

Macroeconomic Outlook Alternative Scenarios

July 2009

Confidence Rebounds, Quicker Recovery (“S1”) Scenario

This above-baseline scenario is designed so that there is a 10% probability that the economy will perform better than in this scenario, broadly speaking, and a 90% probability that it will perform worse.

The upside scenario, “Confidence Rebounds, Quicker Recovery Scenario,” is based on the assumption that growing signs of the end of the recession cause consumer confidence and the stock market to rebound more strongly over the remainder of 2009.

Additionally, the stimulus proves particularly effective in terms of job creation. Also, federal financial policy actions, including foreclosure mitigation, Federal Reserve easing and other initiatives, and the decline in house prices to date, result in increased access to credit and improved affordability. As a result, remaining declines in house prices are limited. House prices bottom out in the first quarter of 2010, resulting in a peak-to-trough decline of 29%, based on the National Association of Realtors’ median sale price measure. Better demand

and improved confidence help to propel total new permits back above the 1 million units range by the third quarter of 2010, several quarters earlier than in the baseline.

Payroll employment declines much more slowly than in the baseline. On a quarterly average basis, the unemployment rate peaks at 9.3% before the end of 2009, 0.8 of a percentage point lower than the baseline peak, which occurs in the second quarter of 2010.

The Federal Reserve begins to tighten modestly toward the end of 2009 and raises interest rates more steadily between mid-2010 and 2012.

Real GDP bottoms out in the second quarter of 2009, as in the baseline, but the ensuing growth immediately following the trough is somewhat better. Moreover, in the year following the trough, real GDP grows by 2.3%, more than twice as fast as the baseline, and the pace accelerates in 2010. On an annual average basis, real GDP growth is -2.4% in 2009 and 2.5% in 2010.

U.S. MACRO S1 SCENARIO—DIFFERENCE FROM BASELINE

	Units	09Q2	09Q3	09Q4	10Q1	2009	2010	2011	2012	2013
Gross Domestic Product	bcw\$	11.2	46.1	82.4	119.3	34.9	164.1	240.9	144.9	89.7
Change	%AR	0.4	1.2	1.3	1.3	0.3	1.1	0.6	-0.9	-0.5
Federal Budget	bil \$	-0.0	2.5	6.4	10.6	8.9	60.3	81.7	35.4	-3.6
Total Employment	mil	0.5	0.9	1.1	1.2	0.6	1.0	0.1	-0.6	-0.8
Change	%AR	1.4	1.2	0.7	0.2	0.5	0.3	-0.7	-0.5	-0.1
Unemployment Rate	%	-0.1	-0.5	-0.8	-1.1	-0.3	-1.4	-1.4	-0.5	-0.0
Light Vehicle Sales	mil, SAAR	0.0	0.9	1.6	2.1	0.6	2.5	2.1	0.3	0.1
Residential Housing Starts	mil, SAAR	0.00	0.04	0.07	0.10	0.03	0.24	0.49	0.08	-0.01
Median Existing-House Price	ths \$	1.7	10.0	14.2	15.5	6.5	17.4	14.6	7.1	1.8
Change	%YA	0.8	5.1	7.8	8.9	3.3	7.0	-2.2	-5.3	-3.4
Consumer Price Index	%AR	-0.0	0.4	0.5	-0.2	0.1	0.0	-0.1	0.3	0.3
Federal Funds Rate	%	0.3	0.4	0.7	1.0	0.3	1.2	1.0	0.2	-0.0
Treasury Yield: 10-Year Bond	%	0.06	0.15	0.24	0.34	0.11	0.37	0.28	0.14	0.18
Baa Corp. - 10Y Treasury	DIFF	-6.6	-6.9	-7.2	-7.9	-6.6	-9.0	-10.5	-9.8	-9.6
Corporate Profits With IVA & CCA	bil \$	4.5	16.5	26.1	32.8	11.8	39.6	50.2	17.4	2.6
Change	%YA	0.3	1.1	2.1	2.5	0.8	2.2	0.5	-2.8	-1.0
S&P 500	1941=10	53.4	94.9	104.4	43.7	63.2	27.8	4.9	-0.0	-0.0
Change	%YA	3.9	7.6	11.5	5.4	5.2	-5.6	-2.1	-0.4	-0.0

U.S. MACRO S1 SCENARIO—FORECAST SUMMARY

	Units	09Q2	09Q3	09Q4	10Q1	2009	2010	2011	2012	2013
Gross Domestic Product	bcw\$	11,319.2	11,383.8	11,425.7	11,496.6	11,372.3	11,649.6	12,226.6	12,827.0	13,269.6
Change	%AR	-1.4	2.3	1.5	2.5	-2.4	2.4	5.0	4.9	3.5
Federal Budget	bil \$	-319.0	-557.6	-569.8	-665.9	-1,895.4	-1,759.9	-1,478.1	-988.9	-765.3
Total Employment	mil	132.6	132.1	131.9	131.6	132.6	131.7	133.7	137.7	141.9
Change	%AR	-3.2	-1.5	-0.6	-0.7	-3.3	-0.7	1.5	3.0	3.0
Unemployment Rate	%	9.2	9.3	9.2	9.0	8.9	8.6	7.4	6.4	5.7
Light Vehicle Sales	mil, SAAR	9.7	10.9	12.0	13.0	10.5	14.3	16.1	16.4	17.0
Residential Housing Starts	mil, SAAR	0.55	0.61	0.68	0.77	0.59	0.99	1.63	1.85	1.83
Median Existing-House Price	ths \$	164.8	163.0	161.7	160.9	165.9	161.6	165.2	170.2	175.3
Change	%YA	-18.5	-16.5	-10.9	-7.6	-15.3	-2.6	2.2	3.0	3.0
Consumer Price Index	%AR	1.5	2.4	1.9	1.3	-0.5	1.6	1.9	2.3	2.2
Federal Funds Rate	%	0.5	0.7	0.9	1.3	0.6	1.7	3.3	4.3	4.5
Treasury Yield: 10-Year Bond	%	3.32	3.59	3.81	4.23	3.36	4.78	5.43	5.03	4.96
Baa Corp. - 10Y Treasury	DIFF	4.7	4.4	4.4	3.9	4.8	3.3	2.6	2.6	2.7
Corporate Profits With IVA & CCA	bil \$	1,293.0	1,304.6	1,295.1	1,290.0	1,301.3	1,304.8	1,426.8	1,592.2	1,692.9
Change	%YA	-15.7	-13.9	2.4	-1.7	-11.9	0.3	9.3	11.6	6.3
S&P 500	1941=10	945.7	992.1	1,067.3	1,120.2	953.6	1,178.0	1,248.8	1,337.2	1,403.7
Change	%YA	-31.1	-20.8	17.3	38.4	-21.9	23.5	6.0	7.1	5.0

Longer Recession, Weaker Recovery (“S2”) Scenario

In this recession scenario, in which the downturn is deeper and longer-lasting than the baseline, there is a 75% probability that economic conditions will be better, broadly speaking, and a 25% probability that conditions will be worse.

The downside 25% scenario, “Longer Recession, Weaker Recovery Scenario,” is based on the assumption that the contractions in the housing and labor markets are somewhat deeper and longer-lasting than in the baseline. In this scenario, real GDP falls from the third quarter of 2008 until the second quarter of 2010, the overall decline is larger, and the recovery slower.

In this scenario, the stimulus is less effective in creating jobs. Further, although financial policy initiatives such as foreclosure mitigation are put in place and access to credit improves, the improvement is too gradual to allow a significant rebound in the housing market until mid-2011. Foreclosures continue to weigh on house prices. Starts resume their decline, fall by 75% cumulatively from prerecession peak, and are essentially flat

for most of 2010. The NAR median sales price falls by 44% cumulatively, with downward pressure on prices until early 2011.

The effects of the longer slump in housing are felt in consumer spending, as consumers retrench to offset the extra wealth loss from the larger decline in house prices. Additionally, the deterioration in the labor market is more severe than under the baseline scenario, and the unemployment rate peaks at 12.1% in the first quarter of 2011.

Owing to the weak recovery, the Federal Reserve does not begin to tighten monetary policy until 2011 and does not begin to raise interest rates significantly until 2012.

The lack of a rebound in housing and the weakness in labor markets weigh on growth in 2009 and 2010. Real GDP falls 4.5% cumulatively before bottoming out in the second quarter of 2010. Growth is then positive, but weak, for the rest of 2010. Real GDP growth is -3% in 2009 on an annual average basis and -0.6% for 2010.

U.S. MACRO S2 SCENARIO—DIFFERENCE FROM BASELINE

	Units	09Q2	09Q3	09Q4	10Q1	2009	2010	2011	2012	2013
Gross Domestic Product	bcw\$	-4.7	-40.9	-94.6	-164.6	-35.0	-251.2	-341.8	-294.7	-123.8
Change	%AR	-0.2	-1.3	-1.9	-2.5	-0.3	-1.9	-0.7	0.6	1.5
Federal Budget	bil \$	0.0	-1.1	-3.9	-9.1	-5.0	-80.6	-209.1	-266.1	-250.2
Total Employment	mil	-0.1	-0.2	-0.5	-1.0	-0.2	-1.7	-3.6	-4.0	-3.2
Change	%AR	-0.2	-0.4	-1.0	-1.3	-0.1	-1.1	-1.5	-0.2	0.7
Unemployment Rate	%	0.1	0.1	0.4	0.7	0.2	1.5	3.0	3.1	2.3
Light Vehicle Sales	mil, SAAR	0.0	-1.0	-1.4	-2.0	-0.6	-2.2	-0.6	0.4	0.0
Residential Housing Starts	mil, SAAR	-0.01	-0.05	-0.11	-0.18	-0.04	-0.25	-0.38	-0.27	0.07
Median Existing-House Price	ths \$	-1.0	-1.6	-1.1	-4.6	-0.9	-10.8	-22.4	-21.1	-12.3
Change	%YA	-0.5	-0.8	-0.6	-2.6	-0.5	-6.3	-8.4	2.4	7.2
Consumer Price Index	%AR	-0.2	-0.9	-0.2	-0.2	-0.2	-0.3	0.2	0.1	-0.0
Federal Funds Rate	%	-0.0	-0.0	-0.0	-0.1	-0.0	-0.2	-1.4	-1.5	-0.4
Treasury Yield: 10-Year Bond	%	-0.03	-0.07	-0.11	-0.13	-0.05	-0.24	-0.61	-0.61	-0.22
Baa Corp. - 10Y Treasury	DIFF	-6.5	-6.9	-7.1	-7.7	-6.5	-8.7	-10.0	-9.5	-9.6
Corporate Profits With IVA & CCA	bil \$	-4.3	-18.9	-36.2	-52.4	-14.9	-68.3	-68.3	-34.2	49.6
Change	%YA	-0.3	-1.3	-2.9	-4.0	-1.0	-4.2	0.5	3.4	5.6
S&P 500	1941=10	-14.2	-49.7	-89.0	-92.9	-38.2	-75.9	-6.5	-0.0	-0.0
Change	%YA	-1.0	-4.0	-9.8	-11.5	-3.1	-3.1	7.0	0.6	-0.0

U.S. MACRO S2 SCENARIO—FORECAST SUMMARY

	Units	09Q2	09Q3	09Q4	10Q1	2009	2010	2011	2012	2013
Gross Domestic Product	bcw\$	11,303.4	11,296.8	11,248.6	11,212.6	11,302.3	11,234.3	11,643.9	12,387.4	13,056.2
Change	%AR	-2.0	-0.2	-1.7	-1.3	-3.0	-0.6	3.6	6.4	5.4
Federal Budget	bil \$	-319.0	-561.2	-580.2	-685.5	-1,909.3	-1,900.8	-1,768.9	-1,290.4	-1,011.9
Total Employment	mil	132.0	131.0	130.2	129.5	131.7	128.9	129.9	134.3	139.5
Change	%AR	-4.7	-3.1	-2.3	-2.3	-3.9	-2.1	0.7	3.4	3.8
Unemployment Rate	%	9.3	9.9	10.4	10.8	9.4	11.5	11.8	10.0	8.1
Light Vehicle Sales	mil, SAAR	9.7	9.1	8.9	8.9	9.3	9.5	13.5	16.5	16.9
Residential Housing Starts	mil, SAAR	0.54	0.53	0.50	0.49	0.52	0.50	0.76	1.50	1.92
Median Existing-House Price	ths \$	162.1	151.4	146.5	140.8	158.6	133.5	128.2	141.9	161.2
Change	%YA	-19.9	-22.4	-19.3	-19.2	-19.0	-15.8	-4.0	10.7	13.6
Consumer Price Index	%AR	1.3	1.1	1.2	1.3	-0.7	1.3	2.1	2.1	1.9
Federal Funds Rate	%	0.2	0.2	0.2	0.2	0.2	0.3	0.9	2.5	4.1
Treasury Yield: 10-Year Bond	%	3.23	3.37	3.46	3.76	3.20	4.17	4.54	4.27	4.56
Baa Corp. - 10Y Treasury	DIFF	4.7	4.5	4.6	4.1	4.8	3.6	3.1	2.9	2.7
Corporate Profits With IVA & CCA	bil \$	1,284.2	1,269.2	1,232.8	1,204.9	1,274.7	1,196.9	1,308.3	1,540.6	1,739.9
Change	%YA	-16.2	-16.2	-2.5	-8.2	-13.7	-6.1	9.3	17.8	12.9
S&P 500	1941=10	878.0	847.6	873.9	983.5	852.2	1,074.3	1,237.5	1,337.2	1,403.7
Change	%YA	-36.0	-32.3	-3.9	21.5	-30.2	26.1	15.2	8.1	5.0

Prolonged Credit Squeeze, Very Severe Recession (“S3”) Scenario

In this very severe recession scenario, there is a 90% probability that the economy will perform better, broadly speaking, and a 10% probability that it will perform worse.

The downside 10% scenario, “Prolonged Credit Squeeze, Very Recession Scenario,” is due to the continuation of very tight credit in the current financial crisis, as the banking system remains under heavy pressure. Additional foreclosure mitigation policies are unproductive. The federal stimulus is relatively ineffective at creating jobs. Because of the persistent problems in the financial system, the difficulty that firms and consumers encounter obtaining loans extends for a longer time, weighing on spending and investment.

As a result of restricted access to credit, the housing market slump is considerably more protracted than in the baseline. Starts resume their decline and fall nearly 80% from their prerecession peak, finally bottoming out in early 2011. No significant recovery begins until 2012. Prices, as measured by the NAR median sales price, fall 48% peak to trough before bottoming out in mid-2011. With the economy weak, the Federal Reserve keeps the fed funds target

rate below 1% from 2009 through 2011. No significant tightening occurs until mid-2012.

The lack of credit availability and the worse labor market lead to a significantly bigger drop in motor vehicle sales, which average well below 10 million units per year during the period from 2009 through 2011. As a result of the consumer weakness and restricted access to credit, business investment falls sharply throughout 2009 and 2010. Additionally, deeper global contraction than in the baseline causes exports to decline further and for all of 2009 and 2010.

The economy experiences a far longer and deeper recession than in the baseline. Real GDP falls from the third quarter of 2008 through the end of 2010, with a peak-to-trough decline of 5.7%. A weak recovery begins in the first quarter of 2011. Real growth is -3.4% for 2009 and -2.4% for 2010. The deeper contraction in the labor market causes the unemployment rate to hit a peak of 13.6% in the third quarter of 2011. The severe weakness results in consumer price deflation from the end of 2008 through the end of 2010.

U.S. MACRO S3 SCENARIO—DIFFERENCE FROM BASELINE

	Units	09Q2	09Q3	09Q4	10Q1	2009	2010	2011	2012	2013
Gross Domestic Product	bcw\$	-54.7	-98.3	-185.3	-237.5	-84.6	-385.5	-810.8	-986.9	-756.8
Change	%AR	-1.9	-1.5	-3.1	-1.9	-0.7	-2.7	-3.7	-1.2	2.3
Federal Budget	bil \$	-0.5	-2.6	-6.7	-11.6	-9.8	-93.8	-299.9	-449.3	-397.7
Total Employment	mil	-0.3	-0.8	-1.5	-2.3	-0.6	-3.4	-7.3	-8.7	-6.2
Change	%AR	-0.9	-1.4	-2.2	-2.3	-0.5	-2.1	-3.0	-0.9	2.2
Unemployment Rate	%	0.1	0.3	0.8	1.2	0.3	2.2	4.6	5.7	4.9
Light Vehicle Sales	mil, SAAR	0.0	-1.2	-1.9	-2.6	-0.8	-3.4	-4.8	-5.0	-2.7
Residential Housing Starts	mil, SAAR	-0.01	-0.13	-0.21	-0.31	-0.09	-0.41	-0.81	-0.97	-0.41
Median Existing-House Price	ths \$	-0.9	-1.8	-2.7	-6.5	-1.4	-13.4	-31.4	-40.8	-38.5
Change	%YA	-0.5	-0.9	-1.5	-3.7	-0.7	-7.7	-13.4	-5.7	4.0
Consumer Price Index	%AR	-1.0	-3.2	-3.0	-2.8	-0.8	-2.5	-0.2	0.5	-0.1
Federal Funds Rate	%	-0.0	-0.0	-0.1	-0.1	-0.0	-0.3	-1.8	-2.9	-2.3
Treasury Yield: 10-Year Bond	%	-0.11	-0.30	-0.53	-0.74	-0.24	-1.04	-1.65	-2.03	-1.76
Baa Corp. - 10Y Treasury	DIFF	-6.4	-6.2	-6.2	-6.6	-6.1	-7.4	-8.3	-7.4	-7.7
Corporate Profits With IVA & CCA	bil \$	-33.9	-54.2	-88.7	-99.9	-44.2	-133.2	-201.5	-217.3	-116.5
Change	%YA	-2.2	-3.6	-7.0	-7.6	-3.0	-7.2	-5.0	1.1	8.6
S&P 500	1941=10	-22.6	-87.4	-133.6	-174.1	-60.9	-123.0	-28.3	-24.2	-10.4
Change	%YA	-1.6	-7.0	-14.7	-21.5	-5.0	-5.3	10.2	0.5	1.1

U.S. MACRO S3 SCENARIO—FORECAST SUMMARY

	Units	09Q2	09Q3	09Q4	10Q1	2009	2010	2011	2012	2013
Gross Domestic Product	bcw\$	11,253.3	11,239.4	11,157.9	11,139.8	11,252.8	11,100.0	11,174.9	11,695.2	12,423.1
Change	%AR	-3.7	-0.5	-2.9	-0.6	-3.4	-1.4	0.7	4.7	6.2
Federal Budget	bil \$	-319.5	-562.8	-583.0	-688.0	-1,914.2	-1,914.0	-1,859.8	-1,473.6	-1,159.4
Total Employment	mil	131.8	130.4	129.3	128.2	131.3	127.2	126.2	129.6	136.4
Change	%AR	-5.4	-4.1	-3.5	-3.2	-4.2	-3.1	-0.8	2.6	5.3
Unemployment Rate	%	9.4	10.1	10.8	11.3	9.6	12.2	13.5	12.5	10.6
Light Vehicle Sales	mil, SAAR	9.7	8.8	8.4	8.3	9.1	8.4	9.2	11.1	14.2
Residential Housing Starts	mil, SAAR	0.53	0.44	0.40	0.36	0.48	0.34	0.33	0.80	1.43
Median Existing-House Price	ths \$	162.1	151.2	144.9	138.9	158.1	130.9	119.1	122.2	135.0
Change	%YA	-19.9	-22.5	-20.2	-20.3	-19.2	-17.2	-9.0	2.6	10.4
Consumer Price Index	%AR	0.5	-1.3	-1.6	-1.2	-1.4	-0.9	1.8	2.5	1.8
Federal Funds Rate	%	0.2	0.2	0.2	0.2	0.2	0.2	0.5	1.2	2.2
Treasury Yield: 10-Year Bond	%	3.15	3.14	3.04	3.15	3.02	3.37	3.50	2.85	3.02
Baa Corp. - 10Y Treasury	DIFF	4.8	5.2	5.5	5.2	5.2	4.9	4.8	5.1	4.5
Corporate Profits With IVA & CCA	bil \$	1,254.6	1,234.0	1,180.2	1,157.3	1,245.3	1,132.0	1,175.0	1,357.5	1,573.8
Change	%YA	-18.2	-18.5	-6.7	-11.8	-15.7	-9.1	3.8	15.5	15.9
S&P 500	1941=10	869.7	809.9	829.3	902.3	829.5	1,027.2	1,215.7	1,313.0	1,393.2
Change	%YA	-36.6	-35.3	-8.8	11.5	-32.1	23.8	18.3	8.0	6.1

Complete Collapse, Depression (“S4”) Scenario

With this depression scenario, there is a 96% probability that the economy will perform better, broadly speaking, and a 4% probability that it will perform worse.

The downside 4% scenario, “Complete Collapse, Depression Scenario,” is caused by a total drying up of credit for an extended time. The stimulus is ineffective, and the federal government reaches the limit of its resources to boost the economy, rendering it unable to prevent a long-running, deep economic slump. Additionally, global contraction causes exports to decline steadily for several years.

In the housing market, no meaningful additional foreclosure mitigation policies are enacted. Businesses are unable to obtain capital to invest, and consumers cannot find access to credit to purchase homes and durable goods such as vehicles. This leads to a prolonged slump in the housing market and large contractions in both consumer spending and business investment.

Housing starts fall by nearly 90% cumulatively from their peak prerecession peak. Although they finally bottom

out in early 2011, the increase is at a snail's pace throughout 2011 and 2012. The NAR median existing sales price falls by 51% cumulatively through the third quarter of 2012. Reduced household wealth and the complete lack of credit cause consumers to pull back sharply on their spending. Unit auto sales plunge and average no more than half of their baseline levels for four full years. Business investment falls precipitously throughout 2009, to 36% below its peak by the first quarter of 2011, and does not begin to strengthen meaningfully until mid-2012.

Real GDP falls from the third quarter of 2008 until the first quarter of 2011, cumulatively declining by 7.4% peak to trough. Real GDP growth is -3.8% in 2009 and -2.4% in 2010. The unemployment rate reaches a high of 15.7% in mid-2012 and remains in double digits until 2015. The extreme weakness results in consumer price deflation throughout all of 2009 and 2010 at a rate averaging nearly 2% per year.

Moreover, when recovery does begin, it is at best moderate. U.S. economic activity remains below full-capacity performance for a decade.

U.S. MACRO S4 SCENARIO—DIFFERENCE FROM BASELINE

	Units	09Q2	09Q3	09Q4	10Q1	2009	2010	2011	2012	2013
Gross Domestic Product	bcw\$	-74.3	-179.2	-278.5	-375.7	-133.0	-549.2	-1037.5	-1326.8	-1219.0
Change	%AR	-2.6	-3.7	-3.5	-3.5	-1.1	-3.7	-4.2	-2.1	1.4
Federal Budget	bil \$	-0.7	-4.2	-9.4	-15.7	-14.3	-123.0	-375.1	-612.7	-703.9
Total Employment	mil	-0.4	-0.9	-1.6	-2.4	-0.7	-3.7	-8.0	-11.5	-11.6
Change	%AR	-1.1	-1.4	-2.3	-2.5	-0.5	-2.3	-3.3	-2.6	0.2
Unemployment Rate	%	0.4	0.6	1.3	1.9	0.6	3.2	6.3	8.8	8.5
Light Vehicle Sales	mil, SAAR	0.0	-1.7	-2.5	-3.3	-1.0	-4.3	-6.3	-8.1	-8.1
Residential Housing Starts	mil, SAAR	-0.02	-0.16	-0.25	-0.35	-0.11	-0.47	-0.91	-1.27	-0.92
Median Existing-House Price	ths \$	-0.9	-2.7	-5.3	-10.2	-2.2	-17.4	-36.8	-51.5	-53.7
Change	%YA	-0.5	-1.4	-2.9	-5.9	-1.1	-9.8	-14.6	-10.3	1.0
Consumer Price Index	%AR	-1.4	-4.4	-5.0	-4.1	-1.1	-3.8	-1.4	0.1	0.6
Federal Funds Rate	%	-0.0	-0.0	-0.1	-0.1	-0.0	-0.3	-2.0	-3.5	-3.6
Treasury Yield: 10-Year Bond	%	-0.15	-0.45	-0.80	-1.13	-0.35	-1.58	-2.50	-3.20	-3.00
Baa Corp. - 10Y Treasury	DIFF	-6.4	-5.9	-5.8	-6.1	-5.9	-6.7	-7.3	-6.1	-6.2
Corporate Profits With IVA & CCA	bil \$	-45.4	-93.1	-130.4	-157.2	-67.2	-191.6	-264.7	-301.7	-223.1
Change	%YA	-3.0	-6.1	-10.3	-12.0	-4.6	-10.3	-5.2	0.1	7.9
S&P 500	1941=10	-66.5	-191.0	-249.5	-309.5	-126.7	-264.1	-77.9	-40.3	-32.2
Change	%YA	-4.8	-15.3	-27.4	-38.2	-10.4	-13.1	23.4	3.7	0.8

U.S. MACRO S4 SCENARIO—FORECAST SUMMARY

	Units	09Q2	09Q3	09Q4	10Q1	2009	2010	2011	2012	2013
Gross Domestic Product	bcw\$	11,233.7	11,158.5	11,064.7	11,001.5	11,204.4	10,936.3	10,948.1	11,355.3	11,960.9
Change	%AR	-4.4	-2.7	-3.3	-2.3	-3.8	-2.4	0.1	3.7	5.3
Federal Budget	bil \$	-319.7	-564.3	-585.7	-692.1	-1,918.6	-1,943.2	-1,934.9	-1,637.1	-1,465.6
Total Employment	mil	131.7	130.3	129.1	128.0	131.2	126.9	125.5	126.8	131.0
Change	%AR	-5.7	-4.1	-3.6	-3.4	-4.3	-3.3	-1.1	1.0	3.4
Unemployment Rate	%	9.6	10.4	11.2	12.0	9.8	13.3	15.2	15.6	14.3
Light Vehicle Sales	mil, SAAR	9.7	8.4	7.8	7.6	8.8	7.5	7.7	7.9	8.8
Residential Housing Starts	mil, SAAR	0.53	0.41	0.36	0.32	0.46	0.28	0.23	0.50	0.92
Median Existing-House Price	ths \$	162.1	150.2	142.2	135.2	157.2	126.8	113.8	111.5	119.7
Change	%YA	-19.9	-23.0	-21.6	-22.4	-19.7	-19.3	-10.3	-2.0	7.4
Consumer Price Index	%AR	0.1	-2.4	-3.6	-2.6	-1.7	-2.2	0.6	2.1	2.5
Federal Funds Rate	%	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.6	0.9
Treasury Yield: 10-Year Bond	%	3.11	2.99	2.77	2.76	2.90	2.83	2.65	1.68	1.78
Baa Corp. - 10Y Treasury	DIFF	4.9	5.4	5.8	5.7	5.4	5.6	5.8	6.4	6.0
Corporate Profits With IVA & CCA	bil \$	1,243.1	1,195.0	1,138.5	1,100.0	1,222.3	1,073.6	1,111.9	1,273.1	1,467.2
Change	%YA	-18.9	-21.1	-10.0	-16.2	-17.2	-12.2	3.6	14.5	15.2
S&P 500	1941=10	825.8	706.3	713.4	767.0	763.7	886.1	1,166.0	1,296.9	1,371.4
Change	%YA	-39.8	-43.6	-21.6	-5.2	-37.4	16.0	31.6	11.2	5.7

Aborted Recovery, Below-Trend Long-Term Growth (“S5”) Scenario

With this low-performance long-term scenario, there is a 96% probability that the economy will perform better, broadly speaking, and a 4% probability that it will perform worse.

In the downside 4% scenario, “Aborted Recovery, Below-Trend Long-Term Growth,” the U.S. economy initially begins to recover at a pace comparable to the baseline during the second half of 2009. By early 2010, however, the existing stimulus proves inadequate, and no additional spending measures are enacted. As a result, a second recession develops, more moderate than the current one, and continues during much of the year. In other words, there is a double dip.

When the economy does begin to expand again toward the end of 2010, demand growth remains relatively weak indefinitely. Even after recovery, unit car sales and housing starts remain 15% to 25% below their long-run baselines.

As a result, both real GDP growth and inflation rates remain lower than their respective baseline trends.

Unemployment rises higher than in the baseline and remains above 10% from the beginning of 2010 through the end of 2011. Since growth is insufficient to bring the jobless rate back to full-employment levels, unemployment remains persistently higher than in the baseline. The long dislocation in the labor market hampers the typical long-term pattern of growth in worker productivity, as employees find fewer opportunities to develop their skills while on the job. The result is productivity growth below long-run trend.

Real GDP growth averages 1% per year lower than in the baseline continuously over the next five years. Although the gap subsequently closes, the annual growth rate remains below the long-run baseline trend indefinitely. Unemployment remains above 7%, more than a percentage point above the full-employment rate in the baseline.

U.S. MACRO S5 SCENARIO—DIFFERENCE FROM BASELINE

	Units	09Q2	09Q3	09Q4	10Q1	2009	2010	2011	2012	2013
Gross Domestic Product	bcw\$	0.0	0.0	-0.0	-47.0	-0.0	-177.8	-447.8	-679.5	-782.2
Change	%AR	0.0	0.0	-0.0	-1.7	-0.0	-1.6	-2.3	-1.8	-0.6
Federal Budget	bil \$	0.0	0.0	-0.0	-1.8	-0.0	-45.0	-144.9	-203.6	-256.0
Total Employment	mil	0.0	0.0	0.0	-0.3	0.0	-1.3	-3.3	-4.5	-5.3
Change	%AR	0.0	0.0	0.0	-0.9	0.0	-1.0	-1.6	-0.8	-0.5
Unemployment Rate	%	-0.0	-0.0	-0.0	0.1	-0.0	0.6	1.5	2.1	2.4
Light Vehicle Sales	mil, SAAR	0.0	0.0	0.0	-0.7	0.0	-2.1	-4.6	-6.1	-6.2
Residential Housing Starts	mil, SAAR	0.00	0.00	-0.00	-0.13	-0.00	-0.24	-0.56	-1.00	-0.83
Median Existing-House Price	ths \$	0.0	0.0	0.0	-0.8	0.0	-1.3	-4.4	-7.9	-10.9
Change	%YA	0.0	0.0	0.0	-0.4	0.0	-0.8	-2.1	-2.2	-1.6
Consumer Price Index	%AR	0.0	0.0	0.0	0.1	0.0	0.1	0.2	-0.1	-0.3
Federal Funds Rate	%	0.0	0.0	0.0	-0.0	0.0	-0.2	-1.5	-2.0	-1.3
Treasury Yield: 10-Year Bond	%	-0.00	0.00	0.00	-0.01	0.00	-0.08	-0.42	-0.58	-0.52
Baa Corp. - 10Y Treasury	DIFF	-6.5	-6.9	-7.1	-7.8	-6.5	-8.8	-10.0	-9.4	-9.3
Corporate Profits With IVA & CCA	bil \$	0.0	-0.0	-0.0	-15.9	-0.0	-49.2	-101.3	-150.6	-161.0
Change	%YA	0.0	-0.0	-0.0	-1.2	-0.0	-3.8	-3.9	-2.7	0.0
S&P 500	1941=10	0.0	0.0	-0.0	-3.5	-0.0	-10.7	-3.3	3.1	3.9
Change	%YA	0.0	0.0	-0.0	-0.4	-0.0	-1.2	0.7	0.5	0.0

U.S. MACRO S5 SCENARIO—FORECAST SUMMARY

	Units	09Q2	09Q3	09Q4	10Q1	2009	2010	2011	2012	2013
Gross Domestic Product	bcw\$	11,308.0	11,337.7	11,343.2	11,330.2	11,337.4	11,307.7	11,537.9	12,002.6	12,397.8
Change	%AR	-1.8	1.1	0.2	-0.5	-2.7	-0.3	2.0	4.0	3.3
Federal Budget	bil \$	-319.0	-560.2	-576.3	-678.3	-1,904.3	-1,865.3	-1,704.7	-1,228.0	-1,017.7
Total Employment	mil	132.1	131.2	130.8	130.2	131.9	129.4	130.2	133.8	137.4
Change	%AR	-4.6	-2.7	-1.3	-1.8	-3.7	-1.9	0.7	2.7	2.7
Unemployment Rate	%	9.2	9.8	10.0	10.2	9.3	10.6	10.3	8.9	8.2
Light Vehicle Sales	mil, SAAR	9.7	10.0	10.3	10.1	9.9	9.7	9.5	10.0	10.7
Residential Housing Starts	mil, SAAR	0.55	0.57	0.61	0.54	0.57	0.52	0.58	0.77	1.01
Median Existing-House Price	ths \$	163.1	153.0	147.6	144.6	159.5	142.9	146.2	155.1	162.5
Change	%YA	-19.4	-21.6	-18.7	-17.0	-18.6	-10.4	2.3	6.1	4.8
Consumer Price Index	%AR	1.6	1.9	1.4	1.6	-0.6	1.7	2.1	1.9	1.6
Federal Funds Rate	%	0.2	0.3	0.2	0.3	0.2	0.3	0.8	2.1	3.2
Treasury Yield: 10-Year Bond	%	3.26	3.44	3.57	3.88	3.25	4.33	4.72	4.31	4.26
Baa Corp. - 10Y Treasury	DIFF	4.7	4.5	4.5	4.0	4.8	3.5	3.0	3.0	3.0
Corporate Profits With IVA & CCA	bil \$	1,288.5	1,288.1	1,268.9	1,241.4	1,289.5	1,216.1	1,275.3	1,424.2	1,529.3
Change	%YA	-16.0	-15.0	0.3	-5.4	-12.7	-5.7	4.9	11.7	7.4
S&P 500	1941=10	892.2	897.2	962.9	1,073.0	890.4	1,139.6	1,240.7	1,340.3	1,407.6
Change	%YA	-35.0	-28.3	5.8	32.6	-27.1	28.0	8.9	8.0	5.0

Baseline Forecast Assumptions

Monetary policy. The Federal Reserve is using all of its considerable resources to support the financial system and economy. The effective federal funds rate remains near zero, and policymakers have indicated that it will stay there for an extended period, suggesting that the funds rate will not rise until at least this time next year.

The Fed is also engaging in aggressive forms of credit easing, in which it essentially prints money to buy financial securities. It is currently buying commercial paper, the debt and mortgage securities guaranteed by Fannie Mae and Freddie Mac, and Treasury securities. The Fed had approximately \$1 trillion of mostly Treasury securities on its balance sheet before it began its credit easing. It currently has close to \$2 trillion worth of a wide range of assets on its balance sheet and has committed to eventually increasing this to as much as \$3 trillion.

The Fed's unprecedented actions appear to be working, with varying degrees of success. Efforts to revive the commercial paper market have been particularly effective, as the private commercial paper market is functioning well and Fed ownership of the paper has been winding down since

peaking late last year. The recent rise in long-term Treasury yields and fixed mortgage rates shows the limits of the Fed's actions, however, as investors have become seemingly more fearful of future inflation and heavy government borrowing.

The Fed is expected to begin normalizing interest rates by the summer of 2010. By that time, the financial crisis will have subsided, and house prices and the broader economy will have stabilized. The funds rate is expected to end 2009 at effectively zero and to end 2010 at closer to 1%.

Fiscal policy. The federal government's fiscal situation is rapidly deteriorating. The budget deficit, which widened from \$163 billion in fiscal 2007 to \$459 billion in fiscal 2008, is expected to balloon to a whopping nearly \$1.8 trillion in fiscal 2009 and to total a cumulative \$6 trillion over the next four fiscal years.

This is more than double the cumulative deficit projected as recently as last summer and reflects the expected nearly \$3 trillion price tag to taxpayers of the financial crisis. This is a very substantial sum, but the costs of

governmental inaction would be measurably greater, as the resulting financial meltdown and very severe recession would hammer tax revenues and significantly lift spending.

Of the \$3 trillion in costs, \$2.1 trillion represents the direct cost of the government response to the financial crisis. This includes approximately \$850 billion in additional fiscal stimulus and \$1.25 trillion in costs for what the government is committing to support various institutions and markets less what it will recoup in future asset sales. The weaker economy and the resulting loss of tax revenues, increased transfer payments to support those losing their jobs, and other income support programs will cost the Treasury another \$900 billion.

The budget outlook remains extraordinarily poor even after the financial crisis abates, as the costs of Medicare, Medicaid and Social Security will balloon. President Obama's first proposed budget does not adequately address the nation's long-term fiscal problems. The Congressional Budget Office projects that the nation's federal debt-to-GDP ratio will rise to over 80% per decade from now under the president's plan, about double the ratio that prevailed prior to the current financial crisis. This budget outlook is untenable, however, and policymakers will need to make various substantial changes to entitlement programs and taxes.

U.S. dollar. The U.S. dollar has sagged a bit since the beginning of the year, as the flight to quality toward U.S. assets faded because of improving financial conditions and the moderating global recession. Despite the recent decline, on a broad, trade-weighted basis, the dollar is still up over 10% from its low about a year ago.

The dollar is roughly at appropriate values against most of the world's major currencies, at \$1.40 per euro, at near \$0.85 U.S. per Canadian dollar, and at 100 Japanese yen per dollar. The dollar is somewhat overvalued against the British pound and significantly overvalued, by some 25%, against the Chinese yuan. Once the financial crisis completely subsides, the Chinese are expected to resume revaluation of their currency, eventually resulting in a freely floating yuan by the middle of the next decade.

Handwringing in currency markets that the U.S. dollar is at risk of losing its reserve currency status is overdone. The dollar accounts for nearly two-thirds of global reserves, and this share is unlikely to change much soon, as the U.S. remains far and away the global economy's largest and most stable economy and the predominant player in global trade. There are also no good alternatives; Europe's current economic problems preclude the euro, while the International Monetary Fund's Special Drawing Rights are nothing more than a unit of account.

Energy prices. Oil, as measured by the price of a barrel of West Texas Intermediate crude, is trading at around \$65. Over the past year, prices have ranged from well below \$50 per barrel at the start of 2009 to a record of almost \$150 per barrel in the summer of 2008. Natural gas prices remain low, particularly compared with oil prices, at below \$4 per million BTUs.

Global economic conditions and their impact on energy demand are driving energy prices. The recent firming in prices reflects growing expectations that the worst of the global downturn is over as the Chinese economy reaccelerates and the severity of the U.S. recession abates. Oil prices are not expected to rise above current levels for very long, at least not until the global recession is over late this year. However, prices are expected to move steadily higher in 2010, as global growth resumes and energy demand picks up in earnest. Oil prices are expected to average near \$60 per barrel for 2009 and \$75 per barrel in 2010. Early in the next decade, oil prices are expected to range between \$75 and \$100 per barrel, consistent with trend global demand and supply fundamentals, abstracting from the vagaries of the world business cycle.

Natural gas prices will have trouble keeping up with oil prices over the next several years, as a very substantial glut of natural gas has developed. Demand has weakened sharply with the recession, and supply has increased substantially in response to previously very high prices. Natural gas prices are expected to average \$4.50 per million BTUs in 2009, \$6.50 in 2010, and closer to \$9 in the longer term.

*Mark Zandi
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