## Treasury Presentation to TBAC

## Office of Debt Management



Fiscal Year 2014 Q4 Report

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## Section I:

Fiscal

## Quarterly Tax Receipts



## Monthly Receipt Levels (12-Month Moving Average)



Eleven Largest Outlays


Treasury Net Nonmarketable Borrowing


Fiscal Quarter

## Cumulative Budget Deficits by Fiscal Year



|  | Primary <br> Dealers ${ }^{1}$ | $\mathrm{CBO}^{2}$ | $\begin{gathered} \text { CBO's Analysis } \\ \text { of the } \\ \text { President's Budget }^{3} \\ \hline \end{gathered}$ | OMB MSR ${ }^{4}$ |
| :---: | :---: | :---: | :---: | :---: |
| FY 2015 Deficit Estimate | 484 | 469 | 509 | 525 |
| FY 2016 Deficit Estimate | 536 | 556 | 548 | 525 |
| FY 2017 Deficit Estimate | 561 | 530 | 539 | 468 |
| FY 2015 Deficit Range | 425-550 |  |  |  |
| FY 2016 Deficit Range | 375-600 |  |  |  |
| FY 2017 Deficit Range | 325-700 |  |  |  |
|  |  |  |  |  |
| FY 2015 Net Marketable Borrowing Estimate | 602 | 508 | 579 | 655 |
| FY 2016 Net Marketable Borrowing Estimate | 633 | 622 | 611 | 658 |
| FY 2017 Net Marketable Borrowing Estimate | 648 | 594 | 604 | 596 |
| FY 2015 Net Marketable Borrowing Range | 463-740 |  |  |  |
| FY 2016 Net Marketable Borrowing Range | 480-757 |  |  |  |
| FY 2017 Net Marketable Borrowing Range | 450-820 |  |  |  |
| Estimates as of: | Oct-14 | Aug-14 | Apr-14 | Jul-14 |

${ }^{1}$ Based on primary dealer feedback on Oct 27,2014 . Estimates above are averages.
${ }^{2}$ Table 1 of the "An Update to the Budget and Economic Outlook: 2014 to 2024"
${ }^{3}$ Table 1 of the "An Analysis of the President's 2015 Budget"
${ }^{4}$ Table S-11 of the "Fiscal Year 2015 MSR"

Budget Surplus/Deficit


## Section II: <br> Financing

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## Assumptions for Financing Section (pages 13 to 19)

- Portfolio \& SOMA holdings as of 09/30/2014.
- Estimated projections of the Large Scale Asset Purchase program, announced on 12/12/2012 by the Federal Reserve with SOMA redemptions until and including May 2021. These assumptions are based on the Federal Reserve's September 2014 primary dealer survey and Chairman Bernanke's June 2013 press conference.
- Assumes announced issuance sizes and patterns constant for Nominal Coupons, TIPS, and FRNs as of $09 / 30 / 2014$, while using an average of $\sim 1.45$ trillion of Bills Outstanding consistent with Treasury's guidance of the FRN program replacing some Bills issuance.
- The principal on the TIPS securities was accreted to each projection date based on market ZCIS levels as of 9/30/2014.
- No attempt was made to match future financing needs.


## Sources of Financing in Fiscal Year 2014 Q4

| July - September 2014 |  |
| ---: | :---: |
| Net Bill Issuance | 23 |
| Net Coupon Issuance | 182 |
| Subtotal: Net Marketable Borrowing | 205 |
| Ending Cash Balance | 158 |
| Beginning Cash Balance | 139 |
| Subtotal: Change in Cash Balance | 19 |
| Net Implied Funding for FY 2014 Q4** | 186 |


| Issuance | July - September 2014 <br> Bill Issuance |  |  | Fiscal Year to Date |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gross | Maturing | Net | Gross | Maturing | Net |
| 4-Week | 510 | 485 | 25 | 1,693 | 1,703 | (10) |
| 13-Week | 345 | 325 | 20 | 1,459 | 1,504 | (45) |
| 26-Week | 309 | 334 | (25) | 1,309 | 1,366 | (57) |
| 52-Week | 75 | 72 | 3 | 313 | 320 | (7) |
| CMBs | 15 | 15 | 0 | 236 | 236 | 0 |
| Bill Subtotal | 1,254 | 1,231 | 23 | 5,010 | 5,129 | (119) |


|  | July - September 2014 <br> Coupon Issuance |  |  | Fiscal Year to Date |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gross | Maturing | Net | Gross | Maturing | Net |
| Issue | 87 | 105 | $(18)$ | 372 | 427 | $(55)$ |
| 2-Year | 0 | 41 | 123 | 0 | 123 |  |
| 2-Year FRN | 41 | 97 | $(16)$ | 348 | 390 | $(42)$ |
| 3-Year | 81 | 121 | $(16)$ | 420 | 415 | 5 |
| 5-Year | 105 | 121 |  |  |  |  |
| 7-Year | 87 | 0 | 87 | 348 | 0 | 348 |
| 10-Year | 66 | 25 | 41 | 264 | 111 | 153 |
| 30-Year | 42 | 0 | 42 | 168 | 0 | 168 |
| 5-Year TIPS | 16 | 0 | 16 | 50 | 17 | 33 |
| 10-Year TIPS | 28 | 24 | 4 | 82 | 50 | 32 |
| 30-Year TIPS | 0 | 0 | 0 | 23 | 0 | 23 |
| Coupon Subtotal | 553 | 371 | 182 | 2,198 | 1,410 | 788 |


| Total | 1,807 | 1,602 | 205 | 7,208 | 6,539 | 669 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Sources of Financing in Fiscal Year 2015 Q1

| October - December 2014 |  |
| ---: | ---: | ---: |
| Assuming Constant Coupon and Average Bill Issuance Sizes as of 9/30/2014* |  |
| Net Bill Issuance | 28 |
| Net Coupon Issuance | 186 |
| Subtotal: Net Marketable Borrowing | 214 |
| Treasury Announced Estimate: Net Marketable Borrowing*** | $\underline{232}$ |
| Implied: Increase in FY 2015 Q1 Net Issuances | 18 |


|  | October - December 2014 <br> Bill Issuance |  | Fiscal Year to Date |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Issuance | Gross | Maturing | Net | Gross | Maturing | Net |
| 4-Week | 416 | 433 | $(17)$ | 416 | 433 | $(17)$ |
| 13-Week | 364 | 345 | 19 | 364 | 345 | 19 |
| 26-Week | 325 | 299 | 26 | 325 | 299 | 26 |
| 52-Week | 72 | 72 | 0 | 72 | 72 | 0 |
| CMBs | 0 | 0 | 0 | 0 | 0 | 0 |
| Bill Subtotal | 1,177 | 1,149 | 28 | 1,177 | 1,149 | 28 |


|  | October - December 2014 <br> Coupon Issuance |  | Fiscal Year to Date |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Issue | Gross | Maturing | Net | Gross | Maturing | Net |
| 2-Year | 87 | 105 | $(18)$ | 87 | 105 | $(18)$ |
| 2-Year FRN | 41 | 0 | 41 | 41 | 0 | 41 |
| 3-Year | 81 | 100 | $(19)$ | 81 | 100 | $(19)$ |
| 5-Year | 105 | 129 | $(24)$ | 105 | 129 | $(24)$ |
| 7-Year | 87 | 0 | 87 | 87 | 0 | 87 |
| 10-Year | 66 | 25 | 41 | 66 | 25 | 41 |
| $30-Y e a r$ | 42 | 0 | 42 | 42 | 0 | 42 |
| 5-Year TIPS | 16 | 0 | 16 | 16 | 0 | 16 |
| 10-Year TIPS | 13 | 0 | 13 | 13 | 0 | 13 |
| 30-Year TIPS | 7 | 359 | 7 | 7 | 0 | 7 |
| Coupon Subtotal | 545 | 1,508 | 545 | 359 | 186 |  |

*Keeping announced issuance sizes and patterns constant for Nominal Coupons, TIPS, and FRNs as of 09/30/2014, while using an average of $\sim 1.45$ trillion of Bills Outstanding consistent with Treasury's guidance of the FRN program replacing some Bills issuance.
**Assumes an end-of-December 2014 cash balance of $\$ 200$ billion versus a beginning-of-October 2014 cash balance of $\$ 158$ billion.
Financing Estimates released by the Treasury can be found via the following url: http://www.treasury.gov/resource-center/data-chart-center/quarterly-refunding/Pages/Latest.aspx

OMB's Projection of Borrowing from the Public


OMB's projections of net borrowing from the public are from Table S-11 of the "Fiscal Year 2015 Mid-Session Review." Data labels at the top represent the change in debt held by the public in $\$$ billions. "Other" represents borrowing from the public to provide direct and guaranteed loans.

Interest Rate Assumptions: 10-Year Treasury Note


Projected Net Borrowing Assuming Constant Future Issuance
 and Economic Outlook." See table at the end of this section for details.

## Impact of SOMA Actions on Projected Net Borrowing Assuming Future Issuance Remains Constant

With Fed Reinvestments (\$bn)
Without Fed Reinvestments (\$bn)
 and Economic Outlook." See table at the end of this section for details.

## Historical Net Marketable Borrowing and Projected Net Borrowing Assuming Future Issuance Remains Constant, \$ billions

| Fiscal Year | Bills | 2/3/5 | 7/10/30 | TIPS | FRN | Historical/Projected Net Borrowing Capacity | OMB's Fiscal Year 2015 MSR | CBO: Update to the <br> Budget and <br> Economic Outlook | October 2014 <br> Primary <br> Dealer Survey |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2009 | 503 | 732 | 514 | 38 | 0 | 1,786 |  |  |  |
| 2010 | (204) | 869 | 783 | 35 | 0 | 1,483 |  |  |  |
| 2011 | (311) | 576 | 751 | 88 | 0 | 1,104 |  |  |  |
| 2012 | 139 | 148 | 738 | 90 | 0 | 1,115 |  |  |  |
| 2013 | (86) | 86 | 720 | 111 | 0 | 830 |  |  |  |
| 2014 | (119) | (92) | 669 | 88 | 123 | 669 |  |  |  |
| 2015 | 43 | (223) | 639 | 87 | 164 | 710 | 655 | 508 | 602 |
| 2016 | 0 | (101) | 442 | 68 | 41 | 451 | 658 | 622 | 633 |
| 2017 | 0 | (31) | 256 | 69 | 0 | 293 | 596 | 595 | 648 |
| 2018 | 0 | 35 | 238 | 63 | 0 | 336 | 568 | 613 |  |
| 2019 | 0 | 35 | 104 | 64 | 0 | 202 | 669 | 715 |  |
| 2020 | 0 | 0 | 119 | 37 | 0 | 156 | 695 | 792 |  |
| 2021 | 0 | 15 | 155 | 11 | 0 | 181 | 698 | 876 |  |
| 2022 | 0 | 77 | 226 | (2) | 0 | 301 | 739 | 1,002 |  |
| 2023 | 0 | 46 | 191 | (3) | 0 | 235 | 706 | 1,013 |  |
| 2024 | 0 | 2 | 192 | (4) | 0 | 190 | 672 | 1,021 |  |

## Section III: Portfolio Metrics

## Assumptions for Portfolio Metrics Section (pages 22 to 27) and Appendix

- Portfolio \& SOMA holdings as of 09/30/2014.
- Estimated projections of the Large Scale Asset Purchase program, announced on 12/12/2012 by the Federal Reserve with SOMA redemptions until and including May 2021. These assumptions are based on the Federal Reserve's September 2014 primary dealer survey and Chairman Bernanke's June 2013 press conference.
- To match OMB's projected borrowing from the public for the next 10 years, nominal coupon securities ( $2-, 3-, 5-, 7-, 10$-, and 30 -year) were adjusted by the same percentage.
- The principal on the TIPS securities was accreted to each projection date based on market ZCIS levels as of 9/30/2014.
- OMB's estimates of borrowing from the public are from Table S-11 of the "Fiscal Year 2015 Mid-Session Review."

Weighted Average Maturity of Marketable Debt Outstanding


Projected Gross Borrowing excluding Bills for Fiscal Year


Projected Maturity Profile from end of Fiscal Year
 basic trajectory of average maturity absent changes to the mix of securities issued by Treasury. See table on following page for details.

## Recent and Projected Maturity Profile, $\$$ billions

| End of Fiscal <br> Year | $<=\mathbf{1 y r}$ | $\mathbf{( 1 , 2 ]}$ | $\mathbf{( 2 , 3 ]}$ | $\mathbf{( 3 , 5 ]}$ | $\mathbf{( 5 , 7 ]}$ | $\mathbf{( 7 , 1 0 ]}$ | $\mathbf{> = 1 0 y r}$ | $\mathbf{T o t a l}$ | $\mathbf{( 0 , 5 ]}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2007 | 1,606 | 639 | 341 | 545 | 267 | 480 | 557 | 4,434 | 3,130 |
| 2008 | 2,152 | 711 | 280 | 653 | 310 | 499 | 617 | 5,222 | 3,796 |
| 2009 | 2,702 | 774 | 663 | 962 | 559 | 643 | 695 | 6,998 | 5,101 |
| 2010 | 2,563 | 1,141 | 895 | 1,273 | 907 | 856 | 853 | 8,488 | 5,872 |
| 2011 | 2,620 | 1,334 | 980 | 1,541 | 1,070 | 1,053 | 1,017 | 9,616 | 6,476 |
| 2012 | 2,951 | 1,373 | 1,104 | 1,811 | 1,214 | 1,108 | 1,181 | 10,742 | 7,239 |
| 2013 | 2,939 | 1,523 | 1,242 | 1,965 | 1,454 | 1,136 | 1,331 | 11,590 | 7,669 |
| 2014 | 2,935 | 1,739 | 1,319 | 2,207 | 1,440 | 1,113 | 1,528 | 12,281 | 8,199 |
| 2015 | 3,194 | 1,793 | 1,357 | 2,370 | 1,469 | 1,113 | 1,650 | 12,946 | 8,714 |
| 2016 | 3,249 | 1,876 | 1,603 | 2,403 | 1,496 | 1,178 | 1,820 | 13,624 | 9,130 |
| 2017 | 3,332 | 2,139 | 1,556 | 2,473 | 1,504 | 1,245 | 1,998 | 14,247 | 9,500 |
| 2018 | 3,628 | 2,083 | 1,613 | 2,513 | 1,564 | 1,302 | 2,142 | 14,845 | 9,838 |
| 2019 | 3,573 | 2,228 | 1,709 | 2,647 | 1,692 | 1,388 | 2,313 | 15,550 | 10,157 |
| 2020 | 3,685 | 2,338 | 1,676 | 2,830 | 1,794 | 1,405 | 2,555 | 16,283 | 10,529 |
| 2021 | 3,796 | 2,280 | 1,924 | 2,922 | 1,828 | 1,457 | 2,816 | 17,023 | 10,921 |
| 2022 | 3,738 | 2,567 | 1,951 | 3,040 | 1,915 | 1,472 | 3,124 | 17,807 | 11,296 |
| 2023 | 4,025 | 2,575 | 2,029 | 3,051 | 1,961 | 1,485 | 3,434 | 18,561 | 11,680 |
| 2024 | 4,076 | 2,706 | 2,039 | 3,179 | 2,051 | 1,498 | 3,733 | 19,283 | 12,000 | and term can be found in the appendix (Page 43).

Projected Maturity Profile from end of Fiscal Year


This scenario does not represent any particular course of action that Treasury is expected to follow. Instead, it is intended to demonstrate the basic

## Recent and Projected Maturity Profile, percent

| End of Fiscal <br> Year | <= 1yr | $\mathbf{( 1 , 2 ]}$ | $\mathbf{( 2 , 3 ]}$ | $\mathbf{( 3 , 5 ]}$ | $\mathbf{( 5 , 7 ]}$ | $\mathbf{( 7 , 1 0 ]}$ | $\mathbf{> = 1 0 y r}$ | $\mathbf{( 0 , 3 ]}$ | $\mathbf{( 0 , 5 ]}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2007 | $36.2 \%$ | $14.4 \%$ | $7.7 \%$ | $12.3 \%$ | $6.0 \%$ | $10.8 \%$ | $12.6 \%$ | $58.3 \%$ | $70.6 \%$ |
| 2008 | $41.2 \%$ | $13.6 \%$ | $5.4 \%$ | $12.5 \%$ | $5.9 \%$ | $9.6 \%$ | $11.8 \%$ | $60.2 \%$ | $72.7 \%$ |
| 2009 | $38.6 \%$ | $11.1 \%$ | $9.5 \%$ | $13.7 \%$ | $8.0 \%$ | $9.2 \%$ | $9.9 \%$ | $59.1 \%$ | $72.9 \%$ |
| 2010 | $30.2 \%$ | $13.4 \%$ | $10.5 \%$ | $15.0 \%$ | $10.7 \%$ | $10.1 \%$ | $10.0 \%$ | $54.2 \%$ | $69.2 \%$ |
| 2011 | $27.2 \%$ | $13.9 \%$ | $10.2 \%$ | $16.0 \%$ | $11.1 \%$ | $10.9 \%$ | $10.6 \%$ | $51.3 \%$ | $67.3 \%$ |
| 2012 | $27.5 \%$ | $12.8 \%$ | $10.3 \%$ | $16.9 \%$ | $11.3 \%$ | $10.3 \%$ | $11.0 \%$ | $50.5 \%$ | $67.4 \%$ |
| 2013 | $25.4 \%$ | $13.1 \%$ | $10.7 \%$ | $17.0 \%$ | $12.5 \%$ | $9.8 \%$ | $11.5 \%$ | $49.2 \%$ | $66.2 \%$ |
| 2014 | $23.9 \%$ | $14.2 \%$ | $10.7 \%$ | $18.0 \%$ | $11.7 \%$ | $9.1 \%$ | $12.4 \%$ | $48.8 \%$ | $66.8 \%$ |
| 2015 | $24.7 \%$ | $13.9 \%$ | $10.5 \%$ | $18.3 \%$ | $11.3 \%$ | $8.6 \%$ | $12.7 \%$ | $49.0 \%$ | $67.3 \%$ |
| 2016 | $23.8 \%$ | $13.8 \%$ | $11.8 \%$ | $17.6 \%$ | $11.0 \%$ | $8.6 \%$ | $13.4 \%$ | $49.4 \%$ | $67.0 \%$ |
| 2017 | $23.4 \%$ | $15.0 \%$ | $10.9 \%$ | $17.4 \%$ | $10.6 \%$ | $8.7 \%$ | $14.0 \%$ | $49.3 \%$ | $66.7 \%$ |
| 2018 | $24.4 \%$ | $14.0 \%$ | $10.9 \%$ | $16.9 \%$ | $10.5 \%$ | $8.8 \%$ | $14.4 \%$ | $49.3 \%$ | $66.3 \%$ |
| 2019 | $23.0 \%$ | $14.3 \%$ | $11.0 \%$ | $17.0 \%$ | $10.9 \%$ | $8.9 \%$ | $14.9 \%$ | $48.3 \%$ | $65.3 \%$ |
| 2020 | $22.6 \%$ | $14.4 \%$ | $10.3 \%$ | $17.4 \%$ | $11.0 \%$ | $8.6 \%$ | $15.7 \%$ | $47.3 \%$ | $64.7 \%$ |
| 2021 | $22.3 \%$ | $13.4 \%$ | $11.3 \%$ | $17.2 \%$ | $10.7 \%$ | $8.6 \%$ | $16.5 \%$ | $47.0 \%$ | $64.2 \%$ |
| 2022 | $21.0 \%$ | $14.4 \%$ | $11.0 \%$ | $17.1 \%$ | $10.8 \%$ | $8.3 \%$ | $17.5 \%$ | $46.4 \%$ | $63.4 \%$ |
| 2023 | $21.7 \%$ | $13.9 \%$ | $10.9 \%$ | $16.4 \%$ | $10.6 \%$ | $8.0 \%$ | $18.5 \%$ | $46.5 \%$ | $62.9 \%$ |
| 2024 | $21.1 \%$ | $14.0 \%$ | $10.6 \%$ | $16.5 \%$ | $10.6 \%$ | $7.8 \%$ | $19.4 \%$ | $45.7 \%$ | $62.2 \%$ |

This scenario does not represent any particular course of action that Treasury is expected to follow. Instead, it is intended to demonstrate the basic trajectory of average maturity absent changes to the mix of securities issued by Treasury. Portfolio Composition by original issuance type and term can be found in the appendix (Page 43).

## Section IV: Demand

Summary Statistics for Fiscal Year 2014 Q4 Auctions

| Security Type | Term | Stop Out Rate (\%)* | Bid-to- <br> Cover <br> Ratio* | Competitive <br> Awards (\$ bn) | \% <br> Primary <br> Dealer* | $\begin{gathered} \% \\ \text { Direct* } \end{gathered}$ | $\begin{gathered} \% \\ \text { Indirect** } \end{gathered}$ | NonCompetitive Awards (\$ bn) | $\begin{array}{\|c} \hline \text { SOMA } \\ \text { Add Ons } \\ \text { (\$ bn) } \\ \hline \end{array}$ | $10-\mathrm{Yr}$ <br> Equivalent (\$ bn)** |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bill | 4-Week | 0.022 | 4.2 | 534.8 | 69.5\% | 6.0\% | 24.4\% | 3.3 | 0.0 | 5.1 |
| Bill | 13-Week | 0.024 | 4.6 | 334.9 | 70.6\% | 6.3\% | 23.1\% | 5.5 | 0.0 | 10.2 |
| Bill | 26-Week | 0.050 | 4.8 | 298.3 | 61.0\% | 6.5\% | 32.5\% | 4.9 | 0.0 | 13.0 |
| Bill | 52-Week | 0.112 | 4.1 | 74.4 | 63.0\% | 3.2\% | 33.8\% | 0.4 | 0.0 | 6.9 |
| Bill | CMBs | 0.025 | 4.5 | 15.0 | 93.8\% | 3.0\% | 3.2\% | 0.0 | 0.0 | 0.1 |
| Coupon | 2-Year | 0.554 | 3.4 | 86.2 | 49.9\% | 14.2\% | 35.9\% | 0.5 | 0.0 | 18.2 |
| Coupon | 3-Year | 0.994 | 3.2 | 80.5 | 46.8\% | 17.3\% | 35.8\% | 0.2 | 0.0 | 25.6 |
| Coupon | 5-Year | 1.722 | 2.7 | 104.8 | 34.4\% | 15.2\% | 50.4\% | 0.1 | 0.0 | 55.5 |
| Coupon | 7-Year | 2.177 | 2.5 | 86.9 | 36.6\% | 15.2\% | 48.2\% | 0.1 | 0.0 | 62.9 |
| Coupon | 10-Year | 2.520 | 2.7 | 65.9 | 39.2\% | 14.2\% | 46.6\% | 0.1 | 0.0 | 66.2 |
| Coupon | 30-Year | 3.274 | 2.6 | 42.0 | 32.5\% | 19.4\% | 48.0\% | 0.0 | 0.0 | 92.0 |
| TIPS | 5-Year | (0.281) | 2.5 | 16.0 | 40.2\% | 3.5\% | 56.3\% | 0.0 | 0.0 | 8.4 |
| TIPS | 10-Year | 0.417 | 2.4 | 27.9 | 39.0\% | 8.1\% | 52.9\% | 0.1 | 0.0 | 31.3 |
| FRN | 2-Year FRN | 0.056 | 4.3 | 40.9 | 47.2\% | 3.7\% | 49.1\% | 0.1 | 0.0 | 0.1 |
|  | Total Bills | 0.034 | 4.5 | 1,257.3 | 67.7\% | 6.0\% | 26.3\% | 14.1 | 0.0 | 35.3 |
|  | Total Coupons | 1.718 | 2.9 | 466.3 | 40.3\% | 15.6\% | 44.0\% | 1.0 | 0.0 | 320.5 |
|  | Total TIPS | 0.163 | 2.4 | 43.9 | 39.4\% | 6.5\% | 54.1\% | 0.1 | 0.0 | 39.7 |
|  | Total FRN | 0.056 | 4.3 | 40.9 | 47.2\% | 3.7\% | 49.1\% | 0.1 | 0.0 | 0.1 |

Bid-to-Cover Ratios for Treasury Bills


Bid-to-Cover Ratios for FRNs


Bid-to-Cover Ratios for 2-, 3-, and 5-Year Nominal Securities (6-Month Moving Average)


2-Year 3-Year 5-Year

Bid-to-Cover Ratios for 7-, 10-, and 30-Year Nominal Securities (6-Month Moving Average)


Bid-to-Cover Ratios for TIPS


## Percent Awarded in Bills Auctions by Investor Class (3-Month Moving Average)



## Percent Awarded in 2-, 3-, 5-Year Nominal Security Auctions by Investor Class (6-Month Moving Average)



Percent Awarded in 7-, 10-, 30-Year Nominal Security Auctions by Investor Class (6-Month Moving Average)


## Percent Awarded in TIPS Auctions by Investor Class

 (6-Month Moving Average)

Primary Dealer Awards at Auction, Percent


## Direct Bidder Awards at Auction, Percent



Total Foreign Awards of Treasuries at Auction, \$ Billion


## Appendix

## Projected Portfolio Composition by Issuance Type, Percent



This scenario does not represent any particular course of action that Treasury is expected to follow. Instead, it is intended to demonstrate the basic

## Recent and Projected Portfolio Composition by Issuance Type, percent

| End of Fiscal Year | Bills | 2-, 3-, 5-Year Nominal <br> Coupons | 7-, 10-, 30-Year <br> Nominal Coupons | Total Nominal <br> Coupons | TIPS (principal <br> accreted to <br> projection date) | FRN |
| :---: | :---: | :---: | :---: | :---: | :---: | :--- |


|  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Issue | Settle Date | Stop Out <br> Rate (\%)* | Bid-toCover Ratio* | Competitive Awards (\$ bn) |  | \% Direct* | \% <br> Indirect* | NonCompetitive Awards (\$ bn) | SOMA <br> Add Ons <br> (\$ bn) | $\begin{gathered} 10-\mathrm{Yr} \\ \text { Equivalent (\$ } \\ \text { bn)** } \\ \hline \end{gathered}$ |
| 4-Week | 7/3/2014 | 0.025 | 4.19 | 29.77 | 68.1\% | 10.5\% | 21.4\% | 0.23 | 0.00 | 0.28 |
| 4-Week | 7/10/2014 | 0.020 | 4.27 | 34.76 | 79.7\% | 10.4\% | 9.9\% | 0.24 | 0.00 | 0.33 |
| 4-Week | 7/17/2014 | 0.020 | 4.32 | 34.77 | 67.6\% | 4.9\% | 27.4\% | 0.23 | 0.00 | 0.33 |
| 4-Week | 7/24/2014 | 0.025 | 3.94 | 34.77 | 86.8\% | 4.9\% | 8.3\% | 0.23 | 0.00 | 0.33 |
| 4-Week | 7/31/2014 | 0.030 | 4.12 | 38.97 | 66.6\% | 6.3\% | 27.1\% | 0.24 | 0.00 | 0.38 |
| 4-Week | 8/7/2014 | 0.020 | 4.26 | 39.77 | 69.2\% | 7.4\% | 23.4\% | 0.23 | 0.00 | 0.38 |
| 4-Week | 8/14/2014 | 0.040 | 3.73 | 49.74 | 73.5\% | 6.7\% | 19.7\% | 0.26 | 0.00 | 0.48 |
| 4-Week | 8/21/2014 | 0.035 | 3.86 | 49.73 | 69.3\% | 8.7\% | 21.9\% | 0.27 | 0.00 | 0.46 |
| 4-Week | 8/28/2014 | 0.030 | 3.80 | 48.98 | 64.2\% | 5.5\% | 30.3\% | 0.27 | 0.00 | 0.47 |
| 4-Week | 9/4/2014 | 0.015 | 4.49 | 39.78 | 50.6\% | 4.2\% | 45.3\% | 0.22 | 0.00 | 0.36 |
| 4-Week | 9/11/2014 | 0.005 | 4.73 | 34.77 | 61.9\% | 3.0\% | 35.2\% | 0.23 | 0.00 | 0.33 |
| 4-Week | 9/18/2014 | 0.000 | 4.61 | 29.76 | 81.6\% | 3.0\% | 15.5\% | 0.24 | 0.00 | 0.28 |
| 4-Week | 9/25/2014 | 0.000 | 5.11 | 39.46 | 80.3\% | 3.3\% | 16.4\% | 0.22 | 0.00 | 0.38 |
| 4-Week | 10/2/2014 | 0.020 | 3.77 | 29.78 | 55.9\% | 5.0\% | 39.0\% | 0.22 | 0.00 | 0.28 |
| 13-Week | 7/10/2014 | 0.030 | 4.62 | 24.54 | 77.7\% | 7.5\% | 14.8\% | 0.41 | 0.00 | 0.74 |
| 13-Week | 7/17/2014 | 0.025 | 4.82 | 24.46 | 66.9\% | 5.7\% | 27.4\% | 0.44 | 0.00 | 0.75 |
| 13-Week | 7/24/2014 | 0.025 | 4.65 | 25.52 | 67.4\% | 7.3\% | 25.3\% | 0.46 | 0.00 | 0.78 |
| 13-Week | 7/31/2014 | 0.030 | 4.71 | 25.70 | 66.7\% | 5.2\% | 28.2\% | 0.40 | 0.00 | 0.81 |
| 13-Week | 8/7/2014 | 0.025 | 4.56 | 27.52 | 67.5\% | 6.4\% | 26.0\% | 0.38 | 0.00 | 0.84 |
| 13-Week | 8/14/2014 | 0.030 | 4.47 | 28.45 | 64.9\% | 4.8\% | 30.3\% | 0.45 | 0.00 | 0.87 |
| 13-Week | 8/21/2014 | 0.030 | 4.70 | 28.45 | 51.5\% | 3.6\% | 44.9\% | 0.45 | 0.00 | 0.84 |
| 13-Week | 8/28/2014 | 0.030 | 4.31 | 27.84 | 81.4\% | 8.1\% | 10.5\% | 0.38 | 0.00 | 0.86 |
| 13-Week | 9/4/2014 | 0.025 | 4.58 | 27.40 | 67.9\% | 8.4\% | 23.7\% | 0.40 | 0.00 | 0.81 |
| 13-Week | 9/11/2014 | 0.020 | 5.39 | 25.58 | 68.4\% | 5.5\% | 26.1\% | 0.42 | 0.00 | 0.76 |
| 13-Week | 9/18/2014 | 0.015 | 4.91 | 23.51 | 81.2\% | 8.3\% | 10.6\% | 0.39 | 0.00 | 0.71 |
| 13-Week | 9/25/2014 | 0.010 | 4.59 | 22.60 | 80.4\% | 4.5\% | 15.1\% | 0.42 | 0.00 | 0.72 |
| 13-Week | 10/2/2014 | 0.015 | 4.17 | 23.31 | 81.7\% | 6.8\% | 11.6\% | 0.44 | 0.00 | 0.72 |
| 26-Week | 7/10/2014 | 0.060 | 4.86 | 22.11 | 54.8\% | 9.7\% | 35.5\% | 0.39 | 0.00 | 1.35 |
| 26-Week | 7/17/2014 | 0.060 | 4.93 | 22.26 | 57.7\% | 5.2\% | 37.1\% | 0.37 | 0.00 | 0.53 |
| 26-Week | 7/24/2014 | 0.055 | 4.66 | 23.17 | 50.4\% | 8.3\% | 41.3\% | 0.45 | 0.00 | 0.60 |
| 26-Week | 7/31/2014 | 0.055 | 4.73 | 22.67 | 53.8\% | 3.6\% | 42.7\% | 0.40 | 0.00 | 0.66 |
| 26-Week | 8/7/2014 | 0.050 | 4.87 | 24.12 | 67.0\% | 4.4\% | 28.6\% | 0.41 | 0.00 | 1.48 |
| 26-Week | 8/14/2014 | 0.050 | 4.72 | 24.03 | 64.5\% | 3.4\% | 32.0\% | 0.39 | 0.00 | 0.80 |
| 26-Week | 8/21/2014 | 0.050 | 4.83 | 24.15 | 48.4\% | 3.6\% | 48.0\% | 0.40 | 0.00 | 0.83 |
| 26-Week | 8/28/2014 | 0.050 | 4.58 | 22.91 | 69.4\% | 6.4\% | 24.3\% | 0.34 | 0.00 | 0.85 |
| 26-Week | 9/4/2014 | 0.050 | 4.79 | 23.37 | 70.1\% | 5.4\% | 24.5\% | 0.35 | 0.00 | 1.37 |
| 26-Week | 9/11/2014 | 0.045 | 5.38 | 22.26 | 64.3\% | 3.0\% | 32.8\% | 0.36 | 0.00 | 0.92 |
| 26-Week | 9/18/2014 | 0.045 | 4.99 | 22.39 | 64.7\% | 7.8\% | 27.5\% | 0.33 | 0.00 | 0.97 |
| 26-Week | 9/25/2014 | 0.040 | 4.71 | 21.66 | 64.0\% | 13.6\% | 22.4\% | 0.36 | 0.00 | 1.02 |
| 26-Week | 10/2/2014 | 0.040 | 4.30 | 23.21 | 66.4\% | 8.4\% | 25.2\% | 0.32 | 0.00 | 1.39 |
| 52-Week | 7/24/2014 | 0.110 | 4.27 | 24.80 | 68.1\% | 3.3\% | 28.6\% | 0.12 | 0.00 | 2.07 |
| 52-Week | 8/21/2014 | 0.105 | 4.10 | 24.77 | 60.0\% | 3.0\% | 37.0\% | 0.15 | 0.00 | 2.24 |
| 52-Week | 9/18/2014 | 0.120 | 4.06 | 24.78 | 61.1\% | 3.2\% | 35.7\% | 0.14 | 0.00 | 2.48 |
| CMBs | 9/4/2014 | 0.025 | 4.54 | 15.00 | 93.8\% | 3.0\% | 3.2\% | 0.00 | 0.00 | 0.05 |

*Weighted averages of Competitive Awards.
**Approximated using prices at settlement and includes both Competitive and Non-Competitive Awards.

| Nominal Coupons |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Issue | Settle Date | Stop Out <br> Rate (\%)* | Bid-toCover Ratio* | Competitive Awards (\$ bn) | \% <br> Primary <br> Dealer* | $\begin{gathered} \% \\ \text { Direct* } \end{gathered}$ | ```% Indirect*``` | NonCompetitive Awards (\$ bn) | SOMA <br> Add Ons $(\$ \mathrm{bn})$ | $\begin{gathered} 10-\mathrm{Yr} \\ \text { Equivalent (\$ } \\ \text { bn)** } \\ \hline \end{gathered}$ |
| 2-Year FRN | 7/31/2014 | 0.070 | 4.09 | 14.97 | 50.0\% | 3.3\% | 46.7\% | 0.03 | 0.00 | 0.03 |
| 2-Year FRN | 8/29/2014 | 0.055 | 4.38 | 12.98 | 50.2\% | 3.3\% | 46.5\% | 0.02 | 0.00 | 0.03 |
| 2-Year FRN | 9/26/2014 | 0.041 | 4.45 | 12.98 | 41.0\% | 4.6\% | 54.4\% | 0.02 | 0.00 | 0.02 |
| 2-Year | 7/31/2014 | 0.544 | 3.22 | 28.73 | 58.7\% | 14.3\% | 27.0\% | 0.17 | 0.01 | 5.82 |
| 2-Year | 9/2/2014 | 0.530 | 3.48 | 28.72 | 48.0\% | 12.1\% | 39.8\% | 0.18 | 0.00 | 5.94 |
| 2-Year | 9/30/2014 | 0.589 | 3.56 | 28.75 | 43.0\% | 16.1\% | 40.9\% | 0.15 | 0.00 | 6.28 |
| 3-Year | 7/15/2014 | 0.992 | 3.38 | 26.83 | 49.1\% | 12.7\% | 38.2\% | 0.07 | 0.00 | 8.27 |
| 3-Year | 8/15/2014 | 0.924 | 3.03 | 26.85 | 44.8\% | 19.0\% | 36.2\% | 0.05 | 0.00 | 8.62 |
| 3-Year | 9/15/2014 | 1.066 | 3.17 | 26.83 | 46.6\% | 20.3\% | 33.1\% | 0.07 | 0.00 | 8.65 |
| 5-Year | 7/31/2014 | 1.720 | 2.81 | 34.95 | 25.9\% | 25.9\% | 48.2\% | 0.05 | 0.01 | 18.41 |
| 5-Year | 9/2/2014 | 1.646 | 2.81 | 34.91 | 36.4\% | 10.8\% | 52.7\% | 0.04 | 0.00 | 18.27 |
| 5-Year | 9/30/2014 | 1.800 | 2.56 | 34.90 | 41.0\% | 8.8\% | 50.3\% | 0.05 | 0.00 | 18.73 |
| 7-Year | 7/31/2014 | 2.250 | 2.58 | 28.98 | 37.4\% | 15.2\% | 47.4\% | 0.02 | 0.01 | 20.89 |
| 7-Year | 9/2/2014 | 2.045 | 2.57 | 28.97 | 30.7\% | 20.4\% | 48.8\% | 0.03 | 0.00 | 20.78 |
| 7-Year | 9/30/2014 | 2.235 | 2.48 | 28.98 | 41.7\% | 10.0\% | 48.3\% | 0.02 | 0.00 | 21.16 |
| 10-Year | 7/15/2014 | 2.597 | 2.57 | 20.98 | 46.5\% | 13.9\% | 39.6\% | 0.02 | 0.00 | 20.99 |
| 10-Year | 8/15/2014 | 2.439 | 2.83 | 23.95 | 37.9\% | 15.1\% | 47.0\% | 0.05 | 0.00 | 24.18 |
| 10-Year | 9/15/2014 | 2.535 | 2.71 | 20.99 | 33.5\% | 13.5\% | 53.0\% | 0.01 | 0.00 | 21.00 |
| 30-Year | 7/15/2014 | 3.369 | 2.40 | 12.99 | 35.7\% | 11.1\% | 53.2\% | 0.01 | 0.00 | 28.01 |
| 30-Year | 8/15/2014 | 3.224 | 2.60 | 15.98 | 29.8\% | 24.4\% | 45.9\% | 0.02 | 0.00 | 35.57 |
| 30-Year | 9/15/2014 | 3.240 | 2.67 | 12.99 | 32.8\% | 21.8\% | 45.5\% | 0.01 | 0.00 | 28.43 |


*Weighted averages of Competitive Awards.
**Approximated using prices at settlement and includes both Competitive and Non-Competitive Awards. For TIPS' 10-Year Equivalent, a constant auction BEI is used as the inflation assumption.


# Treasury Borrowing Advisory Committee 

November 4, 2014

## Table of Contents

Charge to the Committee: Please provide an update on the trends in the student loan market over the last several years. What issues, if any, should Treasury consider with regard to student loans?

## Topics to discuss:

1. A brief history of the student lending program and key elements today, including an update on trends since the July 2012 TBAC presentation on the topic
2. Default trends and implications
3. Key factors driving growth in student loans
4. Broader implications of student lending growth
5. How the Committee expects the student loan market to develop, including potential reform proposals
6. Main risks associated with student lending, including the funding implications for Treasury under the status quo versus alternate potential scenarios

## Executive Summary

- In July 2012, TBAC addressed the topic of student lending, providing a broad review of the program, its growth, benefits and risks. Notably for TBAC, the Student Aid and Fiscal Responsibility Act (SAFRA) of 2010 ceased the origination of federal student loans by private lenders and as of July 1, 2010, all federal student loans are made directly by the Department of Education and funded by the U.S. Treasury Department.
- As a result of this shift, the liability management task of Treasury has a new expanding dimension, moving from a focus on financing the deficit, toward an increasing share of overall issuance supporting the funding needs of financial assets owned by Treasury, some purchased during the financial crisis, but future growth primarily driven by direct student lending.
- Since the 2012 report, student loan balances and default rates have increased.
- The balance of student loans outstanding has grown from $\$ 1.0$ trillion as of YE2011 to $\$ 1.3$ trillion as of 2Q2014. ${ }^{(1)}$ The government represents more than $85 \%$ of origination volume. There are four key factors that continue to drive growth:
- More people choosing to consume more years of higher education, in part reflecting demographic change with growth in the 2034 year cohort and in part due to the weak economy with students staying in school longer.
- A greater proportion of students are taking out Federal student loans (48\% as of 2012, up from 33\% in 2002). ${ }^{(2)}$
- The increasing cost of higher education exacerbated by reduced subsidies from state governments to in-state schools.
- Outstanding balances declining more slowly than originally anticipated due to both increased volume of loans in deferral and forbearance as well as longer loan tenors.
- The growth in for-profit schools, which accounts for the majority of growth in higher education students and has broadened the use of student financing.
- Default rates are high and rising, with the two-year cohort default rate increasing to $10.0 \%$ vs. $8.8 \%$ as of the 2012 TBAC report. ${ }^{(3)}$
- Notably, "default" in the context of federal student loans is generally defined as 270 days without payment. ${ }^{(4)}$ Loans in default represent $9 \%$ of the stock of outstanding federal student loans.
- Behind the default rate is a shadow book of potential future defaults, reflected in the volume of loans in deferment and forbearance. Those loans add $23 \%$ to the $9 \%$ that are already listed in default (see slide 12).
- Additionally, the growing volume of seriously delinquent loans (90+ days) indicate further potential defaults on the horizon. Student loan delinquency rates are the highest among any consumer debt product. ${ }^{(5)}$


## Notes

Notes

1. Based on data released by the Federal Reserve on October 7, 2014 for 2011 and 2Q14. Including student loans originated under FFELP and Direct Loan Programs; Perkins loans; and private student loans without government guarantees
2. Department of Education two-year cohort default rates, which refer to the percentage of borrowers entering repayment during one fiscal year and defaulting by the end of the next fiscal year. The 2-year cohort default rate for 2011 was $10.0 \%$ (the most recent available) and for 2009 was $8.8 \%$ (the most recent available at the time of the 2012 TBAC presentation).
3. Department of Education. Varies by type of loan, date of origination and processing time
4. Federal Reserve Bank of New York Quarterly Report on Household Debt and Credit (August 2014)

## Executive Summary (Continued)

- A key concern is that students are taking on student loans because historically an education has been correlated with economic mobility; however, today an average of $40 \%$ of students at four-year institutions (and $68 \%$ of students in for-profit institutions) do not graduate within six years, ${ }^{(1)}$ which means they most likely do not benefit from the income upside from a higher degree yet have the burden of student debt.
- Unlike all other indebtedness, student debt cannot be extinguished in bankruptcy in almost all cases and the government can offset income tax refunds, Social Security and other federal benefits.
- This outcome contrasts to the goal behind the Federally subsidized student loans which has been to ensure access to higher education, economic opportunity and social mobility.
- As first commented by President Johnson at the inception of the program, the act should be "a way to deeper personal fulfillment, greater personal productivity, and increased personal reward."(2)
- CBO calculations indicate that the student loan program delivers a $\$ 135 \mathrm{Bn}$ profit to taxpayers over the next decade. ${ }^{(3)}$
- However, as the CBO acknowledges, there are substantial potential liabilities that are hidden by required government accounting that calculates the cost of the program based on the program as mandated and without factoring in market risk.
- According to the CBO, under fair value accounting (incorporating market risk) the program will cost taxpayers $\$ 88$ billion. ${ }^{(3)}$
- In addition, the estimate does not include the potential cost or benefit associated with recent proposals to redesign elements of the student lending program, including: (i) reducing the interest rate; (ii) increasing repayment options; and (iii) addressing the pace of origination with a focus on qualifying institutions eligible for such programs.
- Nor does it reflect potential efficiency benefits by addressing disparities in the quality of student loan servicing.
- For example, the gross cost of maturity extension in order to increase the probability of repayment would be approximately $\$ 220$ billion, although before factoring in the economic and social costs / benefits.
- Due to the relatively recent growth in both origination volume and default rates, it is premature to conclude the extent to which student lending is crowding out other forms of credit creation and thus acting as a drag on other parts of the economy. However, credit availability could be a problem as this age group bears the brunt of increased student debt. ${ }^{(4)}$
- While this presentation will attempt to identify important characteristics of the basic features of some of the more common loans offered directly by the federal government, clearly a more exhaustive analysis, including the collection and availability of important data about the performance and borrower trends is needed to complete a full assessment of the funding strategy for these loan programs.

[^0]Section 1: Overview of the Student Lending Program and Key Elements Today

## History of the Student Lending Program

- Student loans are used to finance post-secondary education, which is typically targeted for undergraduate and postgraduate education but also can include eligible vocational or trade schools.
- The U.S. government began offering Federal financing for Institutions of Higher Education (IHE) in 1965 with Title IV of the Higher Education Act (HEA).
- HEA is re-authorized every five years, although the re-authorization process can take years to get through Congress: HEA's reauthorization has been temporarily extended beyond its December 2013 expiry as Congress negotiate changes.
- Key elements of the Federal student loan financing in the last 25 years:
- 1990: IHEs were given restrictions on eligibility for federal student loan financing, based on Cohort Default Rates (CDRs). Today, an institution loses its eligibility for the FFELP and Direct Loan programs if the most recent 3-year CDR is greater than $40 \%$ and / or if the three most recent 3 -year CDRs are each $\mathbf{3 0 \%}$ or greater. ${ }^{(1)}$
- 1998: Federal student loan debt cannot be discharged in personal bankruptcy. Private sector student loans cannot be discharged in bankruptcy after 2005.
- 2008: Federal student loans could be discharged for permanently disabled people who have "no substantial gainful activity" (similar to the Social Security definition for disability)
- 2010: The Student Aid and Fiscal Responsibility Act (SAFRA) of 2010 ceased the origination of federal student loans by private lenders, and as of July 1, 2010, all federal student loans are made directly by the Department of Education and funded by the U.S. Treasury Department. Newly originated federal student loans since July 1, 2006 are fixed rate loans.
- 2013: Introduction of Income-Based Repayment (IBR) alternative repayment schemes


## Student Debt Outstanding Is Growing Rapidly, With >85\% Backed by the Federal Government



Source: Federal Reserve, Department of Education


Source: National Student Loan Data System (NSLDS) Federal Student Aid Portfolio Summary

With Sizeable Taxpayer Exposure, Given the Percentage Backed by the Government
Outstanding Student Loans by Type as of Dec. 31, 2013


[^1]
## More Than 75\% of Federal Student Loans Are Originated With No Credit Underwriting

- Approximately $76 \%$ of student loans, all government programs, were originated in AY 2012-2013 with no credit underwriting
- Federal loans made with no credit underwriting
Federal Unsubsidized Stafford
Loans (50.3\%)
- Offered to undergraduate and graduate students; interest accrues while in school
$\square$ Federal Subsidized Stafford Loans (25.1\%)
- Offered to undergraduate students; federal government pays the interest while enrolled in schoolPerkins Loans (1\%)
- Low interest loans offered to undergraduate and graduate students with exceptional financial need
- Federal loans made with limited credit underwriting
Parent PLUS Loans (8.9\%)
- Loans to parents with dependent children
- Requires credit check (limited)Grad PLUS Loans (6.7\%)
- Loans offered to graduate students
- Requires credit check (limited)

Private Student Loans ${ }^{(1)}$ (8\%)

- Comprehensive credit underwriting


Source: College Board, "Trends in Student Aid, 2013." http://trends.collegeboard.org/sites/default/files/student-aid-2013-full-report.pdf

## Unlike Other Credit, Can’t Extinguish Student Loans in Bankruptcy

## Default Consequences:

- Tax Refund Offsets: IRS can offset the borrower's income tax refund until the defaulted loan is paid in full. A number of states also have laws that authorize state guaranty agencies to take state income tax refunds.
- Federal Benefits Offsets: The government can offset certain Social Security benefits to collect government student loans. Just as with other types of student loan collection, there is no time limit on Social Security offsets, according to a 2005 Supreme Court Case.
- Wage Garnishments: The government can also garnish wages as a way to recover money owed on a defaulted student loan. The United States Department of Education or a Student Loan Guarantor can garnish $15 \%$ of disposable pay ${ }^{(1)}$ per pay period without a court order.
- Effect on Credit History: Adversely affects credit for many years. If borrower defaults, loan will be listed as a current debt that is in default. The default will also be listed in the historical section of borrower's credit report, specifying the length of the default.
- License Revocations: A number of states allow professional and vocational boards to refuse to certify, certify with restrictions, suspend or revoke a member's professional or vocational license and, in some cases, impose a fine, when a member defaults on student loans.

[^2]
## Section 2: Default Trends and Implications

## Sizeable Loan Growth: Assessing Default Risk

- In attempting to gauge the potential future cost of the program, it is important to consider not only the volume of loans in default, but also the volumes in three other categories that could indicate difficulty repaying: deferment, forbearance, and serious delinquency.
- Default: "Default" in the context of student loans is generally defined as 270 days without payment. ${ }^{(1)}$
- For each group of loans maturing in a given federal fiscal year, the Department of Education publishes default rates occurring through the end of the following fiscal year (2-year Cohort Default Rate, or CDR) and the second following fiscal year (3-year CDR).
- An institution loses its eligibility for the FFELP and Direct Loan programs if the most recent 3-year CDR is greater than 40\% and / or if the three most recent 3 -year CDRs are each $30 \%$ or greater. (2)
- For reference, the most recent national 3-year cohort default rate was $13.7 \%$ (the national 2-year cohort default rate was $10 \%$ as of the last published mark for FY2011, up 300 bps from 2008 and 550 bps from the trough of $4.5 \%$ in 2003).
- Universities that lose eligibility may appeal the decision, meaning they may not lose federal financing for a long period, if ever.
- Default trends are weaker at for-profit institutions, nearly 400 bps above the national two-year CDR as of the most recent mark published for 2011.
- Based on this threshold, 21 institutions of $6,100+$ schools which qualified for Title IV funding lost eligibility in the most recent year.
- Deferment: Payments have been postponed as a result of certain circumstances such as returning to school, military service, or economic hardship.
- Forbearance: Payments have been temporarily suspended or reduced as a result or certain types of financial hardships.
- The ability to defer or forbear on loans distinguishes student lending from other credit. During deferment or forbearance, the principal and interest of the loans capitalize, making balances larger for students and exacerbating repayment potential.
- Serious Delinquency (90+ Days): Classified as in repayment, but given the high volume relative to historical levels, some portion can be considered at risk of default.
- Result: There are nearly $\$ 100 B n$ in defaults (or an average of $\$ 14,100$ per borrower), which is $9 \%$ of the stock of federal student loans, with default rates differing meaningfully for the various types of institutions. ${ }^{(3)}$


## Default, Defined as Loans That Are 270+ Days Delinquent, And Three Other Categories Are Potential Risks

- The following table outlines the current status of the outstanding stock of Federal student loans. The blue-shaded areas show the total stock of Federal student financing. The pink-shaded area outlines the portion of the stock that is in deferment or forbearance.



## Some Parallels to the Subprime Mortgage Market Pre-Crisis

- To the extent it is appropriate to draw parallels to the subprime mortgage market, although clearly substantial differences exist, one can look at the rate of serious delinquencies as a percent of the balance of total subprime loans originated leading up to the crisis. The market experienced a balance of $90+$ day delinquencies greater than $30 \%$ and $40 \%$ only in mid/late 2009, suggesting that a $30 \%$ or $40 \%$ threshold as a trigger would be too generous.
- It is important to note the subprime mortgage data is for delinquency versus default, and there are differences in the markets for subprime loans and student loans. However, in an attempt to calibrate the appropriate threshold, we find the data instructive.



## Section 3: Key Factors Driving Growth in Student Loans

## Growing Number of Students Receiving Student Loans

Percentage of Undergraduate Students Receiving Loans: 2001-2013 ${ }^{(1)}$


Public and Private for-Profit Undergraduate Students


Source: U.S. Department of Education National Center for Education Statistics "Digest of Education Statistics," 2013, Table 331.20, 2013.
Notes

1. Data for academic year ending in years shown above.
2. Full-time, first time degree/certificate seeking undergraduates enrolled in all private or public degree-granting institutions. Student loans include only those made directly to students and do not include parent
3. Fuli-tim

## More People Are Consuming More Years of Higher Education

- There are more college-aged people... The US population cohort aged $20 y$ to $24 y$ has grown $+9.4 \%$ over the last $10 y$. ${ }^{(1)}$ This is the baby-boom 'echo' that should begin to slow noticeably from 2015 onward.
- ...And more of them are pursuing college degrees... College enrollment has grown $+19 \%$ over the last $10 y .{ }^{(2)}$
- Graph 1 shows the growth of full time students in $4 y$ universities of different types - public, non-profit private and for-profit private. Graph 2 shows the rising proportion of the US population aged 20y to $24 y$ that attend different types of $4 y$ universities.
- Not only do both graphs show absolute and proportionate increase, but both graphs show that the Great Financial Crisis appears to have accelerated the growth in students attending school.
- Equally important, both graphs show that the bulk of the increase in students was driven by 'for profit' universities.


## Graph 1: Growth of Full-Time Students in Four-Year Universities, By Type



[^3]Graph 2: Proportion of U.S. Population Aged 20Y-24Y Attending Four-Year Universities, by Type


Source: U.S. Department of Education, National Center for Education Statistics

## More People Are Consuming More Years of Higher Education (Cont'd)

- ...And even more people are going to university for longer, in part pursuing post-graduate degrees and in part taking longer to graduate... Anecdotally, this is evident as a consequence of the Great Financial Crisis and spike in unemployment. Factually, it is also evident in the data as shown in Graph 3, which details the proportion of degrees granted in each that are above undergraduate/college degrees - i.e. Masters, Doctorate or Specialist (MD, MBA, etc...). Graph 3 shows a similar trend - more people are pursuing postgraduate degrees since the mid-1980s and this trend accelerated post-2008.
- ...And there are more universities to service them. There was a significant rise in the number of institutes of higher education (IHE) since 1992, as 'for profit' universities saw rapid growth. Graph 4 details the absolute number of IHEs by type that are eligible to receive students with Federal student aid.
- Again, the bulk of the growth in the last 15y was driven by 'for profit' universities.
- These three trends mean that the absolute stock of student loan debt should increase - a rising share of a growing population are choosing to consume more years of higher education.
- Even if we assume that the same proportion of this education expense was debt-financed (it is now a higher proportion) and that the cost of higher education remain constant (it has grown), the absolute stock of student financing would increase. In fact, a greater proportion of students are taking out Federal student loans (48\% as of 2012, up from 33\% in 2002).


## Graph 3: More Students + More Students Getting Graduate Degrees



[^4]Graph 4: Growth in the Number of Degree-Granting Four-Year Institutions


[^5]
## Recent Growth in 'For Profit’ Schools Has Broadened the Use of Student Financing

- Simply put: "for profit" universities have grown rapidly in number and in enrollment, and students at "for profit" universities are twice as likely to utilize Federal student financing.
- To give some context as to why 'for profit' schools have grown and consolidated, as well as to why they are very much a factor in the growth in student loan financing, Table 3 below is a snapshot for average four-year undergraduate university income statement as well as the average cumulative source of financing for the student.
- The financial metrics are broken down as revenues and costs per student per year.
- Note the two boxes highlighted: the pink box shows the average operating profit per student at a 'for profit' university, while the yellow box shows that student financing covers roughly all public university tuition over the course of four years (which presumably was the design).


## TABLE 3: Snapshot of Average Four-year Undergraduate Education

|  |  | Private | Private |
| :---: | :---: | :---: | :---: |
| per Full Time Student equivalent | Public | Nonprofit | For Profit |
| Tuition \& fees | 1,410 | 6,018 | 13,019 |
| Investment \& endowment income | 297 | 3,100 | 0 |
| Govt. grants, contracts, appropriation | 3,265 | 2,735 | 1,001 |
| Other revenues | $\underline{2.449}$ | 6.382 | $\underline{286}$ |
| Total Rerenues | 7,421 | 18,235 | 14,307 |
| Instruction | 7,239 | 15,321 | 3,017 |
| Research | 3,756 | 5,887 | 8 |
| Student services \& academic support | 5.190 | 14.128 | 8.310 |
| Total expenses | 16,185 | 35,336 | 11,335 |
| Differential | -8,764 | -17,101 | 2,972 |
| Scholarship or grant | 6,931 | 16,037 | 4,832 |
| as $\%$ of $4 y$ cumulative tuition | 123\% | 67\% | 9\% |
| Student financing | 6,063 | 7,466 | 9,641 |
| as \% of $4 y$ cwnulative tuition | 108\% | 31\% | 19\% |

[^6]Section 4: Broader Implications of Student Lending Growth

## One of the Key Drivers for Default is Failure to Graduate...

Graduation Rates Raise Questions about the Value of Loans for Most Borrowers
Graduation Rates of Bachelor's Degree Seeking Students at 4-Year Postsecondary Institutions
(Cohort Entry Year: 2006)


Source: Department of Education, National Center for Education Statistics

## ..Failure to Graduate Exacerbates Already Weak Labor Market Outcomes

- Failure-to-graduate remains the most deadly of traps for higher education. As shown in the following Graphs 8, 9 and 10, the marginal benefit of higher education is clear in terms of lifetime earnings and better employment stability. Failure-to-graduate combined with leverage is a poor mix: the debt burden remains but very little of the economic benefits accrue. Whatever the reasons that the student failed-to-graduate, he or she is left with all of the downside and limited upside.


Graph 9: Higher Education Benefit: Absolute Higher Earnings



## Student Loan Debt Could Affect Credit Formation


Source: Federal Reserve, Federal Reserve Bank of New York
First Time Homebuyers Face Affordability IsSues
Monthly Payments as a \% of Income
$30 \%$
$27 \%$
$24 \%$
$18 \%$
$21 \%$

[^7]Credit Availability Could be a Problem as This Age Group Represents a Large Portion of Student Debt Expense


[^8]
## The Increase in Student Loan Debt Shows Some Impact on Willingness to Purchase Housing

- There has been much debate as to whether the growth in student loan debt is crowding out other financing for post-graduates aged $24 y$ to $34 y$. The academic and policy literature is mixed on the topic, primarily because there is limited data that is appropriated sliced by student loan debt level, income level and housing-secured debt.
- Federal Reserve Bank of New York analysis:

- The first panel shows that post-Great Financial Crisis, those with student-loan debt are marginally less likely to have mortgage debt and suffered a larger fall in mortgage debt. The second panel suggests there's no difference in utilization of auto-loan debt between those with and without student loans; however, like with mortgage debt, those with student-loan debt suffered a larger fall in auto debt. The final panel shows that the difference in credit/FICO scores for those with and without student loan debt has widened, either because FICO scores are more accurate or credit standards are more stringent.
- In addition to the potential spillovers to other credit, various academic studies show that there's a correlation between higher student debt burden and (a) lower propensity to pursue graduate education, (b) reduced retirement savings, (c) higher propensity to live with parents, (d) delayed age of marriage, and even (e) lower reported satisfaction of marriage.
- Correlations could be related to higher student debt but more broadly to the extreme stress on employment prospects, volatility in asset markets and housing markets, and meaningful structural change across several industries in the post-Great Financial Crisis.


## More Households Have More Student Debt; Significant Burden For Those With Lowest Income

Graph 11: More Households Have More Student Debt Source: Brookings Instiute (May 14)


TABLE 8: Outstanding Student Loan Debt as \% of Household Income

| \% |  |  | $\underline{2010}$ | $\underline{2007}$ |  |
| :--- | ---: | :--- | ---: | ---: | ---: |
| Lowest Quintile | Up | to | $\$ 21,044$ | $24 \%$ | $15 \%$ |
| Second Quintile | $\$ 21,044$ | to | $\$ 36,723$ | $10 \%$ | $7 \%$ |
| Middle Quintile | $\$ 36,724$ | to | $\$ 59,623$ | $12 \%$ | $7 \%$ |
| Fourth Quintile | $\$ 59,624$ | to | $\$ 97,585$ | $7 \%$ | $6 \%$ |
| Upper Quintile | $\$ 97,586$ | to | $\$ 146,791$ | $7 \%$ | $4 \%$ |
| Upper $10 \%$ | $\$ 146,792$ | or | more | $2 \%$ | $1 \%$ |
| All Households |  |  |  | $6 \%$ | $4 \%$ |

Source: Fry (2012), Brookings Institute (May '14)

# Section 5: How the Committee Expects the Student Loan Market to Develop, Including Potential Reform Proposals 

## Current Trends Imply Continued Loan Growth and CBO Budget Savings Projections Do Not Factor in Market Risk or Shifts in Macroeconomic Conditions

As currently designed, the federal student loan programs are projected to grow significantly over the next ten years

- The CBO estimates that the government's four largest student loan programs will increase by $\$ 1.2$ trillion on a gross basis from FY2015 through FY2024.
- Annual growth is expected to be \$103Bn in FY2015, increasing to annual growth of \$133Bn in FY2024 (also on a gross basis).

CBO estimates that the program as currently designed yields budget savings of \$135Bn from FY15 to FY24 (1)

- Based on the current accounting methodology as prescribed by the Federal Credit Reporting Act of 1990 (FCRA).

However, under fair-value accounting, the program results in an $\$ 88 \mathrm{Bn}$ cost to taxpayers ${ }^{(1)}$

- FCRA discounts expected future cash flows of the loan program using current UST rates, without accounting for market risk.
- In contrast, under the alternative fair-value accounting approach analyzed by the CBO, "estimates are based on market values... which more fully account for the cost of the risk the government takes on."
- The CBO explains: "Market risk... arises from shifts in macroeconomic conditions, such as productivity and unemployment, and from changes in expectations about future macroeconomic conditions. The government is exposed to market risk when the economy is weak because borrowers default on their debt obligations more frequently and recoveries from borrowers are lower. When the government extends credit, the associated market risk of those obligations is effectively passed along to taxpayers, who, as investors, would view that risk as having a cost. Therefore, the fair-value approach offers a more comprehensive estimate of federal costs."


## Potential Reform Proposals Could Alter Economics of Program

## Overview

- Given the social and economic cost of default, it is important to note various ideas for reform that have been proposed.
- The primary reform proposals, described below, address: (i) cost of the program to students; (ii) options available for repayment; and (iii) volume of loan origination.
- The cost/benefit analysis of the program is beyond the scope of this presentation. The approaches to reform complement one another in the aggregate, with the focus on origination fulfilling the mandate of the student lending program by ensuring the completion of a quality education.


## Cost

- Would allow borrowers with certain types of student loans issued before 2010 to refinance at lower interest rates offered to new borrowers as of July 2013.

Repayment and Servicing

- Income-based repayment: Several income-driven plans exist that focus on capping repayments at a percentage of discretionary income (e.g., 10\%) and forgiving remaining balances after a period of qualifying payments (e.g., 20 years).
- Forgiveness: The Public Service Loan Forgiveness program allows individuals working in full-time public service jobs to qualify for forgiveness for the remaining balance of their federal direct loans after making 120 qualifying payments after October 1, 2007. The first forgiveness of loan balances will not be granted until October 2017.
- Servicing: Continued reform by the federal loan service providers to take advantage of income-based repayment programs as well as minimize defaults and delinquencies.


## Volume and Pace of Origination

- Risk sharing:
- Would develop a college ratings system that takes into account both affordability and outcomes.
- The Department of Education recently finalized plans for a "gainful employment rule" that would put career training programs at risk of losing their ability to participate in taxpayer-funded federal student aid programs if the estimated annual loan payment of a typical graduate exceeds $20 \%$ of his or her discretionary income or $8 \%$ of his or her total earnings.
- CFPB: The CFPB's student loan ombudsman has implemented numerous programs to enhance financial literacy for students, parents and universities; increase transparency about student loan practices; analyze trends in the market; and make policy recommendations for a variety of areas, especially improvements in loan servicing.


## Other

- Market segmentation: The federal program, which represents $>85 \%$ of the market, uses the same terms for all borrowers. Programs are developed with no ability to create tools that meet the specific needs of different types of borrowers. Market segmentation could help facilitate the development of loan products and loan terms to do so, for example through public-private partnerships.

Section 6: Main Risks Associated with Student Lending, Including the Funding Implications for Treasury Under the Status Quo Versus Alternate Potential Scenarios

## Direct Loan Accounts Are Expected to Continue to Grow and Represent a Growing Portion of the Federal Debt Held by Taxpayers

U.S. Total Debt Held by the Public and Total Debt Held by Public Net of Direct Loan Accounts: FY2013 - FY2024


[^9]
## Direct Lending Expected to Expand Significantly

- Primary drivers of direct lending growth are demographics (population aged $16 y-24 y$ ), unemployment and underemployment (U-6).
- Demographics hold down direct loan growth as the baby-boom 'echo’ ages.
- As the labor market improves, growth should decelerate from a peak of $67 \%$ year-over-year growth in 2011 to 5\% year-overyear growth in 2024 (net of amortization)
- Panel 1 plots the unemployment rate along with our model-based forecast of the growth rate of loan financing.
- Panel 2 shows that although the growth rate of loan financing is expected to slow significantly, the level of direct lending may still double over the next 10 years.
- Such forecasts are highly uncertain and depend on modeling choices and variables that we can know little about, such as recession odds (upside risk), regulatory action (downside risk), and inflation in education (two-way risk).

Federal Direct Loan Financing and the Unemployment Rate



## Cost of Dealing with Legacy Debt: Maturity Extension

- Regardless of the pace of new lending, existing direct loans are of questionable creditworthiness
- As of FY Q3:2014, 37.6\% of Federal direct loan balances were tied up with borrowers who were delinquent, in default or in similar categories including forbearance, deferment, non-defaulted bankruptcy or disability (hereinafter called "delinquency and default rate" for simplicity)
- In the same period, $37.5 \%$ of indirect (FFELP) loan balances were in default, forbearance, deferment, non-defaulted bankruptcy or disability
- While fixed-rate student debt is insulated from interest rate risk, given the consequences of default discussed earlier, political pressure may nevertheless mount to forgive or extend student debt
- Debt forgiveness would reduce direct lending balances, while incurring a current-year expense for the Department of Education
- Maturity extension would cost less upfront to the taxpayer than debt forgiveness and provide some breathing room for at-risk borrowers. However, by keeping loans on the balance sheet for longer, maturity extension would increase direct lending balances at the Treasury.
- Alternative scenario: all borrowers who are in default, delinquency, or similar categories are allowed to defer payment for 10 years, at which point the remaining balance becomes a 10-year loan
- Assume in alternative (1) current delinquency and default rate, and in alternative (2) that the rate increases by 10pp (i.e., 37.6\% to 47.6\%)
- With maturity extension, total direct lending balances at the end FY2024 will be higher than the base case by $+\$ 220$ billion with delinquency and default unchanged, and $+\$ 280$ billion if delinquency and default increases 10pp to 47.6\%
- Balances affected more by maturity extension than by further erosion in creditworthiness
- We can consider a similar thought experiment for the contingent liability of the outstanding stock of indirect lending. Take the stock of FFELP loan balances ( $\$ 402.5$ bn as of FY Q3:2014) and multiply by the delinquency and default rate (37.5\%). Then the contingent liability is $\$ 150.7$ billion, if the Federal government is assumed to be the ultimate backstop for indirect loans.
- These calculations do not provide a complete cost/benefit analysis of maturity extension. This exercise quantifies the potential consequences of such a re-profiling of debt in terms of the consequences for Treasury's debt management. A holistic assessment of such a program would have to consider the benefits of doing so, which could well be economically significant.


## Cost of Dealing with Legacy Debt: Maturity Extension



## Appendix

## For Illustrative Purposes Only: Alternative Paths of Loan Balances

- Higher Unemployment and Underemployment: Given the relationship between employment conditions and loan growth, a higher unemployment or underemployment (U-6) rate would be likely to cause lending to grow substantially more than the base case.
- Specifically, if the unemployment rate were to edge up after reaching a trough in two years and the gap between U-6 and unemployment remains as wide as it is today - in excess of historical norms - the size of the program would be expected to reach roughly $\$ 3.3$ trillion in 2024, $\$ 1.7$ trillion more than in the base case.
- Fewer loans are disbursed: The CBO expects the number of new loans to grow at roughly $2 \%$ annually, even in years when the 1624 year-old population is expected to decline, consistent with the base case presented here. While the number of loans is unlikely to turn negative due to increasing demand for years of higher education and cost, the pace may slow further than expected.
- The effect of a slower pace of loan disbursements is likely to be small: if the rate of growth in the number of loans were to fall to $1 \%$, the reduction in total balances would be expected only to amount to $\$ 68$ billion less over ten years than the base case.
- The CBO's and our base case already assumes nominal growth in the average size of each loan to undershoot expected long-run inflation, so slower growth is unlikely to come from a deceleration in the cost of education - it is already baked into the model.
- Under the program's current parameters, it is much easier to envision an upward surprise in lending relative to the base case than a downward surprise.
- Government ends unsubsidized lending: Roughly half of current lending is classified as "unsubsidized". In theory, an "unsubsidized" product should be delivered at roughly the same price by the private sector, as any subsidy should be equal to the difference between the market's price and the government's price. Regardless of whether or not this concept is true in practice, it could serve as a rationale to reduce the government's obligations in student lending by discontinuing unsubsidized lending. Doing so would have a large impact on lending balances.
- If the Federal government were to stop making "unsubsidized" loans, growth in direct student lending over the next ten years would be reduced by an estimated $\$ 458$ billion, roughly $55 \%$ of total growth in the base case.


## For Illustrative Purposes Only: Alternative Paths of Loan Balances (Continued)



## Types of U.S. Federal Student Loans

- Direct, Subsidized Loans. Loan is directly administered by the Federal government and offered only to undergraduate students based on financial need. Interest does not accumulate while the borrower remains in school. The interest rate (2014-15) is 4.66\% and the maximum loan balance is $\$ 23,000$.
- Direct, Unsubsidized Loans. Loan is directly administered by the Federal government and offered to both undergraduate and graduate students regardless of need. Interest accumulates while the borrower remains in school. The 2014-15 interest rate for undergraduates is $4.66 \%$ and for graduate students is $6.21 \%$. For undergraduate students, the maximum loan balance is $\$ 31,000$ for dependent students (i.e. supported by parents) and the maximum combined balance of subsidized and unsubsidized Federal loans is $\$ 57,500$ for independent students. Graduate and professional students have a hard cap of \$138,500 balance.
- Direct PLUS Loans. Loan is directly administered by the Federal government and offered to graduate students and the parents of undergraduate students up to the cost of tuition and living expenses, at an interest rate (2014-15) of 7.21\%.
- Perkins Loans. Loan is administered by the IHE/university. Interest does not accumulate while the borrower remains in school. The 2014-15 rate is $5.0 \%$. The aggregate limit is $\$ 27,500$ for undergraduate and $\$ 60,000$ for graduate students (inclusive of the $\$ 27,500$ as an undergraduate).


## Terms of U.S. Federal Student Loans

- Pay rate - Interest rates are fixed over the life of the loan, but are based upon the UST10y rate and a fixed spread - 205bp for undergraduate loans, 360bp for graduate loans and 460bp for PLUS loans. The rates are capped at 8.25\% (undergraduate), 9.50\% (graduate) and 10.50\% (PLUS).
- Maturity - The maturity of student loans is typically $10 y$ but can extend to $25 y$
- Repayment - For the most part, Federal student loans are similar to auto loans, with a fixed monthly payment of principal and interest over a ten year term.
- However, the repayment of Federal student loans can be tied to the borrower's discretionary income for the term of the loan. At present, $11 \%$ of Federal student loans are structured this way. The borrower's discretionary income is the reported taxable income less $150 \%$ of the Federal poverty guideline for the household size. The paydown rate can be $10 \%$ to $15 \%$ (in some cases 20\%) of the calculated discretionary income, determined at the time of the loan agreement. Upon maturity (either 20y or 25y), any remaining balance of the loan is forgiven (although the forgiven balance does count as taxable income). If the borrower's discretionary income increases, the monthly loan payment will never be more than the standard payment under a 10y amortization.
- For example, the 2014 Federal poverty threshold for a household of one person is $\$ 11,670$. For an individual earning $\$ 30,000$ after graduation and a loan paydown rate of $10 \%$ of discretionary income, the monthly payment would be $\$ 104$ (\$30,000 less $\left.1.5^{*} \$ 11,670=\$ 1,250 / 12=\$ 104\right)$.
- Various amendments over the years have allowed forgiveness of Federal student loans if you work for a qualifying non-profit agency or government agency for ten years.


## Definitions for Direct Loan and Federal Family Education Loan Portfolio by Loan Status

| Field Name | Definition |
| :--- | :--- |
| In-School | Includes loans that have never entered repayment as a result of the borrower's enrollment in school. |
| Grace | Includes loans that have entered a six-month grace period after the borrower is no longer enrolled in <br> school at least half-time. Borrowers are not expected to make payments during grace. |
| Repayment | Includes loans that are in an active repayment status. <br> returning to school, military senvice, or economic hardship. |
| Deferment | Includes loans in which payments have been temporarily suspended or reduced as a result of certain <br> types of financial hardships. |
| Forbearance | Includes loans that are more than 360 days delinquent. |
| Default | Includes loans that are in non-defaulted bankruptcy and in a disability status. |
| Other | Includes the number of recipients in the specified loan status. The recipient is the student that benefits <br> from the federal student loan. In most cases, the recipient is the borrower, but in parent PLUS loans, <br> the parent is the borrower and their child is the recipient. |
| Dollars Outstanding | Recipients |

## FCRA Versus Fair Value Accounting: $\$ 223$ Billion Differential

Estimated Total Budgetary Costs Under FCRA and Fair Value: 2015 to 2024

|  | Type of Credit | Obligations or Commitments (Billions of dollars) | $\begin{gathered} \begin{array}{c} \text { Sub } \\ \text { (Billion } \end{array} \\ \hline \text { FCRA } \end{gathered}$ | dy Cost <br> of dollars) <br> Fair-Value |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Department of Education |  |  |  |  |
| Subsidized Stafford Loans (Undergraduate Students) | Direct loan | 314 | 26 | 80 |  |
| Unsubsidized Stafford Loans (Undergraduate and Graduate Students) | Direct loan | 647 | -86 | 40 |  |
| PLUS Loans (Graduate Students) | Direct loan | 107 | -38 | -13 | "more comprehensive" |
| PLUS Loans (Parents of Dependent Students) | Direct loan | 106 | -38 | -19 | fair-value approach |
| Total, Department of Education ${ }^{\text {a }}$ |  | $\overline{1,174}$ | 135 | 88 |  |

Estimated Budgetary Costs of Selected Federal Credit Programs Under FCRA (\$Bn)
Total,
2015-


[^0]:    Notes

    1. National Center for Education Statistics. Based on graduation rates of Bachelor's Degree-Seeking Students at 4 -Year Postsecondary Institutions (cohort entry year: 2006).
    2. President Lyndon Johnson, "Remarks at Southwest Texas State College Upon Signing the Higher Education Act of 1965" (November 8, 1965).
    3. Congressional Budget Office, "Fair-Value Estimates of the Cost of Selected Federal Credit Programs for 2015 to 2024" (May 2014).
    4. Federal Reserve Bank of New York Quarterly Report on Household Debt and Credit (August 2014).
[^1]:    Source: Department of Education, Consumer Financial Protection Bureau, Federal Reserve

[^2]:    Source: National Consumer Law Center; Finaid.org
    Note

    1. Disposable pay is the pay remaining after deduction of any amounts required by law to be withheld. The maximum for student loan and all other garnishments is $25 \%$ of disposable income. Wage garnishment amounts may be lower, as the borrower must be left with weekly earnings after garnishment that are at least 30 times the Federal minimum wage ( $\$ 7.25$ an hour since July 24,2009 ).
[^3]:    Source: U.S. Department of Education, National Center for Education Statistics

[^4]:    Source: U.S. Department of Education, National Center for Education Statistics

[^5]:    Source: U.S. Department of Education, National Center for Education Statistics

[^6]:    Source: US Department of Edvcation, National Center for Edvcation Statistics

[^7]:    Source: Freddie Mac, Case Schiller, Census Bureau

[^8]:    Source: Federal Reserve (total figures), Federal Reserve Bank of New York (age distribution)

[^9]:    Source: Office of Management and Budget: Budget of the United States Government, Fiscal year 2015

