Research Department
Federal Reserve
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FRBSF Weekly Letter

Inventory Excess?

The nation's economic activity remained practically flat in the first quarter of 1979, except in the area of inventory spending. According to preliminary GNP data, real inventory investment increased 45 percent over the preceding quarter, and this information was buttressed by earlier monthly reports from manufacturers and distributors. The National Association of Purchasing Management, for instance, noted that purchased-materials inventories increased sharply in March, and the percentage of members reporting higher stocks was the highest since last July. This raises several questions:

1. Is the stock buildup basically speculative in nature? As such, it could be a sign of an ongoing inventory boom, which will be followed by a sharper than expected economic slowdown.
2. Is the inventory accumulation largely involuntary, the result of weaker than anticipated first-quarter sales? If so, the undesired stocks may be signalling the beginning of a classical inventory cycle, with this buildup to be followed by a sharp cutback later on.
3. Is the first-quarter buildup largely a voluntary effort to replenish stocks after an unanticipated fourth-quarter surge in sales? If so, current inventory behavior does not necessarily indicate any economic weakness, but simply represents another stage in the series of mini-cycles which have characterized this four-year-old business expansion.

No speculative buildup

Recent data do not indicate any substantial speculative buildup, on the basis of movements in the three different types of factory stocks—materials and supplies, work in process, and finished goods. During the 1974 speculative binge, manufacturers built up very large inventories of materials and supplies, in anticipation of higher prices and major shortages in the future. Altogether, materials and supplies constituted 48 percent of the entire buildup in that year. In contrast, materials and supplies constituted only 29 percent of the inventory buildup in the first two months of 1979. Indeed, during the past few months, the distribution of inventories by stage of fabrication was closest to the pattern existing in 1978, a period characterized by conservative inventory policies.

Some analysts suggest that the buildup was not purely speculative, but was related to a desire to build up stocks in anticipation of a lengthy Teamsters' strike. There may have been some of this, but it was probably minor. In fact, a weekly Labor Department survey on the strike's impact provided no evidence that businesses had stockpiled materials to any significant degree in anticipation of the strike.

The second possibility was that business firms accumulated inventories involuntarily, because of the weaker-than-expected pattern of final sales

(continued on page 2)

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(total GNP less inventory spending). This may have been true in some lines, but the aggregate statistics show little evidence of such a buildup. If this had been true, manufacturers' finished-goods inventories would have increased sharply. However, finished goods accounted for only 26 percent of the total buildup in January and February— in contrast to the situation during the heavy 1974 buildup, when they accounted for almost 30 percent of the total increase.

Deliberate buildup

The third possibility—a conscious desire to replenish stocks—seems to be the most likely explanation on the basis of available evidence. At the beginning of 1979, stocks were at historically low levels relative to sales, because of the unexpectedly rapid pace of sales during the final quarter of 1978. Consequently, the strong first-quarter accumulation did no more than return stock/sales ratios to the average level maintained throughout most of the 1977-78 period, when cautious management policies kept a tight leash on inventories.

This pattern of conservative inventory management shows up in the ratios, no matter whether they are calculated on a constant-dollar or book-value basis (see chart). The book-value figures should be discounted because of their downward bias during periods of inflation. (Under this measure, inventories are valued at a mix of current and lower past prices; while sales are valued at current prices only.) But the ratios when calculated on a book-value basis are still useful for short-term comparisons, and for that matter, are

Publications Available

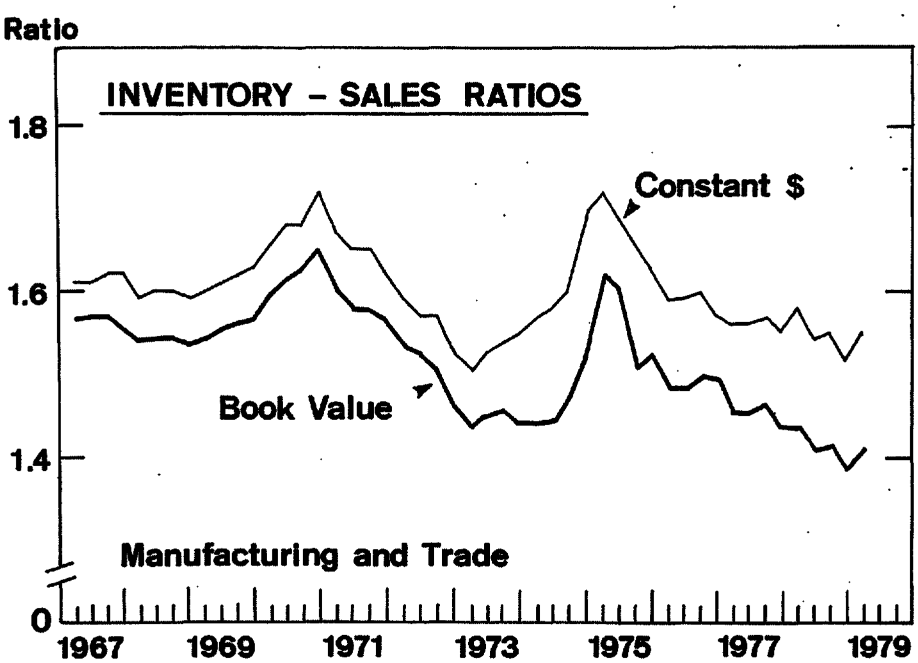
Copies are now available of two recent speeches by John J. Balles, President of the Federal Reserve Bank of San Francisco. "U.S. - Japan Economic Relations" outlines steps that should be taken by the two nations to stabilize the dollar and reduce barriers to world trade and finance. "Inflation — Causes and Prospects" discusses the role of monetary and fiscal policy in the current inflationary situation. Free copies of these and other Reserve Bank publications can be obtained by calling or writing the Public Information Section, Federal Reserve Bank of San Francisco, P.O. Box 7702, San Francisco 94120. Phone (415) 544-2184.

widely used because they are available on a more timely basis than the constant-dollar ratios.

On a constant-dollar basis, adjusted for inflation, the very low stock/sales ratio of fourth-quarter 1978 was matched only by the ratio reached in fourth-quarter 1972 and first-quarter 1973 —a period of materials shortages and rapidly rising final sales. Despite the recent increase, from 1.52 in fourth-quarter 1978 to an estimated 1.55 in first-quarter 1979, the ratio still remains in line with the average maintained throughout most of the cautious 1977-78 period. And from early indications, the same holds true for other ratios derived from the GNP statistics, such as the inflation-adjusted ratio of total inventories to final sales.

On balance, inventories have remained at relatively moderate levels in recent months. This has favorable implications for the national economy. Five of the past six business cycles have been characterized by an unintentional buildup and subsequent liquidation of stocks. But if business firms continue their conservative inventory policies of the past two years, they can help ensure that any future softening of the economy will not degenerate into a more severe decline.

Rose McElhattan



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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 4/11/79	Change from 4/4/79	Change from year ago @ Dollar	Percent
Loans (gross, adjusted) and investments*	123,760	148	+ 17,123	+ 16.06
Loans (gross, adjusted) — total#	101,030	− 181	+ 16,913	+ 20.11
Commercial and industrial	29,873	184	+ 3,885	+ 14.95
Real estate	36,012	157	+ 7,664	+ 27.04
Loans to individuals	20,883	86	NA	NA
Securities loans	1,571	− 298	NA	NA
U.S. Treasury securities*	7,992	137	− 100	− 1.24
Other securities*	14,738	192	+ 310	+ 2.15
Demand deposits — total#	43,683	184	+ 3,553	+ 8.85
Demand deposits — adjusted	31,904	943	+ 2,241	+ 7.55
Savings deposits — total	30,131	− 88	− 413	− 1.35
Time deposits — total#	49,841	− 50	+ 8,674	+ 21.07
Individuals, part. & corp.	40,570	− 18	+ 8,144	+ 25.12
(Large negotiable CD's)	17,562	− 102	+ 2,861	+ 19.46

Weekly Averages of Daily Figures	Week ended 4/11/79	Week ended 4/4/79	Comparable year-ago period
Member Bank Reserve Position			
Excess Reserves (+)/Deficiency (−)	52	48	− 55
Borrowings	11	65	16
Net free reserves (+)/Net borrowed(−)	41	− 17	− 71
Federal Funds — Seven Large Banks			
Net interbank transactions [Purchases (+)/Sales (−)]	+ 2,701	+ 1,506	+ 1,951
Net, U.S. Securities dealer transactions [Loans (+)/Borrowings (−)]	+ 737	+ 222	+ 111

*** Excludes trading account securities.**
 # Includes items not shown separately.
@ Historical data are not strictly comparable due to changes in the reporting panel; however, adjustments have been applied to 1978 data to remove as much as possible the effects of the changes in coverage. In addition, for some items, historical data are not available due to definitional changes.

Editorial comments may be addressed to the editor (William Burke) or to the author ....
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