

December 12, 2022

BUDGET ASSUMPTIONS
Nominal Treasury Interest Rates for Different Maturities
(from the annual budget assumptions for the first year of the budget forecast)

| Calendar Year | 3-Year | 5-Year | 7-Year | 10-Year | 20-Year | 30-Year |
|----------------------|---------------|---------------|---------------|----------------|----------------|----------------|
| 1979 | 9.7 | 9.2 | 9.1 | 9.0 | #N/A | 8.9 |
| 1980 | 10.9 | 10.6 | 10.6 | 10.6 | #N/A | 10.4 |
| 1981 | 13.4 | 12.8 | 12.6 | 12.2 | #N/A | 11.8 |
| 1982 | 12.8 | 13.1 | 13.2 | 13.3 | #N/A | 13.0 |
| 1983 | 9.5 | 9.8 | 10.0 | 10.2 | #N/A | 10.3 |
| 1984 | 9.8 | 10.0 | 10.1 | 10.3 | #N/A | 10.4 |
| 1985 | 10.3 | 10.7 | 10.8 | 11.0 | #N/A | 11.0 |
| 1986 | 8.6 | 8.8 | 8.8 | 8.9 | #N/A | 9.1 |
| 1987 | 6.3 | 6.5 | 6.6 | 6.7 | #N/A | 7.0 |
| 1988 | 7.3 | 7.7 | 7.8 | 8.0 | #N/A | 8.1 |
| 1989 | 7.8 | 8.1 | 8.2 | 8.3 | #N/A | 8.2 |
| 1990 | 7.4 | 7.5 | 7.6 | 7.7 | #N/A | 7.8 |
| 1991 | 7.2 | 7.4 | 7.4 | 7.5 | #N/A | 7.7 |
| 1992 | 6.1 | 6.5 | 6.7 | 7.0 | #N/A | 7.1 |
| 1993 | 5.6 | 6.0 | 6.3 | 6.7 | #N/A | 6.8 |
| 1994 | 5.0 | 5.3 | 5.5 | 5.7 | #N/A | 5.8 |
| 1995 | 7.3 | 7.6 | 7.7 | 7.9 | #N/A | 8.1 |
| 1996 | 5.4 | 5.5 | 5.5 | 5.6 | #N/A | 5.7 |
| 1997 | 5.8 | 5.9 | 6.0 | 6.1 | #N/A | 6.3 |
| 1998 | 5.6 | 5.7 | 5.8 | 5.9 | #N/A | 6.1 |
| 1999 | 4.7 | 4.8 | 4.9 | 4.9 | #N/A | 5.0 |
| 2000 | 5.9 | 6.0 | 6.0 | 6.1 | #N/A | 6.3 |
| 2001 | 5.4 | 5.4 | 5.4 | 5.4 | #N/A | 5.3 |
| 2002 | 4.1 | 4.5 | 4.8 | 5.1 | #N/A | 5.8 |
| 2003 | 3.1 | 3.6 | 3.9 | 4.2 | #N/A | 5.1 |
| 2004 | 3.0 | 3.7 | 4.2 | 4.6 | 5.4 | 5.5 |
| 2005 | 3.7 | 4.1 | 4.4 | 4.6 | 5.2 | 5.2 |
| 2006 | 4.7 | 4.8 | 4.9 | 5.0 | 5.3 | 5.2 |
| 2007 | 4.9 | 4.9 | 4.9 | 5.0 | 5.1 | 5.1 |
| 2008 | 4.1 | 4.3 | 4.4 | 4.6 | 4.9 | 4.9 |
| 2009 | 2.7 | 3.3 | 3.7 | 4.2 | 4.7 | 4.5 |
| 2010 | 2.3 | 3.1 | 3.5 | 3.9 | 4.4 | 4.5 |
| 2011 | 1.4 | 1.9 | 2.4 | 3.0 | 3.9 | 4.2 |
| 2012 | 1.6 | 2.1 | 2.5 | 2.8 | 3.5 | 3.8 |
| 2013 | 0.5 | 1.1 | 1.5 | 2.0 | 2.7 | 3.0 |
| 2014 | 1.0 | 1.9 | 2.5 | 3.0 | 3.6 | 3.9 |
| 2015 | 1.7 | 2.2 | 2.5 | 2.8 | 3.1 | 3.4 |
| 2016 | 2.0 | 2.4 | 2.7 | 2.9 | 3.2 | 3.5 |
| 2017 | 1.4 | 1.7 | 1.9 | 2.1 | 2.5 | 2.8 |
| 2018 | 2.3 | 2.5 | 2.6 | 2.6 | 2.8 | 3.0 |
| 2019 | 3.3 | 3.3 | 3.4 | 3.4 | 3.5 | 3.6 |
| 2020 | 1.6 | 1.7 | 1.8 | 2.0 | 2.3 | 2.4 |
| 2021 | 0.2 | 0.3 | 0.6 | 0.8 | 1.5 | 1.7 |
| 2022 | 1.3 | 1.6 | 1.9 | 2.1 | 2.5 | 2.6 |
| 2023 | 4.0 | 3.8 | 3.8 | 3.9 | 4.2 | 4.2 |

Real Treasury Interest Rates

| | 3-Year | 5-Year | 7-Year | 10-Year | 20-Year | 30-Year |
|------|--------|--------|--------|---------|---------|---------|
| 1979 | 2.8 | 3.4 | 4.1 | 4.6 | #N/A | 5.4 |
| 1980 | 2.1 | 2.4 | 2.9 | 3.3 | #N/A | 3.7 |
| 1981 | 3.6 | 3.9 | 4.3 | 4.4 | #N/A | 4.8 |
| 1982 | 6.1 | 7.1 | 7.5 | 7.8 | #N/A | 7.9 |
| 1983 | 4.2 | 4.7 | 5.0 | 5.3 | #N/A | 5.6 |
| 1984 | 5.0 | 5.4 | 5.7 | 6.1 | #N/A | 6.4 |
| 1985 | 5.9 | 6.5 | 6.8 | 7.1 | #N/A | 7.4 |
| 1986 | 4.6 | 5.1 | 5.6 | 5.9 | #N/A | 6.7 |
| 1987 | 2.8 | 3.1 | 3.5 | 3.8 | #N/A | 4.4 |
| 1988 | 3.5 | 4.2 | 4.7 | 5.1 | #N/A | 5.6 |
| 1989 | 4.1 | 4.8 | 5.3 | 5.8 | #N/A | 6.1 |
| 1990 | 3.2 | 3.6 | 3.9 | 4.2 | #N/A | 4.6 |
| 1991 | 3.2 | 3.5 | 3.7 | 3.9 | #N/A | 4.2 |
| 1992 | 2.7 | 3.1 | 3.3 | 3.6 | #N/A | 3.8 |
| 1993 | 3.1 | 3.6 | 3.9 | 4.3 | #N/A | 4.5 |
| 1994 | 2.1 | 2.3 | 2.5 | 2.7 | #N/A | 2.8 |
| 1995 | 4.2 | 4.5 | 4.6 | 4.8 | #N/A | 4.9 |
| 1996 | 2.6 | 2.7 | 2.8 | 2.8 | #N/A | 3.0 |
| 1997 | 3.2 | 3.3 | 3.4 | 3.5 | #N/A | 3.6 |
| 1998 | 3.4 | 3.5 | 3.5 | 3.6 | #N/A | 3.8 |
| 1999 | 2.6 | 2.7 | 2.7 | 2.7 | #N/A | 2.9 |
| 2000 | 3.8 | 3.9 | 4.0 | 4.0 | #N/A | 4.2 |
| 2001 | 3.2 | 3.2 | 3.2 | 3.2 | #N/A | 3.2 |
| 2002 | 2.1 | 2.8 | 3.0 | 3.1 | #N/A | 3.9 |
| 2003 | 1.6 | 1.9 | 2.2 | 2.5 | #N/A | 3.2 |
| 2004 | 1.6 | 2.1 | 2.4 | 2.8 | 3.4 | 3.5 |
| 2005 | 1.7 | 2.0 | 2.3 | 2.5 | 3.0 | 3.1 |
| 2006 | 2.5 | 2.6 | 2.7 | 2.8 | 3.0 | 3.0 |
| 2007 | 2.5 | 2.6 | 2.7 | 2.8 | 3.0 | 3.0 |
| 2008 | 2.1 | 2.3 | 2.4 | 2.6 | 2.8 | 2.8 |
| 2009 | 0.9 | 1.6 | 1.9 | 2.4 | 2.9 | 2.7 |
| 2010 | 0.9 | 1.6 | 1.9 | 2.2 | 2.7 | 2.7 |
| 2011 | 0.0 | 0.4 | 0.8 | 1.3 | 2.1 | 2.3 |
| 2012 | 0.0 | 0.4 | 0.7 | 1.1 | 1.7 | 2.0 |
| 2013 | -1.4 | -0.8 | -0.4 | 0.1 | 0.8 | 1.1 |
| 2014 | -0.7 | 0.0 | 0.5 | 1.0 | 1.6 | 1.9 |
| 2015 | 0.1 | 0.4 | 0.7 | 0.9 | 1.2 | 1.4 |
| 2016 | 0.3 | 0.6 | 0.8 | 1.0 | 1.2 | 1.5 |
| 2017 | -0.5 | -0.3 | 0.0 | 0.1 | 0.5 | 0.7 |
| 2018 | 0.6 | 0.6 | 0.7 | 0.7 | 0.9 | 1.0 |
| 2019 | 1.3 | 1.3 | 1.3 | 1.4 | 1.5 | 1.5 |
| 2020 | -0.4 | -0.3 | -0.2 | 0.0 | 0.3 | 0.4 |
| 2021 | -1.8 | -1.6 | -1.4 | -1.1 | -0.5 | -0.3 |
| 2022 | -1.2 | -0.6 | -0.3 | 0.0 | 0.4 | 0.5 |
| 2023 | 1.2 | 1.3 | 1.4 | 1.5 | 2.0 | 2.0 |