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Defined Contribution Institutional Investment Association
RETIREMENT RESEARCH CENTER

Custom Target Date Fund (cTDF) Survey

Contributors

Chris Nikolich, AB

Warren Cormier, DCIIA RRC

Amanda McCormick, DCIIA RRC

Joshua Dietch, T. Rowe Price

Special thanks go to the many DCIIA members who have played a role in the creation of this research.

INTRODUCTION

Since the passage of the Pension Protection Act in 2006 and the creation of qualified default investment alternatives (QDIAs),[1] target date strategies have become an integral part of how Americans save for retirement. In fact, a 2019 Callan Associates survey reports that 87.3% of institutional defined contribution (DC) plans use target date strategies as their default investment vehicle and that 17.3% of plans are using "custom" target date strategies.[2] However, little is known about the characteristics of "custom" target date funds (cTDFs), due to the lack of an authoritative industry-wide database. As an organization whose founding principle is advocating institutional investment best practices, DCIIA is uniquely positioned to fill this void. Our research is intended to do so by increasing knowledge about custom target date funds, chronicling not only the number of these funds and the assets in them, but also how they are constructed.

To do this, DCIIA launched a study in 2018 to fill the information gap. That study's findings were published in March 2019, in DCIIA's paper, "Custom Target Date Fund (cTDF) Survey." This second paper describes the results of DCIIA's next iteration of the study.

ABOUT THE SURVEY

For the first DCIIA study, nine asset allocators provided the asset allocations, as of year-end 2017, of the cTDFs they managed. In this current study, there are a total of 14 asset allocators participating and the data is representative of year-end 2018. Of these 14 asset allocators, nine participated in both studies, supplying information about their asset allocations in 2017 and 2018.

Collectively, this information provides DCIIA members and the broader retirement-plan community with a previously unavailable overview of custom TDFs. DCIIA's summary report of this information is intended to inform discussions among plan sponsors, asset allocators, and asset managers. For plan sponsors new to custom target date consideration, DCIIA offers additional resources about Investment Options and Best Practices as part of its Resource Library.

EXECUTIVE SUMMARY

- In this second iteration of the DCIIA cTDF study, substantially more data has been added:
  - 14 asset allocators reporting data for YE 2018, versus 9 for YE 2017
  - 91 plans reported, versus 65 in YE 2017
  - 958 unique funds reported, versus 673 in YE 2017
  - Annual vintage performance collected for both 2017 and 2018
- Custom TDF assets represented in the sample exceeded $312 billion, while plan assets exceeded $1.2 trillion.
- DCIIA was also able to compare the reported year-over-year data for the nine asset allocators that reported in both 2017 and 2018 — data representing 61 plans and 582 unique funds. This comparison provides a very specific apples-to-apples measure of movement from YE 2017 to YE 2018. DCIIA's findings are noted in this paper's appendix.

Exhibit 1

All Data for 2017 (9 Respondents) and for 2018 (14 Respondents); Partial Data for 2018 (9 Respondents who also reported in 2017)

Vintage	Growth 2017 (n=9)	Growth 2018 (n=9)	Growth 2018 (n=14)	% Point Change (2017 n=9 to 2018 n=14)
2060	91.2%	92.5%	92.7%	**1.5%**
2055	90.3%	92.3%	92.7%	**2.4%**
2050	90.4%	91.9%	92.1%	**1.7%**
2045	88.5%	91.1%	90.9%	**2.4%**
2040	86.0%	86.4%	86.3%	**0.3%**
2035	79.3%	80.2%	79.9%	**0.6%**
2030	72.0%	71.5%	71.1%	**-0.9%**
2025	64.0%	63.4%	62.1%	**-1.9%**
2020	54.2%	53.5%	51.5%	**-2.7%**
2015	49.1%	48.1%	47.0%	**-2.1%**
Income	33.2%	35.2%	34.7%	**1.5%**

- The results show that overall the median allocations between the two years were very stable, with few changes observed. Essentially, the allocation to growth (versus defensive) assets varied within vintage by fewer than 3 percentage points, as seen in **Exhibit 1.**
- The 2.7% reduction in median growth exposure for the 2020 vintage does not necessarily indicate that asset allocators became more conservative. We would expect growth exposure to fall as a result of both the natural progression of glide paths, as well as 2018 market returns.
- DCIIA observed similar stability when looking specifically at the data from the nine asset allocators that reported in both years of the study.
  - It also should be noted that, when looking at the data for allocators who reported in both years, specific asset-type saliency again showed only modest changes.
- When DCIIA examined YE 2018 data at the plan level, we saw wide ranges of allocations within vintages and asset categories. This indicates that asset allocators and individual plan sponsors had different views of the ideal glide path for each vintage, with asset allocations varying by as much as 30 percentage points. These differing views may indicate that, when both the glide path and the underlying asset classes were constructed, other factors were at play, such as the existence of a defined benefit (DB) plan or a plan where specific demographics were being taken into account.
- Median performance across all vintages rose over 18% in 2017, yet fell over 6% in 2018 as a result of exceptionally different market environments. Furthermore, relative to other comparable vintages, the superior performers in 2017 also tended to lag in 2018, driven by different growth exposure. These findings illustrate the need to measure performance over longer time horizons.

[1] From page 1. This category includes target date funds, target risk funds, and managed accounts.
[2] From page 1. Callan Institute. "2020 Defined Contribution Trends Survey."

METHODOLOGY

DCIIA directly solicited investment managers, glide path managers, and recordkeepers to participate in the study. Notably, managed accounts (MAs) and model portfolios were excluded from the research request.

For this study, an investment option was considered a cTDF if it was: tailored to the plan demographics, available exclusively to that plan's participant population, and valued daily.

DCIIA established a secure process to maintain the anonymity of participating providers and plans, and their data. DCIIA requested allocation percentages for each fund (or "vintage") within the custom target date strategy. We assigned unique identifiers to each respondent and their funds and plans, both to maintain confidentiality and to ensure continuity for future research.

Respondents were asked to allocate their cTDF holdings across 45 asset classes. DCIIA then categorized the universe of asset classes into four broad asset categories: equity, fixed income, inflation-sensitive, and diversifiers.

SAMPLE

There are 14 asset allocators in the 2018 sample, up from nine in 2017. Accordingly, the number of plans increased from 65 to 91, and the number of unique funds increased from 673 to 958. The average number of vintages per cTDF also increased, from 10 to 11, due to the increase in the number of 2060 vintages. **(Exhibit 2)**

Exhibit 2
Sample Overview

	2017	2018	% Growth of Sample
Asset Allocators	9	14	56%
# of Plans	65	91	40%
# of Unique Funds	673	958	42%
Average of Vintages per cTDF	10	11	10%

DETAILED FINDINGS

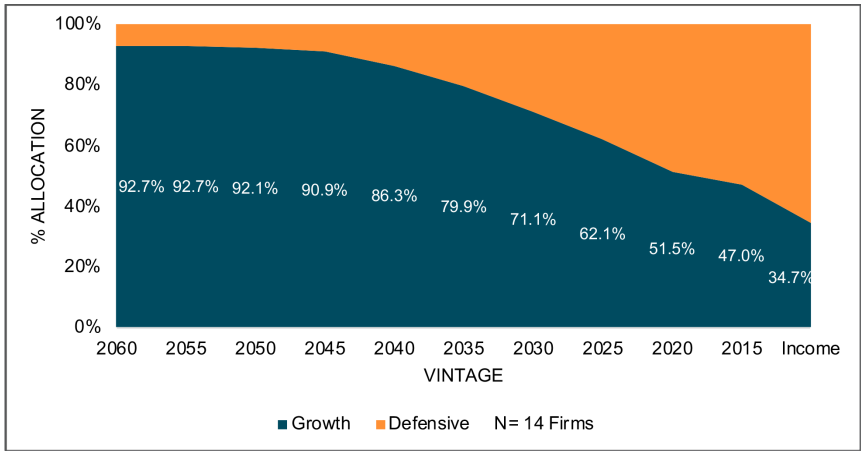
This section provides glide path illustrations and descriptive statistics from the year-end 2018 study. The findings are grouped by investment objective, asset category, and asset classification.

Investment Objective

Exhibit 3 illustrates the average custom TDF glide path when the asset classes are aggregated into two main objectives: "growth" and "defensive." These averages, and others detailed within this report, are simple averages calculated across all plans reported in 2017 and 2018.

- Allocations to a "growth" objective for each plan reflect the cumulative exposures to the following asset classes: all equity asset classes, real estate, commodities, real assets, infrastructure, multi-asset inflation, private real estate, global real estate investment trusts (REITs), long/short hedge funds, risk parity, absolute return, private equity, and preferred.
- Allocations to a "defensive" objective for each plan reflect the remaining non-"growth" asset classes, which include: all fixed income asset classes, treasury inflation-protected securities (TIPS), emerging market TIPS, currency, market-neutral hedge funds, bank loans, structured securities, global tactical asset allocation (GTAA), and US balanced.

Exhibit 3
Average Glide Path by Investment Objective



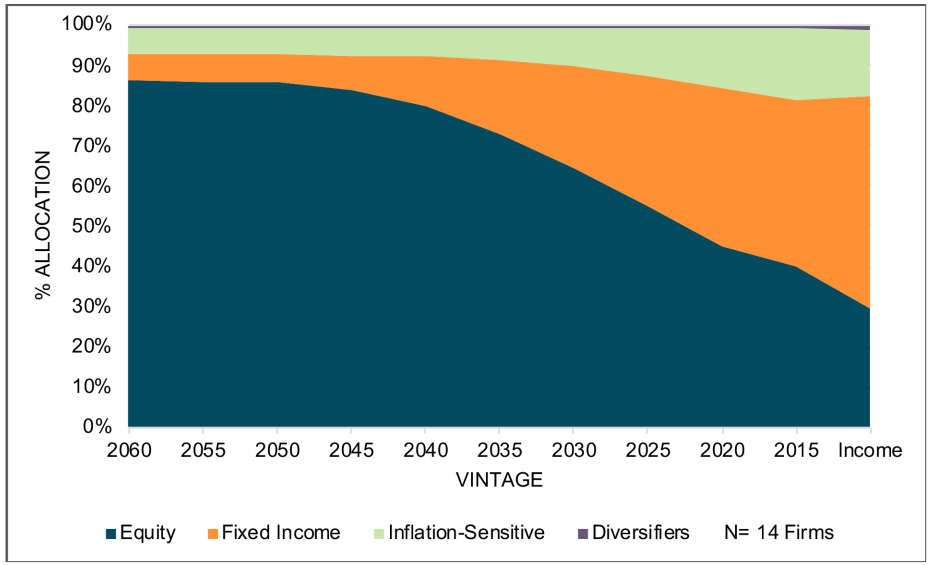
DETAILED FINDINGS

Asset Categories

The asset classes are divided into four broad categories: equity, fixed income, inflation sensitive, and diversifiers. The simple average allocations across the four asset categories by vintage are illustrated in **Exhibit 4**. Importantly, this data is based on the 14 asset allocators who provided data for year-end 2018.

Exhibit 4

Glide Path by Asset Category



Allocation by Asset Category

The underlying data for **Exhibit 4** is tabulated opposite in **Exhibit 5**. As the table shows, a majority of the average custom TDF exposure was allocated to equities and fixed income, with a relatively modest but increasing allocation to inflation-sensitive assets 15 to 20 years prior to retirement. Diversifiers are represented by the thin line at the top of **Exhibit 4** and illustrate a relatively consistent, yet minor, average allocation of less than 1%.

Exhibit 5

Asset Category Allocations

Vintage	Equity	Fixed Income	Inflation-Sensitive	Diversifiers
2060	86.3%	6.6%	6.3%	0.7%
2055	85.8%	6.8%	6.7%	0.7%
2050	85.7%	7.2%	6.4%	0.7%
2045	84.0%	8.5%	6.8%	0.7%
2040	79.7%	12.6%	6.8%	0.8%
2035	72.7%	18.5%	7.9%	0.9%
2030	64.2%	25.6%	9.4%	0.8%
2025	55.0%	32.1%	12.1%	0.8%
2020	44.9%	39.6%	14.8%	0.7%
2015	39.9%	41.2%	18.2%	0.6%
Income	29.5%	52.8%	16.5%	1.2%
N= 14 Firms				

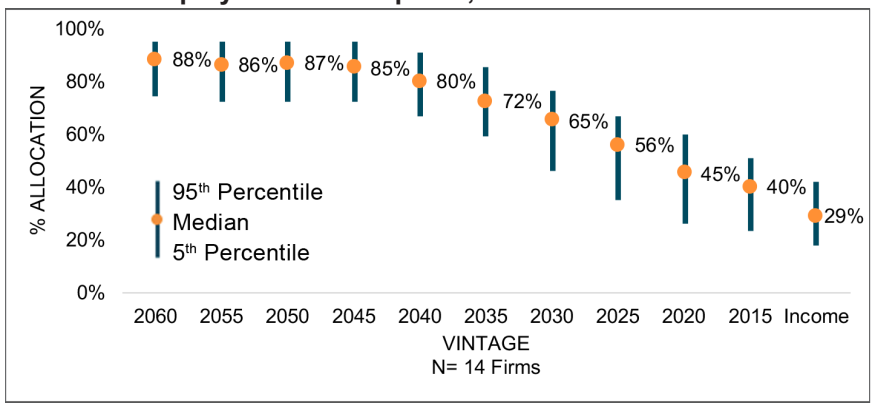
Asset Classes

The sections that follow provide more detail about the 2018 data for asset classes within each of the four broad asset categories. The high (95th percentile) and low (5th percentile) allocations demonstrate the range of investment approaches. The asset classes with the highest prevalence among the sample custom TDF plans are also provided. Prevalence is measured as: the number of plans within the sample with an allocation to the specific asset class, divided by the number of plans in the sample.

EQUITY ALLOCATIONS IN CUSTOM TDFS

On the high end of exposure, 95th percentile equity allocations ranged from 95% for 2045—2060 funds to 42% for the income funds. The 5th percentile equity allocations ranged in a similar style, from 74% for the 2060 funds to 18% for the income funds. The spread in median allocations to equity ranged from 88% for the 2060 funds to 29% for the income funds. Differences between the 95th and 5th percentiles for later-dated funds were not significant, and peaked at 34 percentage points for the 2020 vintage. **(Exhibit 6)**

Exhibit 6 Equity Allocation Spread, 95th and 5th Percentiles - 2018



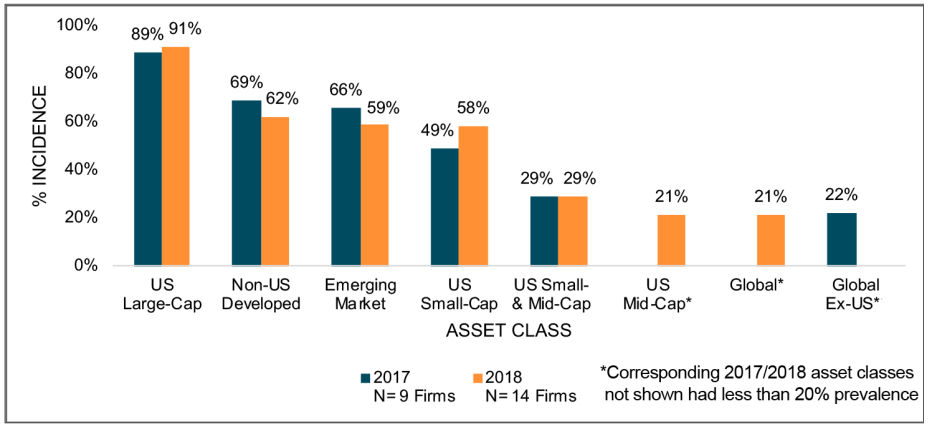
Prevalence

The prevalence measure highlights the percentage of plans that had discrete exposure to the specific asset class. For example, 91% of the plans in the survey held US large-cap equity exposure in at least one of their custom TDF vintages in year-end 2018. The other 9% of plans had exposure to US large-cap stock securities via aggregated approaches to asset classes such as all-cap or global equity. In fact, every participating plan had allocations to US small-cap, US mid-cap, or global equity.

The top five equity asset classes by prevalence for year-end 2018 were: US large-cap equity (91%), non-US developed equity (62%), emerging market equity (59%), US small-cap equity (58%), and US small- and mid-cap equity (29%). US mid-cap and global equity were prevalent in 21% of custom TDF strategies. The remaining five equity asset classes each had less than 20% prevalence among plans. **(Exhibit 7)**

Comparing 2017 and 2018 year-end data, the prevalence of US large-cap and US small-cap was higher in 2018, but the prevalence of non-US-developed and emerging market was lower. Global and US mid-cap emerged in 2018, after not being prevalent in 2017 (i.e., less than 20% prevalence in 2017), while the prevalence of global ex-US fell from 22% in 2017 to 18% in 2018. The differences in prevalence among asset classes were driven primarily by each manager's unique approach to asset classification amid expansion of the sample.

Exhibit 7
Year-Over-Year Comparison of Equity Asset Class Prevalence



EQUITY

Twelve asset classes compose DCIIA's equity category:

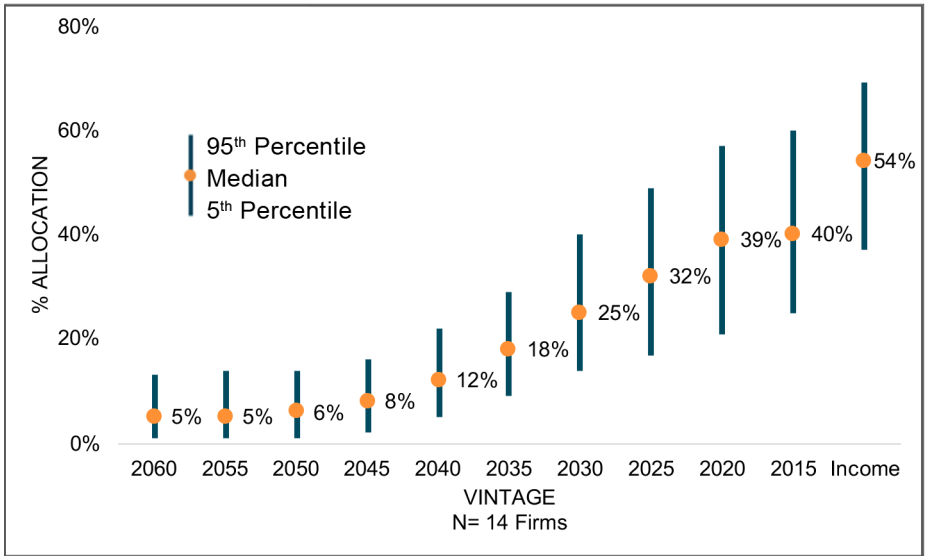
1. US Large-Cap Equity
2. US Mid-Cap Equity
3. US Small-Cap Equity
4. US Small- & Mid-Cap Equity
5. US All-Cap Equity
6. Non-US Developed Equity
7. Non-US Small-Cap Equity
8. Global Equity
9. Global Ex-US Equity
10. Global All-Cap Ex-US Equity
11. Emerging Market Equity
12. Defensive/Low Volatility

FIXED INCOME ALLOCATIONS IN CUSTOM TDFS

On the low end of exposure, 5th percentile fixed income allocations for year-end 2018 ranged from 37% for income funds to 1% for 2050-2060 funds. The 95th percentile fixed income allocations ranged in a similar style, from 69% for income funds to 13% for 2060 funds. The average allocation to fixed income for income funds was 52%, declining to 7% for the 2060 fund. Differences between the 95th and 5th percentiles varied little for later-dated funds, and peaked at 36 percentage points for the 2020 vintage. **(Exhibit 8)**

Exhibit 8

Fixed Income Allocation Spread, 95th and 5th Percentiles - 2018

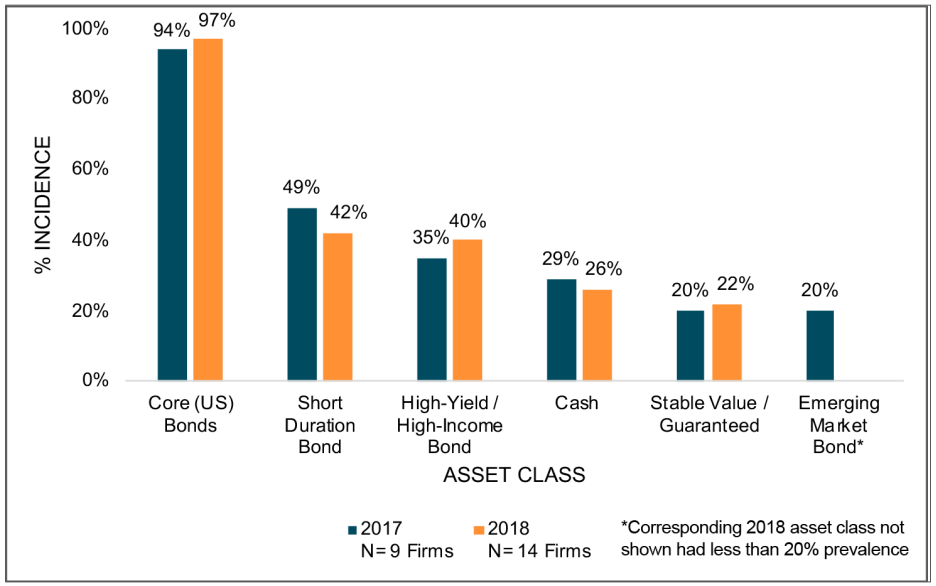


Prevalence

Looking at all 14 asset allocators that reported in 2018, versus all nine asset allocators that reported in 2107, we see greater prevalence in 2018 for: core (US) bonds, high-yield/high-income bond, and stable value/guaranteed. Prevalence fell in 2018 for: short duration bond, cash and emerging market bond. **(Exhibit 9)**

Exhibit 9

Year-Over-Year Comparison of Fixed Income Asset Class Prevalence



FIXED INCOME

Twelve asset classes compose DCIIA's fixed income category:

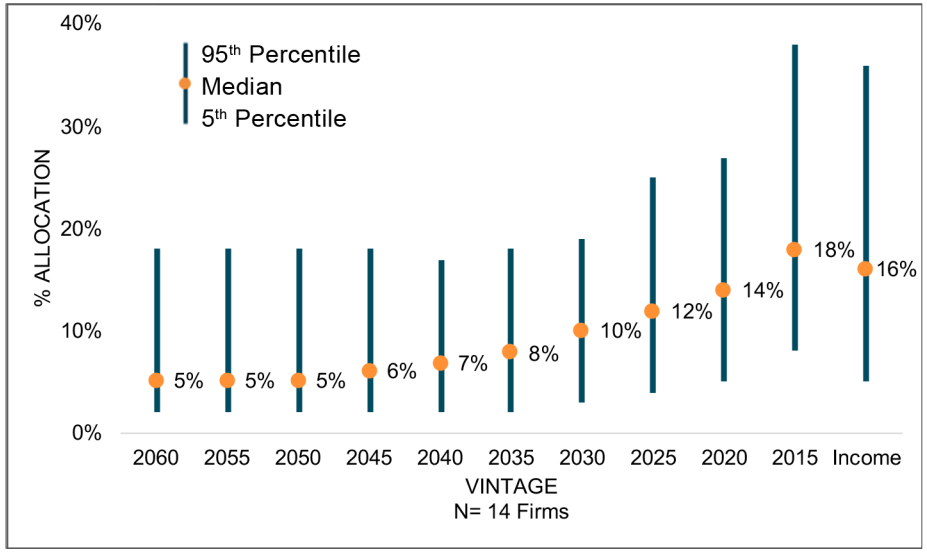
1. Unconstrained Bond
2. Core (US) Bond
3. Core (Non-US) Bond
4. Global Core (Unhedged) Bond
5. Global Core (Hedged) Bond
6. High-Yield/High-Income Bond
7. Short Duration Bond
8. Long Duration Bond
9. Emerging Market Bond
10. Cash
11. Stable Value/Guaranteed
12. Multi-Asset Credit

INFLATION-SENSITIVE ALLOCATIONS IN CUSTOM TDFS

On the low end of exposure, 5th percentile inflation-sensitive allocations ranged from 2% for 2035—2060 funds to 8% for 2015. The 95th percentile inflation-sensitive allocations ranged from 38% for 2015 funds to 17% for 2040 funds. The average allocation to the inflation-sensitive category for 2015 funds was 18%, declining to 6% for both the 2050 and 2060 funds. Differences between the 95th and 5th percentiles peaked at 31 percentage points for income funds. **(Exhibit 10)**

Exhibit 10

Inflation-Sensitive Allocation Spread, 95th and 5th Percentiles - 2018



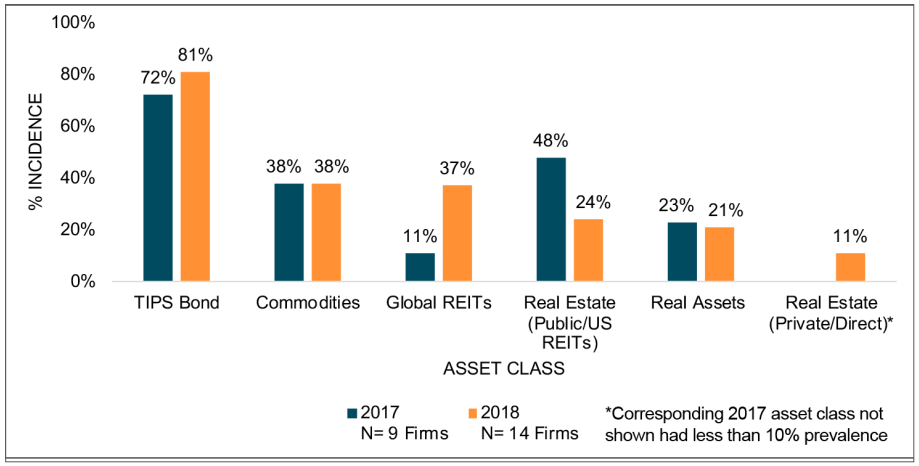
Prevalence

The top five inflation-sensitive asset classes in 2018 by prevalence were: TIPS bond (81%), commodities (38%), global REITs (37%), real estate--public/US REITs (24%), real assets (21%) and real estate--private/direct (11%). The remaining four inflation-sensitive asset classes each had less than 10% prevalence among the plans. **(Exhibit 11)**

Comparing the data of the 14 who reported in 2018 to the data for the nine who reported in 2017 shows increases year-over-year in the prevalence of TIPS bond, global REITs, and real estate (private/direct). We see lesser prevalence in real estate (public/US REITs) and real assets.

Exhibit 11

Year-Over-Year Comparison of Inflation-Sensitive Asset Class Prevalence



INFLATION-SENSITIVE

Ten asset classes compose DCIIA's inflation-sensitive category:

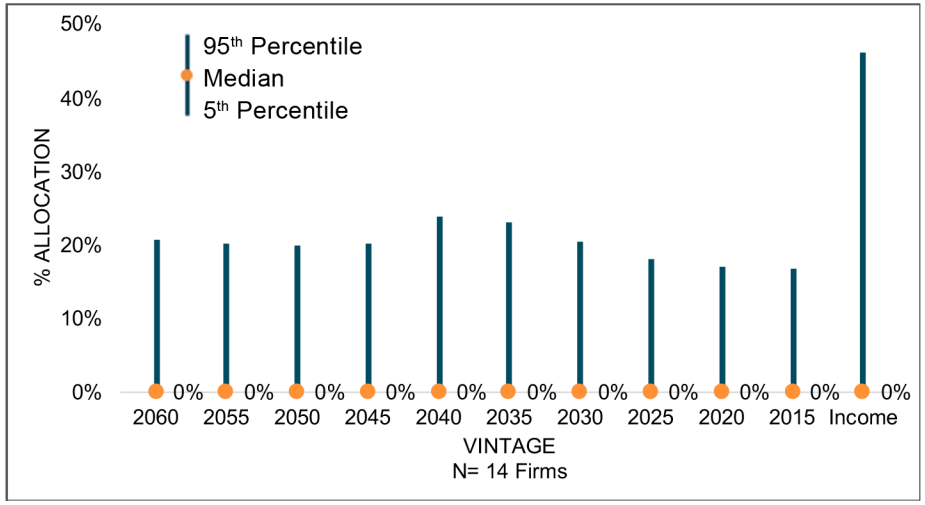
1. Real Estate (Public/US REITs)
2. Real Estate (Private/Direct)
3. Global REITs
4. Commodities
5. Real Assets
6. Infrastructure
7. TIPS Bond
8. Emerging Market TIPS
9. Currency Hedge
10. Multi-Asset Inflation

DIVERSIFIER ALLOCATIONS IN CUSTOM TDFS

The 5th percentile allocations for diversifier assets were relatively consistent across vintages, showing little range—around 0% to 2%. The allocations to diversifier assets, however, varied in the 95th percentile from 46% for income to 17% in the 2015 and 2020 funds. The average allocation to diversifiers was 1% to 2% across all vintages, but this percentage alone does not capture the high end of the allocations represented by the 95th percentile. **(Exhibit 12)**

Exhibit 12

Diversifier Allocation Spread, 95th and 5th Percentiles - 2018



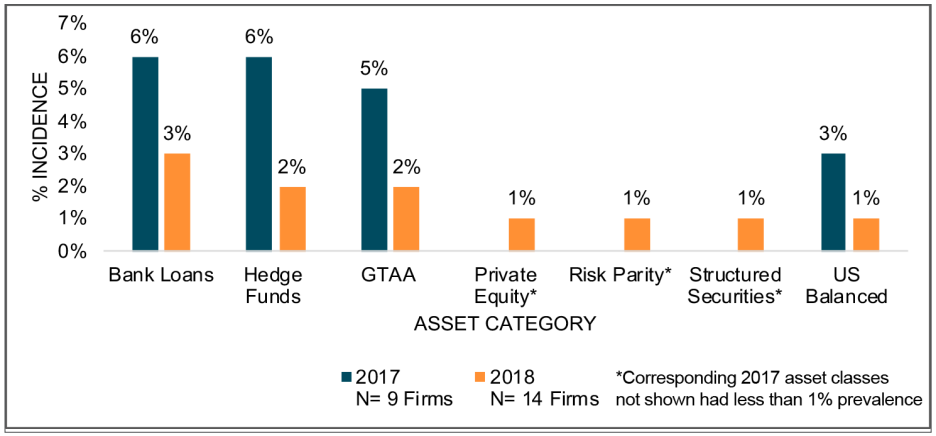
Prevalence

The top seven diversifier asset classes by prevalence for all 14 respondents in 2018 were: bank loans (3%), hedge funds (2%), GTAA (2%), private equity (1%), risk parity (1%), structured securities (1%), and US balanced (1%). The remaining diversifier asset classes each had less than 1% prevalence among the plans. **(Exhibit 13)**

Comparing the data provided by all 14 respondents in 2018 to the nine respondents in 2017, we saw a drop in prevalence in bank loans, hedge funds, GTAA, and US balanced. However, we saw the emergence of private equity, risk parity, and structured securities as prevalent asset classes.

Exhibit 13

Year-Over-Year Comparison of Diversifier Asset Class Prevalence



DIVERSIFIERS

Eleven asset classes compose DCIIA's diversifiers category:

1. Private Equity
2. Hedge Funds
3. Long/Short Hedge Funds
4. Market-Neutral Hedge Funds
5. Risk Parity
6. Global Tactical Asset Allocation (GTAA)
7. Absolute Returns
8. Structured Securities
9. Preferred Securities
10. Bank Loans
11. US Balanced

PERCENTAGE RETURNS AVERAGES (NET OF ALL FEES)

The returns for 2017 and 2018 were impacted by very different market experiences. In 2017 there was a lack of volatility in the equity markets, with the S&P 500 ending up 18.74%. In 2018 the markets saw significant volatility and the S&P 500 was down 6.59%. The returns for all vintages reported in 2017 are shown in **Exhibit 14**. The returns for 2018 are shown in **Exhibit 15**.

Exhibit 14 **Returns, 95th and 5th Percentiles - 2017**

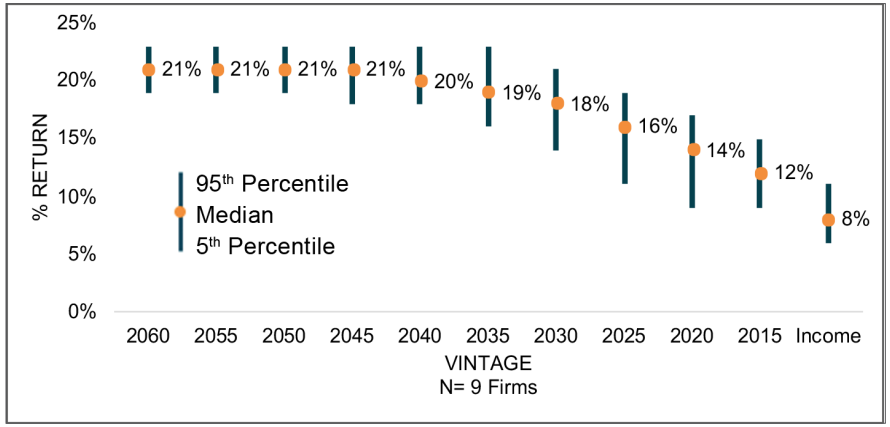
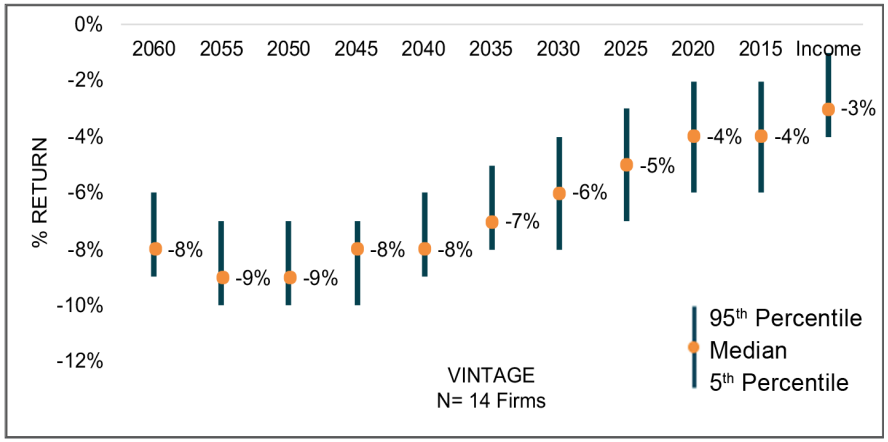


Exhibit 15 **Returns, 95th and 5th Percentiles - 2018**



GOING FORWARD

DCIIA is pleased to provide this previously unavailable information. We look forward to the study's continuing evolution over time, which will include expanding coverage of the cTDF universe as well as the incorporation of other data elements.

For further inquiries on the full coverage of asset classes, please contact DCIIA at info@dciia.org.

APPENDIX

Allocation by Investment Strategy

Allocation of year-end 2018 data, looking only at plans that were in both the 2017 and 2018 data sets. **(Exhibit 16)**

Exhibit 16
Year-Over-Year Comparison of Allocation by Investment Strategy

Vintage	2018 Growth	Year-Over-Year Δ	2018 Defensive	Year-Over-Year Δ
2060	92.5%	2.8%	7.5%	-2.8%
2055	92.2%	2.0%	7.7%	-2.1%
2050	91.9%	1.6%	8.0%	-1.7%
2045	91.1%	2.5%	8.9%	-2.5%
2040	86.4%	0.3%	13.6%	-0.3%
2035	80.2%	0.7%	19.7%	-0.8%
2030	71.5%	-0.8%	28.4%	0.7%
2025	63.4%	-0.4%	36.6%	0.4%
2020	53.5%	-1.0%	46.5%	1.0%
2015	48.1%	-1.6%	51.9%	1.6%
Income	35.2%	1.6%	64.8%	-1.6%

N= 9 Firms

Allocation by Asset Category

Looking only at plans that were represented in both the 2017 and 2018 data sets, DCIIA observed that the allocations to equity were down in every vintage except 2060 (which was +0.4%) and 2050 (which remained the same). Allocations to fixed income were largely up for 2020–2040, yet down for 2045–2060. Allocations to the inflation-sensitive and diversifiers categories were up in most vintages. Income funds showed an increase in equity allocation of 2.4%. **(Exhibit 17)**

Exhibit 17
Year-Over-Year Comparison of Allocation by Asset Category

Vintage	2018 Equity	Year-Over-Year Δ	2018 Fixed Income	Year-Over-Year Δ	2018 Inflation Sensitive	Year-Over-Year Δ	2018 Diversifiers	Year-Over-Year Δ
2060	85.4%	0.4%	6.7%	-1.3%	6.0%	0.1%	1.0%	-0.1%
2055	85.9%	-0.3%	7.0%	-0.5%	6.1%	0.6%	1.0%	0.3%
2050	86.1%	0.0%	7.2%	-0.3%	5.8%	0.4%	0.9%	-0.1%
2045	84.6%	-0.4%	8.2%	-0.4%	6.2%	0.6%	1.0%	0.3%
2040	80.0%	-0.9%	12.4%	0.3%	6.4%	0.5%	1.2%	0.1%
2035	72.7%	-1.6%	17.9%	0.1%	8.0%	0.8%	1.3%	0.6%
2030	64.2%	-1.3%	25.0%	0.4%	9.7%	0.8%	1.1%	0.1%
2025	55.2%	-1.6%	30.5%	0.3%	13.2%	1.2%	1.1%	0.1%
2020	45.8%	-1.5%	37.4%	0.4%	16.1%	1.3%	1.0%	0.2%
2015	40.2%	-1.0%	40.6%	-0.6%	18.6%	1.4%	0.8%	0.4%
Income	29.3%	2.4%	52.4%	-1.1%	17.5%	-1.2%	1.6%	-0.4%

N= 9 Firms

APPENDIX

Prevalence

Equity allocation spread of year-end 2018 data, looking only at plans that were in both the 2017 and 2018 data sets. **(Exhibit 18)**

Fixed income allocation spread of year-end 2018 data, looking only at plans that were in both the 2017 and 2018 data sets. **(Exhibit 19)**

Exhibit 18

Equity Allocation Spread, 95th and 5th Percentiles

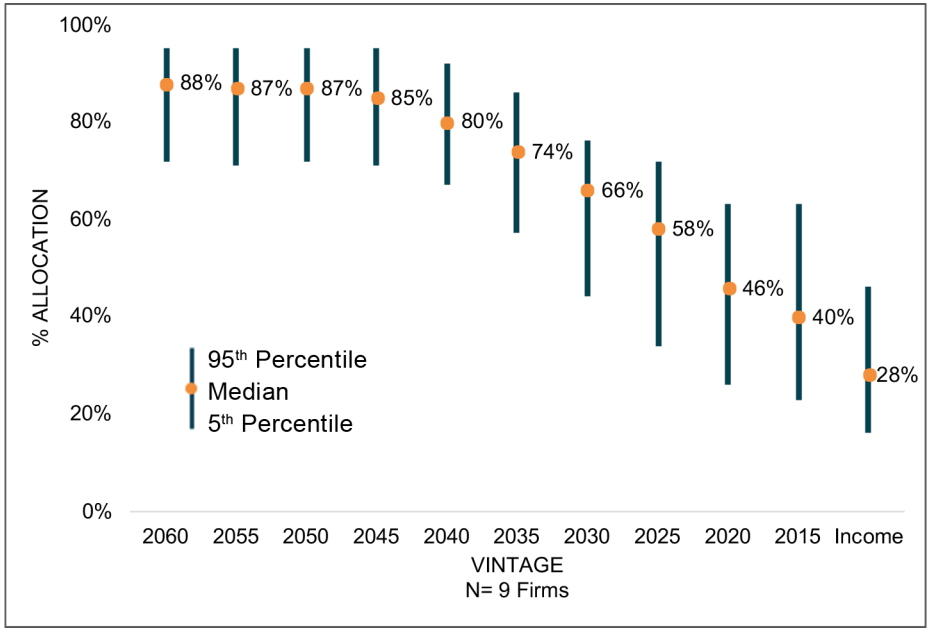
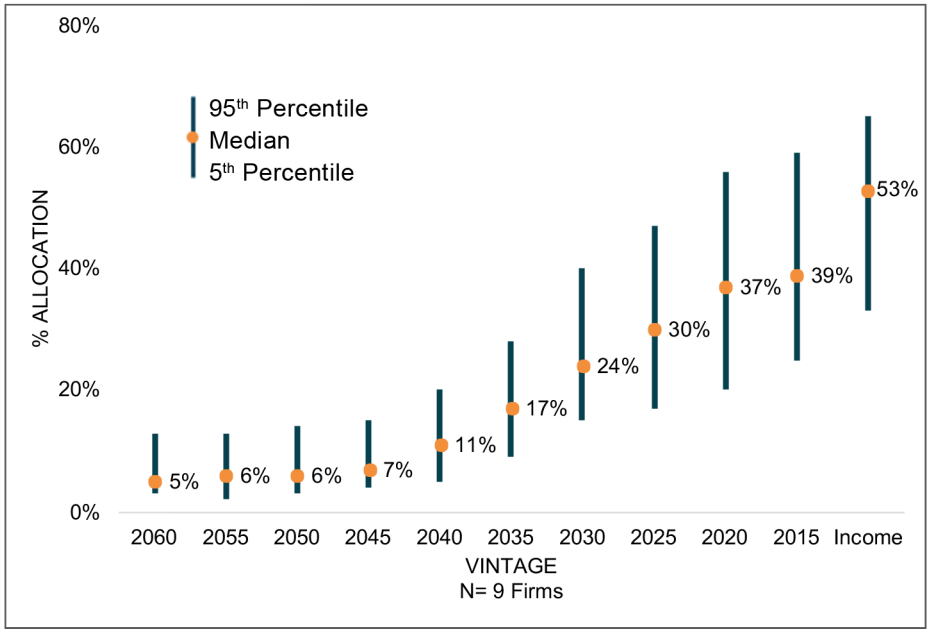


Exhibit 19

Fixed Income Allocation Spread, 95th and 5th Percentiles



APPENDIX

Prevalence

Inflation-sensitive allocation spread of year-end 2018 data, looking only at plans that were in both the 2017 and 2018 data sets. **(Exhibit 20)**

Diversifier allocation spread of year-end 2018 data, looking only at plans that were in both the 2017 and 2018 data sets. **(Exhibit 21)**

Exhibit 20

Inflation-Sensitive Allocation Spread, 95th and 5th Percentiles

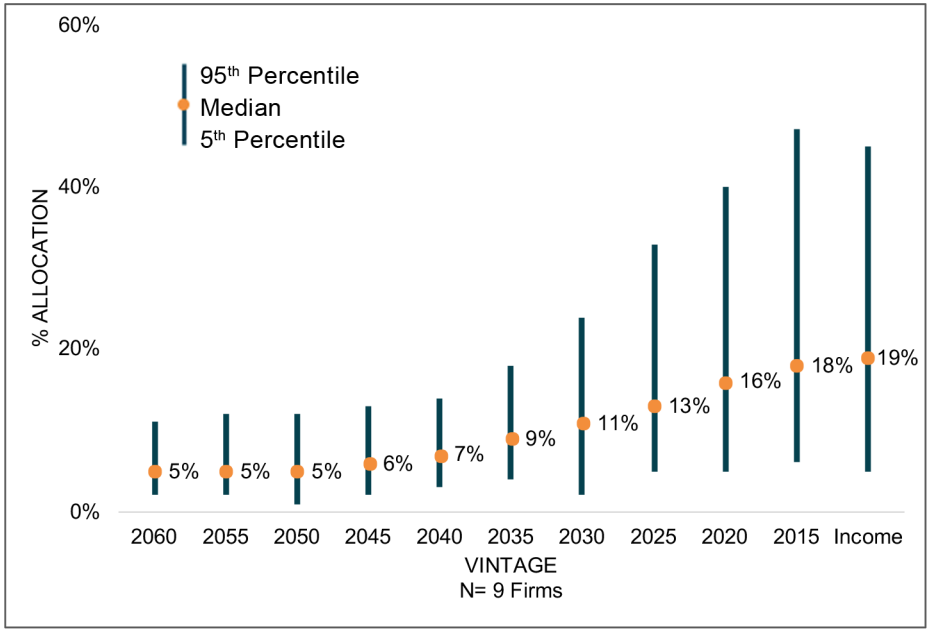
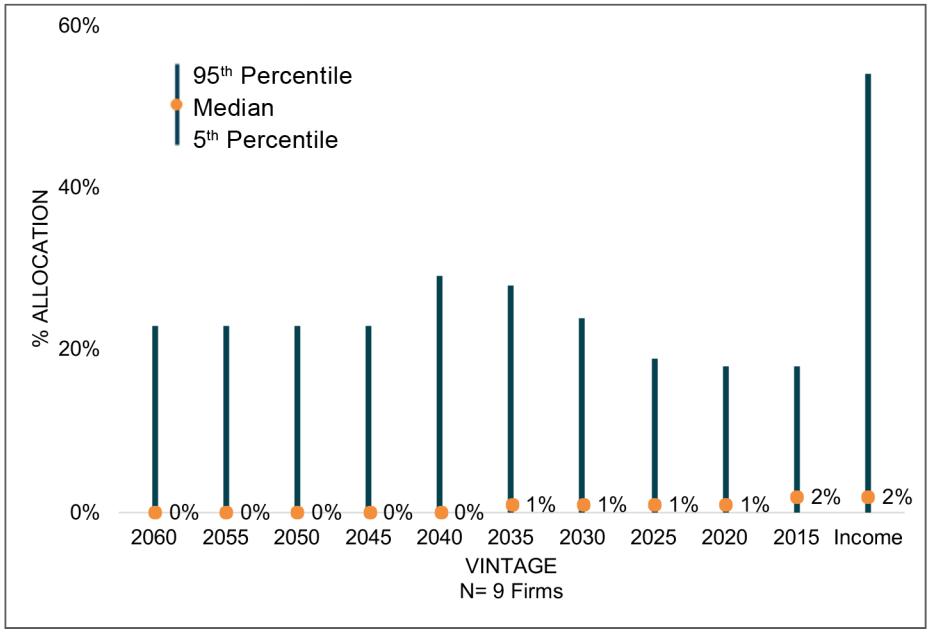


Exhibit 21

Diversifier Allocation Spread, 95th and 5th Percentiles



ABOUT THE DCIIA RRC

DCIIA's Retirement Research Center conducts rigorous, industry-informed research that is grounded in a practical approach focused on actionable insights. We adhere to a disciplined research methodology, governance and validation process. Our goal is to serve the industry as a reliable, unbiased, and authoritative research resource supporting improved retirement security—be it through plan design, institutional practices, investment solutions, or behavioral interventions.

ABOUT DCIIA

The Defined Contribution Institutional Investment Association (DCIIA) is a non-profit association dedicated to enhancing the retirement security of America's workers. To do this, DCIIA fosters a dialogue among the leaders of the defined contribution community who are passionate about improving defined contribution outcomes. DCIIA's diverse group of members include investment managers, consultants and advisors, law firms, recordkeepers, insurance companies, plan sponsors and other thought leaders who are collectively committed to the best interests of plan participants.

For more information, visit: www.dciia.org.