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WINTER 1977
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EDITOR'S NOTE:

ECONOMIC OUTLOOK USA is designed to aid private and public decision makers in achieving a better understanding of the economic and social environment in which they will be operating. The analysis in this publication incorporates direct measurements of the expectations, attitudes and plans of both consumers and business firms with the economic and financial variables traditionally used in forecast models. The philosophy of this publication is that a blend of anticipatory and traditional measures provides richer insights into prospective developments, insights which will produce more consistently reliable forecasts of both economic and social change.

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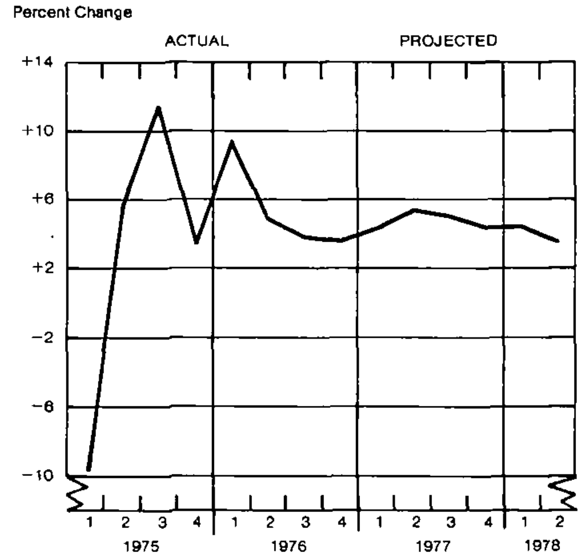
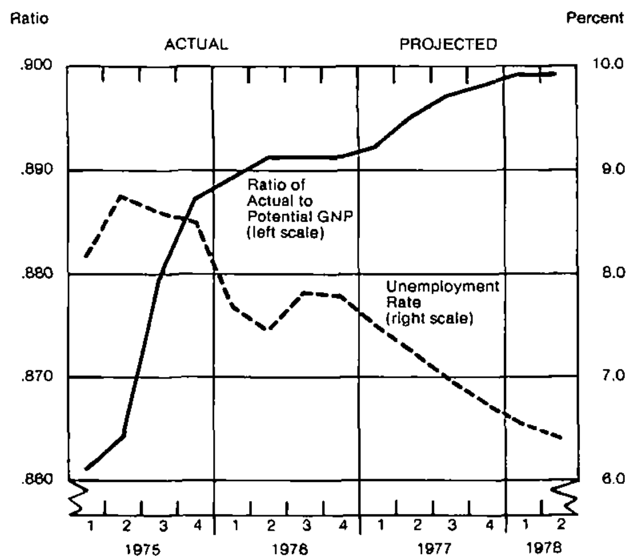
ECONOMIC PROSPECTS

Actual and projected; seasonally adjusted quarterly data at annual rates

ANNUAL RATE OF CHANGE OF REAL GNP



UNEMPLOYMENT AND THE ACTUAL-POTENTIAL GNP RATIO



Frequently Used Abbreviations:

ASA	American Statistical Association
BEA	Bureau of Economic Analysis, U.S. Department of Commerce
NBER	National Bureau of Economic Research
SRC	Survey Research Center
197*x*:*y*	*y*th quarter of 197*x*

The Michigan Model Econometric Forecast of 1977

Saul H. Hymans and Harold T. Shapiro
Department of Economics
The University of Michigan

The Current State of the Economy

From various evidence there is reason for concern about the current state of the economy as we head into 1977. The rate of growth of real GNP has been declining in recent quarters and the unemployment rate is back almost to 8 percent (see the charts, p. 2). The economic recovery has hit a snag, and there would seem to be little justification for regarding the pause as a transitory phenomenon in an otherwise vigorous recovery.

The recovery from the 1974-75 recession—as we have experienced it so far—never has spread through the private sector in the fashion of a classical cyclical recovery. The automobile industry, of course, experienced an extraordinary recovery after having suffered a deflationary shock which was unique in its origin and—since the 1930s—unprecedented in its magnitude. But the one percentage point drop in the personal saving rate between the second half of 1974 and the second half of 1976 is more than fully accounted for by the sharp recovery in consumer spending on automobiles! The balance of consumption spending has failed even to keep pace with the growth of disposable income in the past two years, despite the fact that the personal saving rate was already high—by historical standards—during most of 1973-74.

The pace of recovery in business fixed investment in the past year has been about the slowest of any post-recession year since the 1940s. With consumption shaded on the sluggish side, capacity utilization running very low, and the maze of Federal government regulations regarding acceptable safety and environmental standards in production facilities growing increasingly complex, one should not be surprised that the incentive to invest in capital equipment appears to be somewhat weak.

Finally, homebuilding activity—typically a leading sector in an economic recovery process—has displayed a mixed pattern since the recession. Single-family housing starts have already recovered to peak levels. But multi-unit starts are still suffering from the difficulties generated by the thinly financed speculative boom in apartment construction in 1972-73 and the bankruptcies and high vacancy rates which developed subsequently.

From all this we can only conclude that the private sector of the economy is not, by itself, likely to generate a significant improvement in the rate of growth during 1977. To put it another way, one would have to bet that a large number of favorable factors would come together in just the right fashion to overcome what is evidently a significant degree of inertia in the private sector. In our forecast, we are betting instead that the Carter Administration will act rather quickly to provide direct stimulus to the economy, and that the new President will receive sufficient Congressional support to get a modestly stimulative fiscal program passed and operating within a few months of the Inaugural.

Inputs to the Forecast

The economic outlook for 1977 depends very heavily on the fiscal policy actions taken—or not taken—in the early months of the Carter Administration. A sentiment which has been expressed rather commonly in the financial press asserts that the outlook for 1977 is pretty much set and beyond the reach of any reasonable set of fiscal policy actions which could be taken during the year. It strikes us that such an assertion is gravely mistaken. While it is indeed the case that changes in fiscal policy take some time to attain their maximum economic effects, the bulk of the empirical evidence suggests that substantial effects do materialize over a 6 to 9 month period. Appropriate fiscal policy actions put into effect by this coming Spring will indeed make a significant difference in the pace of economic growth in the second half of 1977.

Before turning to the specifics of our input assumptions, let us mention a preliminary econometric forecast produced as a benchmark for comparisons. This forecast was based on the assumption that there would be no changes in fiscal policy during 1977—that is, no departure from existing tax rates and an expenditure budget pretty much in line with the Second Concurrent Resolution of the Congress. The monetary policy assumption was also one of status quo, as measured by the rate of growth of the monetary aggregates and the level of the discount rate. With these as the main inputs, the econometric model produced an annual rate of growth of real GNP of 3.9 percent in the first half of 1977, 3.6 percent in the second half of the year, and 3 percent in the first half of 1978. In this analysis the unemployment rate took a year and a half to decline by barely one percentage point and had pretty well bottomed-out at 6.9 percent in mid-1978. That, we believe, is the sad prospect facing this country in the absence of more stimulative fiscal and/or monetary policies.

We are convinced that the new Administration will—if it has not already—come to much this same view. We are therefore assuming that *a tax cut will be proposed early in 1977, and that the* Congress will pass a tax cut with minimal delay. The specifics of the tax cut which we have built into our forecast are as follows:

- a $7½ billion tax cut arising from an increase in the personal exemption level from $750 to $1000,
- $2½ billion in income tax relief to low income families, and
- a $3 billion cut in corporate taxes arising from increasing the investment tax credit from the current 10 percent to 15 percent.

In total, therefore, we are assuming a *$13 billion tax cut.* We are further assuming that the legislation will be passed quickly enough to get the personal tax cuts into revised withholding tables by April 1, 1977, but that the tax cuts will be made effective retroactive to January 1, 1977. The consequent overwithholding of taxes in the first quarter of the year will show up as higher refunds and/or lower final settlements in 1978. As an alternative to the higher refunds in 1978, we considered the possibility of immediate rebates (in the second quarter of 1977) of the taxes overwithheld in the first quarter of the year, but such a scheme seemed entirely infeasible. The increase in the investment tax credit is also assumed to be retroactive to the first of the year.

The tax cut program as discussed is not of major magnitude. Relative to the size of the economy, for example, it is considerably smaller than the 1964 tax cut. But it is large enough to have a measurable impact in 1977, and we suspect that the Administration will thereby view itself as buying time to draw up a more comprehensive revision of the tax structure—including more fiscal stimulus if needed—at a later point. The latter would not likely come soon enough to affect the economy before mid-1978, and we have therefore left any further consideration of tax changes out of the forecast.

We also believe that the Carter Administration will be unable to move very quickly on the expenditure side of the budget, and we have therefore continued to assume that *Federal expenditures will remain fairly close to the budget implied in the Second Concurrent Resolution of the Congress.* For fiscal 1977 we are projecting a Federal expenditure total of $419.7 billion in the National Income and Product Accounts, and for fiscal 1978 an expenditure total of $468.6 billion.

While we feel quite confident in projecting that fiscal policy will soon turn more stimulative, we are somewhat pessimistic about the possibility of a significant change in monetary policy. The testimony of Chairman Burns before the Senate Banking Committee on November 11th reinforced our pessimism. It is not, however, always easy to interpret Arthur Burns. While he testified to a lowering of the targeted growth rates for the monetary aggregates, he simultaneously agreed that the economy needed more growth than is now being experienced. The Fed seems to believe that money is not tight now, and that there is room to accommodate some fair increase in the demand for money without much of an increase in interest rates. In any case, we have assumed that the Fed will provide for *only a 4-5 percent rate of growth of unborrowed reserves,* but will hold *the discount rate* at its current level of 5½ *percent.* In the context of our forecast, that combination of monetary policy decisions is consistent with various short-term interest rates rising on the average by about 25 basis points per quarter for the next year or so.

Actual and Projected Economic Indicators

seasonally adjusted

ECONOMIC INDICATOR	Quarterly Data										Annual Data			
	ACTUAL			PROJECTED										
	1976				1977				1978		Act.	Proj.	Act.	Proj.
													-%-Changes-	
	1st	2nd	3rd p	4th	1st	2nd	3rd	4th	1st	2nd	1976	1977	75-76	76-77
GROSS NATIONAL PRODUCT	1636	1675	1710	1753	1795	1843	1890	1939	1985	2027	1694	1867	11.7	10.2
PERSONAL CONSUMPTION EXPENDITURES	1044	1065	1089	1115	1143	1173	1201	1227	1256	1282	1078	1186	10.8	10.0
DURABLE GOODS	151.4	155.0	158.2	161.3	166.2	169.3	174.8	178.5	181.2	183.9	156.5	172.2	18.8	10.1
AUTOMOBILES AND PARTS	68.0	70.4	71.9	73.4	76.7	77.9	81.5	83.3	84.0	85.0	70.9	79.8	33.5	12.5
FURN. AND H.H. EQUIPMENT	61.2	62.3	63.2	64.2	65.4	66.8	68.1	69.5	70.9	72.1	62.7	67.4	8.9	7.5
OTHER DURABLES	22.2	22.3	23.0	23.6	24.1	24.7	25.2	25.7	26.3	26.8	22.8	24.9	8.6	9.4
NONDURABLE GOODS	429.1	434.8	442.6	451.3	460.8	472.2	482.5	491.8	503.3	513.0	439.5	476.8	7.4	8.5
SERVICES	463.1	474.9	488.0	502.2	515.9	531.1	544.1	557.2	571.8	585.7	482.0	537.1	11.5	11.4
GROSS PRIVATE DOMESTIC INVESTMENT	229.6	239.2	245.6	255.5	265.3	276.0	287.3	298.3	306.9	314.5	242.4	281.7	32.0	16.2
NONRESIDENTIAL	153.4	157.9	162.5	167.4	172.5	179.0	185.8	192.8	199.3	205.5	160.3	182.5	8.9	13.9
RESIDENTIAL STRUCTURES	61.3	65.3	68.7	72.8	77.7	82.9	87.2	90.0	91.1	91.7	67.0	84.4	30.9	26.0
CHANGE IN BUS. INVENTORIES	14.8	16.0	14.4	15.2	15.1	14.1	14.3	15.5	16.5	17.3	15.1	14.8	-	-
NET EXPORTS	8.4	9.3	5.8	4.5	0.5	-1.1	-2.6	-3.3	-3.9	-4.0	7.0	-1.6	-	-
EXPORTS	154.1	160.3	166.2	170.3	174.5	178.8	183.2	188.2	193.3	198.5	162.7	181.2	9.9	11.3
IMPORTS	145.7	151.0	160.4	165.8	174.0	179.9	185.8	191.5	197.1	202.6	155.8	182.8	22.1	17.4
GOVERNMENT PURCHASES	354.7	362.0	369.4	378.7	386.5	395.1	404.2	416.3	425.5	434.4	366.2	400.5	8.0	9.4
FEDERAL	129.2	131.2	134.3	138.5	140.5	142.6	144.7	149.9	152.4	154.9	133.3	144.4	7.1	8.4
NATIONAL DEFENSE	86.2	86.9	88.6	91.3	92.6	93.9	95.2	98.3	99.8	101.3	88.3	95.0	4.7	7.6
OTHER	42.9	44.2	45.7	47.2	47.9	48.7	49.5	51.6	52.6	53.6	45.0	49.4	12.1	9.8
STATE AND LOCAL	225.5	230.9	235.1	240.2	246.0	252.5	259.5	266.4	273.1	279.5	232.9	256.1	8.6	10.0
ADDENDA:														
GROSS NATIONAL PRODUCT DEFLATOR, 1972 = 100	131.3	132.9	134.4	136.6	138.5	140.3	142.2	144.4	146.3	148.2	133.8	141.4	5.2	5.6
REAL GROSS NATIONAL PRODUCT (billions of 1972 dollars)	1246	1260	1272	1284	1297	1313	1329	1343	1357	1368	1266	1320	6.2	4.3
AGGREGATE UNEMPLOYMENT RATE (percent)	7.2	7.5	7.8	7.8	7.5	7.2	7.0	6.7	6.5	6.4	7.7	7.1	-	-
CORPORATE PROFITS PLUS IVA and CCA	109.5	118.7	123.5	128.1	133.2	138.6	144.6	149.2	156.0	155.9	120.8	141.4	31.8	17.1
PERSONAL DISPOSABLE INCOME	1148	1173	1190	1217	1244	1281	1313	1341	1378	1407	1182	1295	9.3	9.6
REAL DISPOSABLE INCOME (billions of 1972 dollars)	880.7	890.3	892.4	899.2	905.4	919.8	930.6	938.0	951.7	959.8	890.6	923.5	4.1	3.7

p - preliminary

Note: All data are in billions of current $ unless otherwise indicated.

Sources: Projections by Research Seminar in Quantitative Economics, University of Michigan; actual data from Departments of Commerce and Labor, Board of Governors of the Federal Reserve System.

With respect to *State and Local Government purchases*, we anticipate a 10 percent increase for calendar 1977, compared with an increase of only 8½ percent in calendar 1976. Increases in Federal grant programs and some general improvement in the financial condition of state and local governmental units are responsible for this modest increase.

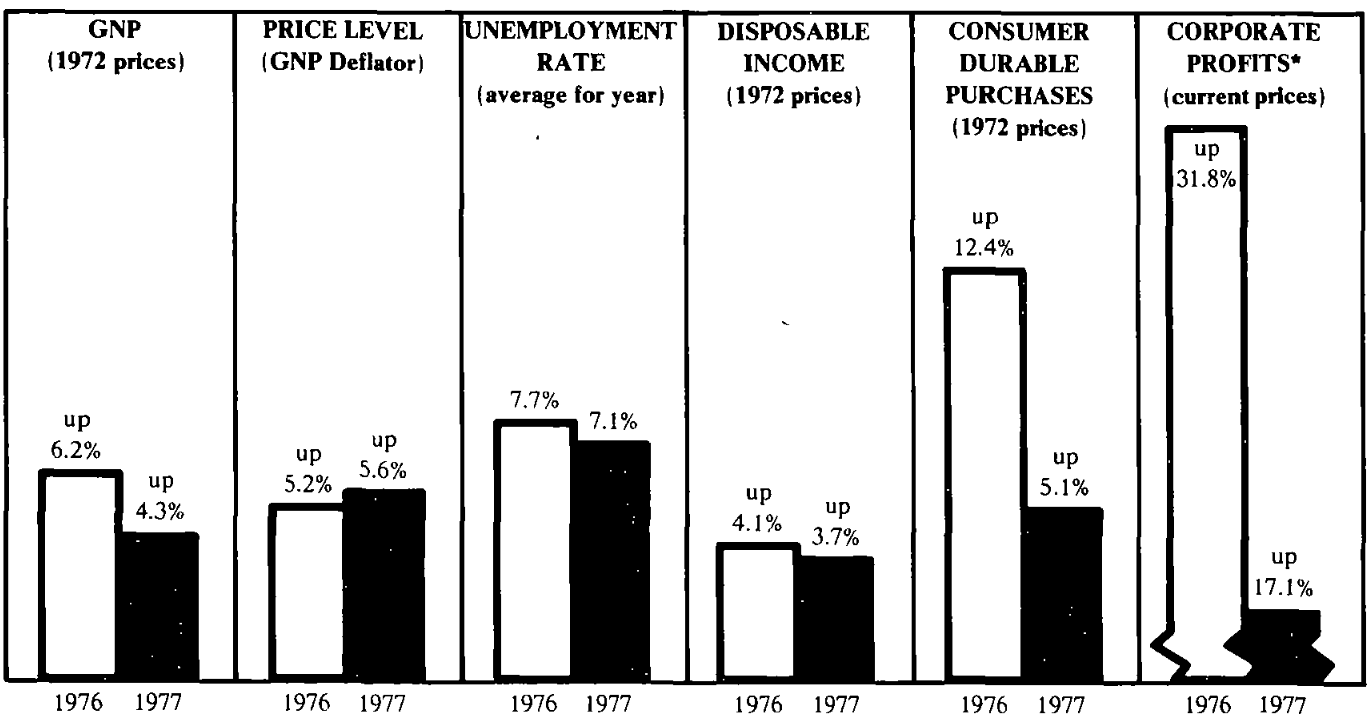
We expect that the *volume of U.S. exports of goods and services* will grow at a 4 percent annual rate in the first half of 1977, and that gradual improvement in the domestic economies of our principal trading partners will raise the export growth rate to 5 percent by the first half of 1978. Relative currency values have not been entirely stable recently, and even though the British pound may have sunk well below its real value vis-à-vis the dollar, we do not expect the major Western currencies, as a group, to be moving sharply in relation to the U.S. dollar during the coming year.

The final set of input assumptions requiring note has to do with prices. The current situation with respect to agricultural crops seems to indicate a *continued weakness in wholesale food prices through the first quarter of 1977*, and our discussions with agricultural economists have led us to project a *5 percent rate of growth of food prices beginning next spring.* The situation regarding the price of *crude materials* is a bit more complicated. From the first to the third quarter of 1976, crude material prices rose at a 19 percent annual rate, and that increase seems only now to be finding its way into final product prices. Indeed, this accounts for a good part of the acceleration in the rate of increase of the GNP deflator which we have forecast for the fourth quarter of 1976, and we expect that the first quarter of 1977 will also exhibit some small added inflation from this source. But the rise of crude material prices stopped for a time late last summer, with only a gradual rise since then. The information which we have been able to gather suggests that—for the most part—crude material prices are not expected to be a source of major inflationary stimulus during the coming year. That "for the most part" phrase is intended to allow for an expected *jump in OPEC oil prices* in the first quarter of 1977. We have factored a 10 percent increase in the price of OPEC oil into the forecast inputs. Our model evaluates the effect of this increase in oil prices as follows: a year after the price hike, in the first quarter of 1978, the level of real GNP is three-tenths of one percent lower than it would otherwise be (a loss of nearly $4 billion in real GNP in 1978:1), and the average level of consumer prices in the same quarter is about one-fourth of one percent above what it would otherwise be.

An Overview of the Forecast

The chart below provides an overview of the forecast by comparing key macroeconomic variables in calendar years 1976 and 1977. Compared with a 6.2 percent growth rate for 1976, we are projecting only a 4.3 percent growth rate in real GNP for calendar 1977—even with the assumed tax cut stimulus. (The corresponding figure, absent the tax cut, would be a bit under 3.9 percent.) Compared with an aggregate inflation rate (GNP deflator) of 5.2 percent for 1976, we are forecasting a 5.6 percent rate of inflation for 1977. To some extent the step-up in the rate of inflation is exaggerated by looking at the year-over-year price level, since the sharp rise in the price level for crude materials discussed above works its way into the final product deflator only in late 1976 and early 1977. The unemployment rate is expected to average 7.1 percent next year, down from 7.7 percent this year. Constant-dollar consumer durables purchases, which rose by more than 12 percent in 1976—mostly due to a 24 percent jump in autos—are forecast to rise by only 5.1 percent for 1977. And following a 32 percent climb in profits (plus IVA and capital consumption adjustments) for 1976, we forecast a 17 percent increase for 1977.

Michigan Model Forecast For 1977: Summary Measures



*includes inventory valuation & capital consumption adjustment

The Quarterly Pattern of Economic Activity

The large table and the charts on pp. 2, 6, and 7 present substantial detail regarding the quarterly path of economic activity in the forecast. The first chart on p. 2 contains the forecast of *GNP growth*, quarter by quarter, from 1976:4 through 1978:2. Real GNP growth is projected to rise through mid-1977, reach a peak annual rate of about 5¼ percent, and then decline to a rate below 4 percent by mid-1978. Recall our earlier judgment that the assumed $13 billion tax cut should be considered a modest program which would buy some time for the Carter Administration and the Congress to agree on a more ambitious tax revision scheme, including the possibility of additional fiscal stimulus. We shall return to this matter in subsequent discussion.

The second chart on p. 2 displays the relation, in our forecast, between *GNP growth and the unemployment rate*. Here we measure real GNP as a percent of potential—or full employment—GNP. Note that by the end of 1976 real GNP will have recovered to 89.1 percent of potential after reaching a recession low of 86.1 percent. In our forecast real GNP continues to close the gap with potential GNP through early 1978 and then levels off at about 90 percent of potential GNP. Correspondingly, the unemployment rate declines throughout the forecast period, but its rate of decline diminishes during the first half of 1978. The unemployment rate is projected to average 6.7 percent in 1977:4 and just under 6.4 percent in 1978:2.

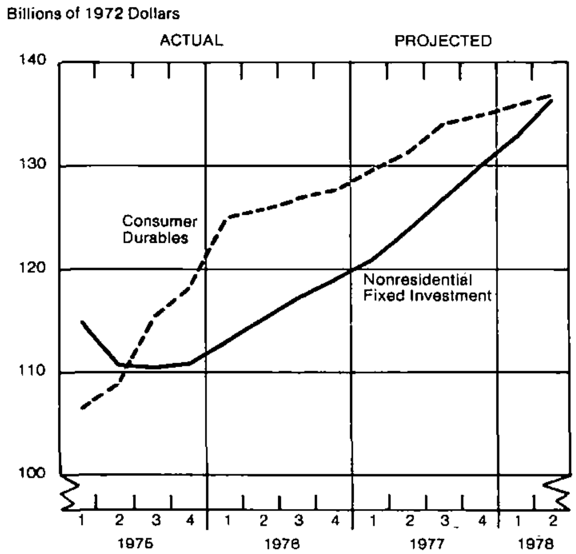
In the first chart below the contrast between *consumer durables purchases* early in the recovery period and in the forecast period is immediately evident. The tax cut produces a modest spurt in the growth of durables purchases in mid-1977, but the basic strength here results from an excellent 1977 model year for the auto industry followed by continued high, but not rising, sales in the 1978 model year. Other durable goods purchases are forecast to be rising at 5 to 6 percent rates over the next year and a half.

Business fixed investment, on the other hand, is forecast to be rising more rapidly than during 1976. For 1977 as a whole we project an 8 percent increase in real business fixed investment, twice that experienced this year. From mid-1977 to mid-1978 we forecast a 9½ percent rise, with about one-third of that resulting from the assumed tax cut policy. Most of the rise in capital investment occurs in equipment, with continued weakness in non-residential construction.

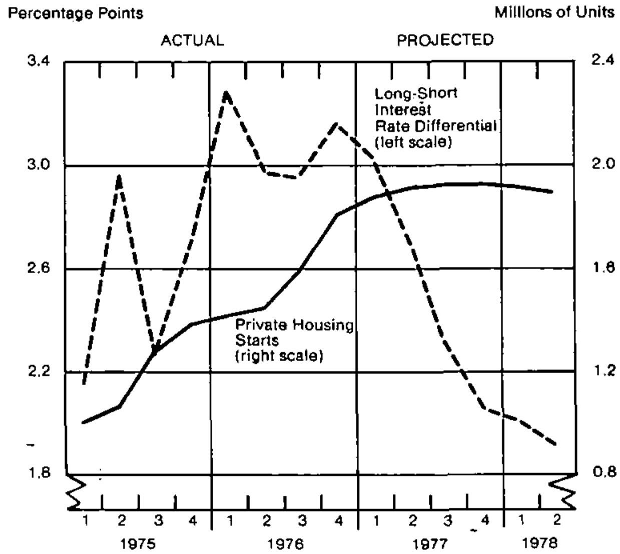
Residential construction (chart below) is projected to continue upward during 1977, with housing starts running at slightly above 1.9 million units (annual rate) in the second half of the year and then falling back slightly in the first half of 1978. Although our monetary assumptions do not produce an economy-wide credit squeeze, short-term rates do rise by enough to begin to restrict the flow of available mortgage credit toward the end of 1977.

Our forecast of the quarterly pattern of *inflation and productivity growth* is shown in the first chart on p. 7. As already noted, the rate of inflation is forecast to be higher in the last quarter of 1976 and the first quarter of 1977 than in the subsequent period, during which the rate of inflation in consumer prices remains at about 5½ percent. Productivity growth is projected to average about 2½ percent (annual rate) during the next year and a half, well below the rates of early 1976, when the economy was expanding rapidly. Although not shown on the chart, the average annual rate of increase of hourly compensation is expected to be a bit over 8 percent during the next year and a half. This, together with the projected productivity increase, implies unit labor cost rising at an annual rate of about 5.4 percent, which is barely exceeded by the rate of price inflation. The rise in *corporate profits*, therefore, as shown in the second chart on p. 7, includes virtually no upward drift in the margin of profit over labor costs.

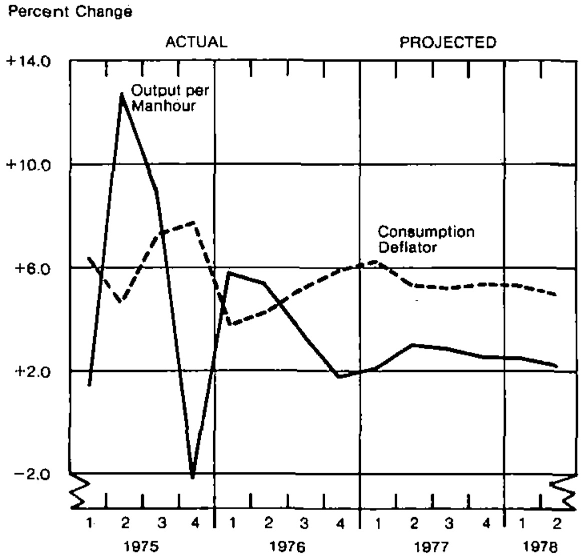
BUSINESS FIXED INVESTMENT AND CONSUMER DURABLES PURCHASES



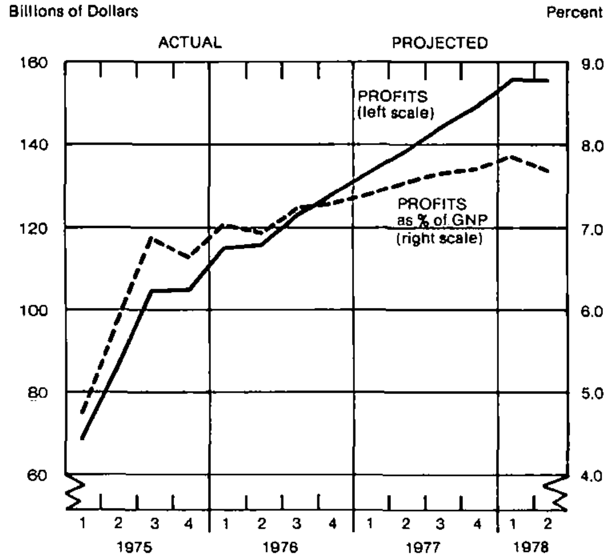
HOUSING STARTS AND INTEREST RATES



PRICE INFLATION AND PRODUCTIVITY



CORPORATE PROFITS PLUS IVA AND CCA



Concluding Comments and Cautions

The economic outlook portrayed in our forecast is rather disappointing. Everything moves in the right direction: output and employment up, inflation down. But in all cases the movements are sluggish. By the end of 1977—fully two and a half years after the recession trough—the unemployment rate will just about have made it down to 6½ percent. And for all that sluggishness in the economy, the inflation rate will still be at about 5½ percent. That, at least, is the way the econometric model sees the outlook. If the model is right, three conclusions must be drawn.

First, a tax cut of the magnitude assumed in the forecast will have to be followed within about a year by a substantial amount of additional stimulus—whether fiscal policy, monetary policy, or some of each.

Second, if steps are taken to close the gap between a 6½ percent rate of unemployment and a targeted 4½ or 5 percent rate, those steps should certainly include policies which raise significantly the inducement to expand and (especially) to modernize productive capacity. An easier monetary policy may be necessary; but, to accomplish the latter purpose, something more than macroeconomic stimulus may be called for. In our discussions with members of the business community, a commonly recurring theme is the problem of making long-term capital commitments in a state of growing uncertainty about each new set of Federal regulations. While we feel strongly supportive of the objectives of the Occupational Safety and Health Administration regulations, environmental quality requirements, and product safety standards, it hardly seems obligatory that such regulations be—or be perceived as being—a major impediment to improving the efficient productive capacity of the economy. We urge the Carter Administration to include this problem among its matters of high priority.

And *third,* it seems evident to us that in the process of attempting to steer the economy toward higher employment, careful consideration ought to be given to the adoption of a serious incomes policy. Certainly such a policy should not involve price and wage controls, which quickly generate consequences likely to be as harmful as the inflation itself. And clearly we do not want a highly variable incomes policy which provides conflicting signals and generates uncertainty about what is or isn't reasonable behavior at any given time.

But we have to recognize that in the modern American economy no single entity with market power—whether a firm or a union—can possibly be expected to take a chance and act alone against an inflationary spiral. Each such entity will have to be assured that it will be among the majority of its peers when it holds the line on price increases or wage demands. Perhaps that assurance simply cannot exist. But if it can, it may well have to be provided through a context in which the national Administration provides leadership and accepts the responsibility for bringing together the parties to the social compact. And this comes back full-circle to the first of the three conclusions, because the chances are great that the quid pro quo for obtaining a substantially more stimulative monetary policy is the putting in place of an effective incomes policy.

November 1976

The Accelerating Expansion of 1977

Paul W. McCracken
Edmund Ezra Day University Professor of Business Administration
The University of Michigan

That 1976 galloped on to the stage of history and a year later limped off has been painfully evident to managers of businesses and also to managers of economic policy. It was a year that saw real output rising at an explosive pace of more than a 9 percent annual rate in the early months, decelerating then to less than a 3 percent rate in the final quarter.

The interruption of the 1976 expansion in mid-year, with employment and output for a time actually declining, even raised questions about the possibility of another recession before a return to reasonably full utilization of labor and other productive resources. Such concerns were not just irrational worries. They had some foundation in history. In 1974 most analysts in business, government, and academe did not see in the slow deterioration of business conditions that year the precipitate descent into a recession that occurred after September. In 1960 the rebound from the earlier steel strike so obscured basic trends that the 1960-61 recession came on us somewhat by surprise. And, dipping back into much earlier history, the sharp 1937-38 recession began at a time when the economy was far short of having fully recovered—with unemployment still in the 12-14 percent zone.

Concerns that the economy might again suffer a relapse before a full recovery to the ongoing growth path clearly had some foundation in history.

Reassurance from Previous Cycles

The evidence at the turn of the year increasingly suggests, however, that the 1976 pace was in fact just that—a pause rather than early developments leading to a recession. Here we do get some reassurance from history. During the first three months of a true cyclical recession industrial production has usually declined at something like a 7-9 percent per year rate, though in 1974 the figure was 24 percent. If we were to take August as the final month before the 1976 pause emerged, industrial output rose in the ensuing three months at a 2 percent per year rate.

For employment the picture is much the same. During the first three months of most recessions civilian employment has declined at roughly a 1 percent per year rate. The corresponding figure after last August was a +0.7 percent. While each recession is to a substantial extent a unique historical episode, as the great scholar of business cycles (and teacher of Arthur Burns) Wesley C. Mitchell once observed, we can at least say that the 1976 pause did not unfold in its early months the way most recessions have done.

What we saw in 1976 seems to be more in the category of the recessionettes that we experienced in 1962-63 or again in 1967. After getting down to a 5.4 percent rate in 1962 the unemployment rate drifted upward to a 5.9 percent level in mid-1963. In 1967 industrial output sagged and did not regain its January level until August. Yet we think of these, rightly, as merely temporary interruptions of the expansion. The evidence increasingly suggests that the 1976 pause will go into the same annals of history.

Business Investment and International Trade

Having apparently escaped a 1976-77 recession, can we now assume that the year ahead will show sustained gains in business activity? Here the evidence is clearly mixed. Obviously businesses move into 1977 in no ebullient mood about their outlays on new facilities. Indeed, they are now projecting these outlays to rise during the first half of 1977 at only a 5½ percent per year pace, which in real terms would be a negligible increase at best. While projections often undershoot reality during an upswing, this drop from a 17 percent rate of increase in the second half of 1976 to a 5½ percent pace in the half year ahead is more than the usual "horizon effect."

Moreover, our external trade developments are also apt to be a drag on the economy. The $18 billion unfavorable swing itself reduced by roughly a percentage point the rise in real output experienced in 1976, and after allowing for secondary repercussions the adverse effect was even more. The fact is that changes in our international trade now can exert a major effect on economic developments at home. These have been a drag in 1977, and sluggish domestic economic developments in Canada, Japan, and Germany (our major trading partners) suggest that our external trade will not be a source of domestic expansion in 1977.

CHANGE IN EMPLOYMENT AND OUTPUT THREE MONTHS AFTER CYCLICAL PEAKS

(Expressed at seasonally adjusted annual rates)

Three Months Following:	Civilian Employment	Industrial Production
July 1957	−0.9%	−8.7%
May 1960	−1.0	−7.0
November 1969	+0.8	−7.4
September 1974	−5.0	−23.7
August 1976*	+0.7	+2.1

Source: Basic data from Federal Reserve and Department of Commerce.
*Included for comparative purposes, but is not a cyclical peak.

U.S. MERCHANDISE TRADE

(In billions, seasonally adjusted annual rates)

Item	Second Half: 1975	Second Half: 1976*
Exports	$108.3	$125.0
Imports	99.8	135.0
	$ 8.5	$ -10.0

Source: Department of Commerce.
*My own estimates based on incomplete data.

Money Supply and Taxes

Forces making for expansion, however, ought to be strong enough to produce something like a 10-11 percent rise in the dollar volume of business activity during 1977. For one thing this is about the track being established by basic economic policies. The 10-12 percent per year pace at which the money stock (M2) has been increasing implies something like that rate of expansion for the dollar volume of business activity.

ANNUAL RATES OF INCREASE IN MONEY STOCK

Period	M_2
9/75-12/75	7.2%
12/75-3/76	11.5
3/76-6/76	9.6
6/76-9/76	10.7
9/76-12/76*	11-13

Source: Federal Reserve.
*My own estimate.

There will also be a tax reduction of $15-20 billion, and this is the most effective way to enlarge after-tax incomes without an increase in labor costs per unit of output. The evidence also suggests that consumers will spend the money. The latest survey by the S.R.C. indicates that basic consumer sentiment was reasonably well-sustained during the 1976 lull, and consumers have been saving only about the usual proportion of their after-tax incomes.

Inflation

What about the rate of inflation? After discouragements of the last decade optimism about the price level does not come easy. It is possible, however, that 1977 could produce here a pleasant surprise. We closed out 1976 with the consumer price index rising at about a 5 percent rate, down sharply from the 12-14 percent rate two years earlier. With some patience in pursuing a sustainable but not explosive rate of expansion, we could be looking at somewhat lower rates of inflation a year later. If so, that would be the best augury for economic developments during the remainder of the 1970s.

A Survey of Forecasts for 1976-77

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Professor of Economics and Finance
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Bad news dominated good news in recent readings on economic indicators and business activity slowed, which was generally not anticipated in earlier forecasts. In such cases forecasts are often lowered, and it happened this time as well, but the downward revisions were on the whole small. The new forecasts from the ASA-NBER Survey of the Economic Outlook spell out the prevailing view that the slowdown is just about over and the economy will resume its upward movement at a fairly steady rate of approximately 5 percent per year in constant-dollar GNP. Thus the "pause" is evidently seen as a very transitory phenomenon attributable to those special but by no means rare factors that impede foresight but facilitate ex post rationalization of economic events. (Such shocks may work in either direction, but the recent ones were mostly adverse, as illustrated by the shortfall of Federal Government expenditures, pre-election uncertainties, the strike against the Ford Motor Company, etc.) Low probabilities are attached to a continuation of the slowdown in 1977, let alone a recession, while a moderate expansion is definitely held to be the most likely prospect. This applies quite generally to the survey respondents, regardless of whether or not they explicitly assumed a tax cut or other stimulative policies. However, according to the median of the 36 submitted forecasts, the expansion would not be sufficient to bring the unemployment rate down to less than 7 percent of the labor force during 1977.

A Postmortem on the 1976 Predictions

Forecast users, like forecast makers, should look backward as well as forward in time and try to learn from past facts and errors what can be glimpsed of the future. The table (p. 10) confronts the November 1975 survey forecasts with the current recorded figures for the first three quarters of 1976 and with the current estimates for 1976:4 and the year 1976 as a whole. The predicted and actual figures are generally expressed in the form of quarterly (for 1975-76, annual) percentage changes as this seemed to be the simplest, reasonably fair way of evaluating the forecasts in the face of the difficulties caused by the major data revisions of 1976 (especially the shift from a 1958 to a 1972 dollar base in the national income and product accounts).

Real GNP will probably be about 6.2 percent higher in 1976 than in 1975, and the median forecast from the ASA-NBER survey of a year ago (5.9 percent) must be viewed as quite accurate. The forecast of inflation was too high, but not unreasonably so (6 percent vs. an estimated 5.1 percent). Consequently, the prediction of nominal GNP was very close indeed. Moreover, the group's forecasts for 1976 as a whole turn out to be satisfactorily near the mark even for the other variables that are much more volatile and therefore more difficult to predict. This is true, in particular, of the forecasts for such important indicators as the unemployment rate, the index of industrial production, business expenditures on plant and equipment, and housing starts. Much the same general conclusions are reached by comparing the forecasts and actual outcomes for the average changes over the first three quarters of 1976 (which avoids using the recent forecasts for the fourth quarter as proxies for the unknown actuals).

Looking at the developments during the year, it is clear that forecasters on the average underestimated the pace of expansion in the first quarter and overestimated the pace of expansion in the second and third quarters of 1976. The predicted rates of growth differ little, though some deceleration of growth was expected; the actual figures show a much greater slowdown. Not surprisingly, in view of the difficulties of predicting the quarter-to-quarter path of the economy and the probability of offsetting errors, the forecasts of individual quarterly changes are often much less accurate than the forecasts of annual changes. Large errors attach to predictions of quarterly changes in business inventory investment, a variable which is notorious as the forecasters' bane.

THE ECONOMY IN 1976: PREDICTED VS. ACTUAL CHANGES

	Quarterly Changes				Annual Change
	1975:4-1976:1	1976:1-1976:2	1976:2-1976:3	1976:3-1976:4	1975-1976
	GNP in current dollars				
Predicted[a]	2.8	2.9	2.8	2.7	12.4
Actual[a]	3.0	2.4	2.1	2.5	11.7
	GNP in constant dollars				
Predicted[a]	1.5	1.3	1.3	1.2	5.9
Actual[a]	2.2	1.1	1.0	1.2	6.2
	Implicit price deflator				
Predicted[a]	1.4	1.5	1.5	1.4	6.0
Actual[a]	0.8	1.3	1.1	1.3	5.1
	Index of industrial production				
Predicted[a]	2.6	2.5	2.4	1.6	9.6
Actual[a]	3.0	1.9	1.3	1.4	10.4
	Bus. expend. on new plant and equipment				
Predicted[a]	2.1	2.8	3.2	3.7	7.2
Actual	2.6	3.0	4.1	2.8	6.9
	New private housing units started				
Predicted[a]	7.6	5.6	4.7	3.2	31.9
Actual[a]	2.6	2.4	10.2	5.8	31.0
	Change in business inventories				
Predicted[b]	4.5	3.1.	2.6	0.8	21.7
Actual[b]	19.1	1.2	-1.6	-0.4	29.4
	Unemployment rate				
Predicted[c]	-0.2	-0.2	-0.3	-0.2	-0.7
Actual[c]	-0.8	-0.2	+0.4	-0.1	-0.9

[a]Percent changes.

[b]Differences, billions of dollars.

[c]Differences, percent of the labor force.

Sources: *Predicted* changes are based on median forecasts from the November 1975 ASA-NBER survey. *Actual* changes are based on figures reported in the October 1976 issue of *Business Conditions Digest* for the first three quarters of 1976 and on median forecasts from the November 1976 ASA-NBER survey for 1976:3-1976:4 and 1975-1976.

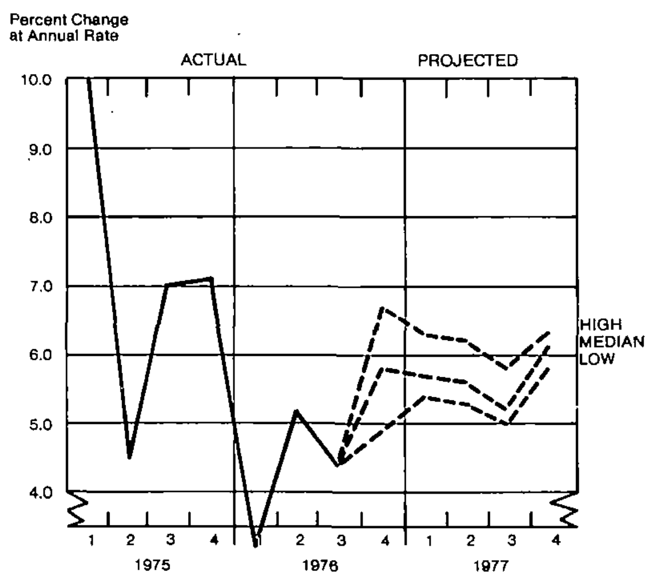
All in all, the forecasters' performance in this earliest survey covering 1976 as a whole was a creditable one as compared with the record of macroeconomic predictions from the best qualified sources. But some periods are predicted reasonably well, others poorly by most forecasters. These are not random subsets. The "good" periods are mainly those of sustained and moderate growth (e.g., 1963-64), the "bad" ones include major speedups and slowdowns and, particularly, downturns in general economic activity (e.g., 1965, 1967, and 1974, respectively). Extrapolation of recent trends helps to predict continued expansion, and recognition of growth forces at work helps to anticipate the end of a mature recession, but forecasting business cycle peaks and major fluctuations in the rates of growth and inflation is a very different and much more difficult matter. Hence the frequency of turning-point and large overestimation errors in the recession and low-growth years and of large underestimation errors in the boom years. This time forecasters are once more betting that the economy will steer clear of new crises in the year ahead, and the success of their predictions for 1977 obviously hinges on how good that bet will turn out to be.

Assumptions and Overview of the 1977 Predictions

Seventeen participants in the latest ASA-NBER survey proceeded on the premise that there will be some tax reduction or rebate or an unspecified but "more expansionary" action in the fiscal sphere; twelve assumed that there will be "no change" in fiscal policy; and seven left the question unanswered. No systematic differences were found between the average real-growth forecasts of these groups, however. The projected gains in real GNP during 1977 cluster close to 5 percent for all of them. In this respect, the survey appears to differ substantially from several contemporary forecasts with econometric models which come up with lower growth rates, *especially* in the absence of a tax stimulus.

A few general observations are suggested. (1) Most forecasters anticipate that the pace of economic activity will quicken next quarter and be kept fairly steady through 1977 even without any fiscal stimulus. (2) Most also assume that monetary policy will be "unchanged" or in conformity with the announced targets, which presumably means that these money growth rates are viewed as adequate to support the projected expansion. (3) Pessimists shave off the growth in real GNP to somewhere between 4 and 5 percent—not very radically. (4) The tax cuts of the contemplated, relatively small size ($10 billion to $15 billion) are apparently expected to have quite limited effects in 1977 upon the increases in the massive GNP aggregate. (5) The unemployment rate is to be reduced by little more than one percentage point by the end of 1977 (the central half or interquartile range of the survey predictions for 1977:4 is 6.8-7.3 percent of the labor force). Indeed, the survey is more pessimistic about the prospects for unemployment than are some of the recent forecasts with econometric models. (6) The inflation rate, in terms of the GNP price index, is seen as stubbornly persistent with no significant tendency to either accelerate or decelerate. The estimates for 1976-77 average 5.4 percent; those for the period 1976:4-1977:4, 5.7 percent (the first and third quartiles are 5.4 percent and 6.2 percent, respectively).

GNP IMPLICIT PRICE DEFLATOR



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

Capital Outlays by Households

Consumer expenditures on durable goods will increase at annual rates of some 11 percent—about equal to those of current-dollar GNP—according to the median of the survey forecasts. It is estimated that in 1976 these outlays will have risen 19 percent, GNP less than 12 percent. This sector, then, is expected to contribute much less to the economy's growth in 1977 than it did earlier in the 1975-76 recovery.

Investment in residential structures will be a source of greater strength than consumer durables, though it will grow much more slowly than it did in the early stages of the 1975-76 recovery. Housing starts are to rise approximately 1.8 percent per quarter in 1977 and to gain 14.8 percent for the year as a whole. This would be nearly three times the concurrent growth in real GNP.

Business Investment and Profits

Inventory investment will level off at about the levels of 1976 or increase just a fraction. The average forecasts for 1976 and 1977 are $14.8 billion and $15.3 billion, respectively. Thus, this sector is not expected to make any significant contribution to business expansion in the year ahead.

Forecasters continue to see a source of strength in business expenditures on plant and equipment, although their projections of this variable were scaled down a little between the surveys of August and November 1976. These expenditures (in current dollars at annual rate) are expected to increase from $126.4 billion in 1976:4 to $144 billion in 1977:4, i.e., by nearly 14 percent. This would make business fixed investment account for a somewhat larger share of GNP and would signal a gain of perhaps 8 to 10 percent in real capital formation of the business sector. (Let us hope that these forecasts will prove more accurate than the most recent, disappointingly low figures from the Commerce anticipations survey for the first half of the next year.)

Rising profits are widely assumed to bolster business confidence and investment. But profits are volatile and difficult to evaluate let alone project, so this chain of influence is uncertain and often disturbed by other factors (e.g., fears of weakening sales or of government interference or controls). Thus recently large increases in corporate profits after taxes were not nearly matched by increases in outlays for plant and equipment (in 1976 the former are estimated at about 28 percent, the latter at 7 percent). In 1977 profits are expected to rise 13 percent over 1976, close to the predicted gain in business fixed-investment expenditures.

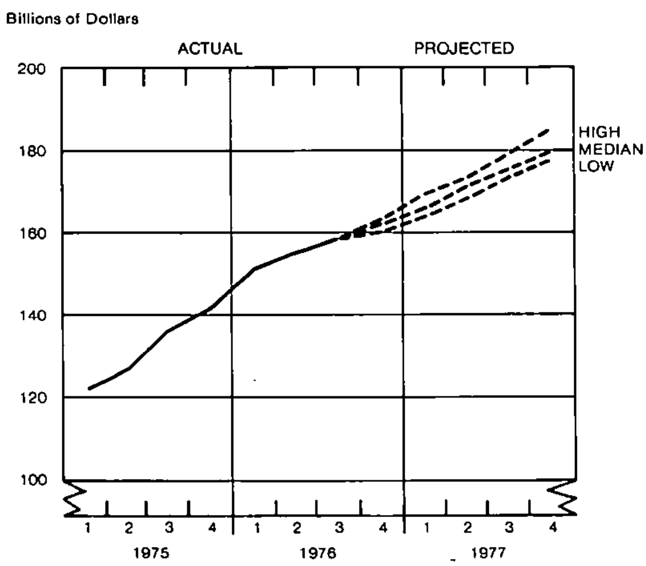
The Dispersion of Forecasts and Probabilities

There is no evidence of any marked skewness in the distribution of the individual forecasts for 1977; means and medians for most predicted economic indicators are quite close. Furthermore, the predictions from the survey are rather tightly concentrated about these averages. The standard deviations (s.d.) are small relative to the means and of the same order of magnitude as the interquartile ranges, except for inventory investment. The large majority of the forecasts fall within the distance of ±1 s.d. from the mean and virtually all are within ±2 s.d. (even the very few outliers are quite close to the latter range). As would be expected, the dispersion of forecasts is greater the more volatile the predicted variable (e.g., greater for inventory change than for real GNP) and the longer the predictive span.

It is plausible that the individual forecasts would be more dispersed the greater the uncertainty about the future, and there is some support for this hypothesis in the past data. But forecasters may be in general *agreement* on the most probable point predictions, without being necessarily very *confident* about these specific numbers. The survey questionnaire asks them directly what probabilities they attach to different possible changes in GNP and the price level. The range from +9 percent to +12.9 percent accounts for nearly 87 percent of the mean probability distribution of predictions for 1977 GNP; the range from +4 percent to +6.9 percent accounts for approximately 83 percent of that for the implicit price deflator. The annual rate of inflation so measured, then, is thought unlikely to exceed 7 percent or fall short of 4 percent but most likely to fall in the 5 to 6 percent interval.

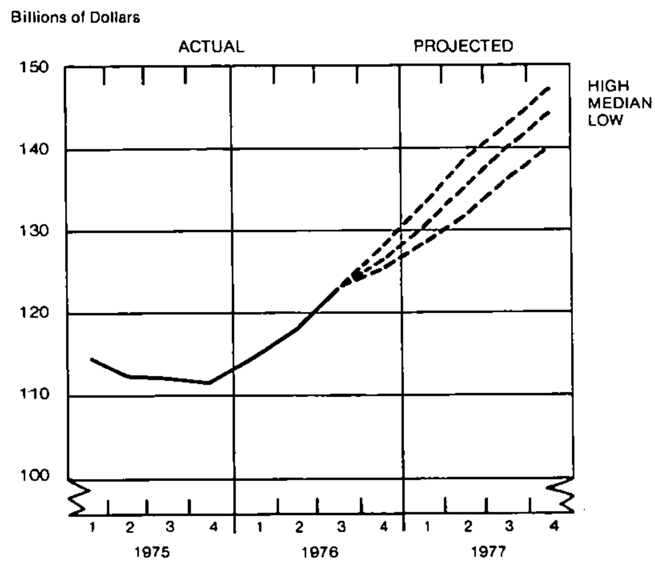
The distributions of the forecasters' assessments of the probability that real GNP will decline have means increasing from 6 to 13 chances in 100 over the period 1976:4 through 1977:4. Thus the likelihood of a recession next year is rated low.

CONSUMER DURABLE OUTLAYS



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

BUSINESS CAPITAL OUTLAYS



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

Consumers Remain Cautiously Optimistic

Richard T. Curtin
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Following a gain of more than 6 points recorded in the Index of Consumer Sentiment between May and September 1976, the November-December survey showed a decline of 2.8 points; the Index now stands at 86.0. The fourth-quarter figure is substantially higher than that recorded in the first half of this year, and more than 10 points above the October-November 1975 figure (see the chart). Given the extent and volatility of recent changes in consumer sentiment, this small overall decline does not represent evidence of a new slide in consumer confidence.

Underlying the minor decline are important undercurrents which suggest an ongoing shift and consolidation of attitudes amid continued uncertainty. In contrast to the relatively greater improvement in consumer sentiment shown among high-income families early in 1976, during the last three months of the year high-income families reported a greater decline in sentiment than lower-income families. The Index value for families with incomes above $15,000 was 80.9 in November-December 1976, reversing nearly all the improvement since 78.1 was recorded in February 1976, but remaining a full 10 points higher than in October-November 1975.

Changes in consumer attitudes toward business conditions during the last three months of 1976 also reflect cross-currents. Evaluations of the short-term business outlook turned increasingly pessimistic, while prospects for long-term business conditions continued to improve, although from relatively low levels. The long-term business outlook was the only component of the Index of Consumer Sentiment which posted a gain in the November-December survey.

Personal Finances Remain Problematic

Consumer evaluations of their personal financial progress were somewhat less favorable in November-December 1976 than three months earlier: in September, 36 percent of all respondents said they were better off than a year ago, while only 31 percent claimed to be better off in November-December. Fewer mentions of favorable income trends were responsible for the decline.

Overall, the level of personal financial optimism remained largely unchanged at year end from the values posted in February 1976. In the most recent survey, 29 percent expected to be better off financially during the next year, while 14 percent expected their financial situation to deteriorate. In both September and December 1976, nearly a majority (47 percent) of all respondents expected their family's financial situation to remain unchanged during the next 12 months.

Improved Price Expectations

In November-December 1976, 32 percent of all respondents reported that they expected prices to stay the same or go down during the next 12 months, representing a substantial improvement over the 20 percent who held this view in September 1976. Compared to late 1975 and early 1976, however, price expectations have shown only modest improvement.

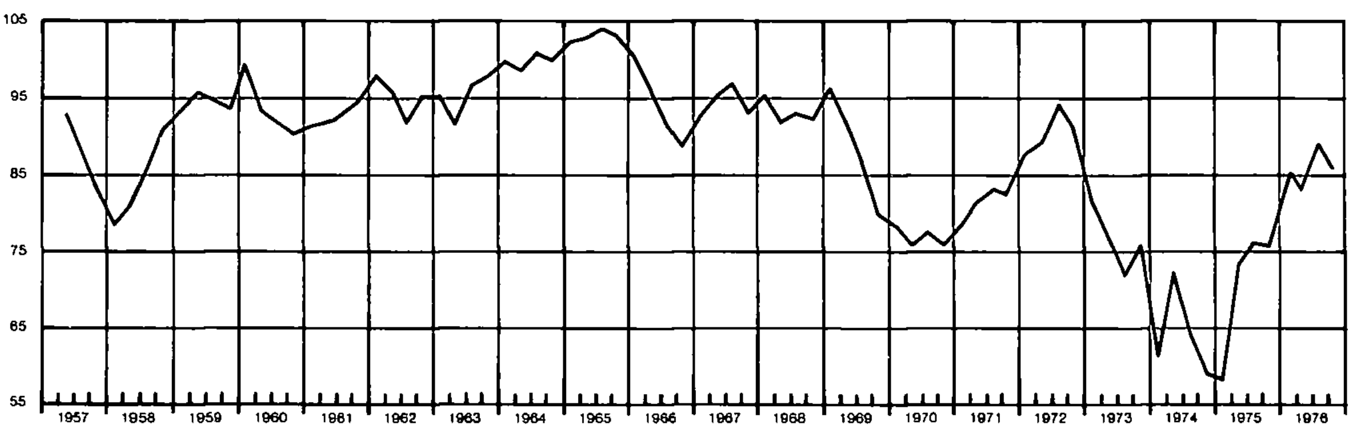
In contrast to the improvement in price expectations, attitudes toward real income advancement remained static during the last three months of 1976. In September, 34 percent of all respondents expected their incomes to go up by less than prices; three months later, 35 percent still held this view. In both surveys, only 15 percent of respondents said that they expected their income to advance by more than prices. Overall, these pessimistic real income expectations have remained largely unchanged throughout 1976, although they were a little less unfavorable in December 1976 than in August-September 1975.

More Cautious Buying Attitudes

On balance, there was a small deterioration in attitudes toward buying conditions for large household durables, cars, and houses. This weakening in buying attitudes stemmed more from a greater frequency of unfavorable evaluations than from declines in

INDEX OF CONSUMER SENTIMENT

February 1966 = 100



favorable opinions. In November-December 1976, 51 percent of respondents reported that buying conditions for household durables were good, insignificantly down from the 53 percent who reported the same opinion in September. But the proportion holding unfavorable attitudes went up from 14 percent to 22 percent during the same period. Similarly, favorable attitudes toward the automobile and housing markets showed insignificant declines, over-balanced by increases in unfavorable evaluations. Overall, buying attitudes at year-end show little change over those held in early 1976.

Mixed Changes in Business Expectations

Heightened awareness of a stalling economy in late 1976 was reflected in consumers' evaluations of current business conditions compared to those of a year earlier. In August-September 1976, 57 percent of all respondents rated business conditions as better than conditions a year earlier, but by December this proportion had fallen to 47 percent. Consumer comparisons of current business conditions with those of a year earlier were more unfavorable in December than at any other time during 1976.

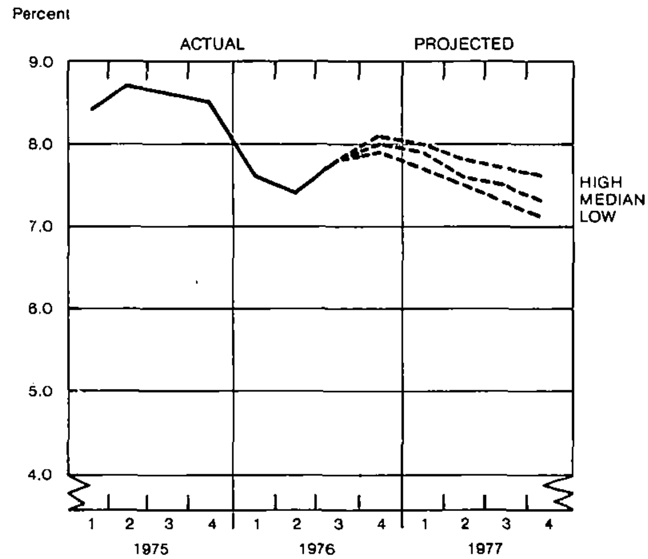
In contrast, opinions concerning expected changes in business conditions during the next 12 months have shown modest improvement during the last three months of 1976. In the latest survey, 39 percent of all respondents expected business conditions to be better in 12 months, and only 10 percent expected conditions to deteriorate further. When asked why they expected business conditions to improve, one in five respondents mentioned the recent presidential election and the impact of potential changes in economic policy. Thus "political expectations" dominated the shift toward a more favorable short-run business outlook.

Consumer Sentiment and Presidential Preferences

At the close of the November-December 1976 interview, respondents were asked whether they had voted in the recent presidential election and, if so, for whom they had voted. Among all voters surveyed, excluding the small proportion of minor party voters, 51.7 percent reported they had voted for Carter and 48.3 percent for Ford. When the respondents' voting choice was cross-classified by their consumer attitudes, Carter voters tended to report less favorable evaluations of current conditions, but their expectations for change—especially in business conditions—were much more optimistic than those of respondents who said they had voted for Ford. For example, Carter voters were relatively less optimistic when they evaluated their current financial situation compared to a year ago, less favorable when asked to compare current business conditions to those of a year ago, and somewhat less favorable in their evaluations of current buying conditions for large household durables, cars, and houses. At the same time, Carter voters reported much more favorable expectations about the future course of the economy and their own personal financial situation (see the table). Fully 56 percent of the respondents who reported that they voted for Carter expected business conditions to be better in a year, while among Ford voters only 29 percent expected them to improve during the next 12 months. Similarly, favorable long-term business expectations were held by 40 percent of Carter voters, compared to 26 percent of Ford voters.

When asked why they expected business conditions to be better in a year, Carter voters more often than Ford voters cited factors related to government economic policies. Similarly, when asked to explain why they held unfavorable long-term expectations, Ford voters much more often than Carter supporters gave reasons related to the role of government in the economy.

UNEMPLOYMENT RATE



Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters, adjusted by Editor to incorporate most recent data.

Summary Outlook

Consumer sentiment, although much improved over its 1975 lowpoint, exhibited a somewhat volatile but trendless course during 1976. Although consumers have become increasingly aware of the sluggish performance of the economy, their expectations for an improved business outlook have not diminished. Thus, even in the face of the so-called economic pause, consumers have remained cautiously optimistic.

But this current state of consumer confidence is fragile, since expectations of improved business conditions were found to be centered in the political arena and may be subject to quick reversal. Improvements in real incomes, and the reestablishment of confidence in the government and in business, are required before one may expect large and sustained improvements in consumer demand.

	Among Respondents Who Voted For	
Attitudes	**Ford**	**Carter**
Personally better/worse than a year ago	104*	96
Personally better/worse in a year	109	120
Business conditions next 12 months	107	130
Business conditions next 5 years	96	121
Market conditions for household durables	139	126
Market conditions for houses	111	94
Market conditions for automobiles	108	99
Business conditions better/worse than a year ago	131	112
Business conditions better/worse in a year	111	151
Expected change in unemployment	102	125
Expected change in interest rates	98	96
Expected change in prices	31	48

*Table entries represent the proportion giving favorable answers minus the proportion giving unfavorable replies, plus 100.

Growth Prospects for 1977

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The University of Michigan

Many observers of the current economic scene have come to the conclusion that stimulative action will be needed early in 1977 in order to prevent a continuation of the sluggish real growth rates and high unemployment that characterized the performance of the economy during the latter half of 1976.

This conclusion—that stimulative action early in 1977 is essential—is based on two rather straightforward propositions:

1. That the growth of consumer spending from its present level is unlikely to proceed at a faster pace than the growth of disposable income.
2. That prospective increases in business investment and government spending will be of insufficient magnitude (given the present stance of fiscal policy) to do more than maintain real growth rates in the 4-5 percent zone.

In short, the argument is that consumer spending cannot be counted on to provide much net upward thrust to the economy during 1977, in contrast to what happened during 1976, and most analysts do not see enough strength in business investment or government spending to take up more than part of the slack.

Consumer Spending Prospects

During 1976, consumer spending grew at a substantially greater rate than consumer disposable income: the saving rate declined from levels of close to 8 percent to levels in the 6 percent zone, automobile sales rose from slightly over 9 million units to over 10 million, and installment debt picked up in a normal cyclical recovery pattern.

However, neither the basic data on consumer plans, attitudes, and expectations, nor formal models of consumer saving behavior and demand for durable goods, suggest that the rate of personal saving is likely to be pushed down much lower than its second half 1976 level of around 6 percent. As outlined in the article by Richard Curtin, the Index of Consumer Sentiment followed an erratic sidewise movement during much of 1976, while ending up the year at a substantially higher level (86.0) than at the close of the preceding year (75.4). Consumer expectations about price change, which play a crucial role in modeling efforts that use expectational variables, became steadily more optimistic as the year progressed. Although it is certainly possible that 1977 will see a significant improvement in these attitudes and expectations, it seems unlikely that such improvement will take place on a big enough scale to have much impact on consumer propensities to save or spend.

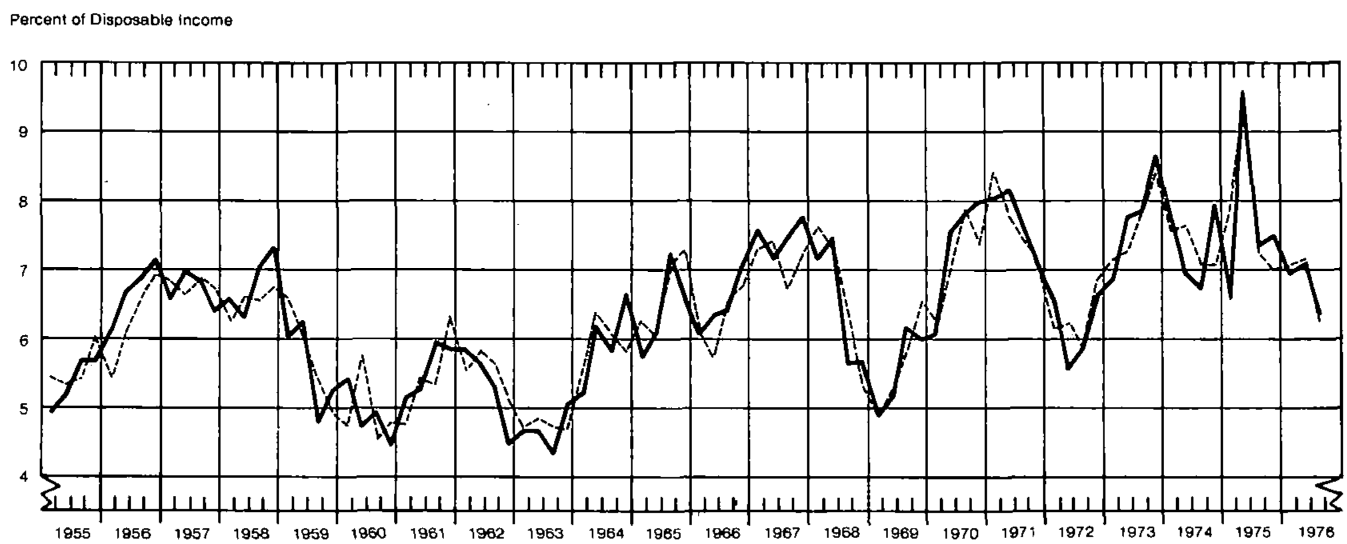
The chart below shows the rate of personal saving predicted by a model which incorporates both a wealth-income adjustment mechanism and the uncertainty influences represented by consumer expectations about price change and the Index of Consumer Sentiment. The dashed line in the chart shows predicted values, and indicates that the model explained consumer saving behavior quite well during 1976. For 1977, the model predicts little change in the rate of personal saving, a prediction which underlies the conclusions stated above—that the growth rate of consumer spending during 1977 will be closely tied to the growth rate of consumers' real disposable income.

Detailed expectational models for automobile demand and demand for non-auto durables also support this conclusion. Automobile sales are projected to reach levels above 11 million units by the middle of next year, and sales of non-auto durables are forecasted to grow at roughly a 10 percent annual rate during 1977. All these estimates assume that total real income grows at rates between 4 and 5 percent during 1977, with price inflation proceeding at about a 5 percent plus pace, thus generating money income growth rates of close to 10 percent throughout 1977.

Investment and Government Spending

Analyses elsewhere in this publication detail the prospects for business plant and equipment spending, inventory spending and government spending. Even though both plant and equipment spending and government spending are expected to grow

ACTUAL AND PREDICTED SAVING RATES, 1955-1976



at substantially higher rates during 1977 than had been the case during 1976, their overall growth rates are not sufficient to produce aggregate real growth rates above the 4-5 percent zone.

Need for Stimulative Policy

The economic prospects outlined above can be viewed from two different perspectives. On the one hand, it might be argued that real growth rates in the 4-5 percent zone are above average for the U.S. economy during recent years, and represent the kind of slow but steady recovery path that will insure an eventual return to full employment along with gradual moderation of the rate of price inflation. An alternative view is that the U.S. cannot afford to pay the price of such a long, drawn-out recovery path, with its associated continuation of high unemployment rates and "lost" output for several more years. Moreover, it is argued that the alleged price of a speedier recovery (higher inflation rates) may not have to be paid at all if the appropriate policy stance is adopted.

The alternative view leads to the conclusion that stimulative action in early 1977 is both appropriate and essential. Even if a real growth path in the 4-5 percent zone were assured, which is by no means guaranteed lacking additional stimulation, the result would still be year-end 1977 levels of unemployment rates and excess capacity that many would see as unacceptably high: the 4-5 percent growth rate scenario leaves the economy by year-end 1977 at *lower* levels of real output and *higher* rates of unemployment than the targets adopted by the Ford administration in late 1975 as safe and attainable. In short, although a real growth rate in the 4-5 percent zone would normally be regarded as a good performance, it seems to fall short of what is needed in the present economic situation.

Alternative Stimulative Policies

The new administration has been spending a good bit of time in trying to decide what, if anything, to recommend to the Congress in terms of stimulative fiscal action. Some of the discussion about alternative stimulative programs is really concerned with values and preferences about the size and function of the Federal government in U.S. society. Other matters for debate are concerned with more narrowly defined analytic issues—whether, for example, a temporary tax reduction would have the same impact on demand as a permanent tax reduction, or whether increasing the investment tax credit will stimulate investment sufficiently, given the present low level of capacity utilization and the existence of substantial uncertainties in the business investment climate relating to environmental considerations, energy issues, etc.

One such analytic issue concerns the relative demand stimulating effect of temporary or permanent cuts in income taxes. Since the 1960s the U.S. has experienced three major changes in tax rates, two of them temporary or partly so (1968 and 1975), the other permanent (1964). Economists have debated at some length the proposition that temporary tax changes have their major impact on saving and impact only slightly on long-term expected income and hence on consumption decisions that are tied to these income expectations.

Evidence from the income tax surcharge passed in 1968, which is widely viewed as having had less effect in holding down consumption spending than had been expected, is often cited in support of this theory, as is evidence from studies of the relation between various kinds of transitory or windfall changes in income and consumption behavior. Contrary evidence comes from studies showing that small windfalls are treated by consumers just like ordinary changes in regular income while large windfalls are not, and from theoretical considerations relating to the cost of decision-making and the difficulty of distinguishing transitory from permanent changes in taxes and hence in income.

The model of saving behavior discussed above can easily be used to examine the question of whether transitory tax changes have a differential effect on saving and consumption than permanent tax changes. In the model, saving is related to changes in a number of income components that are predominantly permanent ones: changes in wage and salary earnings, changes in property income, changes in tax payments as individuals and families move into different tax brackets, etc.

If the transitory changes in disposable income associated with transitory changes in tax rates have a different impact on saving than other—"normal"— changes in taxes, we should expect to find that an equation estimated *prior to* the 1975 tax cut should have underestimated the impact of the tax cut on saving. Second, we should find that special variables which reflect the temporary character of the 1968 and 1975 tax changes show that saving behavior was abnormal for these two transitory tax change episodes, and that the relation between tax changes and saving during these periods could not have been predicted from the normal relation between the two.

Empirical tests of these tax-impact models indicate that the 1975 temporary tax reduction had about the same effect on saving as other and presumably permanent tax changes; there is some evidence that the tax surcharge in 1968 did come more out of savings than tax increases normally do, although the differential is quantitatively not very important.

Interestingly enough, the analysis indicates that there was a significant *anticipation effect* of the 1975 tax reduction: during the first quarter of 1975, consumer spending was substantially higher, and saving lower, than predicted by the model. Similar anticipation effects cannot be found for either the 1968 (temporary) tax increase or the 1964 (permanent) tax reduction, although such effects might well have worked through other expectational variables in the model.

In sum, the evidence suggests that a temporary tax cut enacted early in 1977 is likely to have the same impact on consumer spending and saving as a permanent tax cut of equivalent size, and may well have a stimulative anticipatory effect as well.

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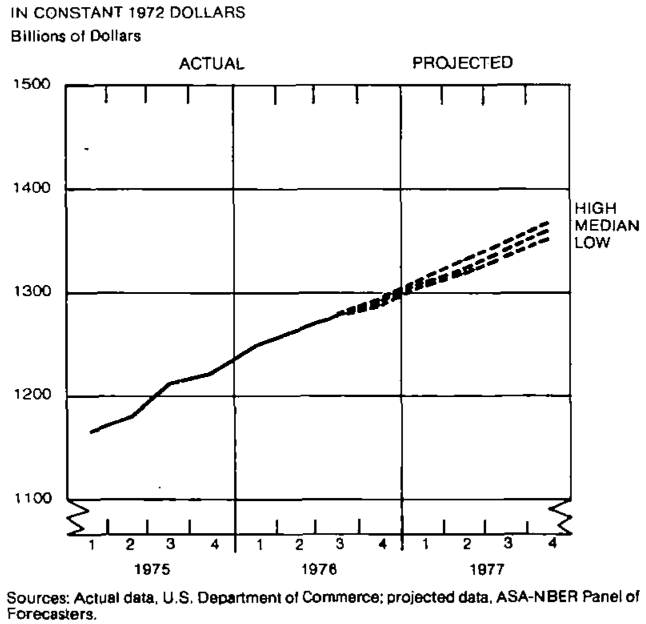

Sources: Actual data, U.S. Department of Commerce; projected data, ASA-NBER Panel of Forecasters.

SURVEYS OF CONSUMERS, 1974-75

Contributions to Behavioral Economics

Edited by Richard T. Curtin

With contributions by: Thomas J. Anton, Greg J. Duncan, Evelyn Hansmire, John Holmes, F. Thomas Juster, George Katona, Robert W. Marans, E. Scott Maynes, Sandra Newman, Jay Schmiedeskamp, Burkhard Strumpel, and other Staff of the Economic Behavior Program

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