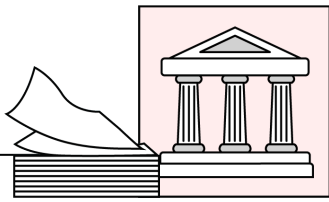


Custom DC plan benchmarks

Finance



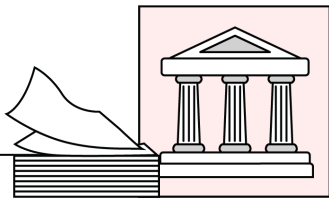


Benchmark population

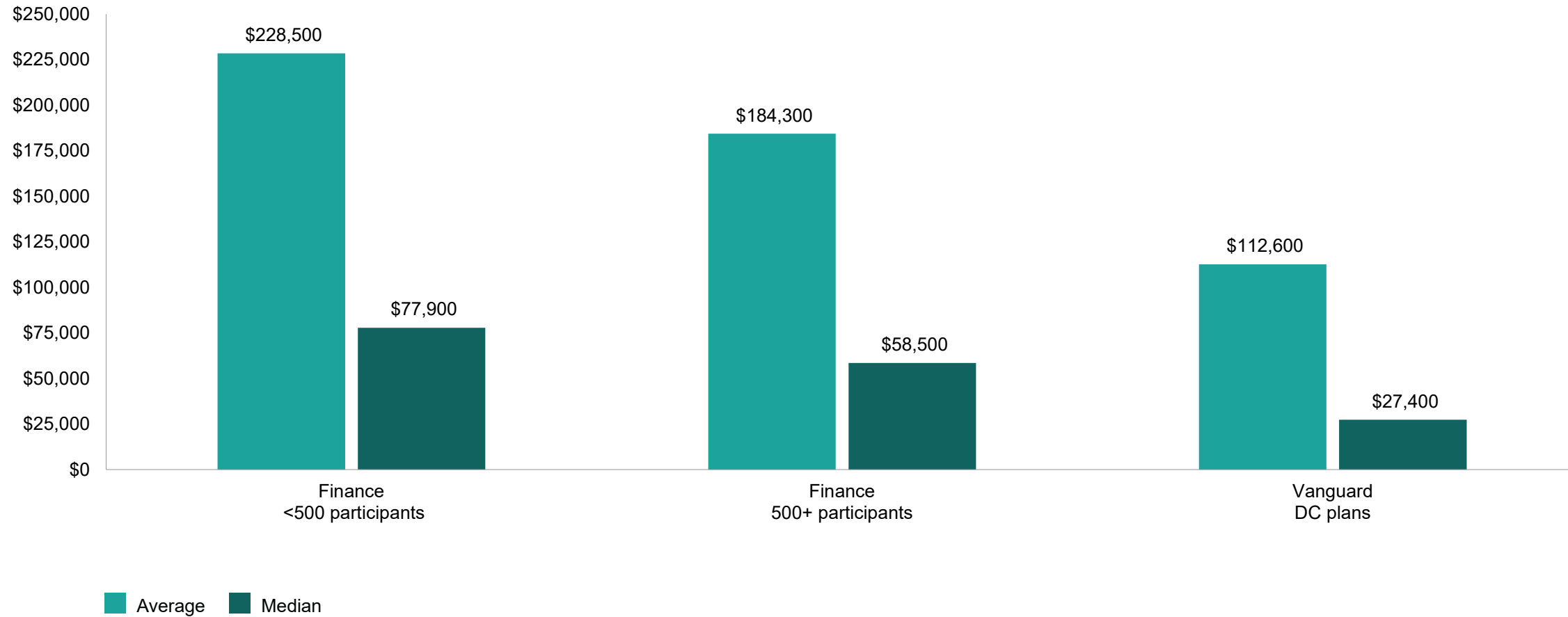
	Finance <500 participants	Finance 500+ participants	Vanguard DC plans
Number of plans	45	38	1,650
Number of participants	7,898	136,185	4.9 million
Average number of participants	176	3,584	2,950
Median number of participants	146	1,637	565
Amount of assets	\$1.8 billion	\$25.1 billion	\$550.2 billion
Average assets	\$40.1 million	\$660.4 million	\$333.9 million
Median assets	\$36.8 million	\$187.5 million	\$65.5 million

The financial services industry is defined by NAICS (North American Industry Classification System) subsectors 521, 522, 523, and 525.

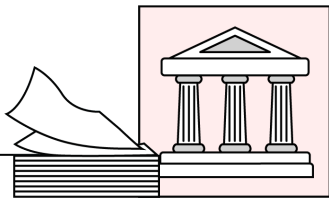
Source: Vanguard, as of December 31, 2022.



Participant balances

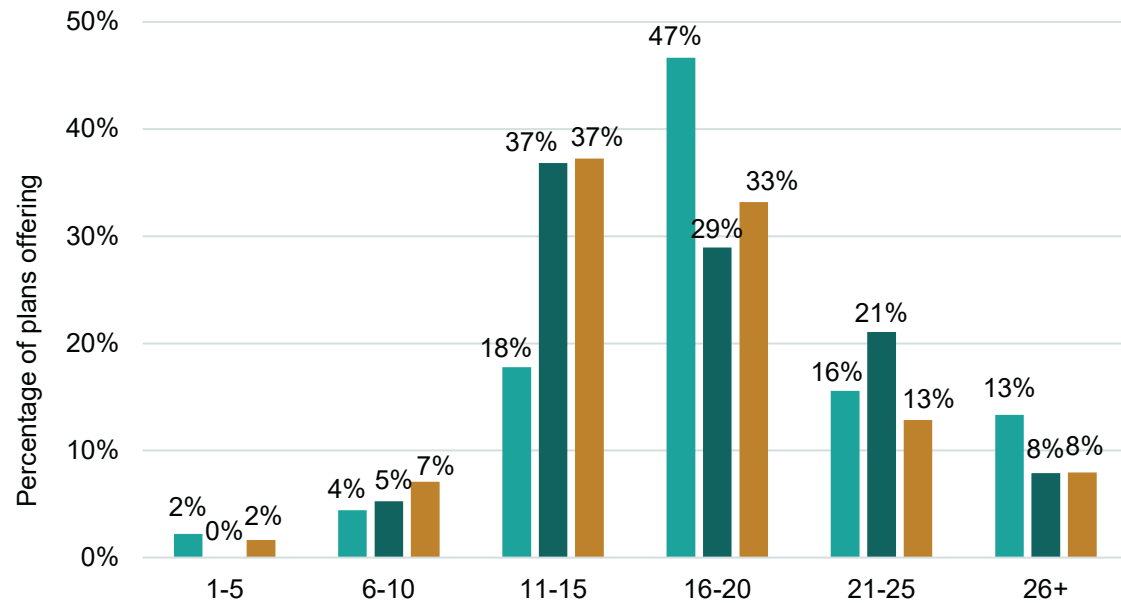


Source: Vanguard, as of December 31, 2022.
Bar chart may not align precisely with percentages due to rounding.

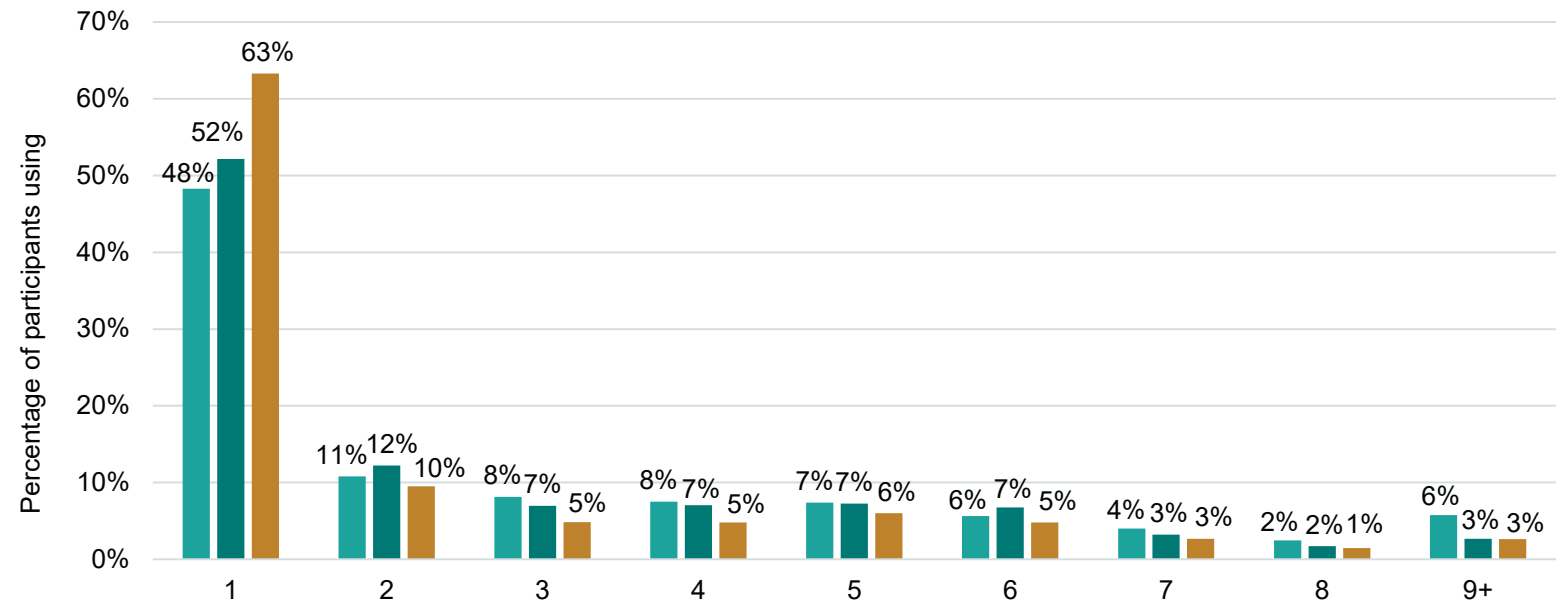


Number of fund options offered and used

Funds offered per plan (all life-cycle funds counted as one)



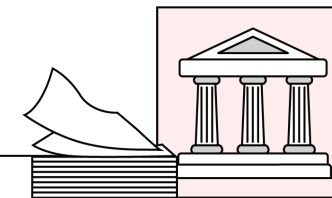
Funds used per participant



	Average funds offered	Median funds offered	Average funds used	Median funds used
Finance <500 participants	20.8	19	3.1	2
Finance 500+ participants	18.0	18	2.7	1
Vanguard DC plans	17.4	16	2.4	1

Source: Vanguard, as of December 31, 2022.

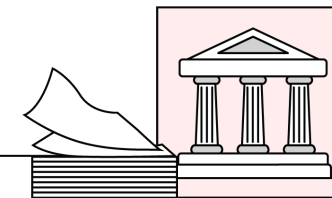
Bar chart may not align precisely with percentages due to rounding.



Types of investment options offered and used*

	Finance <500 participants		Finance 500+ participants		Vanguard DC plans	
	Percentage of plans offering	Percentage of participants using*	Percentage of plans offering	Percentage of participants using*	Percentage of plans offering	Percentage of participants using*
Cash	100%	18%	100%	14%	99%	12%
Money market	71	10	79	9	70	6
Stable value / GIC	67	15	68	9	68	10
Bond	98%	23%	100%	21%	98%	17%
Active	80	16	92	11	80	7
Index	91	16	89	16	89	14
Inflation-protected securities	47	6	50	5	35	3
Multisector	2	22	13	2	8	2
High-yield	29	8	37	2	17	3
International	24	4	18	3	19	3
Emerging markets	2	7	3	5	1	2
Balanced funds	100%	70%	100%	82%	99%	87%
Traditional balanced	62	17	53	14	62	12
Target-risk	18	12	3	20	13	10
Target-date	87	65	97	78	96	83
Company stock	2%	25%	24%	41%	8%	36%
Self-directed brokerage	20%	5%	32%	2%	20%	1%

*Among participants offered the option.
Source: Vanguard, as of December 31, 2022.

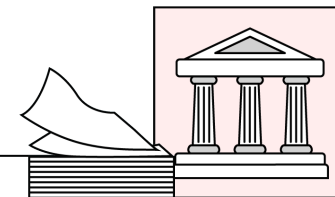


Types of investment options offered and used* (continued)

	Finance <500 participants		Finance 500+ participants		Vanguard DC plans	
	Percentage of plans offering	Percentage of participants using*	Percentage of plans offering	Percentage of participants using*	Percentage of plans offering	Percentage of participants using*
Equity funds	100%	49%	100%	42%	99%	30%
Domestic equity funds	100%	47%	100%	41%	99%	29%
Large-cap index	98	35	100	32	98	23
Large-cap active	84	24	84	23	90	16
Large-cap value	89	15	76	11	87	9
Large-cap growth	91	19	84	21	91	13
Large-cap blend	96	36	100	32	98	23
Mid-cap index	84	13	89	18	83	14
Mid-cap active	64	13	50	11	52	7
Small-cap index	82	17	66	14	63	11
Small-cap active	62	9	50	8	63	7
Socially responsible	16	8	18	7	15	5
International equity funds	98%	27%	100%	25%	97%	19%
Index international	80	18	71	20	79	14
Active international	76	20	87	14	83	10
Emerging markets	62	15	55	10	35	8
Global equity funds	22%	12%	13%	8%	17%	3%

*Among participants offered the option.

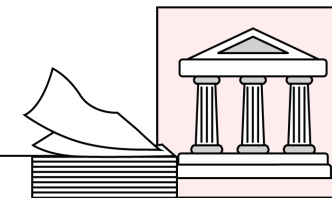
Source: Vanguard, as of December 31, 2022.



Types of investment options offered and used* (continued)

	Finance <500 participants		Finance 500+ participants		Vanguard DC plans	
	Percentage of plans offering	Percentage of participants using*	Percentage of plans offering	Percentage of participants using*	Percentage of plans offering	Percentage of participants using*
Sector funds	42%	14%	39%	7%	38%	6%
REIT	38	9	39	6	32	5
Health care	11	7	0	0	8	7
Energy	9	8	0	0	5	5
Precious metals	4	4	0	0	2	2
Technology	4	18	0	0	3	5
Utilities	2	3	0	0	1	2
Natural resources	4	4	5	5	1	4
Financials	2	2	0	0	<0.5	1
Communications	0	0	0	0	<0.5	1
Consumer	0	0	0	0	<0.5	2
Industrials	0	0	0	0	<0.5	1

*Among participants offered the option.
Source: Vanguard, as of December 31, 2022.



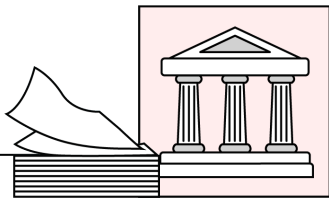
Target-date funds availability and use

	Finance <500 participants	Finance 500+ participants	Vanguard DC plans
Percentage of plans offering	87%	97%	96%
Plan assets invested*	27%	36%	40%
Percentage of plan assets*			
<10%	13%	0%	5%
10–19%	13%	5%	10%
20–29%	33%	16%	17%
30–39%	21%	35%	21%
40–49%	10%	11%	17%
50%+	10%	32%	30%
Percentage of participants using *	65%	78%	83%
Percentage of participant assets**	59%	55%	61%
Percentage of participant assets in target-date funds**			
1–24%	13%	13%	10%
25–49%	10%	11%	8%
50–74%	5%	5%	4%
75–99%	6%	9%	6%
100%	65%	62%	72%
Percentage of participants owning**			
One target-date fund only	62%	60%	71%
One target-date fund plus other funds	29%	33%	23%
Two or more target-date funds only	3%	2%	2%
Two or more target-date funds plus other funds	6%	6%	4%

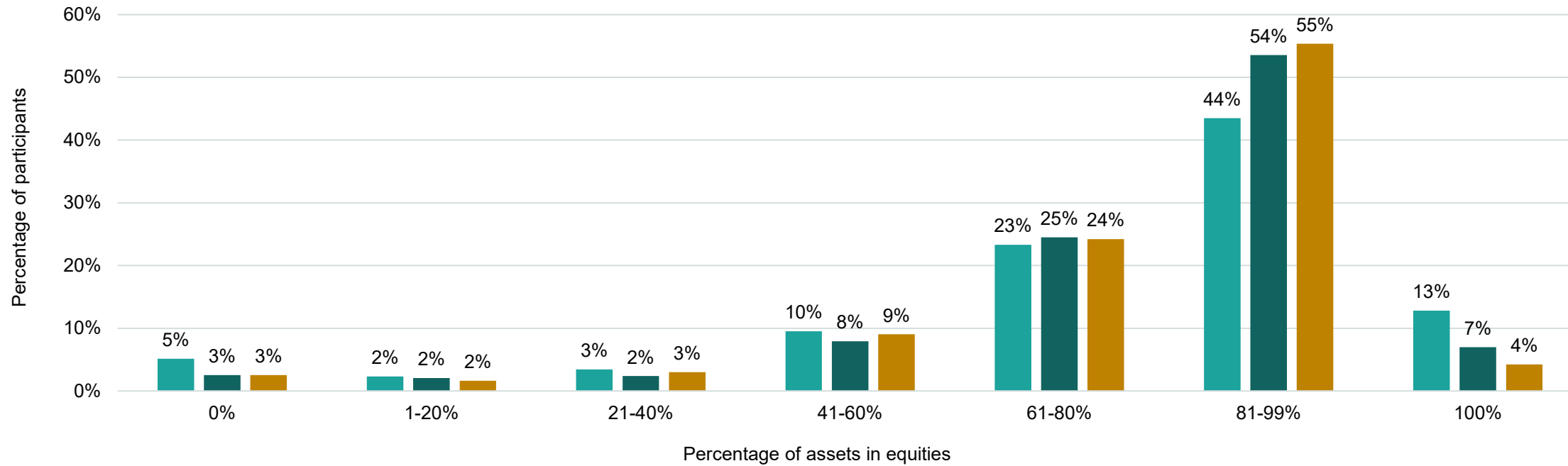
*Among plans offering target-date options.

**Among participants owning target-date options.

Source: Vanguard, as of December 31, 2022.



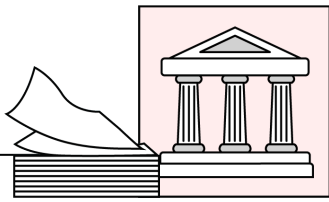
Participant equity exposure



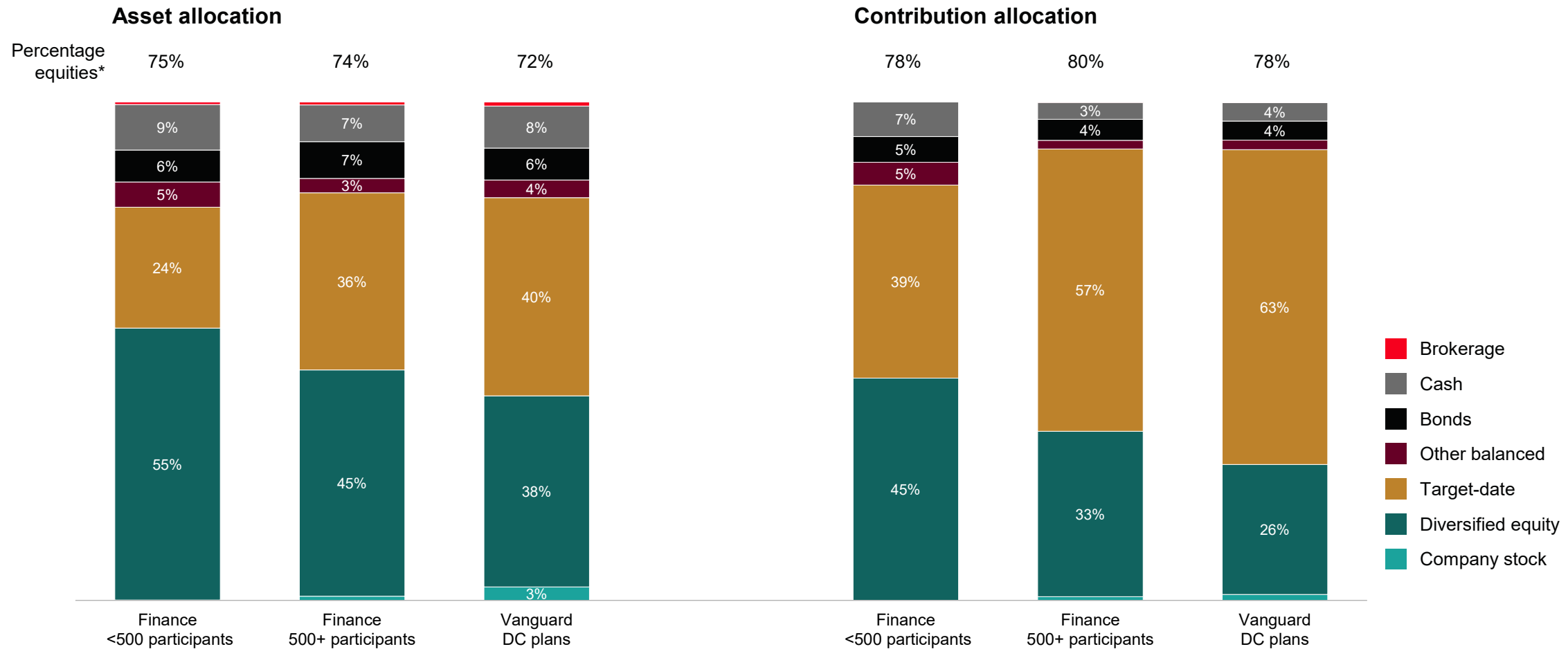
	Average percentage in equities	Median percentage in equities
Finance <500 participants	75%	86%
Finance 500+ participants	78%	86%
Vanguard DC plans	77%	86%

Source: Vanguard, as of December 31, 2022.

Bar chart may not align precisely with percentages due to rounding.



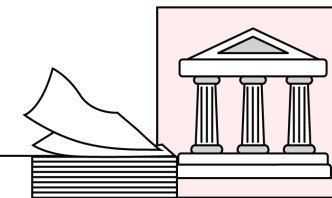
Asset and contribution allocations



*Equities include company stock, diversified equity, and the equity portion of balanced funds.

Source: Vanguard, as of December 31, 2022.

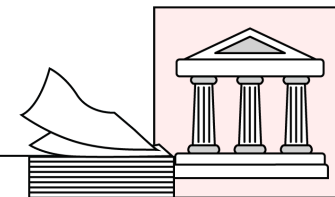
Bar chart may not align precisely with percentages due to rounding.



Participants with professionally managed allocations

	Finance <500 participants	Finance 500+ participants	Vanguard DC plans
All participants			
Single target-date fund	38%	46%	59%
Single balanced fund	1%	1%	<0.5%
Managed account program	3%	7%	7%
Total	42%	54%	66%
New plan entrants during the year			
Single target-date fund	64%	80%	87%
Single balanced fund	<0.5%	1%	<0.5%
Managed account program	2%	3%	2%
Total	66%	84%	89%

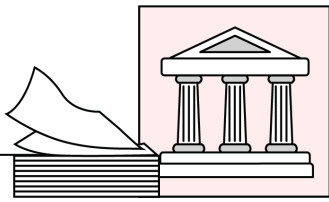
Source: Vanguard, as of December 31, 2022.



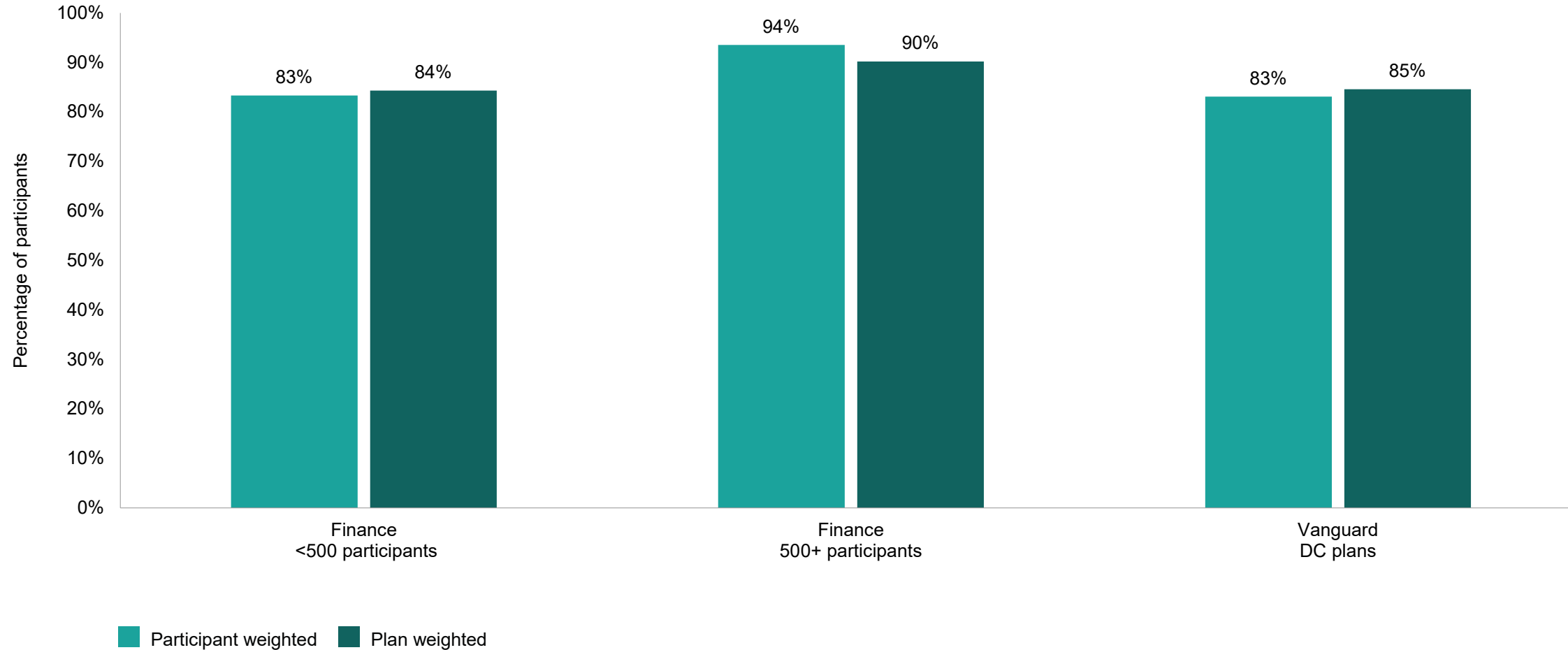
Automatic enrollment options*

	Finance <500 participants	Finance 500+ participants	Vanguard DC plans
Automatic enrollment*			
Number of plans	15	29	884
Percentage of plans	36%	76%	58%
Default automatic enrollment rate			
1 percent	0%	3%	2%
2 percent	13%	0%	5%
3 percent	40%	41%	34%
4 percent	27%	7%	14%
5 percent	7%	21%	17%
6 percent or more	13%	28%	28%
Default automatic increase rate			
1 percent	27%	69%	66%
2 percent	13%	3%	3%
Voluntary election	27%	24%	25%
Service feature not offered	33%	3%	6%
Default automatic increase cap			
<6 percent	0%	5%	2%
6 to 9 percent	33%	10%	17%
10 to 14 percent	33%	57%	48%
15 to 19 percent	33%	14%	22%
20+ percent	0%	10%	6%
No cap	0%	5%	5%
Default fund			
Target-date fund	93%	97%	98%
Other balanced fund	7%	3%	1%
Money market or stable value fund	0%	0%	1%

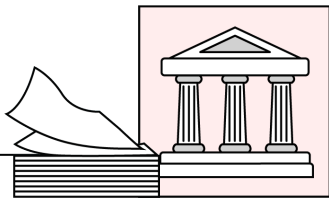
*Limited to plans using Vanguard's automatic enrollment service.
Source: Vanguard, as of December 31, 2022.



Participation rates



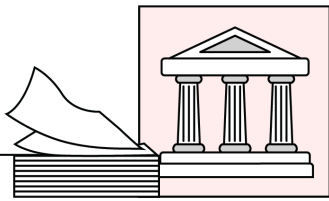
Source: Vanguard active plans with nondiscrimination testing completed during the past two years. Bar chart may not align precisely with percentages due to rounding.



Participant deferral rates

	Finance <500 participants	Finance 500+ participants	Vanguard DC plans
Deferral rates			
Average	7.5%	7.5%	7.4%
Median	6.0%	6.7%	6.4%
Distribution of rates			
<4.0%	20%	19%	25%
4.0% – 6.0%	28%	21%	19%
6.1% – 9.9%	32%	39%	32%
10.0% – 14.9%	13%	16%	17%
15.0%+	7%	6%	7%

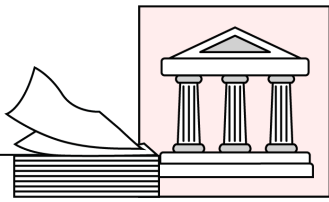
Source: Vanguard active plans with nondiscrimination testing completed during the past two years.



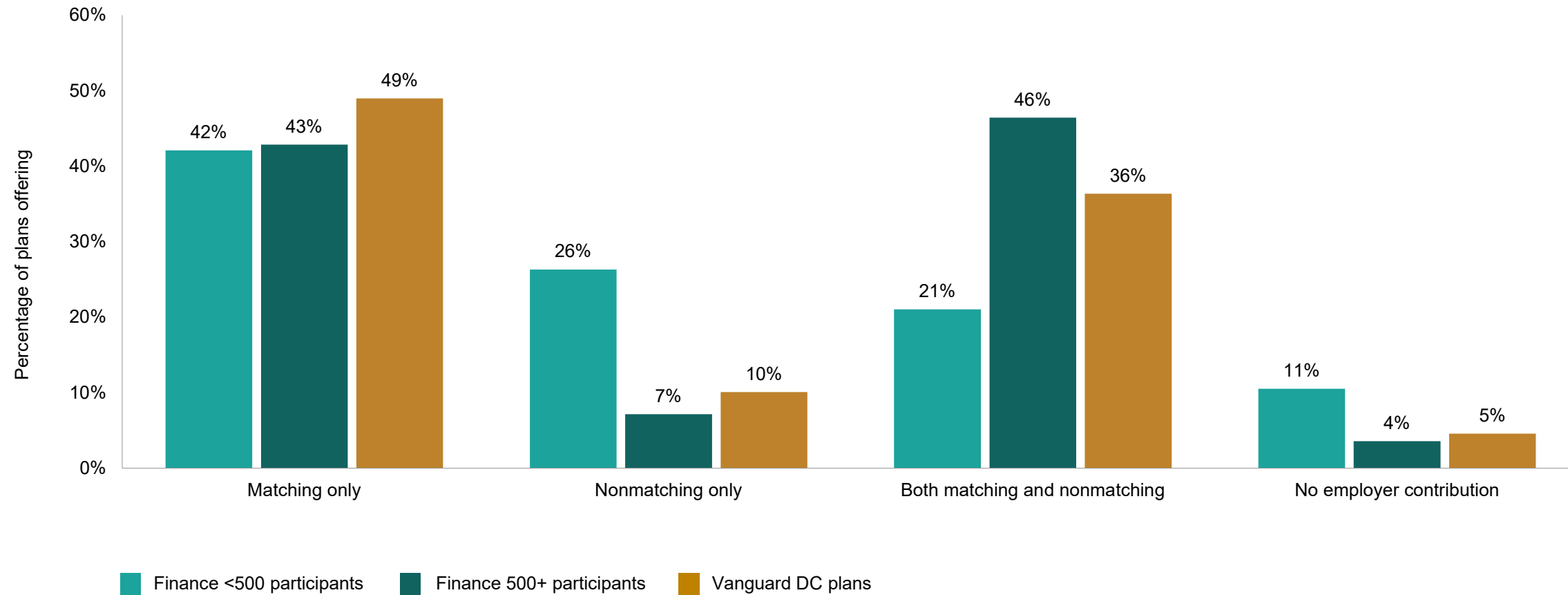
Aggregate participant and employer contribution rates

	Finance <500 participants	Finance 500+ participants	Vanguard DC plans
Total saving rate			
Average	13.8%	12.6%	11.3%
Median	13.4%	12.2%	10.6%
Distribution of rates			
<5.0%	12%	8%	18%
5.0% – 8.9%	16%	15%	20%
9.0% – 11.9%	12%	23%	21%
12.0% – 14.9%	17%	24%	17%
15.0% +	43%	30%	23%

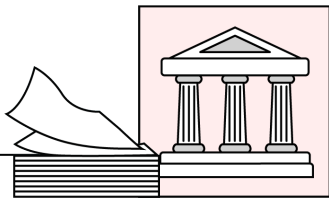
Source: Vanguard active plans with nondiscrimination testing completed during the past two years.



Types of employer contributions

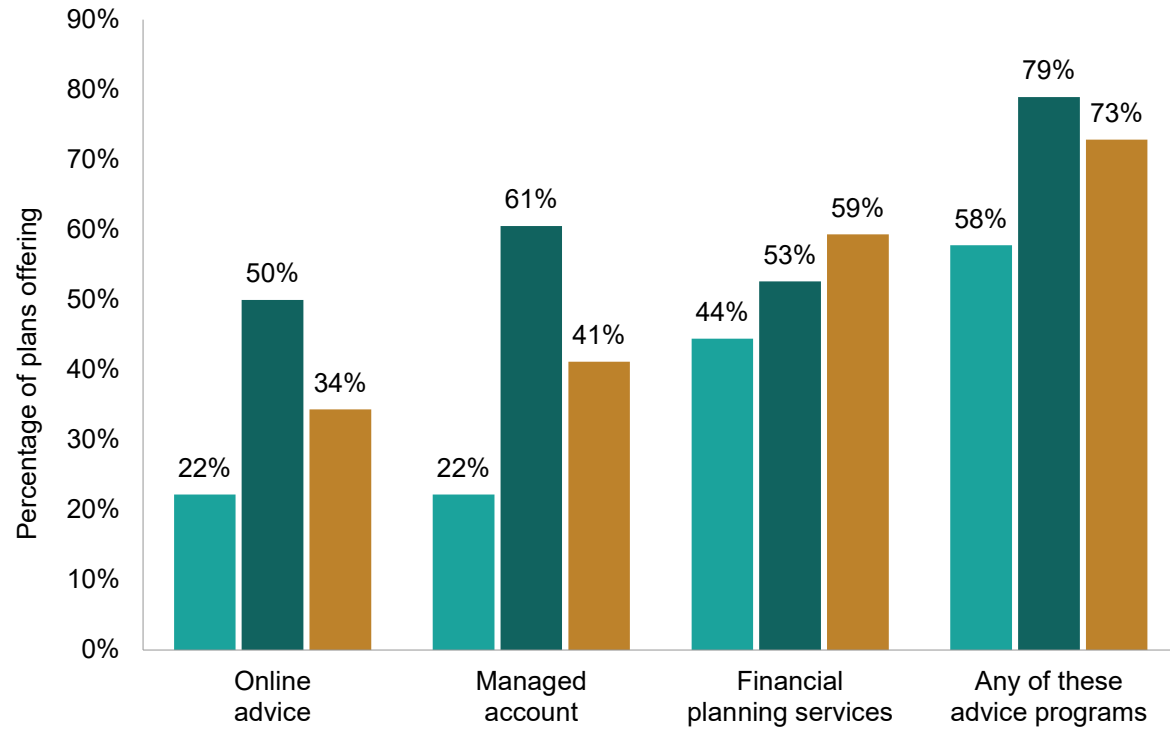


Source: Vanguard active plans with nondiscrimination testing completed during the past two years. Bar chart may not align precisely with percentages due to rounding.

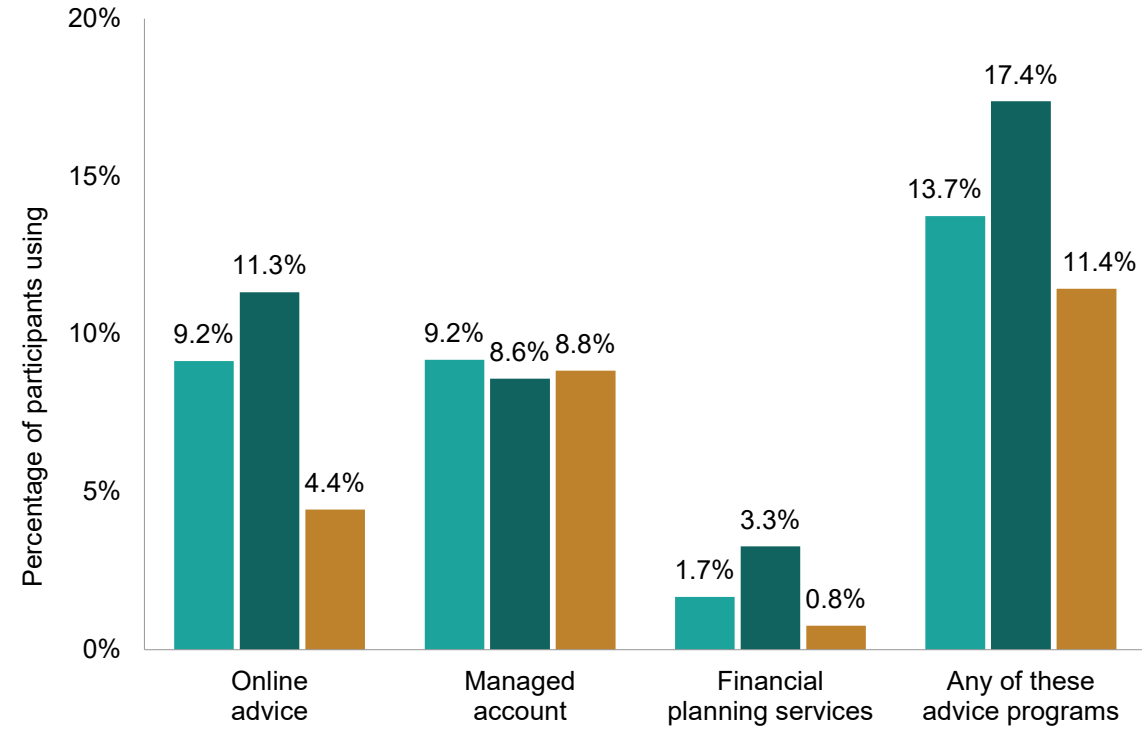


Advice services

Advice offered

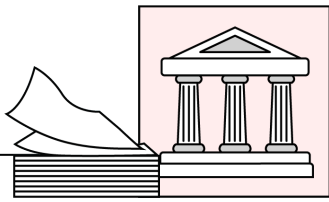


Advice used

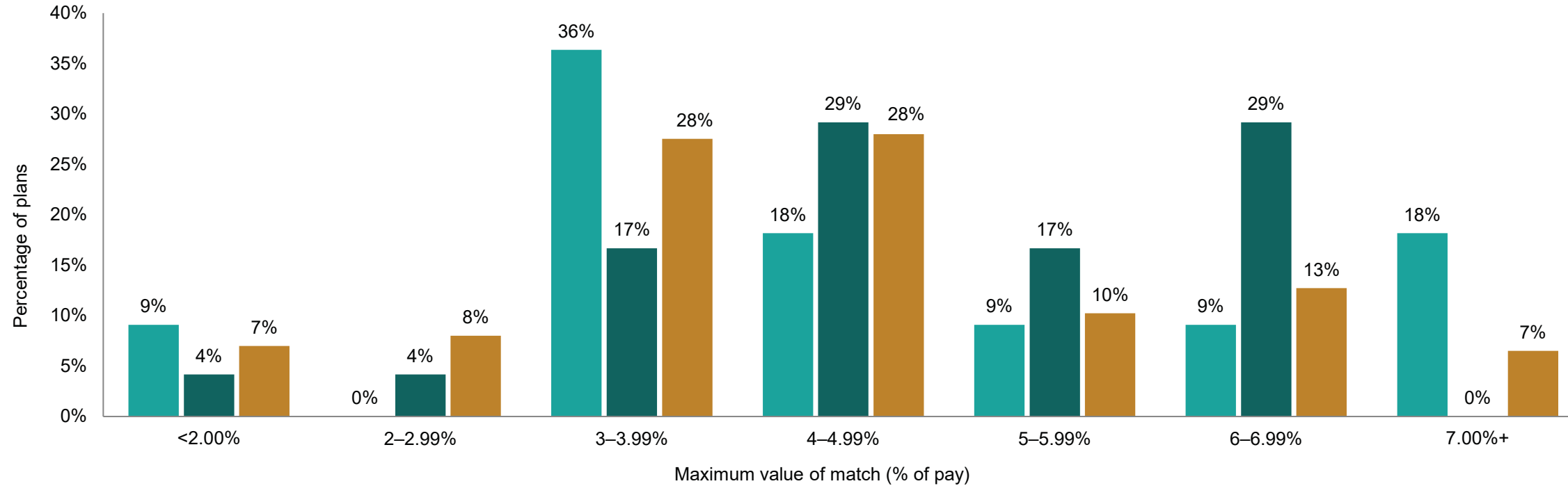


■ Finance <500 participants
 ■ Finance 500+ participants
 ■ Vanguard DC plans

Source: Vanguard, as of December 31, 2022.
 Bar chart may not align precisely with percentages due to rounding.

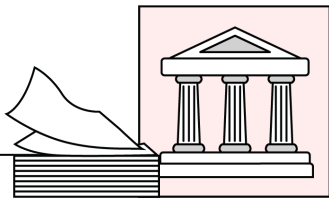


Matching contributions

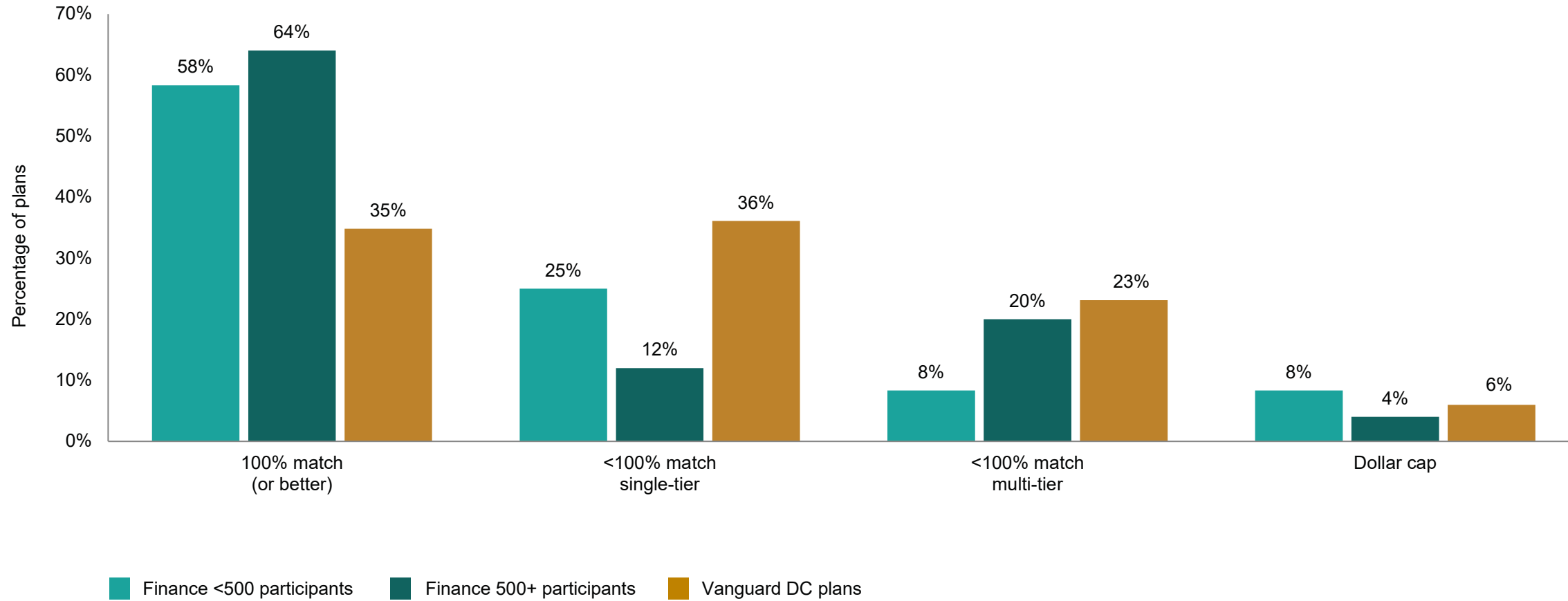


	Average value	Median value
Finance <500 participants	8.9%	4.0%
Finance 500+ participants	4.4%	4.3%
Vanguard DC plans	4.5%	4.0%

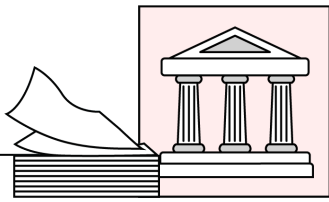
Source: Vanguard active plans with nondiscrimination testing completed during the past two years. Bar chart may not align precisely with percentages due to rounding.



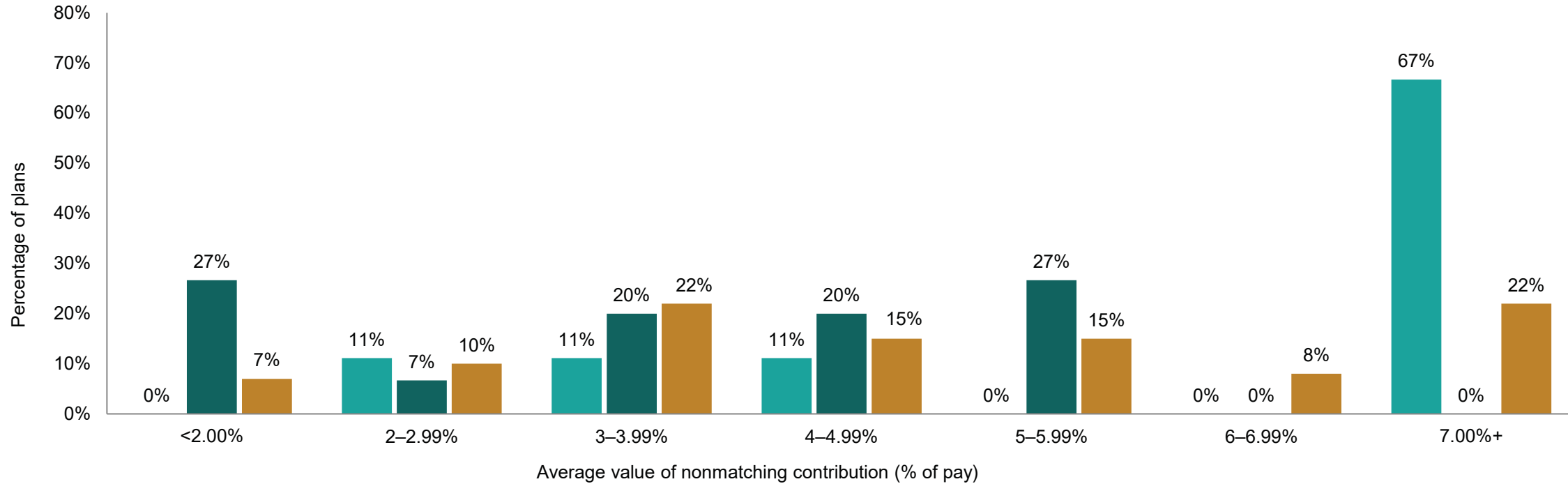
Matching formulas



Source: Vanguard active plans with nondiscrimination testing completed during the past two years. Bar chart may not align precisely with percentages due to rounding.

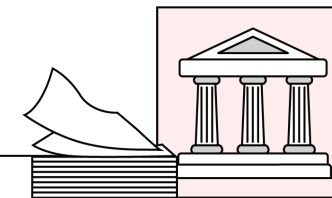


Nonmatching/Profit-sharing employer contributions



	Average value	Median value
Finance <500 participants	9.1%	10.0%
Finance 500+ participants	3.6%	3.9%
Vanguard DC plans	5.1%	4.1%

Source: Vanguard active plans with nondiscrimination testing completed during the past two years. Bar chart may not align precisely with percentages due to rounding.



Roth availability and use

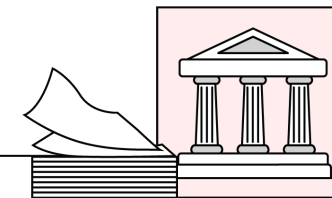
	Finance <500 participants	Finance 500+ participants	Vanguard DC plans
Percentage of plans offering Roth (among plans with elective deferrals)	86%	87%	80%
Percentage of plan assets invested in Roth*	4.8%	4.0%	3.8%
Distribution of percentage of plan assets in Roth			
<1%	22%	12%	19%
1–2%	28%	42%	36%
3–5%	28%	33%	27%
6–9%	11%	9%	13%
10–14%	6%	0%	4%
15%+	6%	3%	2%
Percentage of participants with assets in Roth*	24%	19%	16%
Percentage of participant assets in Roth**	18%	15%	17%
Distribution of participant assets in Roth			
1–24%	52%	62%	54%
25–49%	27%	24%	23%
50–74%	14%	10%	14%
75–99%	4%	3%	6%
100%	3%	0%	3%
Percentage of participants making Roth contributions (past 12 mo)***	24%	19%	15%
Percentage of participant contributions going to Roth**	73%	58%	55%
Distribution of percentage of participant contributions to Roth			
1–24%	10%	20%	22%
25–49%	15%	23%	26%
50–74%	16%	14%	15%
75–99%	5%	8%	7%
100%	54%	35%	30%

*Among plans offering Roth.

**Among participants using Roth.

***Among participants making elective deferrals.

Source: Vanguard, as of December 31, 2022.



Participant loans and in-service withdrawals

	Finance <500 participants	Finance 500+ participants	Vanguard DC plans
Outstanding loans*			
Percentage of participants with outstanding loans	9%	10%	12%
Percentage of account balance in loans	9%	7%	11%
Average loan balance	\$14,715	\$14,937	\$10,369
Number of outstanding loans per participant*			
No loans	91%	90%	88%
One loan	7%	7%	10%
Two loans	2%	3%	2%
Three+ loans	0%	1%	0%
Loans issued past 12 months*			
Average per 1,000 active participants	67	87	93
Average loan amount	\$16,091	\$13,732	\$10,701
Nonhardship withdrawals taken past 12 months**			
Average per 1,000 active participants	72	126	93
Average withdrawal amount	\$31,695	\$12,889	\$17,560
Hardship withdrawals taken past 12 months**			
Average per 1,000 active participants	16	15	49
Average withdrawal amount	\$16,980	\$9,728	\$5,126

*Among plans allowing loans.

**Among participants allowed in-service withdrawals.

Source: Vanguard, as of December 31, 2022.

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