

The brokerage option in DC plans

Vanguard Research Note | May 2021

- Twenty percent of Vanguard defined contribution (DC) plans offer a self-directed brokerage option. Larger plans are somewhat more likely to offer the feature. In 2020, one-third of Vanguard plan participants had access to the option.
- Few participants use the self-directed brokerage feature—only 1% of participants whose plans offered it in 2020.

Introduction

In this paper we examine the self-directed brokerage feature in DC plans at Vanguard. Figure 1 shows the percentage of plans offering the self-directed brokerage feature and the percentage of participants offered the feature who use it. In 2020, one in five Vanguard plans offered a self-directed brokerage option. Larger plans were somewhat more likely to offer the feature, and one-third of Vanguard plan participants had access to the option. Interestingly, 21% percent of plans with a brokerage option were law firms—and on average, 6% of law firm plan assets were invested in brokerage. Forty-four percent of law firms on our platform offer the brokerage feature.

Vanguard directly provides recordkeeping services for more than 4.7 million participants in 1,700 plans. Fewer than 20,000 participants on our proprietary recordkeeping

Figure 1. Population statistics

Vanguard defined contribution plans

Number of plans offering self-directed brokerage	359
Percentage of plans offering brokerage	20%
Percentage of participants offered brokerage	33%
Number of participants using brokerage	
Percentage of participants offered brokerage	
using brokerage	1%
Source: Vanguard, 2021.	

platform use the brokerage option. In fact, 6% of plans offering the brokerage option have no participants using the feature.

Demographics

Figure 2 compares the demographic characteristics of participants using the brokerage feature with those of all Vanguard participants. Participants using brokerage differ from all Vanguard participants on a number of attributes. Brokerage participants are 6 years older, have twice the tenure, and are disproportionately male, compared with the Vanguard universe. Brokerage participants contacted

Figure 2. Participant demographics, 2020

Vanguard defined contribution plan participants

	Brokerage participants	All participants
Median age	50	44
Median tenure	14	7
Percentage male	79%	56%
Median account balance	\$264,049	\$33,472
Median equity allocation	86%	86%
Median brokerage allocation	48%	_
Percentage registered for internet account access	99%	79%
Median Vanguard contacts	31	3
Course: Vanguard 2021		

Source: Vanguard, 2021.

2020

¹ Through our Vanguard Retirement Plan Access (VRPA) partnership, we provide recordkeeping services for an additional 700,000 participants in 15,000 plans. VRPA also offers a brokerage option to plans on the VRPA platform. This platform is distinct from the one described in this research note. Eleven percent of VRPA plans offer brokerage, and 2% of participants offered the self-directed brokerage option use it.

Vanguard much more frequently than all participants did—with a median contact rate of 31 times in 2020, compared with only 3 contacts in 2020 for all participants. The most striking difference between brokerage participants and all participants is their account balances. The median brokerage account balance was about \$264,000—more than 7 times larger than the median Vanguard account balance of about \$33,000.

Brokerage option design

Figure 3 explores design elements adopted by plan sponsors for the brokerage feature. Half of plans offering this feature permit participants to choose any investment option, using what is commonly referred to as a full selfdirected brokerage account (SDBA). SDBA options for this group include mutual funds, exchange-traded funds (ETFs), fixed income, and equities. Another 27% of plans permit participants to use full SBDAs that exclude securities on the over-the-counter bulletin board (OTCBB). (Securities on the OTCBB are securities that do not trade on a major exchange or are considered penny stocks.) Nineteen percent of plans restrict the brokerage feature to mutual funds only. Sixty-two percent of plans do not limit or cap the proportion of the participant account balance that can be invested in the brokerage option, while thirty-eight percent of the plans do impose a limit or cap. Most commonly, the cap is 50% of the participant account balance.

Brokerage holdings

Figure 4 shows the distribution of participant brokerage allocations. On average, brokerage participants invest half of their account balance in the brokerage option. The allocation to brokerage varies from 10% or less (18% of brokerage participants) to more than 90% (23% of participants). Figure 5 shows the distribution of plan brokerage allocations. Larger plans are somewhat more likely to offer the brokerage option. However, smaller firms have a higher proportion of plan assets invested in the brokerage option.

What do brokerage participants invest in? As Figure 6 shows, nearly all brokerage participants (91%) hold some cash in their brokerage account. The most common holding—owned by half of brokerage participants and accounting for 37% of assets—is individual stocks, followed by mutual funds. Thirty-one percent of brokerage participants hold at least one ETF. The most commonly held individual stock is Tesla, followed by Apple and Amazon. The most commonly held mutual fund is Vanguard Total Stock Market Index Fund, followed by Vanguard Index 500 Fund and Vanguard Dividend Growth Fund. The most commonly held ETF is Vanguard S&P 500 ETF, followed by Invesco QQQ and Vanguard Total Stock Market ETF. Participants are able to choose non-Vanguard mutual funds and ETFs; however, Vanguard options are most commonly chosen.²

Figure 3. Brokerage option design

Vanguard defined contribution plans

	2020
Brokerage window design	
Mutual fund only	19%
Mutual fund and ETF	4%
Full self-directed brokerage account excluding over-the-counter bulletin board (OTCBB)* 279	
Full self-directed brokerage account	50%

Cap on participant account balance invested in brokerage

20% to 40%	6%
50%	23%
70% to 90%	9%
No cap**	62%

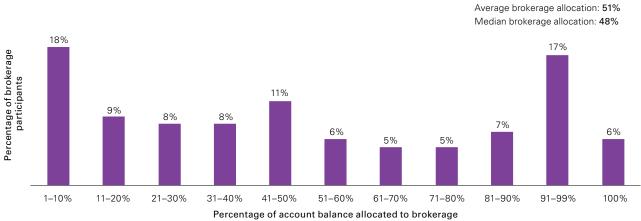
^{*} Securities on the OTCBB are securities that are not traded on a major exchange or are penny stocks.

Source: Vanguard, 2021.

^{**} A 95% or higher cap is in place so fees can be taken from non-brokerage assets. The highest cap for purposes of taking fees from non-brokerage assets is 99%.

Figure 4. Distribution of participant brokerage exposure, 2020

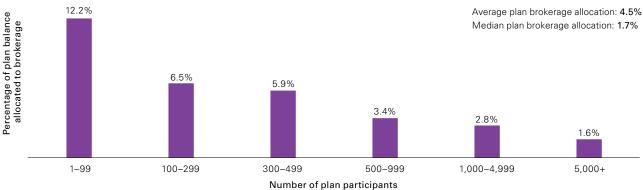
Percentage of Vanguard defined contribution plan brokerage participants



Source: Vanguard, 2021.

Figure 5. Distribution of plan brokerage exposure, 2020

Vanguard defined contribution plans offering brokerage



Source: Vanguard, 2021.

Figure 6. Brokerage investment options used, 2020

Vanguard defined contribution plan brokerage participants

	Percentage of brokerage participants	Percentage of brokerage assets
Cash	91%	15%
Individual bonds	1%	<0.5%
Individual stocks	50%	37%
Mutual funds	41%	33%
Exchange-traded funds	31%	15%
Other	2%	<0.5%

Note: Other includes options, warrants, and miscellaneous assets.

Source: Vanguard, 2021.

Connect with Vanguard® > vanguard.com

Vanguard research authors

Jean A. Young John A. Lamancusa

For more information about Vanguard funds or Vanguard ETFs, visit vanguard.com or call 800-523-1036 to obtain a prospectus or, if available, a summary prospectus. Investment objectives, risks, charges, expenses, and other important information are contained in the prospectus; read and consider it carefully before investing.

Vanguard ETF Shares are not redeemable with the issuing fund other than in very large aggregations worth millions of dollars. Instead, investors must buy and sell Vanguard ETF Shares in the secondary market and hold those shares in a brokerage account. In doing so, the investor may incur brokerage commissions and may pay more than net asset value when buying and receive less than net asset value when selling.

All investing is subject to risk, including the possible loss of the money you invest. Diversification does not ensure a profit or protect against a loss.

Vanguard funds not held in a brokerage account are held by The Vanguard Group, Inc., and are not protected by SIPC. Brokerage assets are held by Vanguard Brokerage Services, a division of Vanguard Marketing Corporation, member FINRA and SIPC.



© 2021 The Vanguard Group, Inc. All rights reserved. Vanguard Marketing Corporation, Distributor.

CIRBOP 052021