

June 30, 2009

Honorable Paul Ryan Ranking Member Committee on the Budget U.S. House of Representatives Washington, DC 20515

Dear Congressman:

As you requested, the Congressional Budget Office (CBO) has analyzed the impact of the three interest rate scenarios that you specified on deficits and debt held by the public. We have compiled such deficit and debt estimates relative to projections presented in the *Analysis of the President's Budgetary Proposals for Fiscal Year 2010* (published in May 2009). The three interest rate paths assumed, which are shown in Table 1, are:

- 1. The rate on 10-year Treasury notes would average 3.75 percent for calendar year 2009 and all interest rates would rise after 2009 such that the rate on 10-year notes would approximate its average level over the 1991-2000 period (6.6 percent).
- 2. The rate on 10-year Treasury notes would average 3.75 percent for calendar year 2009 and all interest rates would rise after 2009 such that the rate on 10-year notes would approximate its average level over the 1981-1990 period (10.5 percent).
- 3. Interest rates would follow a path that is consistent with the average of the top 10 projections of the most recent Blue Chip economic forecast. That average for the latter part of the period is 6.4 percent for 10-year notes.

CBO calculated 3-month interest rates consistent with the assumptions specified for 10-year rates. For scenarios 1 and 2, CBO used the average 3month and 10-year interest rates during the 1990s and 1980s, respectively, to determine the steady-state levels for the latter part of the projection period. CBO assumed that rates would steadily rise—by no more than 2 percentage points a year—until they reached the specified average levels Honorable Paul Ryan Page 2

and then remain constant through 2019. Scenario 3 uses the rates contained in the June 2009 Blue Chip economic forecast for 2009 and 2010; the projections for 2011 through 2019 come from the March 2009 Blue Chip report. Other interest rates necessary to calculate federal interest payments were interpolated using an econometric model.

Under each scenario, interest costs would be higher than CBO estimated in its analysis of the President's budget (see Table 2). The effects would be minimal for 2009, but between 2010 and 2019 interest payments in under both scenarios 1 and 3 would be about \$1.3 trillion higher; in scenario 2, interest payments would be \$5.6 trillion higher. The cumulative deficit and debt held by the public at the end of the 10-year period would rise by slightly smaller amounts. A small portion of the additional interest payments would be offset by larger remittances by the Federal Reserve on its earnings from holding Treasury securities.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Jared Brewster, who can be reached at 226-2880.

Sincerely,

Douglas W. Elmendy

Douglas W. Elmendorf Director

Enclosure

cc: Honorable John M. Spratt Jr. Chairman

## 

(Percent by Fiscal Year)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
3-Month Bill Rates											
CBO's Baseline	0.3	0.8	1.6	2.7	3.7	4.4	4.6	4.7	4.7	4.8	4.8
Scenario 1	0.4	1.6	3.1	4.3	4.9	5.0	5.0	5.0	5.0	5.0	5.0
Scenario 2	0.4	1.6	3.1	5.0	7.0	8.6	8.9	8.9	8.9	8.9	8.9
Scenario 3	0.4	1.3	3.4	4.4	4.8	5.1	5.2	5.1	5.0	5.0	5.0
10-Year Note Rates											
CBO's Baseline	2.9	3.3	3.9	4.5	4.9	5.2	5.4	5.5	5.6	5.6	5.6
Scenario 1	3.6	4.3	5.3	6.1	6.5	6.6	6.6	6.6	6.6	6.6	6.6
Scenario 2	3.6	5.1	7.0	9.0	10.3	10.5	10.5	10.5	10.5	10.5	10.5
Scenario 3	3.4	4.4	5.2	5.8	6.2	6.6	6.6	6.5	6.4	6.4	6.4

Source: Congressional Budget Office.

Note: Scenarios 1, 2, 3 were specified by Congressman Ryan as alternatives to the CBO baseline projections.

## Table 2. Effect of Interest Rate Scenarios Requested by Congressman Ryan on CBO's Estimate of the President's Budget (Billions of Dellars by Fixed Year)

(Billions of Dollars by Fiscal Year)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total, 2010- 2014	Total, 2010- 2019
Scenario 1	: Interest	Rates S	imilar t	o Rates	that Oc	curred	Betweer	n 1991 a	nd 2000	)			
Effect on the Deficit													
Revenues	*	2	7	8	8	8	8	7	6	6	5	33	66
Interest													
Rate Effect	5	36	78	113	124	116	113	115	111	107	111	466	1,023
Debt Service	*	1	<u>3</u>	8	<u>16</u>	24	<u>33</u>	41	<u>50</u>	<u>60</u>	<u>69</u>	<u>52</u>	305
Subtotal, interest	5	36	81	121	140	140	145	156	162	167	180	518	1,328
Total Effect on the Deficit <sup>a</sup>	-5	-34	-74	-113	-132	-132	-137	-149	-155	-161	-175	-485	-1,262
Total Deficit Under Scenario 1	-1,830	-1,467	-1,048	-746	-779	-858	-901	-1,022	-1,083	-1,160	-1,338	-4,897	-10,401
Debt Held by the Public at the End													
of the Year Under Scenario 1	7,972	9,391	10,442	11,293	12,114	13,081	14,077	15,187	16,352	16,979	18,393	n.a.	n.a.
Scenario 2	: Interest	Rates S	Similar (	o Rates	that Oc	curred	Between	n 1981 a	and 199	0			
Effect on the Deficit													
Revenues	*	5	8	13	19	29	36	40	42	44	45	74	281
Interest													
Rate Effect	5	40	101	182	286	370	496	556	608	647	694	979	3,980
Debt Service	*	1	4	<u>14</u>	38	<u>79</u>	135	205	286	<u>380</u>	488	<u>136</u>	1,629
Subtotal, interest	5	41	105	196	324	449	631	760	894	1,027	1,182	1,115	5,609
Total Effect on the Deficit <sup>a</sup>	-5	-36	-97	-183	-305	-421	-595	-720	-851	-983	-1,137	-1,041	-5,328
Total Deficit Under Scenario 2	-1,829	-1,468	-1,071	-816	-951	-1,147	-1,359	-1,594	-1,779	-1,983	-2,300	-5,454	-14,467
Debt Held by the Public at the End													
of the Year Under Scenario 2	7,972	9,393	10,467	11,388	12,382	13,637	15,091	16,773	18,634	20,083	22,459	n.a.	n.a.
Scena	ario 3: Int	erest Ra	ates Sim	ilar to t	he Blue	Chip E	conomi	c Foreca	ast <sup>b</sup>				
Effect on the Deficit													
Revenues	*	2	7	8	8	8	8	7	6	6	5	33	66
Interest													
Rate Effect	4	27	77	117	115	110	118	114	103	98	100	446	979
Debt Service	*	*	3	8	15	23	32	40	49	57	66	49	293
Subtotal, interest	4	27	80	124	130	133	150	155	151		166	495	1,272
Total Effect on the Deficit <sup>a</sup>	-4	-25	-73	-117	-122	-125	-142	-147	-145	-149	-161	-462	-1,206
Total Deficit Under Scenario 3	-1,829	-1,458	-1,047	-750	-769	-851	-905	-1,021	-1,072	-1,148	-1,323	-4,875	-10,345
Debt Held by the Public at the End of the Year Under Scenario 3	7,971	9,381	10,432	11,287	12,098	13,057	14,058	15,167	16,322	16,936	18,336	n.a.	n.a.
Memorandum:													
Total Deficit Under the President's Proposals <sup>c</sup>	-1.825	-1,432	-974	-633	-647	-726	-763	-873	-927	-999	-1,163	-4,413	-9,139
Debt Held by the Public at the End of the	-,020	-,	2.1	000	0.7	. 20	, 65	0.0	/=/		-,100	.,	.,
Year Under the President's Proposals <sup>c</sup>	7,967	9,352	10,329	11,067	11,756	12,591	13,450	14,411	15,421	15,887	17,126	n.a.	n.a.

Source: Congressional Budget Office.

Note: \* = between zero and \$500 million.

a. Negative numbers indicate an increase relative to the deficit estimated under the President's budgetary policies.

b. Based on the 10 highest interest rate projections in the Blue Chip economic forecasts of March 2009 and June 2009.

c. As reported in CBO's An Analysis of the President's Budget Proposals for Fiscal Year 2010 (June 2009).