

# AMERICAN INSTITUTE for ECONOMIC RESEARCH

54 Dunster Street, Harvard Square - Cambridge, Mass.

WEEKLY  
BULLETIN

April 6  
1942

## RESEARCH REPORTS

### WHERE ARE WE GOING?

#### *War and Postwar Readjustments*

In his annual message to Congress just after the war had started, President Roosevelt said: "Modern methods of warfare make it a task, not only of shooting and fighting, but of even more urgent ones of working and producing." He also acknowledged that the process would involve costly readjustments: "This production of ours in the United States must be raised far above its present levels, even though it will mean the dislocation of the lives and occupations of millions of our own people."

Fortunately, industry has not been forced to undertake the overnight transition to a wartime economy that was forced on Britain in 1939. The process here began as soon as the European war developed extra demand for war materials and was later accelerated when our national defense program was adopted. Widespread disruption of the Nation's normal industrial processes began only after the Pearl Harbor attack.

The war and postwar readjustments in the Nation's industries are somewhat simplified by the fact that wartime demand is primarily concentrated in the products of a relatively small number of industries. These are mainly the metal industries, and, although they constitute the most important sector of industry, they normally embrace less than half of all industrial production.

The expansion in the activity of this group of industries vital to the war effort is indicated by the following table. The Federal Reserve indexes are shown for the period immediately preceding the outbreak of war in Europe, for the period when American industries were filling war orders for both Britain and France, for the period just before our entrance into the war, and for the latest month available.

FEDERAL RESERVE INDEXES OF INDUSTRIAL PRODUCTION  
(1935-39 Average = 100, adjusted for Seasonal Variations)

Industrial Groups	Aug. 1939	June 1940	Nov. 1941	Feb. 1942
Iron and Steel	113	152	191	193
Machinery	104	128	221	256
Transportation Equipment	104	135	280	315
Nonferrous Metals and Products	112	126	189	192
Nondurable Goods	105	122	166	143

The first four groups of industries shown in the table were especially stimulated by the war in Europe and have since become essential contributors to the indus-

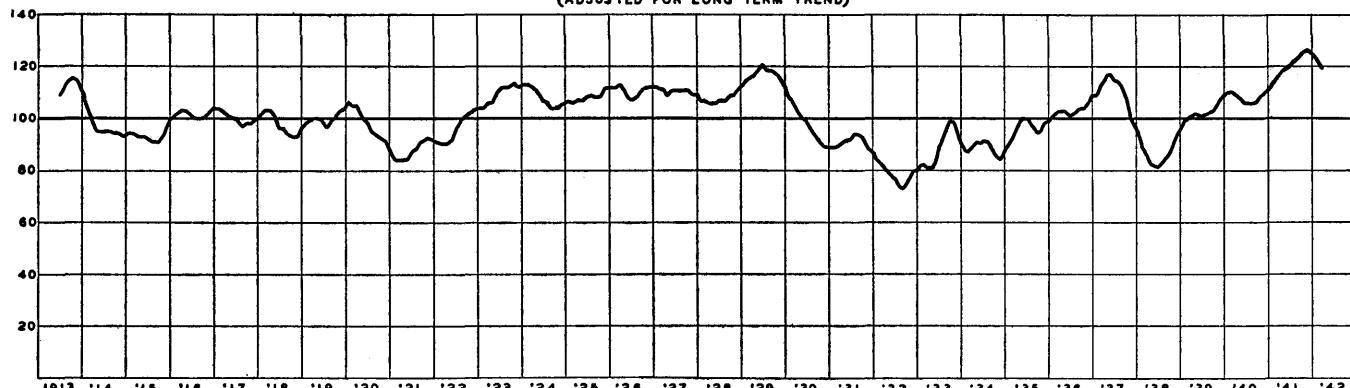
trial department of the war effort. The transportation-equipment group, which has shown the largest gain of the group of industries in the table, includes aircraft and shipbuilding industries. Their activity has increased as rapidly as present equipment, newly created facilities, and labor supply permitted. Data for these industries are not shown separately because figures have not been made public since we entered the war. The automobile industry is also included in the transportation-equipment group. Otherwise, the combined index would have been higher during the period when the automobile industry was being transformed into establishments for war-material production.

Virtually all of the newly developed excess capacity of these metal industries will not be required in peacetime. During the war we shall have accumulated more armaments and munitions than will be required for victory. We shall have enormous quantities of war planes that can be used to a relatively small degree in peacetime. Just as in the first World War, we shall have more shipping than we know what to do with after the war is over. In the meantime, the industries serving as spearheads for the Nation's wartime production will expand their productive facilities and will draw workers from other industries and to a more limited extent from other occupational classes.

The record of the industries included in the nondurable goods classification shown in the table indicates the extent to which many other industries have increased output since the war began in 1939. The activity of these industries reached a peak in November 1941, just before our entrance into the war and has since declined, a trend that will probably continue. The earlier expansion in these industries has required few serious readjustments. Productive capacity for most of these industries was only partially utilized before the war, and additional plant facilities were therefore not required.

A considerable majority of the Nation's gainfully employed persons are either directly connected with industry, with the distribution of industrial products, or with the clerical processes involved. The reapportionment of a large proportion of production from domestic consumption to the destructive purposes of war obviously causes much disruption of the Nation's commercial processes. If the war is prolonged, the number of persons employed in trade may be reduced to half the normal number. Government officials believe that all employment thus displaced will be required for activities associated with the war effort, but the transition

**INDEX OF LIVING STANDARDS**  
(ADJUSTED FOR LONG TERM TREND)



cannot immediately be effected. Statistical data relating to trade are less satisfactory than those representing the industrial processes and do not afford the information necessary for an accurate appraisal.

About one-quarter of the Nation's gainfully employed population is normally engaged in the production and distribution of agricultural products. Demand for most farm products will be urgent during the war, and readjustments in this segment of the Nation's economy will not be serious in spite of the already apparent inadequacy of the farm-labor supply. In this field, the postwar readjustments will be more serious than those required during the war period.

#### Civilian Living Standards

Progress in living standards during the past two decades has largely manifested itself in the provision of new mechanical equipment. Consumers have become accustomed to improved pleasure cars, artificial refrigeration, washing machines, oil burners, radios, and the like. The war has eliminated production of all these conveniences, and existing dealer stocks are being rapidly depleted. On the other hand, the delay in our entrance into the war has enabled the public to accumulate an unusually ample supply of these commodities.

The extent to which consumers have stocked up during the period when supplies of consumer goods were adequate and when the purchasing ability of the public had been augmented by the increased pay rolls incident to the prewar armament effort is illustrated by the trend of the Institute's index of living standards during that period. By November 1941, the index had reached a level substantially exceeding that existing at the height of the New Era boom in 1929.<sup>1</sup>

The index shown in the chart at the top of this page reflects changes in the per capita volume of consumer goods produced in the United States. It is a six months' moving average plotted at the sixth month to allow for the normal time required for such goods to reach the hands of consumers. It is adjusted for long-term trend by adapting "weights" given to component series of the index each year, so that each item has an influence proportional to the value of the year's production.

The production and distribution of consumers durable goods were primarily responsible for the high record achieved by the index of living standards late in 1941.

<sup>1</sup> The index has recently been revised to conform to revisions in population estimates.

The physical volume of consumer durable goods produced each month increased so substantially during this period that production in June 1941 was more than double that in June 1939. The automobiles and other equipment produced at the height of the consumers durable goods boom that culminated in June 1941 were distributed during the remainder of the year.

The national defense program had begun to cut into the production of consumers durable goods several months before we entered the war. Thereafter, the production of this class of goods was sharply curtailed, and, by February 1942, it was down to the depression levels of 1938. Production of this class of goods will be negligible until peace is again established.

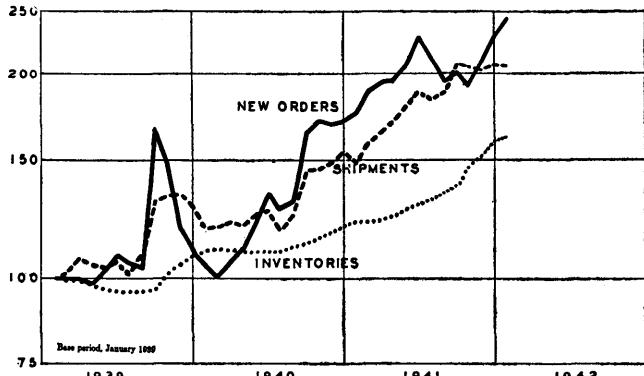
There was a much smaller increase in the production of consumers nondurable goods. However, the gain of from 15 to 20 per cent from the prewar (1939) level was not relinquished after we entered the war. A substantial proportion of current production represents Government orders for the Nation's armed forces, which consume a larger amount of food and clothing per capita than does the civilian population. The demand created by the induction of an increasing number of men into these services may offset the effects of lowered consumption of this class of goods by the civilian population.

#### Adaptability

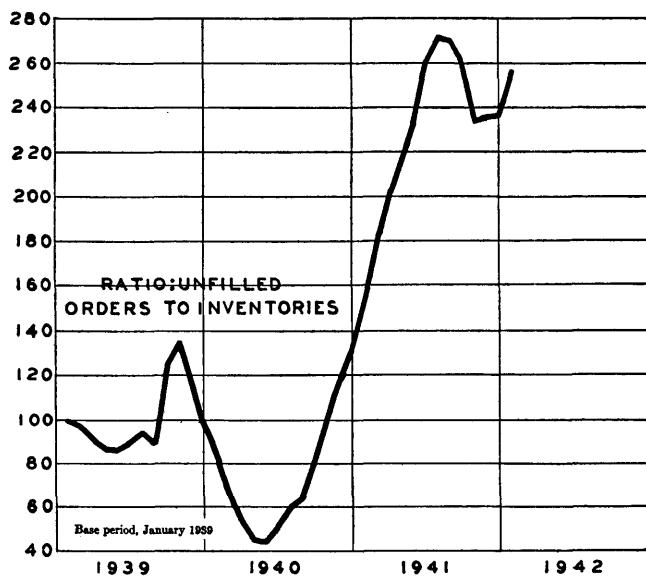
A degree of centralized management of the economic system is of course necessary in wartime, but the injection of Government controls into the economic mechanism invariably creates friction. The confusion that attended the establishment of the NRA illustrates the dislocations that develop when a radical change in a complicated economic system is made. The mass of detail normally attended to by individuals engaged in manufacturing and trade can hardly be supervised efficiently by a bureaucracy, especially in the early stages of the transfer of controls. However, the American people in the past have shown themselves capable of a high degree of adaptability. Without this, it would have been impossible for us to have attained the highest level of living standards achieved by any great nation. During the present war, there are many examples of such adaptability in the Nation's industrial, trade, and transportation establishments.

The statistical evidence presented in the earlier portions of this discussion, because of space limitations, have dealt only with the most important economic groups, measured by size, affected by the war. The

### INDEXES OF MANUFACTURERS' NEW ORDERS, SHIPMENTS, AND INVENTORIES



### RATIO OF UNFILLED ORDERS TO INVENTORIES



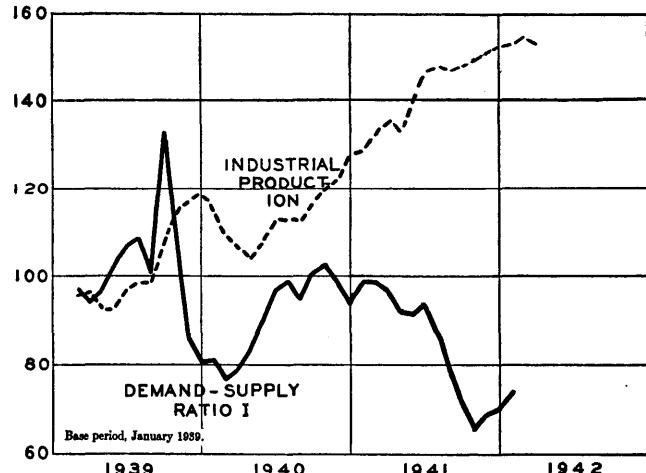
extent and direction of the major readjustments are now fairly well defined, and therefore it is possible to make an appraisal of the probable events that will occur after the war when a return can be made to more nearly normal economic relationships. In a subsequent bulletin, we shall discuss the postwar economic readjustments.

#### Demand-Supply Ratios

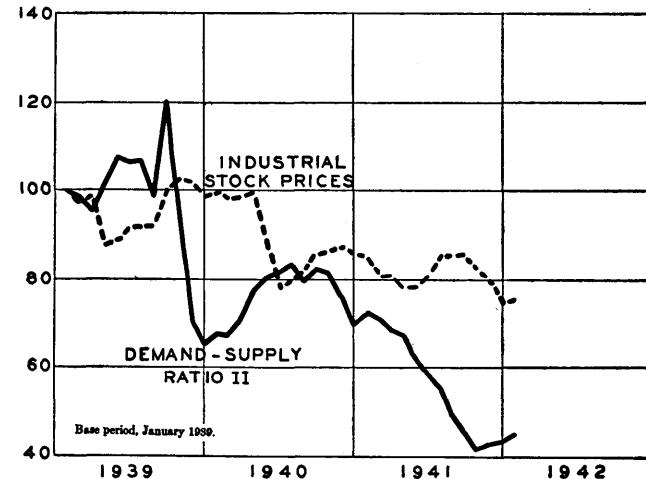
The indexes of manufacturers' new orders, shipments, and inventories compiled by the United States Department of Commerce were recently published for January 1942. The chart in the upper left-hand corner of this page shows the basic indexes from which our demand-supply relationship charts are derived.

The dollar volume of new business placed with manufacturers increased to a new high level during December 1941 and January 1942. Since the June 1941 peak in the value of new orders, prices of manufactured goods increased about nine per cent, so that the physical volume of orders in January 1942 was approximately the same as that in June 1941. After reaching a high level for the war period in September 1941, the value of shipments of manufactured products thereafter remained about unchanged. In view of the downward trend of

### DEMAND-SUPPLY RATIO I VS. INDUSTRIAL PRODUCTION



### DEMAND-SUPPLY RATIO II VS. INDUSTRIAL STOCK PRICES



prices, there has evidently been a decrease in the physical volume of shipments. Probably the curtailment of automobile shipments has been the most important factor influencing this trend. The index of manufacturers' inventories continued to increase during the winter months, but, because of the increase in the value of inventories, only a moderate accumulation of physical stocks was indicated.

The ratios of unfilled orders to inventories shown in the next chart in the same column were computed by dividing the backlog of orders (obtained by calculating the excess of the new orders index over the shipments index for the period shown on the chart) by the index of inventories. The decline in the ratio of unfilled orders to inventories from July to October 1941 coincided with the temporary decline in the new orders index. More recently, the new orders index has advanced while the volume of shipments remained about unchanged; consequently, the ratio of unfilled orders to inventories has advanced again in spite of the increase in inventories.

The chart at the top of the next column on this page shows the Institute's Demand-Supply Ratio I (new orders divided by shipments times inventories) with the Institute's index of industrial production, which is adjusted for long-term trend. Demand-Supply Ratio I

was following a moderately downward trend from October 1940 to June 1941, primarily because the index of shipments (a supply factor) was advancing. The sharp decline in Demand-Supply Ratio I thereafter was the result of the decline in the new orders index. This decline culminated in October 1941, and Demand-Supply Ratio I advanced during the next three months as a result of the increase in new manufacturers' orders. The index of industrial production reached a new high level early this year, but the rate of advance has been slower since June 1941 than it was in the preceding twelve months.

The next chart shown in the same column presents the Institute's Demand-Supply Ratio II with the index of industrial stock prices. This ratio includes industrial production as well as shipments and inventories in the supply factor. Demand-Supply Ratio II increased last winter when Demand-Supply Ratio I was advancing, although the rate of gain of the former was less. This divergence in the trends of the two ratios reflected the continued increase in the index of industrial production. Industrial stock prices reached a new low for the current movement recently. If Demand-Supply Ratio II has the forecasting value that its relatively brief history suggests, at least a substantial rally may be expected in the stock market within the next few months. A real turn in the market's fundamental trend would be indicated only if the upturn in Demand-Supply Ratio II continues and exhibits a more impressive rate of gain.

## THE FUNDAMENTALS

### Supply

The steel-ingot production rate last week advanced from 98 to 98½ per cent of theoretical capacity. A further improvement in the steel-production rate this spring is anticipated. The increasing rate of activity in armament plants is augmenting the supply of steel scrap that can be turned back to the mills. It is also possible that the Government may make some readjustment in price ceilings on scrap in order to stimulate the flow of supply. *The Iron Age* last week expressed the opinion that the manufacturers have achieved a better war-production effort than is popularly appreciated: "However sourly progress of the war is surveyed, industry is making notable progress towards arming the U. S. and its Allies."

	1929	1932	1937	1938	1941	1942
Per Cent of Capacity	95.5	22.5	91.0	36.0	100.0	98.5
(Latest 1942 weekly data; corresponding week earlier years)						

Electric-power production last week was slightly less than it was in the preceding week, but the decrease was smaller than seasonal. The power generated, compared with output during the corresponding week of 1941, recorded a gain of 12½ per cent as it did in the preceding week.

	1929	1932	1937	1938	1941	1942
Billion Kilowatt-Hours	1.68	1.48	2.15	1.98	2.98	3.35

There was a contraseasonal decrease in lumber production last week. The adjusted index declined from

126.3 to 120.8. The volume of orders is at about the same level as it was a year ago.

	1929	1932	1937	1938	1941	1942
New York Times Index	136.2	41.8	85.3	62.4	126.3	120.8

### Demand

The dollar volume of retail sales last week was 26 per cent greater than it was in the corresponding calendar week of 1941. The comparison is impaired, because Easter was a week earlier this year than it was a year ago.

### Prices

A moderate upward trend was indicated by changes in the sensitive wholesale commodity price indexes last week. Moody's Spot Commodity Price Index was 230.8 on March 26 and 232.3 on April 2. The Dow-Jones Index of Commodity Futures closed at 87.23 on March 26 and at 87.66 on April 2.

There was an increase of about 1½ per cent in the cost of living during February 1942 according to the National Industrial Conference Board's index. This was the most substantial monthly increase in the combined index since September 1939. The most influential factor in the rise in living costs during February this year was a 2½ per cent increase in clothing prices. Hitherto, this cost-of-living item has been advancing less rapidly than the more important food item. The cost of housing is gradually creeping up, but average rentals have advanced only a fraction of the increase that has occurred in the combined index. The composite index and separate items for February 1929, 1932, 1941, and for January and February 1942 are shown in the accompanying summary.

	Feb. 1929	Feb. 1932	Feb. 1941	Jan. 1942	Feb. 1942
All items combined	99.7	80.3	86.1	94.5	95.2
Food	104.5	72.0	78.8	95.2	95.8
Housing	91.9	76.2	87.7	90.1	90.4
Clothing	100.0	70.4	73.1	82.4	84.5
Fuel and Light	94.6	89.6	86.4	90.3	90.4
Sundries	100.5	94.6	98.2	102.5	102.9

## SECURITIES

### Bonds

The advance in the bond market that started during the middle of March continued last week. The Dow-Jones average of 40 bonds was 90.72 on March 26 and 90.94 on April 2.

### Stocks

There was no change in the character of the market last week. Prices of industrial issues tended to decline moderately, but a better performance was recorded by the railroad stocks. The volume of transactions on the New York Stock Exchange remained at a minimum.

---

*American Institute for Economic Research is a non-political, non-commercial organization engaged in impartial economic research.*