



Statement of

**Grant A. Driessen**  
Acting Section Research Manager

Before

Committee on Ways and Means  
Subcommittee on Oversight  
U.S. House of Representatives

Hearing on

**“Hidden Cost: The True Price of Federal Debt  
to American Taxpayers”**

December 6, 2023

**Congressional Research Service**

7-5700

[www.crs.gov](http://www.crs.gov)

<Product Code>

Chairman Schweikert, Ranking Member Pascrell, and members of the Subcommittee, my name is Grant Driessen, and I am a Specialist in Public Finance at the Congressional Research Service (CRS). Thank you for inviting me to testify today on behalf of CRS.

As requested, I will provide background on the federal debt management process, briefly summarize the debt instruments currently in use, and discuss developments and policy issues in debt management practices in light of recent economic performance.

## An Overview of Debt Management Practices

Congress holds the authority to issue debt on behalf of the United States through power granted in Article I, Section 8 of the Constitution. While this power was delegated to the Secretary of the Treasury in 1789, Congress retains ultimate control over spending through the budget and appropriations process, revenue levels through tax legislation, and total borrowing through the statutory debt limit. If spending exceeds revenues, Treasury determines what type of debt instruments are used to finance the borrowing necessary to fulfill all obligations. 31 U.S.C. Chapter 31 provides much of the statutory detail on how debt management duties are divided between Congress and Treasury.

The primary objective of Treasury's debt management strategy is to fulfill the government's borrowing needs at the lowest cost over time. Beyond financing the federal government, the success of Treasury's debt management strategy also affects global markets due to the influential role of the United States in the world economy. Treasury adheres to three debt management principles: (1) to issue debt in a regular and predictable pattern, (2) to provide transparency in the decision-making process, and (3) to seek continuous improvements in the auction process.<sup>1</sup> Adoption of this strategy is intended to help maximize government contributions to growth and efficiency in both the domestic and global capital markets.

Development of modern debt management dates to the passage of the Second Liberty Bond Act of 1917. As amended, that legislation designated the Treasury Secretary as the principal authority to determine the types of issues, terms, and techniques most appropriate to manage public debt. Before this measure, interest rates and maturity periods of bonds were set by legislation and congressional authority.<sup>2</sup> Further refinements in debt management policy came when Treasury established the Bureau of Public Debt within the Office of Fiscal Service in June 1940. In the late 1980s, the Office of Debt Management (ODM), formerly known as the Office of Market Finance, became the central office responsible for the decision-making behind Treasury's borrowings. The Bureau of the Public Debt and the Financial Management Service (FMS) merged in 2012 to form the Bureau of the Fiscal Service. The Bureau of the Fiscal Service now oversees the operational aspects of the federal government borrowing process, accounts for and services federal debt, and provides reimbursable support services to federal agencies under the authority of the Treasury Franchise Fund.<sup>3</sup> It also conducts auctions of Treasury securities to allow individuals, institutions, and financial professionals to invest in Treasury bills, notes, bonds, inflation-protected securities (TIPS), and floating rate notes (FRNs).

---

<sup>1</sup> U.S. Department of the Treasury, Office of Domestic Finance, Overview of U.S. Treasury Debt Management, available at <http://www.treasury.gov/about/organizational-structure/offices/Pages/-Debt-Management.aspx>.

<sup>2</sup> Tilford C. Gaines, *Techniques of Treasury Debt Management* (New York: The Free Press of Glencoe, 1962), pp. 19, 21, 154.

<sup>3</sup> The Treasury Franchise Fund provides common administrative support services to other parts of Treasury as well as other government agencies on a competitive and fully cost-reimbursable basis. The collection of delinquent debt owed to the U.S. government is collected by the Financial Management Service. Department of the Treasury, Bureau of the Fiscal Service, *Treasury Franchise Fund, FY2023 President's Budget*, available at <https://home.treasury.gov/system/files/266/19.-TFF-FY-2023-CJ.pdf>.

The Federal Reserve (Fed) works alongside the Treasury in the debt management process, acting as Treasury's fiscal agent. The Fed was created in 1913 to maintain stability in the banking sector following a time of financial panic. For the first several decades of its existence, the Fed worked closely with Treasury to implement fiscal policy goals. Since the early 1950s, however, the Fed has operated independently from Treasury and uses its open market operations to manage the amount of money and credit in the economy via monetary policy. The Fed also provides banking services to the federal government by maintaining deposit accounts for Treasury, paying U.S. government checks drawn on the Treasury, assisting in the debt auction process, and issuing and redeeming savings bonds and other government securities.<sup>4</sup>

## How Treasury Sells Debt

### Auction Process

Auctions are the cornerstone of Treasury's debt management strategy.<sup>5</sup> Auctions and their offering amounts are scheduled and announced in advance of the auction date. Bidders in Treasury auctions may be either foreign or domestic and individual or institutional investors, or federal, state, or local government entities. Treasury securities can be purchased via a web-based account using the department's Treasury Direct system. Purchases of Treasury bills, notes, bonds, TIPS, floating rate notes, and savings bonds can be made through this system.

The yield-to-maturity, interest coupon rate, and the discount (or premium) on a Treasury security are key to understanding the auction process. The yield-to-maturity rate is the rate of return anticipated on a security if it is held until the maturity date and is what is specified by a competitive bidder at the auction. The interest coupon rate is set at the highest yield level, in increments of one-eighth of one percent, which does not result in a price greater than 100% of principal.<sup>6</sup> If the price of a Treasury security, as determined at auction, is less than the face value of the security, then the security may be described as purchased at a discount. If the price exceeds the value of the security, it is described as purchased at a premium. Thus, the coupon rate and discount (or premium) jointly determine the yield to maturity.

Auction bids for Treasury securities may be submitted as noncompetitive or competitive. With a noncompetitive bid, a bidder agrees to accept the discount rate (or yield) determined at auction and is guaranteed to receive the full amount of the bid. With a competitive bid, a bidder specifies the yield that is acceptable.<sup>7</sup> A bid may be accepted in a full or partial amount if the rate specified is less than or equal to, respectively, the discount rate set by the auction.

Once the auction closes, all noncompetitive bids are accepted and competitive bids are ranked based on yield, from lowest to highest. Competitive bids are accepted, starting at the lowest yield, until the offering amount has been exhausted. The highest accepted yield becomes the "stop." A competitive bid will not be accepted if the rate specified in the bid is higher than the yield set at the auction. Though interest

---

<sup>4</sup> History of the Federal Reserve, available at <http://www.federalreserveeducation.org/about-the-fed/history/>. For more information, see CRS In Focus IF10054, *Introduction to Financial Services: The Federal Reserve*, by Marc Labonte.

<sup>5</sup> Though auctions were the main component of the new strategy, Treasury had tried to institute an auction-based system in 1935 and 1963. Both of these earlier attempts failed.

<sup>6</sup> There are no coupon rates for Treasury bills, as Treasury bills are sold on a discount basis.

<sup>7</sup> For bills and TIPS auctions, the bids are offered in terms of a discount rate rather than a yield.

payments received by successful bidders may vary based on the yield specified in their auction bids, all securities in an auction are sold for a single price, computed based on the “stop” yield.<sup>8</sup>

## Marketable Securities

Most of the debt sold by the federal government is marketable, meaning that securities are sold via the auction process and can be resold on the secondary market. Currently, Treasury offers five types of marketable securities: Treasury bills, notes, bonds, inflation protected securities (TIPS), and floating rate notes (FRNs). Treasury holds roughly 300 public auctions per year.<sup>9</sup> If Treasury borrowing requirements or financing policy decisions change, the types of securities, the length of maturity periods, and offering amounts could be altered.<sup>10</sup>

### Treasury Bills

Treasury bills (T-bills) are short-term securities that mature in one year or less. T-bills are sold at a discount from their face value. The interest rate determines the discount from face value and the price paid at auction. When the bill reaches maturity, the investor receives the face value. T-bills are currently being offered with maturities of 4, 13, 26, and 52 weeks. Auctions for T-bills take place weekly on Tuesdays (4-week bills) and Mondays (13- and 26-week bills). Every 4 weeks, 52-week bills are auctioned on Tuesdays as well. The timing from the announcement of the auction, to its execution, to issuance of the purchased security is generally between 7 and 10 days.<sup>11</sup>

### Treasury Notes

Treasury notes are interest-bearing securities, offered in multiples of \$100, currently being offered in 2-, 3-, 5-, 7-, and 10-year fixed maturities. The relationship between yield to maturity and the interest rate determines the price at auction. If the yield-to-maturity is greater than/equal to/less than the interest rate, the price will be less than/equal to/greater than par (face) value. Treasury notes pay interest on a semi-annual basis and the investor receives the face value when the note matures. Treasury notes are currently being auctioned on a monthly basis (2-, 3-, 5-, and 7-year notes) and quarterly (10-year notes).<sup>12</sup>

### Treasury Bonds

Treasury bonds are interest-bearing securities, offered in multiples of \$100, with maturities of 20 and 30 years. The price, yield, and interest rate of a Treasury bond are determined at auction in the same way as a

---

<sup>8</sup> Garbade, Kenneth D. and Jeffrey F. Ingber, *The Treasury Auction Process: Objectives, Structure, and Recent Adaptations*, FRBNY Current Issues in Economics and Finance, February 2005, pp. 2-3.

<sup>9</sup> U.S. Department of the Treasury, Treasury Auctions, available at <https://home.treasury.gov/services/treasury-auctions>.

<sup>10</sup> Cash management bills are occasionally offered in order to meet short- and medium-term cash needs as determined by Treasury. These bills mature on dates determined by Treasury based on need, generally a few days from issue. Occasionally, Treasury also offers reopenings of previous auctions where additional amounts of a previously issued security are sold at the same coupon interest rate and maturity, but with a different issue date and price.

<sup>11</sup> U.S. Department of the Treasury, Treasury Bills, available at <http://www.treasurydirect.gov/instit/marketable/tbills/tbills.htm>.

<sup>12</sup> Initial offerings of 10-year notes are currently auctioned in February, May, August, and November. Each initial offer is followed by two reopenings of the same issue in January, March, April, June, July, September, October, and December. In a security reopening, the U.S. Treasury issues additional amounts of a previously issued security. The reopened security has the same maturity date and interest payment date as the original security, but has a different issue date and usually a different price. U.S. Department of the Treasury, Treasury Notes, available at <http://www.treasurydirect.gov/instit/marketable/tnotes/tnotes.htm>.

Treasury note. Treasury bonds pay interest on a semi-annual basis and investors receive face value when the bond matures. Treasury bonds are currently auctioned quarterly.<sup>13</sup>

### Treasury Inflation-Protected Securities (TIPS)

Treasury Inflation-Protected Securities (TIPS) are interest-bearing securities that protect investors from inflation, and have been offered since 1997. TIPS are offered in multiples of \$100, with maturity periods of 5, 10, and 30 years. The TIPS principal adjusts based on the movements in the consumer price index (CPI-urban, non-seasonally-adjusted) with a three-month lag. The adjustments in the principal of the security form the basis for the interest payments, paid semiannually at a fixed rate. If inflation/deflation occurs, the interest payment increases/decreases. However, when a TIPS matures, the investor is paid the inflation-adjusted principal or original principal, whichever is greater. TIPS are currently being offered either annually (30-year) or biannually (5-year and 10-year).<sup>14</sup>

### Treasury Floating Rate Notes (FRNs)

Treasury began issuing Floating Rate Notes (FRNs) in January 2014. FRNs are sold in increments of \$100, and have a 2-year maturity period. The interest rate on FRNs is tied to the discount rate for 13-week Treasury bills. This relationship protects investors from the effects of a rise in interest rates, in exchange for offerings at lower yields than fixed-rate debt instruments with equivalent maturity periods. Auctions for FRNs take place at the end of each month.<sup>15</sup>

### Nonmarketable Securities

Nonmarketable debt is composed of approximately 2% of publicly held debt and nearly all intragovernmental debt. Publicly held debt that is nonmarketable is primarily the state and local government series and savings bonds.<sup>16</sup> Intragovernmental debt is largely composed of debt owed by Treasury to the Social Security, Civil Service Retirement and Disability, Military Retirement, and Medicare trust funds.<sup>17</sup>

The main purpose of publicly held nonmarketable debt is to protect the bearers from market risk. The state and local government series was created in 1972 to restrict state and local governments from earning arbitrage profits by investing any tax-exempt bond proceeds in investments that may generate higher yields, thereby risking the returns. This program sells Treasury securities to state and local governments to help them comply with this requirement. Savings bonds provide a means for the small investor to participate in government financing. Savings bonds have been sold continuously since 1935 when they were introduced to encourage broad public participation in government financing by making federal bonds available in small denominations.<sup>18</sup>

---

<sup>13</sup> Initial offerings of 30-year bonds are currently auctioned in February, May, August, and November. Each initial offer is followed by two reopenings in the two months following the initial auction. U.S. Department of the Treasury, Treasury Bonds, available at <http://www.treasurydirect.gov/instit/marketable/tbonds/tbonds.htm>.

<sup>14</sup> U.S. Department of the Treasury, Treasury Inflation-Protected Securities, available at <http://www.treasurydirect.gov/instit/marketable/tips/tips.htm>.

<sup>15</sup> U.S. Department of the Treasury, Floating Rate Notes (FRNs) In Depth, available at [https://www.treasurydirect.gov/indiv/research/indepth/frns/res\\_frn.htm](https://www.treasurydirect.gov/indiv/research/indepth/frns/res_frn.htm).

<sup>16</sup> U.S. Department of the Treasury, Bureau of the Fiscal Service, *Monthly Statement of Public Debt*, April 2022, Tables I, available at <https://www.treasurydirect.gov/govt/reports/pd/mspd/2022/opds042022.pdf>.

<sup>17</sup> U.S. Department of the Treasury, Bureau of the Fiscal Service, *Monthly Treasury Statement*, July 2016, Table 6 – Schedule D, available at <https://fiscal.treasury.gov/files/reports-statements/mts/mts0422.pdf>.

<sup>18</sup> Such offerings of Treasury securities dated back to 1776. Between 1776 and 1935, these securities were marketable and

U.S. government trust funds, which compose intragovernmental debt, contain revenues designated by law for a specific purpose. When revenues in the trust funds exceed benefit payments, the unspent monies must remain in the trust fund for future use. However, this excess cash is transferred to the Treasury's General Fund and is used to finance other activities which fall outside the specific purpose of the trust fund. In exchange, the trust fund is issued a Treasury "special issue" security to be redeemed at face value at any time in the future when the funds are needed.<sup>19</sup> Special issue securities are available only to trust funds and are designated as nonmarketable, earning interest on a semi-annual basis. The interest rate is determined by formula, based on the average yield of certain marketable securities.<sup>20</sup> Securities of this type protect the trust fund investments from market fluctuations.

## Role of Federal Reserve

The Federal Reserve serves as Treasury's fiscal agent. In this role, it is responsible for the primary dealer relationships which are used not only for Treasury auctions but other open market operations to conduct monetary policy. In addition, the Federal Reserve plays an important role in the operational aspects of the auction process and payments mechanism. The Federal Reserve is not responsible for making debt issuance decisions—this responsibility rests solely within Treasury's ODM to ensure the independence of the two institutions.

In addition, the Fed is a holder of Treasury securities. It is involved in the purchase and resale of these securities to the secondary market through its open market operations. Its holdings of Treasury securities amounted to nearly \$4.8 trillion as of November 2023.<sup>21</sup> Any profits earned by the Fed through the sale of Treasury securities and other activities are remitted to Treasury and recorded as revenues in the federal budget.<sup>22</sup> The Federal Reserve banks also act as fiscal agents and depositories for Treasury accounts by accepting deposits of federal taxes and other federal agency receipts and processing checks and electronic payments drawn on the account.

## Managing Federal Financial Flows

The Treasury Secretary manages revenue, works to improve public credit, and provides for on-time revenue collection and payment of debts.<sup>23</sup> If federal government finances are not well managed, financial stability and economic growth could be at risk. Throughout the year, the fiscal balance held by Treasury can fluctuate significantly as a result of higher or lower revenue collections or issuance of more or less debt during certain periods. As a result, Treasury must ensure that adequate funds are available, either via revenue streams or borrowing, to finance obligations. In order to finance the government's obligations

---

subjected the investor to market fluctuation. Particularly during World War I, small investors incurred significant losses if they were forced to sell their bonds prior to maturity.

<sup>19</sup> The trust funds now hold only special issues, but they have held public issues in the past.

<sup>20</sup> The specifications for securities issued to each type of trust fund are listed in separate places in the *U.S. Code*. Specifications for the Social Security Trust Fund can be found at 42 U.S.C. §401. Specifications for the Civil Service Retirement and Disability Fund can be found at 5 U.S.C. §8348.

<sup>21</sup> Federal Reserve, St. Louis Branch, "U.S. Treasury securities held by the Federal Reserve: All Maturities," available at <https://research.stlouisfed.org/fred2/series/TREAST>. Currency, not Treasury securities, is the Fed's primary liability. Treasury securities are assets to the Fed.

<sup>22</sup> For more information on the Fed's activities, see CRS Report R46411, *The Federal Reserve's Response to COVID-19: Policy Issues*, by Marc Labonte.

<sup>23</sup> U.S. Department of the Treasury, available at <http://www.treasury.gov/about/role-of-treasury/Pages/default.aspx>.

while minimizing borrowing costs, Treasury must accurately project what cash requirements will be needed on a daily basis to cover government payments, especially given these variations.<sup>24</sup>

The total amount of debt issued over the fiscal year depends in large part on the decisions made by Congress and the priorities it chooses in its annual budget and appropriations process. Recently, Treasury has issued increasing amounts of debt as a result of the government response to the most recent economic downturn, along with other budgetary initiatives. Over the longer term, these priorities could change and decisions on how to finance the promises to retirees for healthcare and other benefits may increase the demands on Treasury's debt issuance. Treasury's financing needs generally follow a predictable seasonal pattern in response to changes in the level of public debt. Growth in public debt is typically lowest in April, due to the filing of individual income tax returns and payment of any unpaid taxes during that month, and highest in September, as a result of the need to meet obligations due at the end of the fiscal year.

## How Much Debt is Outstanding?

Gross federal debt is composed of debt held by the public and intragovernmental debt. Debt held by the public—issued through the Bureau of the Fiscal Service—is the total amount the federal government has borrowed from the public and remains outstanding. This measure is generally considered to be the most relevant in macroeconomic terms because it is the amount of debt sold in credit markets.

Intragovernmental debt is the amount owed by the federal government to other federal agencies, primarily in the Social Security, Medicare, and Civil Service Retirement and Disability trust funds, to be paid by Treasury.<sup>25</sup>

Although nominal debt levels have steadily risen in the postwar period, debt measured as a percentage of GDP declined precipitously for several decades following its peak at 118% in 1946 until it reached 32% by 1981. Real debt levels have subsequently undergone significant increases in the past several decades. At the end of FY2022, total debt was 123% of GDP, and debt held by the public equaled 97% of GDP. The FY2020 debt totals of 128% of GDP for total debt and 100% of GDP for debt held by the public represented the highest levels for each category since FY1940 and FY1947, respectively. The debt shifts in response to the COVID-19 pandemic and the 2007-2009 Great Recession represent the largest increases since the end of World War II.

Treasury also estimates who owns federal securities. Because marketable Treasury securities can be and are often sold on the secondary market, ownership will change over time. As of December 2022, the latest period for which full estimates are available, gross debt totaled \$31.4 trillion, including \$12.4 trillion in the Federal Reserve and Intragovernmental Holdings. U.S. savings bonds accounted for \$0.2 trillion in federal debt, and foreign and international holdings accounted for \$7.3 trillion. The remainder of the debt was held in depository institutions (i.e., commercial banks), pension funds, insurance companies, mutual funds, state and local governments, and other investors (i.e., individuals and corporations).<sup>26</sup>

The Office of International Affairs provides figures on the amount of debt held by foreigners through the Treasury International Capital System (TIC).<sup>27</sup> The TIC data reflect estimates of who holds Treasury

---

<sup>24</sup> U.S. Department of the Treasury, *Treasury: Strategic Plan, 2022-2026*, available at <https://home.treasury.gov/system/files/266/TreasuryStrategicPlan-FY2022-2026.pdf>.

<sup>25</sup> For additional analysis of federal debt levels, see CRS Report R44383, *Deficits, Debt, and the Economy: An Introduction*, by Grant A. Driessen.

<sup>26</sup> U.S. Department of the Treasury, Bureau of the Fiscal Service, *Treasury Bulletin*, September 2023, Table OFS-2, available at <https://www.fiscal.treasury.gov/fsreports/rpt/treasBulletin/current.htm>. For more information about foreign ownership of Treasury securities, see CRS Report RS22331, *Foreign Holdings of Federal Debt*, by Marc Labonte and Ben Leubsdorf.

<sup>27</sup> Data on major foreign holders of Treasury securities by country is available at <http://www.treas.gov/tic/ticsec2.shtml#ussecs>.

securities in a given period, which may be different from who purchased these securities at auction. As of September 2023, TIC data showed a total of \$7.6 trillion in debt held by foreigners (with governmental and private holdings roughly equivalent), or 29% of all debt held by the public.<sup>28</sup> Japan (\$1.1 trillion in total holdings), mainland China (\$0.8 trillion) and the United Kingdom (\$0.7 trillion) were the countries with the largest federal debt holdings. The percentage of publicly held debt owned by foreigners increased from below 10% before the 1970s to over 50% in 2008, but has gradually declined in recent years.<sup>29</sup>

## Factors Affecting Supply and Demand for Treasury Securities

Investors examine several key factors when deciding whether they should purchase Treasury securities. As with all types of investments, price, expected return, and risk play a role in this process. Treasury securities provide a known stream of income and offer greater liquidity than other types of fixed-income securities. Prices are determined by investors who place a value on Treasury securities based on the characteristics of safety and liquidity afforded by this investment option.<sup>30</sup> Because they are also backed by the full faith and credit of the United States, they are often seen as one of the safest investments available.

### Yield Curve

The yield curve shows the relationship between the interest rate (cost of borrowing) and the maturity of debt (i.e., U.S. Treasury securities) at a given time. In other words, the yield represents the rate of return an investor would earn if a security was held to maturity. The yield curve typically changes on a daily basis as interest rates move. Generally, yield curves are upward sloping (i.e., the longer the maturity, the higher the yield), with diminishing rates of increase over time.

Two opposing forces affect the slope and shape of the yield curve. First, investors must be compensated for choosing to invest now even though they may be able to achieve higher interest rates if they invested at a future point in time. This pushes interest rates up. Opposing this increase in interest rates is the fact that the longer the period to maturity, the greater the likelihood that interest rates will fall. This increases the risk to the lender (i.e., Treasury), as they could save on interest costs if they decided to wait before borrowing money. Generally speaking, the first effect will outweigh the second, leading to an upward sloping yield curve. An upward sloping yield curve also illustrates expectations for future economic growth and rising short-term interest rates. A downward-sloping (or “inverted”) curve implies that investors expect short-term interest rates to rise above long-term rates.<sup>31</sup> Downward-sloping yield curves have frequently, but not always, occurred before recessions.<sup>32</sup>

---

<sup>28</sup> U.S. Department of the Treasury, “Major Foreign Holders of Treasury Securities,” November 2023, available at [https://ticdata.treasury.gov/resource-center/data-chart-center/tic/Documents/slt\\_table5.html](https://ticdata.treasury.gov/resource-center/data-chart-center/tic/Documents/slt_table5.html).

<sup>29</sup> For more information on foreign federal debt ownership, see CRS Report RS22331, *Foreign Holdings of Federal Debt*, by Marc Labonte and Ben Leubsdorf.

<sup>30</sup> Dupont, Dominique and Brian Sack, *The Treasury Securities Market: Overview and Recent Developments*, Federal Reserve Board, Federal Reserve Bulletin, December 1999, pp. 792-793, available at <http://www.federalreserve.gov/pubs/bulletin/1999/1299lead.pdf>.

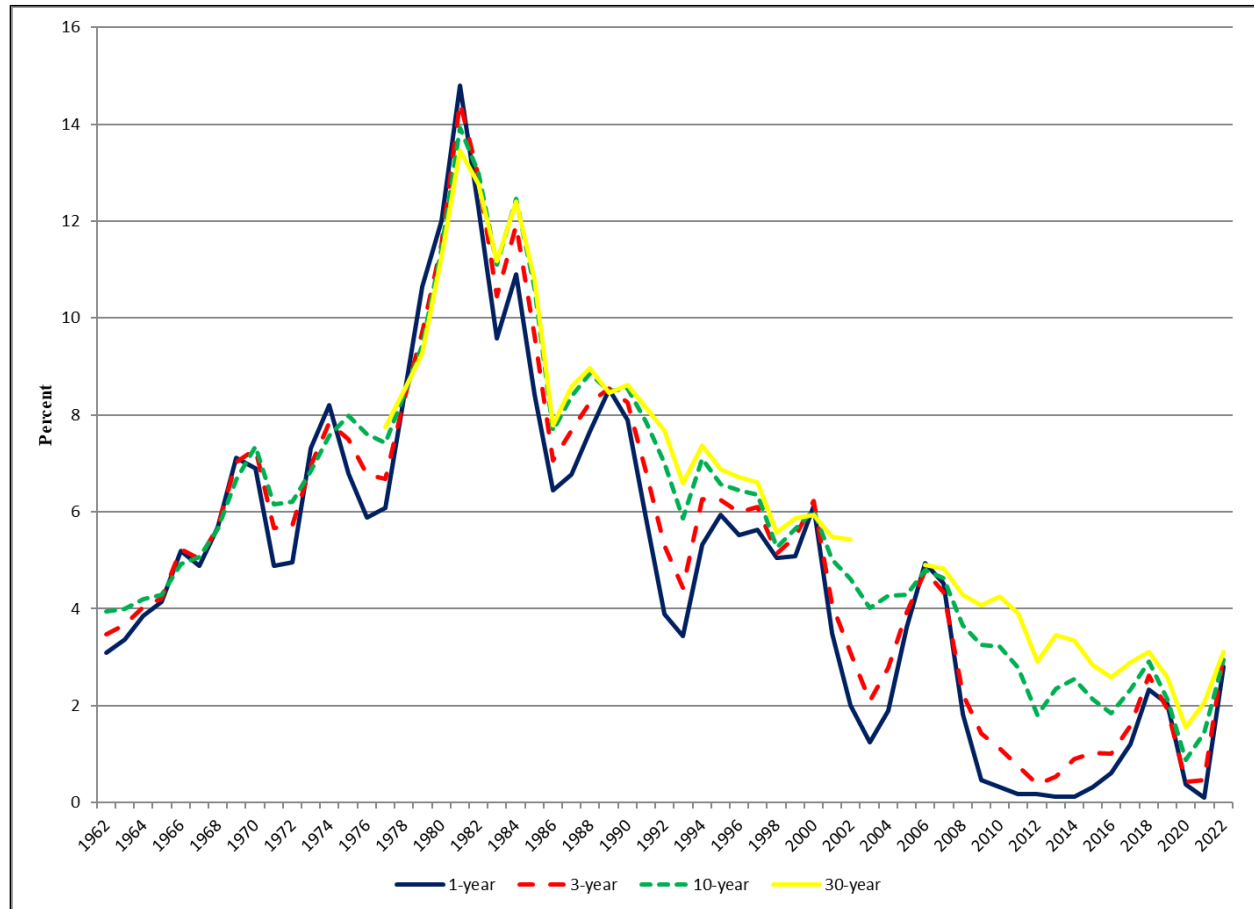
<sup>31</sup> Federal Reserve Bank of San Francisco, *What is a yield curve, and how do you read them? How has the yield curve moved over the past 25 years?* July 2004, available at <http://www.frbsf.org/education/activities/drecon/answerxml.cfm?selectedurl=/2004/0407.html>.

<sup>32</sup> For more information, see CRS Report RS22371, *The Pattern of Interest Rates: Does It Signal an Impending Recession?*, by Marc Labonte and Gail E. Makinen. Out of print. Available to congressional clients upon request.



As of November 24, 2023, Treasury securities exhibited a slightly downward sloping nominal yield curve and a relatively flat real yield curve. These values reflect a flattening of each yield curve in late 2023, and follow a number of shifts in the Treasury yield curves in recent years, with inversions in 2019 and 2022 and a return to the typical upward sloping shape for the yield curves in 2021. Market analysis of the 2023 yield curve flattening is mixed, highlighting the uncertainty surrounding yield curve shifts and general economic performance.<sup>33</sup>

**Figure 1. Selected Treasury Nominal Constant Maturity Rates**  
Annual rates, 1962-2022



**Source:** Federal Reserve Board, Federal Reserve Statistical Release, H.15 Selected Interest Rates, U.S. Government Securities – Annual Series, available at <http://www.federalreserve.gov/releases/h15/data.htm>.

**Notes:** Treasury began issuing 30-year Treasury securities in February 1977 and did not issue these securities between February 18, 2002, and February 9, 2006. The Office of Debt Management also calculates constant maturity rates for securities with other maturity periods in addition to calculating rates for inflation-indexed securities (i.e., TIPS).

**Figure** shows the Treasury constant maturity rates for selected maturities since 1962. Rates on securities with different maturities generally track each other, as securities with similar maturity periods

<sup>33</sup> Illan, Ivan, “What a Flattening Yield Curve Means for Future Fiscal Fitness,” October 19, 2023, Forbes, available at <https://www.forbes.com/sites/forbesfinancecouncil/2023/10/19/what-a-flattening-yield-curve-means-for-future-fiscal-fitness/?sh=604087ce2607>; and Barbusica, Davide, and Carolina Mandl, “US Treasury yield curve shifts could be set-up for Jackson Hole unwind,” August 25, 2023, Reuters, available at <https://www.reuters.com/markets/us/us-treasury-yield-curve-shifts-could-be-set-up-jackson-hole-unwind-2023-08-24/>.

tend to have similar rates because they offer fixed interest payments over essentially the same period of time.<sup>34</sup> Given that securities with longer maturities tend to reflect expectations about the future path of the interest rates of short-term securities, short-term rates generally provide a picture of the path of their longer-term counterparts.

The maturity rates of both long-term and short-term Treasury securities declined significantly after peaking in the early 1980s. Increases in the maturity rates of short-term securities from 2004 through 2007 were followed by sharp declines in rates during and after the economic recession of 2007-2009. Nominal rates of all Treasury securities declined from 2010 to 2019, with a much more pronounced decline among securities with shorter maturity lengths. The economic fallout from the COVID-19 pandemic again led to a swift decline in interest rates, though rates of all securities picked up considerably in 2021 and 2022, with Treasury rates at the end of 2022 looking roughly similar to values in 2018. The spread between the 30-year and 1-year security interest rates was 0.3% in 2022, smaller than the 1.3% average spread since the creation of the 30-year security in 1977. In a recent statement, the Federal Open Market Committee expressed a commitment to lowering inflation to levels closer to their 2% long-term target, while maintaining the target range for the federal funds rate at 5.25%-5.50%.<sup>35</sup>

## Determining Maturity Mix

Newly issued Treasury securities, sold to finance the operations of the federal government, are offered at a mix of maturities in order to satisfy the provisions of the regular and predictable debt management strategy and to minimize interest payments over time. The profile of securities is also important due to its influence on liquidity. In addition, Treasury must make sure that it has adequate cash balances available to pay federal obligations.<sup>36</sup>

Longer-term securities generally command higher interest rates compared to shorter-term securities because investors demand greater compensation for incurring risk over a longer period of time. Generally, a strong economy or higher inflation will be accompanied by higher interest rates. If Treasury issues long-term debt during this time, they are committing to paying higher interest rates for a longer period and may thus decide to prioritize short-term security issuances. However, this leads to uncertainties over the longer term, since the interest rate will likely change. This, however, may lead to more volatile and uncertain yearly interest payments because Treasury has to enter the market more often, and involves a degree of uncertainty over future market behavior. During periods of economic downturn and low interest rates, Treasury may decide to prioritize instruments with longer maturities to take advantage of lower borrowing costs, though such periods may also present an elevated need for predictable behavior and higher levels of liquidity.

Since 1974, the average maturity period of Treasury securities reached its minimum point in FY1976 at 31 months and its peak in FY2000 at 75 months. The average maturity length of Treasury securities has generally increased in recent decades, with swift declines in the maturity period during the Great Recession and COVID-19 pandemic followed by maturity period increases in subsequent years. The average maturity period of Treasury securities was 68 months in 2022, its highest total since 2001.

---

<sup>34</sup> Dupont, Dominique and Brian Sack, *The Treasury Securities Market: Overview and Recent Developments*, Federal Reserve Board, Federal Reserve Bulletin, December 1999, pp. 793-794, available at <http://www.federalreserve.gov/pubs/bulletin/1999/1299lead.pdf>.

<sup>35</sup> Federal Reserve Bank, Board of Governors of the Federal Reserve System, press release, May 2022, available at <https://www.federalreserve.gov/newsevents/pressreleases/monetary20220504a.htm>. Changes in the federal funds rate affect other interest rate levels, and represent one of the Fed's primary methods of implementing desired changes in monetary policy.

<sup>36</sup> Requirements and guidance for Treasury cash balances can be found in the federal code, including 31 U.S.C. §323.