

# Forecast Record

I did not make a forecast in any of the eight quarters of 2020 and 2021 except for the one dated April 29, 2021. This forecast was made to have a baseline for the paper [What Do Price Equations Say About Future Inflation](#). Given that it was made in the middle of the pandemic and is problematic, I am not counting it as a regular forecast. The forecast dated January 27, 2022, was the first one after the pandemic, although it may be problematic. The second forecast after the pandemic is dated April 30, 2022, and it also may be problematic. In the tables below the values from these two forecasts are not presented.

In the tables below I have presented the forecast values even if these are for pandemic quarters, but I have not presented the actual values. The last forecast values presented are for the forecast dated January 30, 2020, based on data through 2019.4, forecast 147. This is the last forecast before the pandemic. The following is a discussion of the past forecasts.

Data revisions make it difficult to compare forecasted and actual values. Should the forecasted values be compared to the first release of the data, the second release, the first major revision release, the last major revision release, etc.? How should one treat conceptual changes? Since the first US model forecast analyzed here (September 23, 1983), there have been many revisions of the data in the national income and product accounts and two major conceptual changes. The first major conceptual change was the shift in focus from GNP to GDP, and the second was moving to a chain-type measure of real GDP.

Regarding GNP versus GDP, the model treats the difference between the two as exogenous, and for forecasting purposes the difference is taken to be roughly unchanged over time. This means that the forecasted growth rates of GNP and GDP are essentially the same. One can thus look at the past forecasts of GNP growth rates (before the shift in focus) as also forecasts of GDP growth rates, and they can thus be compared to the actual GDP growth rates. This is what is done in the following tables. The actual values for all quarters are taken to be the actual GDP growth rates, but the forecast values before the change in focus are taken to be GNP growth rates. The same is true for the price deflator: the actual values are taken to be the actual growth rates of the GDP deflator, but the forecast values before the change in focus are taken to be the growth rates of the GNP deflator.

Regarding the move to a chain-type measure, the following tables use the new measure. In other words, the model is being judged on how well it has forecasted the current estimates of the actual values based on the chain-type measure. If one thinks of these actual values as being the best current estimates of what actually happened, then the model is being judged on how it predicted what actually happened. This seems to be an

interesting comparison, although there is clearly no right or wrong choice. Other choices could be made.

The data that were released on January 27, 2022, are used for the actual values in the tables below. Again, the model is being judged on how well it has forecasted the current estimates of what actually happened.

Tables 1 through 5 present the forecast record of the model for real GDP, the GDP deflator, and the unemployment rate. The tables are fairly self explanatory, and only Tables 4 and 5 will be discussed here. Tables 4 and 5 show how well the model forecasts one year ahead. Table 4 presents for each forecast the actual and predicted values of the growth rate of real GDP four quarters ahead, that is, the growth rate of real GDP over the first four quarters from the beginning of the forecast period. The results are as follows.

The model did extremely well in predicting the strong growth in the last half of 1983 and in 1984 and 1985. For example, the growth rate in the 1983:3-1984:2 period was 8.0 percent, and the model predicted 7.4 percent. The model overpredicted slightly the period around 1986 (forecasts 10-13), although the largest error is only 1.4 percentage points. It was then reasonably accurate until the recession of 1990-1991, which it missed. As is well known, the recession of 1990-1991 was hard to predict, and the model certainly did not predict it. The model did well in predicting the size of the recovery from the recession (forecasts 32-40). Forecasts 41-44 underpredicted the growth rate between 0.8 and 1.7 percentage points. Forecasts 45-48 were quite accurate. Between forecasts 49 and 65 (July 29, 1995, through July 30, 1999), the model underpredicted the growth rate by an average of 2.1 percentage points. The largest error in this period is for forecast 62 (November 3, 1998), where the model underpredicted by 3.9 percentage points. Much of the strong growth between 1995 and 1999 was due to the wealth effect from the stock market boom, and the stock market boom was not predicted by the model. This is the main reason for the underprediction of the growth rate between 1995 and 1999. Forecasts 66 and 67 were quite accurate, and forecasts 68-70 (April 28, 2000, July 31, 2000, and October 30, 2000) overpredicted by 1.3, 1.5, and 2.1 percentage points respectively. Forecasts 71-73 were quite accurate; forecast 74 underpredicted the growth rate by 1.6 percentage points; forecast 75 was quite accurate; forecast 76 overpredicted by 1.5 percentage points; forecasts 77 and 78 were quite accurate; and forecasts 79 and 80 underpredicted by 1.5 and 1.5 percentage points respectively. Forecasts 81 through 95 were fairly accurate except for forecast 92, which overpredicted by 1.4 percentage points. Forecasts 96 through 102 all overpredicted, by, respectively, 1.6, 2.2, 2.9, 5.2, 6.4, 7.2, and 3.2 percentage points. The recession that began in 2008 was clearly not predicted. The next four errors---forecasts 103, 104, 105, and 106---are small. The errors for forecasts 107 through 134 are all positive, which means that the recovery since 2010 has been slower than predicted. The last ten errors---forecasts 134--143---are fairly small. The mean absolute error for the 143 forecasts in Table 4 is 1.27 percentage points.

Table 5 is the same as Table 4 except that it is for the growth rate of the GDP price deflator. The mean absolute error for the 143 inflation forecasts is only 0.77 percentage points, and so overall the inflation forecasts have been fairly accurate. Between forecasts 37 and 67 (August 5, 1992, through January 29, 2000) the error was never larger than 0.8 percentage points in absolute value. For forecasts 68-73 the model overpredicted inflation between 0.7 and 1.4 percentage points. Forecasts 74-89 were fairly accurate, with no error larger than 0.7 percentage points in absolute value. On the other hand, forecasts 90-103 overpredicted inflation by 1.2, 1.4, 1.3, 1.6, 2.0, 1.6, 1.9, 2.5, 2.4, 2.1, 2.6, 4.4, 4.9, and 2.2 percentage points, respectively. The 4.9 percentage point error for forecast 102 is the largest of all the forecasts. The model clearly overpredicted inflation for these 14 quarters. The errors for forecasts 104--143 are back to smaller errors, although inflation was persistently overpredicted between 2011 and 2014.

**Table 1: Predicted and Actual Values of the Growth Rate of Real GDP**

Table 1  
Predicted and Actual Values of the Growth Rate of Real GDP

	833	834	841	842	843	844	851	852	853	854
Actual:	8.2	8.6	8.1	7.1	3.9	3.3	3.9	3.6	6.2	3.0
Forecast Dated:										
1. Sept.23, 1983	8.2	7.5	7.0	6.8	7.0	6.5	5.9	5.3	4.5	3.9
2. Dec. 3, 1983		7.1	6.3	5.8	5.4	4.8	4.4	3.9	3.4	3.0
3. Jan. 28, 1984			5.8	6.6	6.3	5.9	5.3	4.6	3.9	3.2
4. April 24, 1984				5.6	4.7	4.4	4.0	3.7	3.4	3.0
5. July 26, 1984					6.0	5.2	4.3	3.7	3.0	2.5
6. Oct. 24, 1984						3.1	3.2	3.3	3.3	3.3
7. Jan. 24, 1985							5.1	4.8	4.6	3.9
8. April 20, 1985								4.3	3.7	4.0
9. July 22, 1985									4.2	4.5
10. Oct. 22, 1985										4.4

Table 1 (continued)  
Predicted and Actual Values of the Growth Rate of Real GDP

	853	854	861	862	863	864
Actual:	6.2	3.0	3.8	1.8	3.9	2.2
Forecast Dated:						
9. July 22, 1985	4.2	4.5	3.9	3.9	3.4	3.0
10. Oct. 22, 1985		4.4	4.4	4.3	3.6	3.0
11. Jan. 27, 1986			4.2	4.1	3.3	2.7

Table 1 (continued)  
Predicted and Actual Values of the Growth Rate of Real GDP

	862	863	864	871	872	873	874	881	882	883	884
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Actual:	1.8	3.9	2.2	3.0	4.4	3.5	7.0	2.1	5.4	2.4	5.4
Forecast Dated:											
12. April 21, 1986	4.9	4.2	3.6	3.6	3.4	3.2	3.1	3.1	3.1	3.1	3.1
13. July 28, 1986		4.7	4.3	4.4	3.8	4.2	3.9	3.6	3.3	3.1	3.0
14. October 25, 1986			4.2	3.4	3.4	4.2	4.1	3.8	3.8	3.2	3.0
15. January 25, 1987				3.0	3.7	3.2	4.2	4.1	3.9	3.5	3.2
16. May 4, 1987					2.6	4.1	3.1	3.3	3.7	3.6	3.5
17. July 30, 1987						2.7	3.2	3.1	4.0	4.1	3.9
18. October 31, 1987							3.1	2.2	2.7	2.8	3.1
19. January 30, 1988								2.4	3.0	2.9	3.4
20. April 28, 1988									2.9	3.0	3.3
21. July 29, 1988										3.3	3.7
22. October 28, 1988											3.6

Table 1 (continued)  
Predicted and Actual Values of the Growth Rate of Real GDP

	882	883	884	891	892	893	894	901	902	903	904
Actual:	5.4	2.4	5.4	4.1	3.1	3.0	0.8	4.4	1.5	0.3	-3.6
Forecast Dated:											
20. April 28, 1988	2.9	3.0	3.3	3.4	3.2	2.9	2.7	2.9	2.8	2.7	2.7
21. July 29, 1988		3.3	3.7	3.5	3.1	2.8	2.4	2.6	2.5	2.4	2.4
22. October 28, 1988			3.6	3.9	3.6	3.2	2.9	3.0	2.9	2.8	2.7
23. January 31, 1989				4.7	3.2	3.2	3.1	2.9	2.8	2.7	2.6
24. April 27, 1989					2.8	3.2	3.2	2.9	2.6	2.4	2.2
25. July 30, 1989						1.9	2.7	2.7	2.8	2.7	2.5
26. October 29, 1989							2.7	3.0	2.9	2.6	2.7
27. January 31, 1990								1.8	2.3	2.8	2.8
28. May 1, 1990									2.4	3.1	3.0
29. July 31, 1990										0.9	1.9
30. November 2, 1990											0.3

Table 1 (continued)  
Predicted and Actual Values of the Growth Rate of Real GDP

	902	903	904	911	912	913	914	921	922	923	924
Actual:	1.5	0.3	-3.6	-1.9	3.2	2.0	1.4	4.9	4.4	4.0	4.2
Forecast Dated:											
28. May 1, 1990	2.4	3.1	3.0	2.9	2.7	2.5	2.3	2.5	2.5	2.5	2.5
29. July 31, 1990		0.9	1.9	2.5	2.8	2.9	2.9	3.0	3.0	3.0	2.9
30. November 2, 1990			0.3	0.6	0.9	1.3	1.7	2.3	2.7	2.9	3.0
31. January 30, 1991				2.6	2.3	2.5	2.5	2.6	2.8	2.9	2.9
32. April 29, 1991					1.3	1.8	3.1	3.8	4.0	4.0	3.8
33. July 27, 1991						0.9	2.6	3.4	3.6	3.6	3.4
34. October 30, 1991							1.9	3.1	3.9	3.5	3.4
35. February 2, 1992								2.2	3.2	3.4	4.2
36. April 30, 1992									4.4	4.0	4.6
37. August 5, 1992										2.4	3.3
38. November 6, 1992											2.5

Table 1 (continued)  
Predicted and Actual Values of the Growth Rate of Real GDP

	922	923	924	931	932	933	934	941	942	943	944
Actual:	4.4	4.0	4.2	0.7	2.3	1.9	5.5	3.9	5.5	2.4	4.7
Forecast Dated:											
36. April 30, 1992	4.4	4.0	4.6	4.8	3.9	3.2	2.8	2.3	2.0	2.3	2.4
37. August 5, 1992		2.4	3.3	4.0	4.1	3.8	3.4	2.9	2.5	2.6	2.6
38. November 6, 1992			2.5	3.3	3.5	3.8	3.6	3.3	2.9	2.6	2.3
39. January 31, 1993				4.1	2.5	2.7	3.2	3.1	3.1	2.9	2.7
40. May 1, 1993					2.1	2.4	3.1	3.5	3.6	3.5	3.2
41. September 5, 1993						2.8	2.8	2.4	2.1	2.1	2.2
42. November 1, 1993							3.0	3.2	3.0	2.6	2.4
43. February 2, 1994								3.9	3.3	2.8	2.5
44. May 2, 1994									2.8	2.6	2.8
45. August 2, 1994										1.2	2.1
46. November 1, 1994											1.2

Table 1 (continued)  
Predicted and Actual Values of the Growth Rate of Real GDP

	942	943	944	951	952	953	954	961	962	963	964
Actual:	5.5	2.4	4.7	1.4	1.2	3.4	2.7	3.0	6.8	3.6	4.2
Forecast Dated:											
44. May 2, 1994	2.8	2.6	2.8	2.6	2.3	2.2	2.2	2.2	2.1	2.1	2.2
45. August 2, 1994		1.2	2.1	2.6	2.5	2.4	2.5	2.4	2.3	2.2	2.1
46. November 1, 1994			1.2	2.5	2.3	2.1	2.2	2.3	2.3	2.2	2.2
47. January 30, 1995				1.2	1.6	2.3	2.6	2.8	2.9	2.9	2.9
48. April 29, 1995					2.1	2.5	2.9	2.7	2.6	2.5	2.4
49. July 29, 1995						2.4	2.5	2.3	2.4	2.5	2.5
50. October 28, 1995							2.4	2.5	2.5	2.3	2.2
51. February 29, 1996								2.7	2.8	2.3	2.3
52. May 3, 1996									3.7	2.6	2.3
53. August 2, 1996										2.9	2.2

Table 1 (continued)  
Predicted and Actual Values of the Growth Rate of Real GDP

	962	963	964	971	972	973	974	981	982	983	984
Actual:	6.8	3.6	4.2	2.6	6.8	5.1	3.5	4.1	3.7	5.1	6.6
Forecast Dated:											
52. May 3, 1996	3.7	2.6	2.3	2.2	2.0	2.0	2.1	2.0	2.1	2.2	2.4
53. August 2, 1996		2.9	2.2	2.1	2.0	2.0	2.1	2.2	2.3	2.4	2.6
54. November 1, 1996			1.9	2.5	2.8	2.4	2.4	2.4	2.3	2.3	2.5
55. February 1, 1997				3.0	2.5	2.3	2.1	2.1	2.1	2.2	2.4
56. May 9, 1997					3.7	2.7	2.4	2.0	1.8	1.9	2.0
57. August 4, 1997						1.1	2.2	2.5	2.3	2.2	2.2
58. November 11, 1997							3.5	3.3	2.6	2.3	2.1
59. January 30, 1998								2.7	2.7	2.6	2.2
60. April 30, 1998									2.2	3.0	2.8
61. July 31, 1998										2.3	2.5

Table 1 (continued)  
Predicted and Actual Values of the Growth Rate of Real GDP

	982	983	984	991	992	993	994	001	002	003	004
Actual:	3.7	5.1	6.6	3.8	3.4	5.4	6.7	1.5	7.5	0.4	2.4
Forecast Dated:											
60. April 30, 1998	2.2	3.0	2.8	2.2	2.0	1.9	1.9	2.0	2.0	2.0	2.1
61. July 31, 1998		2.3	2.5	1.5	1.7	1.7	1.8	1.9	2.0	2.0	2.1
62. November 3, 1998			1.6	0.5	0.8	0.8	1.0	1.6	1.8	2.0	2.3
63. January 30, 1999				3.1	2.5	1.9	1.6	1.9	2.0	2.1	2.3
64. May 1, 1999					4.1	3.0	2.2	2.6	2.6	2.6	2.7
65. July 30, 1999						4.0	2.9	3.0	3.2	2.9	2.6
66. November 5, 1999							3.7	3.1	3.3	3.2	3.1
67. January 29, 2000								3.2	3.2	2.8	2.3
68. April 28, 2000									5.4	3.8	2.4

Table 1 (continued)  
Predicted and Actual Values of the Growth Rate of Real GDP

	002	003	004	011	012	013	014	021	022	023	024
Actual:	7.5	0.4	2.4	-1.3	2.4	-1.6	1.1	3.4	2.4	1.6	0.5
Forecast Dated:											
68. April 28, 2000	5.4	3.8	2.4	2.3	1.9	1.6	1.6	1.7	1.7	1.8	1.9
69. July 31, 2000		3.4	2.4	2.3	2.0	1.6	1.6	1.7	1.8	2.0	2.2
70. October 30, 2000			2.4	3.3	2.6	2.1	2.3	2.2	2.1	2.0	2.2
71. January 31, 2001				0.8	0.7	1.1	1.4	1.6	1.9	2.0	2.1
72. April 27, 2001					3.4	2.4	1.5	1.5	1.4	1.4	1.6
73. July 27, 2001						2.0	1.4	1.7	1.9	1.8	1.9
74. November 1, 2001							0.0	0.2	0.5	1.2	2.1
75. January 31, 2002								3.1	1.8	1.8	2.8

Table 1 (continued)  
Predicted and Actual Values of the Growth Rate of Real GDP

	022	023	024	031	032	033	034	041	042	043	044
Actual:	2.5	1.6	0.5	2.1	3.6	6.8	4.7	2.3	3.2	3.8	4.2
Forecast Dated:											
76. April 27, 2002	3.6	2.6	3.4	3.1	2.9	2.7	2.6	2.5	2.4	2.4	2.5
77. July 31, 2002		1.8	2.8	3.0	3.0	3.2	3.2	3.0	2.9	2.7	2.7
78. October 31, 2002			2.4	2.4	2.4	2.7	3.0	3.0	2.9	2.8	2.8
79. January 30, 2003				2.7	2.7	2.8	3.1	3.0	2.9	2.8	2.7
80. April 25, 2003					2.7	2.8	3.0	3.0	2.9	2.8	2.8
81. July 31, 2003						4.1	3.6	3.5	3.4	3.0	2.9
82. October 31, 2003							5.8	3.9	3.1	2.9	2.7
83. February 5, 2004								5.2	3.7	3.2	3.0

Table 1 (continued)  
Predicted and Actual Values of the Growth Rate of Real GDP

	042	043	044	051	052	053	054	061	062	063	064
Actual:	3.2	3.8	4.2	4.5	2.0	3.2	2.3	5.5	1.0	0.6	3.4

Forecast Dated:												
84. April 29, 2004	4.9	3.7	3.2	2.9	2.7	2.7	2.6	2.6	2.6	2.7	2.7	
85. July 31, 2004		3.5	3.6	3.3	3.2	3.0	3.0	2.7	2.5	2.5	2.5	
86. October 29, 2004			3.6	3.1	2.9	2.9	2.9	2.7	2.6	2.6	2.6	
87. January 28, 2005				4.1	3.2	2.9	2.8	2.5	2.5	2.4	2.4	
88. April 29, 2005					1.9	2.3	2.6	2.4	2.5	2.5	2.5	
89. July 30, 2005						4.0	2.9	2.3	2.4	2.2	2.3	
90. October 31, 2005							5.2	2.9	2.3	2.2	2.0	
91. January 28, 2006								3.5	2.8	2.6	2.6	

Table 1 (continued)  
Predicted and Actual Values of the Growth Rate of Real GDP

	062	063	064	071	072	073	074	081	082	083	084
Actual:	1.0	0.6	3.4	1.2	2.6	2.4	2.5	-1.6	2.3	-2.1	-8.5
Forecast Dated:											
92. April 28, 2006	3.6	2.9	2.7	2.5	2.4	2.4	2.4	2.5	2.6	2.6	2.7
93. July 28, 2006		1.6	2.3	2.4	2.4	2.6	2.6	2.7	2.7	2.7	2.8
94. October 27, 2006			2.1	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.8
95. January 31, 2007				3.2	2.9	2.6	2.6	2.5	2.6	2.6	2.7
96. April 27, 2007					3.2	3.0	2.9	2.8	2.8	2.7	2.7
97. July 27, 2007						4.1	3.7	3.4	3.1	2.8	2.7
98. October 31, 2007							3.4	3.2	3.1	2.8	2.7
99. January 31, 2008								3.1	2.5	2.7	2.6

Table 1 (continued)  
Predicted and Actual Values of the Growth Rate of Real GDP

	082	083	084	091	092	093	094	101	102	103	104
Actual:	2.3	-2.1	-8.5	-4.6	-0.7	1.5	4.3	2.0	3.9	3.1	2.1
Forecast Dated:											
100. April 30, 2008	3.2	3.5	2.6	3.3	2.8	2.7	2.6	2.5	2.5	2.5	2.5
101. July 31, 2008		2.8	3.5	3.2	3.2	3.0	2.9	2.8	2.7	2.6	2.6
102. October 30, 2008			-0.1	0.1	1.7	2.3	2.5	2.5	3.0	3.2	3.1
103. February 5, 2009				-1.8	-0.3	0.6	1.2	2.8	3.7	3.9	3.7
104. April 30, 2009					0.6	0.8	1.0	2.7	3.5	3.7	1.7
105. August 24, 2009						0.2	0.8	3.1	4.4	5.0	3.3
106. October 31, 2009							3.3	3.8	4.4	4.7	3.0
107. January 30, 2010								3.0	4.3	4.9	3.3

Table 1 (continued)  
Predicted and Actual Values of the Growth Rate of Real GDP

	102	103	104	111	112	113	114	121	122	123	124
Actual:	3.8	3.1	2.1	-1.0	2.7	-0.2	4.6	3.3	1.8	0.7	0.4
Forecast Dated:											
108. April 30, 2010	3.6	4.4	3.1	3.1	3.7	4.3	3.9	4.0	4.2	4.3	4.1
109. July 30, 2010		2.5	2.9	3.1	3.8	4.4	4.0	4.1	4.3	4.3	4.1
110. October 29, 2010			0.8	2.7	3.7	4.6	4.4	4.6	4.7	4.7	4.4
111. January 29, 2011				5.4	4.2	4.3	3.9	2.9	2.8	3.0	3.1
112. April 28, 2011					4.3	5.0	4.7	3.8	3.6	3.7	3.6
113. July 31, 2011						3.0	5.4	4.7	4.5	4.5	4.4

114. October 30, 2011	3.9	3.2	3.7	4.4	4.9
115. January 28, 2012		2.8	4.1	4.7	5.3

Table 1 (continued)  
Predicted and Actual Values of the Growth Rate of Real GDP

	122	123	124	131	132	133	134	141	142	143	144
Actual:	1.8	0.7	0.4	3.5	0.6	3.2	2.9	-1.4	5.2	4.7	1.8
Forecast Dated:											
116. April 27, 2012	3.9	5.0	5.5	5.0	4.6	4.4	4.3	4.1	4.0	3.9	3.8
117. July 27, 2012		3.4	4.8	4.8	4.6	4.6	4.6	4.5	4.4	4.2	4.1
118. October 26, 2012			3.5	4.2	4.4	4.7	4.9	4.9	4.7	4.6	4.4
119. January 30, 2013				3.6	4.2	4.7	4.8	4.8	4.7	4.5	4.3
120. April 26, 2013					2.7	3.9	4.4	4.6	4.6	4.5	4.4
121. August 5, 2013						3.3	4.9	5.0	4.7	4.7	4.5
122. November 11, 2013							2.4	3.4	3.6	4.2	4.5
123. January 30, 2014								3.2	4.3	4.4	4.3

Table 1 (continued)  
Predicted and Actual Values of the Growth Rate of Real GDP

	142	143	144	151	152	153	154	161	162	163	164
Actual:	5.2	4.7	1.8	3.3	2.3	1.3	0.6	2.4	1.2	2.4	2.0
Forecast Dated:											
124. April 30, 2014	2.6	4.0	4.6	4.6	4.5	4.4	4.1	3.9	3.6	3.4	3.2
125. July 31, 2014		2.6	4.5	4.6	4.4	4.3	4.0	3.8	3.6	3.4	3.2
126. October 30, 2014			3.8	4.1	4.0	4.0	4.0	3.8	3.6	3.5	3.4
127. January 31, 2015				2.8	3.3	3.6	3.7	3.8	3.8	3.7	3.6
128. April 29, 2015					1.6	2.9	3.6	3.9	4.0	4.0	3.8
129. July 31, 2015						2.1	3.2	3.5	3.7	3.9	3.9
130. October 31, 2015							3.2	2.6	2.8	3.1	3.4
131. January 30, 2016								2.0	2.5	3.1	3.5

Table 1 (continued)  
Predicted and Actual Values of the Growth Rate of Real GDP

	162	163	164	171	172	173	174	181	182	183	184
Actual:	1.2	2.4	2.0	1.9	2.3	2.9	3.8	3.1	3.4	1.9	0.9
Forecast Dated:											
132. April 28, 2016	1.5	2.5	3.2	3.6	3.8	3.9	3.9	3.8	3.7	3.6	3.5
133. July 29, 2016		2.7	2.9	3.2	3.4	3.6	3.7	3.7	3.6	3.6	3.5
134. October 30, 2016			2.8	2.9	3.2	3.3	3.4	3.4	3.4	3.4	3.4
135. January 27, 2017				2.1	2.6	2.9	3.1	3.2	3.3	3.4	3.4
136. April 28, 2017					2.9	3.1	3.3	3.3	3.3	3.3	3.3
137. July 30, 2017						2.9	2.4	2.2	1.9	1.9	1.9
138. October 29, 2017							2.7	2.4	2.2	2.1	2.0
139. January 28, 2018								4.0	3.3	2.9	2.7

Table 1 (continued)  
Predicted and Actual Values of the Growth Rate of Real GDP



	182	183	184	191	192	193	194	201	202	203	204
Actual:	3.4	1.9	0.9	2.4	3.2	2.8	1.9				
Forecast Dated:											
140. April 28, 2018	2.7	2.4	2.5	2.3	2.2	2.2	2.1	2.0	2.0	2.1	2.2
141. July 29, 2018		3.5	3.0	2.6	2.4	2.2	2.0	1.9	1.8	1.9	1.9
142. October 27, 2018			2.9	2.9	2.8	2.4	2.2	1.9	1.9	1.9	1.9
143. February 28, 2019				1.7	1.5	1.2	1.1	1.6	1.9	2.2	2.3
144. April 26, 2019					1.2	1.5	1.5	1.9	1.9	2.0	2.0
145. July 26, 2019						2.4	2.2	2.3	2.2	2.1	2.0
146. October 30, 2019							2.4	2.8	2.7	2.4	2.2
147. January 30, 2020								3.5	2.8	2.4	2.3

**Table 2: Predicted and Actual Values of the Growth Rate of the GDP Deflator**

Table 2  
Predicted and Actual Values of the Growth Rate of the GDP Deflator

	833	834	841	842	843	844	851	852	853	854
Actual:	4.4	2.8	4.1	3.5	3.6	3.0	4.0	2.6	2.4	2.2
Forecast Dated:										
1. Sept. 23, 1983	5.3	5.1	5.1	5.1	5.2	5.5	5.8	6.1	6.3	6.5
2. Dec. 3, 1983		4.4	4.8	5.1	5.3	5.6	5.9	6.1	6.2	6.3
3. Jan. 28, 1984			4.2	4.5	4.9	5.2	5.6	5.8	6.1	6.3
4. April 24, 1984				4.4	4.7	5.0	5.3	5.5	5.7	5.9
5. July 26, 1984					4.6	4.9	5.3	5.5	5.6	5.7
6. Oct. 24, 1984						4.1	4.3	4.4	4.6	4.7
7. Jan. 24, 1985							4.1	4.4	4.7	5.0
8. April 20, 1985								3.5	3.8	4.0
9. July 22, 1985									3.2	3.5
10. Oct. 22, 1985										3.9

Table 2 (continued)  
Predicted and Actual Values of the Growth Rate of the GDP Deflator

	853	854	861	862	863	864
Actual:	2.4	2.2	2.0	1.5	1.7	2.8
Forecast Dated:						
9. July 22, 1985	3.2	3.5	3.7	3.9	4.2	4.4
10. Oct. 22, 1985		3.9	3.6	3.6	3.8	3.9
11. Jan. 27, 1986			2.9	3.0	3.1	3.1

Table 2 (continued)  
Predicted and Actual Values of the Growth Rate of the GDP Deflator

	862	863	864	871	872	873	874	881	882	883	884
Actual:	1.5	1.7	2.8	2.0	2.8	2.9	3.4	3.2	3.9	4.9	3.5

Forecast Dated:											
12. April 21, 1986	2.6	2.8	2.9	2.9	2.9	3.0	3.1	3.1	3.2	3.2	3.3
13. July 28, 1986		1.7	1.8	1.9	2.1	2.2	2.4	2.5	2.7	2.8	2.9
14. October 25, 1986			2.4	2.2	2.0	1.9	1.9	2.0	2.1	2.3	2.4
15. January 25, 1987				2.6	2.4	2.4	2.2	2.3	2.5	2.6	2.7
16. May 4, 1987					2.5	2.6	2.9	3.0	3.1	3.2	3.4
17. July 30, 1987						4.6	3.2	3.4	3.5	3.7	3.9
18. October 31, 1987							2.7	3.4	3.5	3.6	3.8
19. January 30, 1988								3.6	3.7	3.9	4.0
20. April 28, 1988									3.2	3.4	3.6
21. July 29, 1988										4.1	3.9
22. October 28, 1988											3.6

Table 2 (continued)  
 Predicted and Actual Values of the Growth Rate of the GDP Deflator

	882	883	884	891	892	893	894	901	902	903	904
Actual:	3.9	4.9	3.5	4.2	4.3	3.0	2.9	4.4	4.5	3.5	3.0
Forecast Dated:											
20. April 28, 1988	3.2	3.4	3.6	3.7	3.9	4.0	4.2	4.2	4.3	4.4	4.5
21. July 29, 1988		4.1	3.9	4.1	4.3	4.5	4.6	4.7	4.8	4.9	4.9
22. October 28, 1988			3.6	3.8	4.0	4.2	4.4	4.5	4.6	4.7	4.8
23. January 31, 1989				3.1	4.0	4.0	4.2	4.4	4.5	4.6	4.6
24. April 27, 1989					4.0	4.5	4.7	4.9	5.1	5.2	5.3
25. July 30, 1989						4.1	4.5	4.6	4.7	4.8	4.9
26. October 29, 1989							3.6	3.8	4.0	4.2	4.3
27. January 31, 1990								4.2	3.9	3.8	3.9
28. May 1, 1990									5.1	4.4	4.3
29. July 31, 1990										2.5	2.7
30. November 2, 1990											3.5

Table 2 (continued)  
 Predicted and Actual Values of the Growth Rate of the GDP Deflator

	902	903	904	911	912	913	914	921	922	923	924
Actual:	4.5	3.5	3.0	4.0	3.0	3.1	2.4	1.6	2.3	2.0	2.8
Forecast Dated:											
28. May 1, 1990	5.1	4.4	4.3	4.2	4.2	4.3	4.3	4.3	4.4	4.4	4.5
29. July 31, 1990		2.5	2.7	2.8	2.9	3.1	3.3	3.4	3.6	3.7	3.9
30. November 2, 1990			3.5	3.7	3.7	3.7	3.8	3.8	3.9	4.0	4.1
31. January 30, 1991				3.3	3.7	3.8	3.9	4.0	4.1	4.2	4.3
32. April 29, 1991					2.2	2.7	2.7	2.8	2.9	3.1	3.3
33. July 27, 1991						3.9	4.0	4.0	4.1	4.2	4.3
34. October 30, 1991							2.9	2.9	3.1	3.3	3.5
35. February 2, 1992								3.1	2.8	2.9	3.0
36. April 30, 1992									3.0	2.9	2.9
37. August 5, 1992										2.0	2.1
38. November 6, 1992											1.5

Table 2 (continued)  
 Predicted and Actual Values of the Growth Rate of the GDP Deflator

	922	923	924	931	932	933	934	941	942	943	944
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Actual:	2.3	2.0	2.8	2.3	2.4	2.1	2.5	1.9	1.9	2.3	2.2
Forecast Dated:											
36. April 30, 1992	3.0	2.9	2.9	3.3	3.5	3.7	3.8	3.9	4.0	4.0	4.1
37. August 5, 1992		2.0	2.1	2.3	2.6	2.9	3.2	3.3	3.4	3.5	3.6
38. November 6, 1992			1.5	1.6	1.7	1.9	2.1	2.4	2.5	2.7	2.8
39. January 31, 1993				1.3	2.2	2.3	2.4	2.6	2.8	3.0	3.2
40. May 1, 1993					1.8	1.9	2.1	2.3	2.4	2.7	2.9
41. September 5, 1993						2.4	2.4	2.6	2.7	2.7	2.7
42. November 1, 1993							1.7	1.9	2.1	2.3	2.4
43. February 2, 1994								1.6	1.6	1.9	2.2
44. May 2, 1994									1.6	1.8	2.0
45. August 2, 1994										2.3	2.1
46. November 1, 1994											2.6

Table 2 (continued)  
Predicted and Actual Values of the Growth Rate of the GDP Deflator

	942	943	944	951	952	953	954	961	962	963	964
Actual:	1.9	2.3	2.2	2.2	1.9	1.8	1.9	1.9	1.9	1.3	2.2
Forecast Dated:											
44. May 2, 1994	1.6	1.8	2.0	1.8	2.0	2.1	2.2	2.3	2.4	2.4	2.4
45. August 2, 1994		2.3	2.1	2.1	1.9	2.1	2.2	2.3	2.4	2.5	2.6
46. November 1, 1994			2.6	2.4	2.1	2.2	2.3	2.4	2.4	2.5	2.6
47. January 30, 1995				2.1	1.9	1.9	2.0	2.1	2.2	2.3	2.4
48. April 29, 1995					2.6	2.5	2.5	2.6	2.7	2.7	2.8
49. July 29, 1995						2.1	2.2	2.3	2.5	2.5	2.5
50. October 28, 1995							2.5	2.4	2.4	2.5	2.5
51. February 29, 1996								1.5	1.8	2.0	2.1
52. May 3, 1996									1.7	1.9	2.0
53. August 2, 1996										1.7	2.0

Table 2 (continued)  
Predicted and Actual Values of the Growth Rate of the GDP Deflator

	962	963	964	971	972	973	974	981	982	983	984
Actual:	1.9	1.3	2.2	1.2	2.0	1.7	1.3	0.6	0.9	1.7	1.1
Forecast Dated:											
52. May 3, 1996	1.7	1.9	2.0	2.0	2.1	2.2	2.2	2.3	2.3	2.4	2.5
53. August 2, 1996		1.7	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.4
54. November 1, 1996			1.6	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3
55. February 1, 1997				1.3	1.7	1.9	2.0	2.0	2.1	2.2	2.2
56. May 9, 1997					1.6	1.6	1.7	1.7	1.8	1.9	1.9
57. August 4, 1997						1.5	1.4	1.5	1.6	1.7	1.8
58. November 11, 1997							1.5	1.6	1.7	1.8	1.9
59. January 30, 1998								1.1	1.6	1.7	1.8
60. April 30, 1998									1.0	1.4	1.5
61. July 31, 1998										1.4	1.8

Table 2 (continued)  
Predicted and Actual Values of the Growth Rate of the GDP Deflator

982	983	984	991	992	993	994	001	002	003	004
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Actual:	0.9	1.7	1.1	1.3	1.5	1.4	2.2	2.7	2.5	2.4	2.2
Forecast Dated:											
60. April 30, 1998	1.0	1.4	1.5	1.6	1.7	1.7	1.8	1.8	1.9	1.9	2.0
61. July 31, 1998		1.4	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9
62. November 3, 1998			1.5	1.6	1.5	1.5	1.5	1.5	1.6	1.6	1.7
63. January 30, 1999				1.4	1.5	1.6	1.6	1.6	1.7	1.7	1.7
64. May 1, 1999					1.4	1.6	1.7	1.7	1.8	1.9	2.0
65. July 30, 1999						1.8	2.0	2.1	2.1	2.2	2.3
66. November 5, 1999							2.8	2.8	2.8	2.8	2.8
67. January 29, 2000								3.2	3.2	3.2	3.1
68. April 28, 2000									3.5	3.6	3.7

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Table 2 (continued)  
Predicted and Actual Values of the Growth Rate of the GDP Deflator

	002	003	004	011	012	013	014	021	022	023	024
Actual:	2.5	2.4	2.2	2.7	2.8	1.2	1.3	1.1	1.6	1.9	2.3
Forecast Dated:											
68. April 28, 2000	3.5	3.6	3.7	3.7	3.6	3.5	3.4	3.3	3.2	3.1	3.1
69. July 31, 2000		2.7	3.4	3.4	3.5	3.5	3.4	3.4	3.3	3.2	3.2
70. October 30, 2000			3.4	3.4	3.5	3.6	3.6	3.5	3.4	3.4	3.3
71. January 31, 2001				3.3	3.2	3.0	2.9	2.8	2.7	2.6	2.6
72. April 27, 2001					3.2	3.1	3.0	2.9	2.8	2.7	2.7
73. July 27, 2001						2.7	2.8	2.7	2.6	2.6	2.6
74. November 1, 2001							1.5	1.6	1.6	1.5	1.6
75. January 31, 2002								1.6	1.6	1.8	1.9

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Table 2 (continued)  
Predicted and Actual Values of the Growth Rate of the GDP Deflator

	022	023	024	031	032	033	034	041	042	043	044
Actual:	1.6	1.9	2.3	2.0	1.4	2.3	2.4	2.9	3.3	2.6	3.1
Forecast Dated:											
76. April 27, 2002	1.3	1.7	1.9	2.1	2.3	2.4	2.4	2.5	2.5	2.4	2.4
77. July 31, 2002		1.4	1.5	1.7	1.9	2.1	2.2	2.3	2.4	2.4	2.4
78. October 31, 2002			1.9	2.1	2.2	2.2	2.2	2.3	2.3	2.4	2.4
79. January 30, 2003				1.8	1.9	2.1	2.1	2.3	2.3	2.4	2.4
80. April 25, 2003					2.0	2.1	2.2	2.2	2.3	2.4	2.4
81. July 31, 2003						1.9	2.0	2.2	2.3	2.5	2.5
82. October 31, 2003							2.0	2.5	2.8	2.9	3.0
83. February 5, 2004								2.3	2.3	2.5	2.6

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Table 2 (continued)  
Predicted and Actual Values of the Growth Rate of the GDP Deflator

	042	043	044	051	052	053	054	061	062	063	064
Actual:	3.3	2.6	3.1	3.2	2.7	3.8	3.5	2.9	3.6	2.8	1.5

Forecast Dated:												
84. April 29, 2004	2.6	2.8	3.0	3.1	3.1	3.1	3.1	3.0	2.9	2.8	2.8	
85. July 31, 2004		3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.1	3.1	
86. October 29, 2004			3.1	3.1	3.1	3.1	3.1	3.2	3.2	3.1	3.1	
87. January 28, 2005				3.5	3.5	3.5	3.5	3.5	3.4	3.4	3.3	
88. April 29, 2005					3.7	3.7	3.6	3.6	3.5	3.5	3.5	
89. July 30, 2005						4.2	4.2	4.2	4.0	3.9	3.8	
90. October 31, 2005							4.6	4.4	4.4	4.3	4.2	
91. January 28, 2006								4.2	4.1	4.1	4.0	

Table 2 (continued)  
 Predicted and Actual Values of the Growth Rate of the GDP Deflator

	062	063	064	071	072	073	074	081	082	083	084
Actual:	3.6	2.8	1.5	3.9	2.7	2.1	1.7	1.9	1.5	3.1	1.0
Forecast Dated:											
92. April 28, 2006	4.4	4.3	4.2	4.1	4.0	3.9	3.8	3.7	3.6	3.5	3.4
93. July 28, 2006		4.5	4.4	4.3	4.2	4.1	4.0	3.9	3.9	3.8	3.8
94. October 27, 2006			4.8	4.5	4.4	4.2	4.0	3.9	3.8	3.7	3.5
95. January 31, 2007				4.4	4.2	4.1	4.0	3.9	3.8	3.6	3.5
96. April 27, 2007					4.2	4.0	3.9	3.8	3.7	3.6	3.5
97. July 27, 2007						4.4	4.4	4.3	4.3	4.2	4.1
98. October 31, 2007							4.7	4.6	4.5	4.3	4.2
99. January 31, 2008								3.3	4.5	4.3	4.0

Table 2 (continued)  
 Predicted and Actual Values of the Growth Rate of the GDP Deflator

	082	083	084	091	092	093	094	101	102	103	104
Actual:	1.5	3.1	1.0	-0.2	-0.7	0.4	1.3	1.0	2.1	1.2	2.4
Forecast Dated:											
100. April 30, 2008	3.4	4.4	4.1	3.9	3.7	3.6	3.4	3.3	3.1	3.0	2.8
101. July 31, 2008		5.6	5.3	5.0	4.8	4.6	4.4	4.2	4.0	3.8	3.6
102. October 30, 2008			5.5	5.1	4.7	4.6	4.6	4.4	4.1	4.0	3.9
103. February 5, 2009				2.6	2.4	2.4	2.3	2.3	2.5	2.7	2.9
104. April 30, 2009					0.7	0.8	0.9	1.1	1.4	1.8	2.2
105. August 24, 2009						-0.5	-0.4	-0.2	0.3	0.9	1.6
106. October 31, 2009							0.2	0.6	1.0	1.5	2.1
107. January 30, 2010								1.0	1.4	1.9	2.5

Table 2 (continued)  
 Predicted and Actual Values of the Growth Rate of the GDP Deflator

	102	103	104	111	112	113	114	121	122	123	124
Actual:	2.1	1.2	2.4	2.1	2.7	2.4	0.6	2.4	1.6	2.1	2.0
Forecast Dated:											
108. April 30, 2010	1.5	1.8	2.4	2.6	2.9	3.1	3.4	3.6	3.7	3.9	4.0
109. July 30, 2010		0.8	1.6	1.8	2.1	2.4	2.7	2.9	3.1	3.3	3.5
110. October 29, 2010			0.8	1.0	1.3	1.6	2.0	2.3	2.6	2.9	3.2
111. January 29, 2011				1.9	2.3	2.6	2.9	3.2	3.3	3.4	3.5
112. April 28, 2011					3.0	3.2	3.5	3.8	3.8	3.9	4.0
113. July 31, 2011						2.7	3.6	3.7	3.6	3.7	3.8

114. October 30, 2011	2.5	3.1	3.1	3.2	3.4
115. January 28, 2012		1.9	2.1	2.3	2.6

Table 2 (continued)  
Predicted and Actual Values of the Growth Rate of the GDP Deflator

	122	123	134	131	132	133	134	141	142	143	144
Actual:	1.6	2.1	2.0	1.6	1.1	1.9	2.4	1.7	2.3	1.8	0.7
Forecast Dated:											
116. April 27, 2012	2.3	2.7	2.9	3.3	3.4	3.5	3.6	3.8	3.8	3.9	3.9
117. July 27, 2012		2.1	2.3	2.7	2.8	3.0	3.2	3.3	3.5	3.6	3.7
118. October 26, 2012			1.9	2.2	2.4	2.5	2.7	2.9	3.1	3.3	3.4
119. January 30, 2013				2.3	2.6	2.7	2.9	3.0	3.1	3.2	3.3
120. April 26, 2013					2.4	2.5	2.6	2.7	2.9	3.0	3.1
121. August 5, 2013						1.8	2.5	2.7	2.8	2.9	3.0
122. November 11, 2013							2.1	2.2	2.3	2.2	2.4
123. January 30, 2014								2.1	2.4	2.5	2.6

Table 2 (continued)  
Predicted and Actual Values of the Growth Rate of the GDP Deflator

	142	143	144	151	152	153	154	161	162	163	164
Actual:	2.3	1.8	0.7	-0.1	2.2	1.2	-0.0	-0.3	2.6	1.1	2.3
Forecast Dated:											
124. April 30, 2014	2.2	2.4	2.5	2.6	2.6	2.6	2.7	2.7	2.7	2.8	2.8
125. July 31, 2014		2.5	2.7	2.7	2.6	2.7	2.7	2.7	2.6	2.6	2.6
126. October 30, 2014			2.8	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7
127. January 31, 2015				2.3	2.2	2.2	2.1	2.0	2.0	2.0	2.0
128. April 29, 2015					1.6	1.6	1.5	1.4	1.4	1.4	1.4
129. July 31, 2015						1.0	1.3	1.3	1.2	1.2	1.2
130. October 31, 2015							1.2	1.5	1.4	1.3	1.3
131. January 30, 2016								1.6	1.5	1.4	1.3

Table 2 (continued)  
Predicted and Actual Values of the Growth Rate of the GDP Deflator

	162	163	164	171	172	173	174	181	182	183	184
Actual:	2.6	1.1	2.3	1.9	1.5	2.0	2.9	2.2	3.3	1.7	2.1
Forecast Dated:											
132. April 28, 2016	1.2	1.1	1.0	0.9	0.9	0.9	0.8	1.0	1.0	1.1	1.2
133. July 29, 2016		1.4	1.2	1.1	1.0	1.0	1.0	1.0	1.0	1.1	1.1
134. October 30, 2016			1.3	1.2	1.1	1.0	1.0	1.0	1.0	1.0	1.1
135. January 27, 2017				1.5	1.3	1.3	1.1	1.0	1.0	1.0	1.0
136. April 28, 2017					1.9	1.8	1.7	1.6	1.5	1.5	1.4
137. July 30, 2017						1.7	1.7	1.6	1.5	1.5	1.4
138. October 29, 2017							1.9	1.8	1.8	1.8	1.8
139. January 28, 2018								2.1	2.2	2.3	2.3

Table 2 (continued)  
Predicted and Actual Values of the Growth Rate of the GDP Deflator



12. April 21, 1986	6.8	6.6	6.4	6.3	6.2	6.0	5.9	5.8	5.6	5.5	5.4
13. July 28, 1986		7.3	7.3	7.3	7.2	7.1	6.9	6.8	6.6	6.5	6.3
14. October 25, 1986			7.1	7.2	7.3	7.4	7.4	7.3	7.2	7.1	7.0
15. January 25, 1987				6.9	6.9	7.0	7.0	7.0	6.9	6.8	6.7
16. May 4, 1987					6.5	6.3	6.3	6.3	6.2	6.1	6.1
17. July 30, 1987						6.1	6.0	6.0	5.8	5.7	5.5
18. October 31, 1987							6.0	6.0	6.0	6.0	5.9
19. January 30, 1988								5.8	5.7	5.5	5.4
20. April 28, 1988									5.5	5.3	5.0
21. July 29, 1988										5.3	5.1
22. October 28, 1988											5.2

Table 3 (continued)  
Predicted and Actual Values of the Unemployment Rate

	882	883	884	891	892	893	894	901	902	903	904
Actual:	5.5	5.5	5.4	5.2	5.2	5.3	5.4	5.3	5.3	5.7	6.1
Forecast Dated:											
20. April 28, 1988	5.5	5.3	5.0	4.8	4.7	4.5	4.4	4.4	4.3	4.3	4.2
21. July 29, 1988		5.3	5.1	4.9	4.7	4.7	4.7	4.7	4.7	4.8	4.8
22. October 28, 1988			5.2	4.9	4.7	4.5	4.3	4.2	4.2	4.1	4.1
23. January 31, 1989				5.0	4.7	4.6	4.4	4.3	4.3	4.2	4.2
24. April 27, 1989					4.9	4.7	4.5	4.3	4.2	4.2	4.2
25. July 30, 1989						5.2	5.0	4.8	4.7	4.5	4.5
26. October 29, 1989							5.0	4.8	4.6	4.5	4.4
27. January 31, 1990								5.2	5.1	5.0	4.8
28. May 1, 1990									5.0	4.8	4.6
29. July 31, 1990										5.4	5.3
30. November 2, 1990											5.6

Table 3 (continued)  
Predicted and Actual Values of the Unemployment Rate

	902	903	904	911	912	913	914	921	922	923	924
Actual:	5.3	5.7	6.1	6.6	6.8	6.9	7.1	7.4	7.6	7.6	7.4
Forecast Dated:											
28. May 1, 1990	5.0	4.8	4.6	4.4	4.4	4.3	4.3	4.4	4.4	4.5	4.6
29. July 31, 1990		5.4	5.3	5.1	5.0	4.8	4.7	4.7	4.6	4.6	4.6
30. November 2, 1990			5.6	5.5	5.5	5.4	5.3	5.2	5.1	5.0	4.9
31. January 31, 1991				6.1	6.1	6.0	5.9	5.8	5.7	5.6	5.5
32. April 29, 1991					6.8	6.9	6.7	6.5	6.2	6.0	5.8
33. July 27, 1991						7.0	7.0	6.8	6.5	6.3	6.1
34. October 30, 1991							6.8	6.6	6.4	6.2	6.0
35. February 2, 1992								6.9	6.8	6.7	6.5
36. April 30, 1992									7.0	6.8	6.5
37. August 5, 1992										7.2	6.8
38. November 6, 1992											7.3

Table 3 (continued)  
Predicted and Actual Values of the Unemployment Rate

	922	923	924	931	932	933	934	941	942	943	944
Actual:	7.6	7.6	7.4	7.1	7.1	6.8	6.6	6.6	6.2	6.0	5.6







88. April 29, 2005	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
89. July 30, 2005		5.0	4.9	4.9	4.9	4.9	5.0	5.0		
90. October 31, 2005			4.9	4.7	4.6	4.6	4.6	4.6		
91. January 28, 2006					5.0	5.0	4.9	4.9		

Table 3 (continued)  
Predicted and Actual Values of the Unemployment Rate

	062	063	064	071	072	073	074	081	082	083	084
Actual:	4.7	4.7	4.5	4.5	4.5	4.7	4.8	5.0	5.3	6.0	6.9
Forecast Dated:											
92. April 28, 2006	4.6	4.6	4.5	4.5	4.6	4.7	4.7	4.8	4.9	5.0	5.1
93. July 28, 2006		4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.9
94. October 27, 2006			4.8	4.9	4.9	4.9	4.9	5.0	5.0	5.0	5.0
95. January 31, 2007				4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.6
96. April 27, 2007					4.5	4.6	4.6	4.6	4.6	4.7	4.7
97. July 27, 2007						4.5	4.4	4.3	4.3	4.3	4.1
98. October 31, 2007							4.7	4.6	4.6	4.5	4.5
99. January 31, 2008								4.9	5.0	5.1	5.1

Table 3 (continued)  
Predicted and Actual Values of the Unemployment Rate

	082	083	084	091	092	093	094	101	102	103	104
Actual:	5.3	6.0	6.9	8.3	9.3	9.6	9.9	9.9	9.7	9.5	9.5
Forecast Dated:											
100. April 30, 2008	5.2	5.3	5.3	5.3	5.2	5.2	5.2	5.2	5.2	5.2	5.2
101. July 31, 2008		5.5	5.4	5.2	5.0	4.9	4.7	4.6	4.6	4.5	4.6
102. October 30, 2008			6.4	6.7	6.8	6.9	6.9	6.9	6.8	6.8	6.7
103. February 5, 2009				7.8	8.3	8.6	8.8	8.7	8.5	8.2	7.9
104. April 30, 2009					8.9	9.3	9.4	9.3	9.1	8.8	8.6
105. August 24, 2009						9.9	10.2	10.1	9.9	9.4	9.1
106. October 31, 2009							9.6	9.4	9.0	8.5	8.0
107. January 30, 2010								9.8	9.4	8.9	8.4

Table 3 (continued)  
Predicted and Actual Values of the Unemployment Rate

	102	103	104	111	112	113	114	121	122	123	124
Actual:	9.7	9.5	9.5	9.1	9.1	9.0	8.7	8.3	8.2	8.0	7.8
Forecast Dated:											
108. April 30, 2010	9.4	9.0	8.6	8.2	7.9	7.6	7.2	7.0	6.7	6.5	6.2
109. July 30, 2010		9.6	9.3	9.0	8.8	8.5	8.2	7.9	7.6	7.3	7.1
110. October 29, 2010			9.5	9.4	9.2	8.9	8.6	8.2	7.9	7.5	7.2
111. January 29, 2011				9.8	8.7	8.3	7.9	7.6	7.4	7.2	7.1
112. April 28, 2011					8.7	8.4	8.0	7.7	7.5	7.3	7.1
113. July 31, 2011						8.8	8.6	8.3	8.1	7.9	7.7
114. October 30, 2011							8.9	8.7	8.5	8.3	8.1
115. January 28, 2012								8.6	8.5	8.3	8.0

Table 3 (continued)  
Predicted and Actual Values of the Unemployment Rate

	122	123	124	131	132	133	134	141	142	143	144
Actual:	8.2	8.0	7.8	7.8	7.5	7.3	7.0	6.6	6.2	6.1	5.7
Forecast Dated:											
116. April 27, 2012	8.1	8.0	7.7	7.5	7.2	7.0	6.8	6.7	6.5	6.4	6.3
117. July 27, 2012		8.2	8.1	7.9	7.7	7.5	7.3	7.0	6.8	6.7	6.5
118. October 26, 2012			8.1	8.0	7.8	7.7	7.5	7.2	7.0	6.8	6.6
119. January 30, 2013				7.8	7.7	7.6	7.5	7.3	7.1	6.9	6.8
120. April 26, 2013					7.7	7.6	7.5	7.4	7.2	7.1	6.9
121. August 5, 2013						7.5	7.4	7.2	7.1	6.9	6.8
122. November 11, 2013							7.3	7.4	7.4	7.3	7.3
123. January 30, 2014								6.9	6.8	6.8	6.7

Table 3 (continued)  
Predicted and Actual Values of the Unemployment Rate

	142	143	144	151	152	153	154	161	162	163	164
Actual:	6.2	6.1	5.7	5.5	5.4	5.1	5.0	4.9	4.9	4.9	4.8
Forecast Dated:											
124. April 30, 2014	6.8	6.8	6.9	6.8	6.7	6.7	6.6	6.5	6.4	6.4	6.3
125. July 31, 2014		6.6	6.4	6.4	6.4	6.4	6.4	6.4	6.3	6.3	6.4
126. October 30, 2014			6.0	6.0	6.1	6.1	6.1	6.1	6.1	6.1	6.1
127. January 31, 2015				5.7	5.8	5.9	6.0	6.1	6.1	6.1	6.2
128. April 29, 2015					5.7	5.8	6.0	6.1	6.2	6.2	6.3
129. July 31, 2015						5.5	5.7	5.9	6.0	6.0	6.0
130. October 31, 2015							5.3	5.5	5.7	5.8	5.9
131. January 30, 2016								5.1	5.3	5.5	5.6

Table 3 (continued)  
Predicted and Actual Values of the Unemployment Rate

	162	163	164	171	172	173	174	181	182	183	184
Actual:	4.9	4.9	4.8	4.6	4.4	4.3	4.2	4.0	3.9	3.8	3.8
Forecast Dated:											
132. April 28, 2016	5.1	5.3	5.5	5.7	5.8	5.8	5.8	5.8	5.8	5.7	5.7
133. July 29, 2016		5.0	5.2	5.4	5.6	5.7	5.7	5.8	5.8	5.7	5.7
134. October 30, 2016			5.1	5.3	5.5	5.6	5.8	5.8	5.9	5.9	5.9
135. January 27, 2017				5.0	5.2	5.4	5.6	5.7	5.8	5.9	5.9
136. April 28, 2017					4.7	4.8	5.0	5.1	5.2	5.3	5.3
137. July 30, 2017						4.4	4.5	4.6	4.7	4.9	5.0
138. October 29, 2017							4.4	4.5	4.5	4.5	4.6
139. January 28, 2018								4.0	3.9	3.9	3.9

Table 3 (continued)  
Predicted and Actual Values of the Unemployment Rate

	182	183	184	191	192	193	194	201	202	203	204
Actual:	3.9	3.8	3.8	3.8	3.6	3.6	3.6				
Forecast Dated:											
140. April 28, 2018	4.1	4.2	4.3	4.4	4.5	4.5	4.6	4.7	4.7	4.8	4.8

141. July 29, 2018	3.9	3.9	4.0	4.0	4.1	4.2	4.3	4.4	4.4	4.5
142. October 27, 2018		3.8	3.8	3.8	3.8	3.9	4.0	4.1	4.2	4.2
143. February 28, 2019			3.8	3.9	4.1	4.3	4.5	4.7	4.8	4.8
144. April 26, 2019				3.9	4.1	4.2	4.3	4.4	4.5	4.5
145. July 26, 2019					3.7	3.8	3.9	3.9	4.0	4.1
146. October 30, 2019						3.7	3.8	3.8	3.9	3.9
147. January 30, 2020							3.5	3.6	3.8	3.9

**Table 4: Predicted and Actual Values for Four-Quarter Real Growth**

Table 4  
Predicted and Actual Values of the Growth Rate of Real GDP  
Over the First Four Quarters of the Forecast Period

	Act.	Pred.	Pred.-Act.	Period
1. September 23, 1983	8.0	7.4	-0.6	833-842
2. December 3, 1983	6.9	6.1	-0.8	834-843
3. January 28, 1984	5.6	6.1	0.5	841-844
4. April 24, 1984	4.6	4.7	0.1	842-851
5. July 26, 1984	3.7	4.8	1.1	843-852
6. October 24, 1984	4.3	3.2	-1.1	844-853
7. January 24, 1985	4.2	4.6	0.4	851-854
8. April 20, 1985	4.1	3.9	-0.2	852-861
9. July 22, 1985	3.7	4.1	0.4	853-862
10. October 22, 1985	3.1	4.2	1.1	854-863
11. January 27, 1986	2.9	3.5	0.6	861-864
12. April 21, 1986	2.7	4.1	1.4	862-871
13. July 28, 1986	3.4	4.3	0.9	863-872
14. October 25, 1987	3.3	3.8	0.5	864-873
15. January 25, 1987	4.5	3.5	-1.0	871-874
16. May 4, 1987	4.2	3.3	-0.9	872-881
17. July 30, 1987	4.5	3.2	-1.3	873-882
18. October 31, 1987	4.2	2.7	-1.5	874-883
19. January 30, 1988	3.8	2.9	-0.9	881-884
20. April 28, 1988	4.3	3.1	-1.2	882-891
21. July 29, 1988	3.7	3.4	-0.3	883-892
22. October 28, 1988	3.9	3.6	-0.3	884-893
23. January 31, 1989	2.7	3.5	0.8	891-894
24. April 27, 1989	2.8	3.0	0.2	892-901
25. July 30, 1989	2.4	2.5	0.1	893-902
26. October 29, 1989	1.7	2.8	1.1	894-903
27. January 31, 1990	0.6	2.4	1.8	901-904
28. May 1, 1990	-1.0	2.8	3.8	902-911
29. July 31, 1990	-0.5	2.0	2.5	903-912
30. November 2, 1990	-0.1	0.8	0.9	904-913
31. January 30, 1991	1.2	2.5	1.3	911-914
32. April 29, 1991	2.9	2.5	-0.4	912-921
33. July 27, 1991	3.2	2.6	-0.6	913-922
34. October 30, 1991	3.7	3.1	-0.6	914-923
35. February 2, 1992	4.4	3.2	-1.2	921-924
36. April 30, 1992	3.3	4.4	1.1	922-931
37. August 5, 1992	2.8	3.4	0.6	923-932
38. November 6, 1992	2.3	3.3	1.0	924-933
39. January 31, 1993	2.6	3.1	0.5	931-934
40. May 1, 1993	3.4	2.8	-0.6	932-941
41. September 5, 1993	4.2	2.5	-1.7	933-942
42. November 1, 1993	4.3	2.9	-1.4	934-943
43. February 2, 1994	4.1	3.1	-1.0	941-944
44. May 2, 1994	3.5	2.7	-0.8	942-951

45. August 2, 1994	2.4	2.1	-0.3	943-952
46. November 1, 1994	2.7	2.0	-0.7	944-953
47. January 30, 1995	2.2	1.9	-0.3	951-954
48. April 29, 1995	2.6	2.5	-0.1	952-961
49. July 29, 1995	4.0	2.4	-1.6	953-962
50. October 28, 1995	4.0	2.4	-1.6	954-963
51. February 19, 1996	4.4	2.5	-1.9	961-964
52. May 3, 1996	4.3	2.7	-1.6	962-971
53. August 2, 1996	4.3	2.3	-2.0	963-972
54. November 1, 1996	4.7	2.4	-2.3	964-973
55. February 1, 1997	4.5	2.5	-2.0	971-974
56. May 9, 1997	4.9	2.7	-2.2	972-981
57. August 4, 1997	4.1	2.0	-2.1	973-982
58. November 11, 1997	4.1	2.9	-1.2	974-983
59. January 30, 1998	4.9	2.5	-2.4	981-984
60. April 30, 1998	4.8	2.5	-2.3	982-991
61. July 31, 1998	4.7	2.0	-2.7	983-992
62. November 3, 1998	4.8	0.9	-3.9	984-993
63. January 30, 1999	4.8	2.3	-2.5	991-994
64. May 1, 1999	4.2	3.0	-1.2	992-001
65. July 30, 1999	5.2	3.3	-1.9	993-002
66. November 5, 1999	4.0	3.3	-0.7	994-003
67. January 29, 2000	2.9	2.9	0.0	001-004
68. April 28, 2000	2.2	3.5	1.3	002-011
69. July 31, 2000	1.0	2.5	1.5	003-012
70. October 30, 2000	0.5	2.6	2.1	004-013
71. January 31, 2001	0.2	1.0	0.8	011-014
72. April 27, 2001	1.3	2.2	0.9	012-021
73. July 27, 2001	1.3	1.7	0.4	013-022
74. November 1, 2001	2.1	0.5	-1.6	014-023
75. January 31, 2002	2.0	2.4	0.4	021-024
76. April 27, 2002	1.7	3.2	1.5	022-031
77. July 31, 2002	2.0	2.6	0.6	023-032
78. October 31, 2002	3.2	2.5	-0.7	024-033
79. January 30, 2003	4.3	2.8	-1.5	031-034
80. April 25, 2003	4.4	2.9	-1.5	032-041
81. July 31, 2003	4.2	3.6	-0.6	033-042
82. October 31, 2003	3.5	3.9	0.4	034-043
83. February 5, 2004	3.4	3.8	0.4	041-044
84. April 29, 2004	3.9	3.7	-0.2	042-051
85. July 31, 2004	3.6	3.4	-0.2	043-052
86. October 29, 2004	3.4	3.1	-0.3	044-053
87. January 28, 2005	3.0	3.2	0.2	051-054
88. April 29, 2005	3.2	2.3	-0.9	052-061
89. July 30, 2005	3.0	2.9	-0.1	053-062
90. October 31, 2005	2.3	3.1	0.8	054-063
91. January 28, 2006	2.6	2.9	0.3	061-064
92. April 28, 2006	1.5	2.9	1.4	062-071
93. July 28, 2006	1.9	2.2	0.3	063-072
94. October 27, 2006	2.4	2.5	0.1	064-073
95. January 31, 2007	2.2	2.8	0.6	071-074
96. April 27, 2007	1.4	3.0	1.6	072-081
97. July 27, 2007	1.4	3.6	2.2	073-082
98. October 31, 2007	0.2	3.1	2.9	074-083
99. January 31, 2008	-2.5	2.7	5.2	081-084
100. April 30, 2008	-3.3	3.1	6.4	082-091
101. July 31, 2008	-4.0	3.2	7.2	083-092
102. October 30, 2008	-3.1	0.1	3.2	084-093
103. February 5, 2009	0.1	-0.1	-0.2	091-094
104. April 30, 2009	1.8	1.3	-0.5	092-101
105. August 24, 2009	2.9	2.1	-0.8	093-102
106. October 29, 2009	3.3	4.0	0.7	094-103
107. January 30, 2010	2.8	3.9	1.1	101-104
108. April 30, 2010	2.0	3.5	1.5	102-111
109. July 30, 2010	1.7	3.1	1.4	103-112
110. October 29, 2010	0.9	2.9	2.0	104-113

111. January 29, 2011	1.5	4.4	2.9	111-114
112. April 28, 2011	2.6	4.4	1.8	112-121
113. July 31, 2011	2.4	4.4	2.0	113-122
114. October 30, 2011	2.6	3.8	1.2	114-123
115. January 28, 2012	1.6	4.2	2.6	121-124
116. April 27, 2012	1.6	4.8	3.2	122-131
117. July 27, 2012	1.3	4.4	3.1	123-132
118. October 26, 2012	1.9	4.2	2.3	124-133
119. January 30, 2013	2.5	4.3	1.8	131-134
120. April 26, 2013	1.3	3.9	2.6	132-141
121. August 5, 2013	2.5	4.5	2.0	133-142
122. November 11, 2013	2.8	3.4	0.6	134-143
123. January 31, 2014	2.6	4.0	1.4	141-144
124. April 30, 2014	3.8	3.9	0.1	142-151
125. July 31, 2014	3.0	4.0	1.0	143-152
126. October 30, 2014	2.2	4.0	1.8	144-153
127. January 31, 2015	1.9	3.3	1.4	151-154
128. April 29, 2015	1.6	3.0	1.4	152-161
129. July 31, 2015	1.4	3.1	1.7	153-162
130. October 31, 2015	1.6	2.9	1.3	154-163
131. January 30, 2016	2.0	2.8	0.8	161-164
132. April 28, 2016	1.9	2.7	0.8	162-171
133. July 29, 2016	2.1	3.0	0.9	163-172
134. October 29, 2016	2.3	3.0	0.7	164-173
135. January 27, 2017	2.7	2.7	0.0	171-174
136. April 28, 2017	3.0	3.1	0.1	172-181
137. July 30, 2017	3.3	2.3	-1.0	173-182
138. October 29, 2017	3.1	2.3	-0.8	174-183
139. January 28, 2018	2.3	3.2	0.9	181-184
140. April 28, 2018	2.2	2.5	0.3	182-191
141. July 26, 2019	2.1	2.9	0.8	183-192
142. October 27, 2019	2.3	2.7	0.4	184-193
143. February 28, 2019	2.6	1.4	-1.2	191-194

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Mean Absolute Error 1.27

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### Table 5: Predicted and Actual Values for Four-Quarter Inflation

Table 5  
Predicted and Actual Values of the Growth Rate of the GDP Price Index Over the First Four Quarters of the Forecast Period

	Act.	Pred.	Pred.-Act.	Period
1. September 23, 1983	3.7	5.1	1.4	833-842
2. December 3, 1983	3.5	4.9	1.4	834-843
3. January 28, 1984	3.5	4.7	1.2	841-844
4. April 24, 1984	3.5	4.8	1.3	842-851
5. July 26, 1984	3.3	5.1	1.8	843-852
6. October 24, 1984	3.0	4.3	1.3	844-853
7. January 24, 1985	2.8	4.5	1.7	851-854
8. April 20, 1985	2.3	3.9	1.6	852-861
9. July 22, 1985	2.1	3.6	1.5	853-862
10. October 22, 1985	1.9	3.7	1.8	854-863
11. January 27, 1986	2.0	3.0	1.0	861-864
12. April 21, 1986	2.0	2.8	0.8	862-871
13. July 28, 1986	2.3	1.9	-0.4	863-872
14. October 25, 1987	2.6	2.1	-0.5	864-873
15. January 25, 1987	2.8	2.4	-0.4	871-874
16. May 4, 1987	3.1	2.7	-0.4	872-881
17. July 30, 1987	3.4	3.7	0.3	873-882

18. October 31, 1987	3.9	3.3	-0.6	874-883
19. January 30, 1988	3.9	3.8	-0.1	881-884
20. April 28, 1988	4.1	3.5	-0.6	882-891
21. July 29, 1988	4.2	4.1	-0.1	883-892
22. October 28, 1988	3.8	3.9	0.1	884-893
23. January 31, 1989	3.6	3.8	0.2	891-894
24. April 27, 1989	3.6	4.5	0.9	892-901
25. July 30, 1989	3.7	4.5	0.8	893-902
26. October 29, 1989	3.8	3.9	0.1	894-903
27. January 31, 1990	3.9	3.9	0.0	901-904
28. May 1, 1990	3.8	4.5	0.7	902-911
29. July 31, 1990	3.4	2.7	-0.7	903-912
30. November 2, 1990	3.3	3.6	0.3	904-913
31. January 30, 1991	3.1	3.7	0.6	911-914
32. April 29, 1991	2.5	2.6	0.1	912-921
33. July 27, 1991	2.4	4.0	1.6	913-922
34. October 30, 1991	2.1	3.0	0.9	914-923
35. February 2, 1992	2.2	2.9	0.7	921-924
36. April 30, 1992	2.3	3.0	0.7	922-931
37. August 5, 1992	2.4	2.2	-0.2	923-932
38. November 6, 1992	2.4	1.7	-0.7	924-933
39. January 31, 1993	2.3	2.0	-0.3	931-934
40. May 1, 1993	2.2	2.0	-0.2	932-941
41. September 5, 1993	2.1	2.5	0.4	933-942
42. November 1, 1993	2.2	2.0	-0.2	934-943
43. February 2, 1994	2.1	1.8	-0.3	941-944
44. May 2, 1994	2.2	1.8	-0.4	942-951
45. August 2, 1994	2.2	2.1	-0.1	943-952
46. November 1, 1994	2.0	2.3	0.3	944-953
47. January 30, 1995	2.0	2.0	0.0	951-954
48. April 29, 1995	1.9	2.5	0.6	952-961
49. July 29, 1995	1.9	2.3	0.4	953-962
50. October 28, 1995	1.8	2.4	0.6	954-963
51. February 19, 1996	1.8	1.8	0.0	961-964
52. May 3, 1996	1.7	1.9	0.2	962-971
53. August 2, 1996	1.7	1.9	0.2	963-972
54. November 1, 1996	1.8	1.7	-0.1	964-973
55. February 1, 1997	1.6	1.7	0.1	971-974
56. May 9, 1997	1.4	1.6	0.2	972-981
57. August 4, 1997	1.1	1.5	0.4	973-982
58. November 11, 1997	1.1	1.6	0.5	974-983
59. January 30, 1998	1.1	1.5	0.4	981-984
60. April 30, 1998	1.3	1.4	0.1	982-991
61. July 31, 1998	1.4	1.7	0.3	983-992
62. November 3, 1998	1.3	1.5	0.2	984-993
63. January 30, 1999	1.6	1.5	-0.1	991-994
64. May 1, 1999	2.0	1.6	-0.4	992-001
65. July 30, 1999	2.2	2.0	-0.2	993-002
66. November 5, 1999	2.4	2.8	0.4	994-003
67. January 29, 2000	2.4	3.2	0.8	001-004
68. April 28, 2000	2.4	3.6	1.2	002-011
69. July 31, 2000	2.5	3.2	0.7	003-012
70. October 30, 2000	2.2	3.5	1.3	004-013
71. January 31, 2001	2.0	3.1	1.1	011-014
72. April 27, 2001	1.6	3.0	1.4	012-021
73. July 27, 2001	1.3	2.7	1.4	013-022
74. November 1, 2001	1.5	1.5	0.0	014-023
75. January 31, 2002	1.7	1.7	0.0	021-024
76. April 27, 2002	2.0	1.7	-0.3	022-031
77. July 31, 2002	1.9	1.6	-0.3	023-032
78. October 31, 2002	2.0	2.1	0.1	024-033
79. January 30, 2003	2.0	2.0	0.0	031-034
80. April 25, 2003	2.3	2.1	-0.2	032-041
81. July 31, 2003	2.7	2.1	-0.6	033-042
82. October 31, 2003	2.8	2.5	-0.3	034-043
83. February 5, 2004	3.0	2.4	-0.6	041-044



84. April 29, 2004	3.0	2.9	-0.1	042-051
85. July 31, 2004	2.9	3.1	0.2	043-052
86. October 29, 2004	3.2	3.1	-0.1	044-053
87. January 28, 2005	3.3	3.5	0.2	051-054
88. April 29, 2005	3.2	3.6	0.4	052-061
89. July 30, 2005	3.4	4.1	0.7	053-062
90. October 31, 2005	3.2	4.4	1.2	054-063
91. January 28, 2006	2.7	4.1	1.4	061-064
92. April 28, 2006	2.9	4.2	1.3	062-071
93. July 28, 2006	2.7	4.3	1.6	063-072
94. October 27, 2006	2.5	4.5	2.0	064-073
95. January 31, 2007	2.6	4.2	1.6	071-074
96. April 27, 2007	2.1	4.0	1.9	072-081
97. July 27, 2007	1.8	4.3	2.5	073-082
98. October 31, 2007	2.1	4.5	2.4	074-083
99. January 31, 2008	1.9	4.0	2.1	081-084
100. April 30, 2008	1.3	3.9	2.6	082-091
101. July 31, 2008	0.8	5.2	4.4	083-092
102. October 30, 2008	0.1	5.0	4.9	084-093
103. February 5, 2009	0.2	2.4	2.2	091-094
104. April 30, 2009	0.5	0.9	0.4	092-101
105. August 24, 2009	1.2	-0.2	-1.4	093-102
106. October 29, 2009	1.4	0.8	-0.6	094-103
107. January 30, 2010	1.7	1.7	0.0	101-104
108. April 30, 2010	1.9	2.1	0.2	102-111
109. July 30, 2010	2.1	1.6	-0.5	103-112
110. October 29, 2010	2.4	1.2	-1.2	104-113
111. January 29, 2011	1.9	2.4	0.5	111-114
112. April 28, 2011	2.0	3.4	1.4	112-121
113. July 31, 2011	1.8	3.4	1.6	113-122
114. October 30, 2011	1.7	3.0	1.3	114-123
115. January 28, 2012	2.0	2.2	0.2	121-124
116. April 27, 2012	1.8	2.8	1.0	122-131
117. July 27, 2012	1.7	2.5	0.8	123-132
118. October 26, 2012	1.7	2.2	0.5	124-133
119. January 30, 2013	1.8	2.6	0.8	131-134
120. April 26, 2013	1.8	2.5	0.7	132-141
121. August 5, 2013	2.1	2.4	0.3	133-142
122. November 11, 2013	2.0	2.2	0.2	134-143
123. January 31, 2014	1.6	2.4	0.8	141-144
124. April 30, 2014	1.1	2.4	1.3	142-151
125. July 31, 2014	1.1	2.6	1.5	143-152
126. October 30, 2014	1.0	2.7	1.7	144-153
127. January 31, 2015	0.8	2.2	1.4	151-154
128. April 29, 2015	0.8	1.5	0.7	152-161
129. July 31, 2015	0.9	1.2	0.3	153-162
130. October 31, 2015	0.8	1.3	0.5	154-163
131. January 30, 2016	1.4	1.4	0.0	161-164
132. April 28, 2016	2.0	1.0	-1.0	162-171
133. July 29, 2016	1.7	1.2	-0.5	163-172
134. October 29, 2016	1.9	1.1	-0.8	164-173
135. January 27, 2017	2.0	1.9	-0.1	171-174
136. April 28, 2017	2.1	1.7	-0.4	172-181
137. July 30, 2017	2.6	1.6	-1.0	173-182
138. October 29, 2017	2.5	1.8	-0.7	174-183
139. January 28, 2018	2.3	2.2	-0.1	181-184
140. April 28, 2018	2.1	2.4	0.3	182-191
141. July 26, 2019	1.8	2.6	0.8	183-192
142. October 27, 2019	1.7	2.7	1.0	184-193
143. February 28, 2019	1.6	2.4	0.8	191-194

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Mean Absolute Error

0.77