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Volume Author/Editor: Bert G. Hickman

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Chapter Author: Bert G. Hickman
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periods: In 1940-1941 American troops were not fighting overseas and the characteristics of a wartime economy were not fresh in the minds of Americans. During the Korean period the United States was actively engaged in the hostilities and there was a grave possibility that the conflict would acquire global proportions. The sense of the imminence of wartime economy at the outbreak of the hostilities in Korea, combined with memories of the shortages of consumer goods during World War II, created a climate of expectations that had no counterpart in 1940-1941. The economic effects of the mobilization that began in 1950 would have been very different were it not for the fact that it was accompanied by the hostilities in Korea and the attendant threat of global conflict.

It is apparent that a defense mobilization will provide a stimulus to economic expansion if government expenditures increase the aggregate demand for goods and services. However, the expansion need not await the actual growth of government expenditures. In the first place, some government expenditures for defense will lag behind the placement of orders. For a time, the increased production consequent on the orders will be reflected in private inventory investment rather than in government expenditures. Second, private fixed investment may be encouraged in industries related to defense not only by the general stimulus of orders for goods but also by such devices as accelerated tax amortization, direct loans, and loan guarantees. Such private investment expenditures, while resulting directly from the defense program, are not included in government expenditures. Finally, the outbreak of hostilities or the announcement of a mobilization program may stimulate expansion by affecting the expectations of various groups in the economy. This last was a highly important influence in the nine months following the invasion of South Korea in June 1950.

## The First Nine Months: Expansion and Inflation

One immediate aftermath of the outbreak of hostilities in Korea was a sharp increase in consumer expenditures. In the third quarter of 1950 the spurt in expenditures for consumer durable goods was especially pronounced, but there was also a noticeable rise

Chart 5
Consumer Expenditures by Type, Seasonally Adjusted Quarterly Totals
at Annual Rates, 1949-1952


Source: Survey of Current Business, July 1953.
Ratio scale
in expenditures for nondurables (Chart 5). Businessmen were not prepared for the spurt in activity, and inventory investment, which had been increasing in the first half of the year, decreased in the third quarter (Chart 6). These developments may be followed in greater detail with the aid of the monthly series recorded in Chart 7.

Chart 6
Gross Private Domestic Investment and Its Components, and Net Foreign Investment, Seasonally Adjusted Quarterly Totals at Annual Rates, 1949-1952


Source: Survey of Current Business, July 1953.

## Chart 7

Indexes of Personal Income, Retail, Wholesale, and Manufacturers' Sales and Inventories, and Manufacturers' New Orders, Seasonally Adjusted, Monthly, 1949-1952


Source: Survey of Current Business, various Issues. Conversion to June 1950 base by the author.

Retail sales increased 9 per cent in July. Although retailers increased their own purchases immediately-wholesale sales rose 10 per cent in July-their stocks were nonetheless reduced by the sudden spurt in sales. ${ }^{1}$ Wholesalers also reacted swiftly. Manufacturers' new orders jumped 16 per cent in July, and their sales increased 4 per cent. There was no reduction in wholesale stocks, but manufacturers' stocks of finished goods were diminished (Chart 8). However, the decrease in manufacturers' stocks of finished goods was offset by an increase in stocks of purchased materials and goods in process. In short, buying was extremely active on all market levels in the first few weeks of the war.

The July level of retail sales was maintained through August. Meanwhile, the sales of wholesalers and manufacturers continued to increase, and as a consequence retail and wholesale stocks were enlarged. Then in September retail sales broke sharply downward and continued to decline through November. The fourth quarter decline in consumer expenditures affected durables and nondurables alike.

Wholesale sales followed retail sales downward in September, October, and November, but deliveries of goods to wholesalers and retailers did not fall proportionately, and distributors' stocks rose sharply. Manufacturers' stocks also increased, but primarily because of a rise in stocks of purchased materials and goods in process. Thus manufacturers and distributors alike were making large additions to inventories in the fourth quarter of 1950 despite, or because of, the lull in consumer spending. The increase in nonfarm inventories was more than twice as large as the decrease in consumer expenditures in the last quarter of the year. ${ }^{2}$ The ratio of inventory to sales on all market levels increased substantially between June and December (Chart 9). The increase in stocks rela-

[^0]Chart 8
Manufacturers' Inventories by Stage of Fabrication, Unadjusted, Monthly, 1949-1952


Source: Survey of Current Business, various issues.
tive to sales was particularly pronounced at the retail level. There is no evidence here of a physical shortage of consumer goods at the end of 1950 .

Nonetheless, another consumer buying wave occurred in early 1951, following the reversals in the Korean campaign in late 1950. Once again expenditures for consumer durables increased, although not to the level of the third quarter of 1950. Expenditures for nondurables were larger than in the first buying wave, however. The big spurt in retail sales came in January, but distributors were

Chart 9
Ratio of Inventories to Sales: Manufacturers', Retail, and Wholesale, Monthly, 1949-1952


Source: Survey of Current Business, various issues. Ratios computed by author.
prepared and the goods were available. Sales by manufacturers and wholesalers increased along with retail sales, and stocks rose all along the line from manufacturer to retailer. Sales at retail and wholesale fell off once more in February and March, but manufacturers' sales were maintained, and distributors' stocks mounted spectacularly. Nonfarm inventories were accumulated at an annual rate of 9.5 billion in the first quarter of 1951.

There is ample evidence that the consumer buying waves in the summer of 1950 and the winter of 1951 were not induced by rising incomes. Retail sales rose 9 per cent in July 1950, personal income only 2 per cent (Chart 7). By August, personal income had increased 4 per cent above the June level, but retail sales were still 9 per cent above the June level. Again, in the second buying wave of early 1951, the increase in retail sales was substantially greater than the increase in income. Thus during both buying waves, the increase in consumption was much larger than the increase in disposable personal income. ${ }^{3}$ The seasonally adjusted annual rate of personal saving declined 60 per cent in the third quarter of 1950, while disposable personal income increased nearly 4 per cent. A similar sharp reduction in personal saving in the face of rising income occurred in the first quarter of 1951 (Chart 10).

The timing and character of the buying waves make it apparent that consumers were acting on expectations of shortages. The first spurt in retail sales lasted two months, and occurred immediately after the onset of hostilities. Sales then declined for several months as the United Nations forces advanced northward in Korea, only to spurt once again after the Chinese Communists entered the war and the retreat from the Yalu began. ${ }^{4}$ Purchases of consumer durable goods fluctuated violently during this period (Chart 5). ${ }^{5}$ These

[^1](Continued on page 18)

Chart 10
Disposable Personal Income and Personal Saving, Seasonally Adjusted Quarterly Totals at Annual Rates, 1949-1952

were the goods which had been in shortest supply during World War II. Expenditures on nondurables-which include semidurable as well as perishable commodities-were also noticeably affected by consumer expectations. Expenditures on services, which cannot be stockpiled, merely rose smoothly along with income (Chart 5).
declined in the fourth quarter, a development which can scarcely be attributed to credit controls. More basic influences were doubtless at work. A lull was only to be expected following the active forward buying of the summer months, particularly in view of the favorable military developments which followed the landing at Inchon (September 15) and which seemed to promise an early end to hostilities.

The commodities whose sales were most affected by forward buying may be seen in Table I, which shows the sales of various classes of retail stores as a percentage of disposable income. It is clear that almost every type of durable commodity participated in both buying waves. The nondurables most affected were those sold by general merchandise stores, grocery stores, and gasoline service stations.

Manufacturers and distributors were also influenced by expectations of shortages, at least in the sense that their own buying practices paralleled those of consumers (Chart 7). It could be argued that businessmen were merely acting to adjust stocks to changes in the level of sales ${ }^{6}-\mathrm{it}$ cannot be known whether they would have accumulated inventories in the absence of forward buying by con-sumers-but it is virtually certain that they actively shared the expectations of consumers. They were exposed to the same general influences as consumers-the memories of wartime shortages, the provisions for direct controls in the Defense Production Act of 1950, which was debated in July and August and enacted in September, and the progress of the military campaign in Korea-and in addition they possessed the concrete evidence afforded by the behavior of their own sales and stocks. In any event, whether busi-

[^2]Table 1
Sales of Retail Stores as a Percentage of Disposable Personal Income, 1950-1951

| Kind of business | 1950 bY QUARTERS |  |  |  | 1951 bX QUARTERS |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | I | II | III | $I V$ | $\bar{I}$ | II | III | IV |
| All retail stores | 68.5 | 71.2 | 74.0 | 67.7 | 73.0 | 66.6 | 65.4 | 65.7 |
| Durable goods stores | 24.3 | 26.2 | 28.7 | 24.4 | 27.3 | 23.0 | 21.8 | 21.4 |
| Automotive group | 13.1 | 14.1 | 15.2 | 18.0 | 14.1 | 11.8 | 11.1 | 10.7 |
| Motor vehicle dealers | 12.4 | 13.4 | 14.3 | 12.2 | 13.1 | 11.1 | 10.4 | 10.0 |
| Parts and accessories | 0.7 | 0.7 | 0.9 | 0.8 | 1.0 | 0.7 | 0.7 | 0.7 |
| Building materials and hardware group | 4.5 | 5.1 | 5.4 | 4.7 | 5.5 | 4.9 | 4.5 | 4.4 |
| Building materials | 3.3 | 3.8 | 4.0 | 3.4 | 4.0 | 3.6 | 3.3 | 3.1 |
| Hardware | 1.2 | 1.3 | 1.4 | 1.3 | 1.5 | 1.3 | 1.2 | 1.3 |
| Home furnishings group | 3.9 | 3.8 | 4.6 | 3.8 | 4.3 | 3.3 | 3.3 | 3.4 |
| Furniture and house furnishings | 2.3 | 2.3 | 2.6 | 2.3 | 2.5 | 2.0 | 2.1 | 2.1 |
| Household appliances and radios | 1.6 | 1.5 | 2.0 | 1.5 | 1.8 | 1.2 | 1.2 | 1.2 |
| Jewelry | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 |
| Other durable goods stores | 2.3 | 2.6 | 2.8 | 2.4 | 2.8 | 2.6 | 2.4 | 2.4 |
| Nondurable goods stores | 44.1 | 45.0 | 45.4 | 43.3 | 45.7 | 43.6 | 43.6 | 44.4 |
| Apparel group | 4.5 | 4.7 | 4.6 | 4.5 | 4.7 | 4.3 | 4.3 | 4.4 |
| Men's clothing and furnishings | 1.1 | 1.1 | 1.1 | 1.0 | 1.1 | 1.0 | 1.0 | 1.0 |
| Women's apparel and accessories | 1.7 | 1.8 | 1.8 | 1.8 | 1.8 | 1.7 | 1.7 | 1.7 |
| Family and other apparel | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 0.9 | 1.0 |
| Shoes | 0.8 | 0.8 | 0.7 | 0.7 | 0.8 | 0.7 | 0.7 | 0.7 |
| Drug stores | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 |
| Eating and drinking places | 5.3 | 5.3 | 5.1 | 5.0 | 5.2 | 5.1 | 5.0 | 5.0 |
| Food group | 16.0 | 16.2 | 16.3 | 15.7 | 16.7 | 16.4 | 16.6 | 16.6 |
| Grocery and combination | 12.8 | 13.1 | 13.2 | 12.7 | 13.5 | 13.2 | 13.4 | 13.5 |
| Other food | 3.2 | 3.1 | 3.1 | 3.0 | 3.2 | 3.2 | 3.2 | 3.2 |
| Gasoline service stations | 3.6 | 3.7 | 3.8 | 3.6 | 4.0 | 3.7 | 3.6 | 3.8 |
| General merchandise group | 8.1 | 8.5 | 9.1 | 8.1 | 8.5 | 7.9 | 8.0 | 8.0 |
| Department stores incl. mail order | 4.9 | 5.2 | 5.7 | 5.0 | 5.3 | 4.8 | 4.9 | 4.8 |
| Variety | 1.3 | 1.3 | 1.3 | 1.2 | 1.3 | 1.2 | 1.3 | 1.2 |
| Other general merchandise | 1.9 | 2.0 | 2.1 | 1.9 | 2.0 | 1.9 | 1.9 | 2.0 |
| Other nondurable goods stores | 4.5 | 4.5 | 4.5 | 4.3 | 4.5 | 4.2 | 4.2 | 4.6 |
| Liquor | 1.2 | 1.3 | 1.3 | 1.2 | 1.3 | 1.2 | 1.2 | 1.3 |
| All other | 3.2 | 3.2 | 3.2 | 3.1 | 3.2 | 3.0 | 3.0 | 3.3 |

nessmen merely reacted passively to the actions of consumers or actively shared the expectations of consumers, the end result was the same: a sharp increase in demand on all market levels during the buying waves and inventory accumulation by businessmen as well as consumers.

Thus forward buying shaped the character of the inflationary phase of the Korean expansion. Two associated expectations doubtless influenced consumers and businessmen: the fear that shortages would develop as a consequence of formal or informal rationing and the belief that prices would increase. Such expectations may develop from time to time in the market for a particular product as a result of special conditions which affect that market alone. When many groups hold such expectations at the same time, affecting many markets, the short-period potential for inflation is great. That was the situation in the last half of 1950. The volume of demand generated by the forward buying was itself sufficient to create temporary shortages at existing prices, and as a result prices advanced rapidly. As it turned out, serious shortages of consumer goods did not develop in 1951. However, this might have happened if consumers and businessmen had not accumulated stocks in 1950 and early 1951, since the government substantially increased its claim on the nation's resources in 1951.

## The Deflationary Phase: 1951

A remarkable transformation of the character of the expansion occurred during 1951. The rise in gross national product had been vigorous during the inflationary phase; in 1951 it was moderate. Rising prices accompanied rising production up to the first quarter of 1951; falling wholesale prices and stable industrial production were the dominant trends through the remainder of the year. Increasing activity characterized most sectors of the economy until the early months of 1951 , after which activity diminished in many sectors.

This last point deserves amplification. In general, industries related to defense experienced an expansion of activity, while other industries experienced a contraction. These tendencies may be


[^0]:    1 The 10 per cent increase in wholesale sales is evidence of an increase in purchases by retailers, but it probably understates the magnitude of that increase, since retailers do not buy all their goods from wholesalers. Similarly, manufacturers sell to one another and to retailers, as well as to wholesalers, and manufacturers' sales are not equivalent to wholesalers' purchases.
    2 Nonfarm inventories were accumulated at an annual rate of $\$ 4.5$ billion in the third quarter of 1950 and $\$ 13.7$ billion in the fourth quarter. The corresponding figures for personal consumption expenditures were $\$ 203.8$ billion and $\$ 199.6$ billion. All figures are seasonally adjusted (Survey of Current Business, July 1953, Table 43).

[^1]:    3 Disposable personal income increased by $\$ 8.0$ billion (annual rate) in the third quarter of 1950 , but consumer expenditures rose by $\$ 14.1$ billion. The corresponding figures for the first quarter of 1951 are $\$ 2.3$ billion and $\$ 10.6$ billion. The data are seasonally adjusted (Survey of Current Business, July 1953, Table 45).
    4 In technical terms, the function relating disposable personal income and consumer expenditures shifted upward in the third quarter of 1950 , downward in the fourth quarter, and upward again in the first quarter of 1951, as expectations changed. It is still an open question whether in normal circumstances consumer expectations vary enough to affect the short-run consumption function. It is quite possible that changes in the expectations of individual consumers are ordinarily offsetting, and therefore cancel out. During the period under discussion, however, memories of wartime shortages were still fresh, there was talk of rationing (which was authorized in the Defense Production Act of 1950, approved September 8), and there were dramatic reversals in the military situation, so that changes in expectations were general and in the same direction.
    5 Consumer credit controls were instituted on September 18 and strengthened on October 16. The controls may have contributed to the relaxation of retail demand in September, October, and November, but it is impossible to estimate the quantitative importance of this factor. As is pointed out in the text, sales of nondurables also

[^2]:    ${ }^{6}$ The behavior of stocks and sales during this period is consistent with the hypothesis that distributors and manufacturers of consumer goods were attempting to maintain stocks at some approximately normal ratio to sales but experienced difficulty in so doing because of lags of deliveries behind orders and unforeseen fluctuations of sales. Thus the initial buying wave sharply reduced stock-sales ratios on all market levels (Chart 9) despite the fact that wholesale sales and new orders of manufacturers rose along with retail sales (Chart 7). The stock-sales ratios then rose during the subsequent buying lull, even though wholesale sales and new orders of manufacturers declined in sympathy with retail sales. This could be interpreted as an unintended increase in stocks, at least during the last month or two, although comparison with the turnover ratios of 1949 and 1952 suggests that stocks were not seriously out of line with sales even in November. The same sequence was repeated during the winter, as another reduction in stock-sales ratios occurred during the second buying wave and was in turn succeeded by a sharp and no doubt unintended increase at the wholesale and retail levels as retail sales declined once more, again despite the fact that wholesale sales and manufacturers' new orders duplicated the pattern of retail sales. This is not to argue that businessmen were not speculating in inventory at the same time and for the same reasons as consumers but only that either interpretation is consistent with the observed movements of sales, stocks, and orders. It will be noted, however, that the nonspeculation hypothesis implies that distributors automatically projected the current level or rate of change of sales into the future without analyzing the causes underlying the variations in sales, at least during the second buying wave after the stocks depleted during the first buying wave had been rebuilt.

