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## ASA/NBER Business Outlook Survey: Second Quarter 1976

*The following summary based on a quarterly survey, which is conducted jointly by the American Statistical Association and the National Bureau of Economic Research, is not a formal research report. These quarterly summaries will be published in each issue of Explorations in Economic Research for informational purposes only and therefore have been exempted from the rules governing submission to, and critical review by, the Board of Directors of the National Bureau of Economic Research.*

Forecasts of the economy's growth in 1976 now average 6.4 percent in terms of the rise in real GNP from 1975, and corresponding forecasts of the rate of inflation (increase in the GNP price index) average 5.5 percent. Three months ago, comparable figures predicted that real output and prices would grow by 6.1 and 6.0 percent, respectively. The somewhat higher real growth rates and somewhat lower inflation rates being predicted illustrate a continuation of the improvement in economic outlook. The forecasts of GNP in current dollars remain virtually unchanged.

This report is based on the medians of detailed numerical forecasts submitted in late May 1976 by 48 participants in the most recent American Statistical Association survey. The ASA surveys have been conducted quarterly since 1968, and the respondents include many leading business, academic, and government economists who are professionally engaged in forecasting. Data from the surveys are analyzed for the ASA by the National Bureau of Economic Research, an independent nonprofit research

institution whose basic studies include analyses of business cycles and evaluations of economic forecasts. Dr. Charlotte Boschan of the NBER and Professor Victor Zarnowitz of the Graduate School of Business of the University of Chicago and NBER jointly direct the analysis of these quarterly surveys.

### FROM RECOVERY TO FULL EXPANSION

In the current quarter (April–June 1976), real GNP is estimated at an annual rate of \$1.253 billion, which is up 1.2 percent from the previous quarter and nearly 1 percent from the last peak level in Q4 1973. This means that the recovery phase of the expansion—the process of regaining the ground lost in the past recession—has been completed in overall terms. This involved a rise of about 7 percent in the output of goods and services from the Q1 1975 trough level. Any further gain in that output (measured by real GNP) will represent net expansion, and the forecasters expect that such growth will amount to some 5.3 percent by the second quarter of 1977 when GNP in 1972 dollars is projected to reach \$1,320 billion.

The index of industrial production, which covers manufacturing, mining, and utilities, is estimated to have risen 15 percent from its trough a year ago to a value of 123 (1967 = 100) in the current quarter. This still leaves the index about 3 percent below its last peak level in Q4 1973. It will be only in Q4 1976 that industrial production will move beyond that level (to 129). The value of the production index in Q2 1977 is projected to be 133, 20.6 percent above the trough of Q2 1975 and 4.7 percent above the Q4 1973 peak. Thus, the sector covered by the index, which as usual has been hit harder by recession than the rest of the economy (mainly services), will take longer to recover, despite a faster rate of advance.

### SMALL DOWNWARD REVISIONS IN UNEMPLOYMENT FORECASTS

The unemployment rate (percent of labor force) will decline steadily, if slowly, from 7.4 in the current quarter to 6.7 a year from now—by about 0.2 of one percent per quarter. These figures are lower than the corresponding median predictions of March 1976, with the differences varying between 0.3 and 0.4 of one percentage point, but the projected pace of the decline in unemployment is about the same in this ASA/NBER survey as in the last. That pace remains relatively slow and, accordingly, the anticipated levels of unemployment remain relatively high. (Compare the median

forecast of 6.7 percent unemployment rate in Q2 1977 with the 4.7 percent rate recorded at the past business cycle peak in Q4 1973.)

### **INFLATION TO CONTINUE AT STEADY MODERATE RATE**

The GNP implicit price deflator will rise by about 1.4 percent per quarter through 1976 and the first half of 1977. This is very close to the average rate of 1.48 percent recorded for the five quarters ending in Q1 1976. It appears, then, that the forecasters do not anticipate any major speedup in inflation, but also that they discount the recent slowdown (to 0.9 percent in Q1 1976) as a transitory improvement that cannot be extrapolated. Between the second quarters of 1976 and 1977, the price index is expected to rise from 132.3 (1972 = 100) to 140, an annual rate of 5.8 percent. This median forecast must be regarded as relatively optimistic, since many have worried that expansion might be accompanied by renewed inflationary pressures in the near future.

### **THE IMPROVING OUTLOOK FOR BUSINESS INVESTMENT**

Business expenditures for plant and equipment should expand from \$120.7 billion to \$137.8 billion, or 14.2 percent, in the year ending in Q2 1977. This would mean a rise of 8.4 percent in real terms if prices of capital goods increase no more than the GNP price index is expected to increase during the same period. The forecasts imply that business capital spending will accelerate, the gain between 1975 and 1976 being only 9 percent (from \$112.8 billion to \$123 billion).

While the March survey's median forecasts for the first quarter of 1976 were on the whole quite accurate, particularly for total GNP, they strongly underestimated business inventory investment. The rise from a slightly negative figure in Q4 1975 to \$14 billion (annual rate) in Q1 1976 surprised forecasters who predicted a shift to positive investment that was only one-fifth of the actual figure. Consequently, the predictions of change in business inventories were sharply raised in the latest survey; for instance, the figure for the year 1976 as a whole was approximately doubled (from \$7.2 billion to \$14.1 billion). However, additions to business inventories are, on the average, expected to remain fairly stable, at annual rates of \$14 billion to \$16 billion in each quarter covered, although

some respondents anticipate much higher rates of inventory accumulation and others somewhat lower rates.

Corporate profits after taxes are predicted to reach \$91.3 billion in 1976, up 28.3 percent from their 1975 level, and \$103.7 billion (annual rate) in Q2 1977, up 16 percent from Q2 1976. The outlook for profits can be described as persistently optimistic; it appears to have changed very little in recent months.

### **SUBSTANTIAL RECOVERY IN HOUSING, GROWTH IN CONSUMER DURABLES**

New private housing starts, measured at annual rates, are expected to rise from 1.5 million in Q2 1976 to 1.76 million in Q2 1977, or 17.3 percent. This would still leave starts below their 1971-1973 record levels of more than 2 million units, but it would carry them to levels higher than those recorded at any other time during the post-World War II period. The rate of growth in residential construction implied by these forecasts is lower than the rate attained in the early recovery of 1975. (The increase in housing starts over the calendar year is predicted to be as high as 32.9 percent.) But it is clear that the early recovery rates based on very low initial levels of building activity could not be maintained for long, and that the growth in housing presently forecast is high by comparison with the overall real growth projected for the economy at large.

Consumer expenditures for durable goods will rise 13.9 percent—from \$151 billion to \$172 billion—between the current quarter and Q2 1977. This, too, spells some slackening of growth since the 1975-1976 gain in this area is assessed at 20.3 percent. But the median forecasts here go well beyond the recovery phase and imply substantial net expansion in real terms, at an annual rate of possibly 8 percent.

### **MOST OF THE INDIVIDUAL FORECASTS FAIRLY SIMILAR**

The dispersion of the reported forecasts continues to be relatively small, making the median figures appear fairly representative of the current consensus. For example, the first and third quartiles of real GNP forecasts for Q2 1976 are \$1,250 billion and \$1,257 billion, respectively, and the corresponding figures for Q2 1977 are \$1,311 billion and \$1,330 billion. (The quartiles bracket the central half of the predictions, leaving out the

extreme top and bottom quarters.) For the GNP price deflator, the quartile forecasts for Q2 1977 are 139.4 and 141.0 (1972 = 100); for the unemployment rate they are 6.4 and 6.9 percent. The dispersion of the forecasts typically increases with the predictive span, so the predictions for the earlier quarters are clustered more closely around the averages. There are a few variables, however, for which the individual predictions vary considerably. This is the case for change in business inventories, where the quartiles for Q2 1977 are \$11.9 billion and \$22.0 billion at an annual rate.

### PROBABILITIES AND ASSUMPTIONS

Forecasters' confidence in the durability of the expansion has grown; they see little likelihood of another recession starting any time soon. The distributions of their assessments of the probability that real GNP will decline have means increasing from 1.8 to 12.8 percent over the period Q2 1976-Q2 1977. Most of the survey participants (34) assume that the increase in the money supply during the period covered by their forecasts will be "on target"; only a few assume deviations, most of those in the direction of "more restrictive" monetary policy. Other common assumptions are that the tax cuts will be extended at least through 1976, and that there will be no severe energy or other international crises, major strikes, or imposition of new incomes policies or price and wage controls.

**TABLE 1 Projections of GNP and Other Economic Indicators, 1976-1977 Q2**

Indicator	Number of Fore-casters	Actual 1976				Forecast 1977				Annual Forecast 1976	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	1975	1976
1. Gross national product (\$bil.)	48	1616.3	1659	1707	1757	1806	1854	1498.9	1685		
2. GNP implicit price deflator (1972 = 100)	48	130.5	132.3	134.1	136.2	138.0	140.0	126.4	133.3		
3. GNP in constant dollars (bil. 1972 \$)	48	1238.4	1253 <sup>a</sup>	1271 <sup>a</sup>	1287 <sup>a</sup>	1305 <sup>a</sup>	1320 <sup>a</sup>	1186.1	1262 <sup>a</sup>		
4. Industrial production (1967 = 100)	46	120.2	123	126	129	131	133	113.8	124.6		
5. Unemployment rate (percent)	48	7.6	7.4	7.2	7.0	6.8	6.7	8.5	7.3		
6. Corporate profits after taxes (\$bil.)	44	84.2 <sup>b</sup>	89.4	93.7	98.0	101.0	103.7	71.2	91.3		
7. Plant and equipment expenditures OBE-SEC (\$bil.)	46	118.7 <sup>c</sup>	120.7	124.1	128.4	133.4	137.8	112.8	123.0		
8. New private housing units started (ann. rate mil.)	46	1.414	1.50	1.59	1.67	1.71	1.76	1.162	1.544		
9. Change in bus. inventories, GNP accounts (\$bil.)	45	14.1	14.5	14.0	14.0	15.5	15.7	-14.6	14.15		
10. Consumer expenditures for durable goods (\$bil.)	46	146.5	151.0	156.4	162.4	167.4	172.0	128.1	154.1		
11. National defense purchases, GNP accounts (\$bil.)	46	87.0	88.0	89.6	91.9	93.6	95.0	84.0	89.12		

SOURCE: American Statistical Association and National Bureau of Economic Research, Median Forecasts of Business Outlook Survey, May 1976.  
<sup>a</sup>Median of individual forecasts of real GNP derived from predicted current dollar GNP and the price deflator.  
<sup>b</sup>Actual not available. Based on average forecast.  
<sup>c</sup>Anticipated.

**TABLE 2 Projected Percentage Changes in GNP and Other Economic Indicators, 1976-1977 Q2**

Indicator	Number of Fore-casters	Q1 76 to Q2 76		Q2 76 to Q3 76		Q3 76 to Q4 76		Q4 76 to Q1 77		Q1 77 to Q2 77		1974 to 1975		1975 to 1976	
1. Gross national product (\$bil.)	48	2.6	2.9	2.9	2.9	2.8	2.7	2.7	6.5	12.4					
2. GNP implicit price deflator (1972 = 100)	48	1.4	1.4	1.6	1.3	1.3	1.4	1.4	8.8	5.5					
3. GNP in constant dollars (\$ bil. 1972) <sup>a</sup>	48	1.2	1.4	1.3	1.4	1.4	1.1	1.1	-2.0	6.4					
4. Industrial production (1967 = 100)	46	2.3	2.4	2.4	1.6	1.6	1.5	1.5	-8.8	9.5					
5. Unemployment rate (percent) <sup>b</sup>	48	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	2.9	-1.2					
6. Corporate profits after taxes (\$bil.)	44	6.2	4.8	4.6	3.1	3.1	2.7	2.7	-10.4	28.3					
7. Plant and equipment expenditures OBE-SEC (\$bil.)	46	1.7	2.8	3.5	3.9	3.9	3.3	3.3	0.34	9.0					
8. New private housing units started (ann. rate mil.)	46	6.1	6.0	5.0	2.4	2.4	2.9	2.9	-13.0	32.9					
9. Change in bus. inventories, GNP accounts (\$bil.) <sup>c</sup>	45	0.3	-0.5	0	1.5	1.5	0.2	0.2	-24.3	28.8					
10. Consumer expenditures for durable goods (\$bil.)	46	3.1	3.6	3.8	3.1	3.1	2.7	2.7	5.1	20.3					
11. National defense purchases, GNP accounts (\$bil.)	46	1.1	1.8	2.6	1.8	1.8	1.5	1.5	8.5	6.1					

SOURCE: Computed from Table 1.

<sup>a</sup> See Table 1.

<sup>b</sup> Change in rate, in percentage points.

<sup>c</sup> Change in billions of dollars.

**TABLE 3 Estimated Probability of Decline in GNP in Constant Dollars**

Estimated probability (chances in 100)	Q1 76	Q2 76	Q3 76	Q4 76	Q1 77
	to Q2 76	to Q3 76	to Q4 76	to Q1 77	to Q2 77
Less than 1			Number of forecasts		
1 - 10	69.4	53.1	40.8	26.5	18.4
11 - 20	28.6	44.9	44.9	44.9	40.8
21 - 30	2.0	0.0	10.2	16.3	24.5
31 - 40	0.0	2.0	4.1	12.2	8.2
41 - 50	0.0	0.0	0.0	0.0	6.1
51 - 60	0.0	0.0	0.0	0.0	2.0
61 - 70	0.0	0.0	0.0	0.0	0.0
71 - 80	0.0	0.0	0.0	0.0	0.0
81 and over	0.0	0.0	0.0	0.0	0.0
Median probability (chances in 100)	0.0	0.0	3.0	6.0	8.0
Mean probability (chances in 100)	1.8	3.3	5.6	9.1	12.8

SOURCE: American Statistical Association and National Bureau of Economic Research, Business Outlook Survey, May 1976.  
NOTE: The total number of forecasts included is 49.

**TABLE 4 Mean Probability Distributions of Changes in GNP and Prices, 1975-1976**

Percent Changes 1975-1976	Mean Probability Attached to Possible Percent Changes, 1975-1976	
	GNP in Current \$	Implicit Price Deflator
+16 or more	0.0	0
+15.0 to +15.9	0.7	0
+14.0 to +14.9	4.7	0
+13.0 to +13.9	15.6	0
+12.0 to +12.9	35.5	0
+11.0 to +11.9	25.0	0
+10.0 to +10.9	7.7	0.1
+ 9.0 to + 9.9	2.3	0.8
+ 8.0 to + 8.9	1.9	2.7
+ 7.0 to + 7.9	2.8	8.5
+ 6.0 to + 6.9	2.8	32.0
+ 5.0 to + 5.9	0.9	42.6
+ 4.0 to + 4.9	0.2	11.1
+ 3.0 to + 3.9	0.0	2.0
+ 2.0 to + 2.9	0.0	0.2

SOURCE: American Statistical Association and National Bureau of Economic Research, Business Outlook Survey, May 1976.

NOTE: The total number of forecasters included is 48.

TABLE 5 Forecasting Methods Used

Method	Number of Forecasters		Number of Forecasters Using Each Method Who Ranked It				
	Using	Not Using	Most important	Second Most important	Third Most important	Fourth Most important	Fifth Most important
Informal GNP model	38	11	28	6	3	1	0
Leading indicators	32	17	4	15	11	1	1
Anticipations surveys	30	19	0	14	11	4	1
Econometric model (outside)	29	20	2	11	8	8	0
Econometric model (own)	12	37	9	0	1	1	1
Other methods	4	45	2	2	0	0	0

SOURCE: American Statistical Association and National Bureau of Economic Research, Business Outlook Survey, May 1976.

**TABLE 6 Forecasters' Affiliation**

Primary Affiliation	Number of Forecasters
Manufacturing	14
Commercial banking	3
Other financial institutions	3
Consulting or research	11
Merchandising	0
Trade association	0
Academic	7
Government	6
Labor union	0
Other	5
Total	49

SOURCE: American Statistical Association and National Bureau of Economic Research, Business Outlook Survey, May 1976.

**TABLE 7 Key Assumptions Underlying Forecasts**

Assumption	Number of Forecasters
Energy Problem	
No severe crisis	16
Controls phased out	3
Increase in prices	7
No change in prices	3
Monetary Policy	
Increase in money supply is on target	34
More restrictive	7
Less restrictive	2
Fiscal Policy	
As budgeted	6
Larger deficit	7
Tax cut extended through forecast period	15
Tax cut extended through 1976	5
No change in policy	7
Other	
No major international crisis, no war	10
No incomes policy	10
No major strikes	9
Prolonged strikes	3
Wage settlements moderately inflationary	4
Wage settlements inflationary	2

SOURCE: American Statistical Association and National Bureau of Economic Research, Business Outlook Survey, May 1976.

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