42,953	63,898	41,630	41,967		
May 2003	44,714	63,666	40,096	43,495	42,285	63,358	40,057	40,711		
June 2003	43,793	62,293	39,277	42,973	42,128	62,635	39,504	41,576		
July 2003	39,382	61,541	39,230	39,335	42,954	62,260	39,055	42,506		
August 2003	41,188	61,138	38,638	40,596	40,866	61,316	38,398	40,209		
September 2003	45,047	60,387	39,121	45,530	43,009	60,867	38,827	43,438		
Month to month % change										
Shipments		Inventories		Inventory to shipments ratio		Unfilled orders		New orders		
Seasonally adjusted	Trend	Seasonally adjusted	Trend	Seasonally adjusted	Trend	Seasonally adjusted	Trend	Seasonally adjusted	Trend	
September 2002	0.6	0.3	-0.1	0.4	1.41	1.42	-1.2	-0.5	-3.2	-0.1
October 2002	0.0	0.2	0.4	0.4	1.42	1.42	-1.0	-0.9	0.3	-0.3
November 2002	-1.7	0.0	0.7	0.3	1.45	1.43	-0.8	-1.3	-1.5	-0.5
December 2002	-0.9	-0.2	0.3	0.3	1.47	1.43	-2.8	-1.7	-3.1	-0.6
January 2003	3.5	-0.4	-0.4	0.2	1.41	1.44	-3.8	-2.0	2.7	-0.6
February 2003	-1.4	-0.5	0.6	0.1	1.44	1.45	-0.7	-2.2	1.8	-0.7
March 2003	0.4	-0.6	0.1	0.0	1.44	1.46	-0.4	-2.3	0.7	-0.7
April 2003	-2.5	-0.6	0.8	-0.2	1.49	1.47	-2.3	-2.2	-4.4	-0.6
May 2003	-1.6	-0.6	-0.8	-0.4	1.50	1.47	-3.8	-2.1	-3.0	-0.4
June 2003	-0.4	-0.5	-1.1	-0.5	1.49	1.47	-1.4	-1.8	2.1	-0.2
July 2003	2.0	-0.4	-0.6	-0.6	1.45	1.47	-1.1	-1.4	2.2	0.0
August 2003	-4.9	-0.3	-1.5	-0.6	1.50	1.46	-1.7	-1.0	-5.4	0.1
September 2003	5.2	-0.2	-0.7	-0.5	1.42	1.46	1.1	-0.7	8.0	0.1

Table 2
Motor vehicle, and parts and accessories industries

Period	Unadjusted				Seasonally adjusted					
	Shipments	Inventories	Unfilled orders	New orders	Shipments	Inventories	Unfilled orders	New orders		
\$ millions										
September 2002	8,417	3,525	2,060	8,537	8,347	3,512	2,031	8,485		
October 2002	9,054	3,445	1,968	8,962	8,298	3,450	1,959	8,226		
November 2002	8,695	3,660	1,933	8,660	8,124	3,586	1,932	8,097		
December 2002	6,157	3,689	1,855	6,079	7,258	3,751	1,853	7,179		
January 2003	8,166	3,585	1,834	8,145	8,236	3,552	1,816	8,199		
February 2003	8,211	3,630	1,787	8,164	8,076	3,580	1,779	8,039		
March 2003	8,926	3,529	1,724	8,863	8,335	3,495	1,730	8,286		
April 2003	8,538	3,500	1,630	8,443	8,039	3,489	1,680	7,989		
May 2003	8,733	3,420	1,581	8,684	7,935	3,395	1,606	7,861		
June 2003	8,405	3,238	1,583	8,407	7,800	3,312	1,600	7,794		
July 2003	5,321	3,158	1,607	5,346	8,323	3,224	1,593	8,316		
August 2003	6,882	3,042	1,602	6,876	6,900	3,065	1,602	6,910		
September 2003	8,136	3,176	1,569	8,103	7,796	3,171	1,557	7,752		
Month to month % change										
Shipments		Inventories		Inventory to shipments ratio		Unfilled orders		New orders		
Seasonally adjusted	Trend	Seasonally adjusted	Trend	Seasonally adjusted	Trend	Seasonally adjusted	Trend	Seasonally adjusted	Trend	
September 2002	-2.8	-0.4	0.6	0.6	0.42	0.42	7.3	1.8	-3.0	-0.6
October 2002	-0.6	-0.7	-1.8	0.6	0.42	0.42	-3.5	0.6	-3.1	-0.9
November 2002	-2.1	-0.8	3.9	0.4	0.44	0.43	-1.4	-0.6	-1.6	-1.1
December 2002	-10.7	-0.9	4.6	0.2	0.52	0.43	-4.1	-1.7	-11.3	-1.1
January 2003	13.5	-0.8	-5.3	-0.2	0.43	0.43	-2.0	-2.4	14.2	-0.9
February 2003	-1.9	-0.7	0.8	-0.7	0.44	0.43	-2.1	-2.8	-2.0	-0.7
March 2003	3.2	-0.6	-2.4	-1.2	0.42	0.43	-2.8	-2.9	3.1	-0.6
April 2003	-3.5	-0.5	-0.2	-1.5	0.43	0.43	-2.9	-2.8	-3.6	-0.4
May 2003	-1.3	-0.4	-2.7	-1.7	0.43	0.42	-4.4	-2.3	-1.6	-0.3
June 2003	-1.7	-0.4	-2.4	-1.7	0.42	0.42	-0.4	-1.8	-0.8	-0.3
July 2003	6.7	-0.5	-2.7	-1.6	0.39	0.41	-0.5	-1.4	6.7	-0.4
August 2003	-17.1	-0.5	-4.9	-1.4	0.44	0.41	0.6	-1.2	-16.9	-0.4
September 2003	13.0	-0.4	3.5	-1.1	0.41	0.41	-2.8	-1.2	12.2	-0.4

Table 3

All manufacturing industries except motor vehicle, parts and accessories industries

Period	Unadjusted				Seasonally adjusted					
	Shipments	Inventories	Unfilled orders	New orders	Shipments	Inventories	Unfilled orders	New orders		
\$ millions										
September 2002	36,732	58,668	45,264	35,771	35,787	58,808	44,932	35,056		
October 2002	38,137	58,850	44,804	37,678	35,834	59,130	44,532	35,434		
November 2002	35,610	59,468	44,269	35,075	35,260	59,403	44,195	34,923		
December 2002	33,564	58,700	42,681	31,975	35,740	59,410	42,967	34,511		
January 2003	33,713	59,016	40,809	31,841	36,284	59,376	41,307	34,624		
February 2003	32,607	60,350	40,801	32,598	35,825	59,728	41,027	35,546		
March 2003	36,354	60,983	40,743	36,296	35,735	59,873	40,886	35,593		
April 2003	34,945	61,095	39,685	33,887	34,914	60,409	39,950	33,979		
May 2003	35,981	60,246	38,515	34,811	34,350	59,963	38,451	32,850		
June 2003	35,388	59,055	37,694	34,566	34,328	59,323	37,904	33,781		
July 2003	34,060	58,383	37,623	33,990	34,631	59,036	37,462	34,190		
August 2003	34,307	58,097	37,036	33,720	33,966	58,251	36,796	33,299		
September 2003	36,911	57,210	37,552	37,427	35,213	57,696	37,269	35,686		
Month to month % change										
Shipments		Inventories		Inventory to shipments ratio		Unfilled orders		New orders		
Seasonally adjusted	Trend	Seasonally adjusted	Trend	Seasonally adjusted	Trend	Seasonally adjusted	Trend	Seasonally adjusted	Trend	
September 2002	1.5	0.5	-0.2	0.4	1.64	1.66	-1.6	-0.6	-3.2	0.1
October 2002	0.1	0.4	0.5	0.4	1.65	1.66	-0.9	-1.0	1.1	-0.1
November 2002	-1.6	0.2	0.5	0.3	1.68	1.66	-0.8	-1.4	-1.4	-0.3
December 2002	1.4	0.0	0.0	0.3	1.66	1.66	-2.8	-1.7	-1.2	-0.4
January 2003	1.5	-0.3	-0.1	0.2	1.64	1.67	-3.9	-2.0	0.3	-0.6
February 2003	-1.3	-0.5	0.6	0.2	1.67	1.68	-0.7	-2.2	2.7	-0.7
March 2003	-0.3	-0.6	0.2	0.0	1.68	1.69	-0.3	-2.2	0.1	-0.7
April 2003	-2.3	-0.7	0.9	-0.1	1.73	1.70	-2.3	-2.2	-4.5	-0.6
May 2003	-1.6	-0.6	-0.7	-0.3	1.75	1.71	-3.8	-2.0	-3.3	-0.4
June 2003	-0.1	-0.5	-1.1	-0.4	1.73	1.71	-1.4	-1.8	2.8	-0.1
July 2003	0.9	-0.4	-0.5	-0.5	1.70	1.71	-1.2	-1.4	1.2	0.1
August 2003	-1.9	-0.2	-1.3	-0.5	1.71	1.70	-1.8	-1.0	-2.6	0.2
September 2003	3.7	-0.1	-1.0	-0.5	1.64	1.70	1.3	-0.7	7.2	0.3

Table 4
Shipments by major group and selected industries

	NAICS Code	Unadjusted					
		Current periods					
		September 2003	August 2003	July 2003	June 2003		
		\$ millions					
Food manufacturing	311	5,586	5,326	5,345	5,450		
Beverage and tobacco product manufacturing	312	1,156	1,242	1,321	1,277		
Textile mills	313	256	240	194	254		
Textile product mills	314	190	182	187	202		
Clothing manufacturing	315	579	561	492	434		
Leather and allied product manufacturing	316	92	81	46	42		
Wood product manufacturing	321	2,632	2,488	2,375	2,386		
Paper manufacturing	322	2,656	2,638	2,614	2,559		
Printing and related support activities	323	885	788	781	803		
Petroleum and coal products manufacturing	324	2,947	3,139	2,940	2,743		
Chemical manufacturing	325	3,300	2,978	3,150	3,451		
Plastics and rubber products manufacturing	326	2,044	1,865	1,888	2,021		
Non-metallic mineral product manufacturing	327	1,228	1,166	1,188	1,168		
Primary metal manufacturing	331	2,851	2,525	2,520	2,629		
Fabricated metal product manufacturing	332	2,648	2,344	2,294	2,426		
Machinery manufacturing	333	2,025	1,683	1,851	1,904		
Computer and electronic product manufacturing	334	1,869	1,430	1,301	1,674		
Electrical equipment, appliance and component manufacturing	335	827	701	701	785		
Transportation equipment manufacturing	336	9,707	8,314	6,764	10,071		
Motor vehicle manufacturing	3361	5,364	4,370	3,456	5,702		
Motor vehicle body and trailer manufacturing	3362	210	183	210	233		
Motor vehicle parts manufacturing	3363	2,771	2,512	1,865	2,703		
Aerospace product and parts manufacturing	3364	856	844	851	957		
Railroad rolling stock manufacturing	3365	235	156	149	259		
Ship and boat building	3366	71	68	76	84		
Furniture and related product manufacturing	337	1,078	1,037	974	1,058		
Miscellaneous manufacturing	339	489	461	457	458		
Non-durable goods industries		19,114	18,479	18,466	18,801		
Durable goods industries		25,933	22,709	20,916	24,992		
Manufacturing		45,047	41,188	39,382	43,793		
		Previous year		Year-to-date		Annual	
		September 2002	August 2002	% Change from 2002	2003	% Change from 2001	2002
		\$ millions					
Food manufacturing	311	5,420	5,475	1.4	47,241	1.1	62,911
Beverage and tobacco product manufacturing	312	1,164	1,212	1.8	10,101	3.7	13,304
Textile mills	313	282	271	-10.3	2,200	-3.7	3,210
Textile product mills	314	215	224	-9.6	1,723	0.5	2,520
Clothing manufacturing	315	625	640	-8.2	4,613	-3.0	6,785
Leather and allied product manufacturing	316	98	96	-13.3	492	-9.9	777
Wood product manufacturing	321	2,430	2,553	-5.4	21,307	7.2	29,498
Paper manufacturing	322	2,851	2,857	-2.1	23,850	-4.4	32,726
Printing and related support activities	323	837	829	0.3	7,443	-4.1	10,061
Petroleum and coal products manufacturing	324	3,086	3,073	17.7	27,283	1.1	32,350
Chemical manufacturing	325	3,160	3,209	7.1	30,040	4.0	37,769
Plastics and rubber products manufacturing	326	1,953	2,048	0.9	17,587	6.7	23,002
Non-metallic mineral product manufacturing	327	1,165	1,174	5.6	9,070	9.7	11,586
Primary metal manufacturing	331	2,725	2,657	3.1	24,735	8.8	32,216
Fabricated metal product manufacturing	332	2,506	2,450	1.2	20,914	2.8	27,510
Machinery manufacturing	333	2,146	1,900	-5.5	17,050	1.3	24,113
Computer and electronic product manufacturing	334	1,922	1,662	-15.3	13,578	-16.5	21,255
Electrical equipment, appliance and component manufacturing	335	808	752	-4.1	6,749	-7.6	9,335
Transportation equipment manufacturing	336	10,220	10,469	-4.4	86,261	4.6	119,746
Motor vehicle manufacturing	3361	5,587	5,825	-4.2	47,745	5.7	65,797
Motor vehicle body and trailer manufacturing	3362	234	193	0.0	2,038	8.5	2,704
Motor vehicle parts manufacturing	3363	2,830	3,007	-5.0	23,572	10.2	32,741
Aerospace product and parts manufacturing	3364	1,072	980	-6.1	8,583	-15.0	12,472
Railroad rolling stock manufacturing	3365	272	237	-1.5	2,094	5.4	2,878
Ship and boat building	3366	65	76	-26.8	766	20.6	1,242
Furniture and related product manufacturing	337	1,042	1,104	0.9	9,281	2.4	12,303
Miscellaneous manufacturing	339	495	454	0.1	4,062	8.5	5,527
Non-durable goods industries		19,065	19,295	3.8	167,959	1.1	218,631
Durable goods industries		26,084	25,816	-3.5	217,622	2.5	299,874
Manufacturing		45,149	45,110	-0.4	385,581	1.9	518,505

Table 4

Shipments by major group and selected industries - concluded

	NAICS Code	Change from August	Seasonally adjusted						
			Current periods						
			September 2003	August 2003	July 2003	June 2003			
			\$ millions						
Food manufacturing	311	161	5,354	5,193	5,187	5,250			
Beverage and tobacco product manufacturing	312	-9	1,126	1,135	1,139	1,111			
Textile mills	313	2	237	235	236	238			
Textile product mills	314	2	181	180	195	191			
Clothing manufacturing	315	18	507	489	512	496			
Leather and allied product manufacturing	316	3	59	56	56	53			
Wood product manufacturing	321	93	2,544	2,451	2,353	2,251			
Paper manufacturing	322	-11	2,593	2,604	2,638	2,601			
Printing and related support activities	323	26	832	807	839	832			
Petroleum and coal products manufacturing	324	-119	2,844	2,962	2,885	2,824			
Chemical manufacturing	325	291	3,356	3,065	3,274	3,308			
Plastics and rubber products manufacturing	326	146	1,958	1,812	1,957	1,889			
Non-metallic mineral product manufacturing	327	33	1,028	994	1,036	1,016			
Primary metal manufacturing	331	135	2,762	2,626	2,705	2,614			
Fabricated metal product manufacturing	332	92	2,382	2,290	2,362	2,347			
Machinery manufacturing	333	71	1,896	1,826	1,947	1,830			
Computer and electronic product manufacturing	334	254	1,744	1,490	1,421	1,576			
Electrical equipment, appliance and component manufacturing	335	26	764	738	744	755			
Transportation equipment manufacturing	336	909	9,364	8,455	9,994	9,462			
Motor vehicle manufacturing	3361	722	5,170	4,447	5,782	5,236			
Motor vehicle body and trailer manufacturing	3362	-5	210	215	229	220			
Motor vehicle parts manufacturing	3363	174	2,627	2,453	2,541	2,564			
Aerospace product and parts manufacturing	3364	-23	874	898	1,006	993			
Railroad rolling stock manufacturing	3365	9	192	182	195	238			
Ship and boat building	3366	15	93	78	84	78			
Furniture and related product manufacturing	337	27	1,037	1,010	1,017	1,036			
Miscellaneous manufacturing	339	-6	442	449	459	447			
Non-durable goods industries		492	18,541	18,049	18,405	18,298			
Durable goods industries		1,651	24,469	22,817	24,549	23,830			
Manufacturing		2,143	43,009	40,866	42,954	42,128			
			Change from previous month		Trend change from previous month				
			September 2003	August 2003	July 2003	September 2003	August 2003	July 2003	June 2003
			percentage						
Food manufacturing	311	3.1	0.1	-1.2	-0.2	-0.3	-0.5	-0.5	-0.5
Beverage and tobacco product manufacturing	312	-0.8	-0.4	2.5	0.1	0.1	0.1	0.1	0.1
Textile mills	313	0.7	-0.2	-1.0	-0.3	-0.6	-0.8	-0.9	-0.9
Textile product mills	314	1.0	-7.9	2.2	-0.8	-0.8	-0.7	-0.6	-0.6
Clothing manufacturing	315	3.6	-4.6	3.2	-0.2	-0.5	-0.9	-1.3	-1.3
Leather and allied product manufacturing	316	5.6	0.5	4.0	0.9	0.9	0.6	0.1	0.1
Wood product manufacturing	321	3.8	4.2	4.5	1.9	2.0	1.8	1.2	1.2
Paper manufacturing	322	-0.4	-1.3	1.4	-0.6	-0.8	-0.9	-0.8	-0.8
Printing and related support activities	323	3.2	-3.8	0.8	-0.1	-0.2	-0.3	-0.4	-0.4
Petroleum and coal products manufacturing	324	-4.0	2.7	2.2	-0.7	-0.9	-1.2	-1.3	-1.3
Chemical manufacturing	325	9.5	-6.4	-1.0	-0.4	-0.5	-0.6	-0.7	-0.7
Plastics and rubber products manufacturing	326	8.1	-7.4	3.6	-0.4	-0.4	-0.3	-0.3	-0.3
Non-metallic mineral product manufacturing	327	3.3	-4.0	1.9	0.2	0.2	0.0	-0.1	-0.1
Primary metal manufacturing	331	5.1	-2.9	3.5	-0.4	-0.6	-0.9	-1.2	-1.2
Fabricated metal product manufacturing	332	4.0	-3.0	0.6	0.3	0.4	0.4	0.3	0.3
Machinery manufacturing	333	3.9	-6.2	6.4	-0.2	-0.1	-0.2	-0.3	-0.3
Computer and electronic product manufacturing	334	17.0	4.8	-9.8	0.1	0.0	-0.3	-0.6	-0.6
Electrical equipment, appliance and component manufacturing	335	3.6	-0.9	-1.4	0.3	0.3	0.1	0.0	0.0
Transportation equipment manufacturing	336	10.8	-15.4	5.6	-0.5	-0.6	-0.6	-0.6	-0.6
Motor vehicle manufacturing	3361	16.2	-23.1	10.4	-0.8	-0.7	-0.5	-0.2	-0.2
Motor vehicle body and trailer manufacturing	3362	-2.6	-5.8	3.9	-1.0	-1.1	-1.1	-1.1	-1.1
Motor vehicle parts manufacturing	3363	7.1	-3.4	-0.9	0.3	0.0	-0.5	-0.9	-0.9
Aerospace product and parts manufacturing	3364	-2.6	-10.8	1.4	-1.8	-1.8	-1.6	-1.3	-1.3
Railroad rolling stock manufacturing	3365	5.2	-6.6	-18.1	-3.7	-4.4	-4.6	-4.2	-4.2
Ship and boat building	3366	19.1	-6.4	7.5	-1.3	-1.4	-1.1	-0.4	-0.4
Furniture and related product manufacturing	337	2.7	-0.7	-1.8	0.1	0.0	-0.1	-0.2	-0.2
Miscellaneous manufacturing	339	-1.4	-2.3	2.8	-0.3	-0.3	-0.4	-0.5	-0.5
Non-durable goods industries		2.7	-1.9	0.6	-0.4	-0.5	-0.6	-0.7	-0.7
Durable goods industries		7.2	-7.1	3.0	0.0	-0.1	-0.2	-0.3	-0.3
Manufacturing		5.2	-4.9	2.0	-0.2	-0.3	-0.4	-0.5	-0.5

Table 5
Inventories by major group and selected industries

	NAICS Code	Unadjusted					
		Current periods					
		September 2003	August 2003	July 2003	June 2003		
		\$ millions					
Food manufacturing	311	4,972	4,859	4,814	4,794		
Beverage and tobacco product manufacturing	312	1,756	1,752	1,770	1,779		
Textile mills	313	433	444	459	454		
Textile product mills	314	310	304	308	314		
Clothing manufacturing	315	1,250	1,251	1,276	1,305		
Leather and allied product manufacturing	316	126	143	154	150		
Wood product manufacturing	321	3,955	3,985	4,193	4,270		
Paper manufacturing	322	3,505	3,527	3,595	3,621		
Printing and related support activities	323	690	707	714	701		
Petroleum and coal products manufacturing	324	1,537	1,724	1,780	1,680		
Chemical manufacturing	325	5,732	5,886	5,720	5,841		
Plastics and rubber products manufacturing	326	2,072	2,109	2,116	2,159		
Non-metallic mineral product manufacturing	327	1,162	1,175	1,212	1,221		
Primary metal manufacturing	331	4,534	4,657	4,722	4,746		
Fabricated metal product manufacturing	332	3,457	3,564	3,571	3,624		
Machinery manufacturing	333	4,310	4,334	4,363	4,496		
Computer and electronic product manufacturing	334	3,975	4,096	4,090	4,067		
Electrical equipment, appliance and component manufacturing	335	1,271	1,311	1,306	1,323		
Transportation equipment manufacturing	336	12,855	12,817	12,853	13,220		
Motor vehicle manufacturing	3361	1,300	1,210	1,229	1,327		
Motor vehicle body and trailer manufacturing	3362	441	433	444	467		
Motor vehicle parts manufacturing	3363	1,876	1,832	1,929	1,911		
Aerospace product and parts manufacturing	3364	7,832	7,941	7,842	8,029		
Railroad rolling stock manufacturing	3365	1,076	1,100	1,131	1,164		
Ship and boat building	3366	124	112	110	112		
Furniture and related product manufacturing	337	1,498	1,512	1,528	1,521		
Miscellaneous manufacturing	339	985	980	997	1,009		
Non-durable goods industries		21,134	21,455	21,431	21,492		
Durable goods industries		39,252	39,683	40,110	40,801		
Manufacturing		60,387	61,138	61,541	62,293		
		Previous year		Year-to-date		Average per month	
		September 2002	August 2002	% Change from 2002	Average 2003	% Change from 2001	2002
		\$ millions					
Food manufacturing	311	4,981	4,803	1.5	4,847	3.4	4,832
Beverage and tobacco product manufacturing	312	1,692	1,700	3.2	1,771	5.0	1,717
Textile mills	313	461	475	-8.6	454	-9.3	486
Textile product mills	314	327	333	-3.5	315	-13.1	324
Clothing manufacturing	315	1,197	1,209	3.2	1,227	-12.5	1,174
Leather and allied product manufacturing	316	141	151	-5.2	134	-8.9	137
Wood product manufacturing	321	4,172	4,122	1.7	4,596	-6.3	4,449
Paper manufacturing	322	3,474	3,491	0.3	3,581	-7.0	3,548
Printing and related support activities	323	703	707	-1.4	695	-5.7	702
Petroleum and coal products manufacturing	324	1,673	1,695	1.2	1,669	-10.6	1,614
Chemical manufacturing	325	5,328	5,309	12.8	5,883	4.0	5,277
Plastics and rubber products manufacturing	326	2,033	2,043	7.0	2,163	0.8	2,039
Non-metallic mineral product manufacturing	327	1,177	1,207	-0.4	1,216	2.0	1,206
Primary metal manufacturing	331	4,786	4,674	5.7	4,806	0.4	4,657
Fabricated metal product manufacturing	332	3,489	3,548	3.2	3,610	2.1	3,492
Machinery manufacturing	333	4,497	4,584	-3.0	4,473	1.2	4,609
Computer and electronic product manufacturing	334	4,322	4,500	-10.9	4,213	-22.5	4,654
Electrical equipment, appliance and component manufacturing	335	1,371	1,381	-3.5	1,345	-16.3	1,384
Transportation equipment manufacturing	336	13,763	13,736	-0.9	13,199	-1.3	13,441
Motor vehicle manufacturing	3361	1,797	1,729	-16.4	1,441	2.9	1,730
Motor vehicle body and trailer manufacturing	3362	412	411	12.8	467	-6.3	417
Motor vehicle parts manufacturing	3363	1,728	1,762	10.9	1,923	3.9	1,762
Aerospace product and parts manufacturing	3364	8,050	8,120	1.3	7,864	0.3	7,817
Railroad rolling stock manufacturing	3365	1,391	1,374	-9.3	1,184	-14.0	1,338
Ship and boat building	3366	126	112	-17.5	122	-35.7	145
Furniture and related product manufacturing	337	1,489	1,472	7.3	1,517	1.1	1,427
Miscellaneous manufacturing	339	1,116	1,092	-1.6	1,032	3.3	1,059
Non-durable goods industries		20,814	20,706	4.3	21,511	-0.7	20,676
Durable goods industries		41,379	41,524	-0.6	41,235	-4.7	41,553
Manufacturing		62,193	62,231	1.0	62,746	-3.4	62,229

Table 5
Inventories by major group and selected industries - concluded

	NAICS Code	Change from August	Seasonally adjusted						
			Current periods						
			September 2003	August 2003	July 2003	June 2003			
			\$ millions						
Food manufacturing	311	8	4,854	4,846	4,879	4,848			
Beverage and tobacco product manufacturing	312	15	1,817	1,802	1,790	1,740			
Textile mills	313	-8	442	450	466	458			
Textile product mills	314	6	311	305	310	313			
Clothing manufacturing	315	19	1,234	1,215	1,198	1,207			
Leather and allied product manufacturing	316	-5	124	129	131	132			
Wood product manufacturing	321	-63	4,259	4,321	4,518	4,536			
Paper manufacturing	322	25	3,581	3,557	3,593	3,637			
Printing and related support activities	323	-8	682	690	718	721			
Petroleum and coal products manufacturing	324	-122	1,548	1,669	1,723	1,649			
Chemical manufacturing	325	-67	5,821	5,888	5,835	5,985			
Plastics and rubber products manufacturing	326	-9	2,125	2,134	2,132	2,153			
Non-metallic mineral product manufacturing	327	14	1,198	1,185	1,196	1,197			
Primary metal manufacturing	331	-140	4,486	4,626	4,714	4,810			
Fabricated metal product manufacturing	332	-79	3,490	3,570	3,575	3,597			
Machinery manufacturing	333	9	4,306	4,297	4,362	4,541			
Computer and electronic product manufacturing	334	11	4,101	4,090	4,155	4,149			
Electrical equipment, appliance and component manufacturing	335	-23	1,288	1,311	1,300	1,300			
Transportation equipment manufacturing	336	-26	12,733	12,759	13,148	13,150			
Motor vehicle manufacturing	3361	60	1,271	1,211	1,279	1,390			
Motor vehicle body and trailer manufacturing	3362	4	455	451	458	465			
Motor vehicle parts manufacturing	3363	46	1,900	1,854	1,945	1,922			
Aerospace product and parts manufacturing	3364	-129	7,711	7,841	8,046	7,904			
Railroad rolling stock manufacturing	3365	-24	1,076	1,100	1,131	1,164			
Ship and boat building	3366	6	126	120	121	120			
Furniture and related product manufacturing	337	-10	1,487	1,497	1,526	1,516			
Miscellaneous manufacturing	339	3	979	975	991	997			
Non-durable goods industries		-164	21,305	21,469	21,576	21,636			
Durable goods industries		-285	39,562	39,847	40,683	40,999			
Manufacturing		-449	60,867	61,316	62,260	62,635			
			Change from previous month		Trend change from previous month				
			September 2003	August 2003	July 2003	September 2003	August 2003	July 2003	June 2003
			percentage						
Food manufacturing	311	0.2	-0.7	0.6	-0.1	-0.1	-0.2	-0.2	-0.2
Beverage and tobacco product manufacturing	312	0.8	0.6	2.9	0.6	0.7	0.7	0.7	0.7
Textile mills	313	-1.7	-3.5	1.7	-0.4	-0.3	-0.2	-0.1	-0.1
Textile product mills	314	2.0	-1.5	-1.0	-0.4	-0.5	-0.5	-0.5	-0.5
Clothing manufacturing	315	1.5	1.4	-0.7	0.3	0.3	0.2	0.2	0.2
Leather and allied product manufacturing	316	-3.8	-1.5	-1.3	-1.0	-1.0	-0.8	-0.6	-0.6
Wood product manufacturing	321	-1.5	-4.4	-0.4	-1.3	-1.4	-1.3	-1.0	-1.0
Paper manufacturing	322	0.7	-1.0	-1.2	0.2	0.2	0.2	0.3	0.3
Printing and related support activities	323	-1.1	-3.9	-0.4	-0.6	-0.5	-0.3	0.0	0.0
Petroleum and coal products manufacturing	324	-7.3	-3.1	4.5	-1.0	-0.8	-0.6	-0.3	-0.3
Chemical manufacturing	325	-1.1	0.9	-2.5	-0.4	-0.3	-0.2	0.1	0.1
Plastics and rubber products manufacturing	326	-0.4	0.1	-1.0	-0.4	-0.5	-0.4	-0.3	-0.3
Non-metallic mineral product manufacturing	327	1.2	-1.0	0.0	0.0	0.0	-0.1	-0.2	-0.2
Primary metal manufacturing	331	-3.0	-1.9	-2.0	-1.0	-1.3	-1.4	-1.3	-1.3
Fabricated metal product manufacturing	332	-2.2	-0.1	-0.6	-0.7	-0.7	-0.6	-0.4	-0.4
Machinery manufacturing	333	0.2	-1.5	-3.9	-0.6	-0.8	-0.9	-0.9	-0.9
Computer and electronic product manufacturing	334	0.3	-1.6	0.2	-0.4	-0.5	-0.6	-0.8	-0.8
Electrical equipment, appliance and component manufacturing	335	-1.7	0.8	0.0	-0.8	-1.0	-1.1	-1.0	-1.0
Transportation equipment manufacturing	336	-0.2	-3.0	0.0	-0.6	-0.7	-0.7	-0.8	-0.8
Motor vehicle manufacturing	3361	4.9	-5.3	-8.0	-2.1	-2.8	-3.4	-3.8	-3.8
Motor vehicle body and trailer manufacturing	3362	0.9	-1.7	-1.5	-0.7	-0.7	-0.6	-0.5	-0.5
Motor vehicle parts manufacturing	3363	2.5	-4.7	1.2	-0.3	-0.3	-0.3	-0.2	-0.2
Aerospace product and parts manufacturing	3364	-1.6	-2.6	1.8	-0.3	-0.3	-0.2	-0.1	-0.1
Railroad rolling stock manufacturing	3365	-2.2	-2.7	-2.8	-1.3	-1.6	-1.9	-2.2	-2.2
Ship and boat building	3366	5.0	-0.7	0.9	0.2	-0.1	-0.4	-0.8	-0.8
Furniture and related product manufacturing	337	-0.7	-1.9	0.7	-0.1	-0.2	-0.2	-0.2	-0.2
Miscellaneous manufacturing	339	0.3	-1.5	-0.6	-0.6	-0.9	-1.2	-1.4	-1.4
Non-durable goods industries		-0.8	-0.5	-0.3	-0.2	-0.2	-0.1	0.0	0.0
Durable goods industries		-0.7	-2.1	-0.8	-0.7	-0.8	-0.8	-0.8	-0.8
Manufacturing		-0.7	-1.5	-0.6	-0.5	-0.6	-0.6	-0.5	-0.5

Table 6
Unfilled orders by selected major group and industries

	NAICS Code	Unadjusted					
		Current periods					
		September 2003	August 2003	July 2003	June 2003		
		\$ millions					
Textile mills	313	212	224	209	213		
Textile product mills	314	59	49	60	55		
Clothing manufacturing	315	308	327	332	346		
Leather and allied product manufacturing	316	26	32	36	41		
Plastics and rubber products manufacturing	326	1,403	1,207	1,030	1,020		
Primary metal manufacturing	331	1,669	1,650	1,638	1,629		
Fabricated metal product manufacturing	332	2,984	2,806	2,745	2,705		
Machinery manufacturing	333	5,710	5,943	6,105	6,024		
Computer and electronic product manufacturing	334	4,037	3,642	3,630	3,618		
Electrical equipment, appliance and component manufacturing	335	936	965	952	920		
Transportation equipment manufacturing	336	18,648	18,611	19,260	19,617		
Motor vehicle manufacturing	3361	784	807	782	766		
Motor vehicle body and trailer manufacturing	3362	567	562	567	584		
Motor vehicle parts manufacturing	3363	785	795	825	817		
Aerospace product and parts manufacturing	3364	11,716	11,543	11,944	12,161		
Ship and boat building	3366	48	44	49	52		
Miscellaneous manufacturing	339	206	207	171	170		
Non-durable goods industries		3,189	2,995	2,867	2,816		
Durable goods industries		35,933	35,643	36,363	36,461		
Manufacturing		39,121	38,638	39,230	39,277		
		Previous year		Year-to-date		Average per month	
		September 2002	August 2002	% Change from 2002	Average 2003	% Change from 2001	2002
		\$ millions					
Textile mills	313	277	277	-17.0	232	9.3	276
Textile product mills	314	58	60	21.9	65	2.7	55
Clothing manufacturing	315	282	345	-4.3	325	-7.0	324
Leather and allied product manufacturing	316	27	34	-7.6	32	-18.2	31
Plastics and rubber products manufacturing	326	1,211	1,300	2.4	1,226	15.6	1,254
Primary metal manufacturing	331	1,795	1,760	-6.3	1,683	25.1	1,795
Fabricated metal product manufacturing	332	2,867	2,898	-2.8	2,810	0.3	2,878
Machinery manufacturing	333	6,643	6,972	-6.3	6,376	4.3	6,709
Computer and electronic product manufacturing	334	4,024	4,224	-0.5	3,890	-8.4	3,977
Electrical equipment, appliance and component manufacturing	335	1,011	1,027	2.0	987	-30.5	977
Transportation equipment manufacturing	336	26,117	26,416	-23.0	19,934	-8.7	25,566
Motor vehicle manufacturing	3361	1,226	1,190	-21.9	823	4.2	1,052
Motor vehicle body and trailer manufacturing	3362	580	588	2.1	608	8.4	590
Motor vehicle parts manufacturing	3363	834	749	22.5	835	24.2	729
Aerospace product and parts manufacturing	3364	17,541	17,866	-30.9	12,662	-12.0	17,877
Ship and boat building	3366	21	15	152.8	44	-37.0	18
Miscellaneous manufacturing	339	300	187	-15.8	184	-12.1	226
Non-durable goods industries		2,892	2,969	6.6	2,981	15.3	2,867
Durable goods industries		44,433	45,190	-14.6	37,616	-5.4	43,740
Manufacturing		47,324	48,159	-13.4	40,597	-4.3	46,606

Table 6

Unfilled orders by selected major group and industries - concluded

	NAICS Code	Change from August	Seasonally adjusted						
			Current periods						
			September 2003	August 2003	July 2003	June 2003			
			\$ millions						
Textile mills	313	-10	216	226	215	215			
Textile product mills	314	10	57	47	61	57			
Clothing manufacturing	315	-1	327	328	311	315			
Leather and allied product manufacturing	316	-2	29	31	27	29			
Plastics and rubber products manufacturing	326	175	1,408	1,233	1,148	1,248			
Primary metal manufacturing	331	66	1,696	1,630	1,627	1,593			
Fabricated metal product manufacturing	332	179	2,984	2,806	2,745	2,705			
Machinery manufacturing	333	-233	5,710	5,943	6,105	6,024			
Computer and electronic product manufacturing	334	395	4,037	3,642	3,630	3,618			
Electrical equipment, appliance and component manufacturing	335	-29	936	965	952	920			
Transportation equipment manufacturing	336	-101	18,309	18,411	19,054	19,689			
Motor vehicle manufacturing	3361	-23	784	807	782	766			
Motor vehicle body and trailer manufacturing	3362	17	612	596	586	590			
Motor vehicle parts manufacturing	3363	-22	773	795	811	834			
Aerospace product and parts manufacturing	3364	41	11,347	11,306	11,733	12,213			
Ship and boat building	3366	-2	45	47	49	49			
Miscellaneous manufacturing	339	-14	196	210	188	194			
Non-durable goods industries		177	3,198	3,021	2,985	3,036			
Durable goods industries		251	35,628	35,377	36,070	36,468			
Manufacturing		429	38,827	38,398	39,055	39,504			
			Change from previous month		Trend change from previous month				
			September 2003	August 2003	July 2003	September 2003	August 2003	July 2003	June 2003
			percentage						
Textile mills	313	-4.6	5.1	-0.1	-0.1	-0.7	-1.6	-2.6	
Textile product mills	314	22.4	-22.8	7.1	-3.3	-3.6	-3.9	-3.9	
Clothing manufacturing	315	-0.3	5.4	-1.2	0.4	0.6	0.8	1.1	
Leather and allied product manufacturing	316	-6.2	13.7	-3.9	1.5	1.0	0.1	-1.1	
Plastics and rubber products manufacturing	326	14.1	7.4	-8.0	0.1	-0.2	-0.5	-0.8	
Primary metal manufacturing	331	4.1	0.2	2.1	0.8	0.5	0.0	-0.6	
Fabricated metal product manufacturing	332	6.4	2.2	1.5	-0.3	-0.3	-0.3	-0.4	
Machinery manufacturing	333	-3.9	-2.7	1.4	-1.1	-1.6	-1.9	-2.1	
Computer and electronic product manufacturing	334	10.8	0.3	0.3	-0.6	-1.1	-1.7	-2.2	
Electrical equipment, appliance and component manufacturing	335	-3.0	1.3	3.5	-1.3	-1.5	-1.4	-1.2	
Transportation equipment manufacturing	336	-0.6	-3.4	-3.2	-1.0	-1.4	-1.9	-2.4	
Motor vehicle manufacturing	3361	-2.8	3.2	2.1	-0.8	-0.5	-0.8	-1.7	
Motor vehicle body and trailer manufacturing	3362	2.8	1.7	-0.8	1.1	0.9	0.5	0.0	
Motor vehicle parts manufacturing	3363	-2.7	-2.0	-2.8	-1.5	-1.8	-1.9	-1.9	
Aerospace product and parts manufacturing	3364	0.4	-3.6	-3.9	-1.4	-2.0	-2.7	-3.3	
Ship and boat building	3366	-4.1	-4.7	-0.5	-0.3	0.7	1.9	3.8	
Miscellaneous manufacturing	339	-6.8	11.6	-3.0	1.0	1.3	1.2	0.6	
Non-durable goods industries		5.9	1.2	-1.7	0.5	0.5	0.3	0.1	
Durable goods industries		0.7	-1.9	-1.1	-0.8	-1.1	-1.5	-1.9	
Manufacturing		1.1	-1.7	-1.1	-0.7	-1.0	-1.4	-1.8	

Table 7
New orders by selected major group and industries

	NAICS Code	Unadjusted					
		Current periods					
		September 2003	August 2003	July 2003	June 2003		
		\$ millions					
Textile mills	313	245	254	190	247		
Textile product mills	314	200	172	192	194		
Clothing manufacturing	315	560	556	477	431		
Leather and allied product manufacturing	316	87	77	41	46		
Plastics and rubber products manufacturing	326	2,241	2,042	1,897	1,843		
Primary metal manufacturing	331	2,870	2,536	2,529	2,568		
Fabricated metal product manufacturing	332	2,826	2,405	2,335	2,426		
Machinery manufacturing	333	1,792	1,520	1,933	1,690		
Computer and electronic product manufacturing	334	2,264	1,441	1,313	1,367		
Electrical equipment, appliance and component manufacturing	335	798	714	732	701		
Transportation equipment manufacturing	336	9,744	7,665	6,407	9,936		
Motor vehicle manufacturing	3361	5,342	4,395	3,473	5,710		
Motor vehicle body and trailer manufacturing	3362	216	178	193	197		
Motor vehicle parts manufacturing	3363	2,762	2,481	1,873	2,698		
Aerospace product and parts manufacturing	3364	1,029	444	633	478		
Ship and boat building	3366	75	63	73	82		
Miscellaneous manufacturing	339	487	497	459	460		
Non-durable goods industries		19,308	18,606	18,518	18,747		
Durable goods industries		26,222	21,990	20,818	24,226		
Manufacturing		45,530	40,596	39,335	42,973		
		Previous year		Year-to-date		Annual	
		September 2002	August 2002	% Change from 2002	2003	% Change from 2001	2002
		\$ millions					
Textile mills	313	280	274	-14.4	2,151	-0.8	3,253
Textile product mills	314	213	223	-9.8	1,722	2.0	2,527
Clothing manufacturing	315	562	630	-7.4	4,646	-2.2	6,769
Leather and allied product manufacturing	316	91	88	-12.2	496	-10.6	770
Plastics and rubber products manufacturing	326	1,865	2,161	1.6	17,629	6.2	23,082
Primary metal manufacturing	331	2,761	2,619	0.7	24,606	10.9	32,658
Fabricated metal product manufacturing	332	2,475	2,494	1.4	21,114	2.6	27,584
Machinery manufacturing	333	1,818	1,919	-7.5	16,263	-3.3	23,507
Computer and electronic product manufacturing	334	1,722	1,627	-17.6	13,518	-8.9	21,693
Electrical equipment, appliance and component manufacturing	335	792	807	-4.3	6,682	1.6	9,275
Transportation equipment manufacturing	336	9,921	11,278	-9.8	81,331	3.6	117,133
Motor vehicle manufacturing	3361	5,623	5,957	-5.2	47,543	6.4	65,879
Motor vehicle body and trailer manufacturing	3362	225	193	-2.4	2,031	8.7	2,741
Motor vehicle parts manufacturing	3363	2,915	3,039	-6.2	23,489	11.0	33,006
Aerospace product and parts manufacturing	3364	747	881	-40.5	4,298	-39.5	9,017
Ship and boat building	3366	71	75	-24.8	792	24.0	1,248
Miscellaneous manufacturing	339	608	470	-1.7	4,054	8.5	5,508
Non-durable goods industries		18,982	19,432	3.8	168,179	1.0	218,796
Durable goods industries		25,326	26,690	-6.3	211,988	3.2	297,812
Manufacturing		44,308	46,122	-2.1	380,167	2.3	516,608

Table 7

New orders by selected major group and industries - concluded

	NAICS Code	Change from August	Seasonally adjusted						
			Current periods						
			September 2003	August 2003	July 2003	June 2003			
\$ millions									
Textile mills	313	-20	227	246	236	236			
Textile product mills	314	26	192	166	199	183			
Clothing manufacturing	315	0	506	506	509	490			
Leather and allied product manufacturing	316	-3	57	60	54	56			
Plastics and rubber products manufacturing	326	236	2,133	1,897	1,857	1,840			
Primary metal manufacturing	331	198	2,828	2,630	2,738	2,601			
Fabricated metal product manufacturing	332	210	2,560	2,350	2,402	2,347			
Machinery manufacturing	333	0	1,663	1,663	2,029	1,617			
Computer and electronic product manufacturing	334	637	2,138	1,501	1,434	1,269			
Electrical equipment, appliance and component manufacturing	335	-15	735	751	776	671			
Transportation equipment manufacturing	336	1,450	9,263	7,812	9,358	9,459			
Motor vehicle manufacturing	3361	674	5,147	4,472	5,798	5,243			
Motor vehicle body and trailer manufacturing	3362	1	226	225	224	210			
Motor vehicle parts manufacturing	3363	168	2,605	2,437	2,517	2,551			
Aerospace product and parts manufacturing	3364	445	915	470	527	626			
Ship and boat building	3366	15	91	76	83	79			
Miscellaneous manufacturing	339	-42	428	470	453	459			
Non-durable goods industries		633	18,718	18,085	18,354	18,377			
Durable goods industries		2,596	24,720	22,124	24,152	23,199			
Manufacturing		3,229	43,438	40,209	42,506	41,576			
			Change from previous month		Trend change from previous month				
			September 2003	August 2003	July 2003	September 2003	August 2003	July 2003	June 2003
percentage									
Textile mills	313	-8.0	4.5	0.0	0.3	0.2	0.2	0.0	0.0
Textile product mills	314	15.7	-16.7	8.6	-0.7	-0.7	-0.7	-0.8	-0.8
Clothing manufacturing	315	0.0	-0.6	3.8	-0.2	-0.7	-1.1	-1.4	-1.4
Leather and allied product manufacturing	316	-4.3	9.4	-2.9	1.1	1.3	1.3	0.9	0.9
Plastics and rubber products manufacturing	326	12.4	2.2	0.9	-0.2	-0.2	-0.2	-0.2	-0.2
Primary metal manufacturing	331	7.5	-3.9	5.2	-0.2	-0.4	-0.6	-0.8	-0.8
Fabricated metal product manufacturing	332	8.9	-2.2	2.4	0.2	0.4	0.5	0.5	0.5
Machinery manufacturing	333	0.0	-18.0	25.5	1.5	1.0	0.8	-0.5	-0.5
Computer and electronic product manufacturing	334	42.4	4.7	12.9	1.5	1.6	1.0	0.0	0.0
Electrical equipment, appliance and component manufacturing	335	-2.0	-3.3	15.7	0.5	0.2	-0.1	-0.3	-0.3
Transportation equipment manufacturing	336	18.6	-16.5	-1.1	0.3	0.4	0.5	0.6	0.6
Motor vehicle manufacturing	3361	15.1	-22.9	10.6	-0.8	-0.6	-0.3	0.0	0.0
Motor vehicle body and trailer manufacturing	3362	0.6	0.6	6.9	-0.4	0.0	0.1	-0.1	-0.1
Motor vehicle parts manufacturing	3363	6.9	-3.2	-1.3	0.4	0.0	-0.5	-0.9	-0.9
Aerospace product and parts manufacturing	3364	94.6	-10.7	-15.9	8.3	10.6	12.8	14.1	14.1
Ship and boat building	3366	20.1	-8.8	6.0	-1.9	-2.1	-2.1	-1.7	-1.7
Miscellaneous manufacturing	339	-9.0	3.8	-1.2	-0.4	-0.3	-0.1	0.0	0.0
Non-durable goods industries		3.5	-1.5	-0.1	-0.3	-0.5	-0.6	-0.6	-0.6
Durable goods industries		11.7	-8.4	4.1	0.5	0.5	0.5	0.2	0.2
Manufacturing		8.0	-5.4	2.2	0.1	0.1	0.0	-0.2	-0.2

Table 8a
Shipments for selected industries, unadjusted

	NAICS Code	Current periods			
		September 2003	August 2003	July 2003	June 2003
\$ millions					
Food manufacturing	311				
Animal food manufacturing	3111	445	411	434	407
Starch and vegetable fat and oil manufacturing	31122	277	254	261	238
Sugar and confectionery product manufacturing	3113	398	365	328	327
Fruit and vegetable preserving and specialty food manufacturing	3114	500	459	454	446
Dairy product manufacturing	3115	956	952	980	984
Meat product manufacturing	3116	1,351	1,348	1,329	1,303
Cookie, cracker and pasta manufacturing	31182	117	111	104	108
Other food manufacturing	3119	554	501	504	530
Beverage and tobacco product manufacturing	312				
Soft drink and ice manufacturing	31211	342	380	408	390
Breweries	31212	343	396	448	413
Wineries	31213	54	50	50	50
Distilleries	31214	81	71	69	70
Tobacco manufacturing	3122	337	345	346	354
Textile mills	313				
Fibre, yarn and thread mills	3131	33	31	24	33
Fabric mills	3132	172	160	127	167
Textile and fabric finishing and fabric coating	3133	51	49	43	54
Textile product mills	314				
Carpet and rug mills	31411	67	64	62	73
Textile bag and canvas mills	31491	28	26	33	31
Clothing manufacturing	315				
Hosiery and sock mills	31511	40	43	39	38
Other clothing knitting mills	31519	56	52	48	41
Men's and boys' cut and sew clothing manufacturing	31522	200	185	160	146
Women's and girls' cut and sew clothing manufacturing	31523	199	203	173	139
Clothing accessories and other clothing manufacturing	3159	21	19	20	20
Leather and allied product manufacturing	316				
Footwear manufacturing	3162	73	64	30	24
Wood product manufacturing	321				
Sawmills and wood preservation	3211	1,354	1,288	1,236	1,273
Veneer, plywood and engineered wood product manufacturing	3212	738	671	625	574
Other wood product manufacturing	3219	540	530	514	540
Paper manufacturing	322				
Pulp, paper and paperboard mills	3221	1,831	1,860	1,812	1,768
Paperboard container manufacturing	32221	465	438	454	441
Paper bag and coated and treated paper manufacturing	32222	175	158	158	167
Other converted paper product manufacturing	32229	144	134	137	132
Printing and related support activities	323				
Printing	32311	843	750	742	764
Support activities for printing	32312	42	38	39	39
Petroleum and coal products manufacturing	324				
Petroleum refineries	32411	2,611	2,846	2,641	2,465
Chemical manufacturing	325				
Other basic inorganic chemical manufacturing	32518	236	236	244	241
Other basic organic chemical manufacturing	32519	176	211	198	221
Resin, synthetic rubber, and artificial and synthetic fibres and filaments manufacturing	3252	524	493	499	530
Pesticide and other agricultural chemical manufacturing	32532	12	9	30	82
Pharmaceutical and medicine manufacturing	3254	754	605	714	798
Paint and coating manufacturing	32551	180	169	176	188
Adhesive manufacturing	32552	62	59	60	57
Soap and cleaning compound manufacturing	32561	116	116	117	119
Toilet preparation manufacturing	32562	176	153	143	158
Printing ink manufacturing	32591	36	36	33	35
All other chemical product manufacturing	32599	383	319	345	333

Table 8a

Shipments for selected industries, unadjusted - continued

	NAICS Code	Current periods			
		September 2003	August 2003	July 2003	June 2003
		\$ millions			
Plastics and rubber products manufacturing	326				
Plastic pipe, pipe fitting and unsupported profile shape manufacturing	32612	181	179	175	168
Polystyrene foam product manufacturing	32614	34	34	35	34
Other plastic product manufacturing	32619	849	770	777	850
Other rubber product manufacturing	32629	220	198	177	200
Non-metallic mineral product manufacturing	327				
Clay product and refractory manufacturing	3271	57	57	63	65
Glass and glass product manufacturing	3272	229	219	206	227
Cement manufacturing	32731	155	155	161	154
Ready-mix concrete manufacturing	32732	288	265	277	262
Other concrete product manufacturing	32739	128	126	119	113
Abrasive product manufacturing	32791	28	27	32	32
All other non-metallic mineral product manufacturing	32799	141	119	116	112
Primary metal manufacturing	331				
Iron and steel mills and ferro-alloy manufacturing	3311	890	797	812	843
Iron and steel pipes and tubes manufacturing from purchased steel	33121	239	228	213	215
Foundries	3315	290	248	215	280
Fabricated metal product manufacturing	332				
Cutlery and hand tool manufacturing	3322	45	38	41	43
Plate work and fabricated structural product manufacturing	33231	429	395	389	367
Power boiler and heat exchanger manufacturing	33241	161	101	125	186
Spring and wire product manufacturing	3326	111	104	97	113
Coating, engraving, heat treating and allied activities	3328	230	203	188	207
Other fabricated metal product manufacturing	3329	259	237	230	248
Machinery manufacturing	333				
Agricultural implement manufacturing	33311	170	130	152	166
Ventilation, heating, air-conditioning and commercial refrigeration equipment manufacturing	3334	215	186	177	182
All other general-purpose machinery manufacturing	33399	155	133	132	120
Computer and electronic product manufacturing	334				
Computer and peripheral equipment manufacturing	3341	401	286	256	383
Communications equipment manufacturing	3342	528	385	348	559
Audio and video equipment manufacturing	3343	17	14	14	15
Electrical equipment, appliance and component manufacturing	335				
Lighting fixture manufacturing	33512	74	70	68	68
Small electrical appliance manufacturing	33521	24	19	19	19
Major appliance manufacturing	33522	118	109	113	133
Battery manufacturing	33591	13	12	12	12
Communication and energy wire and cable manufacturing	33592	115	99	91	106
All other electrical equipment and component manufacturing	33599	71	67	65	66
Transportation equipment manufacturing	336				
Motor vehicle manufacturing	3361	5,364	4,370	3,456	5,702
Motor vehicle parts manufacturing	3363	2,771	2,512	1,865	2,703
Aerospace product and parts manufacturing	3364	856	844	851	957
Railroad rolling stock manufacturing	3365	235	156	149	259
Ship and boat building	3366	71	68	76	84
Furniture and related product manufacturing	337				
Household and institutional furniture and kitchen cabinet manufacturing	3371	586	568	524	592
Office furniture (including fixtures) manufacturing	3372	410	387	367	389
Miscellaneous manufacturing	339				
Medical equipment and supplies manufacturing	3391	130	109	113	129
Other miscellaneous manufacturing	3399	359	352	344	329

Table 8a

Shipments for selected industries, unadjusted - continued

	NAICS Code	Previous year		Year-to-date		Annual	
		September 2002	August 2002	% Change from 2002	2003	% Change from 2001	2002
\$ millions							
Food manufacturing	311						
Animal food manufacturing	3111	442	453	-3.6	3,851	6.1	5,392
Starch and vegetable fat and oil manufacturing	31122	250	254	11.5	2,298	3.3	2,811
Sugar and confectionery product manufacturing	3113	366	343	9.5	3,004	1.4	3,846
Fruit and vegetable preserving and specialty food manufacturing	3114	556	500	-4.2	4,198	-1.7	5,923
Dairy product manufacturing	3115	816	829	12.8	8,264	1.2	9,887
Meat product manufacturing	3116	1,421	1,500	-6.6	12,374	-6.6	17,674
Cookie, cracker and pasta manufacturing	31182	130	117	-5.1	995	-7.7	1,425
Other food manufacturing	3119	504	503	7.3	4,484	11.9	5,723
Beverage and tobacco product manufacturing	312						
Soft drink and ice manufacturing	31211	308	372	8.8	3,024	5.2	3,688
Breweries	31212	336	408	-0.5	3,054	2.0	4,103
Wineries	31213	54	50	2.0	411	11.8	585
Distilleries	31214	115	102	-14.8	750	9.1	1,265
Tobacco manufacturing	3122	350	279	2.6	2,862	1.3	3,663
Textile mills	313						
Fibre, yarn and thread mills	3131	44	38	-16.5	299	-5.0	465
Fabric mills	3132	178	176	-8.1	1,451	-3.2	2,067
Textile and fabric finishing and fabric coating	3133	60	58	-12.8	450	-4.1	678
Textile product mills	314						
Carpet and rug mills	31411	75	77	-5.5	629	-3.6	890
Textile bag and canvas mills	31491	32	41	-30.7	237	7.2	429
Clothing manufacturing	315						
Hosiery and sock mills	31511	42	42	-2.5	352	0.4	511
Other clothing knitting mills	31519	58	51	18.3	401	0.1	519
Men's and boys' cut and sew clothing manufacturing	31522	219	204	-9.4	1,551	-4.9	2,360
Women's and girls' cut and sew clothing manufacturing	31523	207	232	-7.5	1,596	-3.7	2,221
Clothing accessories and other clothing manufacturing	3159	22	22	-2.0	173	-4.0	242
Leather and allied product manufacturing	316						
Footwear manufacturing	3162	75	72	-13.8	320	-5.8	518
Wood product manufacturing	321						
Sawmills and wood preservation	3211	1,383	1,511	-16.0	11,542	4.4	17,697
Veneer, plywood and engineered wood product manufacturing	3212	537	532	11.5	5,224	6.1	6,230
Other wood product manufacturing	3219	510	510	11.4	4,541	18.2	5,571
Paper manufacturing	322						
Pulp, paper and paperboard mills	3221	2,025	2,074	-4.9	16,668	-6.8	23,505
Paperboard container manufacturing	32221	458	411	12.0	4,016	3.4	4,914
Paper bag and coated and treated paper manufacturing	32222	188	185	-7.0	1,566	3.0	2,212
Other converted paper product manufacturing	32229	141	141	1.9	1,214	0.6	1,610
Printing and related support activities	323						
Printing	32311	801	789	0.3	7,073	-1.4	9,557
Support activities for printing	32312	36	40	1.3	370	-37.0	504
Petroleum and coal products manufacturing	324						
Petroleum refineries	32411	2,749	2,741	20.0	25,098	0.8	29,276
Chemical manufacturing	325						
Other basic inorganic chemical manufacturing	32518	233	232	7.2	2,158	6.8	2,726
Other basic organic chemical manufacturing	32519	187	204	7.9	1,973	1.8	2,521
Resin, synthetic rubber, and artificial and synthetic fibres and filaments manufacturing	3252	548	542	2.7	4,945	0.6	6,379
Pesticide and other agricultural chemical manufacturing	32532	6	8	28.7	416	-13.4	341
Pharmaceutical and medicine manufacturing	3254	775	708	6.4	6,459	22.0	8,402
Paint and coating manufacturing	32551	156	168	2.2	1,506	-1.4	1,875
Adhesive manufacturing	32552	52	55	5.6	515	12.2	624
Soap and cleaning compound manufacturing	32561	128	132	-6.4	1,072	-7.5	1,516
Toilet preparation manufacturing	32562	126	152	10.5	1,368	3.2	1,663
Printing ink manufacturing	32591	37	35	1.3	315	13.3	419
All other chemical product manufacturing	32599	340	372	3.2	3,133	2.6	4,104

Table 8a

Shipments for selected industries, unadjusted - continued

	NAICS Code	Previous year		Year-to-date		Annual	
		September 2002	August 2002	% Change from 2002	2003	% Change from 2001	2002
\$ millions							
Plastics and rubber products manufacturing	326						
Plastic pipe, pipe fitting and unsupported profile shape manufacturing	32612	162	168	6.2	1,420	4.2	1,758
Polystyrene foam product manufacturing	32614	29	28	9.5	265	3.8	321
Other plastic product manufacturing	32619	801	866	0.4	7,189	8.6	9,435
Other rubber product manufacturing	32629	210	204	-0.5	1,818	0.0	2,409
Non-metallic mineral product manufacturing	327						
Clay product and refractory manufacturing	3271	54	53	11.3	510	5.0	613
Glass and glass product manufacturing	3272	219	226	3.5	1,875	6.2	2,396
Cement manufacturing	32731	151	160	0.0	1,069	5.7	1,425
Ready-mix concrete manufacturing	32732	252	264	4.5	1,795	9.1	2,337
Other concrete product manufacturing	32739	125	117	5.4	860	1.3	1,127
Abrasive product manufacturing	32791	38	38	-3.5	309	36.5	450
All other non-metallic mineral product manufacturing	32799	132	124	12.4	1,060	28.8	1,314
Primary metal manufacturing	331						
Iron and steel mills and ferro-alloy manufacturing	3311	894	851	3.2	7,995	11.3	10,368
Iron and steel pipes and tubes manufacturing from purchased steel	33121	209	218	12.0	2,091	1.4	2,529
Foundries	3315	271	266	2.5	2,430	8.7	3,161
Fabricated metal product manufacturing	332						
Cutlery and hand tool manufacturing	3322	37	36	17.2	391	6.3	467
Plate work and fabricated structural product manufacturing	33231	394	404	-1.8	3,154	0.4	4,286
Power boiler and heat exchanger manufacturing	33241	107	79	38.3	1,039	7.6	1,022
Spring and wire product manufacturing	3326	130	128	-9.2	1,013	9.8	1,477
Coating, engraving, heat treating and allied activities	3328	236	230	0.9	1,971	20.0	2,633
Other fabricated metal product manufacturing	3329	268	277	-2.1	2,238	9.5	3,005
Machinery manufacturing	333						
Agricultural implement manufacturing	33311	173	176	-13.7	1,576	6.1	2,323
Ventilation, heating, air-conditioning and commercial refrigeration equipment manufacturing	3334	197	205	-4.0	1,642	9.7	2,298
All other general-purpose machinery manufacturing	33399	201	185	-23.9	1,262	15.4	2,275
Computer and electronic product manufacturing	334						
Computer and peripheral equipment manufacturing	3341	378	381	-24.8	2,769	-16.6	4,699
Communications equipment manufacturing	3342	651	484	-29.6	3,821	-23.7	7,137
Audio and video equipment manufacturing	3343	17	16	-7.7	141	-7.2	218
Electrical equipment, appliance and component manufacturing	335						
Lighting fixture manufacturing	33512	76	73	-7.1	610	-3.7	877
Small electrical appliance manufacturing	33521	22	22	2.2	180	-9.3	250
Major appliance manufacturing	33522	125	117	-4.8	1,112	12.4	1,529
Battery manufacturing	33591	11	10	5.6	108	-15.1	139
Communication and energy wire and cable manufacturing	33592	119	107	-21.4	884	-42.2	1,436
All other electrical equipment and component manufacturing	33599	68	66	3.5	599	-2.3	772
Transportation equipment manufacturing	336						
Motor vehicle manufacturing	3361	5,587	5,825	-4.2	47,745	5.7	65,797
Motor vehicle parts manufacturing	3363	2,830	3,007	-5.0	23,572	10.2	32,741
Aerospace product and parts manufacturing	3364	1,072	980	-6.1	8,583	-15.0	12,472
Railroad rolling stock manufacturing	3365	272	237	-1.5	2,094	5.4	2,878
Ship and boat building	3366	65	76	-26.8	766	20.6	1,242
Furniture and related product manufacturing	337						
Household and institutional furniture and kitchen cabinet manufacturing	3371	576	609	-4.2	5,152	7.7	7,133
Office furniture (including fixtures) manufacturing	3372	391	415	9.3	3,467	-6.0	4,319
Miscellaneous manufacturing	339						
Medical equipment and supplies manufacturing	3391	122	106	-3.4	1,037	5.3	1,432
Other miscellaneous manufacturing	3399	373	349	1.4	3,024	9.7	4,095

Table 8b
Inventory owned for selected industries, unadjusted

	NAICS Code	Current periods			
		September 2003	August 2003	July 2003	June 2003
\$ millions					
Food manufacturing	311				
Animal food manufacturing	3111	275	279	286	273
Starch and vegetable fat and oil manufacturing	31122	169	151	173	171
Sugar and confectionery product manufacturing	3113	373	389	387	389
Fruit and vegetable preserving and specialty food manufacturing	3114	955	881	832	829
Dairy product manufacturing	3115	787	774	795	803
Meat product manufacturing	3116	814	803	791	779
Cookie, cracker and pasta manufacturing	31182	121	123	123	130
Other food manufacturing	3119	516	509	496	484
Beverage and tobacco product manufacturing	312				
Soft drink and ice manufacturing	31211	262	262	278	275
Breweries	31212	168	176	177	180
Wineries	31213	223	212	217	219
Distilleries	31214	526	531	529	528
Tobacco manufacturing	3122	577	570	569	577
Textile mills	313				
Fibre, yarn and thread mills	3131	47	50	54	54
Fabric mills	3132	319	327	338	336
Textile and fabric finishing and fabric coating	3133	68	67	67	64
Textile product mills	314				
Carpet and rug mills	31411	85	82	83	84
Textile bag and canvas mills	31491	45	46	44	46
Clothing manufacturing	315				
Hosiery and sock mills	31511	156	157	155	160
Other clothing knitting mills	31519	118	124	132	135
Men's and boys' cut and sew clothing manufacturing	31522	424	392	420	446
Women's and girls' cut and sew clothing manufacturing	31523	361	373	363	355
Clothing accessories and other clothing manufacturing	3159	81	84	81	78
Leather and allied product manufacturing	316				
Footwear manufacturing	3162	86	102	114	107
Wood product manufacturing	321				
Sawmills and wood preservation	3211	2,484	2,524	2,676	2,711
Veneer, plywood and engineered wood product manufacturing	3212	623	628	660	682
Other wood product manufacturing	3219	849	834	857	877
Paper manufacturing	322				
Pulp, paper and paperboard mills	3221	2,441	2,472	2,497	2,514
Paperboard container manufacturing	32221	546	538	562	563
Paper bag and coated and treated paper manufacturing	32222	273	274	278	276
Other converted paper product manufacturing	32229	149	152	157	158
Printing and related support activities	323				
Printing	32311	682	699	706	693
Support activities for printing	32312	8	8	8	8
Petroleum and coal products manufacturing	324				
Petroleum refineries	32411	1,255	1,432	1,475	1,372
Chemical manufacturing	325				
Other basic inorganic chemical manufacturing	32518	193	190	192	194
Other basic organic chemical manufacturing	32519	160	150	158	152
Resin, synthetic rubber, and artificial and synthetic fibres and filaments manufacturing	3252	548	548	574	580
Pesticide and other agricultural chemical manufacturing	32532	119	126	119	108
Pharmaceutical and medicine manufacturing	3254	3,076	3,173	2,986	3,095
Paint and coating manufacturing	32551	250	259	261	271
Adhesive manufacturing	32552	88	87	89	91
Soap and cleaning compound manufacturing	32561	98	103	107	107
Toilet preparation manufacturing	32562	183	193	192	186
Printing ink manufacturing	32591	53	56	57	54
All other chemical product manufacturing	32599	295	295	304	316

Table 8b

Inventory owned for selected industries, unadjusted - continued

	NAICS Code	Current periods			
		September 2003	August 2003	July 2003	June 2003
		\$ millions			
Plastics and rubber products manufacturing	326				
Plastic pipe, pipe fitting and unsupported profile shape manufacturing	32612	202	209	218	226
Polystyrene foam product manufacturing	32614	38	38	35	37
Other plastic product manufacturing	32619	856	867	866	893
Other rubber product manufacturing	32629	167	174	181	182
Non-metallic mineral product manufacturing	327				
Clay product and refractory manufacturing	3271	78	83	87	84
Glass and glass product manufacturing	3272	275	274	277	275
Cement manufacturing	32731	148	153	172	185
Ready-mix concrete manufacturing	32732	102	103	104	101
Other concrete product manufacturing	32739	99	100	99	93
Abrasive product manufacturing	32791	112	116	121	124
All other non-metallic mineral product manufacturing	32799	146	145	145	144
Primary metal manufacturing	331				
Iron and steel mills and ferro-alloy manufacturing	3311	1,941	1,998	2,010	2,002
Iron and steel pipes and tubes manufacturing from purchased steel	33121	549	547	581	603
Foundries	3315	254	265	279	293
Fabricated metal product manufacturing	332				
Cutlery and hand tool manufacturing	3322	77	78	75	79
Plate work and fabricated structural product manufacturing	33231	476	481	480	495
Power boiler and heat exchanger manufacturing	33241	152	164	155	164
Spring and wire product manufacturing	3326	116	125	135	144
Coating, engraving, heat treating and allied activities	3328	152	162	154	147
Other fabricated metal product manufacturing	3329	552	560	569	552
Machinery manufacturing	333				
Agricultural implement manufacturing	33311	491	486	480	524
Ventilation, heating, air-conditioning and commercial refrigeration equipment manufacturing	3334	346	361	369	378
All other general-purpose machinery manufacturing	33399	435	435	428	413
Computer and electronic product manufacturing	334				
Computer and peripheral equipment manufacturing	3341	545	557	548	565
Communications equipment manufacturing	3342	1,974	2,022	2,031	1,992
Audio and video equipment manufacturing	3343	52	52	50	53
Electrical equipment, appliance and component manufacturing	335				
Lighting fixture manufacturing	33512	132	132	135	129
Small electrical appliance manufacturing	33521	50	46	48	47
Major appliance manufacturing	33522	164	168	162	176
Battery manufacturing	33591	70	69	68	64
Communication and energy wire and cable manufacturing	33592	245	261	260	264
All other electrical equipment and component manufacturing	33599	108	109	109	106
Transportation equipment manufacturing	336				
Motor vehicle manufacturing	3361	1,300	1,210	1,229	1,327
Motor vehicle parts manufacturing	3363	1,876	1,832	1,929	1,911
Aerospace product and parts manufacturing	3364	7,832	7,941	7,842	8,029
Railroad rolling stock manufacturing	3365	1,076	1,100	1,131	1,164
Ship and boat building	3366	124	112	110	112
Furniture and related product manufacturing	337				
Household and institutional furniture and kitchen cabinet manufacturing	3371	799	795	804	826
Office furniture (including fixtures) manufacturing	3372	444	462	460	439
Miscellaneous manufacturing	339				
Medical equipment and supplies manufacturing	3391	181	184	182	177
Other miscellaneous manufacturing	3399	804	796	815	832

Table 8b

Inventory owned for selected industries, unadjusted - continued

	NAICS Code	Previous year		Year-to-date		Average per month	
		September 2002	August 2002	% Change from 2002	Average 2003	% Change from 2001	2002
\$ millions							
Food manufacturing	311						
Animal food manufacturing	3111	270	264	4.2	274	7.2	263
Starch and vegetable fat and oil manufacturing	31122	182	180	5.5	191	6.5	189
Sugar and confectionery product manufacturing	3113	358	361	2.4	365	-1.3	359
Fruit and vegetable preserving and specialty food manufacturing	3114	945	843	4.8	873	7.6	868
Dairy product manufacturing	3115	726	724	6.1	790	5.3	748
Meat product manufacturing	3116	855	841	-8.5	820	-1.6	884
Cookie, cracker and pasta manufacturing	31182	113	107	12.9	125	-1.9	115
Other food manufacturing	3119	505	510	0.0	486	4.4	482
Beverage and tobacco product manufacturing	312						
Soft drink and ice manufacturing	31211	271	276	1.5	259	13.8	253
Breweries	31212	173	175	3.2	172	10.2	168
Wineries	31213	207	200	7.0	219	12.6	209
Distilleries	31214	521	500	9.9	524	12.1	484
Tobacco manufacturing	3122	520	549	-2.5	597	-6.2	602
Textile mills	313						
Fibre, yarn and thread mills	3131	53	59	-11.2	53	-22.3	58
Fabric mills	3132	344	358	-12.1	333	-7.1	368
Textile and fabric finishing and fabric coating	3133	65	58	16.2	68	-7.4	60
Textile product mills	314						
Carpet and rug mills	31411	84	85	3.2	85	-21.6	81
Textile bag and canvas mills	31491	69	72	-31.1	48	5.1	67
Clothing manufacturing	315						
Hosiery and sock mills	31511	144	145	9.0	149	-0.7	136
Other clothing knitting mills	31519	107	112	13.9	120	0.2	103
Men's and boys' cut and sew clothing manufacturing	31522	382	382	11.2	411	-19.9	369
Women's and girls' cut and sew clothing manufacturing	31523	356	357	-2.2	345	-7.8	351
Clothing accessories and other clothing manufacturing	3159	66	65	16.6	74	-14.6	64
Leather and allied product manufacturing	316						
Footwear manufacturing	3162	98	105	-4.1	92	-10.9	92
Wood product manufacturing	321						
Sawmills and wood preservation	3211	2,736	2,712	-1.9	3,017	-9.8	2,996
Veneer, plywood and engineered wood product manufacturing	3212	617	618	8.2	707	-4.4	652
Other wood product manufacturing	3219	819	791	10.4	872	7.2	801
Paper manufacturing	322						
Pulp, paper and paperboard mills	3221	2,493	2,501	-2.2	2,507	-8.5	2,549
Paperboard container manufacturing	32221	511	514	5.3	548	-5.0	514
Paper bag and coated and treated paper manufacturing	32222	247	251	9.6	275	2.2	254
Other converted paper product manufacturing	32229	149	150	3.6	152	-3.8	147
Printing and related support activities	323						
Printing	32311	689	693	-0.6	686	-4.4	688
Support activities for printing	32312	15	14	-38.6	9	-42.6	14
Petroleum and coal products manufacturing	324						
Petroleum refineries	32411	1,374	1,386	1.3	1,371	-12.4	1,322
Chemical manufacturing	325						
Other basic inorganic chemical manufacturing	32518	170	169	0.2	187	-4.3	184
Other basic organic chemical manufacturing	32519	143	138	10.6	158	-23.8	146
Resin, synthetic rubber, and artificial and synthetic fibres and filaments manufacturing	3252	518	523	9.5	572	-18.9	525
Pesticide and other agricultural chemical manufacturing	32532	111	103	-13.5	121	-20.3	133
Pharmaceutical and medicine manufacturing	3254	2,737	2,790	19.5	3,102	32.8	2,665
Paint and coating manufacturing	32551	256	245	2.5	260	-9.1	249
Adhesive manufacturing	32552	81	79	7.8	88	15.5	81
Soap and cleaning compound manufacturing	32561	113	111	-22.9	106	-11.8	129
Toilet preparation manufacturing	32562	176	167	21.2	189	-6.8	162
Printing ink manufacturing	32591	50	50	4.7	53	-4.2	50
All other chemical product manufacturing	32599	334	316	0.8	312	-0.9	312

Table 8b

Inventory owned for selected industries, unadjusted - concluded

	NAICS Code	Previous year		Year-to-date		Average per month	
		September 2002	August 2002	% Change from 2002	Average 2003	% Change from 2001	2002
\$ millions							
Plastics and rubber products manufacturing	326						
Plastic pipe, pipe fitting and unsupported profile shape manufacturing	32612	226	223	0.3	223	-6.3	223
Polystyrene foam product manufacturing	32614	32	31	22.4	38	1.6	31
Other plastic product manufacturing	32619	856	840	7.5	898	7.8	848
Other rubber product manufacturing	32629	183	189	-2.6	184	-7.2	189
Non-metallic mineral product manufacturing	327						
Clay product and refractory manufacturing	3271	87	89	-1.0	88	-12.2	89
Glass and glass product manufacturing	3272	267	274	0.2	276	2.8	272
Cement manufacturing	32731	157	176	-5.8	184	-1.9	187
Ready-mix concrete manufacturing	32732	97	104	-4.2	99	-8.6	102
Other concrete product manufacturing	32739	78	81	11.3	93	1.3	82
Abrasive product manufacturing	32791	161	161	-17.6	127	32.0	151
All other non-metallic mineral product manufacturing	32799	147	142	4.1	146	0.9	141
Primary metal manufacturing	331						
Iron and steel mills and ferro-alloy manufacturing	3311	2,181	2,078	5.1	2,070	-1.1	2,050
Iron and steel pipes and tubes manufacturing from purchased steel	33121	552	527	14.8	591	6.7	543
Foundries	3315	278	275	0.9	288	1.0	287
Fabricated metal product manufacturing	332						
Cutlery and hand tool manufacturing	3322	87	84	-0.2	82	9.3	83
Plate work and fabricated structural product manufacturing	33231	456	456	4.6	471	2.9	448
Power boiler and heat exchanger manufacturing	33241	150	155	18.6	172	27.1	148
Spring and wire product manufacturing	3326	160	158	-5.9	144	-7.4	154
Coating, engraving, heat treating and allied activities	3328	165	166	4.0	160	16.4	156
Other fabricated metal product manufacturing	3329	544	542	2.1	561	3.6	548
Machinery manufacturing	333						
Agricultural implement manufacturing	33311	510	493	3.5	522	1.5	510
Ventilation, heating, air-conditioning and commercial refrigeration equipment manufacturing	3334	348	344	0.6	352	6.8	345
All other general-purpose machinery manufacturing	33399	413	391	12.4	398	12.2	363
Computer and electronic product manufacturing	334						
Computer and peripheral equipment manufacturing	3341	568	601	-6.5	572	-42.7	607
Communications equipment manufacturing	3342	2,208	2,294	-15.3	2,116	-19.6	2,447
Audio and video equipment manufacturing	3343	55	52	11.1	54	-10.6	51
Electrical equipment, appliance and component manufacturing	335						
Lighting fixture manufacturing	33512	158	157	-15.2	138	-2.7	160
Small electrical appliance manufacturing	33521	47	47	14.2	48	-19.2	43
Major appliance manufacturing	33522	156	153	10.1	176	10.6	160
Battery manufacturing	33591	69	72	-10.1	65	44.2	70
Communication and energy wire and cable manufacturing	33592	283	283	-8.9	269	-42.2	291
All other electrical equipment and component manufacturing	33599	106	109	-4.0	108	-24.2	111
Transportation equipment manufacturing	336						
Motor vehicle manufacturing	3361	1,797	1,729	-16.4	1,441	2.9	1,730
Motor vehicle parts manufacturing	3363	1,728	1,762	10.9	1,923	3.9	1,762
Aerospace product and parts manufacturing	3364	8,050	8,120	1.3	7,864	0.3	7,817
Railroad rolling stock manufacturing	3365	1,391	1,374	-9.3	1,184	-14.0	1,338
Ship and boat building	3366	126	112	-17.5	122	-35.7	145
Furniture and related product manufacturing	337						
Household and institutional furniture and kitchen cabinet manufacturing	3371	814	813	8.2	823	9.7	772
Office furniture (including fixtures) manufacturing	3372	410	399	10.5	436	-11.1	398
Miscellaneous manufacturing	339						
Medical equipment and supplies manufacturing	3391	179	185	-3.5	176	-5.8	180
Other miscellaneous manufacturing	3399	937	907	-1.3	857	5.4	879

Table 9
Inventories owned by stage of fabrication

Period covered	Unadjusted			
	Raw materials	Goods in process	Finished products	Total inventories
September 2002	27,108	15,941	19,144	62,193
October 2002	27,379	15,975	18,942	62,295
November 2002	27,237	16,282	19,610	63,129
December 2002	27,600	15,742	19,047	62,389
January 2003	27,863	15,527	19,210	62,601
February 2003	28,300	15,874	19,806	63,980
March 2003	28,431	15,820	20,261	64,512
April 2003	27,952	16,165	20,478	64,595
May 2003	27,058	16,224	20,385	63,666
June 2003	26,529	15,841	19,923	62,293
July 2003	26,684	15,489	19,368	61,541
August 2003	26,634	15,598	18,906	61,138
September 2003	26,135	15,398	18,853	60,387
Period covered	Seasonally adjusted			
	Raw materials	Goods in process	Finished products	Total inventories
September 2002	27,319	15,812	19,189	62,320
October 2002	27,450	15,913	19,217	62,580
November 2002	27,331	16,014	19,643	62,989
December 2002	27,591	15,943	19,626	63,161
January 2003	27,471	15,952	19,506	62,929
February 2003	27,661	15,917	19,730	63,307
March 2003	27,779	15,774	19,815	63,368
April 2003	27,726	16,150	20,023	63,898
May 2003	27,388	15,978	19,991	63,358
June 2003	27,085	15,773	19,777	62,635
July 2003	27,026	15,723	19,511	62,260
August 2003	26,796	15,482	19,038	61,316
September 2003	26,499	15,374	18,995	60,867

Table 10
Shipments by major group and province, unadjusted

Province	Current year			
	September 2003	August 2003	July 2003	June 2003
	\$ millions			
Total				
Newfoundland and Labrador	227	237	277	264
Prince Edward Island	134	112	126	150
Nova Scotia	751	756	743	723
New Brunswick	1,161	1,167	1,078	1,187
Quebec	10,610	10,040	9,410	10,012
Ontario	23,855	20,818	19,732	23,455
Manitoba	1,023	919	943	967
Saskatchewan	644	597	612	649
Alberta	3,667	3,637	3,529	3,525
British Columbia	2,969	2,898	2,926	2,856
311 Food manufacturing				
Newfoundland and Labrador	77	93	125	117
Prince Edward Island	95	77	90	106
Nova Scotia	205	203	191	173
New Brunswick	225	166	169	280
Quebec	1,250	1,201	1,157	1,215
Ontario	2,215	2,053	2,108	2,115
Manitoba	252	243	247	250
Saskatchewan	156	152	155	154
Alberta	729	744	699	641
British Columbia	382	394	405	398
312 Beverage and tobacco product manufacturing				
Nova Scotia	19	25	29	23
Quebec	376	396	409	422
Ontario	553	577	625	589
Saskatchewan	5	6	7	6
British Columbia	82	98	103	98
313 Textile mills				
Quebec	162	156	115	165
Ontario	71	63	60	68
314 Textile product mills				
Quebec	79	81	76	83
Ontario	81	75	81	91
Alberta	2	3	3	3
British Columbia	11	9	10	9
315 Clothing manufacturing				
Quebec	329	337	287	259
Ontario	165	147	135	119
Manitoba	45	37	30	21
Saskatchewan	2	2	2	1
Alberta	6	6	7	6
British Columbia	26	25	25	22
316 Leather and allied product manufacturing				
Quebec	66	57	24	23
Ontario	20	17	15	12
321 Wood product manufacturing				
Nova Scotia	47	48	50	46
Quebec	708	678	540	653
Ontario	496	468	493	462
Manitoba	58	51	50	47
Saskatchewan	58	51	46	43
Alberta	242	225	220	199
British Columbia	855	801	812	787

Table 10
Shipments by major group and province, unadjusted - continued

Province	Current year			
	September 2003	August 2003	July 2003	June 2003
	\$ millions			
322 Paper manufacturing				
Nova Scotia	70	76	79	75
Quebec	914	910	910	880
Ontario	803	773	781	781
Alberta	121	142	131	126
British Columbia	442	435	419	408
323 Printing and related support activities				
Quebec	236	226	219	209
Ontario	475	391	408	434
Manitoba	38	33	34	37
Saskatchewan	11	11	10	8
Alberta	46	43	38	44
British Columbia	51	58	42	42
324 Petroleum and coal products manufacturing				
Quebec	626	690	649	548
Ontario	915	892	879	811
Alberta	706	765	715	681
British Columbia	62	66	69	64
325 Chemical manufacturing				
Quebec	731	686	719	772
Ontario	1,832	1,564	1,688	1,810
Manitoba	59	38	45	59
Saskatchewan	45	19	42	87
Alberta	524	533	526	572
British Columbia	88	115	106	108
326 Plastics and rubber products manufacturing				
Nova Scotia	94	85	89	88
Quebec	485	448	427	462
Ontario	1,189	1,053	1,087	1,193
Manitoba	45	43	43	43
Saskatchewan	9	9	10	10
Alberta	102	111	97	97
British Columbia	101	99	115	109
327 Non-metallic mineral product manufacturing				
Nova Scotia	17	16	19	17
Quebec	304	297	272	296
Ontario	550	509	535	527
Saskatchewan	15	13	15	13
Alberta	149	145	157	133
British Columbia	133	128	132	129
331 Primary metal manufacturing				
Quebec	1,108	1,015	1,019	1,015
Ontario	1,400	1,205	1,196	1,290
Alberta	77	79	79	75
332 Fabricated metal product manufacturing				
Newfoundland and Labrador	17	18	15	14
Prince Edward Island	2	2	2	2
Nova Scotia	29	37	31	28
New Brunswick	30	26	25	24
Quebec	508	468	434	450
Ontario	1,470	1,269	1,254	1,337
Manitoba	71	75	68	73
Saskatchewan	42	41	40	39
Alberta	319	273	285	318
British Columbia	159	136	140	140

Table 10

Shipments by major group and province, unadjusted - continued

Province	Current year			
	September 2003	August 2003	July 2003	June 2003
	\$ millions			
333 Machinery manufacturing				
Quebec	476	369	344	391
Ontario	981	802	968	971
Manitoba	78	67	92	83
Saskatchewan	49	44	41	40
Alberta	253	218	229	245
British Columbia	149	145	139	140
334 Computer and electronic product manufacturing				
Quebec	576	415	355	522
Ontario	1,056	842	767	948
Saskatchewan	9	9	8	10
Alberta	115	71	72	98
British Columbia	85	67	68	65
335 Electrical equipment, appliance and component manufacturing				
Quebec	274	244	234	260
Ontario	443	355	365	423
Manitoba	14	10	10	11
Saskatchewan	13	13	12	13
Alberta	46	39	41	39
British Columbia	27	30	29	27
336 Transportation equipment manufacturing				
Nova Scotia	57	48	41	56
Quebec	942	922	862	998
Ontario	8,369	7,027	5,536	8,658
Manitoba	140	116	120	133
Saskatchewan	24	22	27	23
Alberta	68	67	65	78
British Columbia	84	88	90	105
337 Furniture and related product manufacturing				
Quebec	288	284	233	265
Ontario	586	563	548	597
Manitoba	63	58	60	61
Saskatchewan	7	7	8	7
Alberta	66	62	59	65
British Columbia	49	46	47	44
339 Miscellaneous manufacturing				
Newfoundland and Labrador	1	1	1	1
Quebec	172	162	124	125
Ontario	187	173	201	218
Manitoba	7	6	10	7
Saskatchewan	4	4	4	4
Alberta	33	38	31	33
British Columbia	64	56	64	50

Table 10

Shipments by major group and province, unadjusted - continued

	Previous year		Year-to-date		Annual	
	September 2002	August 2002	% Change from 2002	2003	% Change from 2001	2002
	\$ millions					
Total						
Newfoundland and Labrador	182	216	6.9	1,800	1.3	2,234
Prince Edward Island	122	132	1.0	992	9.5	1,316
Nova Scotia	787	791	3.4	6,551	1.3	8,646
New Brunswick	1,134	1,192	4.7	9,854	3.1	12,632
Quebec	10,739	10,600	-1.7	89,281	0.9	122,059
Ontario	24,052	23,931	-1.3	205,251	3.4	277,581
Manitoba	978	966	0.9	8,686	0.6	11,538
Saskatchewan	613	616	2.8	5,635	1.3	7,239
Alberta	3,669	3,619	6.7	32,162	-3.4	40,966
British Columbia	2,870	3,043	-2.2	25,320	0.4	34,236
311 Food manufacturing						
Newfoundland and Labrador	65	101	-10.2	637	10.3	891
Prince Edward Island	87	99	-0.8	698	8.0	952
Nova Scotia	214	211	0.1	1,620	2.2	2,234
New Brunswick	199	202	-8.2	1,431	4.6	2,004
Quebec	1,166	1,140	5.0	10,447	1.4	13,573
Ontario	2,146	2,121	1.5	18,818	-0.1	25,085
Manitoba	246	265	-0.5	2,229	4.3	3,023
Saskatchewan	159	161	4.5	1,394	3.3	1,825
Alberta	773	789	-2.1	6,648	-1.0	9,055
British Columbia	364	387	4.8	3,320	3.4	4,270
312 Beverage and tobacco product manufacturing						
Nova Scotia	16	23	14.3	181	1.5	213
Quebec	361	382	2.4	3,152	5.7	4,093
Ontario	586	556	1.2	4,882	2.6	6,514
Saskatchewan	4	12	-41.4	46	-7.8	92
British Columbia	83	102	4.3	762	9.1	990
313 Textile mills						
Quebec	182	179	-11.1	1,400	-2.6	2,069
Ontario	78	74	-13.4	612	-5.3	912
314 Textile product mills						
Quebec	90	90	-7.7	706	-2.1	1,020
Ontario	95	102	-10.8	777	3.8	1,138
Alberta	2	2	9.2	23	-14.4	28
British Columbia	13	13	-29.7	80	4.0	153
315 Clothing manufacturing						
Quebec	360	388	-7.0	2,750	-7.4	3,937
Ontario	181	166	-13.5	1,277	6.6	2,020
Manitoba	46	44	-3.1	257	13.1	376
Saskatchewan	2	2	11.8	16	-5.6	22
Alberta	5	7	-6.4	59	-6.8	89
British Columbia	24	25	2.9	203	-15.8	263
316 Leather and allied product manufacturing						
Quebec	66	65	-8.5	289	-18.8	430
Ontario	21	20	-20.4	128	11.9	225
321 Wood product manufacturing						
Nova Scotia	46	45	-1.3	395	10.1	530
Quebec	648	654	1.0	5,792	11.9	7,637
Ontario	478	496	-3.5	4,138	7.7	5,622
Manitoba	47	43	5.3	396	-13.5	501
Saskatchewan	42	36	29.0	393	39.0	430
Alberta	187	184	2.1	1,763	2.8	2,265
British Columbia	839	943	-15.0	7,150	4.8	10,830

Table 10

Shipments by major group and province, unadjusted - continued

	Previous year		Year-to-date		Annual	
	September 2002	August 2002	% Change from 2002	2003	% Change from 2001	2002
	\$ millions					
322 Paper manufacturing						
Nova Scotia	82	84	5.2	674	-17.9	881
Quebec	1,048	1,006	-4.8	8,281	-2.7	11,729
Ontario	842	861	-4.2	7,256	-3.6	10,091
Alberta	131	140	2.0	1,158	4.0	1,553
British Columbia	415	422	8.0	3,833	-11.7	4,790
323 Printing and related support activities						
Quebec	232	222	1.4	2,063	-11.3	2,749
Ontario	432	433	-0.9	3,908	2.0	5,351
Manitoba	38	34	-3.3	311	-6.4	436
Saskatchewan	11	10	9.7	85	6.1	106
Alberta	51	49	-5.8	403	-5.4	574
British Columbia	47	57	-11.9	409	-10.7	608
324 Petroleum and coal products manufacturing						
Quebec	659	629	22.4	5,875	6.7	6,845
Ontario	943	900	15.1	8,096	-2.9	9,861
Alberta	744	768	20.1	6,459	1.0	7,491
British Columbia	63	66	0.3	578	-4.8	754
325 Chemical manufacturing						
Quebec	753	751	0.4	6,566	6.8	8,711
Ontario	1,690	1,711	6.5	15,898	7.8	20,076
Manitoba	52	49	18.7	534	-12.6	616
Saskatchewan	24	19	23.0	568	-10.8	562
Alberta	530	556	14.4	5,304	-6.7	6,456
British Columbia	91	100	18.3	944	7.1	1,076
326 Plastics and rubber products manufacturing						
Nova Scotia	102	100	-8.1	792	6.9	1,141
Quebec	458	469	5.1	4,104	10.7	5,208
Ontario	1,143	1,220	-0.8	10,405	6.9	13,805
Manitoba	45	41	1.4	391	7.5	508
Saskatchewan	9	9	12.4	83	5.4	98
Alberta	95	99	4.0	802	-4.0	1,023
British Columbia	82	91	11.3	854	-3.1	1,008
327 Non-metallic mineral product manufacturing						
Nova Scotia	15	17	0.1	119	1.2	162
Quebec	283	303	5.6	2,147	10.8	2,701
Ontario	518	503	6.9	4,120	4.9	5,264
Saskatchewan	14	13	-6.6	85	-8.2	113
Alberta	158	153	-0.7	1,104	24.1	1,510
British Columbia	129	137	6.6	1,088	17.0	1,357
331 Primary metal manufacturing						
Quebec	1,021	1,071	-0.1	9,523	7.8	12,712
Ontario	1,407	1,312	3.6	12,341	11.9	16,003
Alberta	77	83	13.8	752	-10.7	896
332 Fabricated metal product manufacturing						
Newfoundland and Labrador	7	10	85.1	116	-15.5	88
Prince Edward Island	2	2	2.4	18	-1.5	25
Nova Scotia	25	23	20.2	221	17.2	264
New Brunswick	24	24	-1.2	198	-5.7	268
Quebec	517	489	-1.9	3,900	1.8	5,329
Ontario	1,425	1,424	-3.1	11,858	4.7	16,165
Manitoba	66	64	20.0	622	-2.0	707
Saskatchewan	39	39	6.3	338	-6.5	416
Alberta	266	219	25.8	2,418	-2.7	2,637
British Columbia	136	156	-0.3	1,224	2.2	1,609

Table 10
Shipments by major group and province, unadjusted - concluded

	Previous year		Year-to-date		Annual	
	September 2002	August 2002	% Change from 2002	2003	% Change from 2001	2002
	\$ millions					
333 Machinery manufacturing						
Quebec	482	349	-1.9	3,387	0.2	4,587
Ontario	1,124	1,022	-9.4	8,760	4.1	12,943
Manitoba	71	85	-9.8	730	9.4	1,042
Saskatchewan	54	53	-12.4	452	7.4	662
Alberta	241	214	-1.6	2,121	-14.5	2,872
British Columbia	138	138	12.3	1,265	8.7	1,594
334 Computer and electronic product manufacturing						
Quebec	650	488	-18.4	4,030	-18.1	6,588
Ontario	997	955	-13.5	7,839	-13.9	11,900
Saskatchewan	8	9	5.4	74	12.7	94
Alberta	130	105	-26.9	745	-29.9	1,392
British Columbia	103	74	-6.4	603	-17.7	879
335 Electrical equipment, appliance and component manufacturing						
Quebec	259	259	-0.3	2,205	10.6	2,930
Ontario	449	398	-7.2	3,648	-12.2	5,210
Manitoba	15	13	-21.1	108	-14.7	183
Saskatchewan	15	15	-37.4	107	-45.0	208
Alberta	29	27	33.6	316	9.5	328
British Columbia	28	29	5.2	268	-32.9	345
336 Transportation equipment manufacturing						
Nova Scotia	58	68	-30.0	492	29.7	862
Quebec	1,052	1,226	-14.1	9,046	-7.0	14,134
Ontario	8,750	8,866	-2.9	73,557	6.5	100,483
Manitoba	130	110	4.2	1,248	0.2	1,603
Saskatchewan	27	25	-11.0	237	21.7	349
Alberta	75	51	9.1	651	0.5	785
British Columbia	105	103	-19.0	845	-4.9	1,283
337 Furniture and related product manufacturing						
Quebec	281	292	-1.9	2,435	11.4	3,293
Ontario	554	606	3.1	5,104	-2.2	6,629
Manitoba	66	64	-2.7	540	11.3	743
Saskatchewan	6	7	-9.1	63	3.3	89
Alberta	74	68	-6.8	578	-3.9	838
British Columbia	43	51	6.8	410	14.4	525
339 Miscellaneous manufacturing						
Newfoundland and Labrador	2	2	-39.9	10	22.1	18
Quebec	170	148	-6.8	1,181	11.3	1,785
Ontario	193	185	5.9	1,828	6.8	2,284
Manitoba	9	8	-16.2	67	-11.0	107
Saskatchewan	4	4	8.8	35	-2.0	44
Alberta	42	38	-8.1	294	7.8	440
British Columbia	56	49	7.2	467	15.0	606

Survey documentation

- About the Monthly Survey of Manufacturing
- Concepts and definitions
- Survey Design and Methodology
- Data Quality

About the Monthly Survey of Manufacturing

The statistics contained in this publication are based on information obtained through a sample survey of 11,000 representative manufacturing establishments across Canada. The Monthly Survey of Manufacturers started in 1947 and although its content has remained essentially the same, it underwent a major redesign with respect to the frame in 1999.

The values (in Canadian dollars) of shipments, inventories and orders are used as indicators of the economic condition of manufacturing industries; as inputs to Canada's Gross Domestic Product; as two components in the Statistics Canada composite indicator; as input to macro- and micro-economic studies and in econometric models (e.g. to determine market share, apparent domestic availability, etc.).

Since 1999, Statistics Canada's Business Register provides the sampling frame for the Monthly Survey of Manufacturing (MSM). The target population for the MSM consists of all statistical establishments on the business register that are classified to the manufacturing sector. The sampling frame for the MSM is determined from the target population after subtracting establishments that represent the bottom 2% of the total manufacturing shipments estimate for each province. These establishments are excluded from the frame so that the sample size can be reduced without significantly affecting quality.

Concepts and Definitions

The Monthly Survey of Manufacturing (MSM) publishes statistical series for manufacturers – shipments, inventories, unfilled orders and new orders. The values of these characteristics represent current monthly estimates of the more complete Annual Survey of Manufactures (ASM) data.

The MSM is a sample survey of approximately 11,000 Canadian manufacturing establishments, which are categorized into over 200 industries. Industries are classified according to the 1997 North American Industrial Classification System (NAICS), which replaced the 1980 Standard Industrial Classification (SIC) system. Reference year 2000 is the last year for which data are released on a SIC basis. The MSM adopted the NAICS for its 2001 reference, while previous years' data have been re-calculated to the new classification system back to 1992. Seasonally adjusted series are available for the main aggregates.

An establishment comprises the smallest manufacturing unit capable of reporting the variables of interest. Data collected by the MSM provides a current 'snapshot' of shipment values by the Canadian manufacturing sector, enabling analysis of the state of the Canadian economy, as well as the health of specific industries in the short- to medium-term. The information is used by both private and public sectors including Statistics Canada, federal and provincial governments, business and trade entities, international and domestic non-governmental organizations, consultants, the business press and private citizens. The data are used for analyzing market share, trends, corporate benchmarking, policy analysis, program development, tax policy and trade policy.

1. Shipments

Shipments are defined as the value of goods manufactured by establishments that have been shipped to a customer. Shipments exclude any wholesaling activity, and any revenues from the rental of equipment or the sale of electricity. Note that in practice, some respondents report financial transactions rather than payments for work done. Shipments are available by 3-digit NAICS, broken down by province.

For the aerospace product and parts, and shipbuilding industries, the value of production is used instead of shipments. This value is calculated by adjusting monthly shipments by the monthly change in goods in process and finished product inventories. Raw materials are not included in the calculation since production tries to measure "work done" during the month. This is done in order to reduce distortions caused by the shipment of high value items as completed sales.

2. Inventories

Measurement of component values of inventory is important for economic studies as well as for derivation of production values. Respondents are asked to report their book values (at cost), of raw materials, any goods in process, and finished product inventories separately. In some cases, respondents estimate a total inventory figure, which is allocated on the basis of proportions reported on the ASM. Inventory levels are calculated on a Canadawide basis, not by province.

3. Orders

a) Unfilled Orders

Unfilled orders represent a backlog or stock of orders that will generate future shipments assuming that they are not cancelled. As with inventories, unfilled orders and new orders levels are calculated on a Canadawide basis, not by province.

The MSM produces estimates for unfilled orders for all industries except for those industries where orders are customarily filled from stocks on hand and order books are not generally maintained. In the case of the aircraft companies, options to purchase are not treated as orders until they are entered into the accounting system.

b) New Orders

New orders represent current demand for manufactured products. Estimates of new orders are derived from shipments and unfilled orders data. All shipments within a month result from either an order received during the month or at some earlier time. New orders can be calculated as the sum of shipments adjusted for the monthly change in unfilled orders.

4. Non-Durable / Durable goods

a) Non-durable goods industries

Non-durable goods industries include Food (NAICS 311), Beverage and Tobacco Products (312), Textile Mills (313), Textile Product Mills (314), Leather and Allied Products (316), Paper (322), Printing and Related Support Activities (323), Petroleum and Coal Products (324), Chemicals (325) and Plastic and Rubber Products (326)

b) Durable goods industries

Durable goods industries include Clothing (NAICS 315), Wood Products (321), Non-Metallic Mineral Products (327), Primary Metals (331), Fabricated Metal Products (332), Machinery (333), Computer and Electronic Products (334), Electrical Equipment, Appliance and Components (335), Transportation Equipment (336), Furniture and Related Products (337) and Miscellaneous Manufacturing (339).

Survey Design and Methodology

Beginning with the August 1999 reference month, the Monthly Survey of Manufacturing (MSM) has undergone an extensive redesign.

Concept Review

It was decided that before any redesign work could begin the basic concepts and definitions of the program would be confirmed.

This was done in two ways: First, a review of user requirements was initiated. This involved revisiting an internal report to ensure that the user requirements from that exercise were being satisfied. As well, another round of internal review with the major users in the National Accounts was undertaken. This was to specifically focus on any data gaps that could be identified.

Secondly, with these gaps or requirements in hand, a survey was conducted in order to ascertain respondent's ability to report existing and new data. The study was also to confirm that respondents understood the definitions, which were being asked by survey analysts.

The result of the concept review was a reduction of the number of questions for the survey from sixteen to seven. Most of the questions that were dropped had to do with the reporting of shipments for work that was partially completed.

Methodology

The new sample design incorporates the 1997 North American Industrial Classification Standard (NAICS) and gives a much higher profile to provincial estimates. Stratification is done by province with equal quality requirements for each province. Large size units are selected with certainty and small units are selected with a probability based on the desired quality of the estimate within a cell.

The opportunity was also taken at this time to allow for the introduction of sample rotation into the survey design. Most of the smaller companies who are asked to participate in the survey will do so only for a set period.

The estimation system generates estimates using the NAICS. The estimates will also continue to be reconciled to the ASM. Provincial estimates for all variables will be produced. A measure of quality (CV) will also be produced.

Components of the Redesigned Survey

Target Population and Sampling Frame

Statistics Canada's business register provides the sampling frame for the MSM. The target population for the MSM consists of all statistical establishments on the business register that are classified to the manufacturing sector (by NAICS). The sampling frame for the MSM is determined from the target population after subtracting establishments that represent the bottom 2% of the total manufacturing shipments estimate for each province. These establishments were excluded from the frame so that the sample size could be reduced without significantly affecting quality.

The Sample

The MSM sample is a probability sample comprised of approximately 11,000 establishments.

Prior to selection, the sampling frame is subdivided into industry-province cells. For the most part, NAICS codes were used. Depending upon the number of establishments within each cell, further subdivisions were made to group similar sized establishments' together (called stratum). An establishment's size was based on its most recently available annual shipments or sales value.

Each industry by province cell has a 'take-all' stratum composed of establishments sampled each month with certainty. This 'take-all' stratum is composed of establishments that are the largest statistical enterprises, and have the largest impact on estimates within a particular industry by province cell. These large statistical enterprises comprise 45% of the national manufacturing shipment estimates.

Each industry - province cell can have at most three 'take-some' strata. Not all establishments within these strata need to be sampled with certainty. A random sample is drawn from the remaining strata. The responses from these sampled establishments are weighted according to the inverse of their probability of selection.

The initial sample was selected in late 1998 and has been refreshed each month by including a sample of new entrants in the frame.

Data Collection

Data collection, data capture, preliminary edit and follow-up of non-respondents are all performed in Statistics Canada regional offices. Sampled establishments are contacted by mail or telephone according to the preference of the respondent. Data capture and preliminary editing are performed simultaneously to ensure the validity of the data.

In some cases, combined reports are received from enterprises or companies with more than one establishment in the sample where respondents prefer not to provide individual establishment reports. Businesses, which do not report or whose reports contain errors, are followed up immediately.

Data Quality

Statistical Edit and Imputation

Data are analyzed within each industry-province cell. Extreme values are listed for inspection by the magnitude of the deviation from average behavior. Respondents are contacted to verify extreme values. Records that fail statistical edits are considered outliers and are not used for imputation.

Values are imputed for the non-responses, for establishments that do not report or only partially complete the survey form. A number of imputation methods are used depending on the variable requiring treatment. Methods include using industry-province cell trends, historical responses, or reference to the ASM. Following imputation, the MSM staff performs a final verification of the responses that have been imputed.

Revisions

In conjunction with preliminary estimates for the current month, estimates for the previous three months are revised to account for any late returns. Data are revised when late responses are received or if an incorrect response was reported earlier.

Estimation

Estimates are calculated by multiplying an estimation weight to an establishment's reported responses. The estimation weight is the inverse of the sampled establishment's probability of selection. Take all units are self-representative.

Benchmarking

The MSM is periodically benchmarked to the most recent results of the Annual Survey of Manufactures (approximately eighteen months after the end of the reference year). Benchmarking is a process designed to calibrate the monthly estimates to the level of the more complete Annual Survey of Manufacturers. The result is that the two surveys have consistent totals at the aggregated level. The MSM estimates were benchmarked to the 1998 ASM with the release of the January 2001 reference month.

Sampling and Non-sampling Errors

The statistics in this publication are estimates derived from a sample survey and, as such, can be subject to errors. The following material is provided to assist the reader in the interpretation of the estimates published.

Estimates derived from a sample survey are subject to a number of different kinds of errors. These errors can be broken down into two major types: sampling and non-sampling.

1. Sampling Errors

Sampling errors are an inherent risk of sample surveys. They result from the difference between the value of a variable if it is randomly sampled and its value if a census is taken (or the average of all possible random values). These errors are present because observations are made only on a sample and not on the entire population.

The sampling error depends on factors such as the size of the sample, variability in the population, sampling design and method of estimation. For example, for a given sample size, the sampling error will depend on the stratification procedure employed, allocation of the sample, choice of the sampling units and method of selection. (Further, even for the same sampling design, we can make different calculations to arrive at the most efficient estimation procedure.) The most important feature of probability sampling is that the sampling error can be measured from the sample itself.

2. Non-sampling Errors

Non-sampling errors result from a systematic flaw in the structure of the data-collection procedure or design of any or all variables examined. They create a difference between the value of a variable obtained by sampling or census methods and the variable's true value. These errors are present whether a sample or a complete census of the population is taken. Non-sampling errors can be attributed to one or more of the following sources:

a) Coverage error: This error can result from incomplete listing and inadequate coverage of the population of interest.

b) Data response error: This error may be due to questionnaire design, the characteristics of a question, inability or unwillingness of the respondent to provide correct information, misinterpretation of the questions or definitional problems.

c) Non-response error: Some respondents may refuse to answer questions, some may be unable to respond, and others may be too late in responding. Data for the non-responding units can be imputed using the data from responding units or some earlier data on the non-responding units if available.

The extent of error due to imputation is usually unknown and is very much dependent on any characteristic differences between the respondent group and the non-respondent group in the survey. This error generally decreases with increases in the response rate and attempts are therefore made to obtain as high a response rate as possible.

d) Processing error: These errors may occur at various stages of processing such as coding, data entry, verification, editing, weighting, and tabulation, etc. Non-sampling errors are difficult to measure. More important, non-sampling errors require control at the level at which their presence does not impair the use and interpretation of the results.

Measures have been undertaken to minimize the non-sampling errors. For example, units have been defined in a most precise manner and the most up-to-date listings have been used. Questionnaires have been carefully designed to minimize different interpretations. As well, detailed acceptance testing has been carried out for the different stages of editing and processing and every possible effort has been made to reduce the non-response rate as well as the response burden.

Measures of Sampling and Non-sampling Errors

1. Sampling Error Measures

The sample used in this survey is one of a large number of all possible samples of the same size that could have been selected using the same sample design under the same general conditions. If it was possible that each one of these samples could be surveyed under essentially the same conditions, with an estimate calculated from each sample, it would be expected that the sample estimates would differ from each other.

The average estimate derived from all these possible sample estimates is termed the expected value. The expected value can also be expressed as the value that would be obtained if a census enumeration were taken under identical conditions of collection and processing. An estimate calculated from a sample survey is said to be precise if it is near the expected value.

Sample estimates may differ from this expected value of the estimates. However, since the estimate is based on a probability sample, the variability of the sample estimate with respect to its expected value can be measured. The variance of an estimate is a measure of the precision of the sample estimate and is defined as the average, over all possible samples, of the squared difference of the estimate from its expected value.

The standard error is a measure of precision in absolute terms. The coefficient of variation, defined as the standard error divided by the sample estimate, is a measure of precision in relative terms. For comparison purposes, one may more readily compare the sampling error of one estimate to the sampling error of another estimate by using the coefficient of variation.

In this publication, the coefficient of variation is used to measure the sampling error of the estimates. However, since the coefficient of variation published for this survey is calculated from the responses of individual units, it also measures some non-sampling error.

The formula used to calculate the published coefficients of variation (CV) in Table 1 is:

$$CV(X) = \frac{S(X)}{X}$$

where X denotes the estimate and S(X) denotes the standard error of X.

In this publication, the coefficient of variation is expressed as a percentage.

Confidence intervals can be constructed around the estimate using the estimate and the coefficient of variation. Thus, for our sample, it is possible to state with a given level of confidence that the expected value will fall within the confidence interval constructed around the estimate. For example, if an estimate of \$12,000,000 has a coefficient of variation of 10%, the standard error will be \$1,200,000 or the estimate multiplied by the coefficient of variation. It can then be stated with 68% confidence that the expected value will fall within the interval whose length equals the standard deviation about the estimate, i.e., between \$10,800,000 and \$13,200,000. Alternatively, it can be stated with 95% confidence that the expected value will fall within the interval whose length equals two standard deviations about the estimate, i.e., between \$9,600,000 and \$14,400,000.

The table below contains the national level CVs, expressed as a percentage, for all manufacturing for the MSM characteristics. For CVs at other aggregate levels, contact the Marketing and Dissemination Section at (613) 951-9497, toll free: 1-866-873-8789 or by e-mail at *manufact@statcan.ca*.

National Level CVs by Characteristic

Month	Shipments	Raw Material Inventories	Goods in Process Inventories	Finished Product Inventories	Unfilled Orders
%					
September 2002	0.53	0.90	0.73	1.40	1.52
October 2002	0.53	0.93	0.72	1.33	1.86
November 2002	0.50	0.91	0.72	1.25	1.85
December 2002	0.54	0.92	0.74	1.20	1.82
January 2003	0.52	0.89	0.75	1.25	1.81
February 2003	0.52	0.89	0.73	1.25	1.78
March 2003	0.52	0.92	0.76	1.26	1.75
April 2003	0.54	0.91	0.78	1.28	1.68
May 2003	0.55	0.95	0.73	1.29	1.60
June 2003	0.56	0.97	0.69	1.36	1.55
July 2003	0.61	1.03	0.71	1.46	1.52
August 2003	0.54	1.09	0.70	1.42	1.63
September 2003	0.56	1.13	0.75	1.48	2.03

2. Non-sampling Error Measures

The exact population value is aimed at or desired by both a sample survey as well as a census. We say the estimate is accurate if it is near this value. Although this value is desired, we cannot assume that the exact value of every unit in the population or sample can be obtained and processed without error. Any difference between the expected value and the exact population value is termed the bias. Systematic biases in the data cannot be measured by the probability measures of sampling error as previously described. The accuracy of a survey estimate is determined by the joint effect of sampling and non-sampling errors.

Three sources of non-sampling error in the MSM are non-response error, imputation error and the error due to editing. To assist users in evaluating these errors, weighted rates that are related to these three types of error are given in Table 2. The following is an example of what is meant by a weighted rate. A cell with a sample of 20 units in which five respond for a particular month would have a response rate of 25%. If these five reporting units represented \$8 million out of a total estimate of \$10 million, the weighted response rate would be 80%.

The definitions of the three weighted rates noted in Table 2 follow. The weighted response rate is the proportion of a characteristic's total estimate that is based upon reported data (excluding data that has been edited). The weighted imputation rate is the proportion of a characteristic's total estimate that is based upon imputed data. The weighted editing rate is the proportion of a characteristic's total estimate that is based upon data that was edited (edited data may have been originally reported or imputed).

The table below contains the three types of weighted rates for each of the characteristics at the national level for all of manufacturing. In the table, the rates (expressed as percentages) are averages over the last thirteen months.

Average National Weighted Rates by Characteristic

Characteristic	Response	Imputation	Editing
		%	
Shipments	92.14	4.73	3.13
Raw Materials	78.47	18.48	3.05
Goods in Process	73.42	10.89	15.69
Finished Products	78.76	14.44	6.81
Unfilled Orders	85.96	7.00	7.05

Joint Interpretation of Measures of Error

The measure of non-response error as well as the coefficient of variation must be considered jointly to have an overview of the quality of the estimates. The lower the coefficient of variation and the higher the weighted response rate, the better will be the published estimate.

Seasonal Adjustment

Economic time series contain the elements essential to the description, explanation and forecasting of the behavior of an economic phenomenon. They are statistical records of

the evolution of economic processes through time. In using time series to observe economic activity, economists and statisticians have identified four characteristic behavioral components: the long-term movement or trend, the cycle, the seasonal variations and the irregular fluctuations. These movements are caused by various economic, climatic or institutional factors. The seasonal variations occur periodically on a more or less regular basis over the course of a year. These variations occur as a result of seasonal changes in weather, statutory holidays and other events that occur at fairly regular intervals and thus have a significant impact on the rate of economic activity.

In the interest of accurately interpreting the fundamental evolution of an economic phenomenon and producing forecasts of superior quality, Statistics Canada uses the X11ARIMA/88 seasonal adjustment method to seasonally adjust its time series. This method minimizes the impact of seasonal variations on the series and essentially consists of adding one year of estimated raw data to the end of the original series before it is seasonally adjusted per se. The estimated data are derived from forecasts using ARIMA (Auto Regressive Integrated Moving Average) models of the Box-Jenkins type.

The X-11 part of the X11ARIMA/88 program uses primarily a ratio-to-moving average method. It is used to smooth the modified series and obtain a preliminary estimate of the trend-cycle. It also calculates the ratios of the original series (fitted) to the estimates of the trend-cycle and estimates the seasonal factors from these ratios. The final seasonal factors are produced only after these operations have been repeated several times.

The procedures to determine the seasonal factors necessary to calculate the final seasonally adjusted data are executed every month. This approach ensures that the estimated seasonal factors are derived from an unadjusted series that includes all the available information about the series, i.e. the current month's unadjusted data as well as the previous month's revised unadjusted data.

While seasonal adjustment permits a better understanding of the underlying trend-cycle of a series, the seasonally adjusted series still contains an irregular component. Slight month-to-month variations in the seasonally adjusted series may be simple irregular movements. To get a better idea of the underlying trend, users should examine several months of the seasonally adjusted series.

The Canada seasonally adjusted total is derived indirectly by the summation of the individually seasonally adjusted kinds of business.

Trend

A seasonally adjusted series may contain the effects of irregular influences and special circumstances and these can mask the trend. The short term trend shows the underlying direction in seasonally adjusted series by averaging across months, thus smoothing out the effects of irregular influences. The result is a more stable series. The trend for the last month may be, subject to significant revision as values in future months are included in the averaging process.



Manufacturing, Construction
and Energy Division

Monthly Survey of Manufacturing

Division de la fabrication,
de la construction et de l'énergie

Enquête mensuelle sur les industries manufacturières

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Canada, 1985, Chapter S19.

Confidentiel une fois rempli

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La *Loi sur la statistique*, Lois révisées
du Canada, 1985, chapitre S19.

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If you need assistance, please call telephone No. below.
Si vous avez besoin d'aide, veuillez téléphoner au n° suivant.

Telephone/Téléphone:

Toll Free/Numéro sans frais:

Fax/Télécopieur:

Toll Free Fax/Télécopieur sans frais:



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INFORMATION SHARING AGREEMENTS:

To reduce response burden and to ensure more uniform statistics, Statistics Canada has entered into agreements with government departments and agencies for the sharing of data. See the second page for details of the agreements concerning this survey.

ENTENTES DE PARTAGE DES DONNÉES :

Pour alléger le fardeau de réponse et assurer des statistiques plus uniformes, Statistique Canada a conclu des ententes avec des ministères et organismes publics en vue d'un échange de données. Voir la deuxième page pour détails sur les accords concernant cette enquête.

Please correct name, address and establishment coverage if necessary – Veuillez corriger le nom, l'adresse et le regroupement d'établissements s'il y a lieu.

<ul style="list-style-type: none"> When values are not available by the due date, estimates are acceptable. Do not report cumulative or year-to-date values. Leave blank spaces only where values are not normally reported. 		<ul style="list-style-type: none"> Lorsque les valeurs ne sont pas disponibles à la date d'échéance, on peut accepter un estimé de ces valeurs. Ne donnez pas des chiffres cumulatifs. Laissez un espace en blanc seulement où les valeurs ne sont pas normalement rapportées. 	
1. Shipments – Livraisons		2. Inventories – Stocks manufacturiers	
Omit cents – Omettre les cents			
a) Goods of own manufacture Produits de propre fabrication	01	a) Raw materials, fuel, supplies, Matières premières, combustible, fournitures	04
b) Goods purchased for resale Produits achetés pour la revente	02	b) Goods in Process (gross value) Produits en cours (valeur brute)	05
TOTAL	03	c) Finished products of own manufacture Produits finis de propre fabrication	06
		d) Goods purchased for resale Produits achetés pour la revente	07
		TOTAL	08
3. Orders – Commandes		4. Period – Période	
Unfilled orders at month end Commandes non remplies à la fin du mois	09	Closing date of accounting period covered Date de clôture de la période comptable	10
		Month – Mois	Day – Jour
Name of contact – Nom de la personne-ressource	Tel. No. – N° de tél.		Date
Position – Fonction	Area code. Ind. rég.		Y-A M D-J
Thank you for your cooperation – Merci de votre collaboration			

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INFORMATION SHARING AGREEMENTS:

Section 11 of the federal Statistics Act provides for the joint collection and sharing of information with provincial statistical agencies which (1) have been established under provincial legislation providing substantially the same provisions for confidentiality and penalties for disclosure of confidential information as the federal Statistics Act, and (2) have the provincial or territorial legislative authority to collect this information on their own. Section 11 therefore was designed to reduce response burden and to facilitate the production of consistent and high quality national and provincial statistics.

A Section 11 agreement is in effect with the Institut de la statistique du Québec with respect to establishments located within the boundaries of that province.

ACCORDS DE PARTAGE DES DONNÉES :

L'article 11 de la Loi fédérale sur la statistique prévoit la collecte conjointe et le partage des données avec les organismes statistiques provinciaux qui 1) ont été établis en vertu d'une loi provinciale prévoyant essentiellement le même degré de protection de la confidentialité et les mêmes sanctions relatives à la divulgation d'information confidentielle que la Loi fédérale sur la statistique, et 2) sont autorisés légalement, par leur province ou leur territoire à recueillir eux-mêmes l'information. L'article 11 vise donc à réduire le fardeau de réponse et à faciliter la production de statistiques cohérentes et de bonne qualité aux niveaux fédéral et provincial.

L'accord en vertu de l'article 11 a été conclu avec l'Institut de la statistique du Québec en ce qui a trait aux établissements situés à l'intérieur des limites de cette province.

Comments – Commentaires
