



BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20551

September 29, 1978

To: Federal Open Market Committee

From: James L. Kichline *JLK*

The attached memorandum was prepared in response to a question raised by President Winn at the September FOMC meeting.

Attachment


BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM

Office Correspondence

Date September 27, 1978

To Mr. James L. Kichline

Subject: Recent Trends in New Orders

From Dana Johnson 

for Durable Goods

This memorandum was prepared in response to a question raised at the September FOMC meeting regarding recent trends in new orders data. In summary, it appears that recent fluctuations in durable goods new orders are in large part attributable to sharp movements in orders for transportation equipment and that seasonal adjustment problems may have been partly to blame. Nondefense capital goods orders also were affected by the swings in transportation equipment bookings but do not appear to have been distorted by any special seasonal adjustment problems.

Recent Movements in New Orders for Durable Goods

New orders for durable goods rose 7.6 per cent in August, recouping two months of decline and returning these bookings to the plateau that they had been on from March to May. As is shown in Table 1, orders for transportation equipment in general and for aircraft in particular were responsible for much of the volatility in orders over the past two months. Excluding bookings for transportation equipment, durable goods new orders fell 1.8 per cent in July and then rose 3.5 per cent in August.

As will be discussed in the following section, some of the swing in the transportation orders may have resulted from inadequate seasonal adjustments. Much of the recent volatility, however, probably reflects the characteristic instability of the transportation equipment

components. In part, this volatility reflects the nature of orders in the nonvehicular transportation industries where contract awards are relatively infrequent but often involve large numbers of expensive pieces of equipment. Over the past year, the average monthly percentage change without regard to sign has been 32 per cent for aircraft orders and 91 per cent for shipbuilding bookings.

Seasonal Adjustment Problems

Two special considerations complicate the seasonal adjustment of orders data in the third quarter. First, the model changeover in the auto industry varies from year to year with respect to timing and duration. Second, the Federal government switched in 1977 to a fiscal year which begins on October 1 rather than July 1. To cope with the first problem, Commerce seasonally adjusts motor vehicle orders by using the quarterly average of seasonal factors for each of the months of the third quarter. To adapt to the new fiscal year, Commerce has judgmentally adjusted the seasonal factors applied to the various defense industry orders series, most of which are subcategories within the transportation equipment sector.

Neither of these ad hoc corrections can be expected to result in appropriately refined seasonal factors since they necessarily are based on incomplete information. The seasonally adjusted and not seasonally adjusted data are shown in Table 2. One could argue, of course, that better seasonal adjustments would have removed more of the variability in recent orders data. However, after excluding the orders affected by these special seasonal problems, total durable orders on a seasonally adjusted basis still show considerable fluctuation, falling 4.0 per cent in July and rebounding 5.8 per cent in August (See Table 1).

-3-

Orders for Nondefense Capital Goods

The underlying trend in nondefense capital goods new orders also has been obscured by sharp swings in recent months. These orders, which are a good leading indicator of equipment investment, jumped 10.1 per cent in August following a 6.0 per cent fall in July. These sharp movements also have been largely due to swings in orders for nonvehicular transportation equipment (See Table 3). While a defense-nondefense breakdown of aircraft orders is not available to the staff, recent press reports would seem to indicate that much of the instability in nondefense transportation equipment reflects the awarding of several large commercial aircraft contracts for both domestic use and export. It should be pointed out that neither truck nor auto orders are included in the nondefense capital goods grouping. Accordingly, recent orders data in this sector were not affected by the special seasonal adjustment problems that were discussed above.

The machinery component of nondefense capital goods orders is usually the best indicator of the underlying trend in the demand for capital equipment. This grouping tends to be relatively stable and accounts for about 3/4 of the value of nondefense capital goods. As can be seen in Table 3, these machinery orders have been virtually flat since February.

Attachments

Table 1.

DURABLE GOODS NEW ORDERS
(Seasonally adjusted, monthly rate)

	Millions \$	Per cent Change		
	Aug.	June	July	Aug.
Durables	70131	-1.7	-5.3	7.6
Stone, Clay, and Glass	3667	6.0	-7.1	2.2
Primary Metals	10620	-3.0	-3.2	5.2
Fabricated Metals	8080	-3.6	-2.7	7.4
Machinery	19865	-2.5	-.7	1.5
Transportation Equip.	18429	-.4	<u>-15.2</u>	<u>21.0</u>
Motor Vehicles and Parts	11357	-3.4	-2.9	7.8
Aircraft and Parts	5305	17.5	<u>-41.9</u>	<u>60.9</u>
Shipbuilding and Mil. Tank Veh.	620	-52.7	40.2	46.9
Instruments	2688	-1.1	.9	-.9
Other Durable Goods ^{1/}	6782	-1.6	-1.3	4.8
Addenda:				
Total ex. Transp. Equip.	51702	-2.2	-1.8	3.5
Total ex. Aircraft	64826	-3.1	-2.0	4.7
Total ex. Motor Veh. and Defense Cap. Gds.	55424	-.3	-4.0	5.8

^{1/} Includes lumber, furniture, and miscellaneous personal goods.

Table 2.

DURABLE GOODS NEW ORDERS
(Monthly Rate)

1978	Millions \$		Per cent Change	
	S.A. ^{1/}	N.S.A. ^{2/}	S.A. ^{1/}	N.S.A. ^{2/}
January	63335	54426	-4.3	-11.9
February	66681	62766	5.3	15.3
March	69016	67473	3.5	7.5
April	70033	68379	1.5	1.3
May	70045	67220	0.0	-1.7
June	68840	74237	-1.7	10.4
July	65187	61702	-5.3	-16.9
August ^{A/}	70131	68037	7.6	10.3

^{A/} Advance.

^{1/} Seasonally Adjusted

^{2/} Not Seasonally Adjusted.

Table 3.

NONDEFENSE CAPITAL GOODS NEW ORDERS
(Seasonally adjusted, monthly rate)

1978	Millions \$			Per cent Change		
	Total	Machinery ^{1/}	Other ^{2/}	Total	Machinery ^{1/}	Other ^{2/}
January	16511	12223	4288	-2.8	-3.3	-1.3
February	17882	12956	4926	8.3	6.0	14.9
March	17507	13003	4504	-2.1	.4	-8.6
April	17409	12951	4458	-.6	-.4	-1.0
May	18124	13151	4973	4.1	1.5	11.6
June	18155	12602	5553	.2	-4.2	11.7
July	17074	12964	4110	-6.0	2.9	-26.0
August ^{A/}	18802	12901	5901	10.1	-.5	43.6

^{A/} Advance.

^{1/} Includes nonelectrical machinery other than farm machinery and machine shops and electrical machinery other than household appliances and electronic components.

^{2/} Includes the nondefense portions of shipbuilding and military tank vehicles, railroad equipment, communication equipment, aircraft and aircraft parts, and ordnance.