



# REFERENCE POINT



# Data can inspire plan changes

## TABLE OF CONTENTS

Executive Summary.....	3
Auto Solutions.....	5
Contributions .....	15
Investments .....	29
Loan and Disbursement Behavior .....	40

## Need more robust industry reporting?

Contact your T. Rowe Price representative for access to our full suite of industry reports.

# Reference Point

## EXECUTIVE SUMMARY

In 2016, retirement plan participants showed a renewed commitment to planning for retirement, with both participants and plans returning to levels not seen since before the financial crisis. But the 2016 data also reveal that there's still work to be done. Use the trends in this report as a first step in identifying opportunity areas for your plan strategy in 2017 and beyond.

**>33%**

of plans have a default deferral rate of 6%

**66%**

automatic enrollment



12%

voluntary enrollment

## Auto-Solutions

**Default deferral rates for auto-enrollments are on the rise.**

- Over 33% of plans now have a default deferral rate of 6%.
- Some sponsors could be tying the default to maximizing the company match, which is set at 6% for the majority of plans recordkept at T. Rowe Price.

 **Many defaults are set at 3%, the standard rate when the Pension Protection Act rolled out over 10 years ago.**

It may be time to reevaluate your plan's default rate.

**Auto-increases have a proven track record—especially when participants are automatically enrolled in the service.**

- More participants stick with annual deferral rate increases when automatically enrolled in the service—66% compared with only 12% for voluntary enrollment.
- The majority of plans do not enroll participants in auto-increases—only 39% in 2016.

 **Participants may be falling short of the 15% savings goal that plan sponsors may want to consider.**

Talk to your counsel about the pros and cons of enrolling participants in an auto-increase service.

# >60%

of plans now offer Roth



Participants invested in an average of 2.5 investment options of 16.1 available

# <24%

of participants had loan balances

## Contributions

A greater number of plans now offer the Roth option.

- The number of plans offering Roth contributions increased by 10% in 2016.
- Over 60% of plans recordkept at T. Rowe Price now offer Roth contribution option.

🔍 **Participants are savvier about Roth's tax benefits and are asking to have the option in their plans.**

If you're planning to amend your plan document, consider the possible benefits and related education requirements for adding Roth contributions.

## Investments

Plan sponsors are adding investment options, but participants are investing in fewer of them.

- Plans offered an average of 16.1 investment options, up from 13.4 in 2007.
- Participants invested in an average of 2.5 investment options in 2016.
- The average number of investment options varies by age and service, with younger and new participants investing in fewer investment options, while older and more tenured participants hold more investment options.

🔍 **Continue to monitor your current investment lineup with an eye toward the participant usage.**

## Loan And Disbursement Behavior

Participants are taking fewer loans—a positive first step.

- The percentage of participants initiating new loans dropped from 1% in 2013 to an average 0.75% in 2016.
- Fewer than 24% of participants had loan balances, the lowest percentage since 2009.
- Increased education about the pros and cons of plan loans may be contributing to a decrease in participants requesting loans.

🔍 **Participants can benefit from targeted, timely loan education.**

Consider providing more education if your plan experiences high loan volumes at particular times or for specific populations.

# Reference Point

T. Rowe Price Defined Contribution Plan Data

As of December 31, 2016

## Auto Solutions

### Auto-Enrollment Stays Strong

Adoption of auto-solutions has been on the rise since the Pension Protection Act of 2006 provided limited fiduciary cover for retirement plans, paving the path for plan sponsors to automatically enroll employees and get them saving sooner.

Now, based on the data we're seeing, plan sponsors who have adopted automatic enrollment appear to be reevaluating the 3% deferral rate that has been the industry standard for 10 years. Many have increased the default to 6% or greater.

**>33%** of plans have a default deferral rate of 6%

Since 2013, the number of plans with a 6% default deferral rate has doubled, with over 33% of plans offering this higher rate in 2016. The majority of plan sponsors with T. Rowe Price offer a maximum 6% company match. Some plan sponsors might be raising the default deferral rate in order to correspond with a 6% company match.

If some plans are tying default deferrals to the company match, the move could appeal to non-savers. According to a recent EBRI study, the majority of non-savers (73%) who do not contribute to a defined contribution plan say they would be more likely to save if their employers provided a match, and about two-thirds of workers would be receptive to a default deferral rate of 3% or 6%.<sup>1</sup>

### PARTICIPATION HITS 10-YEAR HIGH

The increases also hint at the success plan sponsors have experienced through auto-enrollment. The 2016 plan-weighted participation rate of 77.4% was a 10-year high. Participation rates for older participants especially increased over the past decade:

- **Ages 50–59:** up three percentage points
- **Ages 60–64:** up four percentage points
- **Ages 65–69:** up six percentage points



### 2016 Insights

- Over 33% of plans with auto-enrollment have a default deferral rate of 6%.
- Participation in the auto-increase service is 66% for plans that automatically enroll participants in the service, compared with 12% for plans that do not automatically enroll participants in the service.

### AUTO-INCREASE PUSHES PARTICIPANTS TO SAVINGS GOALS

Participants contributed an average of 8% on a pretax basis in 2016, slightly more than half of a 15% target savings rate. Raising the plan's default deferral rate can be an important step but usually not enough to encourage participants to reach the 15% target.

One strategy for boosting deferral rates is automatically enrolling participants in auto-increase, a service that raises the amount participants are contributing by a little bit each year. In plans that:

- **Automatically enroll participants in auto-increase,** participation in this savings feature is 66%. Participants tend to be less likely to opt out of the service.
- **Offer auto-increase but do not automatically enroll participants,** participation is 12%. Participants are less likely to opt in to a voluntary savings feature.

## AUTOBOOST® SERVICE IS A LESSER-KNOWN ALTERNATIVE

Despite proven success, many plan sponsors do not automatically enroll participants in auto-increase, perhaps because of concern that participants are not monitoring their accounts closely enough to realize their contributions are increasing. A possible alternative is T. Rowe Price's *AutoBoost* Service, which allows plan sponsors to make a one-time increase of deferral percentages below a target amount. Once the plan adopts the *AutoBoost* service, participants are given the opportunity to opt out of the one-time increase within a specified period of time.

<sup>1</sup>Source: EBRI Issue Brief, March 2017.

**66%**  
automatic enrollment



12%  
voluntary enrollment



## Potential Strategies To Consider

- Add auto-enrollment to get participants saving early.
- Maximize participants' savings potential through opt-out auto-increase service.
- Use the *AutoBoost* service to increase low savers' deferral percentage one time.



## No. 1 AUTOMATIC ENROLLMENT DESIGN TRENDS

Default auto-enrollment (AE) rate	2011	2012	2013	2014	2015	2016
Percent of Plans Not Offering AE	60.2%	56.1%	52.8%	48.7%	48.9%	45.5%
1%	1.6	1.8	1.8	2.0	2.4	2.0
2%	7.3	6.3	6.3	6.3	5.3	4.6
3%	49.7	47.3	45.6	42.9	38.2	34.3
4%	13.7	14.2	15.0	15.0	13.0	14.6
5%	10.8	11.7	10.8	10.1	10.9	11.4
6% or more	16.9	18.7	20.4	23.6	30.2	33.2

### Default auto-increase (AI) rate

Percent of Plans Not Offering AI	36.7%	36.5%	32.2%	30.0%	30.7%	28.5%
1%	63.5	66.3	69.0	69.6	73.6	74.7
2%	36.5	33.8	31.0	30.4	26.4	25.3

### Default investment

Target date investment	95.5%	95.5%	95.5%	96.0%	95.9%	96.0%
Other investment*	4.5	4.5	4.5	4.0	4.1	4.0

\*Other investments could include balanced, money market, or stable value funds.

Note: Results for auto-enrollment and auto-increase are based on those plans that offer the features.



The percentage of plans with a default deferral rate of 6% or greater was nearly on par with the 3% default deferral rate in 2016 (33.2% and 34.3%, respectively).



## No. 2 PARTICIPATION IN OTHER AUTOMATED SERVICES

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Auto-Reenrollment</b>										
Plan Participation	—	3%	3%	3%	5%	5%	7%	8%	10%	12%
Success Rate	—	81	78	77	78	78	77	78	78	78
<b>Auto-Restart</b>										
Plan Participation	—	—	18	26	31	37	42	44	52	57
Success Rate	—	—	2	32	44	52	49	56	57	61
<b>Auto-Rebalance</b>										
Plan Participation	88%	89	91	92	93	93	93	95	93	95
Employee Participation	—	—	—	—	—	—	—	—	—	1

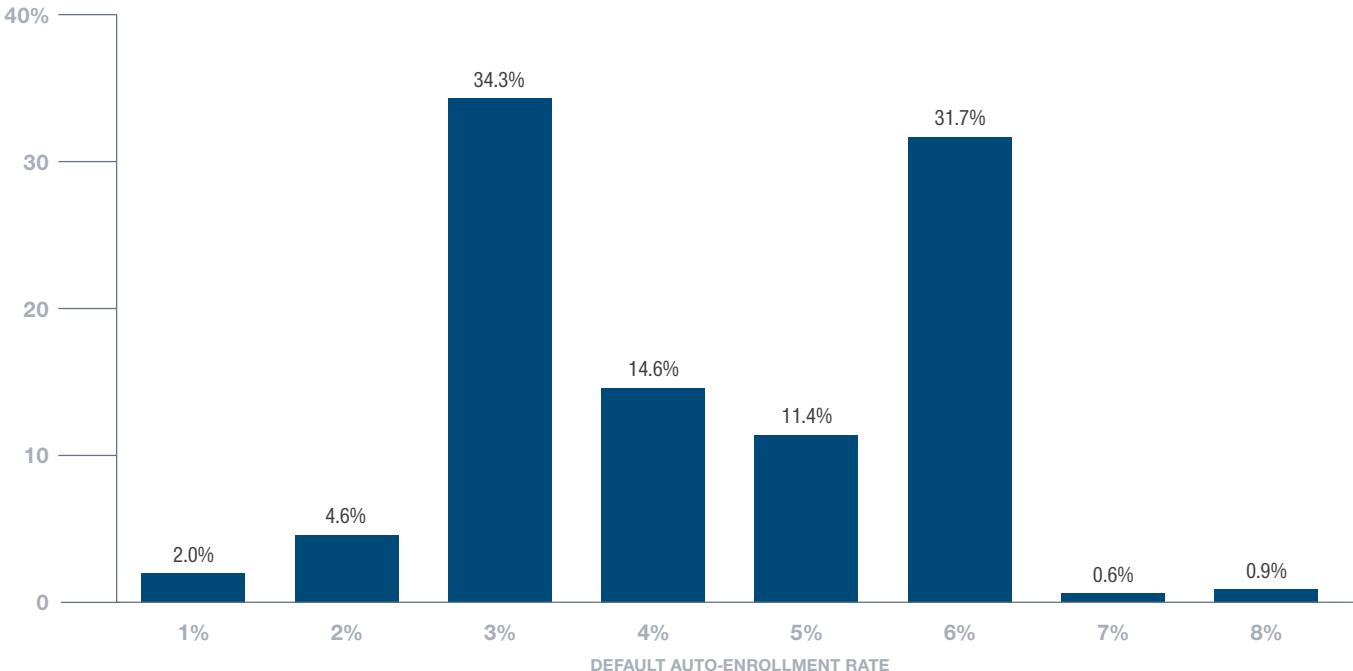
Note: The success rate is used to define how successful the one-time event was in maintaining participation when offering the service to employees. Employee participation—for auto-rebalance—conveys actual employee adoption of the service.



Overall, plan sponsor adoption of automated plan design solutions continues to trend positively, while participant adoption of those solutions still lags.



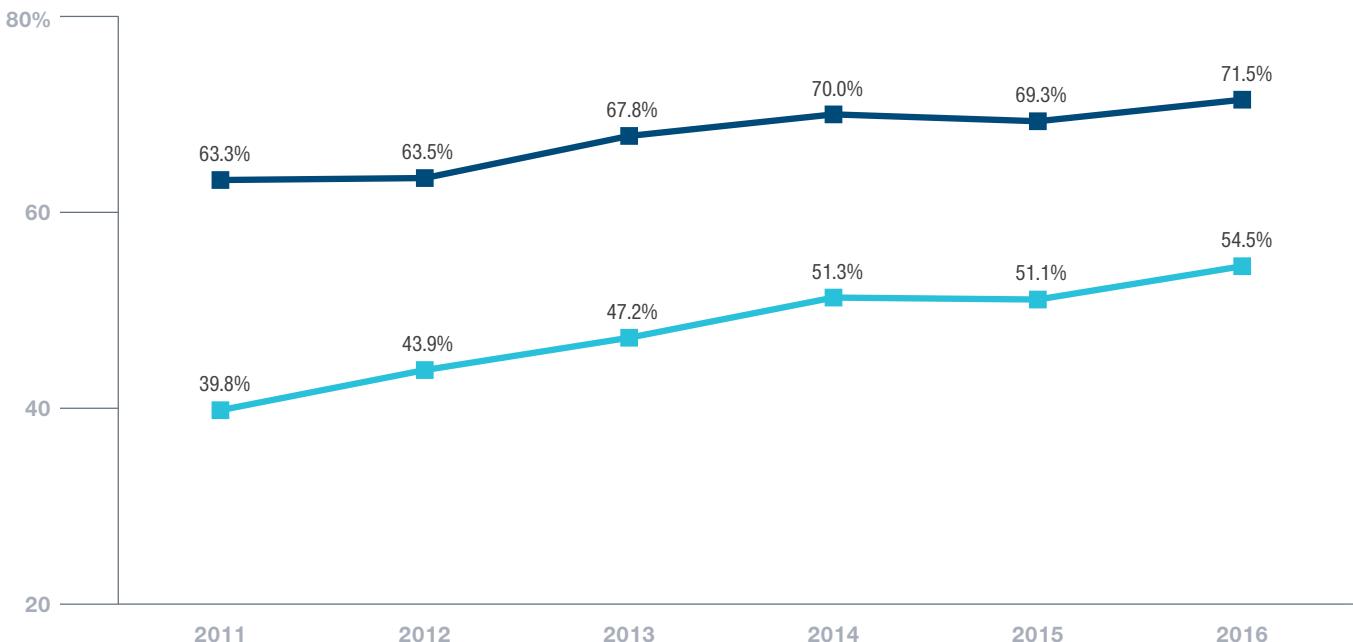
### No.3 DEFAULT DEFERRAL RATE FOR AUTO-ENROLLMENT PLANS



In 2016, plan sponsors began to close the gap between those setting a 3% versus 6% default deferral rate.



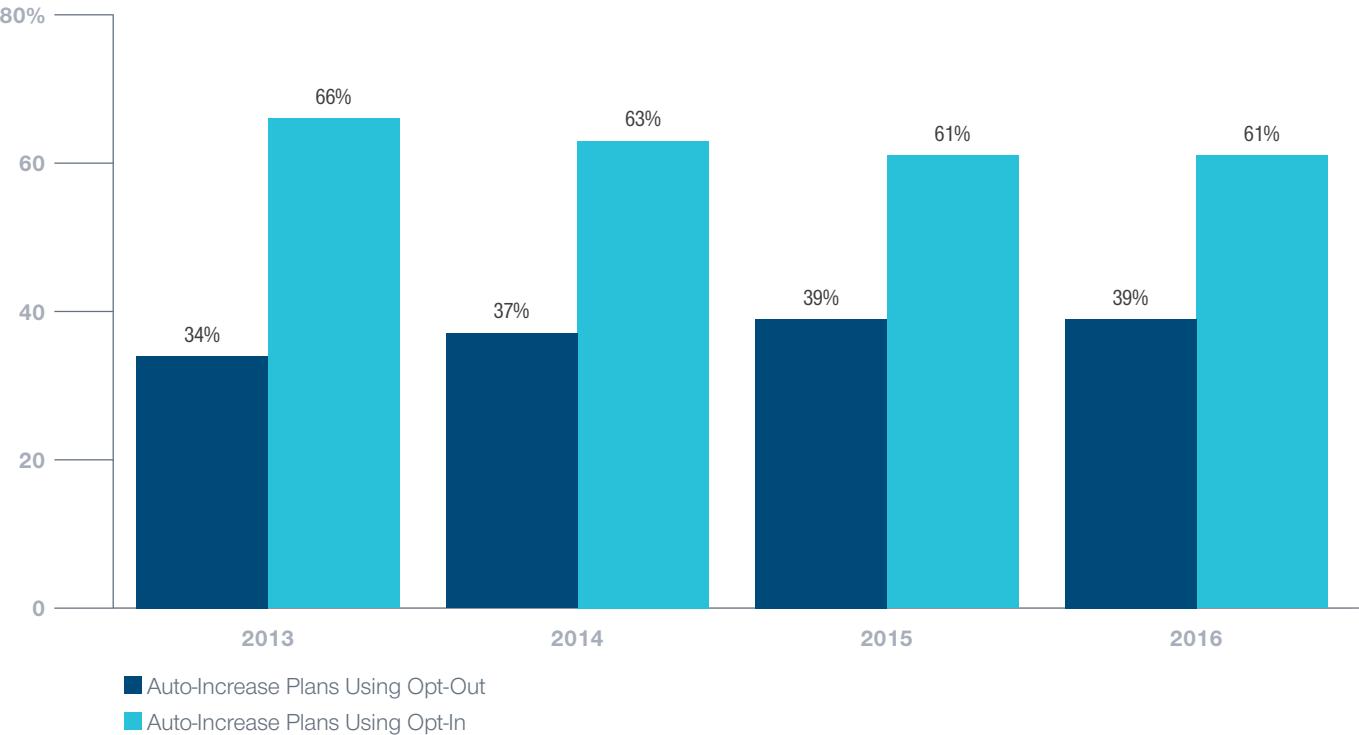
### No.4 PERCENTAGE OF PLANS ADOPTING AUTO-INCREASE AND AUTO-ENROLLMENT



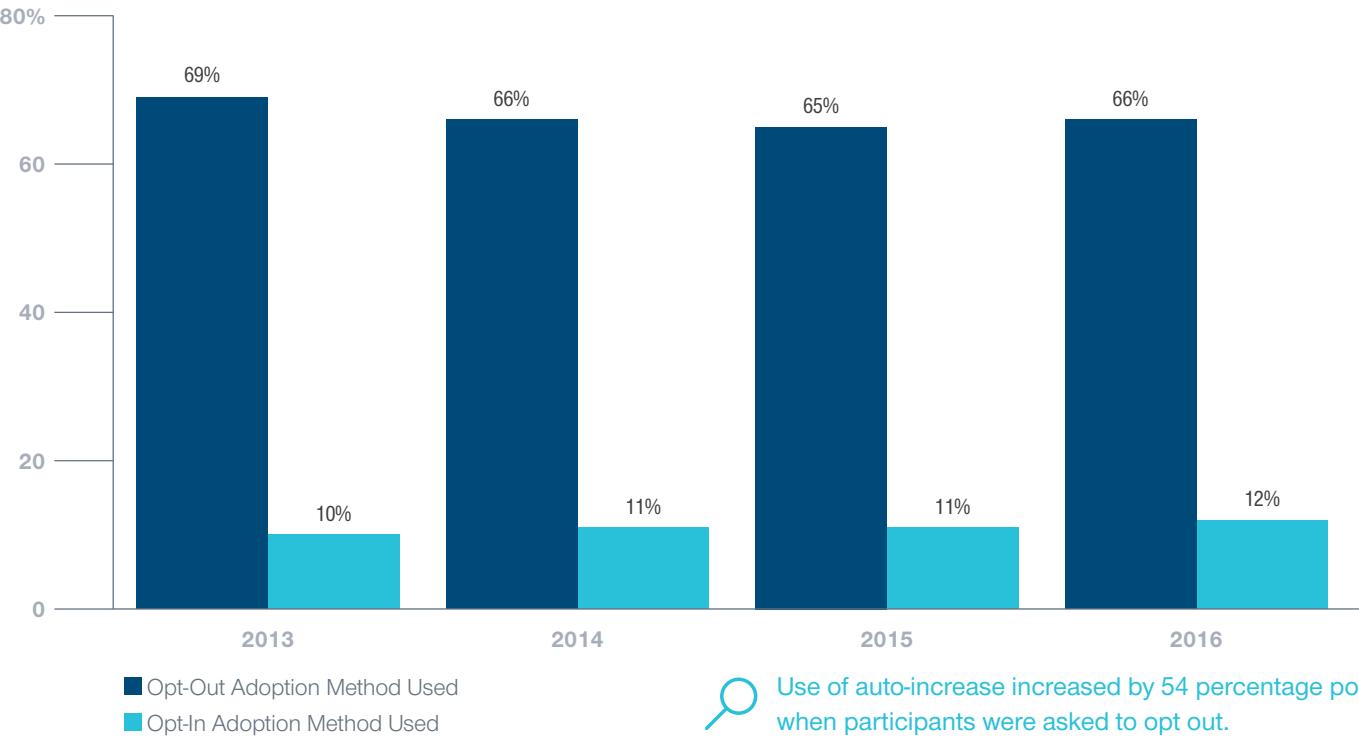
The percentage of eligible plans using auto-increase and auto-enrollment increased in 2016 at 71.5% and 54.5%, respectively.



### No.5 PLAN ADOPTION TYPES COMPARISON FOR AUTO-INCREASE



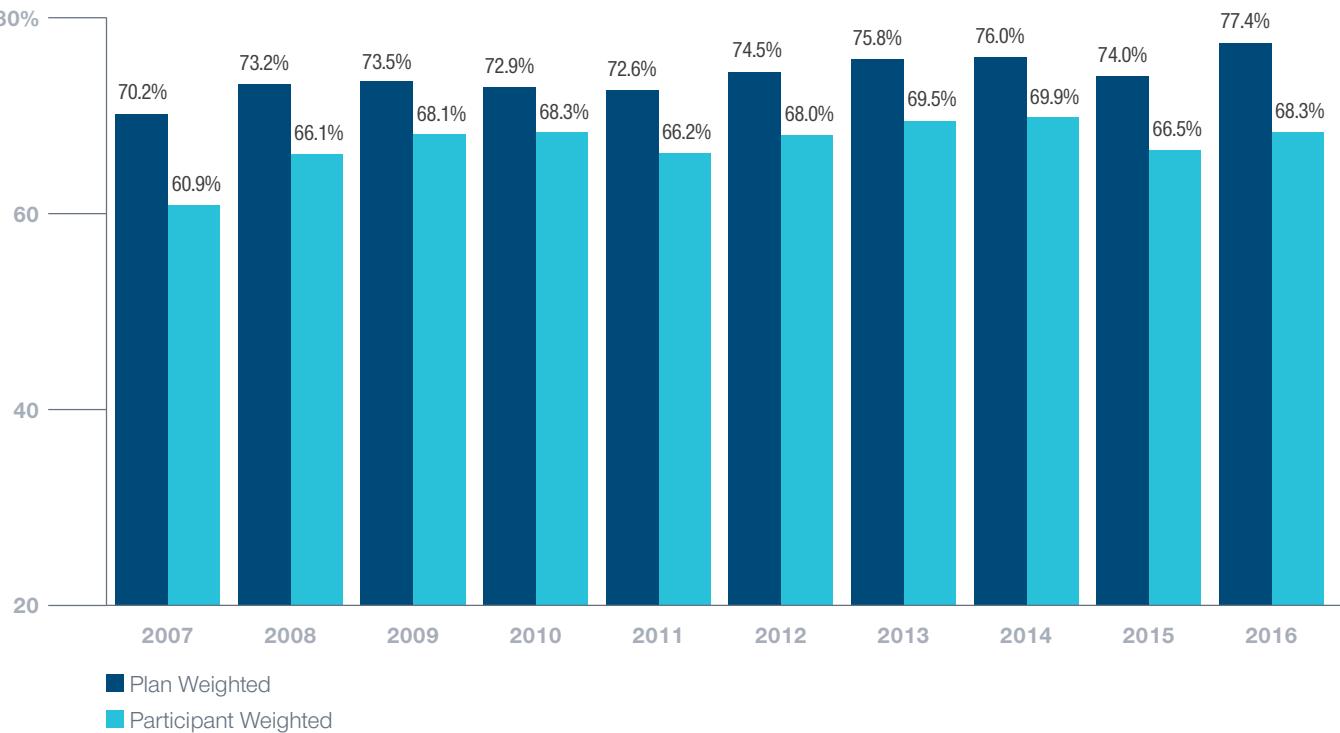
### No.6 PARTICIPANT ADOPTION RATE BASED ON AUTO-INCREASE ADOPTION METHOD



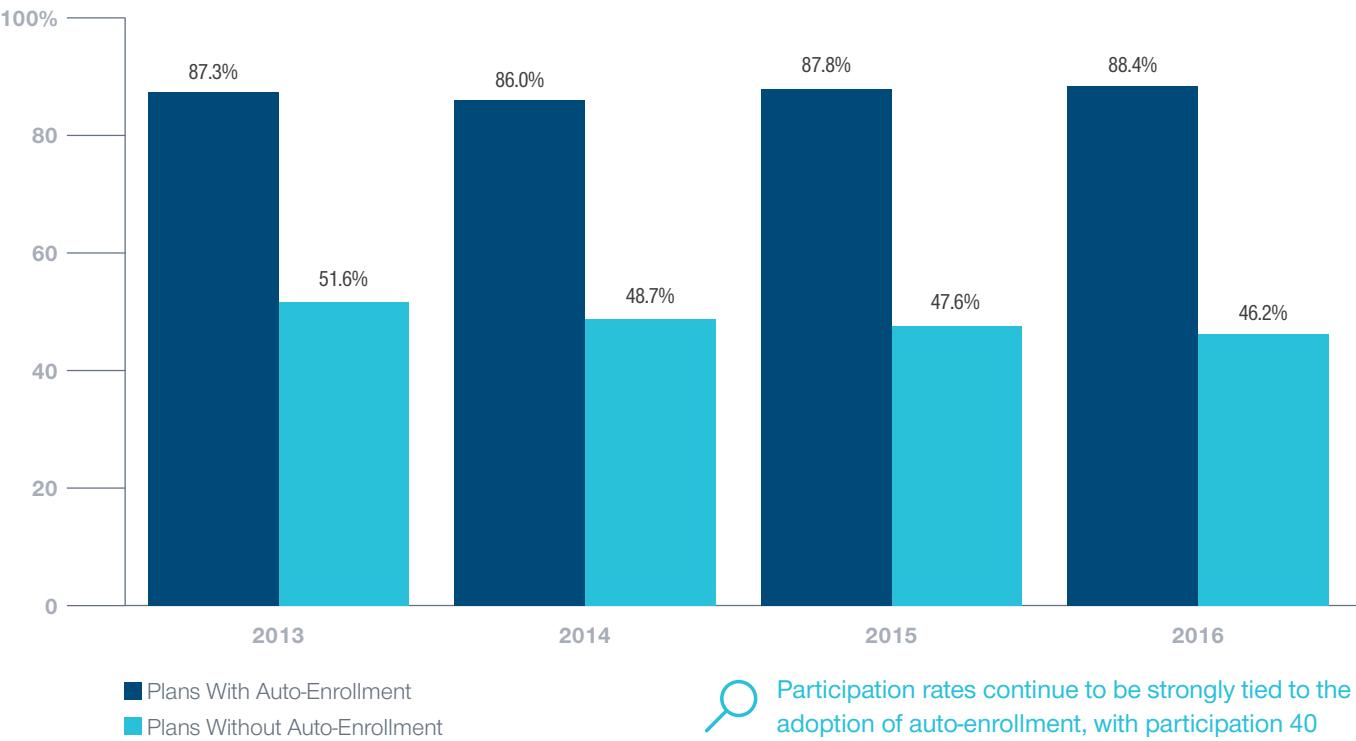
Use of auto-increase increased by 54 percentage points when participants were asked to opt out.

Most plans offer auto-increases as a voluntary option (the “opt-in” method), while fewer plans automatically enroll participants in auto-increases (the “opt-out” method).

**No.7 PARTICIPATION RATES**



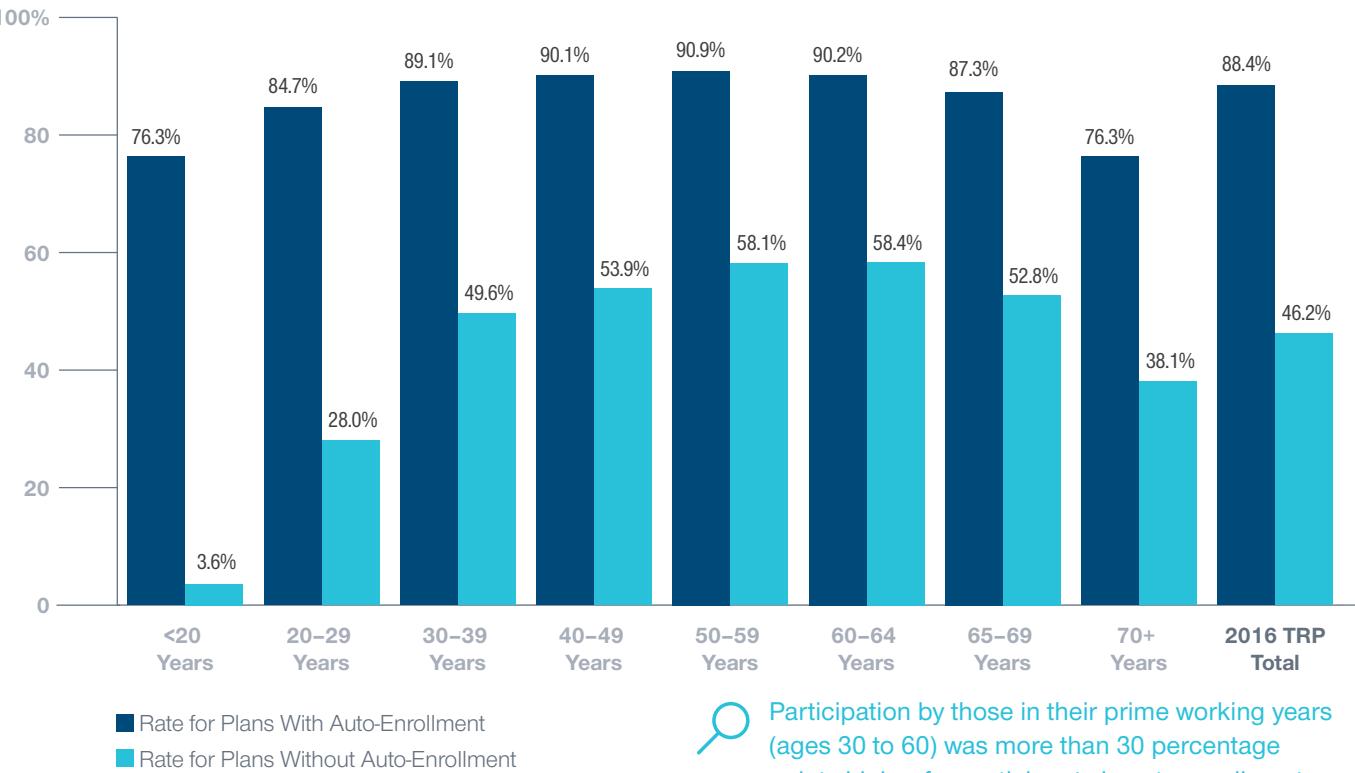
**No.8 PARTICIPATION COMPARISON BETWEEN AUTO-ENROLLMENT AND NON-AUTO-ENROLLMENT PLANS**



Participation rates continue to be strongly tied to the adoption of auto-enrollment, with participation 40 percentage points higher in plans with auto-enrollment than in those without it.



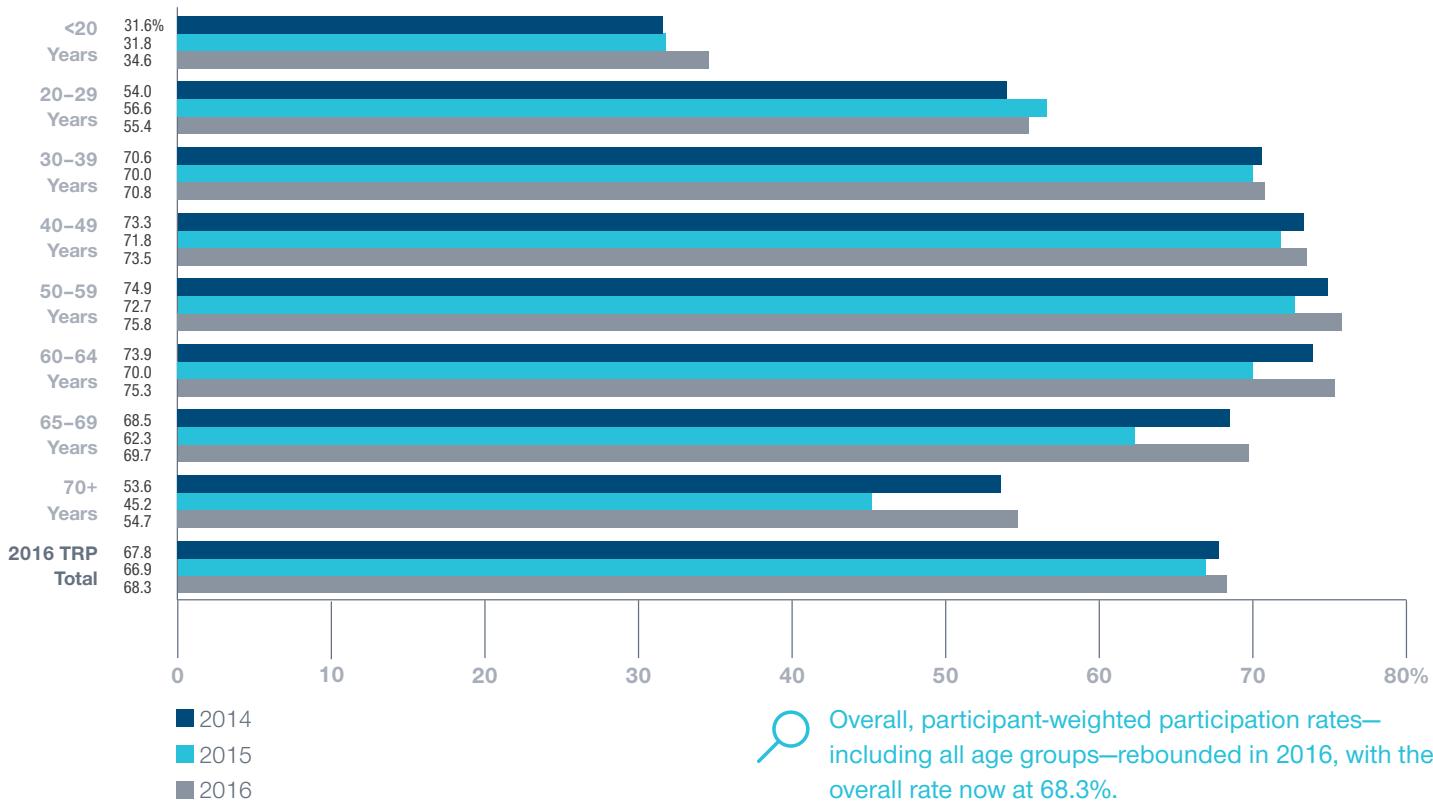
## No. 9 PARTICIPATION RATE COMPARISON BY AGE—PARTICIPANT WEIGHTED



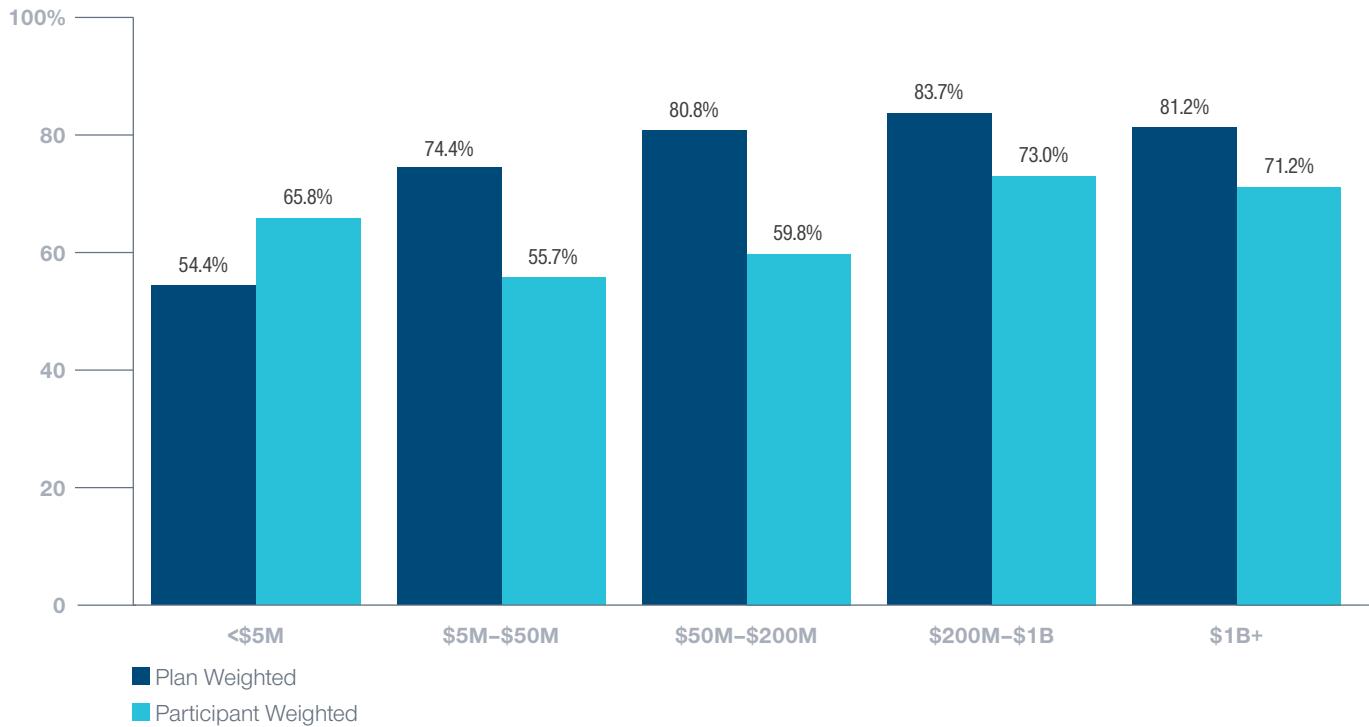
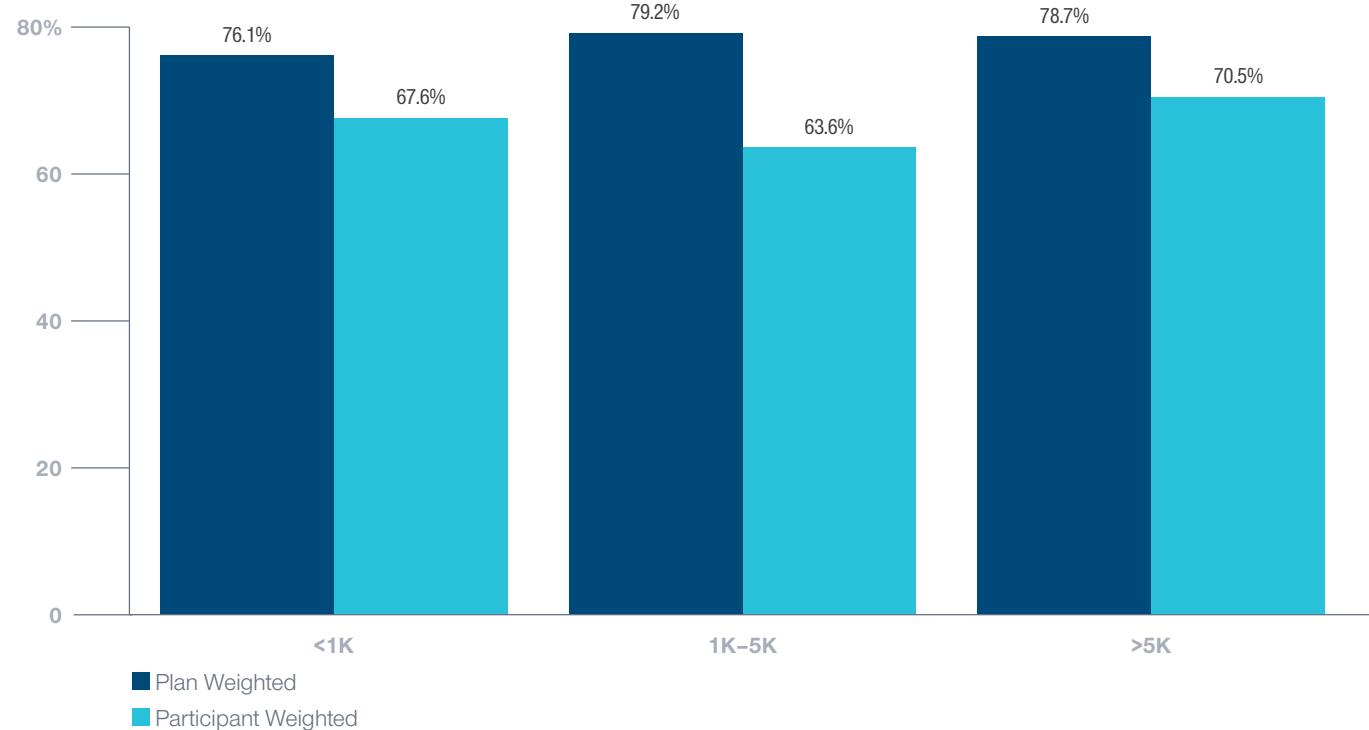
Participation by those in their prime working years (ages 30 to 60) was more than 30 percentage points higher for participants in auto-enrollment plans than for those in non-auto-enrollment plans.



No. 10 PARTICIPATION RATE (PARTICIPANT WEIGHTED)—BY AGE



Overall, participant-weighted participation rates—including all age groups—rebounded in 2016, with the overall rate now at 68.3%.

**No. 11 PARTICIPATION RATES BREAKDOWN—BY PLAN ASSETS****No. 12 PARTICIPATION RATES BREAKDOWN—BY PLAN PARTICIPANT COUNT**

## Methodology

Unless otherwise noted, all data included in this report are drawn from the following sources: Data are based on the large-market, full-service universe—TRP Total—of T. Rowe Price Retirement Plan Services, Inc., retirement plans (401(k) and 457 plans), consisting of 642 plans and over 1.6 million participants.

Auto-enrollment, auto-increase, and default deferral rate results are based on participants of large-market, full-service 401(k) and 457 plans who were automatically enrolled in their plan during 2016. Trend results are based on findings at the calendar year-end from 2007–2016.

Auto-Reenrollment—An automatic reenrollment for participants who opted not to participate in their plan. This is run on-demand and could occur about once a year.

Auto-Restart—For participants who were contributing to their plan and have taken a hardship, once the suspension period is over, participants will have their contributions automatically restarted unless they opt out.

Auto-Rebalance—Provides participants with the tools they need to maintain a consistent investment strategy. If they are not investing 100% of their account in a diversified fund, auto-rebalance will automatically rebalance their account on a periodic basis (i.e., quarterly or annually).

Participation rates by age are participant weighted (total number of participants divided by the total number eligible to participate). Participant-weighted year-over-year participation rate averages are calculated by dividing the number of participants by the number eligible to participate. The plan-weighted year-over-year participation rate average is the sum of plan-level averages divided by the number of plans.

The data are based on any participants eligible to make contributions during the period. Participation results are based on all contributions. Participation rates by age are participant weighted (total number of participants divided by the total number eligible to participate).

© Copyright 2017, T. Rowe Price Investment Services, Inc., Distributor. All rights reserved.

T. Rowe Price, Invest with Confidence, and the bighorn sheep design are collectively and/or apart, trademarks of T. Rowe Price Group, Inc. *AutoBoost* is a trademark of T. Rowe Price Group, Inc.

# Reference Point

T. Rowe Price Defined Contribution Plan Data

As of December 31, 2016

## Contributions

### Rates Hit 10-Year High—But More Is Needed

Participants' pretax deferral rates averaged 8% in 2016—the highest since 2007, before the financial crisis.

Several factors could be contributing to the higher deferral rates. More plan sponsors who offer auto-enrollment are raising the default deferral rate for their plans. In addition, improving market conditions and increased investor confidence could be lifting average deferral rates back to pre-financial crisis levels.

Plan sponsor and participant behavior also contributed to the increased rates in 2016:

- **At the plan level**, 94.9% of plan sponsors elected to retain rather than decrease their default deferral rates, with 5.1% increasing the default.
- **At the participant level**, all nonretiree age groups increased deferral rates, pushing the overall deferral rate up 0.1 percentage point. Over 58% of participants retained their current deferral rates, and 35.9% increased their deferral.

Despite these improvements, according to an EBRI study, the average American is not saving enough for retirement—with 47% of American workers reporting that they have less than \$25,000 in household savings and investments (not including traditional pension plans and the value of their home).<sup>1</sup>

**>136,000**

of eligible participants did not contribute in 2016



### 2016 Insights

- Participants contributed an average of 8% on a pretax basis, the highest since 2007.
- Plan adoption of the Roth option increased by 10 percentage points.

For plans at T. Rowe Price, over 136,000 eligible participants did not contribute in 2016. The average age of these participants was 46.6, and their average tenure was greater than 10 years. The data could indicate that some Generation X participants are experiencing increased financial obligations, which may potentially include an older child's education or an aging parent's support.

The 2016 data indicate that these eligible participants are generally less engaged with their retirement plans. Only 5% took a new loan compared with 13% of participants who contributed all 12 months in 2016.

Similarly, participants who did not contribute also were less active online, with only 6% clicking on an email about their retirement plan and 27% logging in to view their accounts on the New Workplace Retirement site. In comparison, 16% of participants who actively throughout 2016 clicked on a retirement plan email, and 47% viewed their plan account online.

## ADOPTION OF ROTH CONTRIBUTIONS ON THE RISE

In 2016, the number of plans offering the Roth contribution option increased by 10 percentage points to 60.9%.

Roth contributions have slowly increased in popularity since its introduction just over 10 years ago. The learning curve is steep; while tax-free distributions are attractive, Roth is not always the best choice for everyone. Participants and plan sponsors need to understand the pros and cons of Roth contributions, as well as the rules for taking a qualified distribution, in order to benefit from it. (See the Methodology section for the definition of a Roth qualified distribution.)

**>60%** of plans now offer Roth



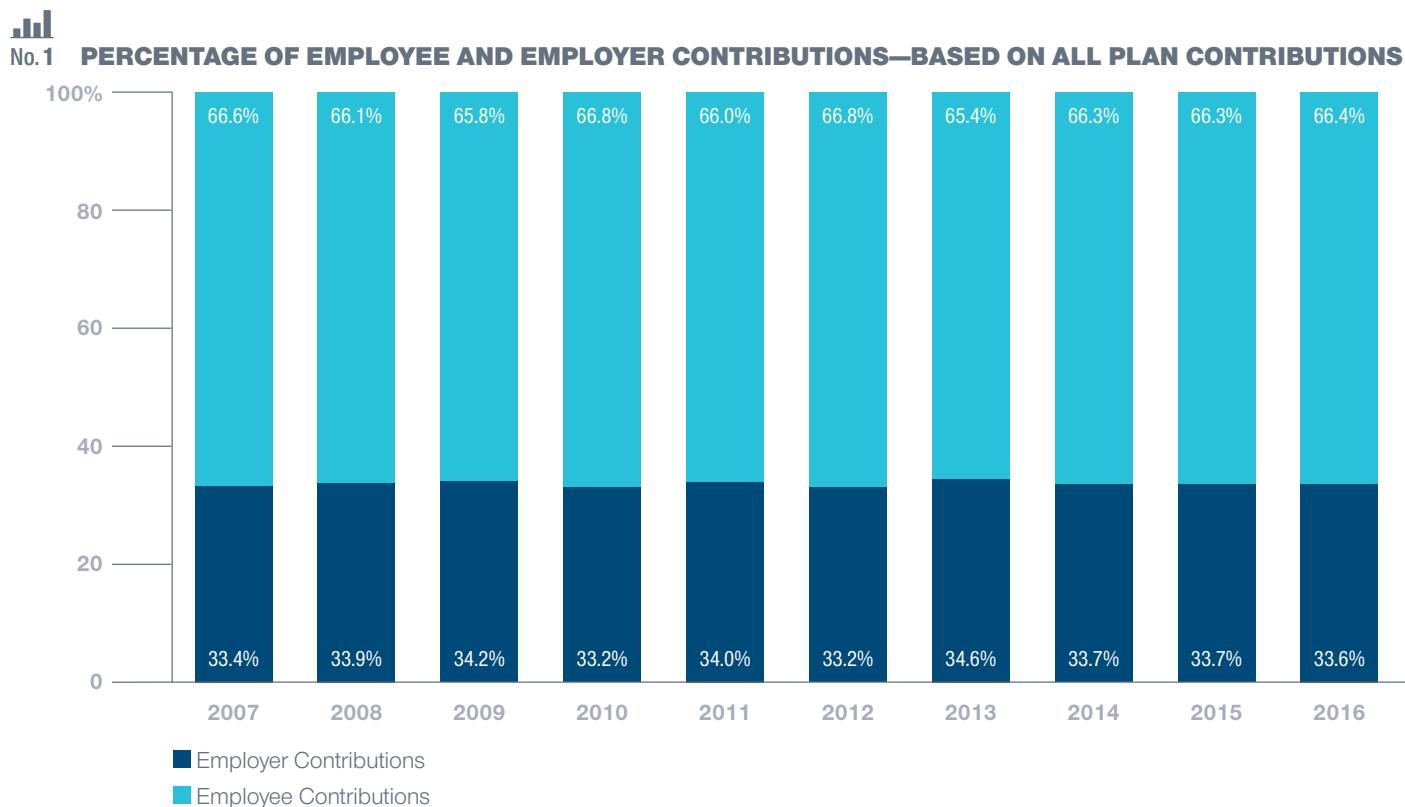
## Potential Strategies To Discuss With Your Counsel

- Implement a financial wellness program with targeted messaging by age group about the importance of retirement saving.
- Determine if the Roth option is right for your plan and how you can educate participants about the differences between pretax and Roth deferrals.

The increased adoption of Roth contribution option in 2016 was driven in part by participants who now have a better understanding of its benefits. As a whole, the industry is now more familiar with the option and becoming receptive to adding it to retirement plans. The holdout group appears to be the plan sponsors. Adding Roth requires an amendment of the plan document.

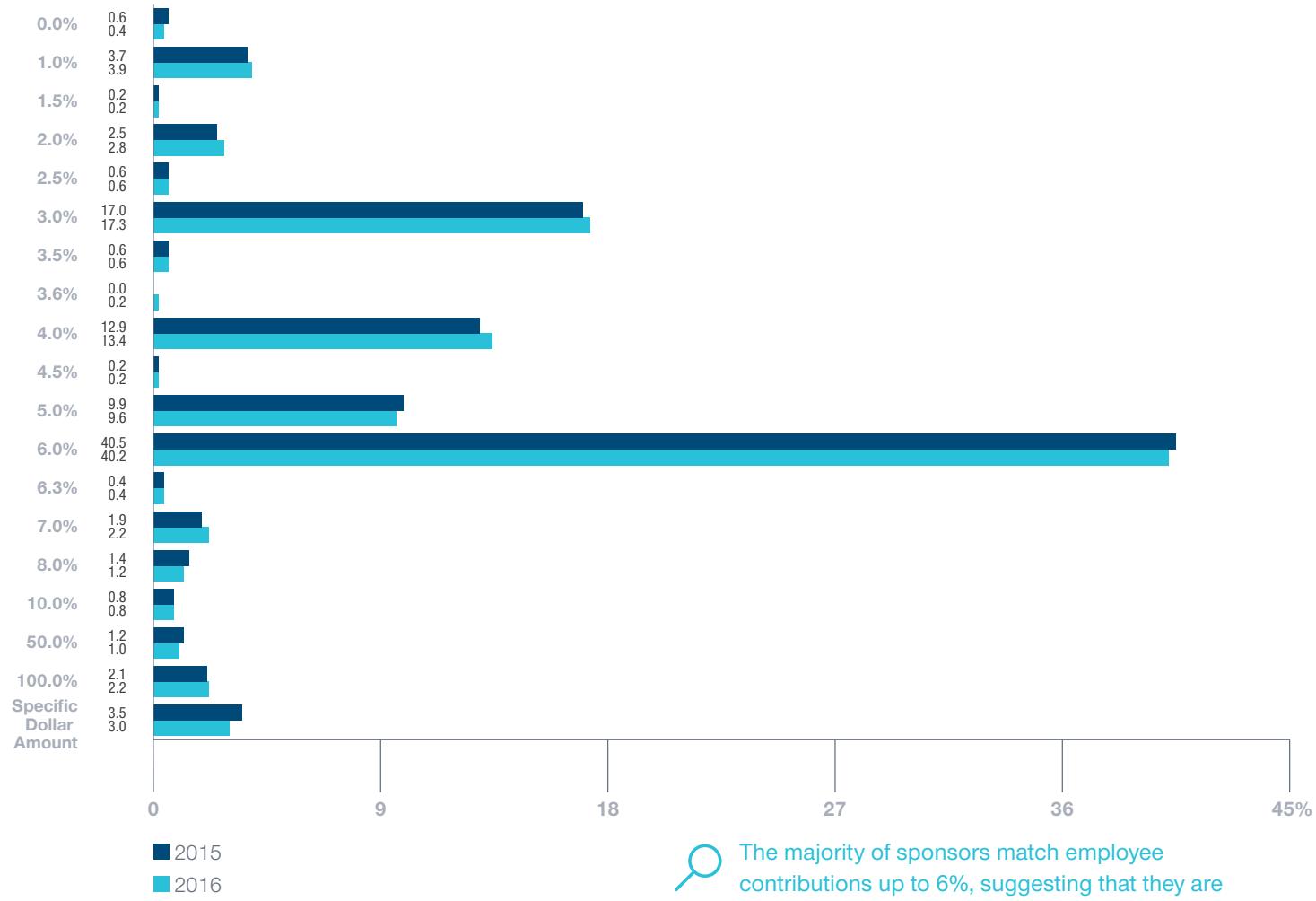
The percentage of participants making Roth contributions appears to have dipped slightly, down from 6.7% in 2015 to 6.3% in 2016. However, a potential cause of this drop was the increase in plans offering Roth rather than participants stopping or decreasing their deferrals.

<sup>1</sup>Source: EBRI Issue Brief, March 2017.





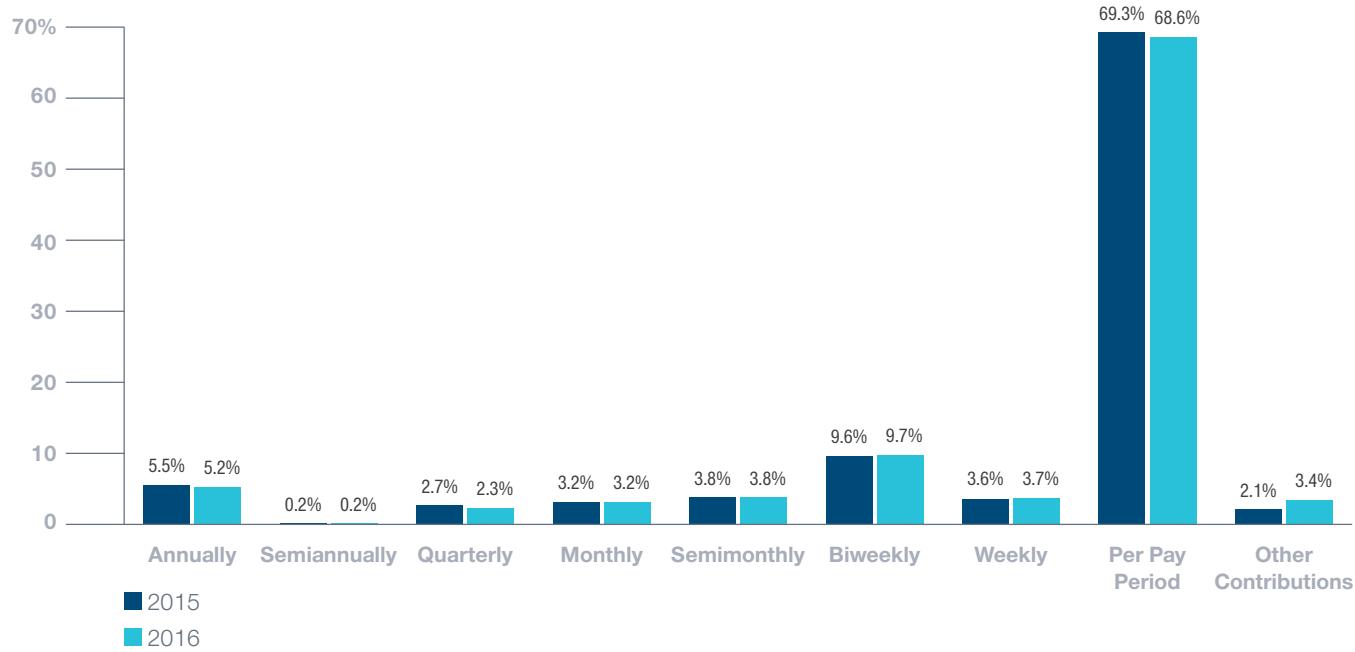
## No.2 COMPANY MATCH AMOUNTS<sup>1</sup>



The majority of sponsors match employee contributions up to 6%, suggesting that they are encouraging participants to defer at least 6% of their pay to get the maximum employer match.

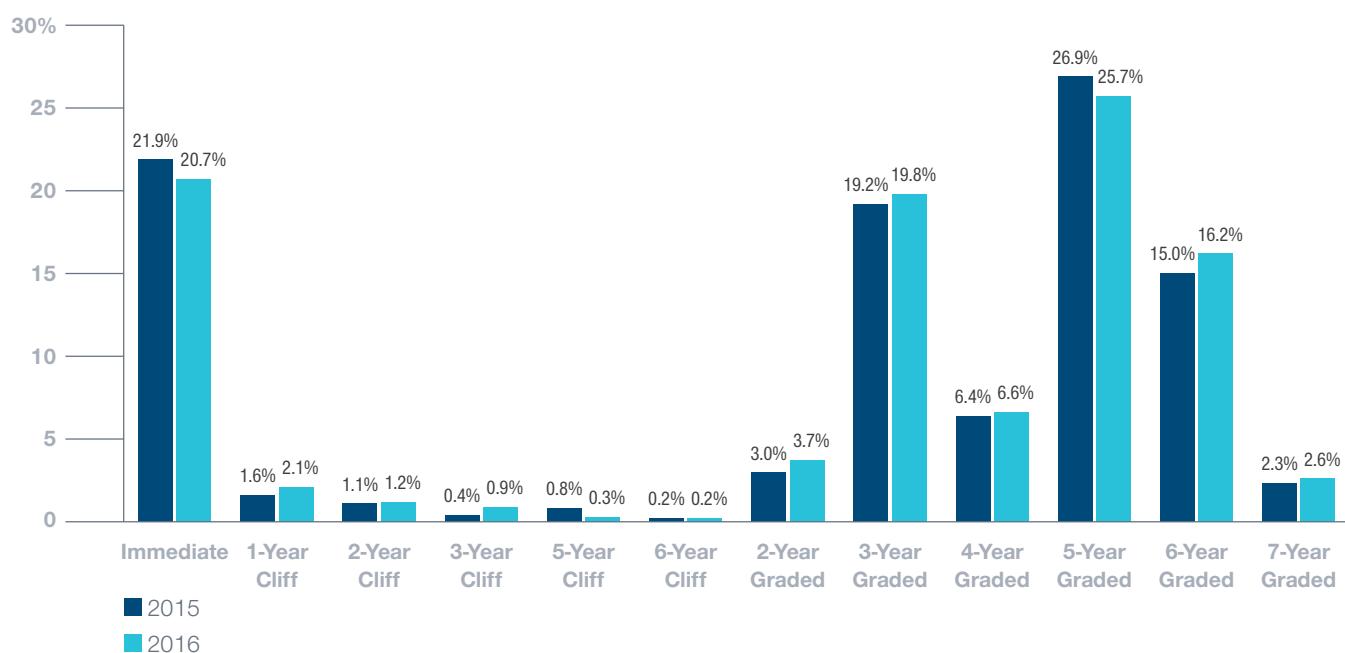
<sup>1</sup>Values are counts of plan locations that offer company match and have identifiable company match data for reporting purposes. Match percentages are the maximum percentage that a company will match participant contributions.

No.3 COMPANY MATCH FREQUENCY



Note: Values are counts of plan locations that offer company match and have identifiable company match data for reporting purposes.

No.4 EMPLOYER VESTING SCHEDULES

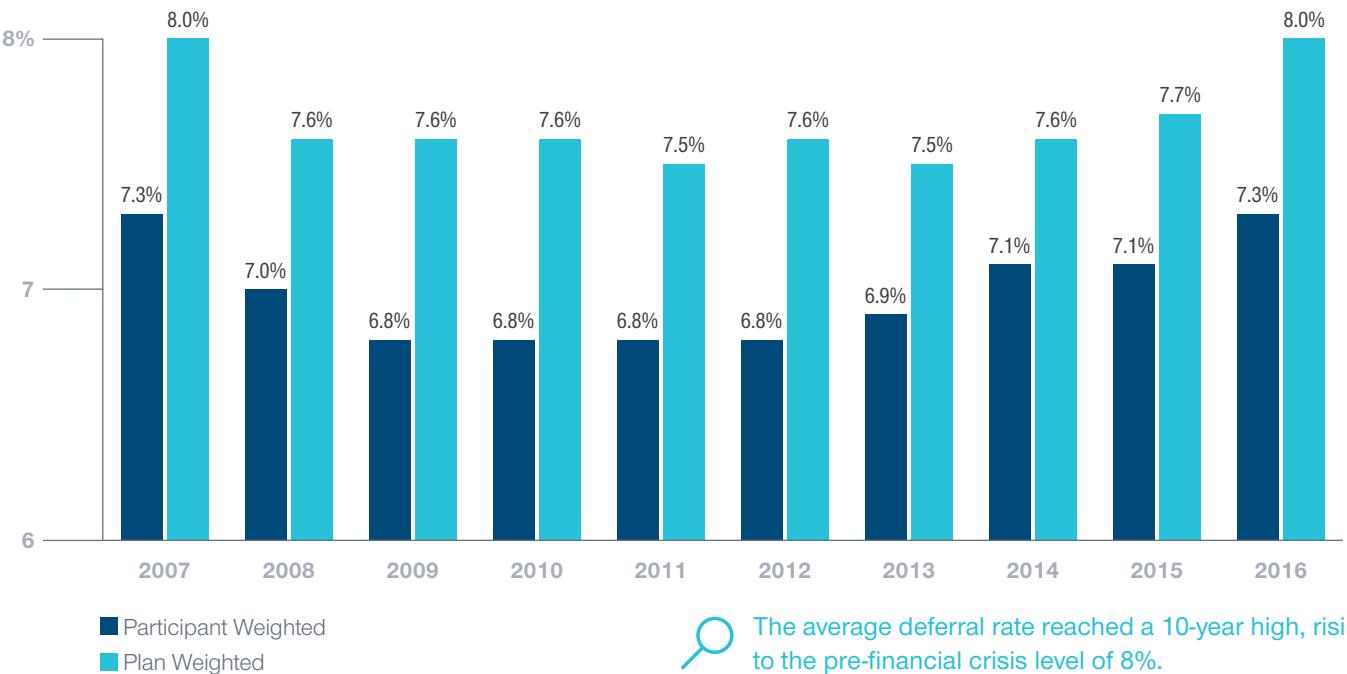


Note: Values shown are an aggregated count of those plans and plan locations that have identifiable vesting schedules for reporting purposes.

Cliff vesting is when the employee becomes fully vested for employer contributions at a specified time. Graded vesting is when the employee becomes partially vested in increasing amounts over an extended period of time. An example of cliff vesting would be when an employee is fully vested in a retirement plan after two years of full-time service. An example of graded vesting would be when employees have 20% of their employer contribution balance vested each year for the first 5 years of full-time service, at which point they would become fully vested.



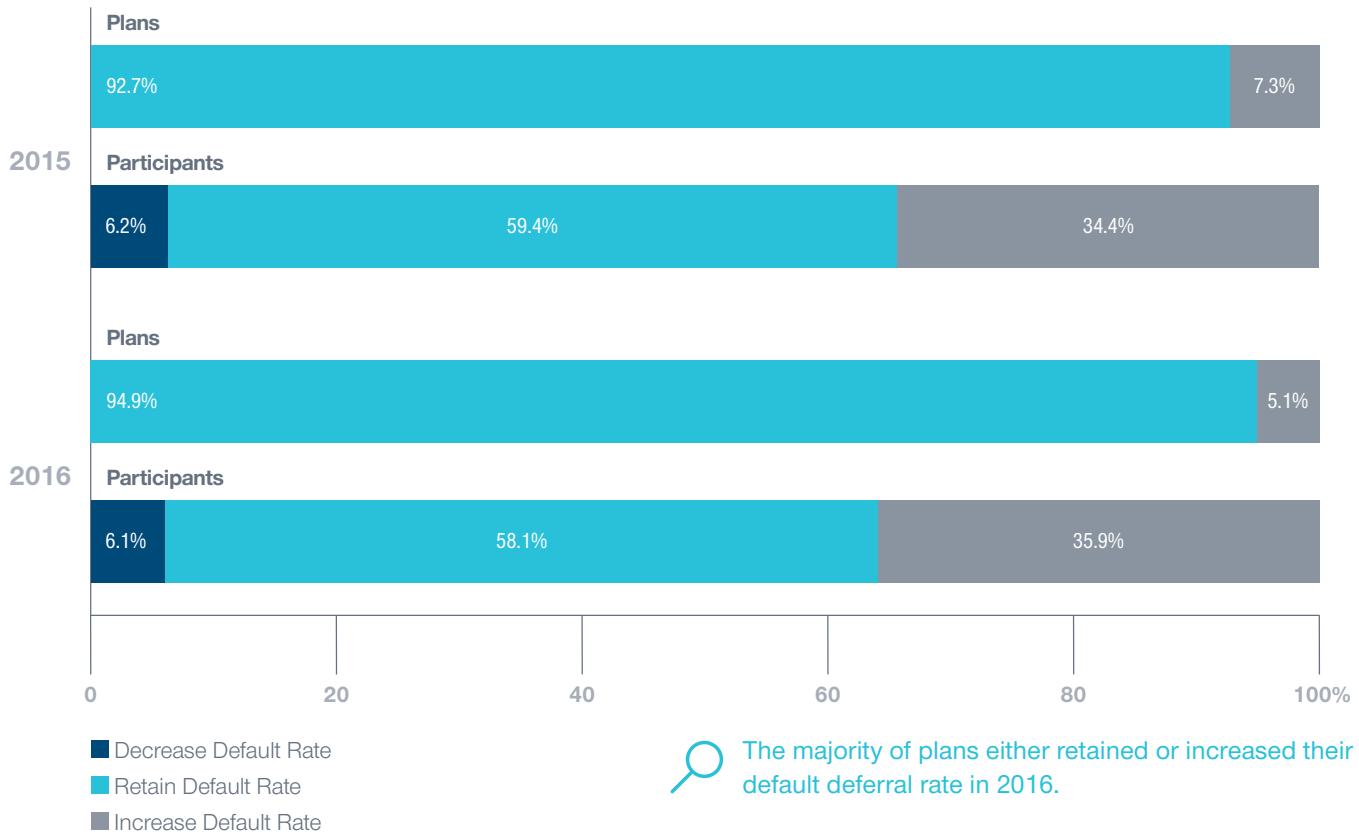
No. 5 AVERAGE EMPLOYEE PRETAX DEFERRALS



The average deferral rate reached a 10-year high, rising to the pre-financial crisis level of 8%.



No. 6 DEFAULT DEFERRAL RATE ACTIONS

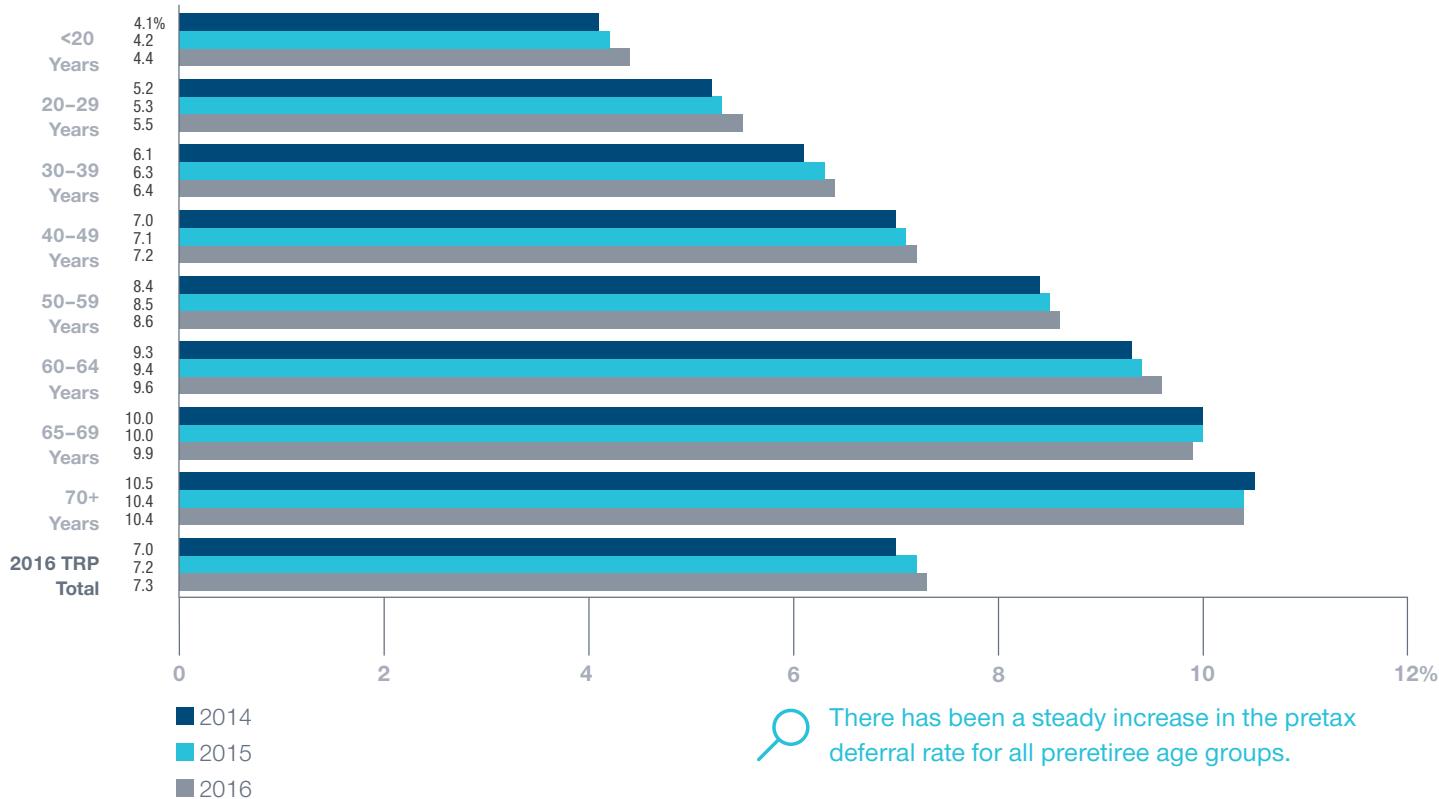


Note: The charts represent the percentage of auto-enrollment plans that adjusted participants' default deferral rates and the percentage of participants who adjusted their default deferral rates during the given period.

Numbers may not total 100% due to rounding.

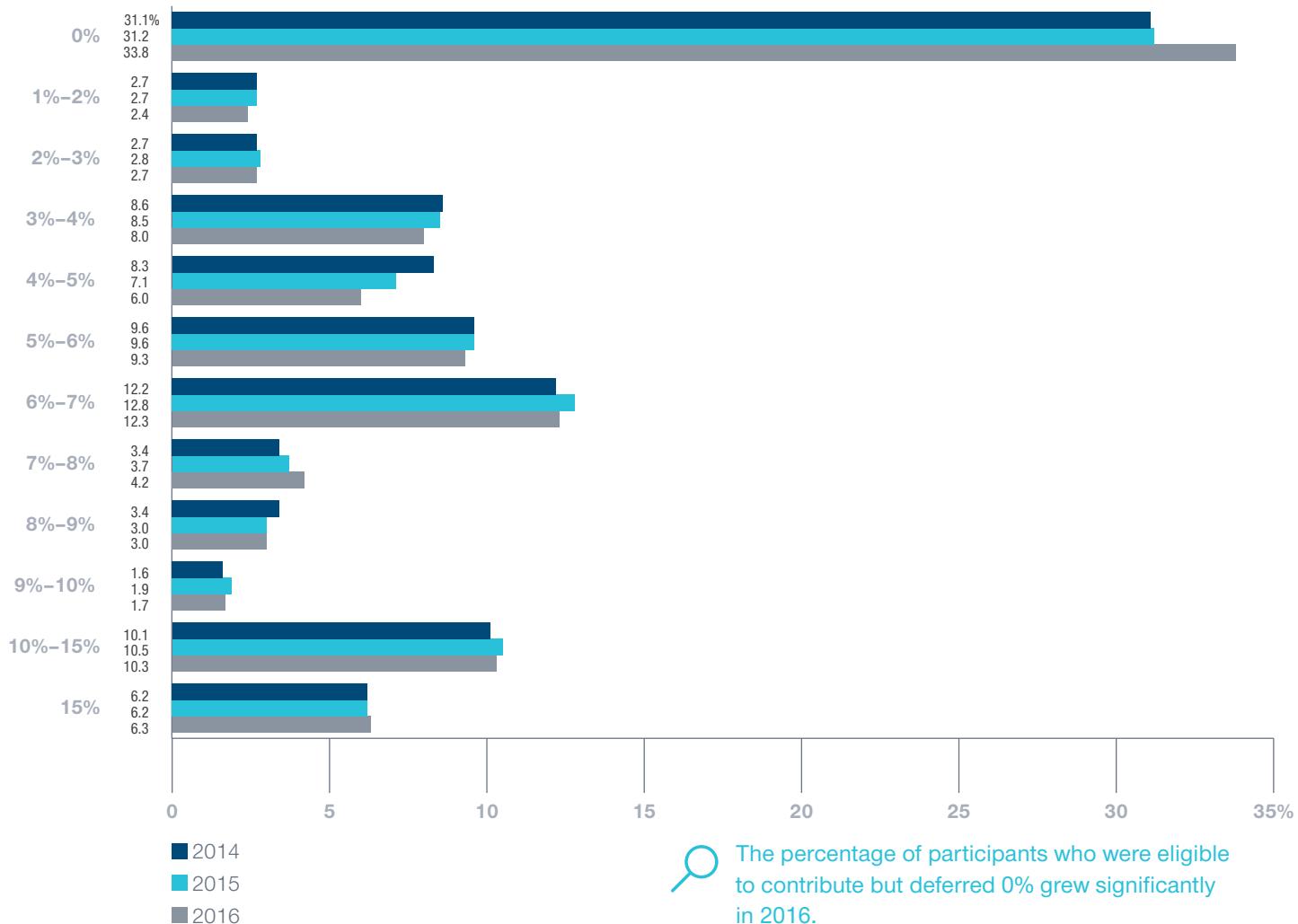


No. 7 AVERAGE PRETAX DEFERRAL RATES—BY AGE

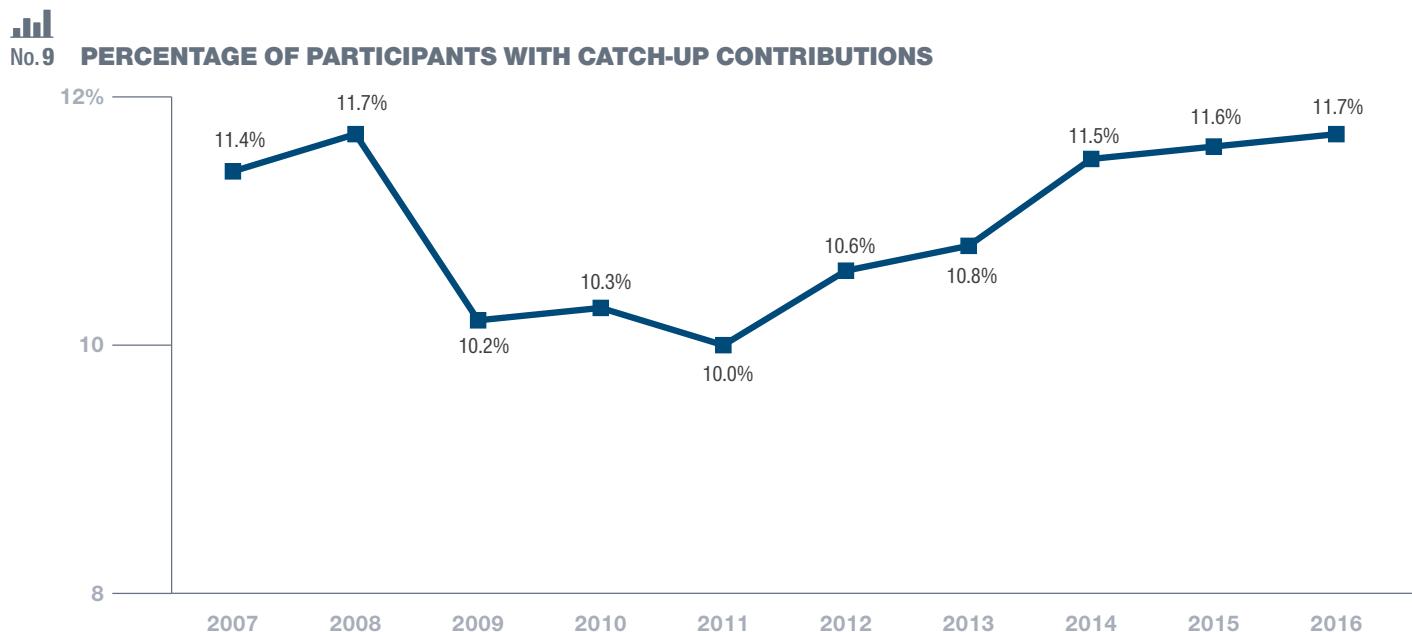




No.8 PERCENTAGE OF PARTICIPANTS AT EACH DEFERRAL AMOUNT

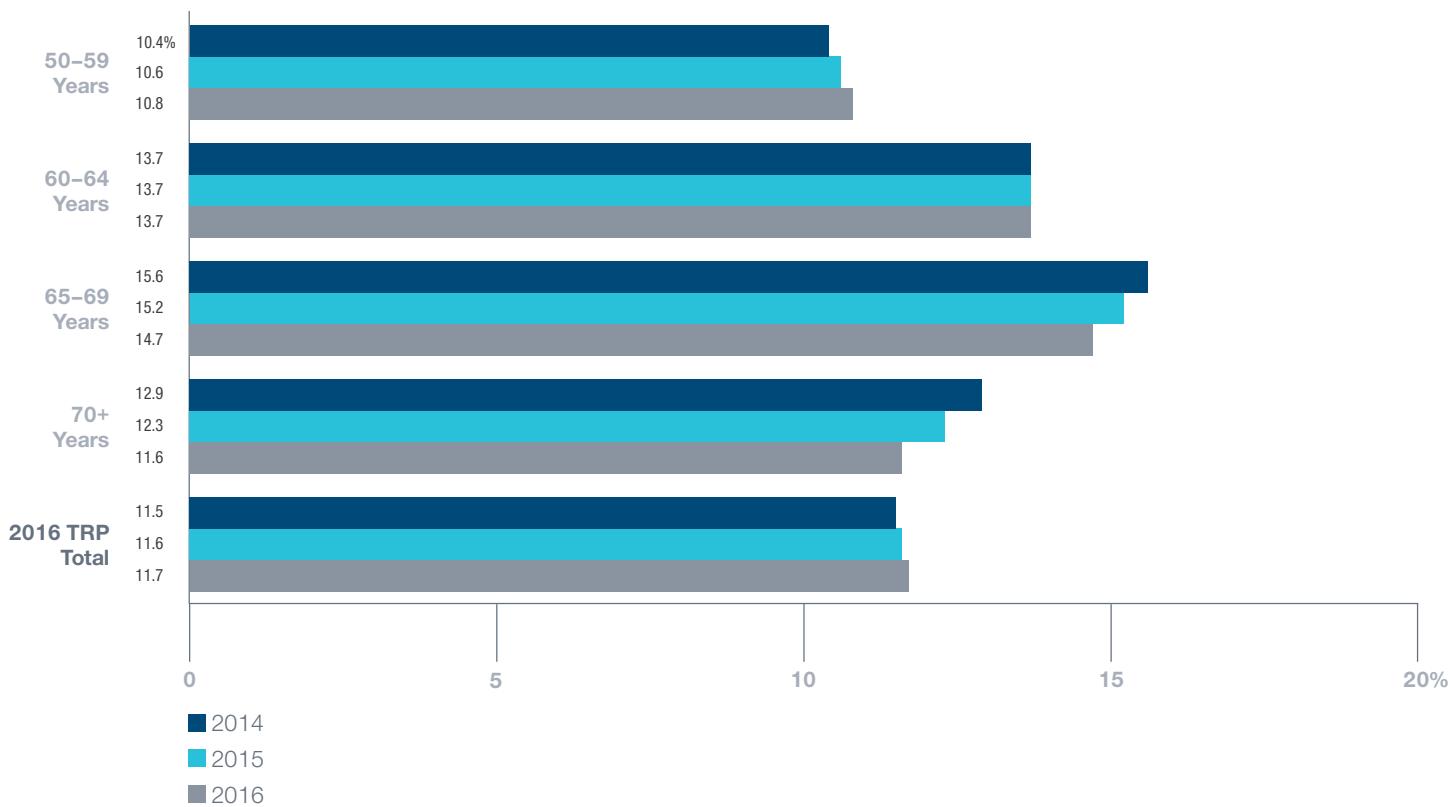


The percentage of participants who were eligible to contribute but deferred 0% grew significantly in 2016.



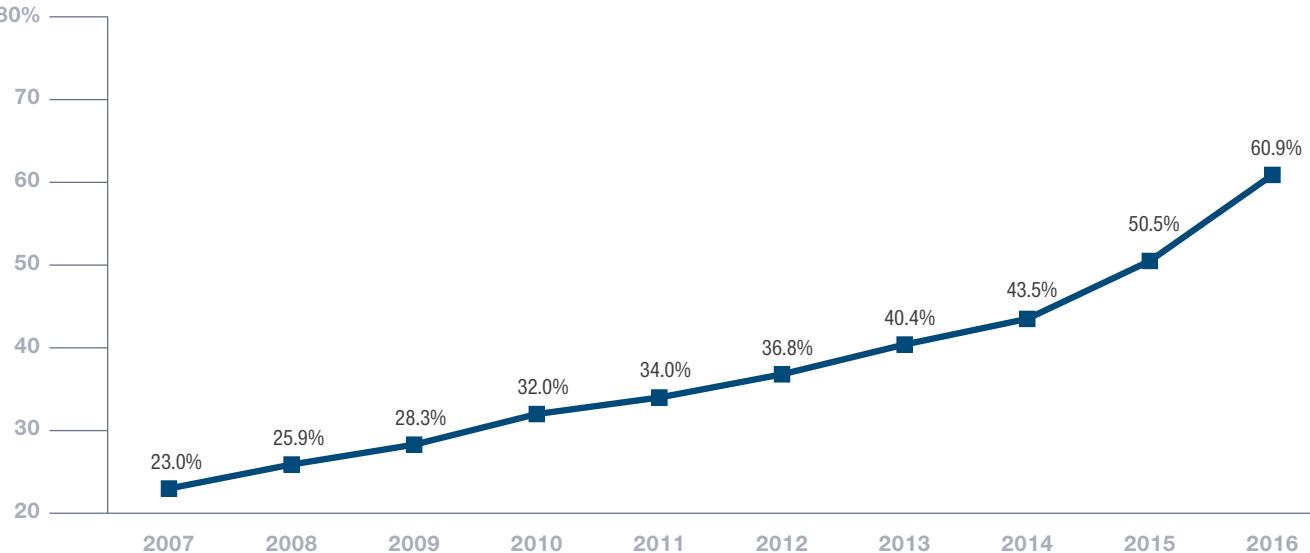
Nearly 12% of eligible participants are making catch-up contributions, a percentage that has steadily increased since 2011.

**No. 10 CATCH-UP CONTRIBUTIONS—BY AGE**





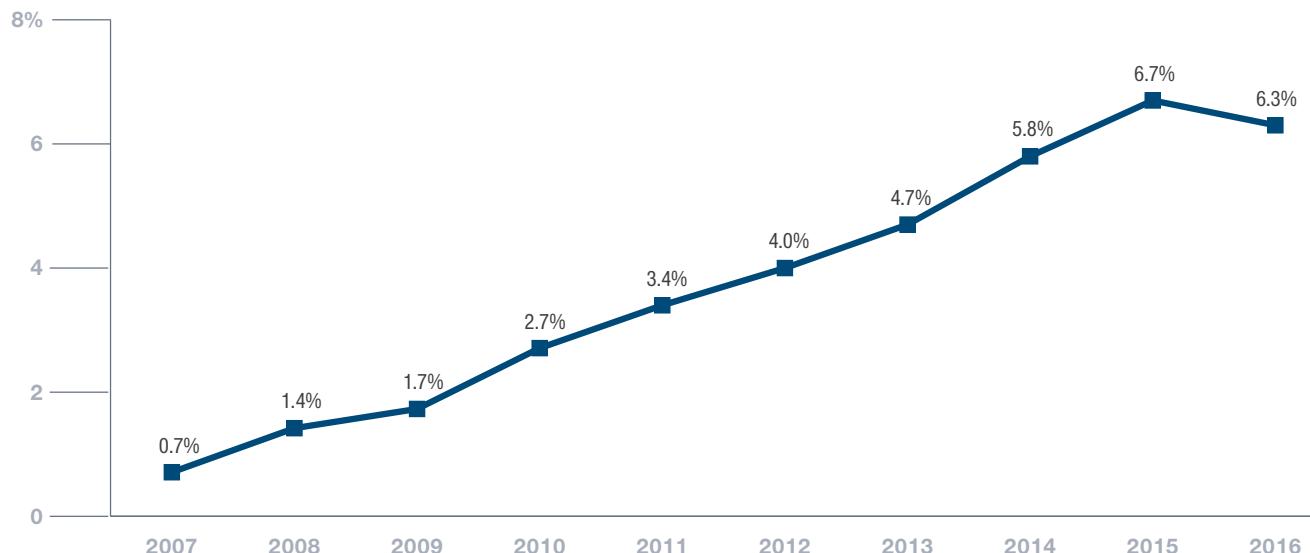
### No. 11 PERCENTAGE OF PLANS OFFERING ROTH CONTRIBUTIONS



We witnessed a significant increase in the percentage of plans offering Roth contributions in 2016—a leap of 10 percentage points.



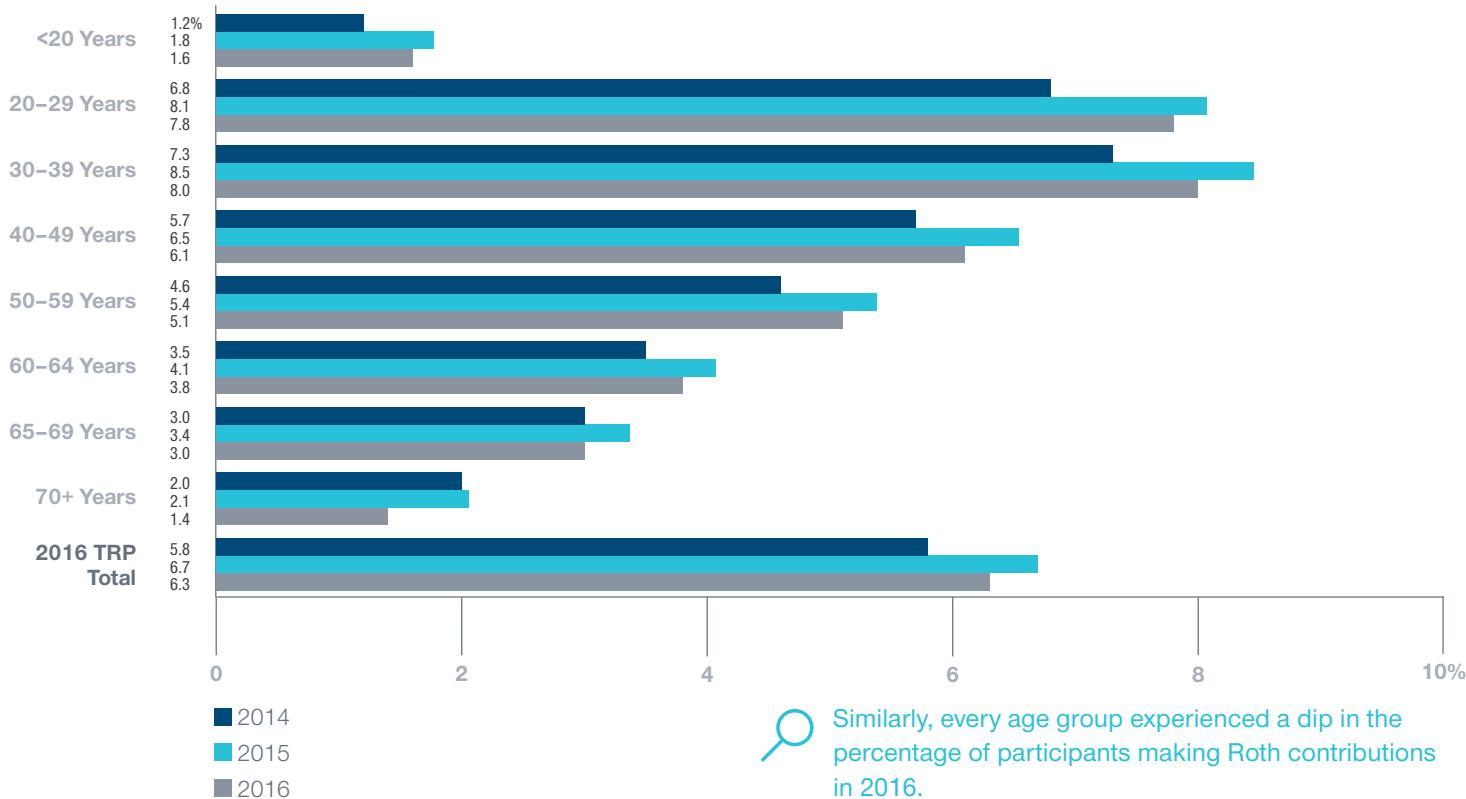
### No. 12 PERCENTAGE OF PARTICIPANTS MAKING ROTH CONTRIBUTIONS



Interestingly, the overall percentage of participants making Roth contributions fell in 2016 to 6.3%, possibly driven by the increase in participants who can now make Roth contributions.



No.13 PERCENTAGE OF PARTICIPANTS MAKING ROTH CONTRIBUTIONS—BY AGE



Similarly, every age group experienced a dip in the percentage of participants making Roth contributions in 2016.



No.14 AVERAGE ACCOUNT BALANCES—BY AGE



Positive growth in the markets and increases to default deferral rates helped boost participant account balances in 2016.

## Methodology

Unless otherwise noted, all data included in this report are drawn from the following sources: Data are based on the large-market, full-service universe—TRP Total—of T. Rowe Price Retirement Plan Services, Inc., retirement plans (401(k) and 457 plans), consisting of 642 plans and over 1.6 million participants.

Employee and employer contributions are based on plans with contributions during the calendar years ended December 31, 2007, through December 31, 2016. Employer contributions include all types of employer money, such as matching contributions, discretionary contributions, and retirement contributions. Match percentages are the maximum percentage of participant contributions that a company will match. Company vesting percentages shown are an aggregated count of those plans and plan locations that have identifiable vesting schedules for reporting purposes.

Deferral results are based on employee pretax deferral percentages greater than zero for eligible participants over various time periods from calendar years ended December 31, 2007, through December 31, 2016. Average deferral by age is participant weighted (total of all participant deferral percentages divided by the total number of participants with a deferral percentage).

Catch-up contribution results for participant age breakdowns are based on the number of participants who made catch-up contributions during the various calendar year periods ended December 31, 2007, through December 31, 2016. These data capture the number of eligible participants over age 50 in plans that offer catch-up contributions.

Results for participant age breakdowns are based on the number of participants who made Roth contributions during the calendar year periods ended December 31, 2007, through December 31, 2016. These data capture the number of eligible participants in plans that offer Roth contributions at each calendar year-end from December 31, 2007, through December 31, 2016.

**Roth qualified distribution**—A qualified distribution is tax-free if taken at least five years after the year of the first Roth contribution and if the participant has reached age 59½, become totally disabled, or died. If the distribution is not qualified, any withdrawal from the account will be partially taxable. These rules apply to Roth distributions only from employer-sponsored retirement plans. Additional plan distribution rules apply. Participants are encouraged to consult with their tax advisor when determining if Roth contributions are right for them.

# Reference Point

T. Rowe Price Defined Contribution Plan Data

As of December 31, 2016

## Investments

### A Strong End To 2016

Economic growth advanced sharply in the fourth quarter of 2016, lifting major indexes to record highs and resulting in strong full-year gains for many investors. Economic growth finished 2016 on a strong note and investors grew more optimistic that the incoming administration and Congress will succeed in reducing regulations and taxes.

International equity markets delivered positive but less strong results, held back by a strengthening U.S. dollar. Fixed income returns suffered toward the end of the year, as interest rates rose following the U.S. elections. Calendar-year returns, though, were solid, led by high yield and emerging market bonds.

### PLAN SPONSORS INCREASED OFFERINGS...

2016 marked the 10th year that plan sponsors with T. Rowe Price increased their plans' investment options. The average number of funds offered in a retirement plan increased from 13.4 in 2007 to 16.1 in 2016. (Target date products are counted as one investment option.)



Participants invested in an average of 2.5 funds of 16.1 available

Multiple factors could be driving the increase:

- **Demand for passively managed funds.** Some plan sponsors are adding index funds to their fund lineups in response to participant requests and potentially for fiduciary and cost reasons.



### 2016 Insights

- Economic growth and investor optimism were generally strong.
- Plans increased offerings to an average 16.1 investments.
- Participants decreased fund holdings to an average 2.5 investments.

### ■ Additional diversification for a diversified workforce.

With four generations active in the workforce, some plan sponsors are adjusting their offerings to meet four different investment styles.

### ■ A shifting market environment.

Adding one or two additional funds can help round out a lineup for additional diversification.

### ...WHILE PARTICIPANTS DECREASED HOLDINGS

Despite the greater availability of fund options, 2016 also marks the 10th year in a row that participants reduced the number of fund holdings in their accounts, from an average of 3.1 in 2007 to 2.5 in 2016.

Age and tenure play a role in the average number of funds a participant holds. On average, workers age 30 or younger and employees with less than three years of service invested in fewer than two funds in 2016, while older and more tenured workers held more. Millennials and Gen Z participants invested in 1.9 and 1.2 funds, respectively, in 2016, while Gen X participants averaged 2.7 funds and baby boomers held 2.8 funds.

In recent years, participants have made significant allocation changes related to:

- **Company stock.** Over the past four years, participants decreased their company stock holdings from 37% to 33.7%. Some of this movement can be attributed to plan design changes, as many plan sponsors have removed the company stock option from their plans. Also, plan sponsors are increasingly placing restrictions on how much company stock participants can hold in their plan accounts, a move that has contributed to the overall drop in company stock holdings.
- **Target date products.** Plan adoption of target date products continues to increase. In 2016, 93% of plans at T. Rowe Price offered target date products. Of those plans, 88% of plans had a balance in a target date investment as of December 31, 2016.

Also in 2016, 55% of participants invested their entire account balance in target date products, an increase of nine percentage points since 2013. The increasing popularity of target date products could indicate that participants prefer a more managed approach versus choosing their own allocation, or they are sticking with their plan's default option.

**55%** 

of participants invested their entire balance in target date products

Last year, 21% of participants invested in a target date product plus at least one other investment option, down two percentage points since 2013. This decrease may indicate greater understanding of how target date products can function as the sole holding in an account, or it could point to the increased usage of target date products as the default investment. Only 24% of participants did not choose a target date product when offered in the fund lineup (down seven percentage points since 2013).

The principal value of target date products is not guaranteed at any time, including at or after the target date, which is the approximate year an investor plans to retire (assumed to be age 65) and likely stop making new investments in the product. If an investor plans to retire significantly earlier or later than age 65, the products may not be an appropriate investment even if the investor is retiring on or near the target date. The products' allocations typically invest in a broad range of underlying mutual funds that include stocks, bonds, and short-term investments and are subject to the risks of different areas of the market. In addition, the objectives of target date products typically change over time to become more conservative.

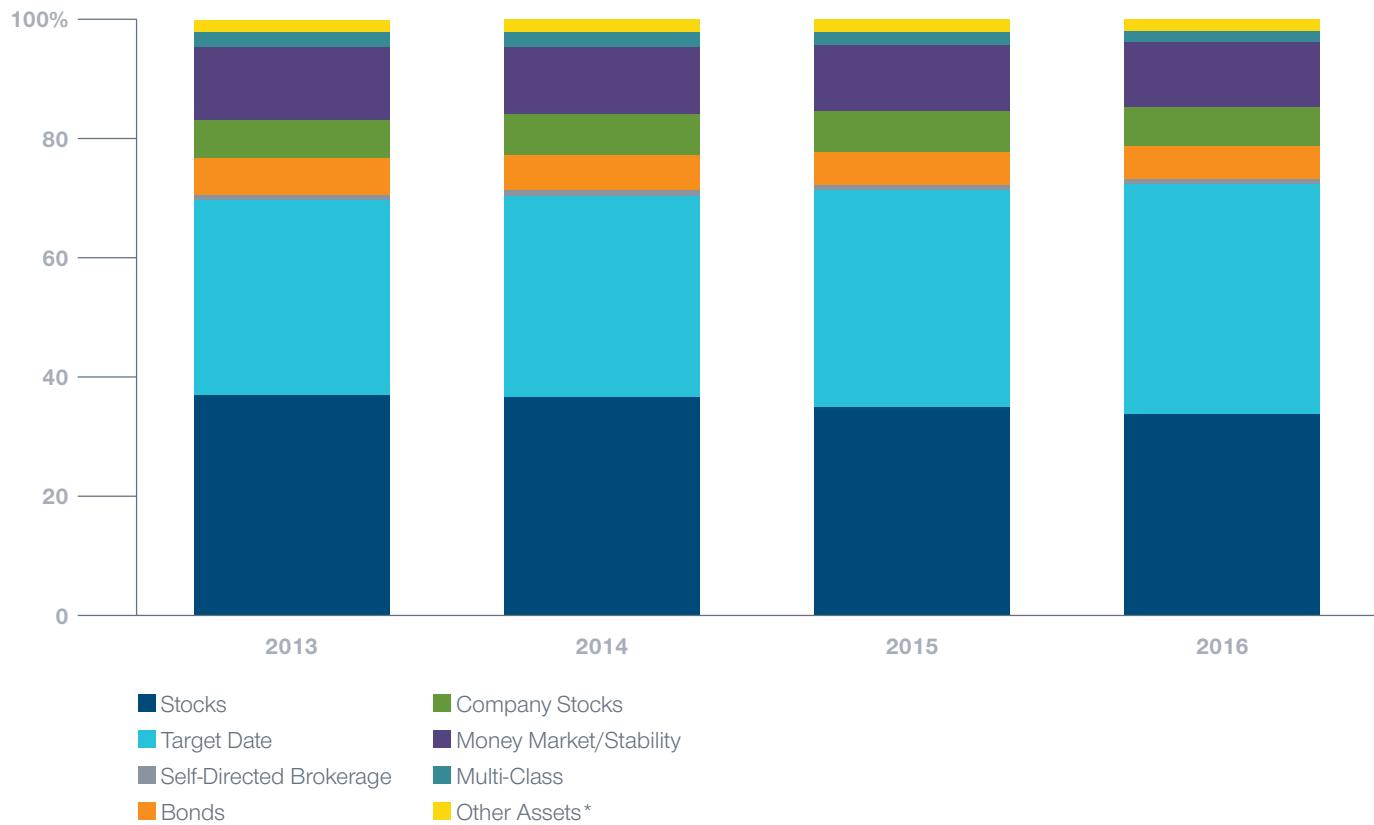
*Call 1-800-922-9945 to request a prospectus, which includes investment objectives, risks, fees, expenses, and other information that you should read and consider carefully before investing.*



## Potential Strategies To Consider

- Consider an education campaign if a large percentage of your participants invest in multiple target date products or have a nondiversified portfolio.

 **No. 1 ASSET ALLOCATION**

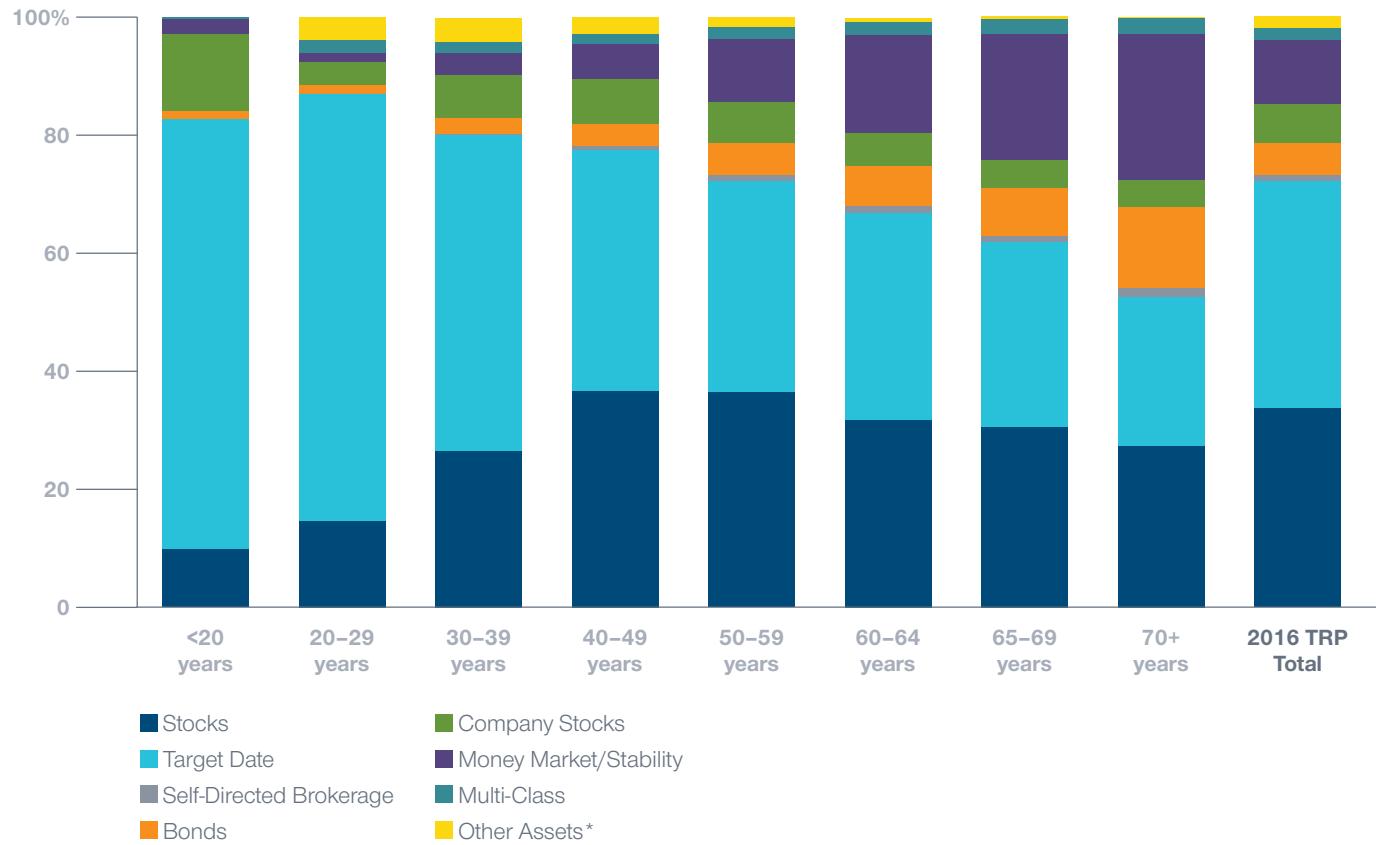


\*Other assets include loan and settlement amounts.  
Numbers may not total 100% due to rounding.

 Target date assets outpaced stock assets for the second year in a row.



## No. 2 ASSET ALLOCATION—BY AGE

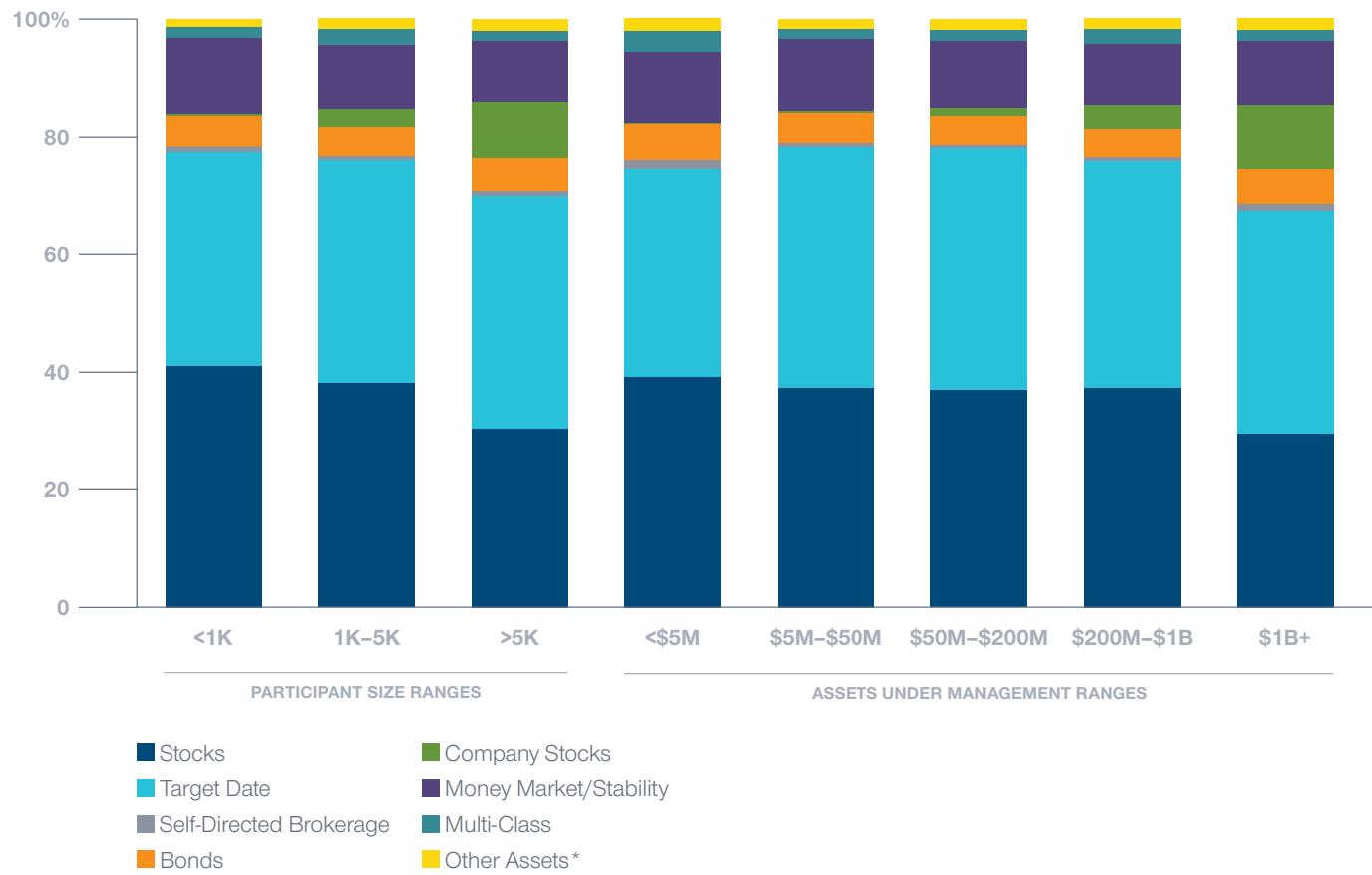


	Stocks	Target Date	Self-Directed Brokerage	Bonds	Company Stocks	Money Market/Stability	Multi-Class	Other Assets*
<20 years	9.8%	73.0%	—	1.2%	13.1%	2.6%	0.2%	0.0%
20–29 years	14.6	72.4	0.0%	1.4	4.0	1.5	2.2	3.9
30–39 years	26.5	53.5	0.2	2.7	7.3	3.7	1.8	4.2
40–49 years	36.7	40.8	0.6	3.7	7.7	5.9	1.7	2.9
50–59 years	36.4	35.9	1.0	5.4	6.9	10.7	2.0	1.6
60–64 years	31.7	35.1	1.1	6.9	5.5	16.6	2.2	0.8
65–69 years	30.6	31.2	1.1	8.1	4.7	21.5	2.5	0.4
70+ years	27.3	25.3	1.5	13.7	4.6	24.7	2.7	0.2
<b>2016 TRP Total</b>	<b>33.7</b>	<b>38.6</b>	<b>0.9</b>	<b>5.4</b>	<b>6.7</b>	<b>10.8</b>	<b>2.0</b>	<b>2.0</b>

\*Other assets include loan and settlement amounts.  
Numbers may not total 100% due to rounding.

70.2% of assets in the 20–29 age range are invested in a target date product—evidence of their high use as the auto-enrollment default.

 **No.3 ASSET ALLOCATION**



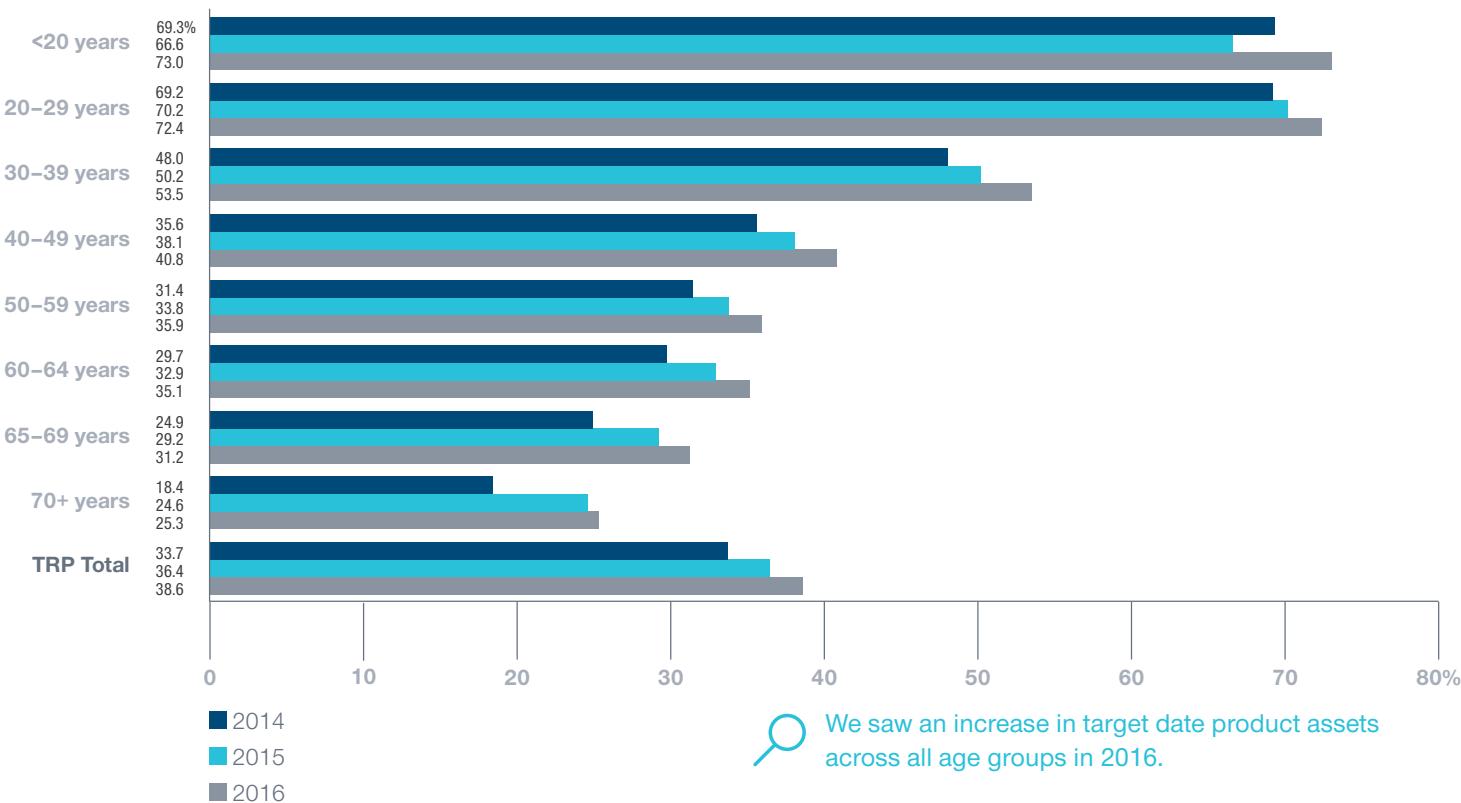
	Stocks	Target Date	Self-Directed Brokerage	Bonds	Company Stocks	Money Market/Stability	Multi-Class	Other Assets*
<1K participants	41.1%	36.2%	0.9%	5.4%	0.3%	12.8%	1.9%	1.4%
1K-5K participants	38.1	37.8	0.7	5.0	3.1	10.9	2.7	1.8
>5K participants	30.4	39.4	0.9	5.6	9.5	10.4	1.7	2.1
<\$5M	39.2	35.2	1.6	6.2	0.2	12.0	3.6	2.1
\$5M-\$50M	37.3	40.8	0.9	5.1	0.2	12.3	1.6	1.8
\$50M-\$200M	36.9	41.1	0.6	4.9	1.4	11.3	2.0	1.8
\$200M-\$1B	37.4	38.4	0.6	4.9	4.1	10.4	2.4	1.9
\$1B+	29.6	37.7	1.2	5.9	11.0	10.9	1.7	2.1
<b>2016 TRP Total</b>	<b>33.7</b>	<b>38.6</b>	<b>0.9</b>	<b>5.4</b>	<b>6.7</b>	<b>10.8</b>	<b>2.0</b>	<b>2.0</b>

\*Other assets include loan and settlement amounts.

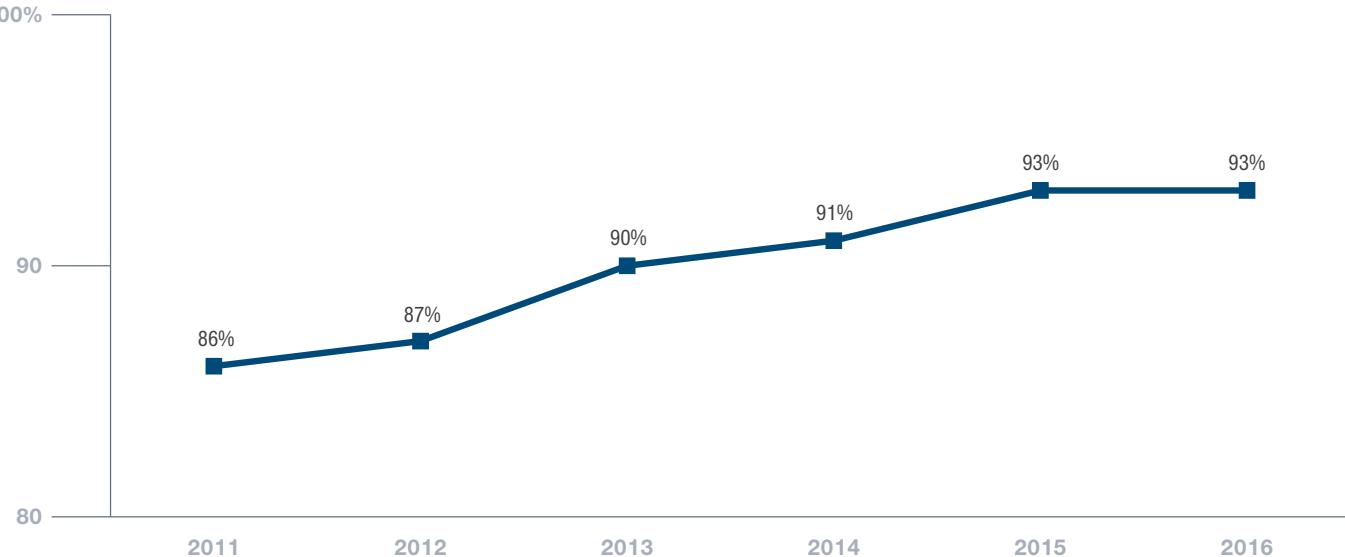
Note: The assets under management ranges refer to those plans where assets under management fall within the specified ranges. The participant size ranges refer to those plans where total participant counts fall within the specified ranges. Numbers may not total 100% due to rounding.

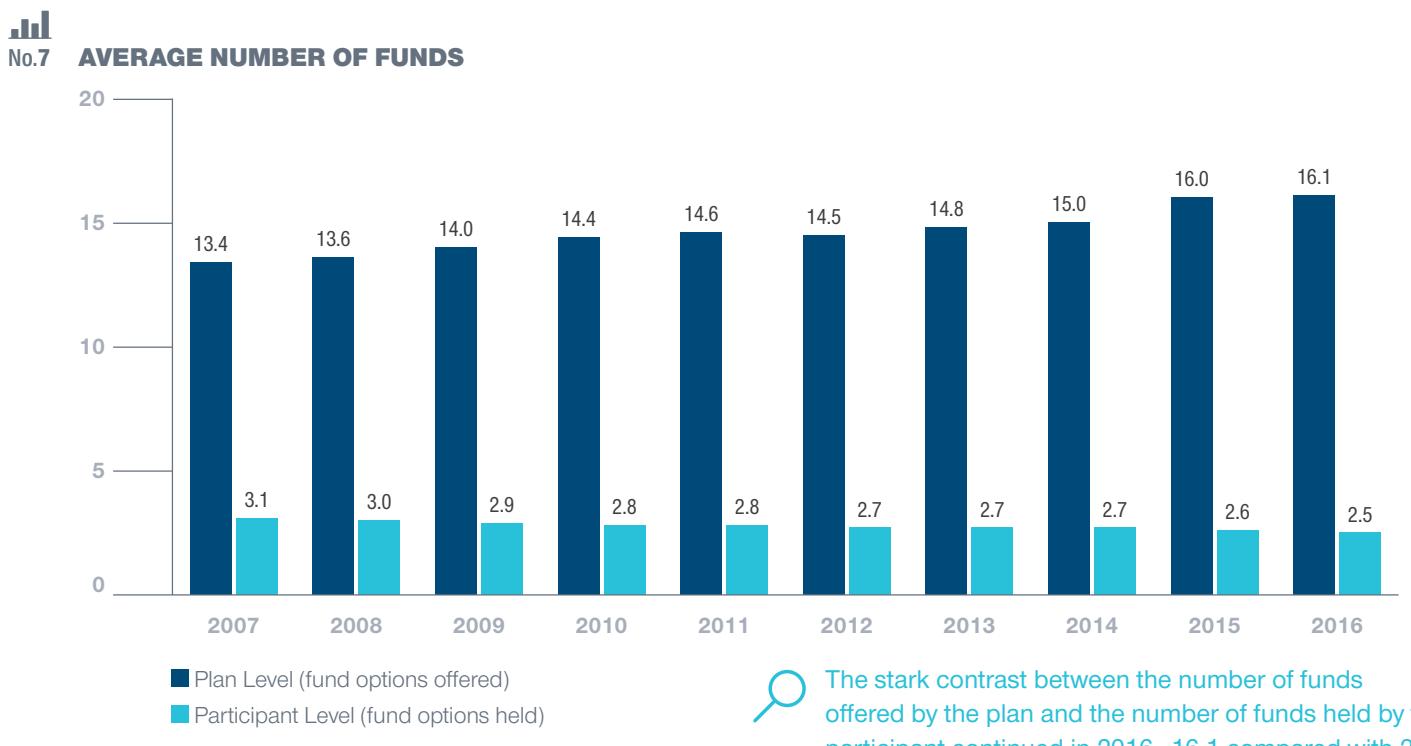
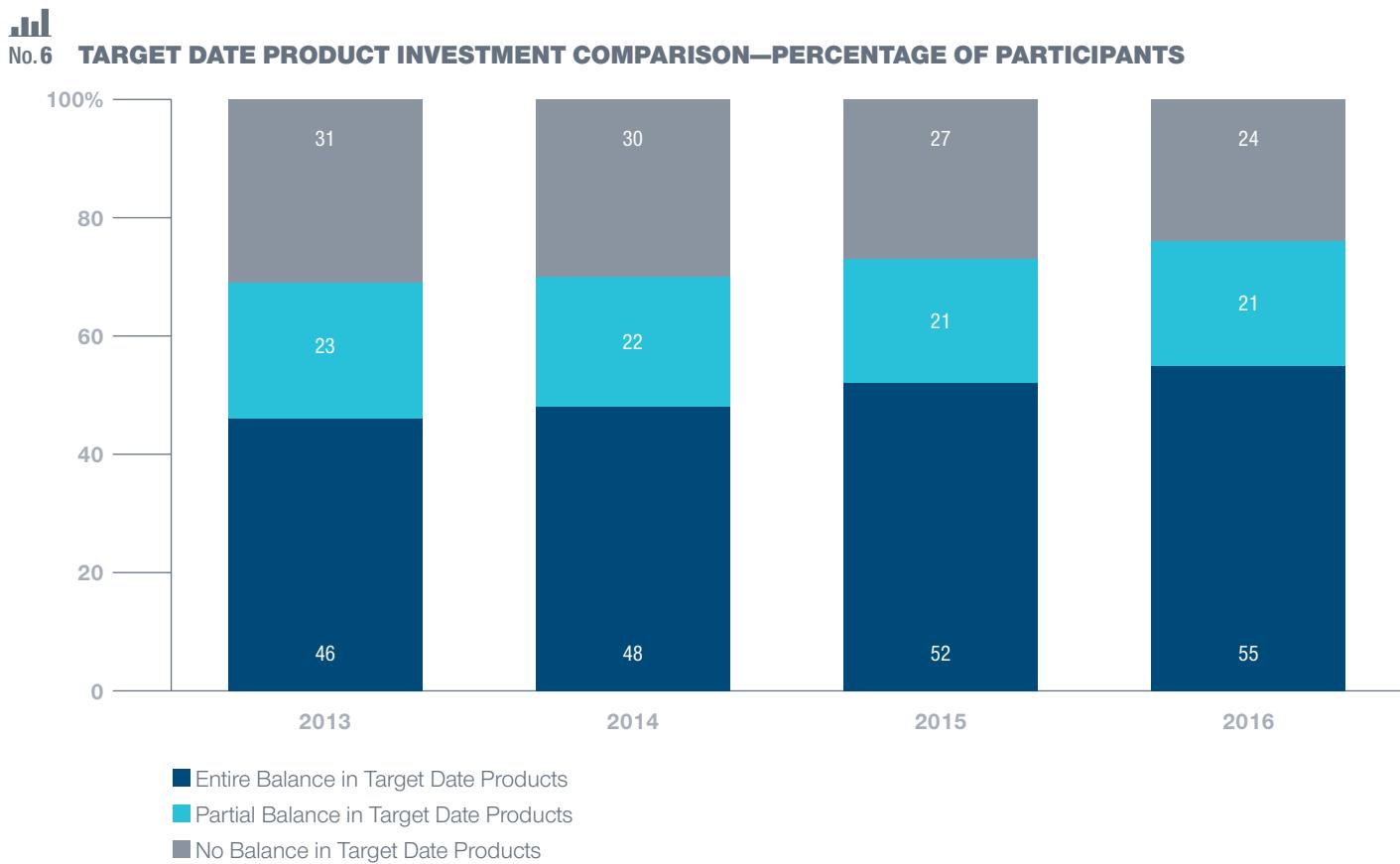


#### No. 4 PERCENTAGE OF ASSETS IN A TARGET DATE PRODUCT—BY AGE



#### No. 5 PERCENTAGE OF PLANS OFFERING TARGET DATE PRODUCTS







## No. 8 TYPES OF INVESTMENT OPTIONS OFFERED

	<1K Participants	1K–5K Participants	>5K Participants	2016 TRP Total
<b>Stability</b>				
Stable Value	75%	87%	83%	80%
U.S. Money Market	80	84	90	82
<b>Fixed Income</b>				
Emerging Markets Fixed Income	4	1	3	3
Global Fixed Income	14	12	11	13
High Yield Fixed Income	16	12	16	15
Inflation Linked	24	26	23	24
Other Fixed Income	1	—	—	0
U.S. Fixed Income	97	99	99	98
<b>Asset Allocation</b>				
Aggressive Allocation	4	3	6	4
Allocation	3	3	1	3
Cautious Allocation	49	56	40	50
Convertibles	1	—	—	0
Moderate Allocation	53	40	43	48
Target Date	91	98	96	93
<b>U.S. Equity</b>				
U.S. Equity Large-Cap	98	99	99	99
U.S. Equity Mid-Cap	76	79	63	76
U.S. Equity Small-Cap	86	89	83	86
<b>International Equity</b>				
Asia Equity	1	1	—	0
Asia ex-Japan Equity	6	1	1	4
Emerging Markets Equity	35	28	23	32
Europe Equity Large-Cap	4	1	1	3
Global Equity	7	8	10	8
Global Equity Large-Cap	96	98	94	96
Global Equity Mid-/Small-Cap	16	11	13	14
Japan Equity	2	—	1	2
Latin America Equity	4	1	1	3
<b>Sector Funds</b>				
Communications Sector Equity	4	5	4	5
Energy Sector Equity	2	1	1	1
Financials Sector Equity	3	1	3	2
Health Care Sector Equity	9	4	6	7
Industrials Sector Equity	0	—	—	0
Natural Resources Sector Equity	9	3	1	7
Precious Metals Sector Equity	1	1	—	1
Real Estate Sector Equity	27	26	21	26
Technology Sector Equity	23	11	7	18
Utilities Sector Equity	3	2	—	2
<b>Other Equity</b>				
Other Equity	9	22	37	16
<b>Commodities</b>				
Commodities Broad Basket	1	2	3	2
<b>Alternatives</b>				
Multi-alternative	1	—	—	0

Note: Participant ranges define those plans where total participant counts fall within the specified ranges. Investment category labels were derived from recognized Morningstar categories.


**No. 9 TYPES OF INVESTMENT OPTIONS OFFERED**

	<\$5M Assets	\$5M–\$50M Assets	\$50M–\$200M Assets	\$200M–\$1B Assets	\$1B+ Assets	2016 TRP Total
<b>Stability</b>						
Stable Value	48%	81%	85%	86%	76%	80%
U.S. Money Market	61	77	87	95	83	82
<b>Fixed Income</b>						
Emerging Markets Fixed Income	6	2	3	1	3	3
Global Fixed Income	9	15	15	12	7	13
High Yield Fixed Income	17	16	14	14	10	15
Inflation Linked	24	21	26	29	10	24
Other Fixed Income	—	0	0	—	—	0
U.S. Fixed Income	85	100	99	100	100	98
<b>Asset Allocation</b>						
Aggressive Allocation	3	5	4	4	7	4
Allocation	2	2	4	2	3	3
Cautious Allocation	23	57	53	56	21	50
Convertibles	—	0	0	—	—	0
Moderate Allocation	48	53	46	42	48	48
Target Date	74	95	96	97	90	93
<b>U.S. Equity</b>						
U.S. Equity Large-Cap	89	100	99	100	100	99
U.S. Equity Mid-Cap	58	84	76	78	45	76
U.S. Equity Small-Cap	62	90	90	88	79	86
<b>International Equity</b>						
Asia Equity	—	0	1	—	—	0
Asia ex-Japan Equity	6	5	5	—	3	4
Emerging Markets Equity	29	32	33	34	21	32
Europe Equity Large-Cap	8	3	3	—	3	3
Global Equity	6	8	6	7	21	8
Global Equity Large-Cap	80	98	99	100	90	96
Global Equity Mid-/Small-Cap	12	16	15	13	10	14
Japan Equity	6	1	1	—	3	2
Latin America Equity	8	3	2	—	3	3
<b>Sector Funds</b>						
Communications Sector Equity	6	4	5	5	7	5
Energy Sector Equity	2	2	1	—	3	1
Financials Sector Equity	5	2	2	1	7	2
Health Care Sector Equity	12	10	5	4	7	7
Industrials Sector Equity	—	0	—	—	—	0
Natural Resources Sector Equity	14	9	6	1	3	7
Precious Metals Sector Equity	2	2	0	—	—	1
Real Estate Sector Equity	14	34	25	26	10	26
Technology Sector Equity	23	22	18	9	10	18
Utilities Sector Equity	3	3	1	3	—	2
<b>Other Equity</b>						
Other Equity	12	6	15	26	59	16
<b>Commodities</b>						
Commodities Broad Basket	2	1	1	4	—	2
<b>Alternatives</b>						
Multi-alternative	—	1	—	—	—	0

Note: Assets under management ranges define those plans where assets under management fall within the specified ranges. Investment category labels were derived from recognized Morningstar categories.


**No. 10 WHERE ASSETS ARE INVESTED**

	<1K Participants	1K-5K Participants	>5K Participants	2016 TRP Total
<b>Stability</b>				
Stable Value	75%	87%	83%	80%
U.S. Money Market	79	81	80	80
<b>Fixed Income</b>				
Emerging Markets Fixed Income	4	1	3	3
Global Fixed Income	14	12	11	13
High Yield Fixed Income	16	12	16	15
Inflation Linked	24	26	23	24
Other Fixed Income	1	—	—	0
U.S. Fixed Income	97	99	99	98
<b>Asset Allocation</b>				
Aggressive Allocation	5	5	7	5
Allocation	3	3	1	3
Cautious Allocation	49	57	44	51
Convertibles	1	—	—	0
Moderate Allocation	53	40	43	48
Target Date	91	98	96	93
<b>U.S. Equity</b>				
U.S. Equity Large-Cap	98	99	99	99
U.S. Equity Mid-Cap	86	91	77	86
U.S. Equity Small-Cap	94	97	90	94
<b>International Equity</b>				
Asia Equity	1	1	—	0
Asia ex-Japan Equity	6	1	1	4
Emerging Markets Equity	35	28	23	32
Europe Equity Large-Cap	4	1	1	3
Global Equity	13	13	20	14
Global Equity Large-Cap	95	98	91	96
Global Equity Mid-/Small-Cap	16	10	11	14
Japan Equity	2	—	1	2
Latin America Equity	4	1	1	3
<b>Sector Funds</b>				
Communications Sector Equity	4	5	4	5
Energy Sector Equity	2	1	1	1
Financials Sector Equity	3	1	3	2
Health Care Sector Equity	9	4	6	7
Industrials Sector Equity	0	—	—	0
Natural Resources Sector Equity	9	3	1	7
Precious Metals Sector Equity	1	1	—	1
Real Estate Sector Equity	27	26	21	26
Technology Sector Equity	23	11	7	18
Utilities Sector Equity	3	2	—	2
<b>Other Equity</b>				
Other Equity	9	22	37	16
<b>Commodities</b>				
Commodities Broad Basket	1	2	3	2
<b>Alternatives</b>				
Multi-alternative	1	—	—	0
Trading Tools	1	3	10	3

Note: Participant ranges define those plans where total participant counts fall within the specified ranges. Investment category labels were derived from recognized Morningstar categories.


**No.11 WHERE ASSETS ARE INVESTED**

	<\$5M Assets	\$5M–\$50M Assets	\$50M–\$200M Assets	\$200M–\$1B Assets	\$1B+ Assets	2016 TRP Total
<b>Stability</b>						
Stable Value	48%	81%	85%	86%	76%	80%
U.S. Money Market	59	76	86	90	66	80
<b>Fixed Income</b>						
Emerging Markets Fixed Income	6	2	3	1	3	3
Global Fixed Income	9	15	15	12	7	13
High Yield Fixed Income	17	16	14	14	10	15
Inflation Linked	24	21	26	29	10	24
Other Fixed Income	—	0	0	—	—	0
U.S. Fixed Income	85	100	99	100	100	98
<b>Asset Allocation</b>						
Aggressive Allocation	3	6	5	4	10	5
Allocation	2	2	4	2	3	3
Cautious Allocation	23	57	53	57	31	51
Convertibles	—	0	0	—	—	0
Moderate Allocation	48	53	46	42	48	48
Target Date	74	95	96	97	90	93
<b>U.S. Equity</b>						
U.S. Equity Large-Cap	89	100	99	100	100	99
U.S. Equity Mid-Cap	67	92	88	90	66	86
U.S. Equity Small-Cap	73	97	97	98	83	94
<b>International Equity</b>						
Asia Equity	—	0	1	—	—	0
Asia ex-Japan Equity	6	5	5	—	3	4
Emerging Markets Equity	29	32	33	34	21	32
Europe Equity Large-Cap	8	3	3	—	3	3
Global Equity	14	15	12	10	38	14
Global Equity Large-Cap	79	97	99	100	83	96
Global Equity Mid-/Small-Cap	12	16	15	12	7	14
Japan Equity	6	1	1	—	3	2
Latin America Equity	8	3	2	—	3	3
<b>Sector Funds</b>						
Communications Sector Equity	6	4	5	5	7	5
Energy Sector Equity	2	2	1	—	3	1
Financials Sector Equity	5	2	2	1	7	2
Health Care Sector Equity	12	10	5	4	7	7
Industrials Sector Equity	—	0	—	—	—	0
Natural Resources Sector Equity	14	9	6	1	3	7
Precious Metals Sector Equity	2	2	0	—	—	1
Real Estate Sector Equity	14	34	25	26	10	26
Technology Sector Equity	23	22	18	9	10	18
Utilities Sector Equity	3	3	1	3	—	2
<b>Other Equity</b>						
Other Equity	12	6	15	26	59	16
<b>Commodities</b>						
Commodities Broad Basket	2	1	1	4	—	2
<b>Alternatives</b>						
Multi-alternative	—	1	—	—	—	0
Trading Tools	2	1	1	4	17	3

Note: Assets under management ranges define those plans where assets under management fall within the specified ranges. Investment category labels were derived from recognized Morningstar categories.

# Reference Point

T. Rowe Price Defined Contribution Plan Data

As of December 31, 2016

## Loan and Disbursement Behavior

### Loan Use Education Is Helping

The percentage of participants with loans dropped to 23.8% in 2016, the lowest since the height of the financial crisis in 2009. The percentage of participants with multiple loans also decreased, hitting a three-year low, from 19.5% in 2013 to 17.1% in 2016. The average loan balance stayed relatively consistent at \$9,037, but is below the industry average of \$9,400.<sup>1</sup>

**<24%** of participants had loan balances

Although loans traditionally have been a staple retirement plan feature, they can potentially affect a participant's future savings. The interest that participants pay back into their accounts can be less than potential returns they could earn if the money remained invested.

A plan loan has both pros and cons. The interest is paid back into the participant's account, an advantage over paying interest to a lender for a traditional loan. However, upon separation of service, the participant must pay back the loan in full or face tax consequences.

Education is key to helping participants understand how plan loans work. Placing educational content where participants are processing loans has helped reduce new loan initiation. In 2016, an average of 0.75% of plan participants initiated new loans, down from 1% in January 2013.



### 2016 Insights

- The percentage of participants with loans is at its lowest since the start of the financial crisis.
- Fewer participants are taking hardship withdrawals.
- Education is proving effective in dissuading participants from using their savings for nonretirement purposes.

Additional education could be beneficial in certain situations:

- **At-risk age groups.** Participants age 50–59 hold the largest loan balances, with an average of \$10,701 in plans at T. Rowe Price (compared with \$9,037 for the industry).<sup>1</sup> These baby boomers are nearing the traditional retirement age, but they often face competing financial priorities, from paying for their adult children's college education, to supporting their aging parents' housing and care needs. A retirement plan loan can provide them with access to the money with need, but it's important that they understand the risks of borrowing in addition to the advantages.
- **Seasonality.** July is a peak month for plan loans, possibly indicating that participants turn to their retirement accounts for money to pay for vacations or tuition payments due at the end of the summer. Educating participants at this time of year about the pros and cons of borrowing can help them make informed decisions.

## HARDSHIP WITHDRAWALS ON THE DECLINE

In 2016, hardship withdrawals declined, with only 1.4% of participants in plans at T. Rowe Price taking a withdrawal compared with the 2% industry average.<sup>1</sup> Hardship withdrawals have been on the decline the past several years, influenced in part by the number of plans that have eliminated this option over the past three years. Only 69% of plans at T. Rowe Price offered hardship withdrawals as of December 31, 2016.



## DIRECT ROLLOVERS UP OVERALL BUT DOWN FOR SOME

Direct rollovers continue to recover since hitting a low of 71% in 2009, the height of the Great Recession. In 2016, 81% of terminated participants who took a distribution chose to roll over their savings, compared with only 19% for cash-outs.

However, the growth of direct rollovers appears to be driven by the youngest and oldest participants. Those under age 20 and age 70+ processed more direct rollovers in 2016 than in 2015. The number of direct rollovers fell in 2016 for all other age groups.

<sup>1</sup>Source: PLANSPONSOR Defined Contribution Survey, 2016.



## Potential Strategies To Consider

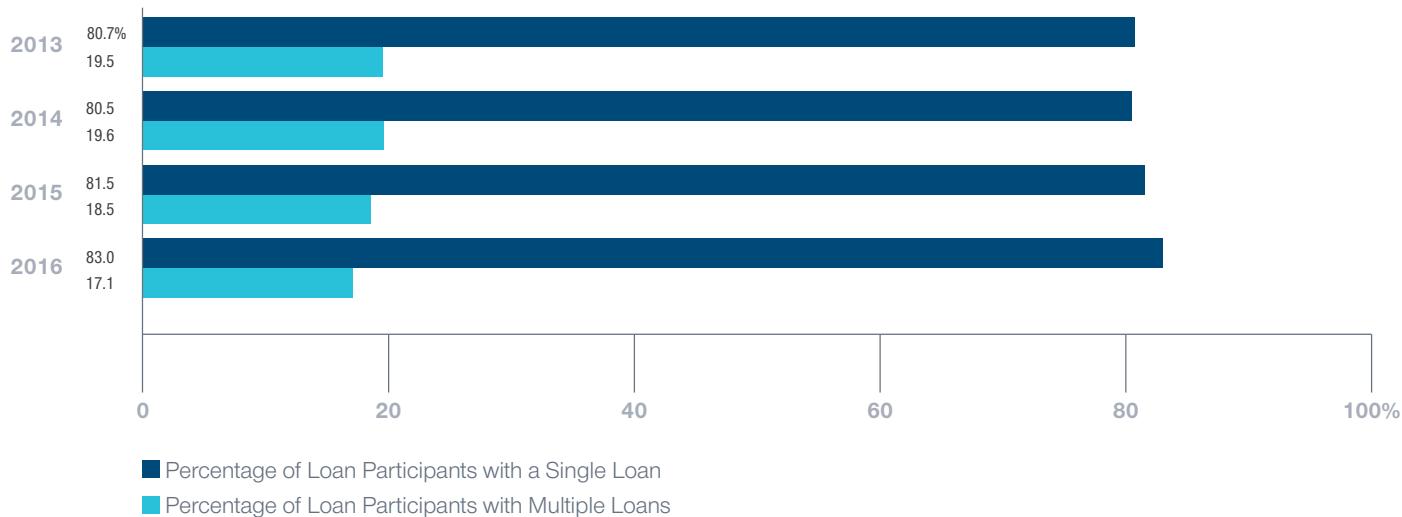
- Promote tools that educate participants on the pros and cons of borrowing from their account.
- Add a financial wellness program to provide participants with budgeting resources.
- Consider age-targeted messaging about cashing out for terminated participants.

**No. 1 LOANS**

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Percentage of Plans That Permit Loans	80.9%	80.9%	82.9%	83.6%	83.2%	84.3%	86.5%	87.3%	87.0%	87.2%
Average Participant Loan Balance	\$7,749	\$7,599	\$7,522	\$7,677	\$7,933	\$8,098	\$8,438	\$8,831	\$9,075	\$9,037
Percentage of Participants With Loans	19.3%	20.0%	22.3%	24.3%	24.7%	24.3%	24.9%	24.7%	24.3%	23.8%

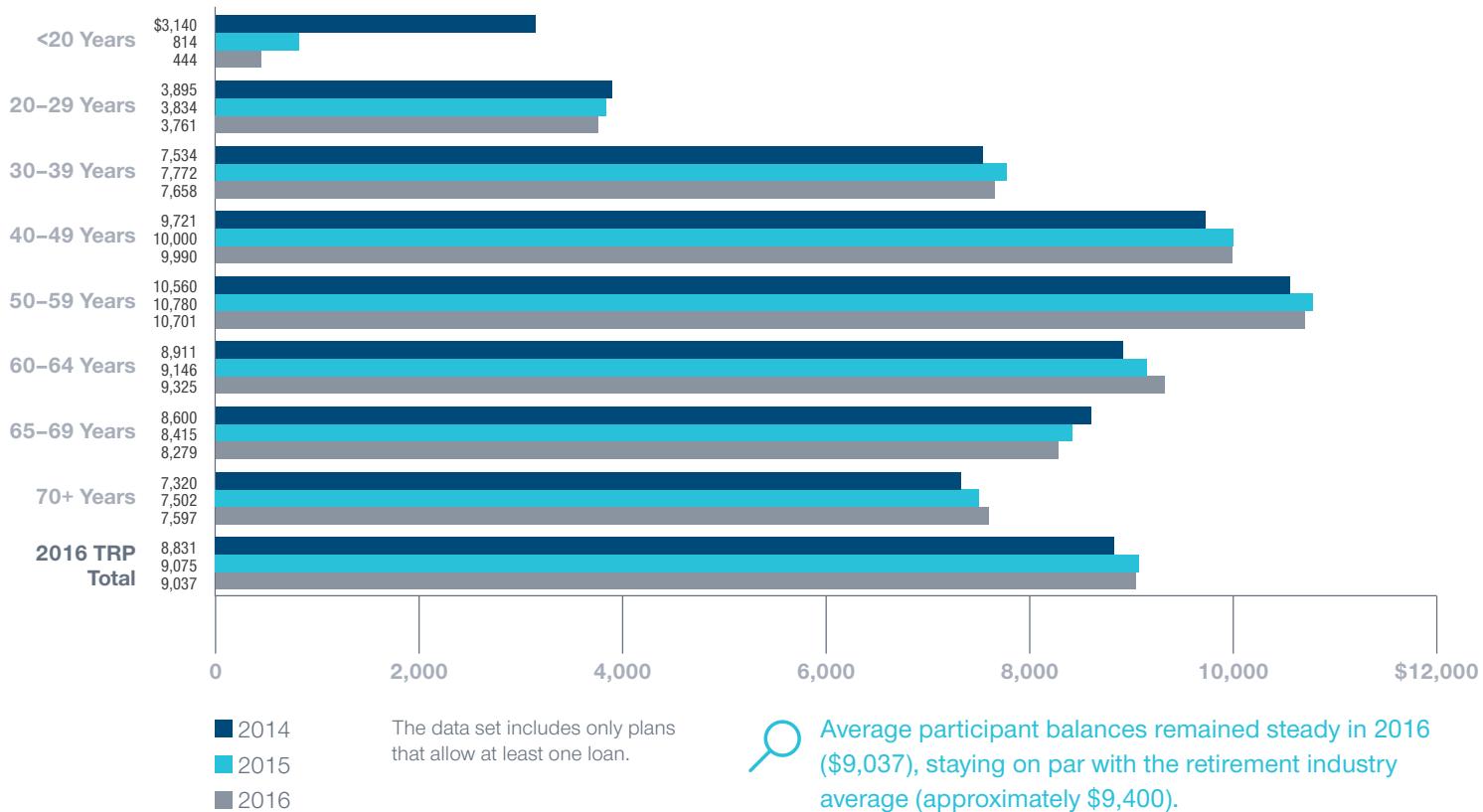
**No. 2**

**PERCENTAGE OF PARTICIPANTS WITH LOANS—SINGLE VS. MULTIPLE**



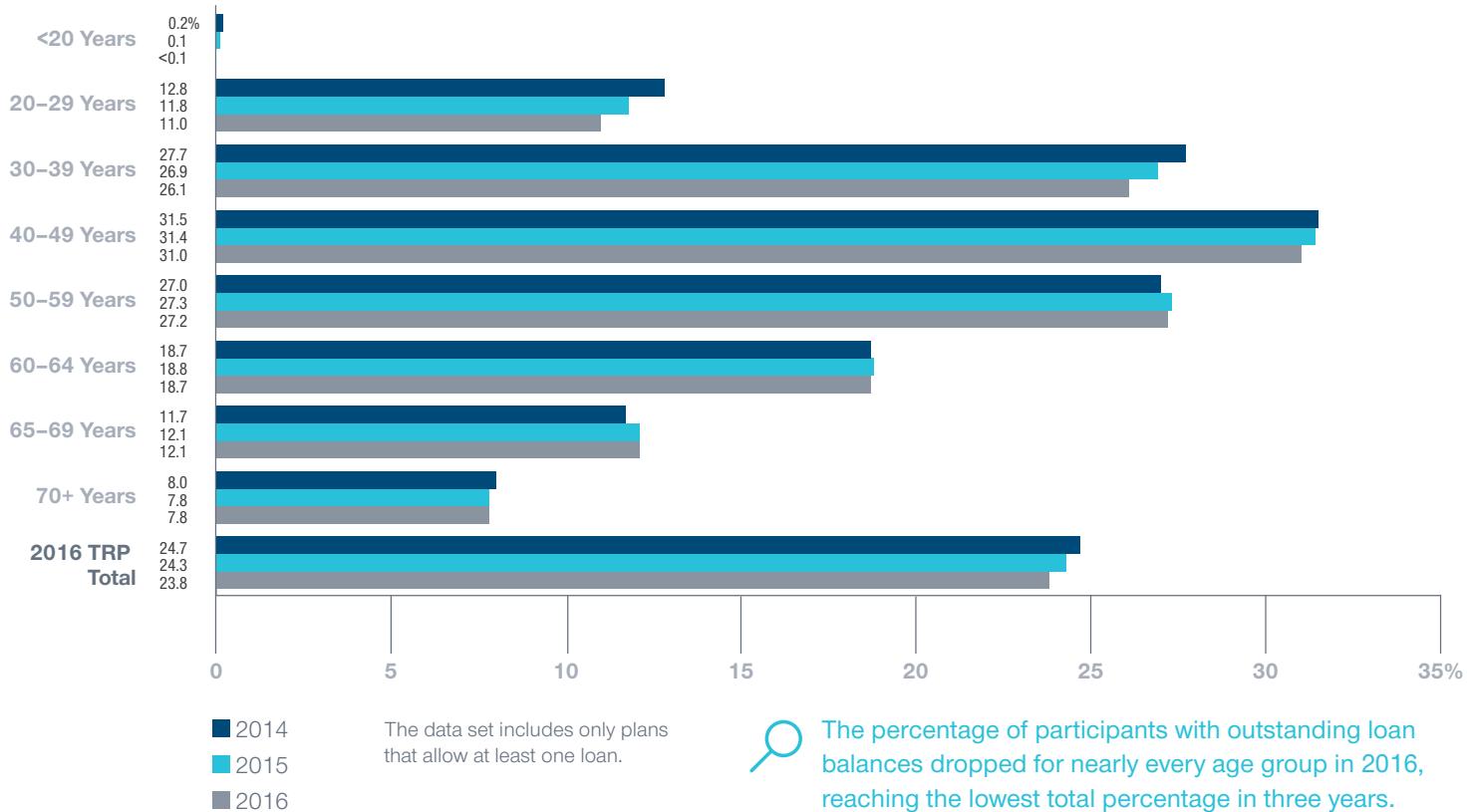


No. 3 AVERAGE PARTICIPANT LOAN BALANCES—BY AGE





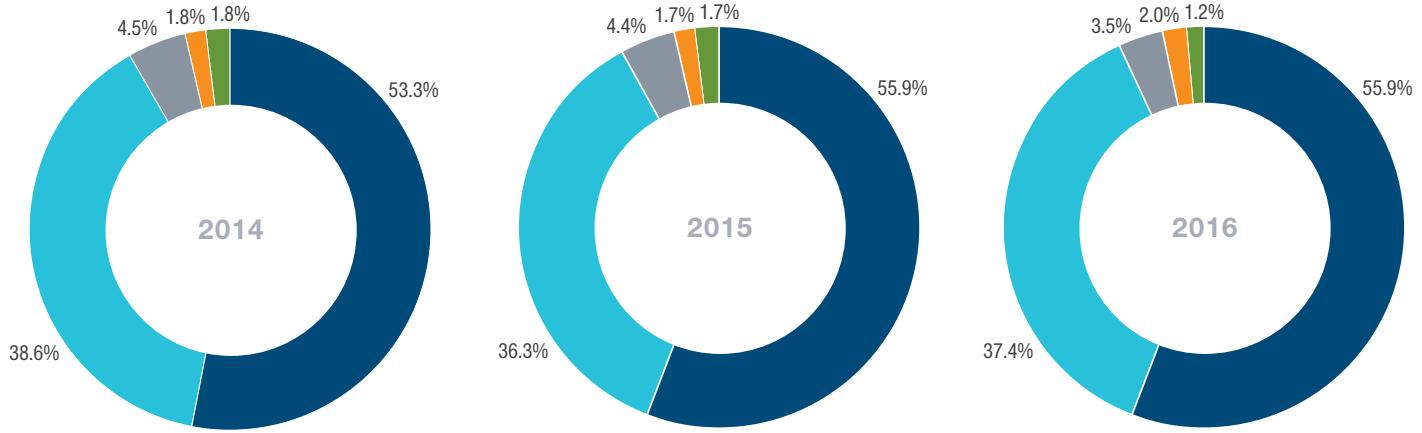
#### No. 4 PERCENTAGE OF PARTICIPANTS WITH OUTSTANDING LOANS—BY AGE



The percentage of participants with outstanding loan balances dropped for nearly every age group in 2016, reaching the lowest total percentage in three years.



#### No. 5 MAXIMUM NUMBER OF LOANS ALLOWED



■ 1—Any Type\*

■ 2—Any Type\*

■ 3—Any Type\*

■ More Than 3—Any Type\*

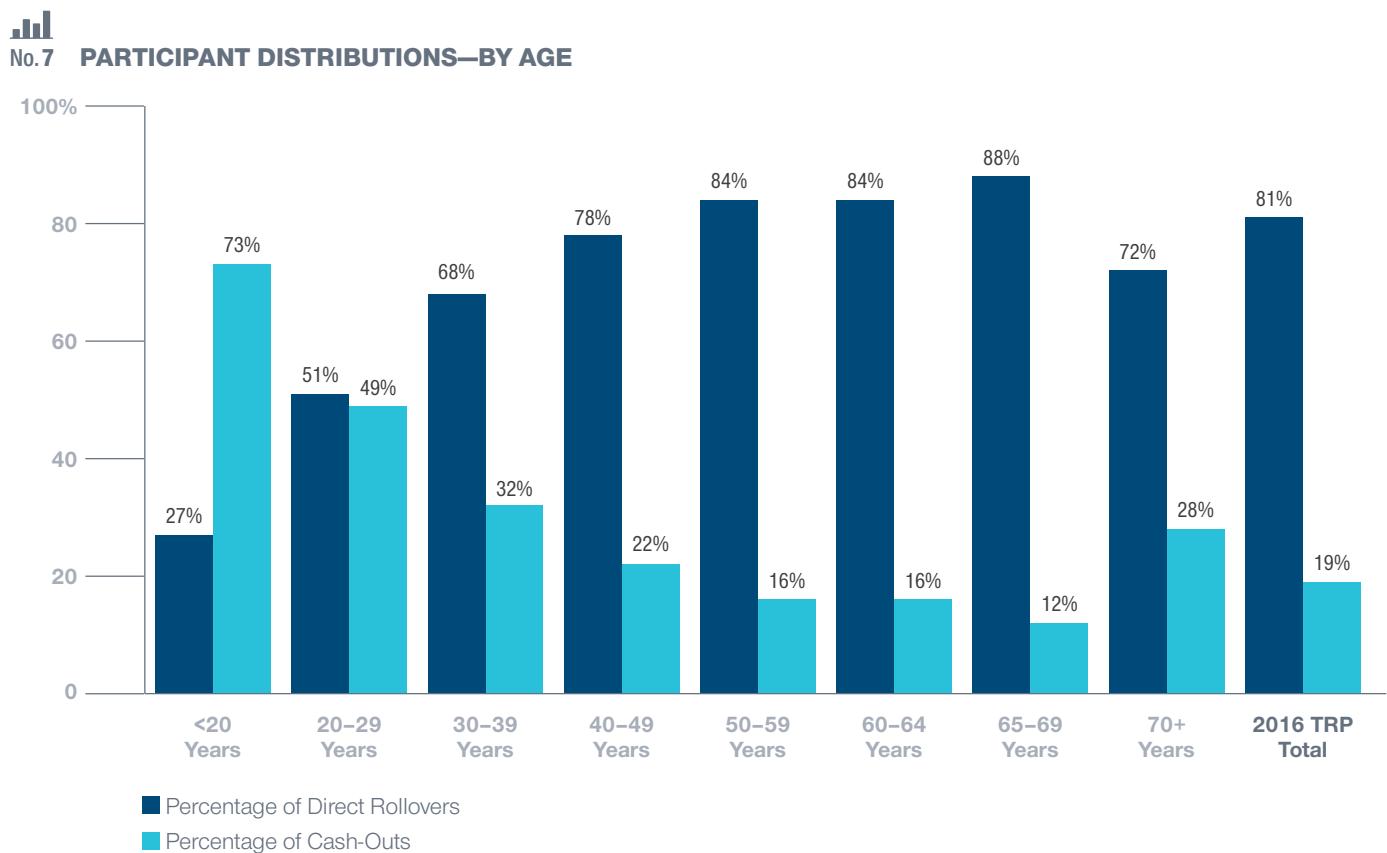
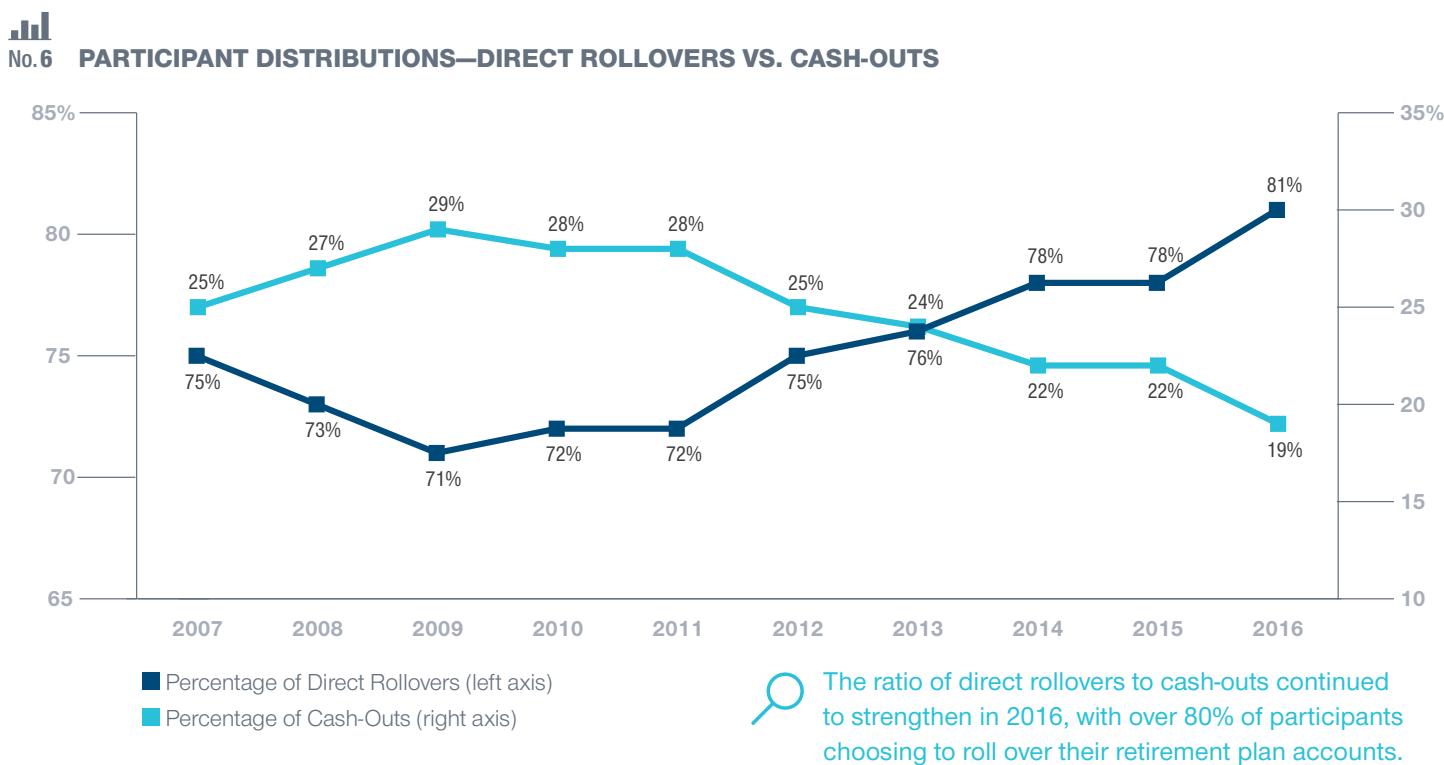
■ No Limit—Any Type\*

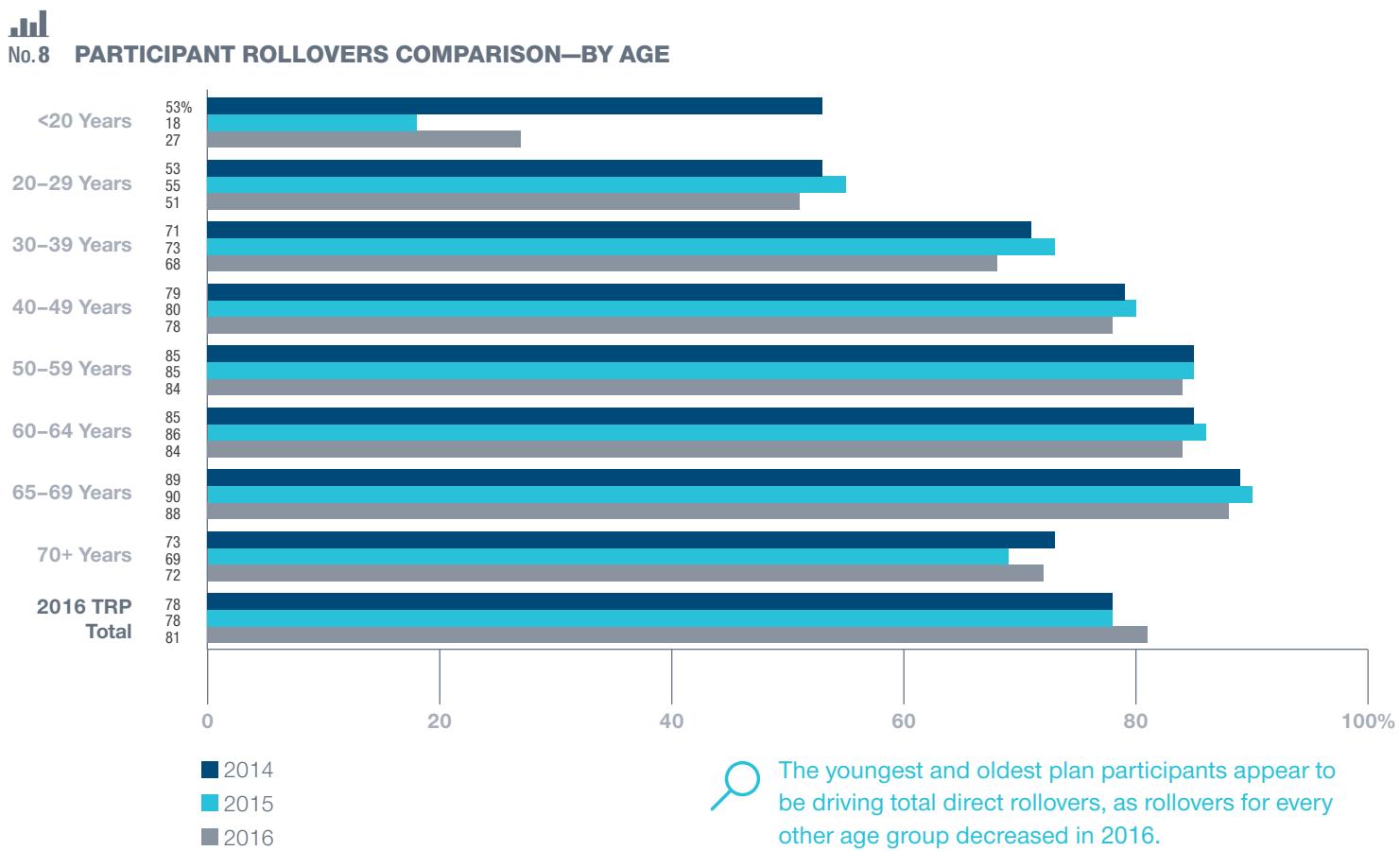
\*Any type—plan may offer primary residence, standard, or both loan types.  
Data set includes only plans that allow at least one loan.

Numbers may not total 100% due to rounding.



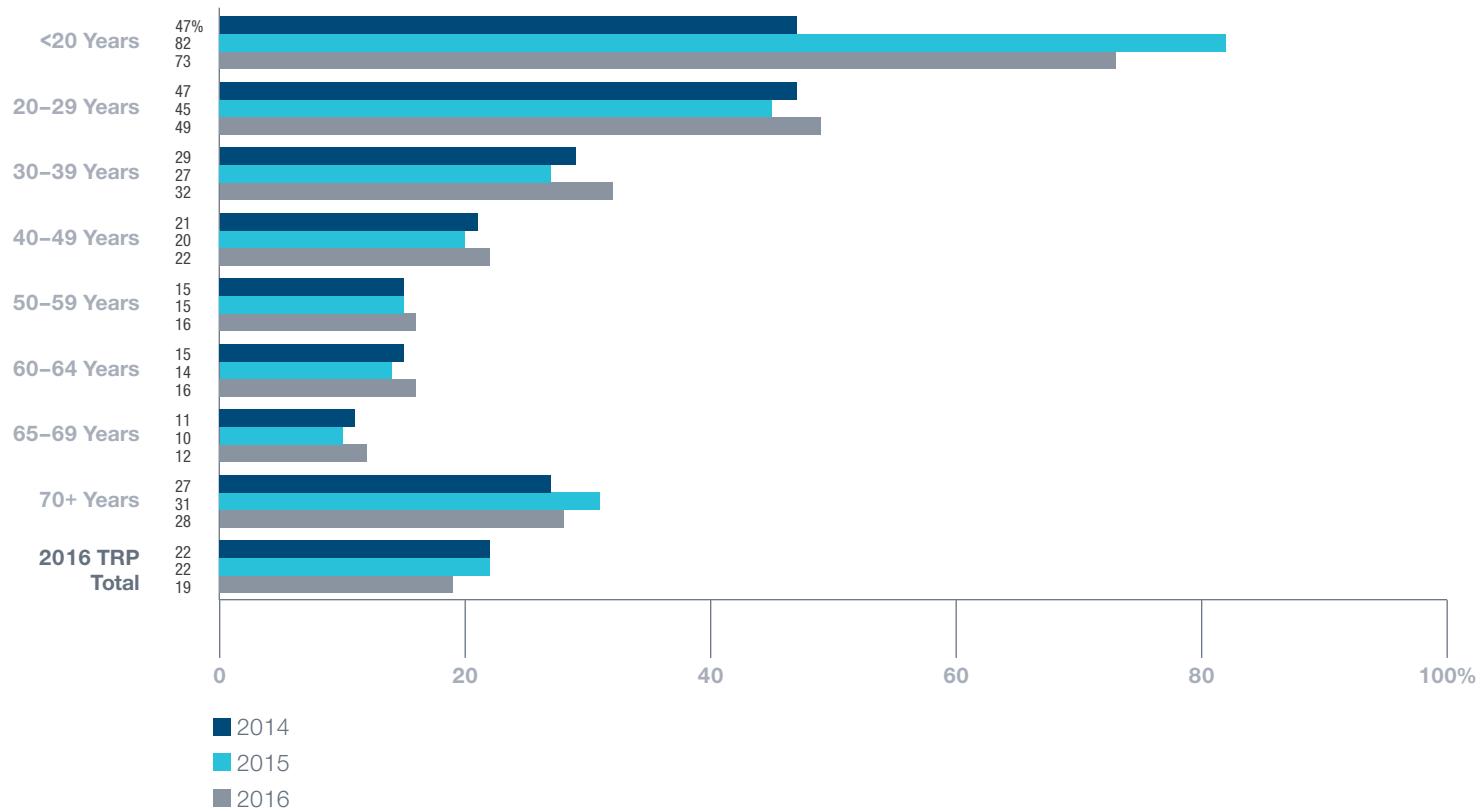
The increase in the percentage of plans that allow two loans could be attributed to the significant drop in plans that allow three loans or do not limit the number of loans participants can take.







No. 9 PARTICIPANT CASH-OUTS COMPARISON—BY AGE





## No. 10 HARSHIP WITHDRAWALS

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Percentage of Participants Taking Hardships	<1.0%	1.6%	1.8%	1.9%	1.9%	1.7%	1.7%	1.6%	1.4%	1.4%
Percentage of Plans That Allow Hardship Withdrawals	—	—	—	—	—	—	71	73	72	69
Average Hardship Withdrawal Amount	\$6,272	\$6,020	\$5,628	\$5,905	\$5,632	\$5,703	\$5,810	\$6,469	\$6,685	\$6,923



In 2016, the percentage of participants taking hardships stayed steady at 1.4%, remaining below the retirement industry average of 2%.

## Methodology

Unless otherwise noted, all data included in this report are drawn from the following sources: Data are based on the large-market, full-service universe—TRP Total—of T. Rowe Price Retirement Plan Services, Inc., retirement plans (401(k) and 457 plans), consisting of 642 plans and over 1.6 million participants.

Loan availability and usage results are based on active participants with outstanding loan balances at calendar years ended December 31, 2007, through December 31, 2016. Participant loans are limited to plans that offer loans. Hardship withdrawal data represent all hardship withdrawals from qualified 401(k) and 457 plan types at calendar years ended December 31, 2007, through December 31, 2016.

Distribution data represent all distributions and hardship withdrawals from qualified 401(k) and 457 plan types for various time periods from calendar years ended December 31, 2007, through December 31, 2016. The rollover/cash-out percentage is based on the amount of assets cashed out or rolled out of a retirement plan account for any participant, including both active and terminated, during the calendar year ended December 31, 2016.

© Copyright 2017, T. Rowe Price Investment Services, Inc., Distributor. All rights reserved.



[troweprice.com/referencepoint](http://troweprice.com/referencepoint)