Prefatory Note

The attached document represents the most complete and accurate version available based on original files from the FOMC Secretariat at the Board of Governors of the Federal Reserve System.

Please note that some material may have been redacted from this document if that material was received on a confidential basis. Redacted material is indicated by occasional gaps in the text or by gray boxes around non-text content. All redacted passages are exempt from disclosure under applicable provisions of the Freedom of Information Act.

Content last modified 1/12/2024.

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Class I FOMC – Restricted Controlled (FR)

Report to the FOMC on Economic Conditions and Monetary Policy

Book B

Monetary Policy Alternatives

June 7, 2018

Prepared for the Federal Open Market Committee
by the staff of the Board of Governors of the Federal Reserve System

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Monetary Policy Alternatives

Information received since the Committee met in May indicates that the economy is evolving broadly in line with expectations. The labor market has continued to strengthen, with the unemployment rate declining to 3.8 percent in May and payrolls expanding by an average of 180,000 per month over the past three months. Real GDP growth appears to have bounced back in the current quarter, led by a pickup in household spending. The staff continues to project above-trend growth through 2019 and high levels of resource utilization over the medium term. The 12-month changes in headline and core PCE prices were 2.0 and 1.8 percent, respectively, in April. For this year as a whole, as well as for 2019 and 2020, the staff projects both headline and core PCE inflation close to 2 percent.

There are three key questions that the Committee is likely to face at this meeting: first, whether the available information warrants raising the target range for the federal funds rate; second, whether the federal funds rate path suggested by recent policy communications remains appropriate, given the current economic outlook and associated risks; and third, whether, in light of the state of the economy and the ongoing removal of policy accommodation, some parts of the FOMC statement need to be updated so as to align the statement with the Committee's current expectations and intentions. With these issues in mind, three alternative draft statements are presented below.

Alternative B in this Tealbook is based on the template presented as Alternative C in the previous Tealbook. Alternative B raises the target range for the federal funds rate by 25 basis points and notes the Committee's expectation that further gradual increases will be consistent with sustained economic growth, a strong labor market, and inflation near 2 percent. If the federal funds rate evolves in line with expectations, it will soon be within the range of participants' estimates of its normal longer-run level. Consequently, Alternative B drops the statement that "the federal funds rate is likely to remain, for some time, below levels that are expected to prevail in the longer run."

Alternative C takes the view that a steeper policy rate path than signaled in the Committee's recent communications will likely be appropriate; it therefore not only raises the target range but also drops the indication that further rate increases are expected to be "gradual." Moreover, Alternative C conveys some concern about potential overheating by adding that "the Committee is closely monitoring the implications of high

levels of resource utilization." This Alternative also removes the forward guidance that suggested that the federal funds rate will remain below its longer-run level for some time, for the same reason that it is removed in Alternative B.

Alternative A is motivated by the view that longer-run inflation expectations are too low. The outlook under Alternative A is conditioned on "appropriate monetary policy accommodation" rather than on further gradual increases in the federal funds rate. Accordingly, this alternative maintains the current target range for the federal funds rate. Alternative A also removes the forward guidance language—in this instance, to signal that there is no presumption of further interest rate increases.

With regard to the specifics of the language in Alternatives A, B, and C:

- The three alternatives are similar in their assessments of the incoming data, though Alternative C notes that growth of household spending has "strengthened," while Alternatives A and B note that it has "picked up." Alternatives A and B observe that inflation has "moved close to 2 percent," though Alternative A adds that this has only occurred "recently." Alternative C states that overall and core inflation "remain close to 2 percent." The alternatives also differ slightly in characterizing inflation expectations:
    - Alternatives B and C combine market-based measures of inflation compensation and survey-based measures of inflation expectations into the broader category of "indicators of longer-term inflation expectations." These indicators are characterized as "little changed, on balance" over the intermeeting period. In combining market-based and survey-based measures, Alternatives B and C drop the observation that market-based measures "remain low."
    - Alternative A continues to describe these two types of indicators separately, and retains language indicating that measures of inflation compensation remain low.
- With respect to the outlook for economic activity and inflation, the associated risks, and the monetary policy path upon which the outlook is conditioned:
    - Alternative B projects "sustained expansion of economic activity, strong labor market conditions, and inflation near the Committee's symmetric 2 percent inflation objective," notes that risks to this outlook are roughly balanced, and

conditions these outcomes on "further gradual" increases in the federal funds rate. Reflecting the view that the risk of inflation running persistently below 2 percent has diminished, Alternative B removes the indication that "the Committee will carefully monitor actual and expected inflation developments."

- Motivated by the risks posed by overly tight labor market conditions, Alternative C signals that a steeper trajectory of the federal funds rate will be warranted "to achieve a sustainable expansion of economic activity and employment and to maintain inflation near the Committee's symmetric 2 percent objective." While stating that the risks to the outlook appear to be roughly balanced, Alternative C notes that "the Committee is closely monitoring the implications of high levels of resource utilization."
- Alternative A projects that "economic activity will expand at a moderate pace" and that inflation will "move modestly above 2 percent for a time and then run near the Committee's symmetric 2 percent objective" given "appropriate monetary policy accommodation." Alternative A states that such a projected path for inflation should "help ensure that longer-term inflation expectations rise to a level consistent with the Committee's symmetric objective for 2 percent inflation." Reflecting the concern that longer-term inflation expectations may still be too low, Alternative A maintains the language that "the Committee will carefully monitor actual and expected inflation developments relative to its symmetric inflation goal."

- With respect to the current policy decision:
  - Alternatives B and C raise the target range to 1¾ to 2 percent, and they both continue to note that the stance of monetary policy remains accommodative; Alternative C removes the associated rationale, which could suggest that an accommodative stance is no longer appropriate.
  - Alternative A leaves the target range unchanged at 1½ to 1¾ percent.
- All three alternatives drop the forward guidance stating that "the federal funds rate is likely to remain, for some time, below levels that are expected to prevail in the longer run."
  - The removal of this forward guidance from Alternatives B and C would signal that the federal funds rate could well move above its longer-run level as the Committee continues to increase the target range.

- The deletion of this forward guidance from Alternative A would signal that the Committee is in no hurry to raise the federal funds rate further.

MAY 2018 FOMC STATEMENT

1. Information received since the Federal Open Market Committee met in March indicates that the labor market has continued to strengthen and that economic activity has been rising at a moderate rate. Job gains have been strong, on average, in recent months, and the unemployment rate has stayed low. Recent data suggest that growth of household spending moderated from its strong fourth-quarter pace, while business fixed investment continued to grow strongly. On a 12-month basis, both overall inflation and inflation for items other than food and energy have moved close to 2 percent. Market-based measures of inflation compensation remain low; survey-based measures of longer-term inflation expectations are little changed, on balance.

2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that, with further gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace in the medium term and labor market conditions will remain strong. Inflation on a 12-month basis is expected to run near the Committee's symmetric 2 percent objective over the medium term. Risks to the economic outlook appear roughly balanced.

3. In view of realized and expected labor market conditions and inflation, the Committee decided to maintain the target range for the federal funds rate at 1-1/2 to 1-3/4 percent. The stance of monetary policy remains accommodative, thereby supporting strong labor market conditions and a sustained return to 2 percent inflation.

4. In determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments. The Committee will carefully monitor actual and expected inflation developments relative to its symmetric inflation goal. The Committee expects that economic conditions will evolve in a manner that will warrant further gradual increases in the federal funds rate; the federal funds rate is likely to remain, for some time, below levels that are expected to prevail in the longer run. However, the actual path of the federal funds rate will depend on the economic outlook as informed by incoming data.

ALTERNATIVE A FOR JUNE 2018

1. Information received since the Federal Open Market Committee met in ~~March~~ **May** indicates that the labor market has continued to strengthen and that economic activity has been rising at a moderate rate. Job gains have been strong, on average, in recent months, and the unemployment rate has ~~stayed low~~ **declined**. Recent data suggest that growth of household spending ~~moderated from its strong fourth-quarter pace~~ **has picked up**, while business fixed investment **has** continued to grow strongly. On a 12-month basis, both overall inflation and inflation for items other than food and energy **recently** have moved close to 2 percent. Market-based measures of inflation compensation remain low; survey-based measures of longer-term inflation expectations are little changed, on balance.

2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that, with ~~further gradual adjustments in the stance of~~ **appropriate** monetary policy **accommodation**, economic activity will expand at a moderate pace in the medium term and labor market conditions will remain strong. Inflation on a 12-month basis is expected to **move modestly above 2 percent for a time and then** run near the Committee's symmetric 2 percent objective ~~over the medium term~~. Risks to the economic outlook appear roughly balanced.

3. In view of realized and expected labor market conditions and inflation, the Committee decided to maintain the target range for the federal funds rate at 1-1/2 to 1-3/4 percent. The stance of monetary policy remains accommodative, thereby supporting strong labor market conditions and a ~~sustained return to~~ **period of inflation modestly above** 2 percent ~~inflation~~. **This inflation outcome should help ensure that longer-term inflation expectations rise to a level consistent with the Committee’s symmetric objective for 2 percent inflation.**

4. In determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments. The Committee will carefully monitor actual and expected inflation developments relative to its symmetric inflation goal. ~~The Committee expects that economic conditions will evolve in a manner that will warrant further gradual increases in the federal funds rate; the federal funds rate is likely to remain, for some time, below levels that are expected to prevail in the longer run. However, the actual path of the federal funds rate will depend on the economic outlook as informed by incoming data.~~

ALTERNATIVE B FOR JUNE 2018

1. Information received since the Federal Open Market Committee met in ~~March~~ **May** indicates that the labor market has continued to strengthen and that economic activity has been rising at a ~~moderate~~ **solid** rate. Job gains have been strong, on average, in recent months, and the unemployment rate has ~~stayed low~~ **declined**. Recent data suggest that growth of household spending ~~moderated from its strong fourth-quarter pace~~ **has picked up**, while business fixed investment **has** continued to grow strongly. On a 12-month basis, both overall inflation and inflation for items other than food and energy have moved close to 2 percent. ~~Market-based measures of inflation compensation remain low; survey-based measures~~ **Indicators** of longer-term inflation expectations are little changed, on balance.

2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that~~, with~~ further gradual ~~adjustments in the stance of monetary policy,~~ **increases in the target range for the federal funds rate will be consistent with sustained expansion of** economic activity**,** ~~will expand at a moderate pace in the medium term and~~ **strong** labor market conditions**,** ~~will remain strong.~~ **and** inflation ~~on a 12-month basis is expected to run~~ near the Committee's symmetric 2 percent objective over the medium term. Risks to the economic outlook appear roughly balanced.

3. In view of realized and expected labor market conditions and inflation, the Committee decided to ~~maintain~~ **raise** the target range for the federal funds rate ~~at 1-1/2~~ to 1-3/4 **to 2** percent. The stance of monetary policy remains accommodative, thereby supporting strong labor market conditions and a sustained return to 2 percent inflation.

4. In determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its ~~objectives of~~ maximum employment **objective** and **its symmetric** 2 percent inflation **objective**. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments. ~~The Committee will carefully monitor actual and expected inflation developments relative to its symmetric inflation goal. The Committee expects that economic conditions will evolve in a manner that will warrant further gradual increases in the federal funds rate; the federal funds rate is likely to remain, for some time, below levels that are expected to prevail in the longer run. However, the actual path of the federal funds rate will depend on the economic outlook as informed by incoming data.~~

ALTERNATIVE C FOR JUNE 2018

1. Information received since the Federal Open Market Committee met in ~~March~~ **May** indicates that the labor market has continued to strengthen and that economic activity has been rising at a ~~moderate~~ **solid** rate. Job gains have been strong, on average, in recent months, and the unemployment rate has ~~stayed low~~ **declined**. Recent data suggest that growth of household spending ~~moderated from its strong fourth-quarter pace~~ **has strengthened**, while business fixed investment **has** continued to grow strongly. On a 12-month basis, both overall inflation and inflation for items other than food and energy ~~have moved~~ **remain** close to 2 percent. ~~Market-based measures of inflation compensation remain low; survey-based measures~~ **Indicators** of longer-term inflation expectations are little changed, on balance.

2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that~~, with~~ further ~~gradual adjustments in the stance of monetary policy,~~ **increases in the target range for the federal funds rate will be warranted to achieve a sustainable expansion of** economic activity **and employment** ~~will expand at a moderate pace in the medium term and labor market conditions will remain strong.~~ **and to maintain** inflation ~~on a 12-month basis is expected to run~~ near the Committee's symmetric 2 percent objective over the medium term. Risks to the economic outlook appear roughly balanced**, but the Committee is closely monitoring the implications of high levels of resource utilization**.

3. In view of realized and expected labor market conditions and inflation, the Committee decided to ~~maintain~~ **raise** the target range for the federal funds rate ~~at 1-1/2~~ to 1-3/4 **to 2** percent. The stance of monetary policy remains accommodative~~, thereby supporting strong labor market conditions and a sustained return to 2 percent inflation~~.

4. In determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its ~~objectives of~~ maximum employment **objective** and **its symmetric** 2 percent inflation **objective**. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments. ~~The Committee will carefully monitor actual and expected inflation developments relative to its symmetric inflation goal. The Committee expects that economic conditions will evolve in a manner that will warrant further gradual increases in the federal funds rate; the federal funds rate is likely to remain, for some time, below levels that are expected to prevail in the longer run. However, the actual path of the federal funds rate will depend on the economic outlook as informed by incoming data.~~

THE CASE FOR ALTERNATIVE B

Economic Conditions and Outlook

- Available data indicate that the unemployment rate is very low and that the labor market continues to strengthen.
    - Payroll gains averaged 180,000 in the three months ending in May, well above the pace that the staff estimates is consistent with no change in resource utilization.
    - The unemployment rate fell to 3.9 percent in April and 3.8 percent in May, levels below all FOMC participants' estimates of the longer-run normal rate of unemployment in the March Summary of Economic Projections.
    - For the past few years, the participation rate has moved essentially sideways, indicating some tightening relative to its downward trend.
    - Average hourly earnings rose 2.7 percent over the year ending in May. ECI wages and salaries, measured on a 12-month basis, moved up to 2.9 percent in the first quarter, while benefits increased by 2.5 percent. These readings are only modestly higher than they were a year earlier.
- Inflation recently has been, and is likely to remain, close to the Committee's symmetric 2 percent goal.
    - The 12-month change in core PCE prices stood at 1.8 percent in April. Total PCE prices rose 2 percent over the 12 months ending in April.
    - The staff projects that core PCE inflation will remain close to 2 percent through 2020. Total PCE inflation on a 12-month basis is projected to increase to 2½ percent by mid-year as consumer energy prices continue to rise, and then slow to 2 percent by the end of 2018 as energy prices level off; thereafter, total PCE inflation is projected to run a bit below core inflation over the medium term with energy prices projected to slowly decline.
    - Both market- and survey-based indicators of longer-term inflation expectations have moved little, on balance, since the April Tealbook, and are consistent with the view that these expectations remain stable.
- The staff estimates that output stands nearly 2 percent above its potential level in the current quarter and that the gap between actual and potential output will continue to

widen through 2019. In this projection, real GDP growth is 2¾ percent this year and then gradually slows to 1¾ percent in 2020.

- Despite increased financial stress in some emerging market economies and renewed political risks in Italy, the staff projects that foreign real GDP growth will remain near its estimated potential rate of 2¾ percent over the medium term.

Policy Strategy

- Policymakers may judge that further gradual increases in the federal funds rate are appropriate to balance the risk of overly tight resource utilization against the risk of inflation again falling below 2 percent.
  - An increase in the target range in June may be seen as consistent with the Committee's earlier statements indicating that further gradual adjustments in the stance of monetary policy would be appropriate if the economy evolved about as anticipated.
- Policymakers may see recent inflation developments as confirming the view that the idiosyncratic factors that held down inflation last year were transitory. That being so, they may expect that, with further gradual tightening of monetary policy, inflation will continue to run close to the Committee's symmetric 2 percent inflation goal.
- With the target range for the federal funds rate moved up to 1¾ to 2 percent, and in light of further anticipated gradual increases in the federal funds rate, policymakers may wish to signal that they no longer expect that "the federal funds rate is likely to remain, for some time, below levels that are expected to prevail in the longer run." Removing this language would allow for the possibility that the federal funds rate will rise above its longer-run level.
- With headline and core measures of inflation running near the Committee's 2 percent symmetric goal, policymakers may wish to remove the language stating that they will "carefully monitor actual and expected inflation developments."
- A statement along the lines of Alternative B seems unlikely to generate appreciable changes in asset prices. As shown in the "Monetary Policy Expectations and Uncertainty" box in this Tealbook, financial market quotes indicate that market participants regard the odds of a rate hike at the upcoming meeting as near 100 percent. Respondents to the Desk's latest surveys of primary dealers and market participants have broadly similar views. The removal of the forward guidance stating that "the federal funds rate is likely to remain, for some time, below levels that are

Monetary Policy Expectations and Uncertainty

Market participants are all but certain that the FOMC will raise the target range for the federal funds rate by 25 basis points at its June meeting. A straight read of quotes on federal funds futures contracts implies that investors attach a probability of close to 100 percent to such an outcome (figure 1).[1] The Desk's June Surveys of Primary Dealers and Market Participants also showed high odds of a rate increase in June, with an average probability across respondents of close to 90 percent (not shown).

The May FOMC meeting minutes, released on May 23, 2018, noted that FOMC participants discussed the possibility of setting the IOER rate 5 basis points below the top end of the federal funds target range to keep the effective federal funds rate well within the target range. This discussion reportedly caught investors by surprise, and implied rates on federal funds futures for July 2018 declined discretely by 3.5 basis points after the minutes were released. Consistent with the technical nature of the adjustment, this decline was reportedly driven by changes in expectations about the level of the effective federal funds rate within the target range rather than by changes in expectations of the target range itself. Financial market quotes provide some support for this interpretation: Figure 2 shows the distribution of the effective federal funds rate for July 2018 implied by options on federal funds futures before and after the release of the minutes (not adjusted for risk premiums). It provides a granular view based on 6¼-basis-point-wide ranges, using the narrowest increments in strike prices available for these options. Both distributions are consistent with high expectations of an increase in the target range to 1.75 to 2 percent at the June meeting. However, the release of the minutes prompted a leftward move in the distribution, with the modal outcome shifting from the 1.94 to 2.00 percent range to the 1.88 to 1.94 percent range.[2]

Looking further ahead, the probability distribution of the level of the federal funds rate at the end of 2018 implied by options quotes, assuming zero term premiums, shifted marginally to the left over the intermeeting period (figure 3). It continues to suggest that investors place the highest odds on the federal funds rate being in either the 2 to 2¼ percent range or the 2¼ to 2½ percent range at

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[1] Our methodology for computing this probability takes into account the anticipated effect of the adjustment in IOER mentioned in the May FOMC meeting minutes (discussed in the next paragraph).

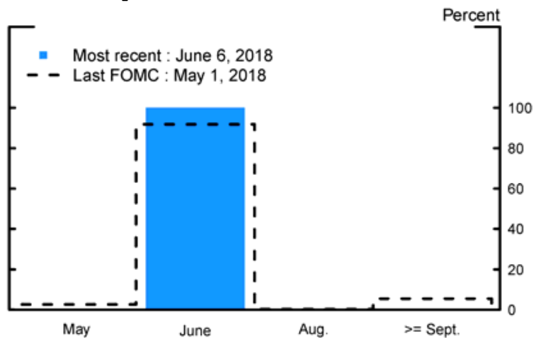
[2] Prior to the minutes release, options markets appear to have priced in some probability that the average effective federal funds rate in July would exceed 2 percent, and that probability diminished after the release. The probability of about 15 percent seen before the release of the minutes is hard to reconcile with the experience of the past several years, during which the average effective rate in any given calendar month remained firmly within the target range. It may, in part, reflect limited liquidity of those out-of-money options, some risk premium built into options quotes, or investors perceiving a small probability of a 50-basis point hike at the June meeting.

year-end. Averaging across respondents, the distribution from the Desk's June surveys (figure 4) shifted to the right a bit, but also continues to place about the same probability to either the 2 to 2¼ percent or the 2¼ to 2½ percent range at the end of 2018.

Figure 5 shows how different measures of federal funds rate expectations for the end of 2018 have evolved since June 2016. The figure displays market-based metrics (with and without term premium adjustments) derived from quotes on overnight index swap contracts (OIS), the median projection from FOMC participants' Summary of Economic Projections (SEP) through March 2018, and the median of respondents' modal forecasts as well as the average of the respondents' implied mean forecasts from the Desk surveys. Of note, the latter two forecasts approximately correspond to the mode and mean, respectively, of the distribution shown in figure 4. The SEP median (the golden squares) has been stable at 2 to 2¼ percent from early 2017 through March of this year, while the market-based measures (the red and blue lines) and the Desk survey–implied mean and modal forecasts (the gray and black dots, respectively) have inched up. The narrowing of the gap between the forward rates implied by OIS quotes (the blue line) and the expected path of the federal funds rate with adjustments for term premiums as estimated by a staff term structure model (the red line) reflects, in part, negative term premiums that are narrowing toward zero as the projection horizon shortens, and possibly also attenuation of downside risks as interest rates move further away from the lower bound.

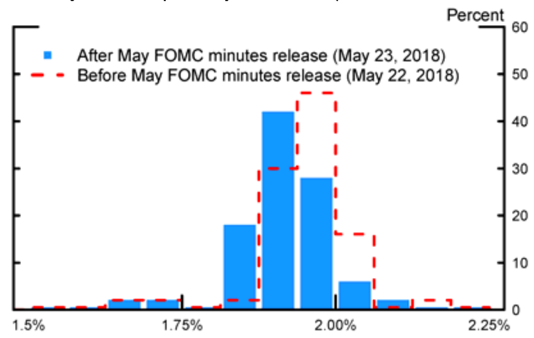
The forecasts implied by the June Desk surveys were little changed relative to the May surveys, and the market-based measures were also little changed, on net, over the intermeeting period. Notable decreases were associated with flight-to-safety flows surrounding political developments in Italy, but the declines have since retraced amid an easing of those concerns and the release of the stronger-than-expected May Employment Situation Report. The latest readings of the unadjusted market-implied measure, the March SEP Median, and the Desk Survey's implied mean forecast are consistent with a total of three 25-basis-point rate increases in 2018, while the market measure that adjusts for term premiums and the Desk Survey's latest modal forecast both imply an expectation of four rate hikes in 2018. Market-implied measures of the expected federal funds rate path beyond 2018 are little changed, on net (figure 6).

Figure 1: Market−Implied Probability Distribution of the Timing of Next Rate Increase



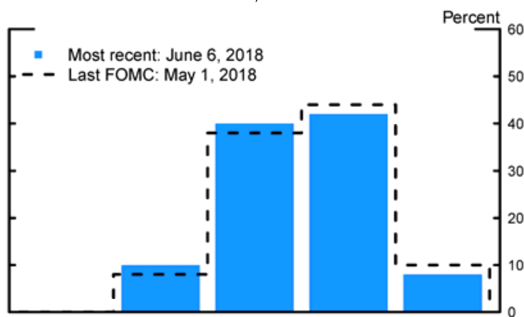
Note: Probabilities implied by a binomial tree fitted to settlement prices on federal funds futures contracts, assuming the next policy action is either no change or a 25 basis point increase in the target range and no intermeeting moves. The "Most Recent" path takes into account the anticipated effect of the adjustment in IOER discussed in the May FOMC meeting minutes.
Source: CME Group; Federal Reserve Board staff estimates.

Figure 2: Distribution of the Federal Funds Rate for July 2018 Implied by Futures Options



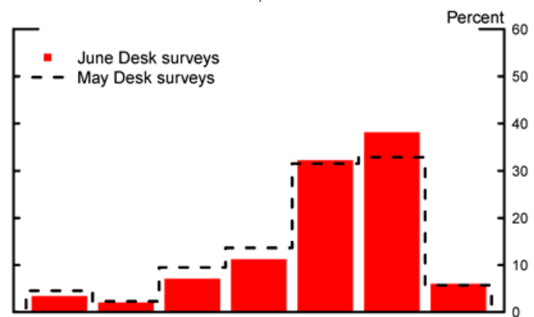
Note: Estimated from federal funds futures options for the average federal funds rate in July 2018 without adjusting for risk premiums.
Source: CME Group; Federal Reserve Board staff estimates.

Figure 3: Market−Implied Probability Distribution of the Federal Funds Rate, Year−End 2018



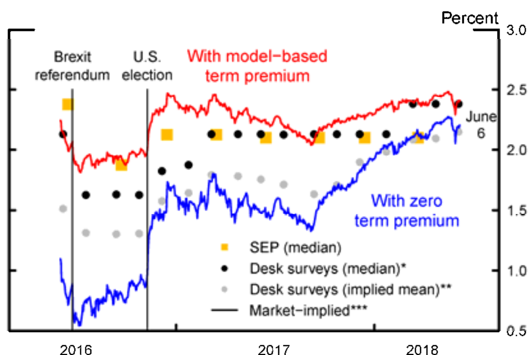
Note: Estimated from federal funds futures options for the average federal funds rate in January 2019 without adjusting for risk premiums.
Source: CME Group; Federal Reserve Board staff estimates.

Figure 4: Desk Survey Average Probability Distribution of the Federal Funds Rate, Year−End 2018



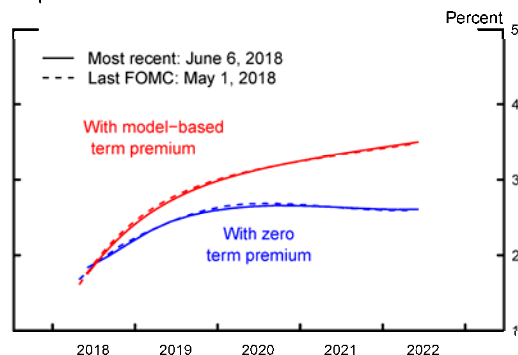
Note: Probabilities are averages of the probabilities assigned by respondents to different ranges of the federal funds rate at the end of 2018.
Source: FRBNY.

Figure 5: Historical Federal Funds Rate Expectations for the End of 2018



* Median of the respondents' modal forecast for the federal funds rate.
** Estimated from respondents' year−end probability distributions.
*** Zero term premium path is estimated using overnight index swap quotes with a spline approach and no term premium adjustment. Model−based term premium path is estimated using a term structure model maintained by Board staff and corrects for term premiums.
Source: Bloomberg, Blue Chip Financial Forecasts, FRBNY, Federal Reserve Board staff estimates.

Figure 6: Market−Implied Federal Funds Rate Expectations



Note: Zero term premium path is estimated using overnight index swap quotes with a spline approach and a term premium of zero basis points. Model−based term premium path is estimated using a term structure model maintained by Board staff and corrects for term premiums.
Source: Bloomberg; Federal Reserve Board staff estimates.

expected to prevail in the longer run" was a possibility discussed in the May FOMC minutes as well as in other public communications. In addition, a number of respondents to the Desk's surveys noted that they expect some changes to the forward guidance in the June statement regarding the position of the federal funds rate relative to its longer-run level.

THE CASE FOR ALTERNATIVE C

Economic Conditions and Outlook

- Policymakers may judge that the labor market is operating appreciably beyond full employment and that economic activity—which is expanding at a faster-than-sustainable rate—will continue to be spurred by expansionary fiscal policy.
  - The unemployment rate, at 3.8 percent in May, is below each FOMC participant's estimate of its longer-run normal level and is projected to decline further. Other indicators also point to an already-tight labor market; these include a record-high job openings rate, continued reports of firms having difficulty hiring workers, and very low initial claims for unemployment insurance.
- Policymakers may judge that more concerted upward pressure on both wages and prices is likely to emerge if the economy experiences a prolonged period of significant labor market tightness. If so, they may be concerned that inflation will move persistently above 2 percent unless the federal funds rate soon begins to rise more rapidly.
- Despite six increases in the target range for the federal funds rate between December 2015 and March 2018 and some recent financial market volatility and appreciation of the dollar, financial conditions continue to be supportive of above-potential growth and, by some measures, have eased on balance since December 2015. On net, broad equity price indexes have increased roughly 35 percent and spreads of investment- and speculative grade corporate bonds over equivalent maturity Treasury securities have declined around 60 and 250 basis points, respectively, since the target range was first raised above its effective lower bound in December 2015. The narrowing of spreads on high-yield bonds has occurred even as use of leverage by speculative-grade and unrated firms has increased over the past several years.

Policy Strategy

- Policymakers may judge that a faster removal of policy accommodation is necessary in the near term to avoid significant overheating and a subsequent need to tighten policy abruptly.
  - Policymakers may be concerned that ongoing above-trend economic growth and an already-strong labor market that continues to tighten could soon result in more notable upward pressure on inflation.

  - They may also judge that a steeper trajectory of rate hikes is needed to prevent the unemployment rate from declining significantly further below its normal longer-run value; such a further decline could make it increasingly challenging to engineer a soft landing as inflation picks up.
  - Additionally, amid elevated asset valuations and an increased use of debt by nonfinancial corporations, policymakers may see a somewhat faster pace of rate increases as needed to avoid a significant buildup of financial imbalances.

- For the above reasons, policymakers may opt to increase the target range for the federal funds rate to 1¾ to 2 percent and to drop statement language that describes the future pace of tightening as gradual. In addition, policymakers may wish to signal that the Committee now judges that a steeper path for the federal funds rate—steeper than suggested by the Committee's previous communications—will be warranted "to achieve a sustainable expansion of economic activity and employment and to maintain inflation near the Committee's symmetric 2 percent objective."

- Policymakers may also wish to communicate in paragraph 2 that "the Committee is closely monitoring the implications of high levels of resource utilization" to signal that they are concerned about the risks from overheating, including the possibility that a prolonged period of high resource utilization might lead to a build-up of financial vulnerabilities.

- While market participants are expecting an increase in the federal funds rate target range to 1¾ to 2 percent, they would likely read the change in language in paragraph 2, in conjunction with the dropping of the final few sentences in paragraph 4, as a signal that the Committee intends to raise the federal funds rate more rapidly than previously expected. Medium- and longer-term real interest rates could rise, as could the exchange value of the dollar; equity prices and inflation compensation could fall. The change in statement language could also increase investors' uncertainty about the future path of the federal funds rate.

THE CASE FOR ALTERNATIVE A

Economic Conditions and Outlook

- Policymakers may judge that inflation has not sustainably returned to 2 percent. On a 12-month basis, core PCE inflation moved to 1.8 percent in April, still below the symmetric 2 percent objective. The 12-month trimmed mean PCE inflation rate from the Federal Reserve Bank of Dallas was 1.7 percent over the 12 months ending in April, about the same as the preceding 12 months.
- One factor holding down both core and total inflation may be low expected inflation. Readings on market-based measures of inflation compensation remain substantially below where they were before the middle of 2014, and some survey-based measures of longer-term inflation expectations are still low by historical standards.
- Moreover, the labor market may not yet have reached maximum sustainable employment and may have further room for improvement. While job gains have been solid, wages have not accelerated much. The employment-to-population ratio for prime-age workers has been rising but still remains well below its pre-recession level, suggesting scope for further labor market strengthening.

Policy Strategy

- Policymakers may be concerned that, because inflation has run persistently below 2 percent in recent years, longer-term inflation expectations are now too low; policymakers also may be concerned that inflation expectations could drift down further if the Committee continues to tighten monetary policy without clear evidence that inflation will remain near 2 percent on a sustained basis. Policymakers may judge that removing the statement's emphasis on monitoring inflation now that inflation is near 2 percent runs the risk of creating the perception that the Committee sees its longer-run objective as a ceiling rather than as a symmetric objective.
  - Against that background, policymakers may favor Alternative A in order to underscore the Committee's commitment to its inflation objective and to ensure that longer-term inflation expectations become well anchored at a level consistent with the Committee's 2 percent objective. In addition, policymakers may judge that the past decade's experience of low inflation reduces the likelihood that longer-run inflation expectations will rise above 2 percent.

- Consequently, policymakers may favor the addition of language in paragraph 3 to indicate that the Committee would welcome "a period of inflation modestly above 2 percent" in order to "ensure that longer-term inflation expectations rise to a level consistent with the Committee's symmetric objective for 2 percent inflation."

- Policymakers may view the current state of the financial system as sound and the potential for a buildup of risks to financial stability as limited, or they may judge that interest rate policy is not an effective tool for addressing any emerging financial stability concerns.

- Despite the likely expansionary effects of recently enacted changes in federal taxes and spending, some other policies—particularly trade policies—and recent political developments in Europe pose downside risks. Policymakers may judge that their ability to react to downside outcomes remains limited by the proximity of the federal funds rate to the effective lower bound.

- Financial market quotes and the Desk's latest surveys indicate that market participants view an increase in the target range at the June meeting as a near certainty. Thus, a statement along the lines of Alternative A would likely be regarded as an important change in the Committee's policy outlook and reduce expectations of further rate hikes. If the public saw this statement as primarily reflecting policymakers' resolve to push inflation above 2 percent for a time, then inflation compensation could rise, real longer-term interest rates would probably fall somewhat, and equity prices might rise. Lower real rates and the prospect of higher inflation likely would lead to depreciation of the dollar. Conversely, if investors read the statement as reflecting an unexpectedly downbeat assessment of the economic outlook, equity prices and inflation compensation could fall.

IMPLEMENTATION NOTE

If the Committee decides to maintain the current target range for the federal funds rate, an implementation note that indicates no change in the administered rates—the interest rates on required and excess reserves, the offering rate on overnight reverse repurchase agreements, and the primary credit rate—would be issued. If the Committee decides to raise the target range for the federal funds rate, an implementation note that communicates the changes the Federal Reserve decided to make in these three policy tools would be issued. The changes include a small technical realignment of the interest rate paid on required and excess reserve balances relative to the top of the target range for the federal funds rate, as discussed by policymakers during May's joint meeting of the FOMC and Board. Draft implementation notes that correspond to these two cases appear on the following pages; struck-out text indicates language deleted from the May directive and implementation note, bold red underlined text indicates added language, and blue underlined text indicates text that links to websites.

Implementation Note for June 2018 Alternative A

Release Date: June 13, 2018

Decisions Regarding Monetary Policy Implementation

The Federal Reserve has made the following decisions to implement the monetary policy stance announced by the Federal Open Market Committee in its statement on ~~May 2~~ **June 13**, 2018:

- The Board of Governors of the Federal Reserve System voted **[** unanimously **]** to maintain the interest rate paid on required and excess reserve balances at 1.75 percent, effective ~~May 3~~ **June 14**, 2018.

- As part of its policy decision, the Federal Open Market Committee voted to authorize and direct the Open Market Desk at the Federal Reserve Bank of New York, until instructed otherwise, to execute transactions in the System Open Market Account in accordance with the following domestic policy directive:

> "Effective ~~May 3~~ **June 14**, 2018, the Federal Open Market Committee directs the Desk to undertake open market operations as necessary to maintain the federal funds rate in a target range of 1-1/2 to 1-3/4 percent, including overnight reverse repurchase operations (and reverse repurchase operations with maturities of more than one day when necessary to accommodate weekend, holiday, or similar trading conventions) at an offering rate of 1.50 percent, in amounts limited only by the value of Treasury securities held outright in the System Open Market Account that are available for such operations and by a per-counterparty limit of $30 billion per day.
>
> The Committee directs the Desk to continue rolling over at auction the amount of principal payments from the Federal Reserve's holdings of Treasury securities maturing during ~~each calendar month~~ **June** that exceeds $18 billion, and to continue reinvesting in agency mortgage-backed securities the amount of principal payments from the Federal Reserve's holdings of agency debt and agency mortgage-backed securities received during ~~each calendar month~~ **June** that exceeds $12 billion. **Effective in July, the Committee directs the Desk to roll over at auction the amount of principal payments from the Federal Reserve's holdings of Treasury securities maturing during each calendar month that exceeds $24 billion, and to reinvest in agency mortgage-backed securities the amount of principal payments from the Federal Reserve's holdings of agency debt and agency mortgage-backed securities received during each calendar month that exceeds $16 billion.** Small deviations from these amounts for operational reasons are acceptable.

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The Committee also directs the Desk to engage in dollar roll and coupon swap transactions as necessary to facilitate settlement of the Federal Reserve's agency mortgage-backed securities transactions."

- In a related action, the Board of Governors of the Federal Reserve System voted [unanimously] to approve the establishment of the primary credit rate at the existing level of 2.25 percent.

This information will be updated as appropriate to reflect decisions of the Federal Open Market Committee or the Board of Governors regarding details of the Federal Reserve's operational tools and approach used to implement monetary policy.

More information regarding open market operations and reinvestments may be found on the Federal Reserve Bank of New York's website.

Implementation Note for June 2018 Alternatives B and C

Release Date: June 13, 2018

Decisions Regarding Monetary Policy Implementation

The Federal Reserve has made the following decisions to implement the monetary policy stance announced by the Federal Open Market Committee in its statement on ~~May 2~~ **June 13**, 2018:

- The Board of Governors of the Federal Reserve System voted **[** unanimously **]** to ~~maintain~~ **raise** the interest rate paid on required and excess reserve balances ~~at~~ **to** ~~1.75~~ **1.95** percent, effective ~~May 3~~ **June 14**, 2018. **Setting the interest rate paid on required and excess reserve balances 5 basis points below the top of the target range for the federal funds rate is intended to foster trading in the federal funds market at rates well within the FOMC's target range.**

- As part of its policy decision, the Federal Open Market Committee voted to authorize and direct the Open Market Desk at the Federal Reserve Bank of New York, until instructed otherwise, to execute transactions in the System Open Market Account in accordance with the following domestic policy directive:

> "Effective ~~May 3~~ **June 14**, 2018, the Federal Open Market Committee directs the Desk to undertake open market operations as necessary to maintain the federal funds rate in a target range of ~~1-1/2 to~~ 1-3/4 **to 2** percent, including overnight reverse repurchase operations (and reverse repurchase operations with maturities of more than one day when necessary to accommodate weekend, holiday, or similar trading conventions) at an offering rate of ~~1.50~~ **1.75** percent, in amounts limited only by the value of Treasury securities held outright in the System Open Market Account that are available for such operations and by a per-counterparty limit of $30 billion per day.
>
> The Committee directs the Desk to continue rolling over at auction the amount of principal payments from the Federal Reserve's holdings of Treasury securities maturing during ~~each calendar month~~ **June** that exceeds $18 billion, and to continue reinvesting in agency mortgage-backed securities the amount of principal payments from the Federal Reserve's holdings of agency debt and agency mortgage-backed securities received during ~~each calendar month~~ **June** that exceeds $12 billion. **Effective in July, the Committee directs the Desk to roll over at auction the amount of principal payments from the Federal Reserve's holdings of Treasury securities maturing during each calendar month that exceeds $24 billion, and to reinvest in agency mortgage-backed securities the amount of principal payments from the Federal Reserve's holdings of agency debt and agency mortgage-backed securities received during each calendar month that exceeds**

Alternatives

$16 billion. Small deviations from these amounts for operational reasons are acceptable.

The Committee also directs the Desk to engage in dollar roll and coupon swap transactions as necessary to facilitate settlement of the Federal Reserve's agency mortgage-backed securities transactions."

- In a related action, the Board of Governors of the Federal Reserve System voted **[** unanimously **]** to approve ~~the establishment of~~ **a 1/4 percentage point increase in** the primary credit rate ~~at the existing level of 2.25~~ **to 2.50** percent**, effective June 14, 2018**. **In taking this action, the Board approved requests to establish that rate submitted by the Boards of Directors of the Federal Reserve Banks of . . .**

This information will be updated as appropriate to reflect decisions of the Federal Open Market Committee or the Board of Governors regarding details of the Federal Reserve's operational tools and approach used to implement monetary policy.

More information regarding open market operations and reinvestments may be found on the Federal Reserve Bank of New York's website.

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Balance Sheet and Income Projections

The staff has prepared projections of the Federal Reserve's balance sheet and elements of the associated income statement that are consistent with the baseline economic outlook presented in Tealbook A. Key features of these projections are described below.

SOMA redemptions and reinvestments. As reported in the exhibit titled "Redemptions and Reinvestments of SOMA Principal Payments," the staff projects that the balance sheet normalization program initiated in October 2017 will lead to the redemption of $229 billion of Treasury securities and about $146 billion of agency securities over 2018. During this same period, $197 billion of principal from maturing Treasury securities and about $64 billion of principal from agency securities will be reinvested.[1] Under the staff's current baseline forecast of rising longer-term interest rates, the cap on monthly redemptions of agency securities is not projected to bind after it rises to its $20 billion maximum on October 1 of this year. However, the projections for agency securities are subject to considerable uncertainty because unscheduled prepayments depend on several factors that are difficult to predict, including the realized path of mortgage rates.[2]

Evolution of the size of the balance sheet. Based on the baseline economic outlook in the June Tealbook, the size of the balance sheet is projected to normalize in the third quarter of 2021, unchanged from the April Tealbook (see the exhibit titled "Total Assets and Selected Balance Sheet Items" and the table that follows the exhibit).[3]

Balance Sheet & Income

[1] Once the cap on monthly reductions in SOMA holdings of Treasury securities has been fully phased in, reinvestments of principal from maturing Treasury securities will primarily take place in the middle month of each quarter.

[2] If actual principal payments were to breach the $20 billion maximum cap before the size of the balance sheet is normalized, then the Desk would reinvest in MBS the amount by which the principal payments received during any month exceeds the cap. See the June FOMC memo titled "Operational Readiness for MBS Reinvestments" for further details.

[3] Many factors will influence the size of the balance sheet upon normalization, including banks' post-crisis underlying demand for reserves. Generally speaking, the size of the balance sheet is considered to be normalized when the resumption of purchases of Treasury securities is required to maintain the desired longer-run level of reserve balances and accommodate the expansion of other key non-reserve liability items.

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Redemptions and Reinvestments of SOMA Principal Payments

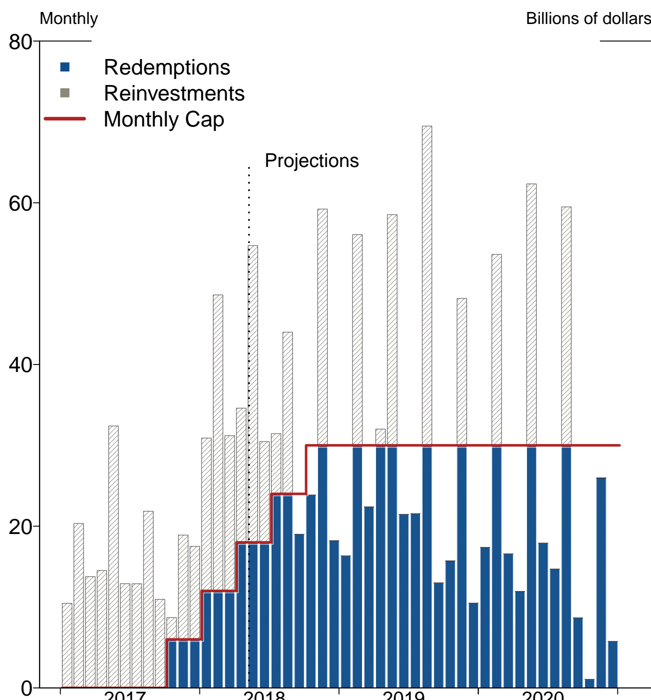
Projections for Treasury Securities
(Billions of dollars)

	Redemptions		Reinvestments	
	Period	Since Oct. 2017	Period	Since Oct. 2017
2018: Q2	54.0	108.0	65.8	167.6
2018: Q3	67.0	175.0	27.4	195.0
2018: Q4	72.1	247.1	29.2	224.2
2018	229.1	247.1	197.1	224.2
2019	270.9	517.9	114.3	338.5
2020	209.9	727.8	85.4	423.9

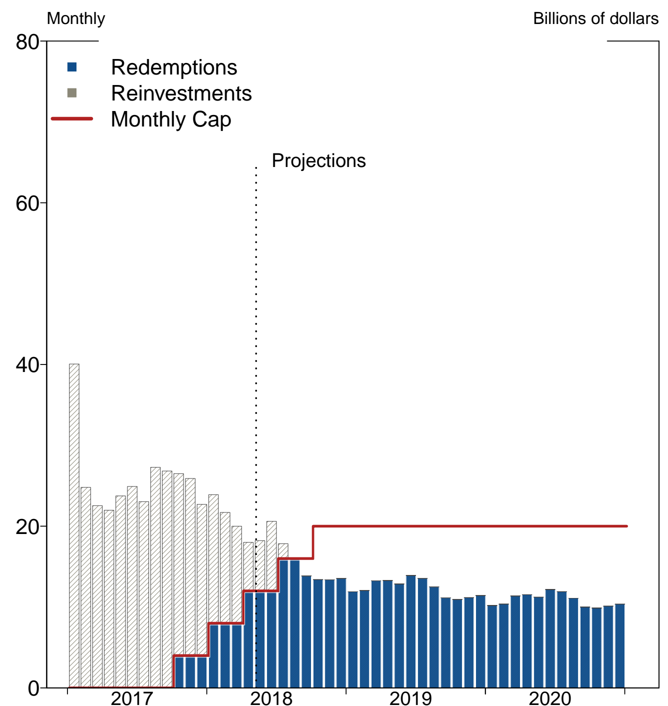
Projections for Agency Securities
(Billions of dollars)

	Redemptions		Reinvestments	
	Period	Since Oct. 2017	Period	Since Oct. 2017
2018: Q2	36.0	72.0	20.8	123.1
2018: Q3	45.8	117.8	1.8	125.0
2018: Q4	40.3	158.2	0.0	125.0
2018	146.2	158.2	64.3	125.0
2019	147.9	306.1	0.0	125.0
2020	130.2	436.3	0.0	125.0

Balance Sheet & Income



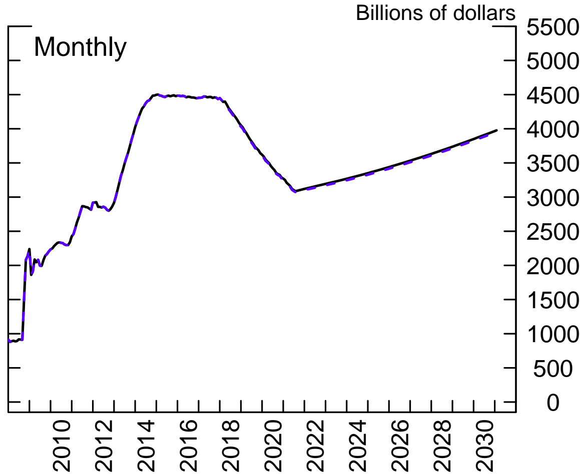
Note: Projection dependent on assumed distribution of future Treasury issuance.

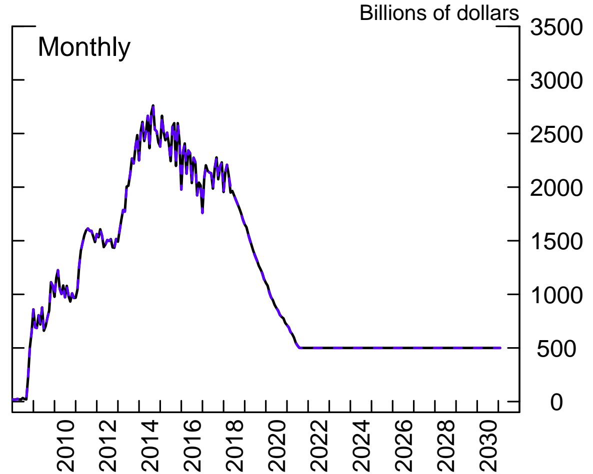


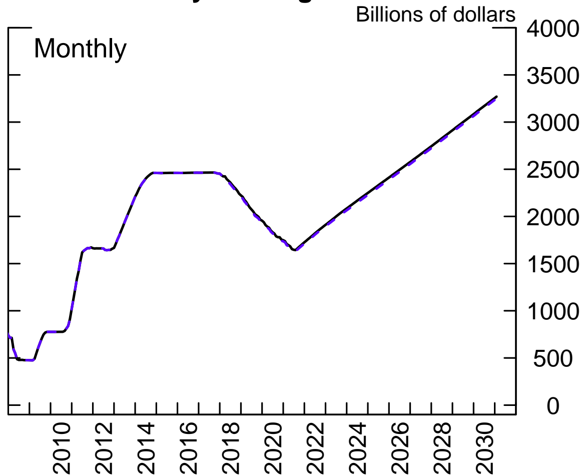
Note: Projection dependent on future interest rates and housing market developments.

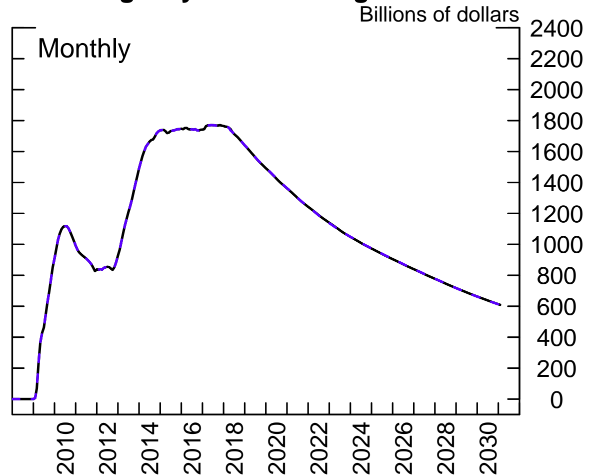
Total Assets and Selected Balance Sheet Items

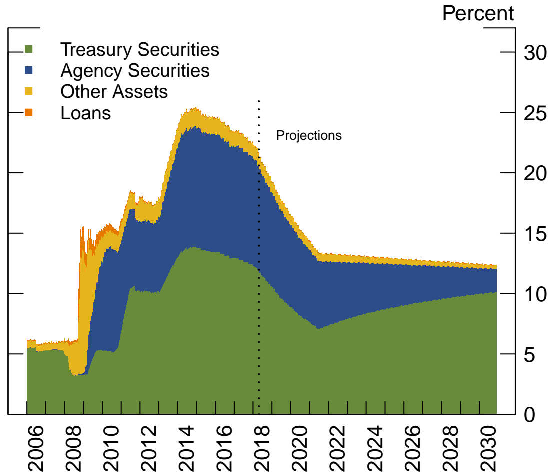
June Tealbook baseline — April Tealbook baseline

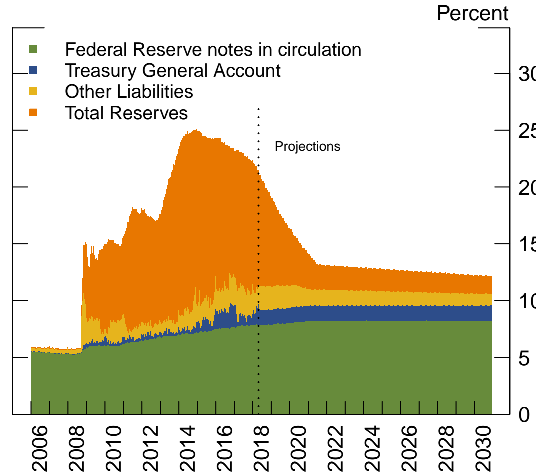












Balance Sheet & Income

Balance Sheet & Income

Federal Reserve Balance Sheet
End-of-Year Projections -- June Tealbook
(Billions of dollars)

	Apr 30, 2018	2018	2020	2022	2024	2026	2030
Total assets	4,356	4,051	3,271	3,193	3,350	3,532	3,966
Selected assets							
Loans and other credit extensions*	2	0	0	0	0	0	0
Securities held outright	4,145	3,865	3,112	3,053	3,224	3,418	3,871
U.S. Treasury securities	2,395	2,223	1,748	1,911	2,249	2,576	3,255
Agency debt securities	4	2	2	2	2	2	2
Agency mortgage-backed securities	1,745	1,640	1,362	1,140	973	840	613
Unamortized premiums	153	141	111	91	76	63	43
Unamortized discounts	-14	-13	-10	-8	-7	-6	-4
Total other assets	70	57	57	57	57	57	57
Total liabilities	4,316	4,012	3,231	3,149	3,302	3,480	3,903
Selected liabilities							
Federal Reserve notes in circulation	1,596	1,652	1,862	1,997	2,129	2,282	2,646
Reverse repurchase agreements	263	350	275	250	250	250	250
Deposits with Federal Reserve Banks	2,451	2,005	1,088	897	919	943	1,002
Reserve balances held by depository institutions	1,949	1,653	713	500	500	500	500
U.S. Treasury, General Account	419	277	300	322	343	368	427
Other deposits	82	75	75	75	75	75	75
Earnings remittances due to the U.S. Treasury	2	0	0	0	0	0	0
Total Federal Reserve Bank capital**	39	39	40	44	48	53	63

Source: Federal Reserve H.4.1 statistical releases and staff calculations.
Note: Components may not sum to totals due to rounding.
*Loans and other credit extensions includes primary, secondary, and seasonal credit; central bank liquidity swaps; and net portfolio holdings of Maiden Lane LLC.
**Total capital includes capital paid-in and capital surplus accounts.

From the start of the balance sheet normalization program in October 2017 to its projected conclusion in 2021, the Federal Reserve's securities holdings are predicted to decline about $1.3 trillion, with holdings of Treasury and agency securities shrinking about $800 billion and $500 billion, respectively. At the time of normalization:

- Reserve balances reach an assumed longer-run level of $500 billion;[4]
- Total assets of the SOMA portfolio are projected to be roughly $3 trillion, consisting of about $1.7 trillion in Treasury securities and $1.3 trillion in agency securities.

Once these declines in asset holdings have taken place, the size of the balance sheet is projected to stand at roughly 13 percent of nominal GDP, compared with a peak of about 25 percent in 2014 and a pre-crisis average of about 6 percent. After the size of the balance sheet is normalized, SOMA holdings will rise, keeping pace with the increases in Federal Reserve liabilities including Federal Reserve notes in circulation, the Treasury General Account (TGA), and Federal Reserve Bank capital. As shares of nominal GDP, Federal Reserve assets and liabilities are expected to edge down.

Federal Reserve remittances. Remittances to the Treasury are projected to decline to $59 billion this year from $80 billion in 2017, (see the "Income Projections" exhibit).[5,6] This decline primarily reflects the realized and expected increases in the interest rate paid on reserves in 2018. Total interest expense is projected to rise to nearly $50 billion this year, while interest income from SOMA holdings is expected to decline slightly, to $111 billion. As the target range for the federal funds rate moves up and the interest expense on reserve balances increases, remittances are expected to decline further

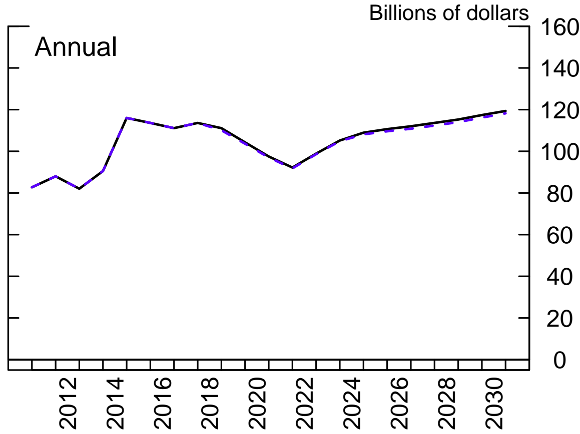
[4] Other noteworthy assumptions about liability items underlying the projections are as follows: The Treasury General Account is assumed to increase in line with nominal GDP; Federal Reserve notes in circulation are assumed to increase at an average annual pace of about 6 percent through 2020 and at the same pace as nominal GDP thereafter; the foreign repo pool and balances in the accounts of designated financial market utilities remain at their April 2018 levels of $250 billion and $70 billion, respectively; and take-up at the overnight RRP facility is assumed to maintain a value of $100 billion until the level of reserve balances reaches $1 trillion, at which point take-up declines to zero over the course of one year.

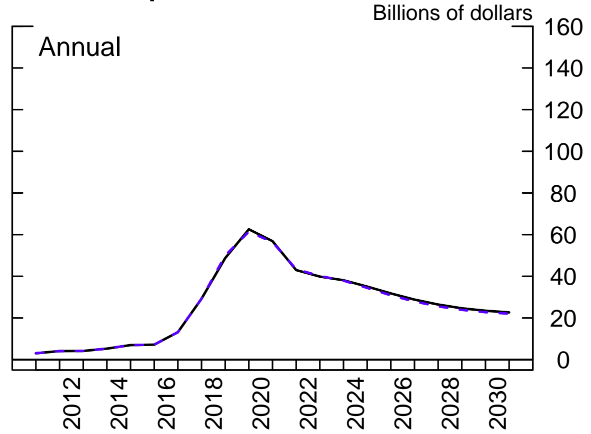
[5] This estimate includes two mandated transfers to the Treasury due to reductions to the statutory limit on aggregate Reserve Bank surplus. First, $2.5 billion was transferred in February resulting from the Bipartisan Budget Act of 2018. Second, $675 million is anticipated to be transferred at the end of June reflecting the amendment to The Economic Growth, Regulatory Relief, and Consumer Protection Act of 2018.

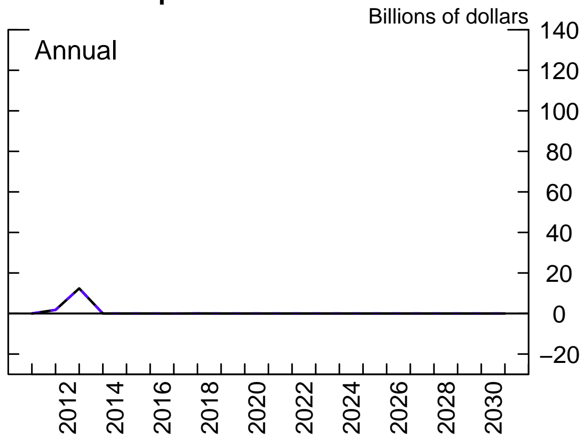
[6] The Federal Reserve Board's public announcement of remittances to the Treasury for 2017 is available at https://www.federalreserve.gov/newsevents/pressreleases/other20180110a.htm.

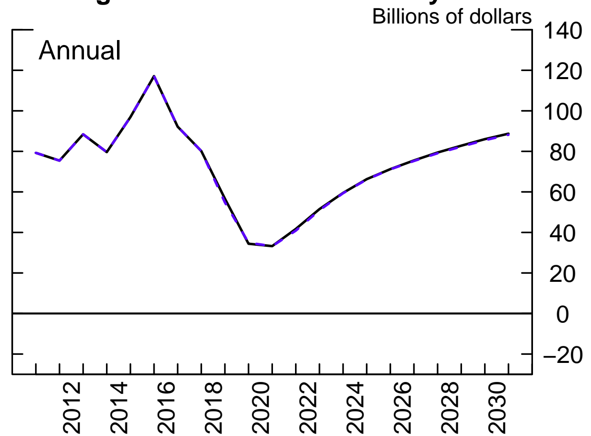
Income Projections

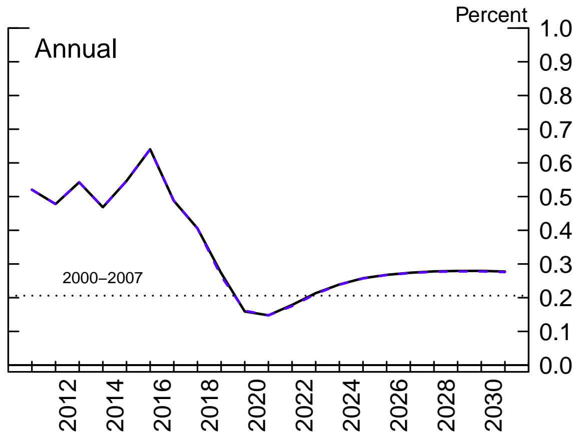
June Tealbook baseline — April Tealbook baseline

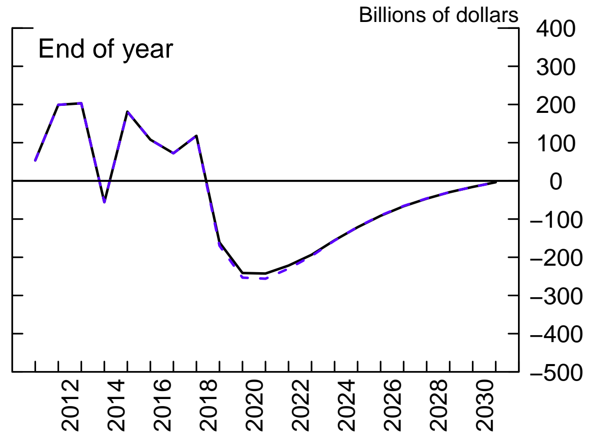












and to bottom out at about $34 billion in 2020. Thereafter, remittances increase as the Desk begins to add Treasury securities to the SOMA portfolio.

The projected path for remittances over the next few years is similar to that in the April Tealbook baseline. As shown in the bottom left panel of the "Income Projections" exhibit, annual remittances average about 0.25 percent of nominal GDP over the projection period, slightly higher than their pre-crisis average.

Unrealized gains or losses. The staff estimates that the SOMA portfolio will be in a net unrealized loss position of nearly $40 billion at the end of June. (See the Box titled "What Does It Mean for the SOMA Portfolio to Be in an "Unrealized Loss" Position?" for further information about accounting practices related to the SOMA portfolio). With longer-term interest rates expected to rise further over the next several years, the unrealized loss position is expected to reach $250 billion in 2020:Q2. Of this amount, nearly $100 billion is attributable to Treasury securities and $150 billion to agency MBS. The unrealized loss position subsequently narrows, in large part because the value of securities acquired under the Federal Reserve's large-scale asset purchase programs returns to par as those securities approach maturity. Relative to the April Tealbook, the net unrealized position over the projection horizon is little changed.

Term premium effect. As shown in the table "Projections for the 10-Year Treasury Term Premium Effect," SOMA securities held as a result of the Federal Reserve's asset purchase programs are currently estimated to be reducing the term premium in the 10-year Treasury yield by 82 basis points, unchanged from the previous Tealbook; this effect is projected to fade gradually over time.[7]

SOMA characteristics. As shown in the top panel of the "Projections for the Characteristics of SOMA Treasury Securities Holdings" exhibit, the weighted-average duration of the SOMA Treasury portfolio is currently about six years. This measure is projected to increase over the course of balance sheet normalization, as the pace of redemptions picks up and longer-duration securities become a larger share of the portfolio. In terms of composition of the portfolio, the share of MBS is expected to peak at 44 percent a few months before normalization, reflecting the faster pace of roll-offs in

[7] The estimated path of the term premium effect depends on the difference between the expected path of the Federal Reserve's balance sheet over coming years and a benchmark counterfactual projection based on the configuration of the balance sheet that prevailed before the financial crisis of 2007–2008.

Balance Sheet & Income

What Does It Mean for the SOMA Portfolio to Be in an "Unrealized Loss" Position?

In May 2018, the Federal Reserve Board published the *Federal Reserve Banks Combined Quarterly Financial Report* for the first quarter of 2018.[1] For the first time since 2013, the financial report showed an unrealized loss position for the overall SOMA portfolio, in the amount of $462 million. The unrealized loss is expected to become larger over the next couple of years and is likely to garner some attention from the public. In this box, we explain the accounting notions of unrealized and realized gain and loss positions, as well as their implications for the Federal Reserve's ability to meet its obligations.

When the Federal Reserve purchases a security, the market price paid generally differs from the security's face value. If the security is purchased for more (less) than its face value, the difference between the purchase price and the face value—the premium (the discount) on that security—is recorded separately on the balance sheet.[2] The premium or discount is amortized over the life of the security, and the security's amortized cost is defined as the purchase price less the amount of the premium or discount that has already been written down. If the security is held to maturity, the Federal Reserve receives the face value, which at that point equals the security's amortized cost.

For transparency purposes, the Federal Reserve also includes in its financial reports the fair value of SOMA securities holdings, although it is not required to do so.[3] Fair value represents the price that would be received if the securities were sold in an orderly market transaction. Along with fair values, the Federal Reserve also reports the cumulative unrealized gain or loss position of the SOMA portfolio, which is the difference between the fair value of the securities held in the SOMA and their amortized cost.

The unrealized position of the SOMA portfolio is primarily affected by movements in interest rates; when interest rates rise, the fair value of securities held declines, resulting in a decline in the unrealized position. Figure 1 plots the 10-year Treasury yield against the SOMA's quarter-end unrealized gain or loss position since 2012. In the aftermath of the global financial crisis, the SOMA portfolio was in a large

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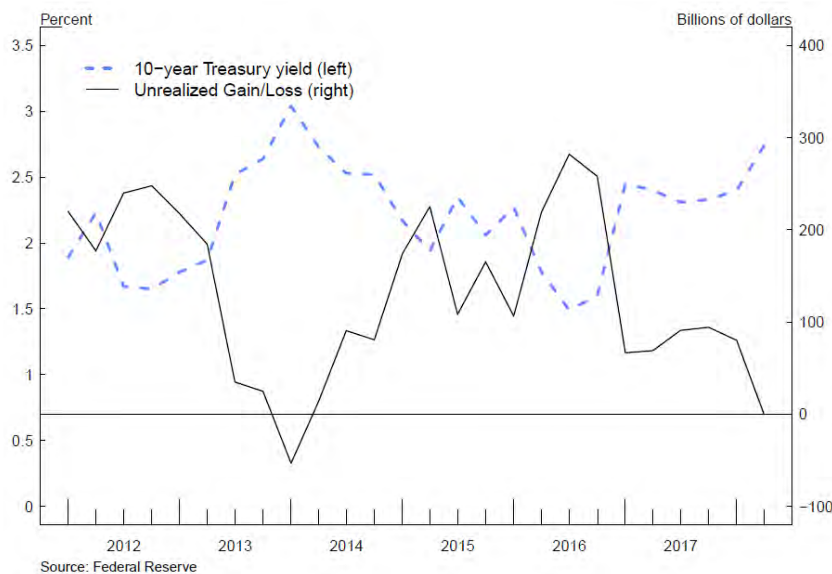
[1] For the first three quarters in a year, the Board of Governors publishes the Federal Reserve Banks' combined financial statements in the unaudited *Federal Reserve Banks Combined Quarterly Financial Report*. Following each year-end, the Board of Governors publishes the *Federal Reserve System Audited Annual Financial Statements*. Quarterly reports and annual statements are available at https://www.federalreserve.gov/aboutthefed/fed-financial-statements.htm.

[2] This practice follows the accounting principles documented in the Financial Accounting Manual for Federal Reserve Banks (FAM), available at https://www.federalreserve.gov/aboutthefed/files/bstfinaccountingmanual.pdf.

[3] Fair values of SOMA holdings are presented in Table 2 of the Supplemental Financial Information section in the March 31, 2018 *Combined Quarterly Financial Report*, and in Section 5.d. of the Notes to Combined Financial Statements section in the 2017 Reserve Bank Combined Financial Statements.

unrealized gain position driven by both the historically large portfolio size and the low interest rate environment, as interest rates at that time were lower than when the securities were originally purchased. SOMA's unrealized position became negative in 2013 during the so-called "taper tantrum," and then again in the first quarter of 2018. Going forward, with interest rates expected to increase, the unrealized loss position is projected to reach about $250 billion in two years, before narrowing as the securities acquired under the large-scale asset purchase programs approach maturity.

Figure 1: 10-year Treasury Yield and SOMA Unrealized Gain/Loss Position



The SOMA's unrealized gain or loss position does not affect the ability of the Federal Reserve to meet its responsibilities—including the conduct of monetary policy—and financial obligations. Moreover, the unrealized position has no impact on net earnings of the Federal Reserve or on its remittances to the U.S. Treasury.

When securities are sold or prepayments from MBS are received, the SOMA portfolio's gains or losses become realized and affect the Reserve Banks' net income and remittances to the Treasury.[4] In the unlikely event that realized losses on the SOMA portfolio resulted in negative net earnings, the Federal Reserve's remittances to the Treasury would be suspended. In this case, a deferred asset would be recorded on the Federal Reserve's balance sheet, representing the amount of net earnings that the Reserve Banks would need to realize before remittances to the Treasury would

[4] Any realized gains and losses are recorded in the non-interest income portion of the Combined Statements of Operations. For example, under the Maturity Extension Program, nearly $700 billion of shorter-term Treasury securities were sold or redeemed from October 2011 until the end of 2012. As a result, total net gains of about $15 billion were recorded over the course of this program.

resume. In such a circumstance, the Federal Reserve would still be able to meet all of its responsibilities and financial obligations.[5]

Balance Sheet & Income

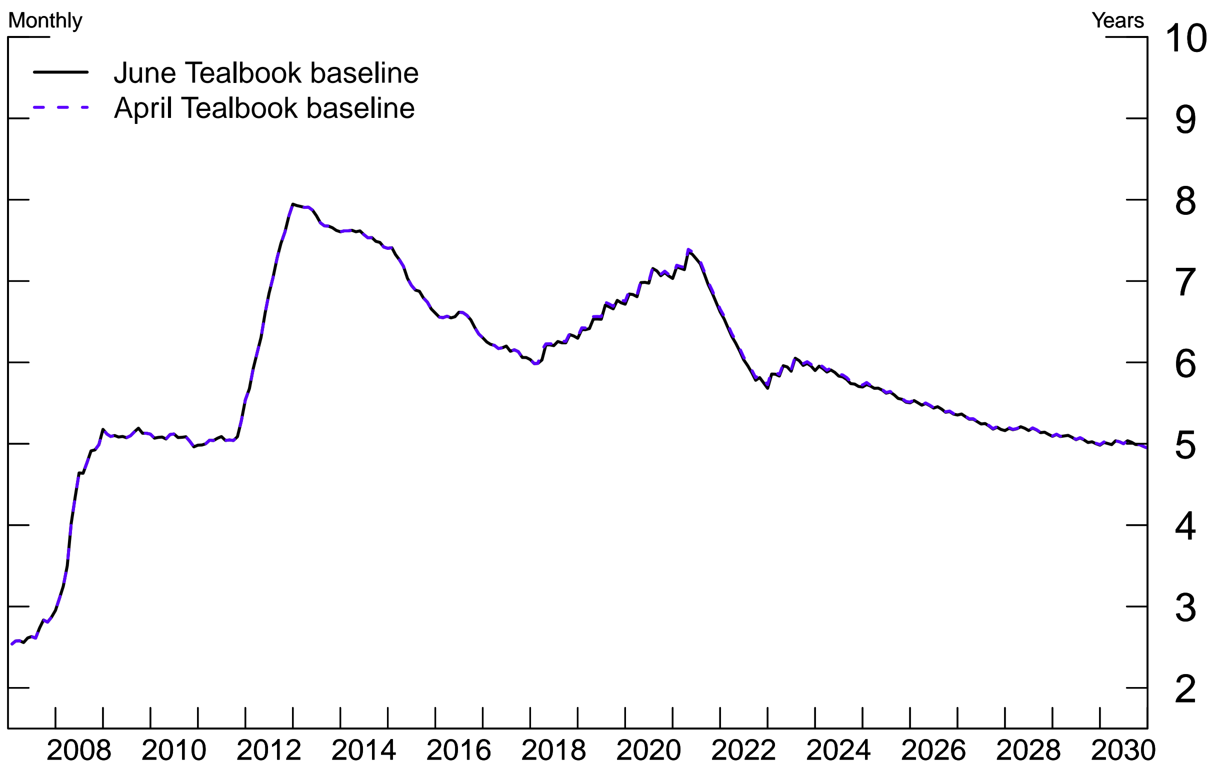
[5] The Federal Reserve remits its net earnings to the U.S. Treasury, after providing for the costs of operations, payment of dividends, and any amount necessary to maintain a statutorily defined surplus. As these net earnings accrue, they are recorded on the Federal Reserve's balance sheet in the liability account labeled "Accrued Remittances to Treasury / Deferred Asset."

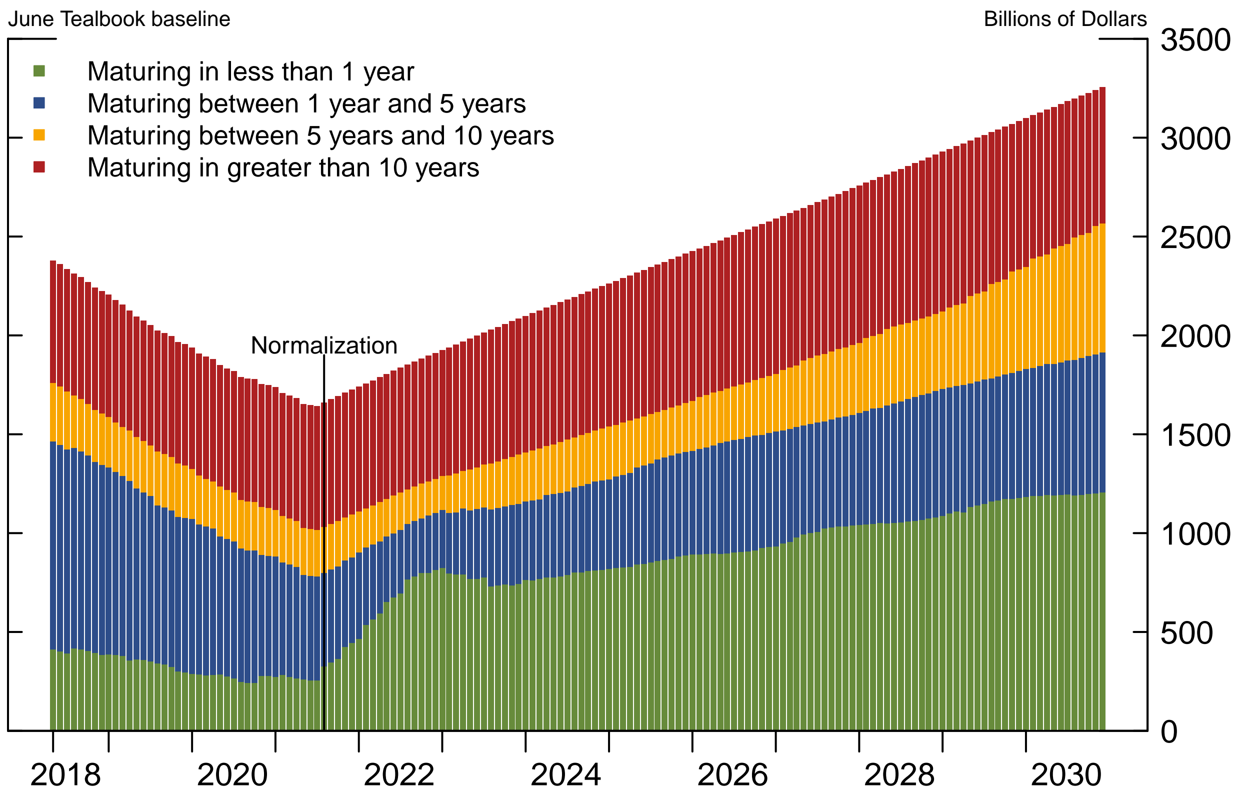
Projections for the 10-Year Treasury Term Premium Effect
(Basis Points)

Date	June Tealbook	April Tealbook
	Quarterly Averages	
2018:Q2	-82	-82
Q3	-79	-79
Q4	-76	-76
2019:Q4	-66	-66
2020:Q4	-58	-58
2021:Q4	-53	-52
2022:Q4	-49	-49
2023:Q4	-46	-46
2024:Q4	-43	-42
2025:Q4	-40	-39
2026:Q4	-37	-37
2027:Q4	-35	-35
2028:Q4	-33	-33
2029:Q4	-31	-31
2030:Q4	-29	-29

Balance Sheet & Income

Projections for the Characteristics of SOMA Treasury Securities Holdings





Treasury securities, and then to decline to less than 30 percent by 2025 (see the bottom left panel of the exhibit titled "Total Assets and Selected Balance Sheet Items").

After normalization of the size of the balance sheet in 2021, the duration of the SOMA Treasury portfolio is projected to decline as the Desk begins adding securities to the SOMA portfolio to keep pace with the expansion in non-reserve liabilities. The initial sharp decline in duration results from the staff's assumption that the Desk will purchase only Treasury bills until they account for one-third of the Federal Reserve's Treasury securities portfolio, close to the pre-crisis composition (currently the SOMA portfolio contains no Treasury bills). Thereafter, purchases of Treasury securities are assumed to be spread across the maturity spectrum (see the bottom panel of the exhibit titled "Projections for the Characteristics of SOMA Treasury Securities Holdings").

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Abbreviations

ABS	asset-backed securities
AFE	advanced foreign economy
BEA	Bureau of Economic Analysis, Department of Commerce
BHC	bank holding company
CDS	credit default swaps
CFTC	Commodity Futures Trading Commission
C&I	commercial and industrial
CLO	collateralized loan obligation
CMBS	commercial mortgage-backed securities
CPI	consumer price index
CRE	commercial real estate
DEDO	section in Tealbook A, “Domestic Economic Developments and Outlook”
Desk	Open Market Desk
DFMU	Designated Financial Market Utilities
ECB	European Central Bank
ELB	effective lower bound
EME	emerging market economy
EU	European Union
FAST Act	Fixing America’s Surface Transportation Act
FDIC	Federal Deposit Insurance Corporation
FOMC	Federal Open Market Committee; also, the Committee
GCF	general collateral finance
GDI	gross domestic income
GDP	gross domestic product
GSIBs	globally systemically important banking organizations
HQLA	high-quality liquid assets
IOER	interest on excess reserves
ISM	Institute for Supply Management

LIBOR	London interbank offered rate
LSAPs	large-scale asset purchases
MBS	mortgage-backed securities
MMFs	money market funds
NBER	National Bureau of Economic Research
NI	nominal income
NIPA	national income and product accounts
OIS	overnight index swap
ON RRP	overnight reverse repurchase agreement
PCE	personal consumption expenditures
QS	Quantitative Surveillance
repo	repurchase agreement
RMBS	residential mortgage-backed securities
RRP	reverse repurchase agreement
SCOOS	Senior Credit Officer Opinion Survey on Dealer Financing Terms
SEP	Summary of Economic Projections
SFA	Supplemental Financing Account
SLOOS	Senior Loan Officer Opinion Survey on Bank Lending Practices
SOMA	System Open Market Account
TBA	to be announced (for example, TBA market)
TCJA	Tax Cuts and Jobs Act of 2017
TGA	U.S. Treasury's General Account
TIPS	Treasury inflation-protected securities
TPE	Term premium effects
ZLB	zero lower bound