BLUE CHIP Economic Indicators

WHAT TOP ECONOMISTS ARE SAYING ABOUT THE U.S. OUTLOOK FOR THE YEAR AHEAD

Vol. 10, No. 11 November 10, 1985

ECONOMIC GREEN LIGHT* STILL SHINES FOR '86

On Real GNP No change from a month ago is the CONSENSUS forecast of our panel of 50 economists for the nation's real growth in both 1985 and 1986. The 1985 year-over-year figure (as might be expected now that the year is nearly over) stabilized at a 2.5 percent gain against the strong 6.8 percent growth in 1984. The group still expects this quarter to be the best of the year--a 3.4 percent annual rate advance compared with the third quarter's 3.3 percent gain.

The CONSENSUS forecast for 1986 remained at the (3.1) percent year-over-year projection of last month--just a shade above the postwar '48-'84 37-year average of 2.9 percent. The near-record spread between the average of the top 10 and the bottom 10 continues, with the most optimistic expecting a healthy 4.3 percent upsurge next year while the more conservative see a near-recessionary advance of only 1.7 percent. This calls for more than usual caution in the application of the CONSENSUS forecast to business plans for 1986.

On Inflation And Profits Good news on the inflation front continues. The CPI forecast for 1986 was lowered to 3.8 percent--from 4 percent last month. Also, the profit forecast for 1986 advanced a full percentage point (see p. 3).

Protection is Voted a No-No! In a firm conviction that goes back to the economist Adam Smith's book of 1776, The Wealth of Nations, our Blue Chip panel strongly endorses lowering international trade barriers. On a 10-point scale, they gave an (8.6) highly favorable rating to this statement from a recent Report of the Council of Economic Advisers to the President: "Our market economy and its system of rewards for superior performance has made the American economy the most productive and innovative in the world. An industrial policy that increases government planning, government subsidies and international protectionism would only be a burden on our economic life and a threat to our long-term economic prosperity." A rating of 8.6 is among the highest we have ever recorded on a public policy issue.

The panel showed a bit less support--a 6.6 vote--for the view that "Protectionism usually hurts the industries it was to help." They were definitely cool--only a 4.2 vote--to a report on "The New Case For Protectionism" (see p. 8).

RJE Summary A look at the annual and quarterly forecasts of our top panel reveals that more and more of the group are pushing the next recession into 1987 or even later. In fact, only five of the 50 now see a "clear-cut" recession in (or starting) next year. And a growing number expect the second half of 1986 to be better than the first half. But I still vote for considerable caution as the year wears on.

Bee-!

*** Yellow logo signals low economic growth, between zero and +2.9%. Red logo warns that real GNP for the year may drop below 0% growth. Green logo means the economy is expanding above long-range growth potential of 3%.**

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'85 Real GNP Again Stays At +2.5%

NOVEMBER 1985 FORECAST FOR 1986 SOURCE:	Percent Change 1986 from 1985 (Year over Year)								Average for Year—1986			Total Units—1986		
	1 Real GNP (Con. $) (Output)	2 GNP Deflator (Prices)	3 Total GNP (Cur.$)	4 Consumer Price Index[1]	5 Indust. Prod. Total[2]	6 Dis. Pers. Income (Con.$)[3]	7 Non-Res. Fix. Inv. (Con.$)[4]	8 Profits Pretax (Cur.$)[5]	9 Treas. Bills 3-Mo.[6]	10 Corp. Aaa Bonds[7]	11 Unempl. % Labor Force[8]	12 Housing Starts (MIL)[9]	13 Auto Sales Domestic (MIL)[10]	14 Auto Sales Import (MIL)[11]
Georgia State	3.6H	3.7	6.3	3.5	2.3	2.4	7.0	2.1	7.4	11.5	7.2	1.74	8.1	2.8
Bostian Research Assoc.	2.9	3.3L	6.6H	3.7	3.0	3.7	8.0H	4.0	7.9H	11.3	7.1L	1.85H	8.2	2.7
Morris, Cohen & Associates	2.6	3.9H	6.5	4.0H	3.0	3.7	7.1	-2.0	7.5	11.2	7.1L	1.77	8.4	2.7
Harris Trust & Savings Bank	2.6	3.7	6.4	3.4	2.2	2.4	6.3	6.4	7.4	11.7	7.2	1.75	8.5	2.8
U.S. Trust Co.	2.5	3.6	6.2	3.5	2.3	2.4	5.9	4.8	7.5	11.5	7.1L	1.73	8.3	2.7
Siff, Oakley, Marks, Inc.	2.5	3.7	6.2	3.6	2.4	2.2	6.4	5.7	7.5	11.6	7.2	1.75	8.3	2.8
Prudential Insurance	2.5	3.7	6.3	3.6	2.2	2.2	6.2	4.9	7.5	11.5	7.2	1.74	8.5	2.8
Polyconomics Inc.	2.5	3.3L	6.5	2.5L	2.4	1.9	8.0H	2.0	7.3	11.2	7.2	1.80	8.3	2.7
Pennzoil Company	2.5	3.8	6.3	3.7	2.3	3.1	6.3	-4.3	7.7	11.6	7.2	1.80	8.1	2.9
Nat. City Bank of Cleveland	2.5	3.7	6.2	3.5	2.2	2.4	5.8	-5.0	7.5	11.5	7.2	1.70L	8.2	2.8
Monsanto Company	2.5	3.7	6.3	3.5	2.1	2.2	6.1	1.0	7.5	11.5	7.2	1.75	8.2	2.7
Marine Midland Bank	2.5	3.7	6.2	3.5	2.4	2.5	7.0	-6.2	7.5	---	7.2	1.74	8.5	2.6
Manufacturers Hanover Trust	2.5	3.7	6.3	3.5	2.6	2.3	6.0	-6.9	7.5	11.0L	7.2	1.75	8.6	2.9
Arthur D. Little	2.5	3.9H	6.5	3.7	2.5	3.0	6.5	2.0	7.3	11.0L	7.3	1.75	8.0	3.0H
La Salle National Bank	2.5	3.6	6.2	3.5	2.3	2.8	6.9	-4.7	7.5	11.5	7.2	1.75	8.3	2.7
Irving Trust Company	2.5	3.7	6.3	3.8	2.3	2.3	6.2	5.7	7.5	11.6	7.2	1.72	8.3	2.8
Wayne Hummer & Co.	2.5	3.6	6.2	3.4	2.4	2.9	7.5	0.0	7.5	11.5	7.2	1.74	8.2	2.8
Fairmodel-Economica Inc.	2.5	3.7	6.3	3.5	2.5	1.8L	6.8	-2.3	7.6	11.5	7.3	1.80	9.0H	2.8
Evans Economics	2.5	3.7	6.3	3.4	2.4	5.2H	5.6	-4.5	7.5	11.5	7.2	1.80	8.2	2.8
Eggert Economic Enterprises	2.5	3.6	6.3	3.4	2.4	2.6	6.5	-1.7	7.5	11.4	7.2	1.75	8.2	2.7
Econoviews International Inc.	2.5	3.3L	6.0L	3.0	2.6	3.0	6.5	0.0	7.8	11.3	7.2	1.80	7.8L	2.6
Econoclast	2.5	3.6	6.1	3.4	2.3	2.5	6.7	1.2	7.5	11.4	7.2	1.79	8.1	2.8
Dean Witter Reynolds	2.5	3.7	6.3	3.6	2.3	2.5	6.8	-4.1	7.4	11.8	7.2	1.76	8.5	2.7
Conference Board	2.5	3.6	6.2	3.6	2.3	2.4	5.4L	-4.3	7.5	12.0H	7.2	1.76	8.6	0.0L
Chrysler Corporation	2.5	3.6	6.1	3.5	2.4	2.4	6.5	6.0	7.6	11.5	7.2	1.77	8.2	2.7
Chamber of Commerce of USA	2.5	3.7	6.3	3.5	2.2	2.3	6.2	4.9	7.5	11.5	7.2	1.73	8.3	2.9
Arnhold & S. Bleichroeder	2.5	3.6	6.2	3.5	2.2	2.9	6.6	5.0	7.5	11.4	7.3	1.73	8.2	2.8
Univ. of Michigan M.Q.E.M.	2.4	3.7	6.2	3.5	2.6	2.2	6.2	8.6	7.5	11.5	7.3	1.74	8.3	2.7
UCLA Business Forecast	2.4	3.7	6.2	3.4	2.3	2.3	5.9	5.1	7.4	11.4	7.2	1.76	8.4	2.9
Security Pacific Nat. Bank	2.4	3.7	6.2	3.5	2.3	2.3	6.2	-4.9	7.5	11.5	7.2	1.75	8.4	2.8
Sears Roebuck	2.4	3.7	6.2	3.7	2.2	2.2	6.1	5.0	7.6	11.5	7.2	1.74	8.4	2.8
Prudential Bache	2.4	3.6	6.2	2.8	1.5L	2.0	5.9	4.5	7.4	11.5	7.2	1.80	8.3	2.8
Philadelphia National Bank	2.4	3.7	6.2	3.5	2.1	2.2	6.1	-1.3	7.5	11.5	7.2	1.75	8.1	2.8
Northern Trust Co.	2.4	3.7	6.2	3.5	2.1	2.6	7.0	-5.3	7.5	11.5	7.2	1.75	8.2	2.8
Morgan Stanley & Co.	2.4	3.7	6.2	3.5	2.4	2.3	6.0	-4.0	---	---	7.2	1.70L	8.4	2.5
Morgan Guaranty	2.4	3.7	6.2	3.5	2.2	2.1	6.2	7.0	---	---	7.2	1.75	8.4	2.8
Metropolitan Insurance	2.4	3.7	6.2	3.5	2.2	2.4	7.4	5.0	7.5	11.5	7.2	1.75	8.7	2.4
Meyer & Associates	2.4	3.7	6.2	3.4	2.5	2.1	6.3	9.7H	7.5	11.5	7.2	1.70L	8.3	2.4
Merrill Lynch	2.4	3.6	6.1	3.4	2.2	2.2	6.0	-4.0	7.5	---	7.2	1.75	8.3	2.8
W.R. Grace Co.	2.4	3.7	6.1	3.5	2.3	2.2	6.5	3.7	7.5	11.5	7.2	1.75	8.3	2.7
1st National Bank - Chicago	2.4	3.7	6.2	3.5	1.7	2.7	6.1	-4.0	7.4	11.4	7.3	1.75	8.3	2.9
Equitable Life Assurance	2.4	3.7	6.2	3.5	4.5H	2.7	7.2	-5.3	7.4	11.5	7.2	1.70L	8.2	2.6
E.I. Du Pont Co.	2.4	3.6	6.1	3.5	2.2	2.3	6.4	-1.9	7.5	11.4	7.3	1.70L	8.3	2.7
Chase Manhattan Bank	2.4	3.7	6.2	3.7	2.2	4.0	6.0	3.5	---	---	7.3	1.80	8.0	3.0H
Cahners Publishing Co.	2.4	3.6	6.1	3.6	2.4	2.2	6.0	3.2	7.5	11.5	7.2	1.72	8.4	2.6
Brown Brothers Harriman	2.4	3.7	6.2	3.5	2.2	2.5	6.1	5.4	---	---	7.2	1.76	8.3	2.8
Bank of America, N.A.	2.4	3.7	6.1	3.5	2.4	2.3	6.3	-9.0	---	---	7.2	1.79	8.5	2.8
Bankers Trust	2.4	3.7	6.2	3.4	2.2	2.2	5.9	5.6	---	---	7.3	1.73	8.5	2.8
Business Economics, Inc.	2.3L	3.7	6.0L	3.6	1.7	2.7	6.0	-5.0	7.3	11.5	7.2	1.72	8.1	2.7
Peter L. Bernstein	2.3L	3.6	6.0L	3.0	2.2	2.0	6.3	-10.0L	7.2L	11.3	7.4H	1.70L	8.2	2.7
1985 CONSENSUS: NOVEMBER Avg.	2.5	3.7	6.2	3.5	2.3	2.5	6.4	0.4	7.5	11.5	7.2	1.75	8.3	2.7
TOP 10	2.7	3.8	6.4	3.7	2.8	3.4	7.3	6.5	7.6	11.6	7.3	1.80	8.6	2.9
BOT 10	2.4	3.5	6.1	3.2	2.0	2.1	5.8	-6.2	7.3	11.2	7.2	1.71	8.1	2.3
OCTOBER Average	2.5	3.7	6.2	3.5	2.5	2.8	7.1	1.1	7.5	11.5	7.2	1.77	8.2	2.7
ACTUAL 1984	6.8	3.8	10.8	4.3	10.7	6.7	19.8	16.0	9.6	12.7	7.5	1.77	8.0	2.4
1983	3.7	3.8	7.7	3.2	6.5	3.5	2.5	22.8	8.6	12.0	9.6	1.70	6.8	2.4

See bottom of page 3 for basic data sources.

Computer Programming provided by the Economic Outlook Center, College of Business, Arizona State University, Tempe.

'86 Real GNP Flat At +3.1%

NOVEMBER 1985 FORECAST FOR 1986 SOURCE:	Percent Change 1986 from 1985 (Year over Year)								Average for Year—1986			Total Units—1986		
	1 Real GNP (Con. $) (Output)	2 GNP Deflator (Prices)	3 Total GNP (Cur.$)	4 Consumer Price Index[1]	5 Indust. Prod. Total[2]	6 Dis. Pers. Income (Con.$)[3]	7 Non-Res. Fix. Inv. (Con.$)[4]	8 Profits Pretax (Cur.$)[5]	9 Treas. Bills 3-Mo.[6]	10 Corp. Aaa Bonds[7]	11 Unempl. % Labor Force[8]	12 Housing Starts (Mil.)[9]	13 Auto Sales Domestic (Mil.)[10]	14 Auto Sales Import (Mil.)[11]
Bostian Research Assoc.	5.1H	4.4	9.7H	4.6	7.6H	4.9	9.6H	19.0	8.2	10.9	6.6	2.05H	8.4	2.9
Peter L. Bernstein	5.0	3.7	8.9	3.7	5.9	4.0	7.6	20.0	7.6	11.4	6.7	2.00	7.9	2.7
Harris Trust & Savings Bank	4.7	3.9	8.8	3.7	5.6	2.9	5.5	18.4	7.1	10.7	6.5L	1.87	8.3	3.2
Polyconomics Inc.	4.5	2.7	7.4	2.5	4.5	4.3	8.0	9.0	6.5	10.1	6.8	1.80	7.9	2.6
Econoclast	4.1	3.0	7.1	3.2	2.1	3.8	7.2	7.8	6.7	10.3	6.9	1.89	7.5	3.3
Morris Cohen & Associates	3.9	4.2	8.3	4.2	4.3	4.0	5.8	16.6	8.2	11.6	6.9	1.81	8.2	2.9
Marine Midland Bank	3.9	3.6	7.6	3.6	4.0	3.3	6.9	12.4	8.0	---	6.6	1.75	8.6	2.6
Fairmodel-Economica Inc.	3.9	3.6	7.6	3.4	5.6	2.6	2.2	27.8H	8.2	10.9	6.9	2.00	10.6H	3.4H
Evans Economics	3.9	3.4	7.5	3.4	4.9	6.2H	4.8	20.6	7.7	11.8	7.0	1.72	7.2	3.1
Econoviews International Inc.	3.9	3.7	7.5	4.0	4.3	3.6	8.5	12.5	8.9	12.0	6.7	1.80	7.5	2.9
Prudential Insurance	3.7	4.5	8.3	4.6	3.3	3.2	4.1	6.8	7.9	11.7	6.9	1.79	8.2	2.9
Irving Trust Company	3.7	3.7	7.5	4.4	3.6	2.8	3.4	8.7	8.4	12.0	6.8	1.64	7.5	2.9
Chamber of Commerce of USA	3.7	3.5	7.3	3.8	3.2	2.7	4.2	5.5	6.7	10.4	6.6	1.83	7.8	3.2
Manufacturers Hanover Trust	3.6	3.8	7.5	3.9	3.8	2.9	2.2	14.6	7.7	10.0	6.9	1.78	7.8	3.0
La Salle National Bank	3.6	3.2	6.9	3.3	4.3	3.3	4.6	8.0	7.6	11.3	6.7	1.73	7.6	2.9
Sears Roebuck	3.5	4.1	7.7	4.4	3.8	3.1	1.4	4.5	7.8	11.3	6.9	1.72	7.6	3.2
Wayne Hummer & Co.	3.5	3.4	7.0	3.7	3.5	3.3	7.1	8.5	7.7	11.1	6.8	1.78	7.9	2.7
Dean Witter Reynolds	3.5	4.4	8.0	4.6	4.4	3.4	4.4	8.8	8.2	12.3H	7.1	1.80	7.4	2.9
Security Pacific Nat. Bank	3.3	3.9	7.4	4.0	3.9	1.9	2.0	9.1	8.0	11.6	7.1	1.78	7.7	3.1
Nat. City Bank of Cleveland	3.2	3.8	7.0	3.8	2.9	2.8	3.0	7.0	8.2	11.3	7.2	1.70	7.6	2.9
UCLA Business Forecast	3.1	3.2	6.4	3.4	3.2	2.5	1.5	5.9	6.7	10.1	7.1	1.96	7.5	3.2
Northern Trust	3.1	3.8	7.0	3.9	2.3	2.7	3.7	5.6	7.6	11.2	7.1	1.75	7.5	3.0
Bankers Trust	3.1	3.6	6.8	3.3	3.6	2.5	0.1	8.3	---	---	7.1	1.83	8.1	3.0
Prudential Bache Securities	3.0	2.5L	5.7	2.0L	4.5	2.4	2.2	8.0	6.4	9.9L	7.0	1.90	8.1	3.1
Morgan Guaranty	3.0	3.6	6.7	3.4	3.1	2.2	3.3	8.0	---	---	7.0	1.83	8.0	3.2
Merrill Lynch	3.0	3.3	6.4	3.0	2.8	2.2	2.5	7.0	7.1	---	7.2	1.78	7.2	3.0
Conference Board	3.0	3.3	6.3	3.4	3.5	3.2	1.7	9.0	7.3	11.5	7.0	1.76	8.4	2.7
Chrysler Corporation	3.0	3.4	6.4	3.4	3.0	2.7	5.0	10.0	7.8	11.8	7.2	1.70	7.1	3.4H
Brown Brothers Harriman Co.	3.0	4.0	7.1	3.8	2.4	2.8	1.7	7.3	---	---	7.3	1.81	7.7	3.1
U. of Michigan M.Q.E.M.	2.9	2.9	6.0	4.0	4.0	1.8	4.3	3.1	7.1	10.7	7.3	1.84	7.5	2.7
Morgan Stanley & Co.	2.9	4.2	7.3	4.2	4.3	2.7	2.0	4.7	---	---	6.8	1.80	7.9	2.4
W.R. Grace Co.	2.9	3.7	6.7	4.2	3.0	2.0	4.5	5.7	7.6	10.9	7.3	1.73	7.6	2.8
Georgia State	2.9	4.0	7.0	4.0	1.1	1.8	3.1	1.4	7.4	11.3	6.7	1.65	7.0	3.0
E.I. Du Pont Co.	2.9	3.0	6.0	3.3	3.5	2.5	2.5	7.5	6.2L	10.1	7.1	1.80	7.6	3.1
Philadelphia National Bank	2.8	3.7	6.5	3.3	2.3	3.1	2.4	3.3	7.5	11.3	7.2	1.77	7.3	2.9
EGGERT ECONOMIC ENTERPRISES	2.8	3.1	6.1	3.4	3.0	2.9	3.5	4.8	7.0	10.5	7.0	1.70	7.5	2.9
1st National Bank - Chicago	2.7	3.8	6.6	3.8	1.1	3.0	0.8	-1.6	6.5	10.6	7.3	1.74	7.4	3.2
Equitable Life Assurance	2.6	3.9	6.5	4.1	2.3	2.5	4.8	1.5	6.8	10.8	7.4	1.70	7.4	2.9
Bank of America, N.A.	2.6	4.0	6.6	4.1	1.7	2.3	2.5	2.0	---	---	7.3	1.90	7.6	3.2
U.S. Trust Co.	2.5	3.6	6.2	3.8	3.1	2.7	0.3	6.1	7.4	11.2	7.3	1.80	7.6	3.0
Monsanto Company	2.5	4.3	6.9	4.3	1.6	2.6	2.3	2.0	7.7	11.5	7.4	1.65	7.4	2.9
Metropolitan Insurance	2.5	4.1	6.7	4.2	3.5	2.3	2.4	5.5	7.6	11.4	7.2	1.63	7.4	2.4
Meyer & Associates	2.5	3.1	5.7	3.3	2.3	0.9L	4.0	8.3	6.5	10.0	7.1	1.70	7.3	2.0L
Pennzoil Company	2.3	5.5H	8.0	5.3H	2.0	3.0	2.0	5.0	9.6H	11.3	7.1	1.59	7.2	3.0
Arnhold & S. Bleichroeder	2.2	3.8	6.2	4.0	2.7	4.4	3.0	1.5	7.8	11.0	7.3	1.75	6.7L	3.2
Arthur D. Little	2.0	4.0	6.1	4.0	-3.0L	2.0	0.0	-5.0	6.9	10.5	7.4	1.50L	7.1	2.8
Chase Manhattan Bank	1.5	3.9	5.5	4.2	1.1	2.5	2.0	-5.6L	---	---	8.0H	1.50L	7.1	2.8
Siff, Oakley, Marks, Inc.	1.0	4.0	5.1	3.9	-0.1	1.4	1.4	-2.3	7.3	11.3	7.8	1.65	7.4	3.0
Cahners Publishing Co.	0.9	3.9	4.8	4.4	-1.6	1.4	-3.2L	-2.8	7.6	11.0	7.4	1.57	7.2	2.4
Business Economics, Inc.	-0.7L	3.9	3.2L	4.0	-2.0	2.0	2.0	-5.0	7.0	10.7	7.7	1.60	7.2	2.3
1986 CONSENSUS: NOVEMBER Avg.	3.1	3.7	6.9	3.8	3.0	2.8	3.4	7.1	7.5	11.0	7.1	1.76	7.7	2.9
TOP10	4.3	4.4	8.3	4.5	5.2	4.2	7.1	17.2	8.4	11.8	7.5	1.92	8.5	3.3
BOT10	1.7	3.0	5.4	3.1	0.2	1.7	0.6	-1.6	6.6	10.2	6.7	1.60	7.1	2.5
OCTOBER Average	3.1	3.8	7.0	4.0	3.2	3.0	4.4	6.1	7.6	11.2	7.1	1.77	7.6	2.9

BASIC DATA SOURCES:

[1] All Urban Consumer Items, BLS; [2] Federal Reserve Board; [3] In 1972 $, BEA; [4] Non-residential Fixed Investment, in 1972 $, BEA; [5] Corporate Profits Pretax *With* Inventory Valuation and Capital Consumption Adjustments, BEA; [6] Secondary Market Bank Discount Basis, Federal Reserve Statistical Release H15; [7] Moody's Seasoned Federal Reserve Board H15; [8] All *Civilian* Workers, BLS; [9] Bureau of Census, SAAR; [10] Domestic Sales, annual rate; [11] Import Sales, annual rate.

Computer Programming provided by the Economic Outlook Center, College of Business, Arizona State University, Tempe.

I What are the following large ECONOMETRIC services forecasting for 1985?

	Percent Change (1985 over 1984) Full Year			
	Real GNP	GNP Deflator	Consumer Prices	Percent Unemployment
Citicorp Info. Services	2.5%	3.7%	3.5%	7.1%
Evans Economics	2.5	3.7	3.4	7.2
Chase Econometric*	2.4	3.7	3.5	7.2
Laurence H. Meyer & Associates	2.4	3.7	3.4	7.2
Merrill Lynch	2.4	3.6	3.4	7.2
UCLA Business Forecast	2.4	3.7	3.4	7.2
Univ. of Michigan M.Q.E.M.	2.4	3.7	3.5	7.3
COMPARED WITH:				
Dr. Walter H. Heller, U of Minn.	2.5	3.5	3.4	7.1
Dr. Murray Weidenbaum, W.U. St.L	2.4	3.7	3.5	7.2
BLUE CHIP CONSENSUS	**2.5%**	**3.7%**	**3.5%**	**7.2%**

II And let's take a look at 1986:

	Percent Change (1986 over 1985) Full Year			
	Real GNP	GNP Deflator	Consumer Prices	Percent Unemployment
Evans Economics	3.9%	3.4%	3.4%	7.0%
Citicorp	3.8	4.5	4.4	6.5
UCLA Business Forecast	3.1	3.2	3.4	7.1
Merrill Lynch	3.0	3.3	3.0	7.2
Univ. of Michigan M.Q.E.M.	2.9	2.9	4.0	7.3
Chase Econometric*	2.5	3.8	3.8	7.2
Laurence H. Meyer & Associates	2.5	3.1	3.3	7.1
COMPARED WITH:				
Dr. Walter W. Heller, U of Minn.	3.0	3.6	4.0	7.1
Dr. Murray Weidenbaum,W. U. St.L	3.0	4.2	4.3	7.0
BLUE CHIP CONSENSUS	**3.1%**	**3.7%**	**3.8%**	**7.1%**

*Courtesy of The Conference Board, New York City.

III What does the BLUE CHIP CONSENSUS expect by quarters for 1985 and 1986?

	%Change (From PRIOR Qtr.Annual Rate)[1]							Average for Quarter[1]			
Actual[2]	Real GNP	Ind. Prod.	GNP Def.	CPI[3]	Prod Price	Dispos Income[4]	% of Unemp.	Treas. Bills	Corp. Aaa Bd.	Ch.Bus Inv.[5]	Net Expts[6]
1985 1st Q	0.3	2.1	5.4	3.3	0.7	-1.6	7.3	8.2	12.3	19.1	-74.5
2nd Q	1.9	1.3	2.6	4.2	2.4	8.1	7.3	7.5	11.6	8.3	-94.0
3rd Q	3.3	1.2	3.3	2.4	3.1	-4.1	7.1	7.1	11.0	-2.1	-89.0
Forecast											
1985 4th Q	3.4	3.4	3.5	3.4	1.8	3.4	7.0	7.2	11.0	8.9	-90.1
1986 1st Q	3.2	3.7	3.7	3.9	2.5	3.5	7.1	7.3	11.1	10.5	-90.1
2nd Q	3.0	3.3	3.9	4.1	2.9	3.1	7.1	7.4	11.1	11.3	-89.1
3rd Q	2.7	3.1	4.2	4.2	3.2	2.7	7.1	7.5	11.0	11.9	-87.1
4th Q	2.7	2.8	4.3	4.5	3.6	2.6	7.1	7.6	11.0	12.5	-83.6

[1]See bottom page 3 for key definitions. Note % changes are from PRIOR quarter--NOT from a year ago. [2]Latest data as published by BEA, BLS and CEA. [3]Change from prior quarter, SAAR, series 320, Bus. Cond. Digest. [4]Disposable Personal Income in 1972 $, SAAR, Series 225, Business Conditions [5]Change in bus. inventories, billions of constant U.S. $, Series 30, Bus. Cond. Digest. [6]Net exports of goods and services in current $, SAAR, series 250, Bus. Cond. Digest.
WARNING: Use quarterly economic projections with care--subject to large revisions.

IV What does the Blue Chip consensus expect by quarters -- 1984 Actual compared to forecasts for 1985 and 1986?

REAL GROSS NATIONAL PRODUCT[1]

	In Billions of 1972 Dollars			% Change from PRIOR YEAR		
	Actual	Forecast		Actual	Forecast	
Quarter	1984	1985	1986	1984	1985	1986
1st	$1610.9	$1663.5	$1711.9	8.0%	3.4%	2.9%
2nd	1638.8	1671.3	1725.2	7.5	2.0	3.2
3rd	1645.2	1684.8	1737.9	6.1	2.4	3.2
4th	1662.4	1697.1	1749.4	5.7	2.1	3.1
YEAR	$1639.3p	$1679.2	$1731.1	6.8%	2.5%	3.1%

INDUSTRIAL PRODUCTION[2]

	Index 1977=100%			% Change from PRIOR YEAR		
	Actual	Forecast		Actual	Forecast	
Quarter	1984	1985	1986	1984	1985	1986
1st	119.3%	123.8%	126.4%	15.5%	3.8%	2.1%
2nd	121.5	124.2	127.5	13.8	2.4	2.6
3rd	123.3	124.5p	128.5	10.4	1.0	3.2
4th	123.1	125.3	129.3	7.2	1.8	3.2
YEAR	121.9%p	124.4%	127.9%	11.8%	2.2%	2.8%*

INFLATION - IMPLICIT PRICE DEFLATOR[3]

	Index 1972=100%			% Change from PRIOR YEAR		
	Actual	Forecast		Actual	Forecast	
Quarter	1984	1985	1986	1984	1985	1986
1st	220.6%	229.1%	236.5%	3.6%	3.9%	3.2%
2nd	222.4	230.6	238.8	3.8	3.7	3.6
3rd	224.6	232.4p	241.2	4.0	3.5p	3.8
4th	226.1	234.3	243.8	3.6	3.6	4.0
YEAR	223.4%p	231.6%	240.1%	3.8%	3.7%	3.6%

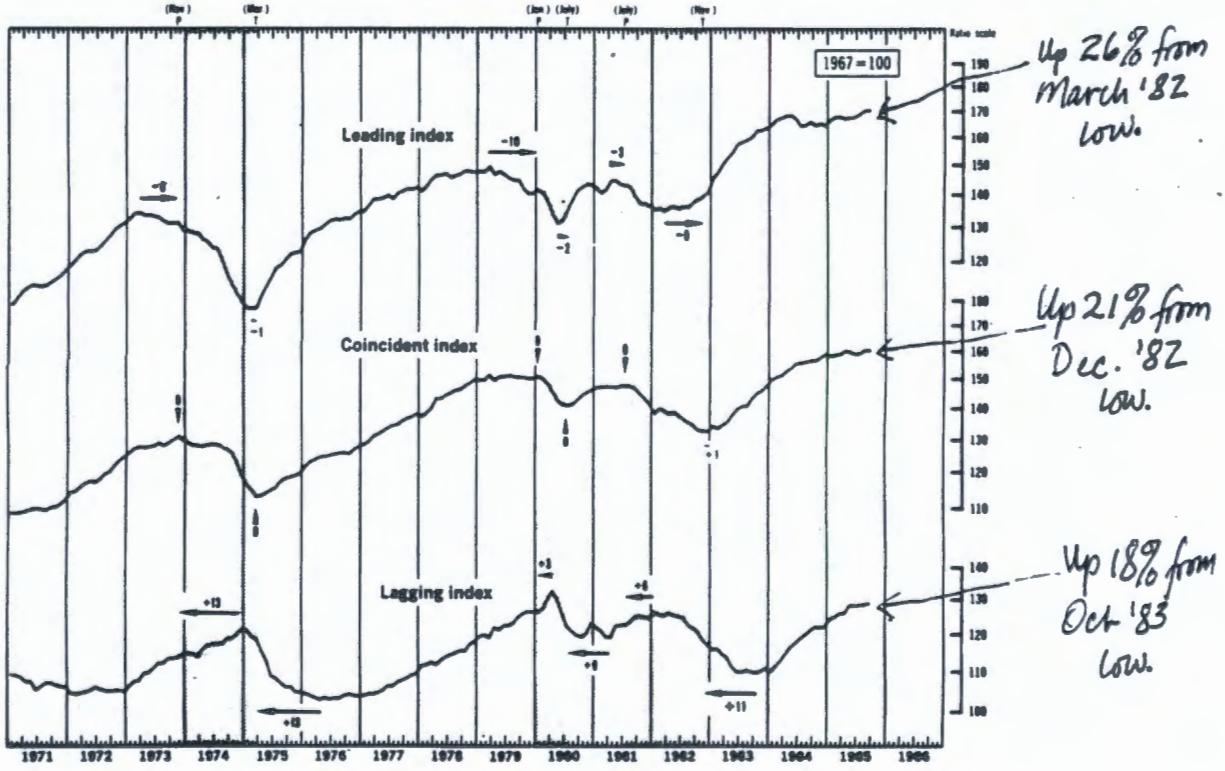
INFLATION - CONSUMER PRICE INDEX[4]

	Index 1967=100%			% Change from PRIOR YEAR		
	Actual	Forecast		Actual	Forecast	
Quarter	1984	1985	1986	1984	1985	1986
1st	306.4%	317.4%	329.3%	4.5%	3.6%	3.7%
2nd	309.7	321.2	332.6	4.3	3.7	3.5
3rd	313.1	323.6p	336.1	4.2	3.4	3.9
4th	315.4	326.2	339.7	4.1	3.4	4.1
YEAR	311.1%p	322.1%	334.4%	4.3%	3.5%	3.8%

[1]GNP with inflation removed--all goods and services. BEA, U.S. Dept. of Comm. (SAAR) [2]Quantity of U.S. output in mining, manufacturing and utility industries. Fed. Res. (SA) [3]Includes a weighting of prices paid by consumers, business, government, import prices, etc. BEA, U.S. Dept. of Commerce. (SA) [4]Retail prices paid by all urban consumers--weights over 400 goods and services by their importance. BLS, U.S. Dept. of Labor. NOT seasonally adjusted.
a=Actual. r=Revised Actual. p=Preliminary Actual. f=Forecast.
NOTE: Annual percent changes may not match exactly with those forecast on pp. 2-3 due to rounding and more frequent quarterly revisions.

LEADING INDICATORS LEVELLING

COMPOSITE INDEXES



NOTE: p (peak) indicates the end of general business expansion and the beginning of recession: T (trough) indicates the end of general business recession and the beginning of expansion. Thus, the shaded areas represent recessions. The numbers on the chart indicate the length of leads (–) and lags (+), in months, from business cycle turning dates.

FIVE UP—FIVE DOWN

Specific Leading Indicators	Basic data				Net contribution to index			Direction of change
	June 1985	July 1985	Aug. 1985	Sept 1985	June to July	July to Aug.	Aug. to Sept	Aug. to Sept
LEADING INDICATORS								
Average workweek, production workers, manufacturing (hours)	40.4	40.3	r40.8	p40.7	-0.08	0.23	0.08	+
*Average weekly initial claims, state unemployment insurance (thousands)	392	381	375	381	0.08	0.04	-0.05	-
New orders, mfg., consumer goods and materials (billions of 1972 dollars)	37.40	37.63	r38.14	p37.89	0.03	0.07	-0.04	-
Vendor performance, companies receiving slower deliveries from vendors (pct.)	44	44	42	42	0.00	-0.08	0.00	0
Net business formation (index: 1967=100)	r116.6	r116.9	r118.0	p117.5	0.04	0.13	-0.06	-
Contracts and orders, plant & equipment (billions of 1972 dollars)	r15.54	r15.34	r15.65	p16.17	-0.03	0.04	0.08	+
Building permits (index: 1967=100)	136.5	135.1	142.3	143.9	-0.03	0.15	0.04	+
#Change in inventories on hand and on order (ann. rate, billions of 1972 $)	r-3.72	r-1.99	p-1.17	NA	0.10	0.05	NA	
#Change in sensitive materials prices (percent)	-0.13	-0.35	-0.52	-0.49	-0.09	-0.07	0.01	+
Stock prices, 500 common stocks (index: 1941-43=10)	188.89	192.54	188.31	184.06	0.12	-0.14	-0.16	-
Money supply (M2) (billions of 1972 $)	r962.9	r967.9	r975.1	p978.9	0.17	0.24	0.14	+
Change in credit--business and consumer borrowing (annual rate, percent)	3.6	r7.7	r8.9	p7.0	0.21	0.06	-0.11	-
Percent change in Leading Index	....	....	....	....	0.66	0.89	0.06	

Down most

Up most

Source: U.S. Dept. of Commerce Bureau of Economic Analysis:10/31/85

* Series is inverted in calculating the composite index: a decrease in this series is considered an upward movement.
# Smoothed by a weighted 4-month average (with weights 1, 2, 2, 1) placed at the terminal mouth of the span.
NA, not available p, preliminary r, revised e, estimated

* All figures seasonally adjusted — annual rate basis

Housing Starts
Privately Owned

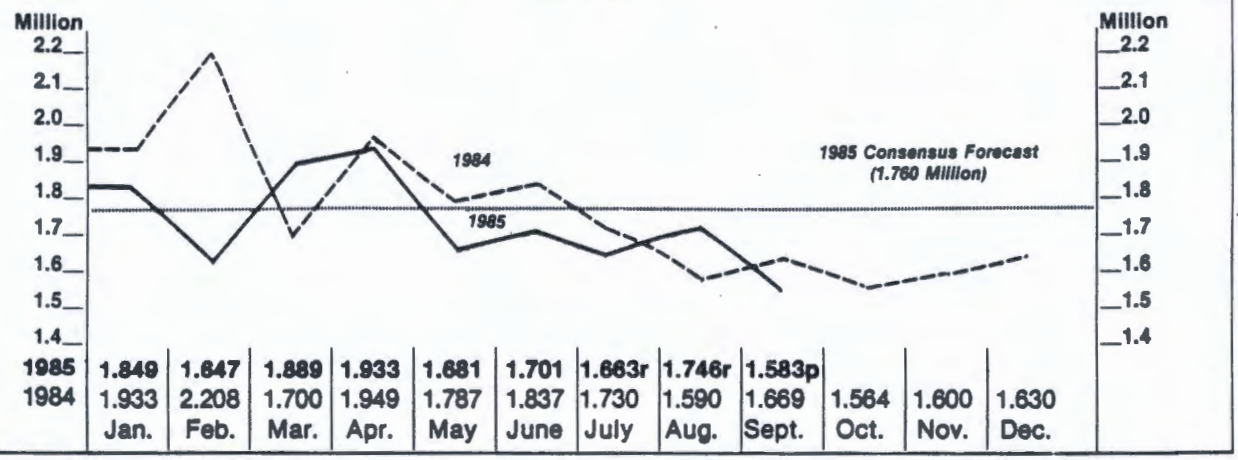
Current data from: Department of Commerce, Bureau of Census

1984—1.750r million (actual)
84 over 83 = +3%

Consensus Forecast: →

1985—1.750 million
85 over 84 = +0%

1986—1.760 million
86 over 85 = +1%



	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1985	1.849	1.647	1.889	1.933	1.681	1.701	1.663r	1.746r	1.583p			
1984	1.933	2.208	1.700	1.949	1.787	1.837	1.730	1.590	1.669	1.564	1.600	1.630

Auto Sales
Including Imports

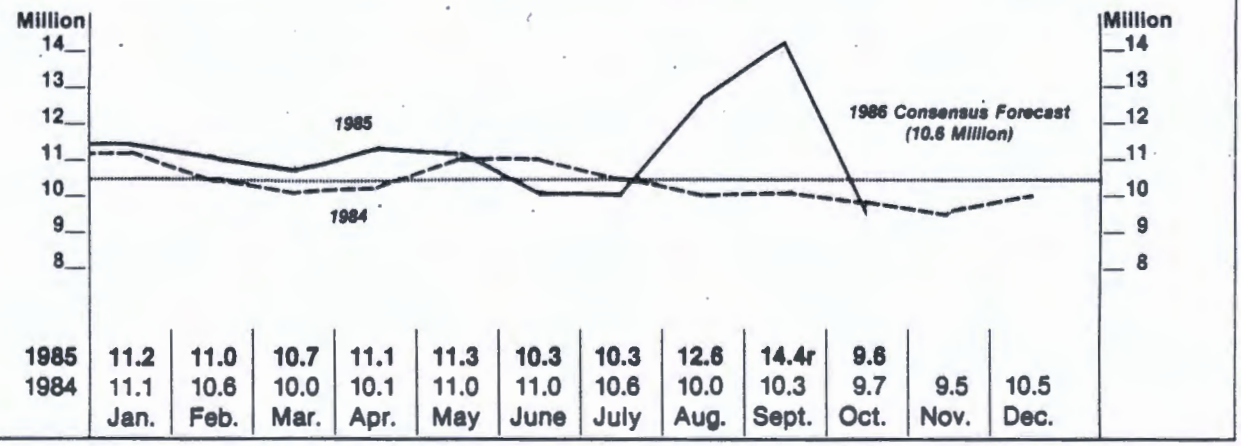
Current data from: Department of Commerce, Bureau of Census

1984—10.4 million (actual)
84 over 83 = +13%

Consensus Forecast: →

1985—11.0 million
85 over 84 = +6%

1986—10.6 million
86 over 85 = −4%



	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1985	11.2	11.0	10.7	11.1	11.3	10.3	10.3	12.6	14.4r	9.6		
1984	11.1	10.6	10.0	10.1	11.0	11.0	10.6	10.0	10.3	9.7	9.5	10.5

Office and Computing Machine Shipments
Billions of Current Dollars—Seasonally Adjusted—Annual Rate

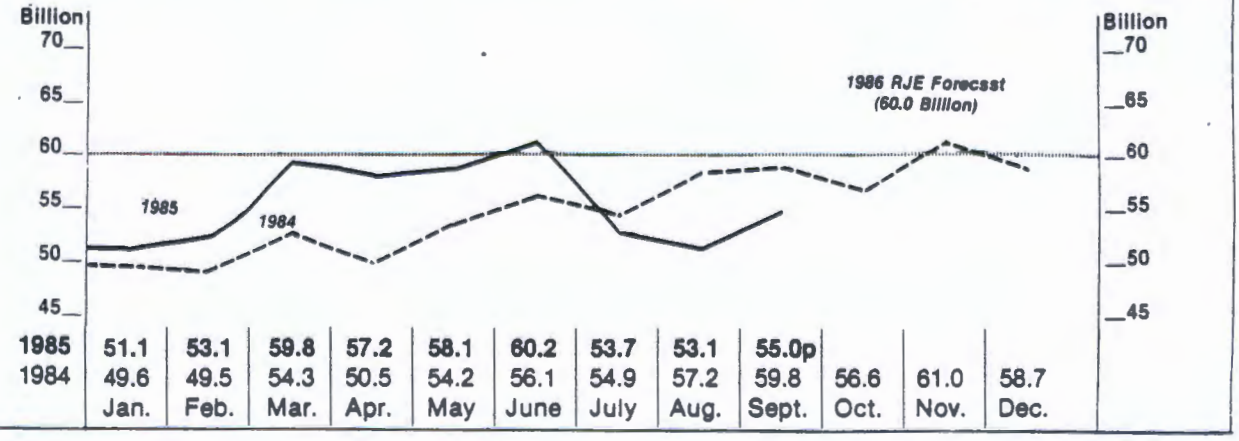
Current data from: Department of Commerce, Bureau of Census

1984—51.1 billion (actual)
84 over 83 = +20%

RJE Forecast: →

1985—56.4 billion
85 over 84 = +2%

1986—60.0 billion
86 over 85 = +7%



	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1985	51.1	53.1	59.8	57.2	58.1	60.2	53.7	53.1	55.0p			
1984	49.6	49.5	54.3	50.5	54.2	56.1	54.9	57.2	59.8	56.6	61.0	58.7

SPECIAL QUESTIONS:

It's time to ask for your vote relating to the congressional push toward protectionism. Going back to Adam Smith (and perhaps earlier), economists have had near unanimous agreement that any effort toward protectionism was a strong "no-no" in terms of its long-range effect on the economic welfare of the country.

I. In a recent "Economic Report of the President," there appears this concise statement:

"Our market economy and its system of rewards for superior performance has made the American economy the most productive and innovative in the world. An industrial policy that increases government planning, government subsidies and international protectionism would only be a burden on our economic life and a threat to our long-term economic prosperity."

Source: Economic Report of the President, Page 111, February 1984.

Please give me your rating: 1 (Strongly Disagree) to 10 (Strongly Agree). In other words, a vote of 5 would be just so-so.....	BLUE CHIP CONSENSUS	Average TOP 10	BOTTOM 10
	8.6	10.0	6.7

II. Perhaps a shade stronger feeling about protectionism than the to-the-point statement from the "Economic Report of the President," Question I above is the claim that "protectionism usually hurts the industries it was to help."

Again, please give me your vote: 1 (Strongly Disagree) to 10 (Strongly Agree) with 5 being just so-so.....	BLUE CHIP CONSENSUS	Average TOP 10	BOTTOM 10
	6.6	9.1	4.2

III. Somewhat less positive than either of the above is a quote from a recent issue of Fortune magazine under the title, "The New Case For Protectionism." I found it difficult to summarize this so-called new argument for protectionism, but the following catches the spirit of it:

"...There is an enormous cost for R&D (Research and Development) and the need for long production runs to recoup those costs. While conventional theory holds that comparative advantages in trade come from differences between countries in resources and skills, the new theory emphasizes R&D spending, learning by doing and economies of scale as sources of comparative advantage for modern industries."

So, give me your rating: (1 Strongly Disagree) to 10 (Strongly Agree) with 5 being just so-so.....	BLUE CHIP CONSENSUS	AVERAGE TOP 10	BOTTOM 10
	4.2	7.0	1.5

FORECAST ASSUMPTIONS FOR THE MID-SESSION REVIEW OF THE 1986 BUDGET
JULY 22, 1985

DATE	NOMINAL GNP	PERCENT CHG Q/Q	PERCENT CHG 4 QTR	REAL GNP	PERCENT CHG Q/Q	PERCENT CHG 4 QTR	GNP DEFLATOR	PERCENT CHG Q/Q	PERCENT CHG 4 QTR	UNEMPLOYMENT RATE - TOTAL
1983 IV	3431.7	10.6		1572.7	5.9		218.2	4.4		8.4
1984 I	3553.3	14.9		1610.9	10.1		220.6	4.4		7.8
II	3644.7	10.7		1638.8	7.1		222.4	3.3		7.4
III	3694.6	5.6		1645.2	1.6		224.6	3.9		7.3
IV	3758.7	7.1	9.5	1662.4	4.2	5.7	226.1	2.8	3.6	7.1
1985 I	3810.6	5.6	7.2	1663.5	0.3	3.3	229.1	5.4	3.8	7.2
II	3853.3	4.6	5.7	1670.7	1.7	1.9	230.6	2.8	3.7	7.2
III	3934.3	8.7	6.5	1689.2	4.5	2.7	232.9	4.0	3.7	7.1
IV	4026.6	9.7	7.1	1712.0	5.5	3.0	235.2	4.0	4.0	7.0
1986 I	4109.3	8.5	7.8	1728.8	4.0	3.9	237.7	4.3	3.8	6.9
II	4193.7	8.5	8.8	1745.9	4.0	4.5	240.2	4.3	4.1	6.9
III	4279.9	8.5	8.8	1763.1	4.0	4.4	242.8	4.3	4.2	6.8
IV	4367.8	8.5	8.5	1780.4	4.0	4.0	245.3	4.3	4.3	6.8
1987 I	4455.3	8.3	8.4	1798.0	4.0	4.0	247.8	4.1	4.2	6.7
II	4544.6	8.3	8.4	1815.7	4.0	4.0	250.3	4.1	4.2	6.6
III	4635.8	8.3	8.3	1833.6	4.0	4.0	252.8	4.1	4.1	6.6
IV	4728.7	8.3	8.3	1851.7	4.0	4.0	255.4	4.1	4.1	6.5
1988 I	4820.0	8.0	8.2	1869.9	4.0	4.0	257.8	3.8	4.0	6.4
II	4913.1	8.0	8.1	1888.3	4.0	4.0	260.2	3.8	3.9	6.4
III	5008.0	8.0	8.0	1906.9	4.0	4.0	262.6	3.8	3.9	6.3
IV	5104.7	8.0	8.0	1925.7	4.0	4.0	265.1	3.8	3.8	6.2
1989 I	5198.3	7.5	7.8	1944.2	3.9	4.0	267.4	3.5	3.7	6.2
II	5292.3	7.4	7.7	1962.4	3.8	3.9	269.7	3.5	3.6	6.1
III	5386.7	7.3	7.6	1980.4	3.7	3.8	272.0	3.5	3.6	6.0
IV	5481.5	7.2	7.4	1997.9	3.6	3.7	274.4	3.5	3.5	6.0
1990 I	5573.9	6.9	7.2	2015.7	3.6	3.7	276.5	3.2	3.4	5.9
II	5667.9	6.9	7.1	2033.6	3.6	3.6	278.7	3.2	3.3	5.8
III	5763.4	6.9	7.0	2051.6	3.6	3.6	280.9	3.2	3.3	5.8
IV	5860.6	6.9	6.9	2069.9	3.6	3.6	283.1	3.2	3.2	5.7

ANNUAL DATA

	NOMINAL GNP	% CHG Y/Y	REAL GNP	% CHG Y/Y	GNP DEFLATOR	% CHG Y/Y	UNEMPLOYMENT RATE - TOTAL
1984	3662.8	10.8	1639.3	6.8	223.4	3.8	7.4
1985	3906.2	6.6	1683.8	2.7	232.0	3.8	7.1
1986	4237.7	8.5	1754.6	4.2	241.5	4.1	6.9
1987	4591.1	8.3	1824.7	4.0	251.6	4.2	6.6
1988	4961.5	8.1	1897.7	4.0	261.4	3.9	6.3
1989	5339.7	7.6	1971.2	3.9	270.9	3.6	6.1
1990	5716.5	7.1	2042.7	3.6	279.8	3.3	5.8

CONSTANT GROWTH OPTION - 45 DAY ESTIMATE FOR 1985III & MSR GROWTH THEREAFTER
NOVEMBER 21, 1985

DATE	NOMINAL GNP	PERCENT CHG Q/Q	PERCENT CHG 4 QTR	REAL GNP	PERCENT CHG Q/Q	PERCENT CHG 4 QTR	GNP DEFLATOR	PERCENT CHG Q/Q	PERCENT CHG 4 QTR	UNEMPLOYM RATE - TO
1983 IV	3431.7	10.6		1572.7	5.9		218.2	4.4		8.4
1984 I	3553.3	14.9		1610.9	10.1		220.6	4.4		7.8
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IV	3758.7	7.1	9.5	1662.4	4.2	5.7	226.1	2.8	3.6	7.1
1985 I	3810.6	5.6	7.2	1663.5	0.3	3.3	229.1	5.4	3.8	7.2
II	3852.3	4.5	5.7	1671.3	1.9	2.0	230.5	2.6	3.6	7.2
III	3915.9	6.8	6.0	1688.9	4.3	2.7	231.9	2.3	3.2	7.0
IV	4007.8	9.7	6.6	1711.7	5.5	3.0	234.1	4.0	3.6	6.9
1986 I	4090.1	8.5	7.3	1728.5	4.0	3.9	236.6	4.3	3.3	6.9
II	4174.1	8.5	8.4	1745.6	4.0	4.4	239.1	4.3	3.7	6.9
III	4259.8	8.5	8.8	1762.8	4.0	4.4	241.7	4.3	4.2	6.8
IV	4347.3	8.5	8.5	1780.1	4.0	4.0	244.2	4.3	4.3	6.8
1987 I	4434.5	8.3	8.4	1797.7	4.0	4.0	246.7	4.1	4.2	6.7
II	4523.4	8.3	8.4	1815.4	4.0	4.0	249.2	4.1	4.2	6.6
III	4614.0	8.3	8.3	1833.3	4.0	4.0	251.7	4.1	4.1	6.6
IV	4706.6	8.3	8.3	1851.3	4.0	4.0	254.2	4.1	4.1	6.5
1988 I	4797.5	8.0	8.2	1869.6	4.0	4.0	256.6	3.8	4.0	6.4
II	4890.1	8.0	8.1	1888.0	4.0	4.0	259.0	3.8	3.9	6.4
III	4984.5	8.0	8.0	1906.6	4.0	4.0	261.4	3.8	3.9	6.3
IV	5080.8	8.0	8.0	1925.4	4.0	4.0	263.9	3.8	3.8	6.2
1989 I	5174.0	7.5	7.8	1943.9	3.9	4.0	266.2	3.5	3.7	6.2
II	5267.5	7.4	7.7	1962.1	3.8	3.9	268.5	3.5	3.6	6.1
III	5361.5	7.3	7.6	1980.0	3.7	3.8	270.8	3.5	3.6	6.0
IV	5455.8	7.2	7.4	1997.6	3.6	3.7	273.1	3.5	3.5	6.0
1990 I	5547.8	6.9	7.2	2015.3	3.6	3.7	275.3	3.2	3.4	5.9
II	5641.3	6.9	7.1	2033.2	3.6	3.6	277.5	3.2	3.3	5.8
III	5736.4	6.9	7.0	2051.3	3.6	3.6	279.7	3.2	3.3	5.8
IV	5833.1	6.9	6.9	2069.5	3.6	3.6	281.9	3.2	3.2	5.7

ANNUAL DATA

	NOMINAL GNP	% CHG Y/Y	REAL GNP	% CHG Y/Y	GNP DEFLATOR	% CHG Y/Y	UNEMPLOYM RATE - TO
1984	3662.8	10.8	1639.3	6.8	223.4	3.8	7.4
1985	3896.6	6.4	1683.8	2.7	231.4	3.6	7.1
1986	4217.8	8.2	1754.2	4.2	240.4	3.9	6.9
1987	4569.6	8.3	1824.4	4.0	250.5	4.2	6.6
1988	4938.2	8.1	1897.4	4.0	260.3	3.9	6.3
1989	5314.7	7.6	1970.9	3.9	269.7	3.6	6.1
1990	5689.7	7.1	2042.3	3.6	278.6	3.3	5.8

CHANGE FROM MID-SESSION REVIEW ASSUMPTIONS
(Calender year)

	NOMINAL GNP	REVENUE LOSS	REAL GNP	GNP DEFLATOR
1984	0.0		0.0	0.0
1985	-9.6	-2.2	-0.0	-0.6
1986	-19.9	-4.6	-0.3	-1.1
1987	-21.5	-4.9	-0.3	-1.1
1988	-23.2	-5.3	-0.3	-1.2
1989	-25.0	-5.8	-0.4	-1.2
1990	-26.8	-6.2	-0.4	-1.3

($28 DUE TO REAL GNP LOSS)

FORECAST ASSUMPTIONS FOR THE MID-SESSION REVIEW OF THE 1986 BUDGET
JULY 22, 1985

DATE	NOMINAL GNP	PERCENT CHG Q/Q	PERCENT CHG 4 QTR	REAL GNP	PERCENT CHG Q/Q	PERCENT CHG 4 QTR	GNP DEFLATOR	PERCENT CHG Q/Q	PERCENT CHG 4 QTR	UNEMPLOYMENT RATE - TOTAL
1983 IV	3431.7	10.6		1572.7	5.9		218.2	4.4		8.4
1984 I	3553.3	14.9		1610.9	10.1		220.6	4.4		7.8
II	3644.7	10.7		1638.8	7.1		222.4	3.3		7.4
III	3694.6	5.6		1645.2	1.6		224.6	3.9		7.3
IV	3758.7	7.1	9.5	1662.4	4.2	5.7	226.1	2.8	3.6	7.1
1985 I	3810.6	5.6	7.2	1663.5	0.3	3.3	229.1	5.4	3.8	7.2
II	3853.3	4.6	5.7	1670.7	1.7	1.9	230.6	2.8	3.7	7.2
III	3934.3	8.7	6.5	1689.2	4.5	2.7	232.9	4.0	3.7	7.1
IV	4026.6	9.7	7.1	1712.0	5.5	3.0	235.2	4.0	4.0	7.0
1986 I	4109.3	8.5	7.8	1728.8	4.0	3.9	237.7	4.3	3.8	6.9
II	4193.7	8.5	8.8	1745.9	4.0	4.5	240.2	4.3	4.1	6.9
III	4279.9	8.5	8.8	1763.1	4.0	4.4	242.8	4.3	4.2	6.8
IV	4367.8	8.5	8.5	1780.4	4.0	4.0	245.3	4.3	4.3	6.8
1987 I	4455.3	8.3	8.4	1798.0	4.0	4.0	247.8	4.1	4.2	6.7
II	4544.6	8.3	8.4	1815.7	4.0	4.0	250.3	4.1	4.2	6.6
III	4635.8	8.3	8.3	1833.6	4.0	4.0	252.8	4.1	4.1	6.6
IV	4728.7	8.3	8.3	1851.7	4.0	4.0	255.4	4.1	4.1	6.5
1988 I	4820.0	8.0	8.2	1869.9	4.0	4.0	257.8	3.8	4.0	6.4
II	4913.1	8.0	8.1	1888.3	4.0	4.0	260.2	3.8	3.9	6.4
III	5008.0	8.0	8.0	1906.9	4.0	4.0	262.6	3.8	3.9	6.3
IV	5104.7	8.0	8.0	1925.7	4.0	4.0	265.1	3.8	3.8	6.2
1989 I	5198.3	7.5	7.8	1944.2	3.9	4.0	267.4	3.5	3.7	6.2
II	5292.3	7.4	7.7	1962.4	3.8	3.9	269.7	3.5	3.6	6.1
III	5386.7	7.3	7.6	1980.4	3.7	3.8	272.0	3.5	3.6	6.0
IV	5481.5	7.2	7.4	1997.9	3.6	3.7	274.4	3.5	3.5	6.0
1990 I	5573.9	6.9	7.2	2015.7	3.6	3.7	276.5	3.2	3.4	5.9
II	5667.9	6.9	7.1	2033.6	3.6	3.6	278.7	3.2	3.3	5.8
III	5763.4	6.9	7.0	2051.6	3.6	3.6	280.9	3.2	3.3	5.8
IV	5860.6	6.9	6.9	2069.9	3.6	3.6	283.1	3.2	3.2	5.7

ANNUAL DATA

	NOMINAL GNP	% CHG Y/Y	REAL GNP	% CHG Y/Y	GNP DEFLATOR	% CHG Y/Y	UNEMPLOYMENT RATE - TOTAL
1984	3662.8	10.8	1639.3	6.8	223.4	3.8	7.4
1985	3906.2	6.6	1683.8	2.7	232.0	3.8	7.1
1986	4237.7	8.5	1754.6	4.2	241.5	4.1	6.9
1987	4591.1	8.3	1824.7	4.0	251.6	4.2	6.6
1988	4961.5	8.1	1897.7	4.0	261.4	3.9	6.3
1989	5339.7	7.6	1971.2	3.9	270.9	3.6	6.1
1990	5716.5	7.1	2042.7	3.6	279.8	3.3	5.8

CONSTANT GROWTH OPTION - 45 DAY ESTIMATE FOR 1985III & MSR GROWTH THEREAFTER
NOVEMBER 21, 1985

DATE	NOMINAL GNP	PERCENT CHG Q/Q	PERCENT CHG 4 QTR	REAL GNP	PERCENT CHG Q/Q	PERCENT CHG 4 QTR	GNP DEFLATOR	PERCENT CHG Q/Q	PERCENT CHG 4 QTR	UNEMPLOYM RATE - TO
1983 IV	3431.7	10.6		1572.7	5.9		218.2	4.4		8.4
1984 I	3553.3	14.9		1610.9	10.1		220.6	4.4		7.8
II	3644.7	10.7		1638.8	7.1		222.4	3.3		7.4
III	3694.6	5.6		1645.2	1.6		224.6	3.9		7.3
IV	3758.7	7.1	9.5	1662.4	4.2	5.7	226.1	2.8	3.6	7.1
1985 I	3810.6	5.6	7.2	1663.5	0.3	3.3	229.1	5.4	3.8	7.2
II	3852.3	4.5	5.7	1671.3	1.9	2.0	230.5	2.6	3.6	7.2
III	3915.9	6.8	6.0	1688.9	4.3	2.7	231.9	2.3	3.2	7.0
IV	4007.8	9.7	6.6	1711.7	5.5	3.0	234.1	4.0	3.6	6.9
1986 I	4090.1	8.5	7.3	1728.5	4.0	3.9	236.6	4.3	3.3	6.9
II	4174.1	8.5	8.4	1745.6	4.0	4.4	239.1	4.3	3.7	6.9
III	4259.8	8.5	8.8	1762.8	4.0	4.4	241.7	4.3	4.2	6.8
IV	4347.3	8.5	8.5	1780.1	4.0	4.0	244.2	4.3	4.3	6.8
1987 I	4434.5	8.3	8.4	1797.7	4.0	4.0	246.7	4.1	4.2	6.7
II	4523.4	8.3	8.4	1815.4	4.0	4.0	249.2	4.1	4.2	6.6
III	4614.0	8.3	8.3	1833.3	4.0	4.0	251.7	4.1	4.1	6.6
IV	4706.6	8.3	8.3	1851.3	4.0	4.0	254.2	4.1	4.1	6.5
1988 I	4797.5	8.0	8.2	1869.6	4.0	4.0	256.6	3.8	4.0	6.4
II	4890.1	8.0	8.1	1888.0	4.0	4.0	259.0	3.8	3.9	6.4
III	4984.5	8.0	8.0	1906.6	4.0	4.0	261.4	3.8	3.9	6.3
IV	5080.8	8.0	8.0	1925.4	4.0	4.0	263.9	3.8	3.8	6.2
1989 I	5174.0	7.5	7.8	1943.9	3.9	4.0	266.2	3.5	3.7	6.2
II	5267.5	7.4	7.7	1962.1	3.8	3.9	268.5	3.5	3.6	6.1
III	5361.5	7.3	7.6	1980.0	3.7	3.8	270.8	3.5	3.6	6.0
IV	5455.8	7.2	7.4	1997.6	3.6	3.7	273.1	3.5	3.5	6.0
1990 I	5547.8	6.9	7.2	2015.3	3.6	3.7	275.3	3.2	3.4	5.9
II	5641.3	6.9	7.1	2033.2	3.6	3.6	277.5	3.2	3.3	5.8
III	5736.4	6.9	7.0	2051.3	3.6	3.6	279.7	3.2	3.3	5.8
IV	5833.1	6.9	6.9	2069.5	3.6	3.6	281.9	3.2	3.2	5.7

ANNUAL DATA

	NOMINAL GNP	% CHG Y/Y	REAL GNP	% CHG Y/Y	GNP DEFLATOR	% CHG Y/Y	UNEMPLOYM RATE - TO
1984	3662.8	10.8	1639.3	6.8	223.4	3.8	7.4
1985	3896.6	6.4	1683.8	2.7	231.4	3.6	7.1
1986	4217.8	8.2	1754.2	4.2	240.4	3.9	6.9
1987	4569.6	8.3	1824.4	4.0	250.5	4.2	6.6
1988	4938.2	8.1	1897.4	4.0	260.3	3.9	6.3
1989	5314.7	7.6	1970.9	3.9	269.7	3.6	6.1
1990	5689.7	7.1	2042.3	3.6	278.6	3.3	5.8

CHANGE FROM MID-SESSION REVIEW ASSUMPTIONS
(Calender year)

	NOMINAL GNP	REVENUE LOSS	REAL GNP	GNP DEFLATOR
1984	0.0		0.0	0.0
1985	-9.6	-2.2	-0.0	-0.6
1986	-19.9	-4.6	-0.3	-1.1
1987	-21.5	-4.9	-0.3	-1.1
1988	-23.2	-5.3	-0.3	-1.2
1989	-25.0	-5.8	-0.4	-1.2
1990	-26.8	-6.2	-0.4	-1.3

($28 DUE TO REAL GNP LOSS)

HARRIS BANK
Chicago, Illinois

Linda
Carol
Sandy

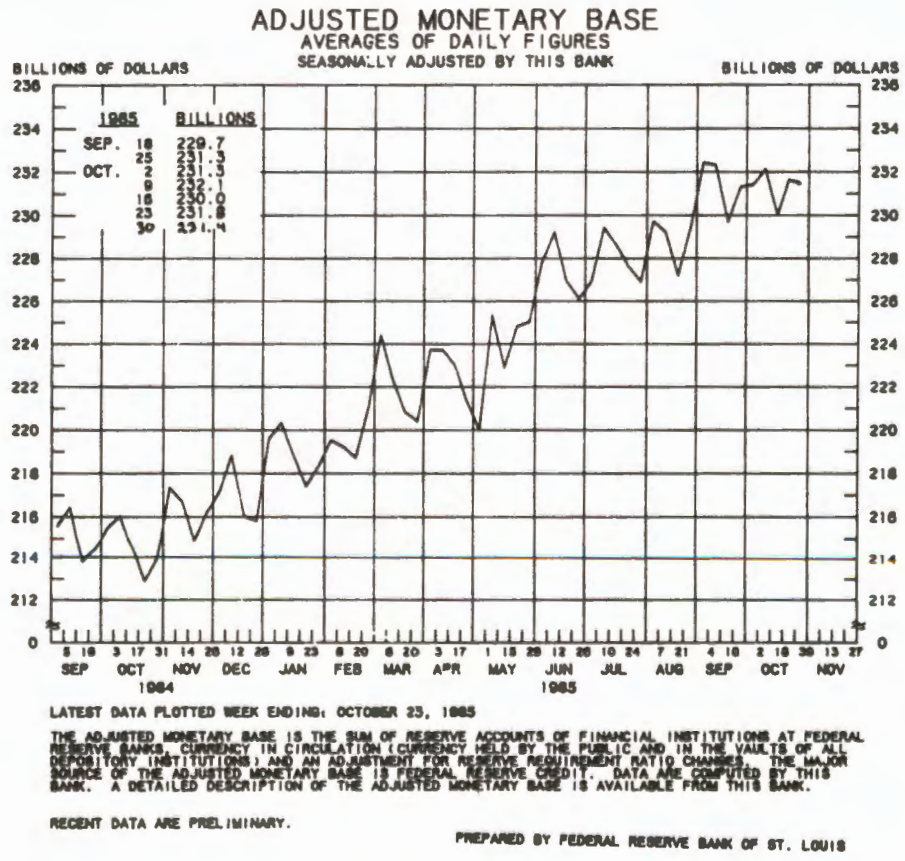
Harris Economics®

November 1, 1985

ECONOMIC PROSPECTS THROUGH 1986

While business activity shows signs of gathering momentum the Fed shows signs of gathering in the growth in money. These developments have occurred amid an extremely modest rise in short-term interest rates. Moderate inflation and tentative signs that the Fed is reining in money should help keep interest rates fairly stable in spite of an expected pick-up in economic activity.

The dollar has fallen by roughly 8 percent in the wake of the Administration's announced desire to reduce its value. This decline occurred as the Fed was shifting toward a more restrictive monetary policy. While international concerns may yet push the Fed toward a more expansive policy, there is as yet no sign that this is occurring.



The Rebound Continues

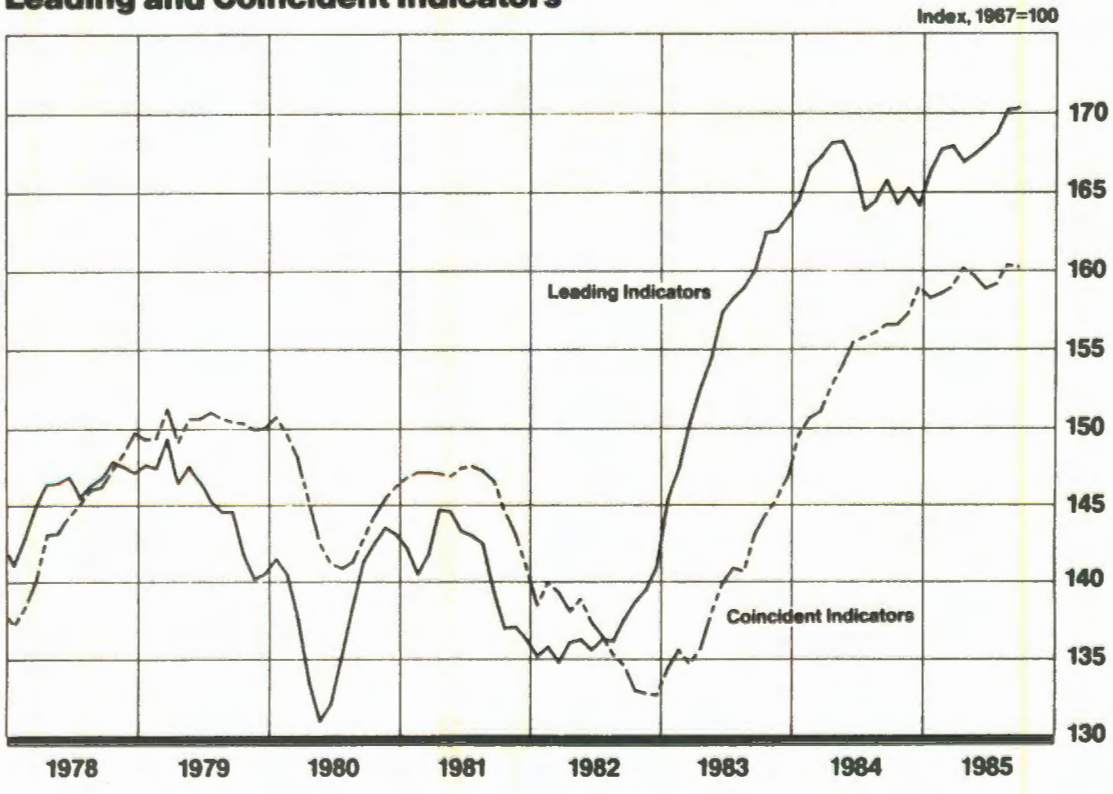
The announcement that third quarter nominal GNP grew at an annual rate of 6.7 percent from a second quarter rate of 4.5 percent provided the first signal that the pace of economic recovery had accelerated. Additional signs have followed.

Employment in August and September increased at a 2 to 3 percent annual rate while wages and salaries rose at a 8 to 9 percent pace. For September the increase in wages and salaries jumped to a 10 percent annual rate. Personal income in September would have been up at a 7 1/2 percent annual rate had it not been for a distortion associated with Hurricane Gloria. (The destruction of homes reduces imputed rental income.)

Although both retail sales figures and auto sales patterns have been affected by promotional efforts, they have had little effect on overall GNP (which measures current production). The main impact has been to raise sales and lower inventories. The low inventory levels suggest that employment and production will rebound in the closing months of this year.

Further evidence of an imminent pick-up can be found in new orders for manufactured durable goods and backlogs which have risen at double-digit rates since the spring. Record high contracts for new construction and gains in the index of leading indicators (which has advanced at a 7 percent annual rate in the three months ending September) also signal further strength ahead.

Leading and Coincident Indicators



All data are seasonally adjusted.

Source: U.S. Department of Commerce.

HARRIS BANK

Why Won't the Low Saving Rate Slow Business Activity?

In spite of evidence that the pace of economic activity is accelerating, some observers suggest that the economy will be slowing due to low saving rates. They argue that the low personal saving rate will force consumers to rebuild liquidity by cutting back on purchases. Despite the popularity of this line of reasoning, it is important to remember that the economy is a closed system. The only way consumers as a group can lower their saving rate (consume more from current output than normal) is if some other group, such as business, raises their saving (consumes less from current output than they normally would). When consumers rebuild their liquidity in subsequent periods (by paying off their loans) they consume less than normal, thereby allowing the business sector to spend more than normal. As a result, saving rates should not be particularly good indicators of subsequent changes in business activity. And, in fact, they're not.

A second point to keep in mind is that saving numbers are among the least reliable of all economic numbers. They are often revised extensively as more complete surveys on income and consumption become available. This occurred during the 1970s when a sharp drop in the saving rate produced many extremely clever explanations of what was happening. All these explanations were quickly disregarded when the saving rate underwent a substantial upward revision.

Monetary Policy--A Turn for the Better

Recent trends suggest that the Fed is busy getting monetary policy back on track. For the month of October the monetary base (currency plus bank reserves) was essentially unchanged while the M1 money supply declined. Actually, some slowing in the thrust of monetary growth appears to have characterized the past four months. Since June, short-term interest rates have moved modestly but persistently higher. The fed funds rate, which averaged 7 1/2 percent in June, moved up to 8 percent in October, while commercial paper and CD rates followed suit. During this four-month period the growth in the monetary base slowed to a 5 percent annual rate. In the prior six months the base had increased at almost twice that rate. Although the most common measure of money, M1, does not show as steady a slowdown as the base number, it too has shown no growth from September to October.

If the Fed is in the process of getting the growth in money under control with only a modest 1/2 percent increase in short-term rates, the implications are not only significant but extremely encouraging. They suggest that the Fed will be able to avoid significant upward pressure on interest rates in the months ahead.

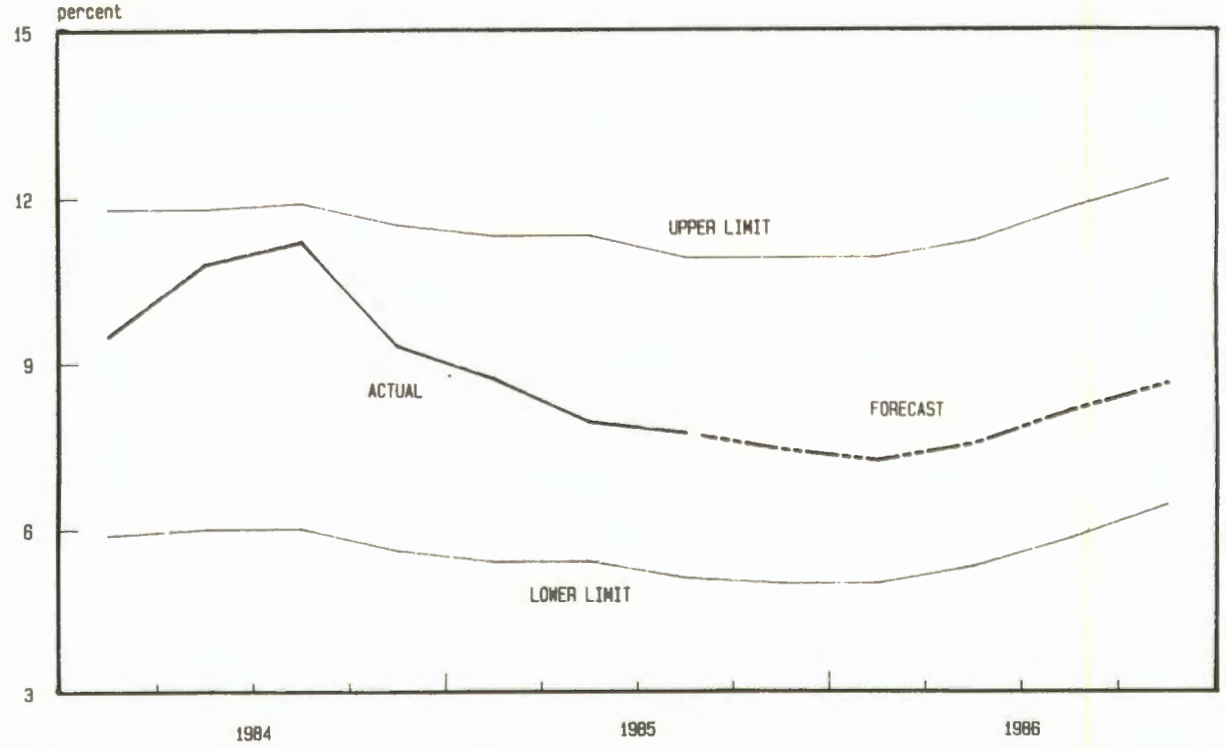
Interest Rates--Which Way From Here?

On occasion it is helpful to place interest rate developments into perspective. One way to do this is by adding an inflation and tax premium to an upper and lower range of real after-tax rates of interest. The range for real after-tax rates represents extremes from recent experience.

As the accompanying chart shows, short-term interest rates are presently in the middle of such a range, suggesting that the chances for higher short-term rates in the immediate future are about equal to the chances that rates will go down. This suggests that short-term rates are likely to remain close to their present levels.

A similar procedure for long-term rates places them in the upper half of their range. Moreover, as inflation unwinds, the range itself moves lower. As a result, long-term rates appear relatively high, suggesting that the odds favor continued moderate declines in these rates.

SIX MONTH COMMERCIAL PAPER



Interest rate range is calculated by adding one year inflation and a tax premium to real after-tax rates of 0 and 4 percent.

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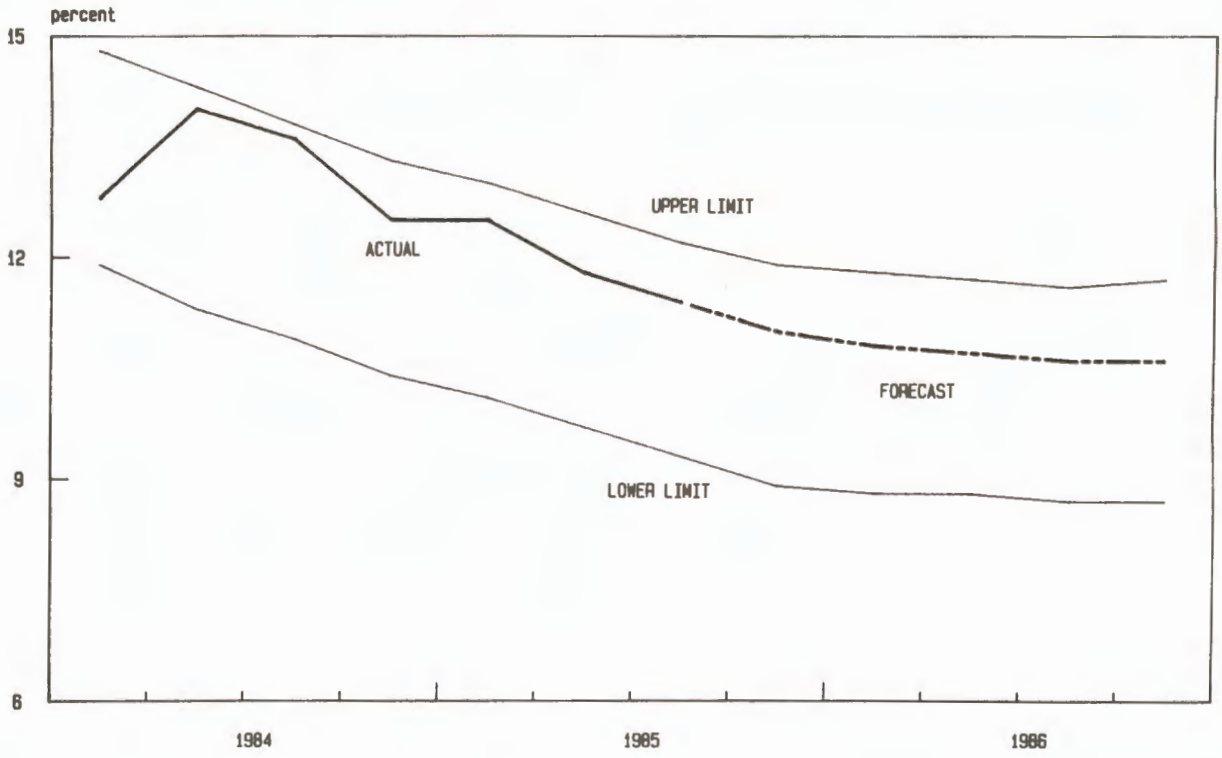
AA INDUSTRIAL BOND RATE



Interest rate range is calculated by adding a 5-year weighted average of inflation and a tax premium to real after-tax rates of 2 and 4 percent.

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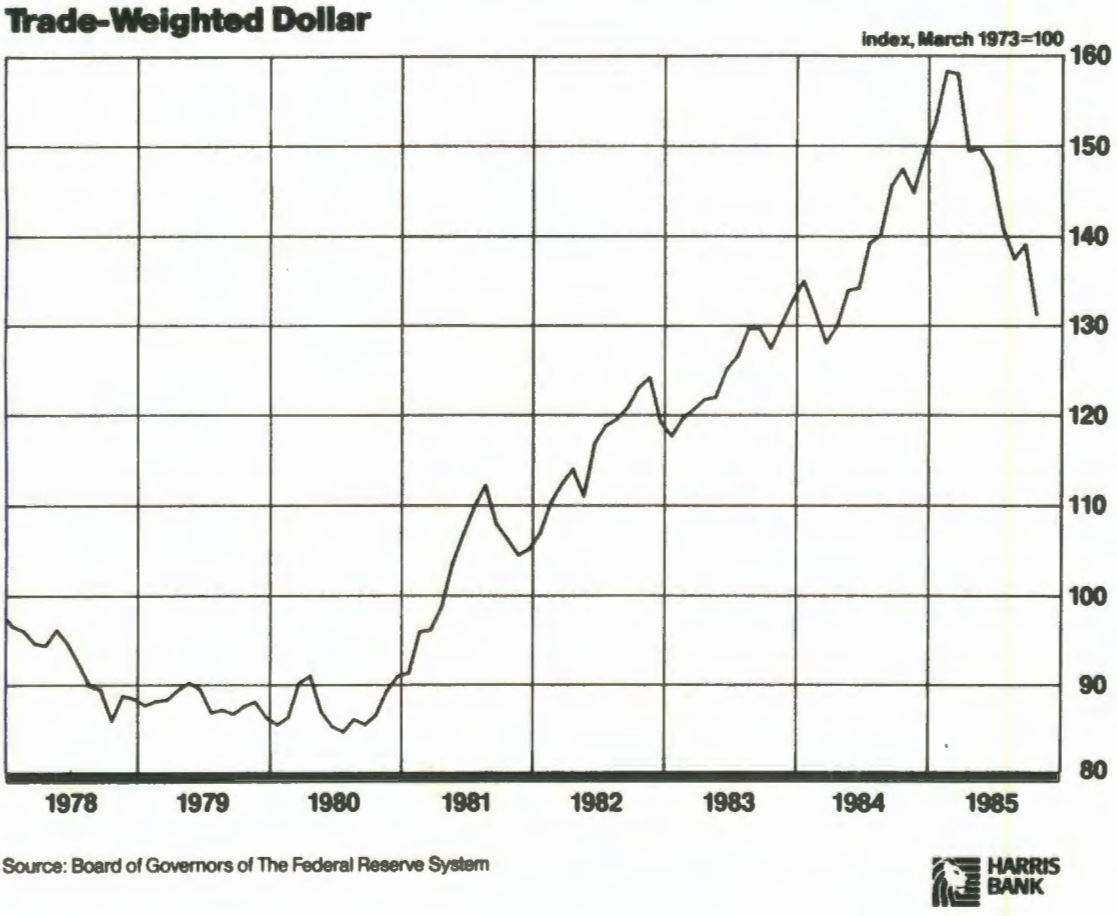
Dollar Bashing Made Easy

So far neither the Fed nor the Administration has had to do anything of substance to achieve their stated objective of lowering the dollar's value. In fact, Fed policy turned restrictive in October—a move that would normally imply a higher value for the dollar. The reason for the dollar's decline appears to be twofold. First, when policymakers announced a desire to see the value of the dollar drop, those in the marketplace naturally assumed that government policy would attempt to achieve it. This assumption immediately lowers the inclination of anyone to hold dollars at the old price, so the value of the dollar declines. However, should policymakers fail to take any substantive action to justify the lower value, the decline would be temporary.

The second reason for the decline in the dollar appears to be substantive. In Japan, where interest rates have moved sharply higher and the yen has appreciated by 10 percent over the dollar, monetary policy appears to have turned highly restrictive. Hence, the brunt of the policy adjustment to lower the dollar's value appears to have come from a highly restrictive monetary policy by the Japanese. This is creating problems for the Japanese by pricing their exports out of the South Asian markets. A restrictive monetary policy in Japan will eventually put a damper on the Japanese economy.

Given these pressures, the Japanese are likely to reverse their aggressively restrictive policy and the dollar will once again move higher. When this happens the pressure will be on the Fed to create more dollars in an effort to keep their value down. While the Fed's behavior over the past month provides some encouragement that it will resist such pressures, the real test lies ahead.



Summary

Prospects improved this past month as monetary policy turned restrictive. An apparent drop in inflationary expectations (which helped hold down interest rates) as well as a restrictive stance by the Japanese (which helped to reduce the value of the dollar) made the Fed's task fairly easy. While the real challenge lies ahead, the shift toward controlling money means that concerns over higher inflation and higher interest rates can once again be placed on the back burner.

Robert J. Genetski
Senior Vice President and Chief Economist
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10/30/85

ECONOMIC OUTLOOK

	ACTUAL					FORECAST					YEARS			
	84 III	84 IV	85 I	85 II	85 III	85 IV	86 I	86 II	86 III	86 IV	1983	1984	1985	1986
GROSS NATL PRODUCT	3694.6	3758.7	3810.6	3853.1	3916.1	4002.3	4101.9	4196.0	4282.4	4370.7	3304.8	3662.8	3895.5	4237.7
%ch	5.6	7.1	5.6	4.5	6.7	9.1	10.3	9.5	8.5	8.5	7.7	10.8	6.4	8.8
REAL GNP	1645.2	1662.4	1663.5	1671.3	1684.8	1707.2	1731.7	1752.9	1770.3	1787.2	1534.7	1639.3	1681.7	1760.5
%ch	1.6	4.2	.3	1.9	3.3	5.4	5.9	5.0	4.0	3.9	3.7	6.8	2.6	4.7
PRICE DEFLATOR	2.2457	2.2610	2.2907	2.3055	2.3244	2.3444	2.3687	2.3937	2.4190	2.4456	2.1534	2.2341	2.3163	2.4068
%ch	4.0	2.8	5.4	2.6	3.3	3.5	4.2	4.3	4.3	4.5	3.8	3.8	3.7	3.9
CPI-ALL URBAN	3.125	3.153	3.178	3.211	3.230	3.251	3.284	3.318	3.353	3.389	2.983	3.111	3.218	3.336
%ch	3.7	3.5	3.3	4.2	2.4	2.7	4.2	4.3	4.3	4.5	3.2	4.3	3.4	3.7
PRETAX PROFITS 1)	224.8	228.7	222.3	221.0	227.1	240.4	262.7	278.5	285.5	291.6	203.2	235.7	227.7	279.6
%ch	-30.3	7.1	-10.7	-2.3	11.6	25.5	42.6	26.4	10.4	8.8	22.8	16.0	-3.4	22.8
PRETAX PROFITS ADJ 2)	282.8	291.6	292.3	298.5	305.6	319.0	339.7	357.9	367.0	375.0	225.2	285.7	303.9	359.9
%ch	-10.9	13.0	1.0	8.8	9.9	18.7	28.6	23.2	10.5	9.1	41.5	26.9	6.4	18.4
AFTER TAX PROFITS	141.7	141.0	137.0	137.4	139.7	147.1	160.5	169.6	173.3	176.4	127.4	145.9	140.3	170.0
%ch	-20.8	-2.0	-10.9	1.2	6.8	23.1	41.7	24.7	9.0	7.4	21.5	14.5	-3.8	21.1
AFTER TAX PROFITS ADJ 2)	199.8	203.9	207.0	214.9	218.2	225.7	237.5	249.0	254.7	259.8	149.4	195.9	216.5	250.3
%ch	9.8	8.5	6.2	16.2	6.3	14.6	22.6	20.8	9.5	8.2	51.8	31.1	10.5	15.6
INDUSTRIAL PRODUCTION	1.233	1.231	1.238	1.242	1.245	1.255	1.283	1.307	1.325	1.342	1.092	1.218	1.245	1.314
%ch	6.4	-.6	2.1	1.3	1.2	3.1	9.4	7.7	5.6	5.2	5.9	11.6	2.2	5.6
PRODUCTIVITY	1.063	1.069	1.060	1.063	1.067	1.075	1.083	1.090	1.095	1.100	1.034	1.063	1.066	1.092
%ch	-1.1	2.3	-3.3	1.1	1.5	3.3	3.1	2.6	2.1	2.1	3.4	2.7	.3	2.4
EMPLOYMENT 3)	105.31	105.95	106.73	106.76	107.19	107.94	108.60	109.36	109.98	110.39	100.82	105.00	107.15	109.58
%ch	1.2	2.5	3.0	.1	1.6	2.8	2.5	2.8	2.3	1.5	1.3	4.1	2.0	2.3
UNEMPLOYMENT RATE (%)	7.5	7.2	7.3	7.3	7.1	7.0	6.8	6.6	6.4	6.4	9.6	7.5	7.2	6.5
AUTO SALES 4)	10.27	10.31	10.84	10.91	12.46	10.80	11.25	11.46	11.58	11.70	9.18	10.39	11.25	11.50
DOMESTIC	7.90	7.65	8.46	8.24	9.44	7.80	8.10	8.30	8.40	8.50	6.79	7.95	8.48	8.33
IMPORTS	2.37	2.67	2.39	2.68	3.02	3.00	3.15	3.16	3.18	3.20	2.39	2.44	2.77	3.17
HOUSING STARTS 4)	1.663	1.598	1.795	1.772	1.664	1.748	1.830	1.850	1.870	1.890	1.703	1.766	1.745	1.860

1)PROFITS FOR 85:3 ARE ESTIMATES.
2)PROFITS ADJUSTED TO EXCLUDE INVENTORY PROFITS AND ALLOW FOR DEPRECIATION AT REPLACEMENT COST.
3)CIVILIAN EMPLOYMENT AND UNEMPLOYMENT SERIES.
4)IN MILLIONS OF UNITS- SEASONALLY ADJUSTED ANNUAL RATE.

10/30/85

FINANCIAL MARKETS

	ACTUAL					FORECAST					YEARS			
	84 III	84 IV	85 I	85 II	85 III	85 IV	86 I	86 II	86 III	86 IV	1983	1984	1985	1986
MONEY SUPPLY-(M1)	549.1	553.5	568.1	582.6	604.4	613.3	623.8	634.4	645.2	656.2	509.8	545.0	592.1	639.9
%ch	4.6	3.3	10.9	10.6	15.9	6.0	7.0	7.0	7.0	7.0	11.2	6.9	8.6	8.1
NEW ISSUE AA INDUS BONDS	13.6	12.5	12.5	11.8	11.4	11.0	10.8	10.7	10.6	10.6	12.2	13.2	11.7	10.7
NEW ISSUE AA UTIL BONDS	14.0	12.8	12.8	12.0	11.6	11.4	11.2	11.1	11.0	11.0	12.6	13.6	11.9	11.1
30-YR GOVT SECURITIES	12.7	11.7	11.6	11.0	10.6	10.3	10.1	10.0	9.9	9.9	11.2	12.4	10.9	10.0
10-YR GOVT SECURITIES	12.9	11.7	11.6	10.8	10.3	10.2	10.0	9.9	9.8	9.8	11.1	12.4	10.7	9.9
PRIME RATE	13.0	11.8	10.5	10.2	9.5	9.5	9.5	9.5	10.0	10.0	10.8	12.0	9.9	9.8
90-DAY CDS	11.4	9.4	8.6	8.0	7.8	7.6	7.4	7.7	8.3	8.8	9.1	10.4	8.0	8.1
6-MONTH COMMERCIAL PAPR	11.1	9.3	8.7	7.9	7.7	7.4	7.2	7.5	8.1	8.6	8.9	10.2	7.9	7.9
3-MONTH T-BILL	10.3	8.8	8.2	7.5	7.1	6.8	6.4	6.7	7.3	7.8	8.6	9.5	7.4	7.1

T3 recommendations on 1985 IV

10/25/85

Outlook

Given the uncertainties in the data and instability in money demand, the outlook is not clearly defined. These uncertainties are reflected in some division within T3 on the fourth quarter outlook.

For the GNP deflator, T3 is in agreement that the Mid-Session forecast of 4.0% for the fourth quarter is too high. The published third quarter estimate is at 3.3% for the deflator and the fixed weight index is up 2.9%. Recent price data suggest further deceleration is likely. T3 thinks a 3.5 percent is a likely result.

For real GNP, T3 is in disagreement. Anderson (CEA) thinks a rise in real growth is probable and would maintain the 5.5% forecast for the fourth quarter. Al-Samarrie (OMB), Russel (Treasury) and Stokes (Commerce) think growth of 4.0% is more likely.[1]

For the total unemployment rate, the Mid-Session forecast of 7.1% in the third quarter was exactly right.[2] However, the September rate was 7.0. The Mid-Session forecast places the rate at 7.0 for the fourth quarter as a whole. T3 agrees that the total unemployment rate will be marginally lower.

For interest rates, T3 expects short and long term rates to come in near the MSR forecast values for the fourth quarter. The MSR forecast a 91-day bill rate of 7.5% and a 6+ year bond rate of 10.3. Currently, the 91-day bill rate is at 7.3% and the 6+ bond rate is at 10.3%.

At the T3 meeting on October 23, Al-Samarrie asked for a T3 analysis of the long-run real growth path. Anderson (CEA) opposed such a study because he thought the high degree of uncertainty concerning the impact of the benchmark revision on post-war real GNP and components precluded a meaningful analysis at this time. However, Al-Samarrie, Russel, and Stokes agreed to proceed with an analysis.

Attachments

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1. See Appendix 1 for the detailed assumptions underlying this forecast.

2. The labor force and employment both came in about 300,000 below the forecast for 1985III.

LA
Clinton

EXECUTIVE OFFICE OF THE PRESIDENT
COUNCIL OF ECONOMIC ADVISERS
WASHINGTON, D.C. 20500

November 18, 1985

MEMORANDUM FOR KATHRYN EICKHOFF, OMB

FROM: LINCOLN ANDERSON LA

SUBJECT: The "T3" Memorandum Evaluating the Mid-Session Inflation Path

First, the subject memorandum does not reflect the views of the CEA. Second, it is not signed by anybody from Treasury. Therefore it should not be labeled as "From: T3." It should be labeled as "From: OMB."

As I explained to Ahmad Al-Samarrie, it is our view that long-run forecasts of real magnitudes are determined by production theory while long-run inflation forecasts are purely a function of monetary growth.

Given this view, the long-run inflation forecast cannot be described as optimistic or pessimistic. The only question is whether it is consistent with the monetary policy assumption. Because the Administration inflation assumption declines over the period I assume the Administration money growth assumption declines over the period. No more and no less.

CEA does not subscribe to the "natural rate" discussion in the memorandum, the discussion of the impact of relative price changes (oil and the exchange rate) on inflation, or the hypothetical discussion of the impact on real output of "a sharp decline in money growth."

In our view the "natural rate" is not well defined; relative price changes do not necessarily cause trend shifts in growth of the overall price level and a gradual reduction in money growth would be fully consistent with the current Administration forecast of both real output and price growth.

cc: MM, AW

EXECUTIVE OFFICE OF THE PRESIDENT
COUNCIL OF ECONOMIC ADVISERS

October 29, 1985

Lincoln

How about a chart showing forecasts vs results.

BWS

BERYL
SEE THE NEW CHART

Beryl W. Sprinkel
Chairman

BWS

MEMORANDUM

COUNCIL OF ECONOMIC ADVISERS

October 28, 1985

Handout a chart showing forecasts as results BWS

~~TO:~~ THE COUNCIL

TO ~~FROM:~~ LINCOLN ANDERSON A

SUBJECT: Tracking Administration Real GNP Forecasts -- The Data

The attached set of charts track Administration forecasts of the level of real GNP through time starting with the FY82 budget forecast (the last under Carter) which had 1986 as an end point. I have added the "current" forecast -- the Mid Session Review (MSR) updated for 1985III results and MSR growth rates for subsequent periods. I have also added the current forecast offered as an alternative by OMB.

The following table provides the data underlying the attached charts.

ADMINISTRATION FORECASTS OF REAL GNP
(Billions of 1972$)
BUDGET FORECASTS

	1982 CARTER	1983 REAGAN	1984	1985	1986	CURRENT MSR	OMB ALTERNATIVE
1980	1481	1481	1475	1475	1475	1475	1475
1981	1493	1510	1503	1512	1512	1512	1512
1982	1545	1513	1476	1485	1480	1480	1480
1983	1600	1591	1496	1535	1535	1535	1535
1984	1659	1670	1555	1616	1639	1639	1639
1985	1720	1750	1617	1682	1702	1682	1680
1986	1784	1827	1682	1750	1771	1750	1736
1987		1905	1749	1820	1841	1820	1799
1988			1819	1892	1915	1893	1860
1989			1892	1966	1989	1966	1917
1990			1967		2061	2037	1975

The charts yield the following observations:

1) Compared with all subsequent forecasts of 1986, the Carter and "Rosy scenario" forecasts are optimistic, to say the least (same comment applies to Rosy for 1987).

2) For forecasts of 1986-88, Feldstein 1 (the infamous December 1982 low ball) represents the local minimum.

3) For forecasts of 1986-90, the 1986 Budget forecast (made in December 1984) represents the local maximum.

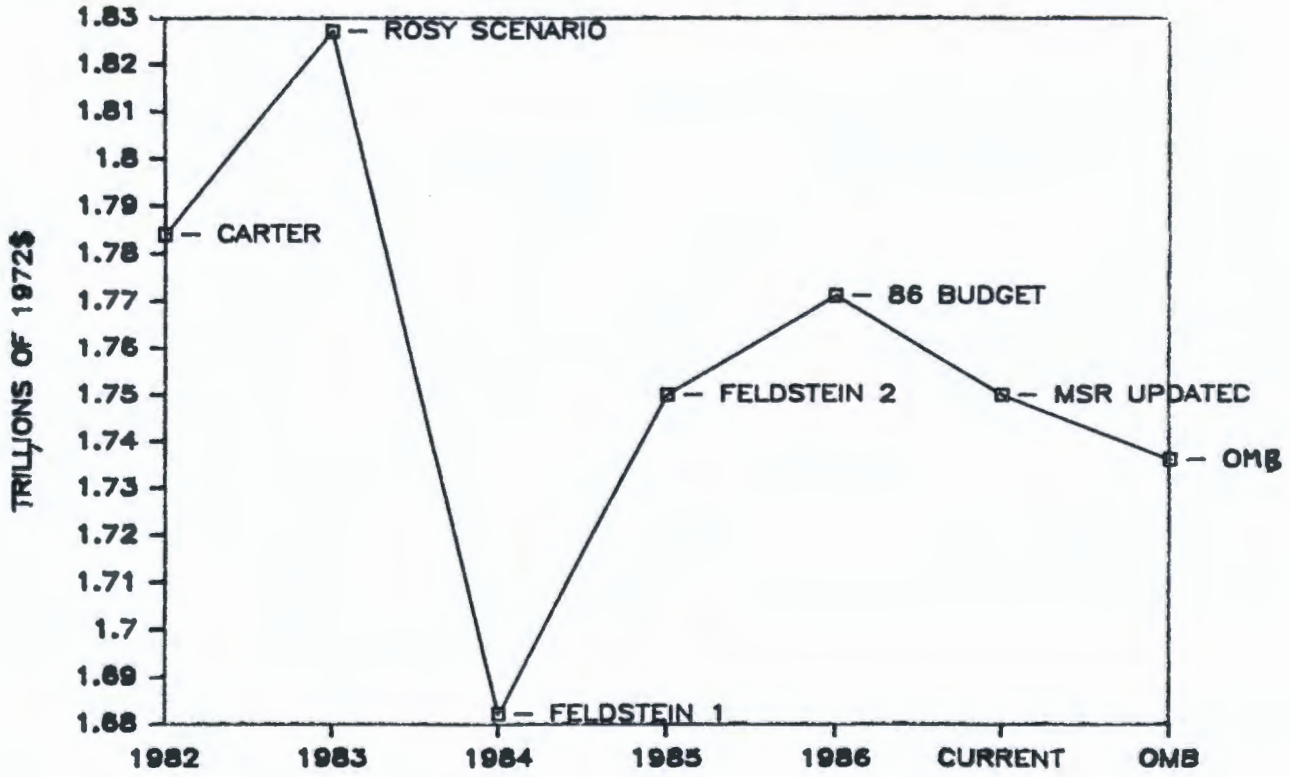
4) For forecasts of 1986-90, the current set of assumptions (MSR updated) represents a major downward revision from the 1986 Budget and is almost identical to Feldstein 2 (a forecast made in December 1983).

5) The proposed OMB alternative would move the forecast below Feldstein 2 for 1986-89 and revise down the current 1990 forecast by $62 billion in 1972 $.

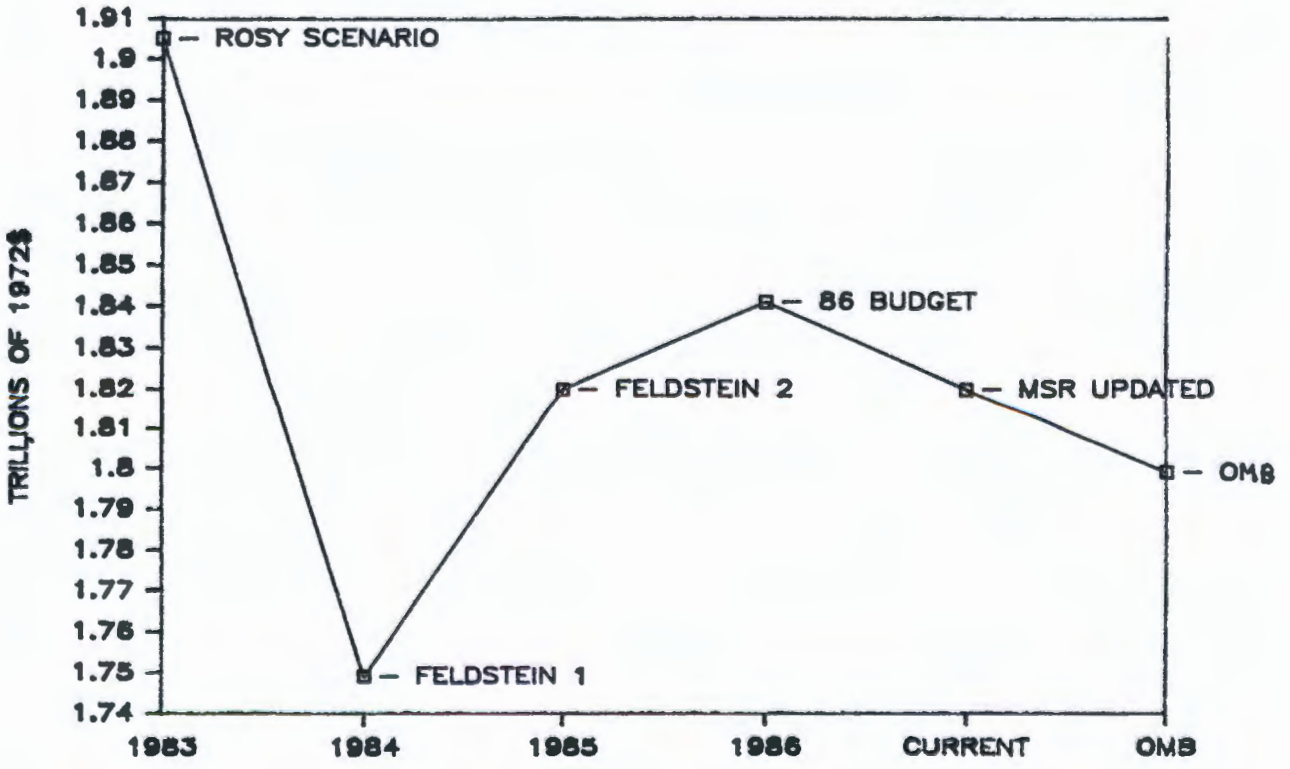
Attachments

cc: MM, AW

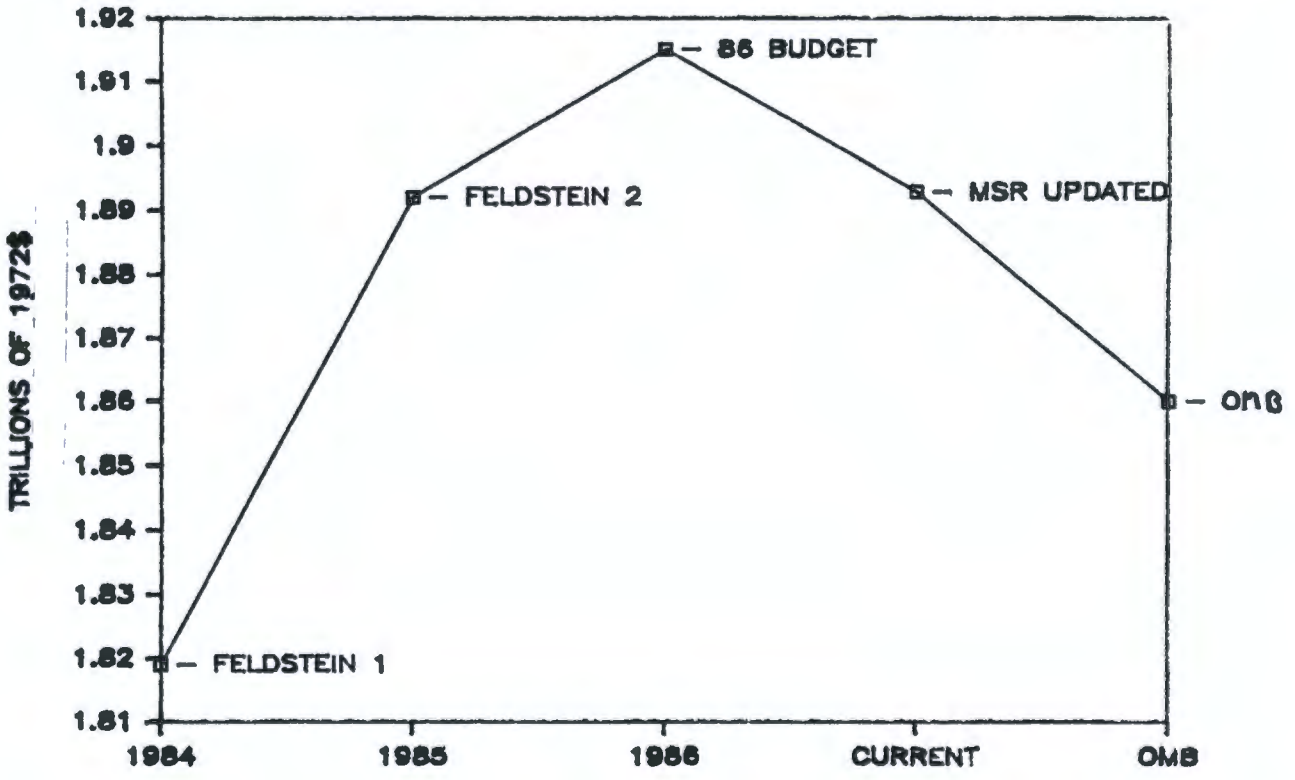
LEVEL REAL GNP FORECAST FOR 1986



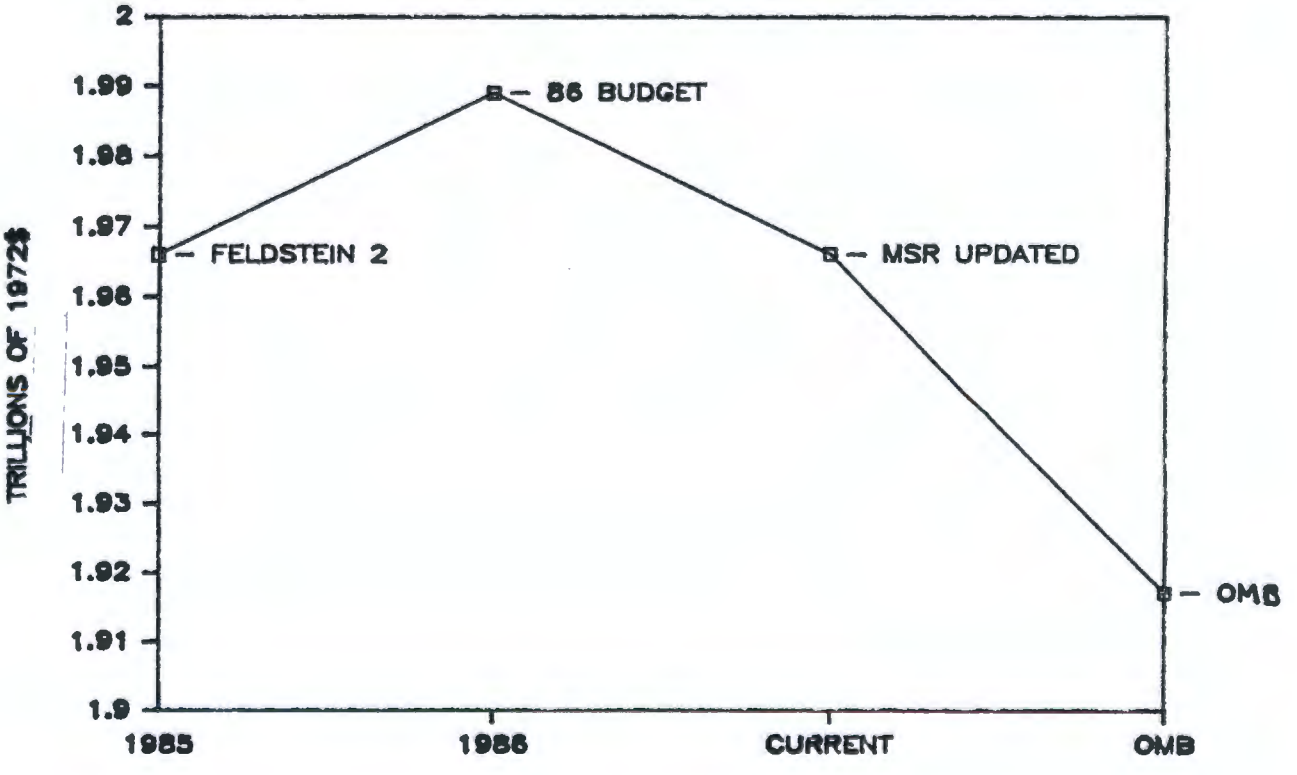
LEVEL REAL GNP FORECAST FOR 1987



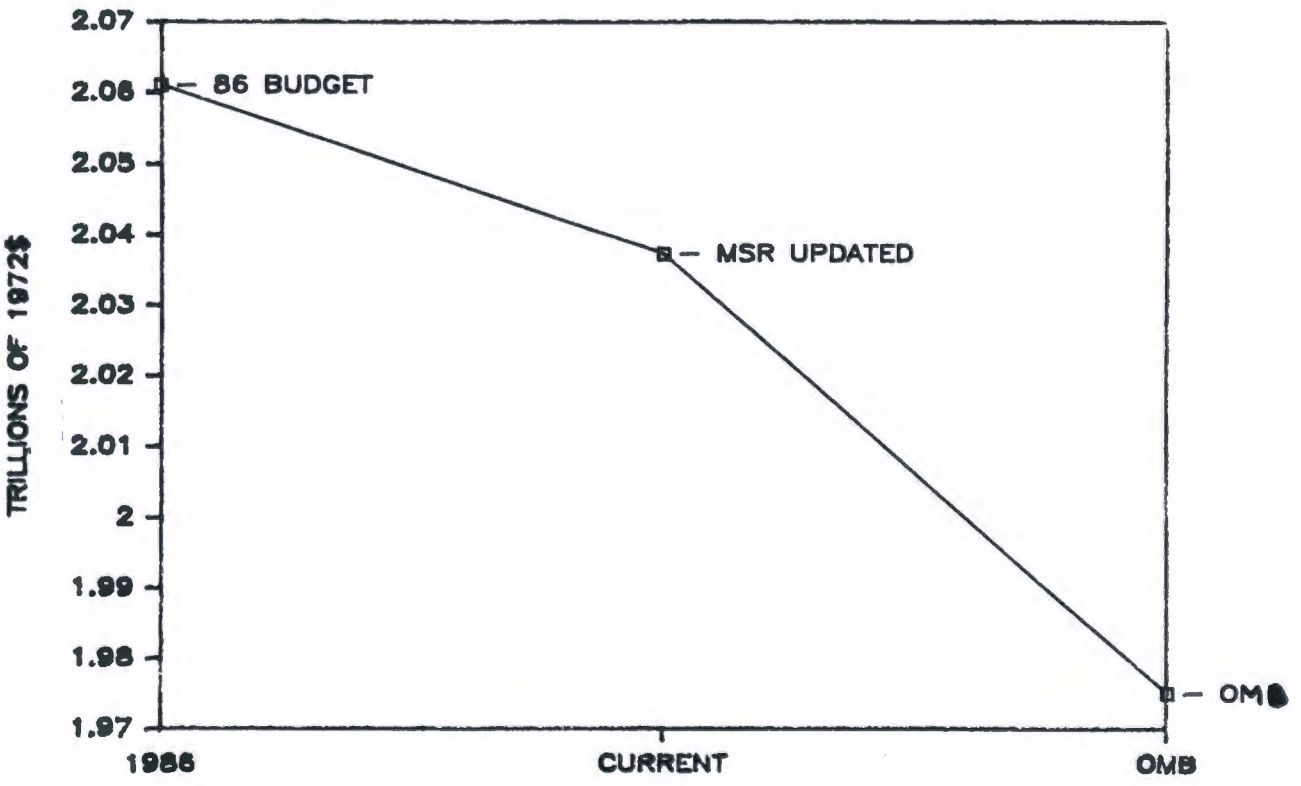
LEVEL REAL GNP FORECAST FOR 1988



LEVEL REAL GNP FORECAST FOR 1989



LEVEL REAL GNP FORECAST FOR 1990



BWS

EXECUTIVE OFFICE OF THE PRESIDENT

COUNCIL OF ECONOMIC ADVISERS

WASHINGTON, D.C. 20500

November 18, 1985

MEMORANDUM FOR T2

FROM: LINCOLN ANDERSON LA

SUBJECT: Response to the Rejoinder

AAKRS have submitted a rejoinder (memo dated November 12) to my evaluation of their evaluation (memo dated November 4).

Their main arguments are:

1. Labor productivity growth is not positively correlated with growth in real compensation per hour.

Response: I can scarcely believe this argument was committed to paper. First, on theoretical grounds, this argument discards the central proposition in positive economics. Second, I don't know where their data come from, but my data show a strong positive correlation (0.6) between the percent change in output per hour in the nonfarm business sector and the equivalent measure of the percent change in real compensation per hour over the period 1947-1985III.[1]

2. Capital costs have declined relative to labor costs therefore capital should be substituted for labor, thus adding to productivity growth.

Response: Maybe -- this is a murky topic. However, it is clear that 1) the contribution of capital deepening to productivity growth is relatively small and 2) such contributions take time. As I noted in my memo, current low productivity growth "in no way precludes a resumption

---

1. One major problem is evident. Use of Spearman rank correlations for analysis of continuous time series is extremely questionable. Spearmans are generally computed to compare test scores and other cross sectional data. Time series data are already ordered. A Spearman ranking destroys the time series characteristic of the data and can easily produce white noise as a result.

of faster productivity growth as the recovery proceeds and record level investment translates into productive capacity."

3. AAKRS note my error in presenting the Kendrick "growth accounting" forecast.

Response: Sorry --in fact Kendrick's forecast duplicates the Administration forecast for real GNP growth and is slightly higher for growth in nonfarm business output. As for AAKRS's speculation as to whether Kendrick would change his forecast due to "two years of disappointingly slow productivity growth," why speculate? He works right here in Washington so I asked him. The answer is no -- in his opinion what we have seen is rapid hours growth substituting for productivity growth in the short run, but he sees no reason to change the long-run trend forecast through 1990.

4. AAKRS object to the use of the postwar-trend in output per employee as being selective.

Response: Okay, let's use all the data. The attached chart shows real GNP per employee computing the trend over the period 1889 through 1984. The result is the same -- the Administration forecast does not deviate from trend.

5. AAKRS think that real GNP is "unequivocally reduced" when establishment basis employment is changed relative to household basis employment.

Response: This is either a brand new proposition in macro economics or they are saying that reduced establishment employment reduces establishment-related output and when these people find jobs (like self-employed) not covered by the establishment series, they do not contribute to GNP. In either case I find the assertion difficult to accept.

6. Finally, AAKRS present a comparison of forecasts and, not surprisingly, the Administration economic assumptions for real growth are higher than the selected set of private forecasts. The table below shows some results:

Real GNP Level 1990
(billions of 1972$)

Administration (MSR Updated)	OMB	Private	1984 Budget*
(3.9%)	(3.4%)	(3.2%)	(3.2%)
2037	1975	1967	1967

*The 1984 Budget forecast was extended from 1988 to 1990 using an assumed growth of 4% per year.

The OMB alternative is $8 billion (0.4%) above the private sector "consensus" and the first forecast made by Martin Feldstein. The current Administration forecast is 3-1/2% above the private sector consensus. Are there grounds for optimism? Yes. The Administration forecast is conditional on the assumption that policy proposals are enacted. For example, the CEA study on tax reform indicated that GNP would be increased by 2-1/2% to 3-1/4% after ten years if the President's proposal were enacted.

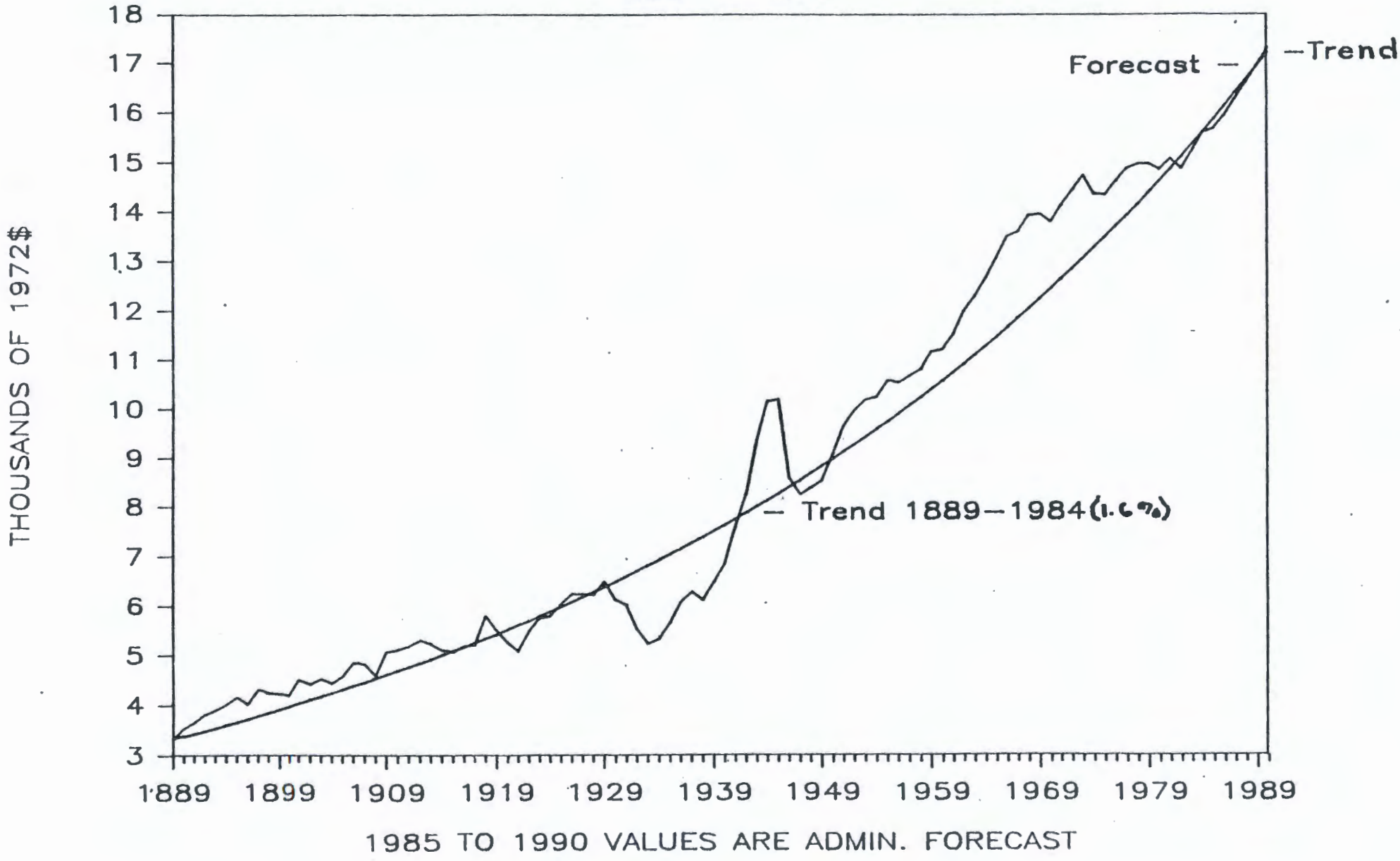
But is 3-1/2% too much? To answer that question, one must look at historical relationships. The current Administration economic assumptions assume the U.S. will achieve an average productivity growth rate equal to the average of the postwar period. AAKRS do not think this is probable, even in a conditional context. Ex ante, economic analysis is not going to provide a definitive answer. All that can be provided is a confidence interval. As this exchange of memos should make clear the confidence interval easily encompasses both forecasts.

Attachment

cc: Beryl W. Sprinkel
Michael Mussa
T3

REAL GNP PER EMPLOYEE

1889 TO 1990



1985 TO 1990 VALUES ARE ADMIN. FORECAST

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

November 14, 1985

Nancy
hold for
review before
T2 meeting
Beryl

Honorable Manuel Johnson
Assistant Secretary
for Economic Policy
Department of the Treasury
Washington, DC 20220

Dear Manley:

Enclosed are the papers to review long-term growth rates for the economy and inflation which were provided by T-3. T-3 was unable to reach a convenient consensus on interest rates to prepare a memo for us so we will have to work at that on our own.

The Council of Economic Advisers declined to participate in the~~ir~~ original exercise, but they did issue a rejoinder. Also, they did not sign off on the inflation piece, but I believe they are in agreement with it.

I will call you Monday to find out when it will be convenient for us to meet.

Cordially,

Kathryn

M. Kathryn Eickhoff
Associate Director
for Economic Policy

Enclosures

cc: Honorable Robert Ortner
Honorable Beryl W. Sprinkel

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

October 31, 1985

MEMORANDUM FOR: T-2

FROM: Ahmad Al-Samarrie, Robert Anderson, Robert Kilpatrick, James Russel, and Kemble Stokes

SUBJECT: Evaluation of the Mid-Session Growth Path

We have been asked by a member of T-2 to examine the longer-term growth path assumed by the Administration for the Mid-Session Review. We have briefly analyzed some of the key elements that determine the path and we are flagging two elements as potential problems: productivity growth and the divergence between household and establishment employment. In each instance, estimates underlying the Mid-Session Review path appear stronger than warranted. The analysis is based on the current BEA estimates of real GNP and therefore does not include any speculation about the forthcoming benchmark revisions. It is our understanding that these revisions will not significantly affect historical growth trends.

Productivity

There is justification for raising the trend rate of productivity growth above the 1.0 percent pace of 1973-84, but not to a rate as high as found in the Mid-Session Review. The attached paper by Kem Stokes provides the detailed arguments to support this conclusion. The main points are summarized here.

- The cyclical recovery in productivity is the weakest in the post-war period relative to the recovery in real GNP, with the possible exception of the 1958 recovery. This expansion provides no evidence of an improving trend.

- The changing industrial composition of total output is expected to have no material influence on aggregate productivity growth over the forecast period. Historically, there was a shift of employment out of the low-productivity agricultural sector, but that shift was essentially completed by the early 1970's.

- The composition of the labor force will continue to change--women will make up a larger share and younger workers a smaller share. The net effect compared to the 1970's should be a boost to aggregate productivity but only a small one -- about 0.1 percent per year.

- The faster growth of capital spending that has occurred in this recovery is projected to continue. It will increase the rate of growth of the capital/labor ratio relative to its growth rate in the 1970's and add about 0.3 percent yearly to productivity growth.

- The cyclical movement toward fuller utilization of resources implied by a reduction in the unemployment rate from 7.0 percent to 5.8 percent should raise productivity by 0.3 percent per year from now until 1990.

These factors imply an increase in the average level of productivity for the nonfarm business sector of 8.8 percent by 1990. This is derived from a trend rate of productivity growth of 1.0 percent; 0.1 percent for improved labor quality; 0.3 percent for capital deepening; and 0.3 percent for a continuing cyclical improvement. By comparison the Mid-Session Review projected an 11.9 percent increase. Thus, our calculations imply that by 1990 the level of productivity is overstated by 2.8 percent in the Mid-Session Review and that, since the nonfarm economy is about 75 percent of total GNP, the level of GNP is overstated by 2.1 percent. Over a 5-year period, this alone suggests that the growth rate of real GNP is overstated by 0.4 percent.

Of course a wide range of uncertainty surrounds any projection of productivity. The estimates outlined above represent our best view of the trend during the rest of the decade.

Bridge Between Household and Establishment Employment

In past Administration forecasts, the discrepancy between household and establishment employment has been managed--on the one side to hit an unemployment rate target, and on the other side to boost wage and salary payments on the income side of the GNP accounts in order to support a higher saving rate. In the Mid-Session path, establishment employment grows by nearly 1 million more between 1985 and 1990 than household employment. Although it is true that employment measured by the establishment survey has been growing more rapidly in this expansion than household survey employment, it is not clear that this trend will continue. Indeed, it is quite possible that the trend will reverse itself.

The ratio of establishment to household employment has hovered around 90 percent since the 1960's and was 90.0 percent in 1984. This past summer the ratio reached 91-1/2 percent, higher than for any previous year in the post-war period. The Mid-Session path has this ratio rising roughly by another 1 percentage point by 1990. If establishment employment were to grow simply at the same rate

as household employment, it would shave roughly 0.3 percent off the growth rate of labor input (in the private nonfarm business sector) that was assumed in the Mid-Session path. Assuming a two-thirds labor contribution to output and given that the nonfarm business sector represents 75 percent of total real GNP, this reduction would translate into 0.1-0.2 percent per year slower total real GNP growth over the next five years.

Conclusion

The Mid-Session real GNP growth through 1990 would be reduced 0.5 percentage point annually by the lower productivity growth (0.4 percentage point) and the slower growth of establishment employment (0.1 percentage point).

Attachment

UNITED STATES DEPARTMENT OF COMMERCE
Chief Economist for the Department of Commerce
Washington, D.C. 20230

October 28, 1985

MEMORANDUM TO T3

FROM: Kem Stokes

SUBJECT: Thoughts on Long-Run Productivity Trends

T-3 has been requested to examine the long-run growth potential of the economy in relation to the projections made in the Mid-Session Review of the 1986 Budget. This brief inquiry treats the productivity issue. The major question is whether there is sufficient evidence to justify an increase in the rate of productivity growth above the pace of the last decade. There is justification, but the magnitudes are not large enough to support the projections in the Mid-Session Review.

Cyclical and Trend Comparisons

The following table presents the longer term productivity growth trends for both the total business sector and the nonfarm business sector. The data show a) the sharp deterioration in long-term rates of growth, and b) the converging of growth rates in the business and nonfarm business sectors reflecting the declining importance of farming.

Productivity Growth
(Percent Change At Annual Rates)

	1950 to 1968	1968 to 1973	1973 to 1984
Total Business	3.0	2.1	1.1
Nonfarm Business	2.4	1.9	1.0

Note: Data Refer To All Persons

To examine whether recent trends have changed, the next table presents data on the relationship between growth in output and growth in productivity in cyclical expansions, thus standardizing for the strength of each expansion period.

On average, productivity growth in expansion periods rises at slightly better than half the pace of growth in output. By this measure, productivity's strongest performance was in the 1960's, the weakest performance is the current expansion and the one beginning in 1958, though the 1958 expansion was not of sufficient duration to make a precise comparison for the entire period.

Output and Productivity in Economic Expansions (Percent Change)

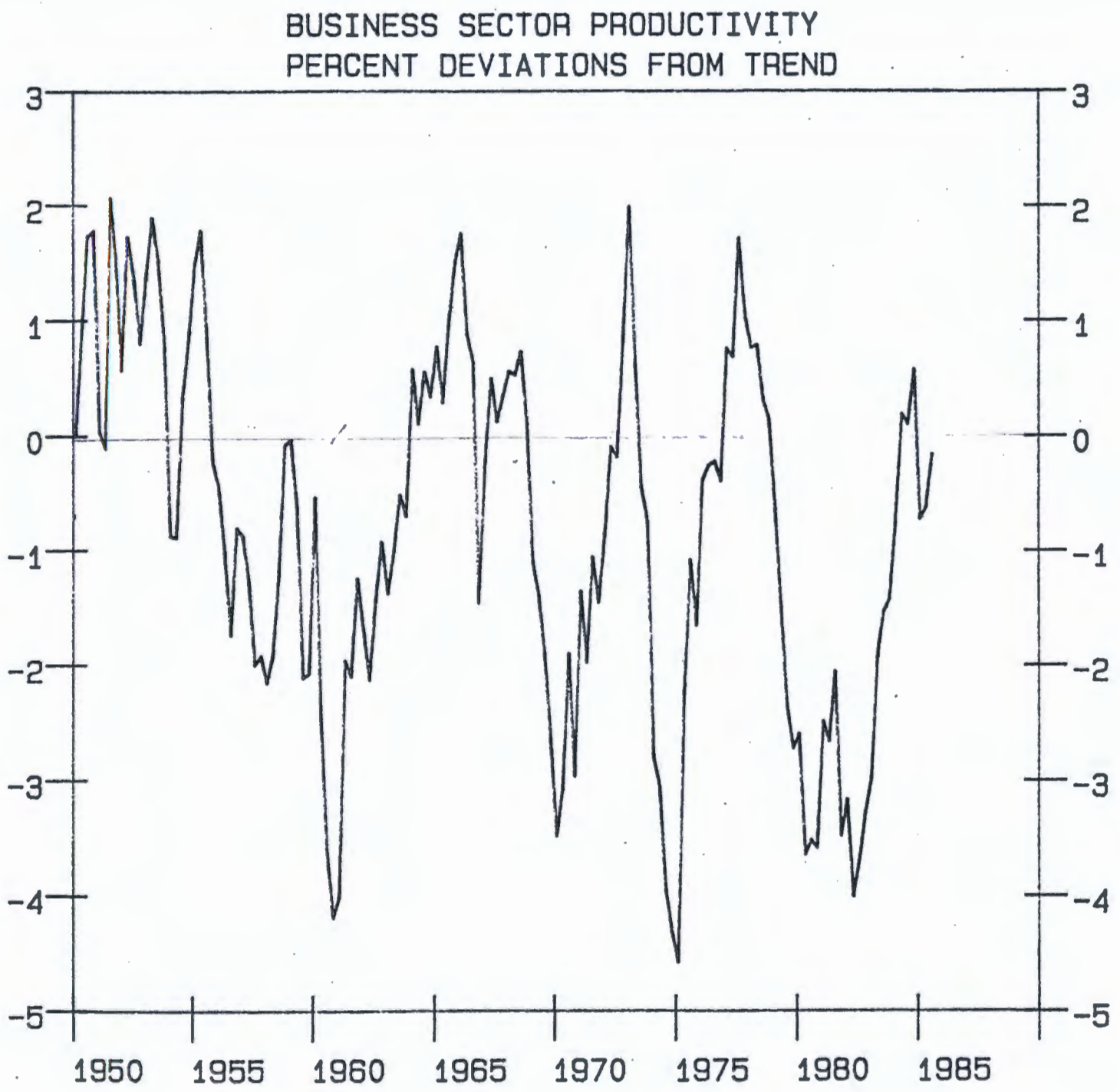
Expansion Beginning	+ 4 Qtrs	+ 8 Qtrs	+ 11 Qtrs
1954 Q2			
Total Business			
Output	9.1	12.3	13.9
Productivity	5.8	6.0	8.5
Ratio(%)	64	49	61
Nonfarm Business			
Output	9.1	12.8	14.5
Productivity	5.0	5.2	6.3
Ratio(%)	55	41	43
1958 Q2			
Total Business			
Output	11.3	11.9	N.M.
Productivity	4.4	5.5	N.M.
Ratio(%)	39	46	N.M.
Nonfarm Business			
Output	11.9	12.3	N.M.
Productivity	4.9	4.6	N.M.
Ratio(%)	41	37	N.M.
1961 Q1			
Total Business			
Output	7.2	10.8	15.3
Productivity	5.5	9.0	12.2
Ratio(%)	76	83	80
Nonfarm Business			
Output	7.7	11.4	16.0
Productivity	5.4	7.9	10.6
Ratio(%)	70	69	66
1970 Q4			
Total Business			
Output	5.3	13.7	17.6
Productivity	3.7	8.3	8.6
Ratio(%)	70	61	49
Nonfarm business			
Output	5.6	14.5	18.8
Productivity	3.8	8.7	9.0
Ratio(%)	68	60	48

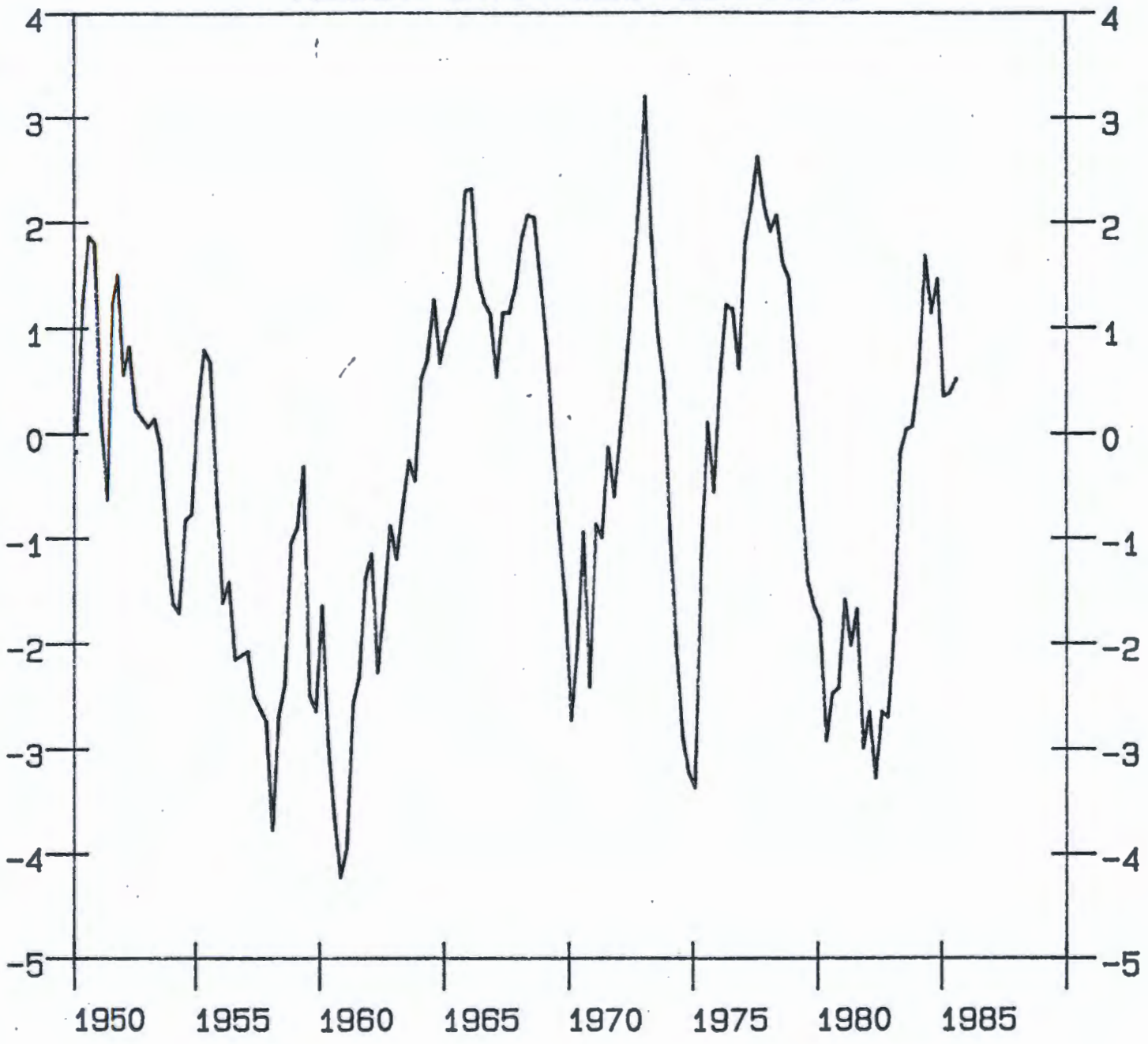
Output And Productivity in Economic Expansions (cont'd)

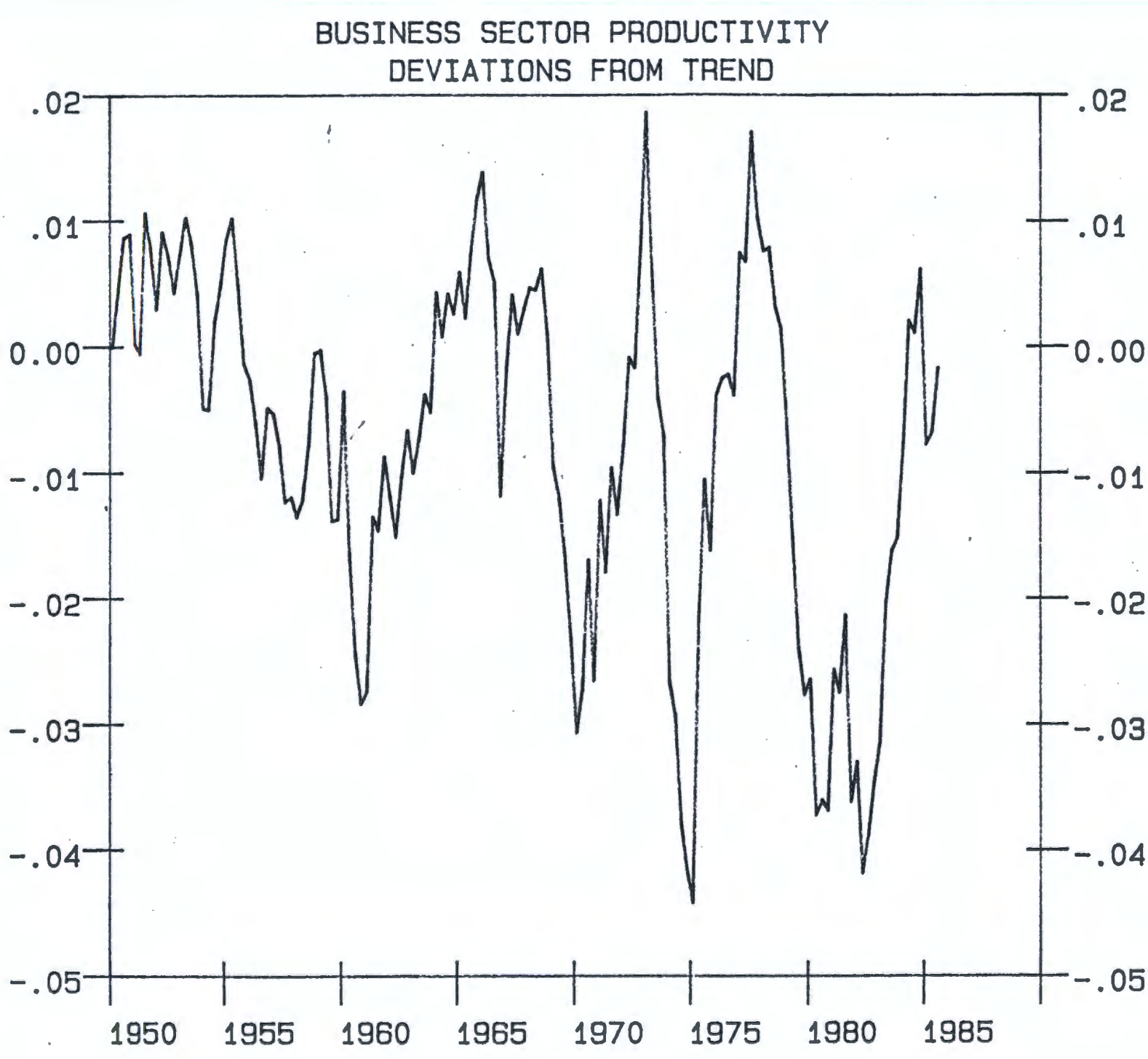
Expansion Beginning	+ 4 Qtrs	+ 8 Qtrs	+ 11 Qtrs
1975 Q1			
Total Business			
Output	8.4	13.2	19.0
Productivity	5.5	7.9	9.1
Ratio(%)	65	60	48
Nonfarm Business			
Output	8.5	13.5	19.4
Productivity	5.1	7.5	8.7
Ratio(%)	60	56	45
1980 Q3			
Total Business			
Output	4.5	N.M.	N.M.
Productivity	2.6	N.M.	N.M.
Ratio(%)	58	N.M.	N.M.
Nonfarm Business			
Output	3.8	N.M.	N.M.
Productivity	1.8	N.M.	N.M.
Ratio(%)	47	N.M.	N.M.
1982 Q4			
Total Business			
Output	8.4	16.3	18.1
Productivity	3.1	6.3	6.7
Ratio(%)	37	39	37
Nonfarm Business			
Output	9.5	16.6	18.3
Productivity	3.9	6.4	6.2
Ratio(%)	41	39	34
Average Ratio(%)			
Total Business	58	56	55
Nonfarm Business	55	50	47

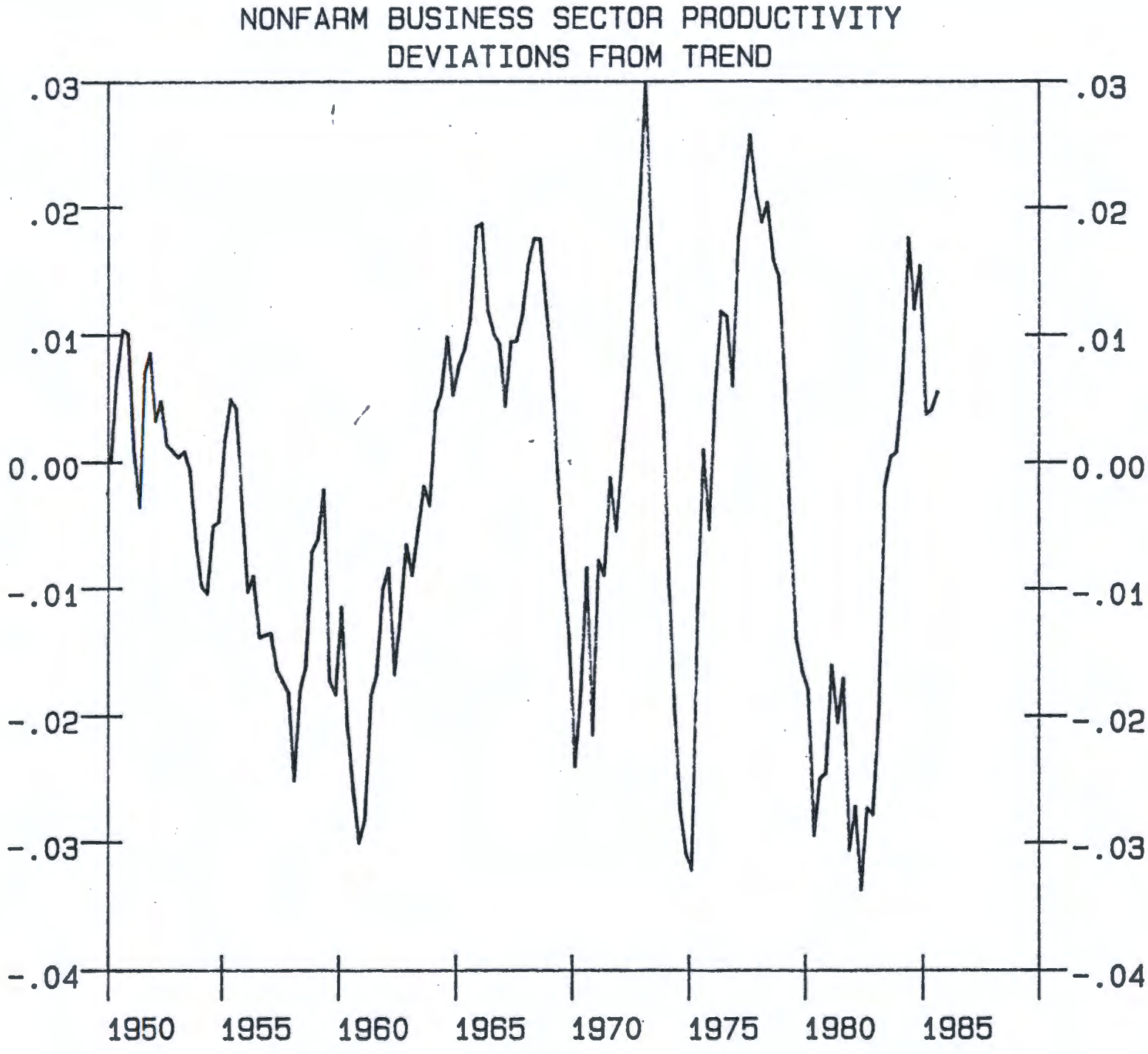
N.M. = Not Meaningful

The following charts give a visual perspective of the level of productivity relative to the long-run growth trends given above. These charts, as well, do not indicate any deviation from recent trends.


BUSINESS SECTOR PRODUCTIVITY
PERCENT DEVIATIONS FROM TREND
3
2
1
0
-1
-2
-3
-4
-5
1950
1955
1960
1965
1970
1975
1980
1985


NONFARM BUSINESS SECTOR PRODUCTIVITY
PERCENT DEVIATIONS FROM TREND
4
3
2
1
0
-1
-2
-3
-4
-5
1950
1955
1960
1965
1970
1975
1980
1985


BUSINESS SECTOR PRODUCTIVITY
DEVIATIONS FROM TREND
.02
.01
0.00
-.01
-.02
-.03
-.04
-.05
1950
1955
1960
1965
1970
1975
1980
1985


NONFARM BUSINESS SECTOR PRODUCTIVITY
DEVIATIONS FROM TREND
.03
.02
.01
0.00
-.01
-.02
-.03
-.04
1950
1955
1960
1965
1970
1975
1980
1985

Industrial Composition

If shifts in employment and hours worked are to have any significant effect on the level, and hence the growth rate for a particular period, of aggregate productivity there must be differences in average productivity between sectors. The following table shows that substantial differences do exist. Interestingly, productivity in service industries was higher than in goods-producing industries until the 1980's. Thus the shift to services ought to have added to aggregate productivity growth at least during the 1948-68 period when the goods-services productivity differentials were large.

OUTPUT PER HOUR: SELECTED YEARS
(1972 Dollars)

	1948	1968	1973	1984
Total Business	$3.48	$6.44	$7.15	$8.07
Goods-Producing	2.94	6.11	7.03	8.19
Agriculture	1.13	3.10	3.97	5.77
Mining	5.33	12.67	13.16	9.65
Construction	4.55	7.19	6.29	4.97
Manufacturing				
Durable	4.02	6.51	7.47	9.47
Nondurable	3.24	6.01	7.58	9.18
Services-Producing	4.13	6.64	7.28	7.99
Transportation	4.25	7.03	7.76	7.70
Communication	3.69	10.62	13.17	21.87
Elec. Gas & San. Ser.	5.02	16.48	18.84	19.44
Wholesale Trade	4.24	8.01	9.24	10.93
Retail Trade	2.66	4.40	4.83	5.61
F.I.R.E.	10.47	13.16	13.05	12.85
Services	3.73	5.01	5.47	5.49
Gov. Enterprises	6.52	5.85	5.92	6.32

Source: Bureau of Labor Statistics

The calculation of the compositional effects can be done with different aggregations of the data. By making several comparisons a number of points can be highlighted.

As shown in the table, shifts in the composition of hours worked added about 0.6 percent to productivity growth in the 1948-68 period, but only about 0.1 percent in the most recent period, a decline of 1/2 percentage points. Aggregate productivity growth for the total business sector slowed from 3.0 percent in the 1948-68 period to 1.1 percent in the 1973-84 period. Composition thus explains about 25 percent of the overall 2-percentage-point slowdown.

COMPOSITIONAL EFFECTS
(Percent Change at Annual Rate)

	1948-1968	1968-1973	1973-1984
13 Industries	.59	.26	.08
Goods vs. Services	.12	.04	.02

However, this compositional effect has relatively little to do with the shift between goods and services, as 2-sector aggregates. Such shifts-in-the-large contributed only 0.1 percent to productivity growth in the early period and nearly nothing in the final period. The bulk of the compositional effects are occurring within the goods-producing and services-producing sectors.

An instructive approach to disaggregating compositional effects within the overall goods and services sectors is to compare farming with an aggregate of all other sectors. This is useful because agriculture had the lowest average productivity of any sector in 1948, and employment shifts out of farming, in earlier studies, have been found to have had an important impact on aggregate productivity.

A second comparison is also useful--one that addresses whether the compositional shifts are more important in goods-producing sectors or services-producing sectors. This calculation is shown in the following table.

DISAGGREGATE COMPOSITIONAL EFFECTS
(Percent Change at Annual Rate)

	1948-1968	1968-1973	1973-1984
Farm vs. Nonfarm	.46	.14	.05
Nonfarm Goods	-.03	.08	.05
Services	.20	.19	-

These calculations indicate the often-stated result that shifts of employment and hours out of low-productivity agriculture and into other higher productivity sectors gave an important boost to aggregate productivity in the 1948-1968 period but less of a boost later on. Of the full compositional effect of a 0.5 percentage point change, the shift out of farming accounts for 0.4 percentage points.

Compositional effects in services clearly added to productivity growth in the early period, but not at all in the later period, reducing aggregate productivity growth by 0.2 percent. Offsetting this pattern has been a slight improvement in the allocational shifts within the goods sector and an increase in their contribution to aggregate productivity growth.

Thus aside from these very minor effects, the shift of employment from goods to service industries has not had any major impact on economy-wide productivity, but what small impact it has had has been positive. Only the shift out of agriculture has had a meaningful impact.

Since the shifts out of farming will have little or no impact on aggregate productivity in the future and since other industry shifts are relatively unimportant, no extra boost to productivity growth relative to the trends of the 1970's from industrial composition is likely.

Demographic Composition

The demographic composition of the labor force has been changing dramatically--a continuing increase in the proportion of women in the labor force, and first an increase and than a decrease in the proportion of younger workers.

In 1970, men represented 62 percent of the labor force. By 1982, the proportion declined to 57 percent and is expected to decline further to 54 percent by 1990 ("The 1995 Labor Force: A Second Look" Howard Fullerton and John Tschetter, Monthly Labor Review, November 1983.)

Civilian Labor Force
(Percent Distribution)

	1970	1982	1990
Men	61.8	56.7	54.2
Under 25	11.7	11.9	9.0
Over 25	50.1	44.8	45.2
Women	38.2	43.4	45.8
Under 25	9.8	10.4	8.6
Over 25	28.4	32.9	37.2

In 1970, persons under 25 made up 21.5 percent of the labor force. This share rose to 22.3 percent in 1982, but is expected to decline to 17.6 percent by 1990.

Wage rates differ considerably by sex and age so that shifts in the composition of the labor force, assuming that labor is paid its marginal product, can affect aggregate productivity growth.

Hourly Earnings by Sex and Age: 1983

	Men	Women
Under 25	$5.13	$4.32
Over 25	8.75	5.96

Using these data on hourly earnings and the composition of the labor force, it appears that the changing demographic composition of the labor force reduced aggregate productivity growth by 0.2 percent per year between 1970 and 1982, but will raise it by 0.1 percent per year between 1982 and 1990. (A calculation based on 1984 data would not change the result that productivity should be boosted by 0.1 percent per year between 1984 and 1990.)

This shift, by itself, would add 0.3 percent per year to productivity growth relative to the one percent trend in the 1970's. However, this overstates the likely improvment since part of the improvement in the quality of labor probably occured as a result of changes in demographic composition of the labor force and the embodiment of improved education in new workers.

Denison (Accounting for Slower Economic Growth: The United States in the 1970's, Brookings Institution, 1979) showed a substantial contribution to productivity growth in the early 1970's from increased education.

National Income Per Person Employed
in Nonresidential Business: Growth Rate
and Sources of Growth 1948-73 and 1973-76
(Contribution To Growth Rate in Percentage Points)

	1948 to 1973	1973 to 1986	Change
Age-Sex Composition	-.17	-.25	-.08
Education	.52	.88	.36

The contribution from education is likely to slow as a greater proportion of the population becomes educated and as the influx of new workers occurs more slowly. Because the contribution from education is substantially larger than the contribution from the age-sex composition and the potential for slowdown greater, it is likely that most of the contribution to aggregate productivity growth from the age-sex composition in the future will be offset. However, since I like to be optimistic, I would add 0.1 percent per year to productivity growth for labor quality (age-sex and education) effects relative to the 1970's experience.

The Effects of Capital Formation

Changes in the rate of capital formation, and more specifically, changes in the growth rates of capital per hour worked can have important effects on productivity change by industry, depending on the extent to which capital is used in the production function. While it is certainly clear from official statistics the extent of the productivity growth shortfall, it is less clear that capital formation has played a major role.

The Bureau of Economic Analysis has recently revised its capital stock series by industry though 1981. These data on gross capital stocks are combined with hours data to calculate the annual rates of change in capital/labor ratios shown in the table below.

These data do not reflect the benchmark revision to the national income and product accounts that is due to be released in late December 1985. One of the major inputs to those revisions will be a new procedure to calculate prices of computing equipment. This change will result in an upward revision in output, and hence productivity, assuming no revision to hours worked. Thus productivity growth is expected to be more rapid and there would be less of a shortfall to be explained. Capital stock will also have grown more rapidly, thus contributing less of an explanation to whatever slowdown remains.

The complications are even more severe when industry productivity is considered. The expected higher real output would be reflected in manufacturing output, thus widening the growth rate differentials that have existed. In addition, the capital stock will be raised more in services than in goods-producing sectors. Thus capital will seem less of a contributing factor to productivity growth differentials than it now appears.

Capital/Labor Ratio: Selected Periods
(Percent Change at Annual Rate)

	1948-1968	1968-1973	1973-1981
Total Business	2.9	3.0	2.4
Goods-Producing	3.8	3.0	3.8
Services-Producing	2.1	2.8	1.4

The slowdown in the growth of the capital/labor ratio between the 1948-68 period and the 1973-81 period is quite small, about 1/2 percent per year. Capital's share of GNP is about 34 percent so that the impact on productivity is only a slowdown of 0.2 percent per year. (Capital share includes all payments to factors of production other than employee compensation and an estimate of the labor compensation portion of proprietors income.) Bosworth reached a similar conclusion in his book Tax Incentives and Economic Growth, Brookings Institution, 1984.

Effects of Changes in the Capital/Labor Ratio on Productivity Growth
(Percent Change at Annual Rate)

	Capital Share(%)	1948-1968	1968-1973	1973-1981
Total Business	34	1.0	1.0	0.8
Goods-Producing	31	1.2	0.9	1.2
Services-Producing	37	0.8	1.0	0.5

In the goods-producing sector the contribution of capital to productivity growth has varied little in the aggregate. In services, capital has contributed modestly to the productivity slowdown--about 0.3 percent per year less between the 1973-81 period and the 1948-68 period.

Given the small impact of capital on productivity growth and the distinct possibility that the real capital stock is underestimated because of computers, particularly in services, it is difficult to draw any firm conclusions regarding the role capital has played in productivity growth in goods-producing as compared with service sectors. The impact of capital formation in both aggregate sectors has been small.

With this historical experience it might be appropriate to disregard completely the strong growth that has taken place in business fixed investment during the current economic expansion. That, however, seems a bit too harsh. Perhaps it might be better to see how much of a boost to productivity could be obtained if a high level of investment spending were maintained.

If we assume an annual trend rate of productivity growth in the nonfarm sector of 1.0 percent, add to that a cyclical rise of 0.3 percent (The GNP increase needed to reduce the unemployment rate from 7.0 percent to 5.8 percent is about 3.0 percent of which half should be productivity--1.5 percent or 0.3 percent per year.) and add an improvement in productivity growth from labor quality of 0.1 percent this results in a level of productivity about 4.4 percent below the Mid-Session. Since nonfarm output is 75 percent of GNP, this reduces GNP by 3.3 percent in 1990. Assume further that the share of business fixed investment in GNP is constant at the 1985 level of 13.1 percent. This yields levels of business investment for structures and equipment which are used to calculate gross capital stocks, using discard rates of 6.3 percent for equipment and 2.0 percent for structures.

On this basis, the gross capital stock rises 4.0 percent per year between 1985 and 1990, the same rate as between 1970 and 1981. The labor force increased 2.5 percent per year between 1970 and 1981 and is projected to increase 1.6 percent per year between 1985 and 1990. This suggests that growth in the capital/labor ratio will increase from 1.5 percent annually between 1970 and 1981 to 2.4 percent annually between 1985 and 1990. Since capital's share is approximately 1/3 this will raise the trend rate of productivity in the nonfarm sector by 0.3 percent per year relative to the 1970's.

Conclusion

Using a trend rate of productivity growth of 1.0 percent, adding 0.1 percent for labor quality, adding 0.3 percent for capital, and adding 0.3 percent for cyclical influences results in an increase in productivity of 8.8 percent by 1990. This compares to the 11.9 percent rise that is projected in the Mid-Session Review.

This suggests that the Mid-Session level of productivity is overstated by 2.8 percent in 1990, and that GNP is overstated by 2.1 percent, or 0.4 percent off the growth rate each year. These shortfalls should be recognized as conservative since the impact of the more rapid growth in the capital/labor ratio is questionable.