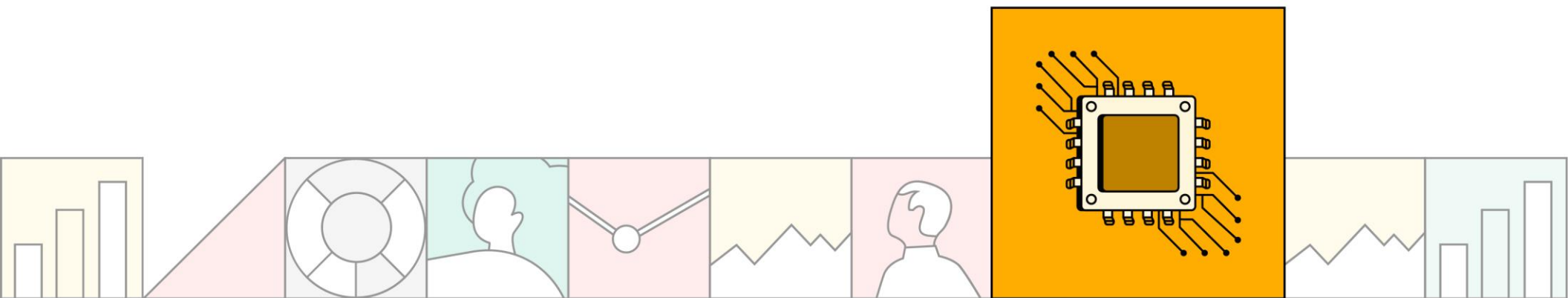


Custom DC plan benchmarks

Technology

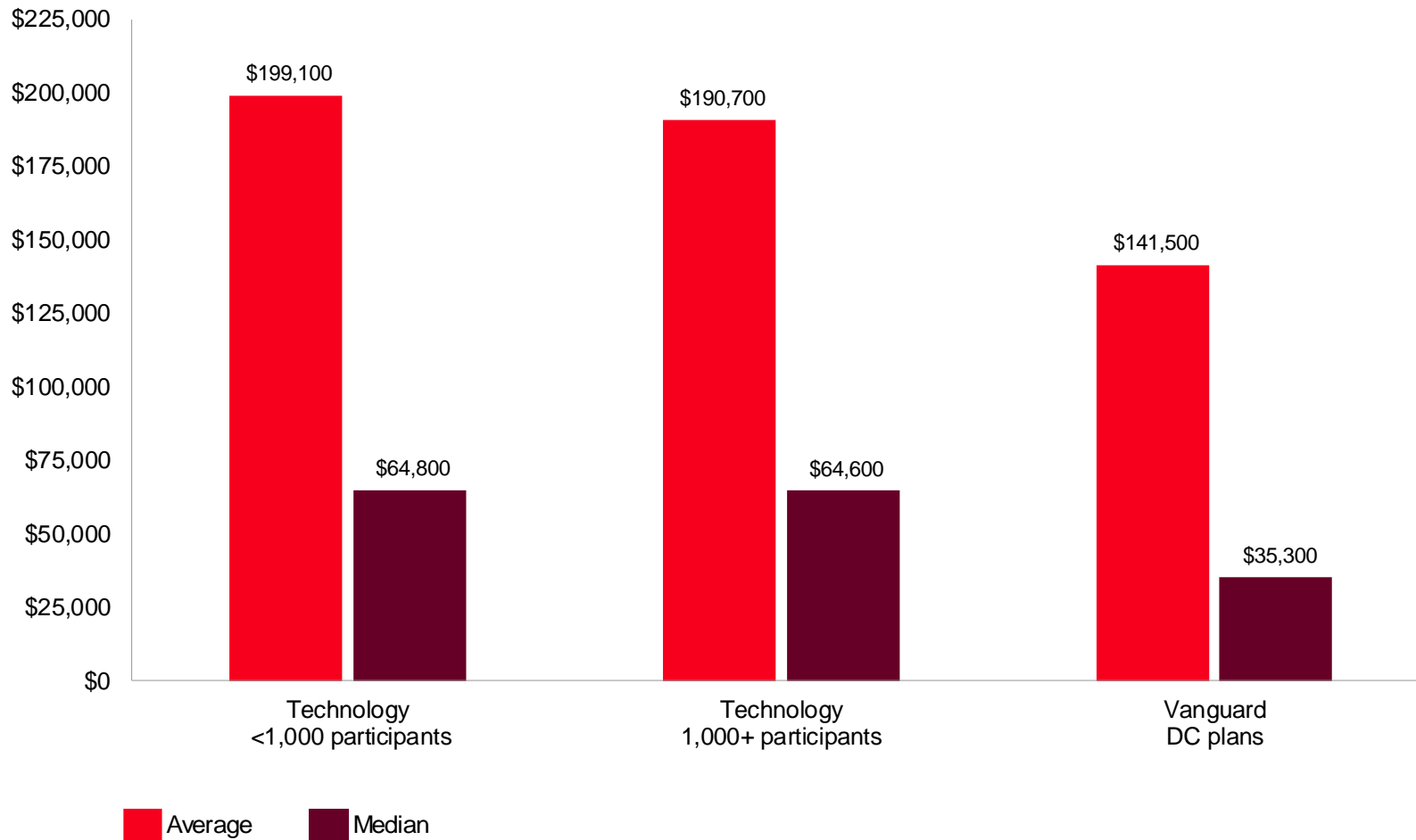


Benchmark population

	Technology <1,000 participants	Technology 1,000+ participants	Vanguard DC plans
Number of plans	201	132	1,675
Number of participants	75,554	883,738	4.7 million
Average number of participants	376	6,695	2,850
Median number of participants	311	2,999	530
Amount of assets	\$15 billion	\$168.5 billion	\$670 billion
Average assets	\$74.8 million	\$1.3 billion	\$401.4 million
Median assets	\$58.4 million	\$438.7 million	\$78.8 million

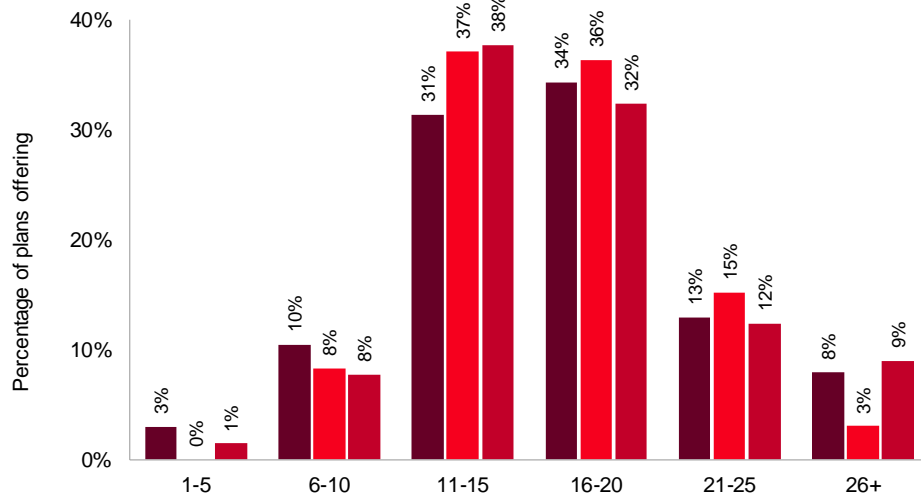
Technology firms, using the Workforce Information Council's methodology, are from industries with at least 2.5 times the level of STEM Core employment (excluding healthcare) as compared to the national average for all industries.

Participant balances

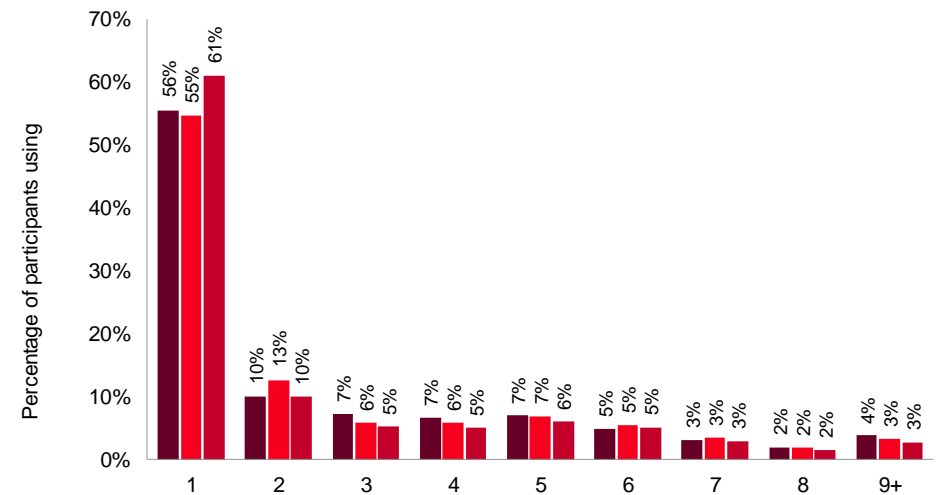


Number of fund options offered and used

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



Funds used per participant



	Average funds offered	Median funds offered
Technology <1,000 participants	17.5	16
Technology 1,000+ participants	17.0	16
Vanguard DC plans	17.5	16

	Average funds used	Median funds used
Technology <1,000 participants	2.7	1
Technology 1,000+ participants	2.6	1
Vanguard DC plans	2.4	1

Types of investment options offered and used*

	Technology <1,000 participants		Technology 1,000+ 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	99%	16%	100%	13%	99%	13%
Money market	68	9	66	7	69	6
Stable value / GIC	68	15	73	11	67	11
Bond	97%	21%	100%	20%	98%	18%
Active	76	11	88	7	79	7
Index	90	16	89	16	89	15
Inflation protected securities	34	4	37	4	34	3
Multi-sector	4	2	9	3	7	2
High-yield	19	6	14	4	17	4
International	22	5	20	2	19	3
Global	4	3	5	2	6	2
Emerging markets	1	<0.5	0	0	1	3
Balanced funds	99%	79%	100%	84%	99%	86%
Traditional balanced	61	15	52	14	63	13
Target-risk	14	27	6	4	13	9
Target-date	94	72	99	81	95	82
Company stock	4%	53%	27%	42%	8%	38%
Self-directed brokerage	10%	4%	27%	2%	20%	1%

*Among participants offered the option.
Source: Vanguard, as of December 31, 2021.

Types of investment options offered and used* (continued)

	Technology <1,000 participants		Technology 1,000+ 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	99%	41%	100%	36%	99%	32%
Domestic equity funds	99%	40%	100%	35%	99%	31%
Large-cap index	98	29	100	27	98	24
Large-cap active	89	23	90	17	91	17
Large-cap value	91	13	86	9	87	10
Large-cap growth	91	19	93	14	91	14
Large-cap blend	98	29	100	27	99	24
Mid-cap index	77	15	89	18	82	15
Mid-cap active	61	11	55	9	53	8
Small-cap index	61	14	56	14	63	11
Small-cap active	71	11	63	8	64	8
Socially responsible	12	2	20	3	13	6
International equity funds	96%	22%	100%	22%	97%	20%
Index international	77	14	90	16	77	14
Active international	82	14	84	12	83	11
Emerging markets	33	8	32	10	35	9
Global equity funds	17%	8%	15%	7%	18%	4%
Sector funds	30%	10%	29%	7%	36%	7%
REIT	26	8	25	7	32	6
Health care	8	9	2	9	9	6
Energy	7	9	3	6	5	4
Precious metals	2	2	3	2	2	2
Technology	1	10	3	6	3	6
Utilities	1	2	1	4	1	2
Natural resources	0	0	1	1	1	4
Financials	0	0	0	0	<0.5	1
Communications	0	0	0	0	<0.5	1
Commodities	0	0	0	0	<0.5	6
Consumer	1	1	1	1	<0.5	2
Industrials	0	0	0	0	<0.5	1

* Among participants offered the option.

Source: Vanguard, as of December 31, 2021.

Target-date funds availability and use

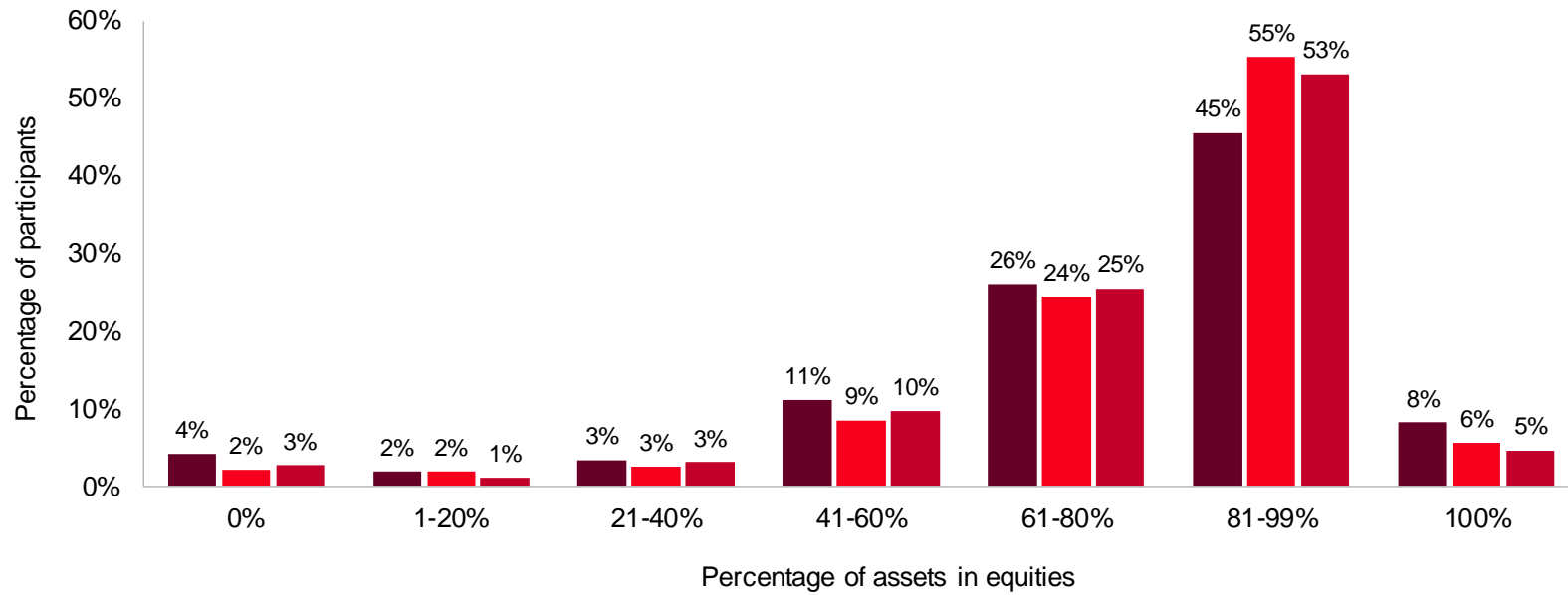
	Technology <1,000 participants	Technology 1,000+ participants	Vanguard DC plans
Percentage of plans offering	94%	99%	95%
Plan assets invested*	34%	40%	38%
Percentage of plan assets*			
<10%	4%	2%	5%
10–19%	15%	7%	11%
20–29%	26%	18%	19%
30–39%	20%	28%	23%
40–49%	12%	18%	14%
50%+	24%	27%	28%
Percentage of participants using *	72%	81%	82%
Percentage of participant assets**	62%	60%	60%
Percentage of participant assets in target-date funds**			
1–24%	11%	12%	10%
25–49%	9%	10%	9%
50–74%	5%	7%	4%
75–99%	5%	7%	6%
100%	70%	64%	71%
Percentage of participants owning**			
One target-date fund only	68%	62%	69%
One target-date fund plus other funds	25%	31%	25%
Two or more target-date funds only	3%	2%	2%
Two or more target-date funds plus other funds	5%	5%	4%

*Among plans offering target-date options.

**Among participants owning target-date options.

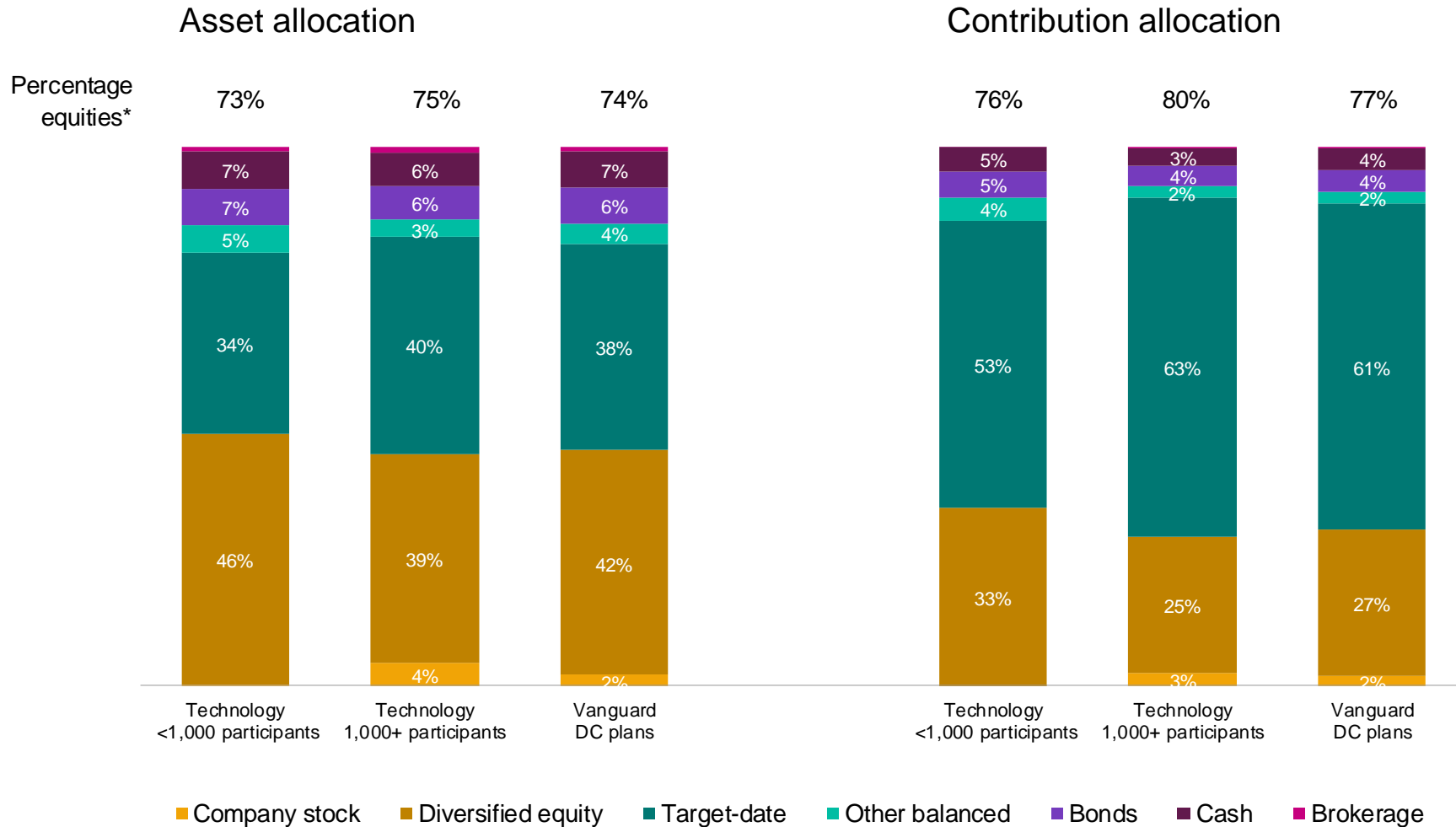
Source: Vanguard, as of December 31, 2021.

Participant equity exposure



	Average percentage in equities	Median percentage in equities
Technology <1,000 participants	75%	85%
Technology 1,000+ participants	78%	87%
Vanguard DC plans	77%	87%

Asset and contribution allocations



*Equities include company stock, diversified equity, and the equity portion of balanced funds.
Source: Vanguard, as of December 31, 2021.

Participants with professionally managed allocations

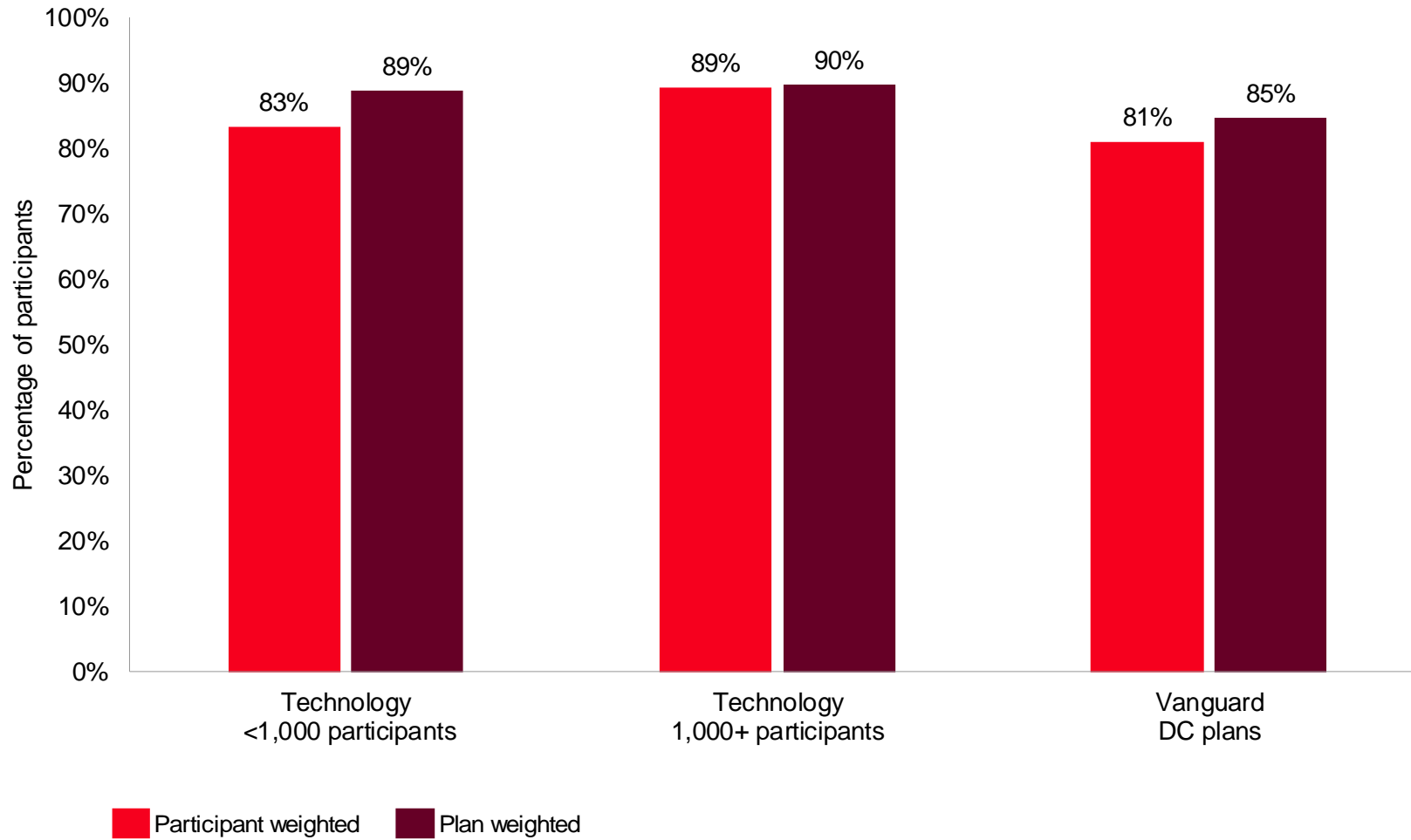
	Technology <1,000 participants	Technology 1,000+ participants	Vanguard DC plans
All participants			
Single target-date fund	48%	50%	56%
Single balanced fund	1%	1%	1%
Managed account program	4%	7%	7%
Total	53%	58%	64%
New plan entrants during the year			
Single target-date fund	77%	76%	85%
Single balanced fund	1%	1%	1%
Managed account program	1%	2%	2%
Total	79%	79%	88%

Automatic enrollment options*

	Technology <1,000 participants	Technology 1,000+ participants	Vanguard DC plans
Automatic enrollment*			
Number of plans	99	98	859
Percentage of plans	53%	75%	56%
Default automatic enrollment rate			
1 percent	1%	3%	1%
2 percent	3%	2%	5%
3 percent	25%	31%	36%
4 percent	19%	10%	14%
5 percent	19%	12%	17%
6 percent or more	32%	42%	27%
Default automatic increase rate			
1 percent	58%	70%	67%
2 percent	4%	1%	2%
Voluntary election	29%	28%	24%
Service feature not offered	9%	1%	7%
Default automatic increase cap			
<6 percent	3%	4%	2%
6 to 9 percent	13%	4%	18%
10 to 14 percent	49%	53%	48%
15 to 19 percent	16%	26%	18%
20+ percent	8%	11%	6%
No cap	10%	1%	8%
Default fund			
Target-date fund	98%	99%	98%
Other balanced fund	0%	1%	1%
Money market or stable value fund	1%	0%	1%

*Limited to plans using Vanguard's automatic enrollment service.
Source: Vanguard, as of December 31, 2021.

Participation rates



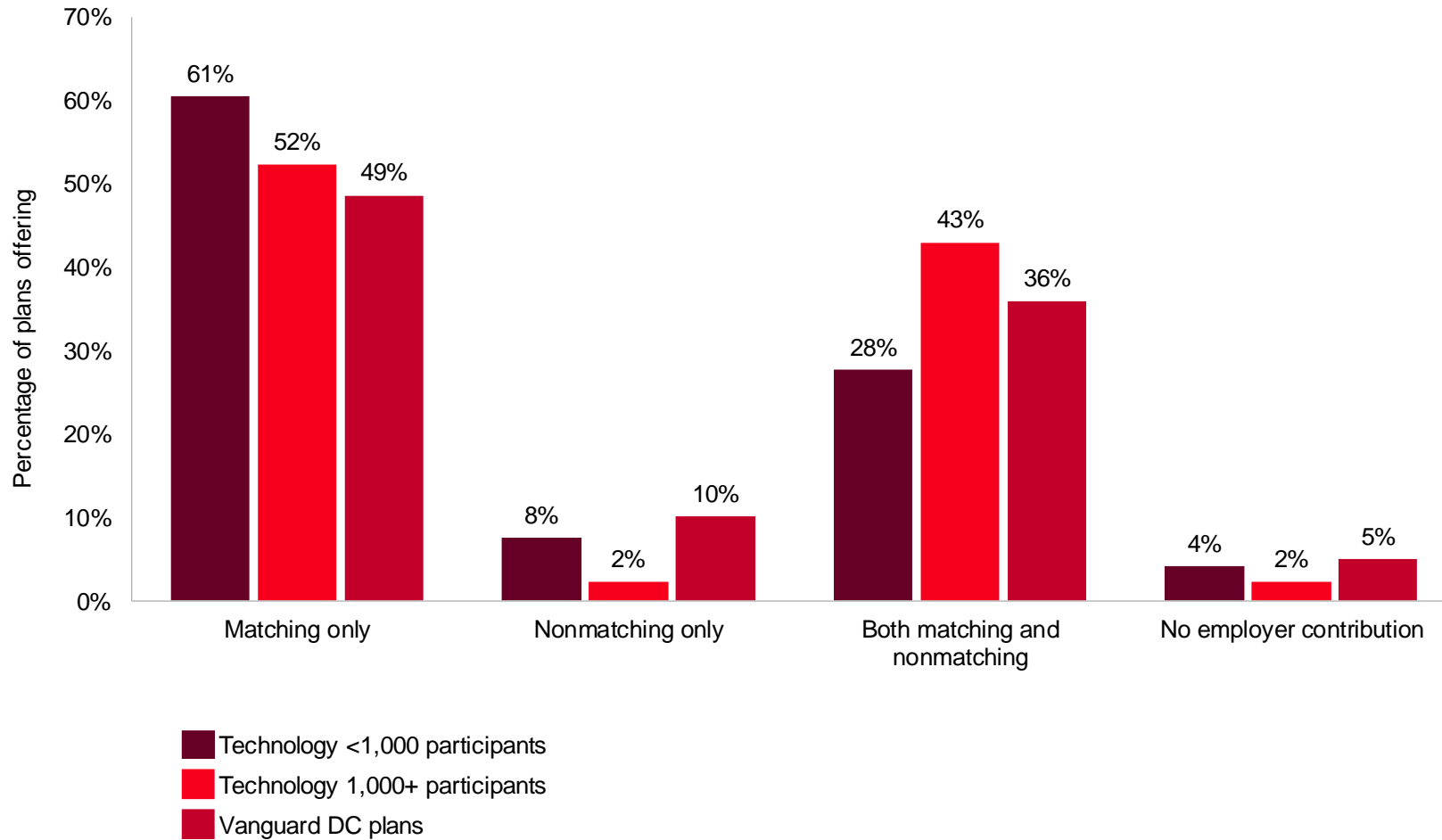
Participant deferral rates

	Technology <1,000 participants	Technology 1,000+ participants	Vanguard DC plans
Deferral rates			
Average	8.4%	8.5%	7.3%
Median	7.2%	7.7%	6.1%
Distribution of rates			
<4.0%	16%	16%	26%
4.0% – 6.0%	19%	16%	20%
6.1% – 9.9%	35%	38%	31%
10.0% – 14.9%	21%	23%	16%
15.0%+	9%	8%	7%

Aggregate participant and employer contribution rates

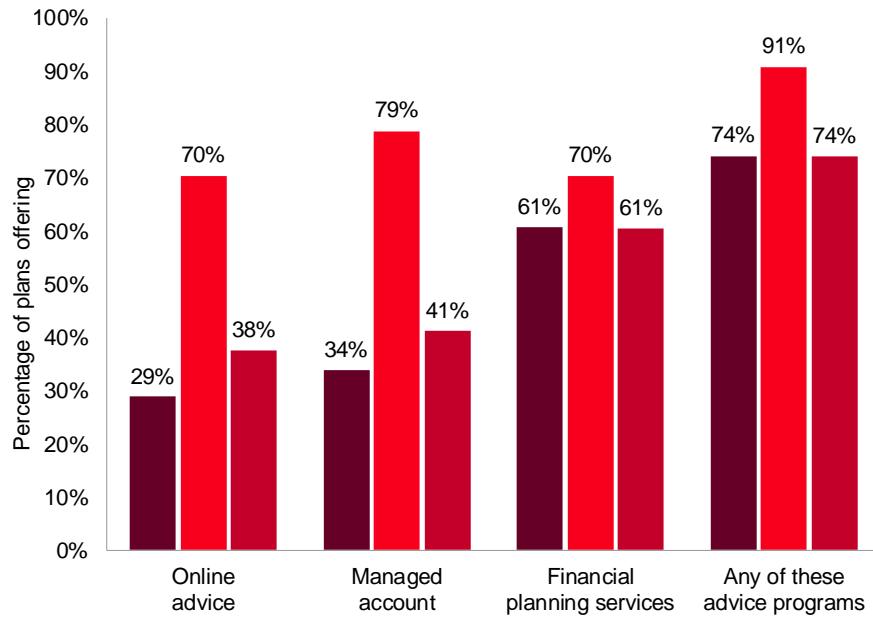
	Technology <1,000 participants	Technology 1,000+ participants	Vanguard DC plans
Total savings rate			
Average	13.1%	13.7%	11.2%
Median	12.5%	12.8%	10.4%
Distribution of rates			
<5.0%	9%	10%	18%
5.0% – 8.9%	18%	18%	21%
9.0% – 11.9%	20%	23%	22%
12.0% – 14.9%	19%	18%	16%
15.0% +	33%	31%	23%

Types of employer contributions

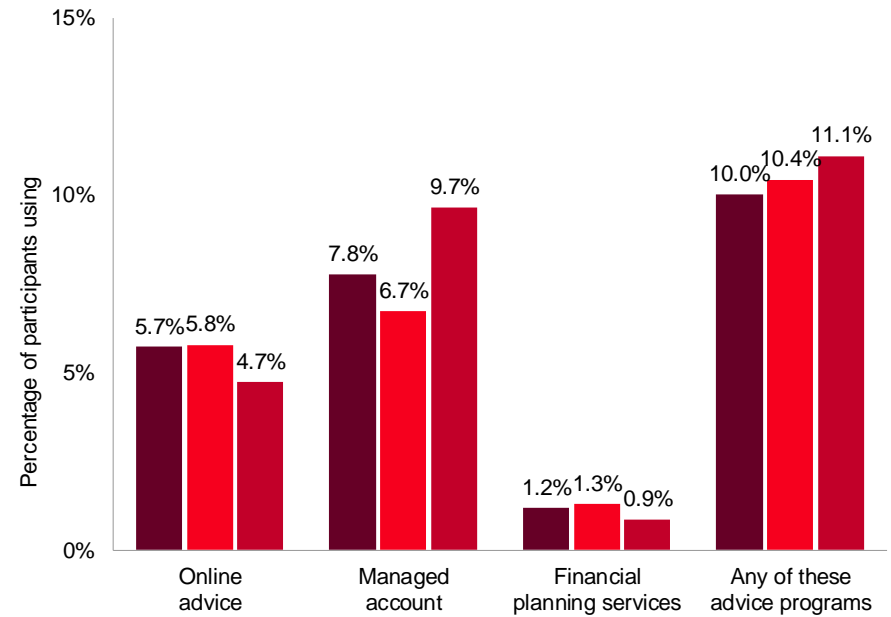


Advice services

Advice offered

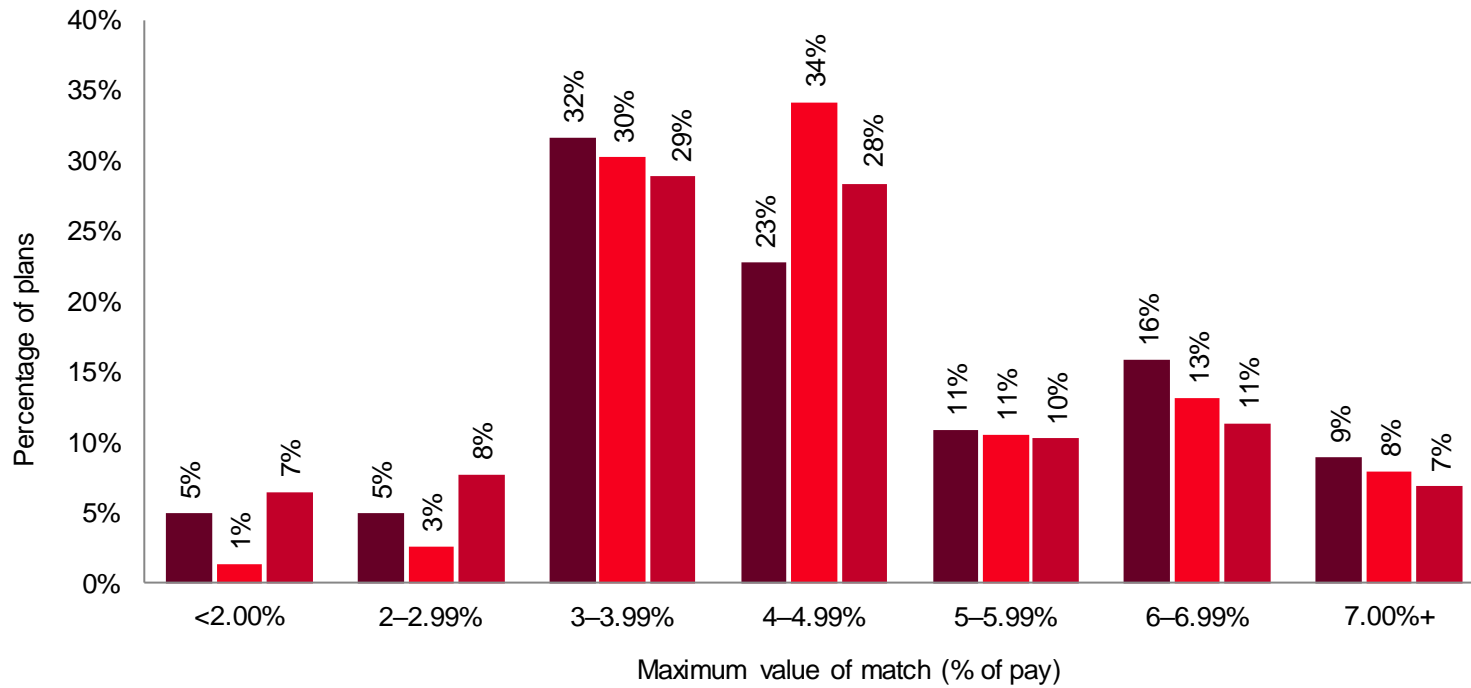


Advice used



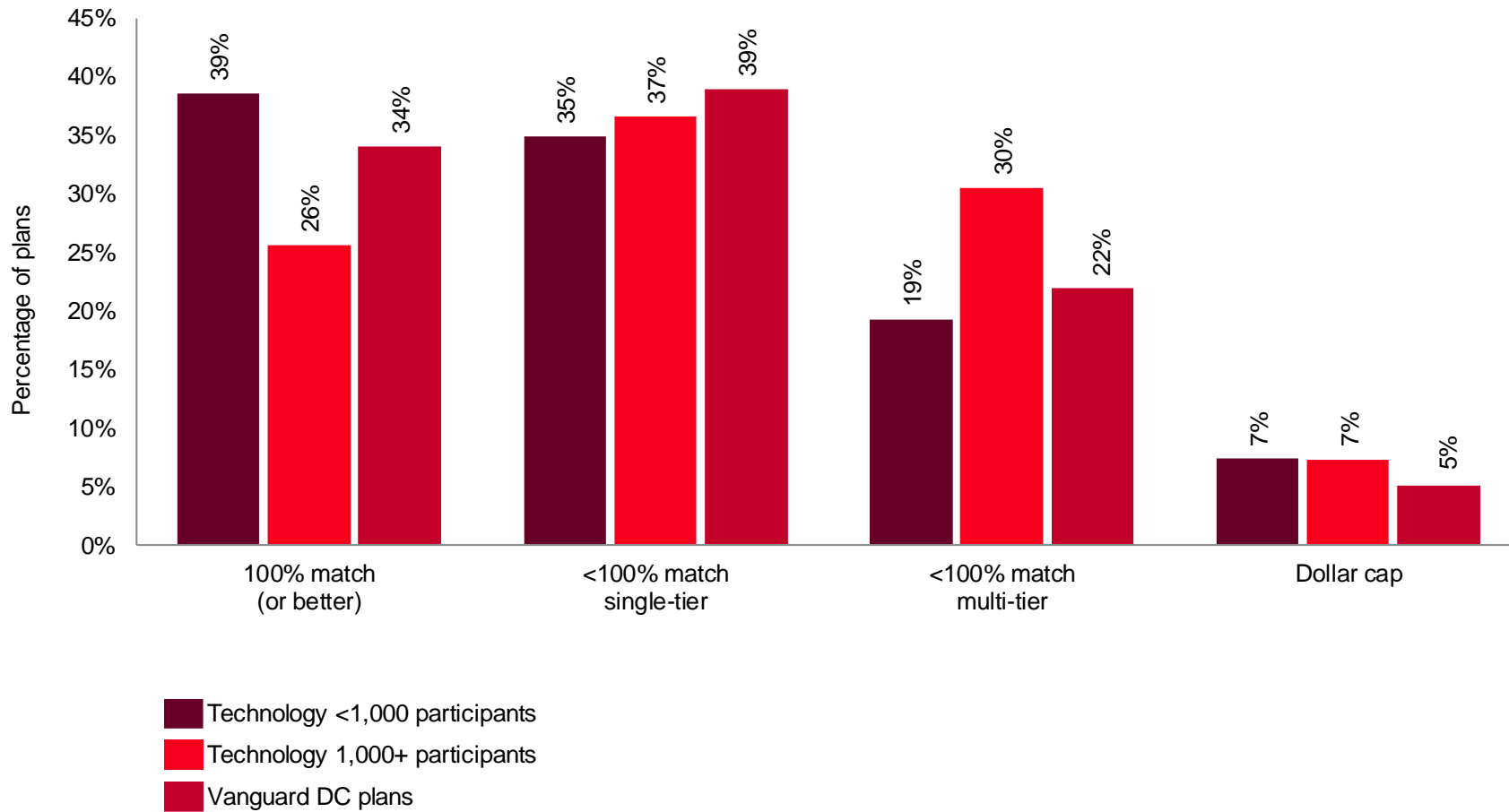
- Technology <1,000 participants
- Technology 1,000+ participants
- Vanguard DC plans

Matching contributions

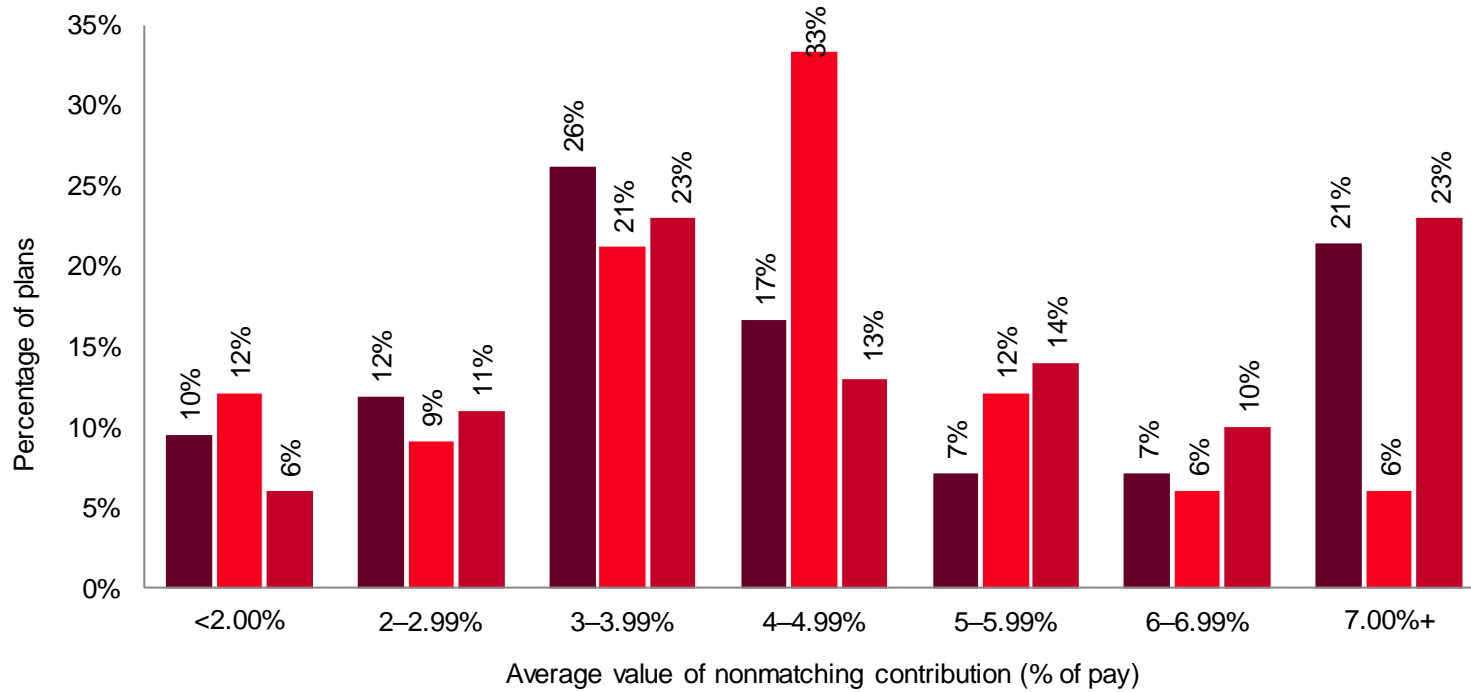


	Average value	Median value
Technology <1,000 participants	5.5%	4.0%
Technology 1,000+ participants	5.1%	4.0%
Vanguard DC plans	4.4%	4.0%

Matching formulas



Nonmatching / profit-sharing employer contributions



	Average value	Median value
Technology <1,000 participants	5.5%	4.2%
Technology 1,000+ participants	4.6%	4.1%
Vanguard DC plans	5.1%	4.2%

Roth availability and use

	Technology <1,000 participants	Technology 1,000+ participants	Vanguard DC plans
Percentage of plans offering Roth	79%	92%	77%
Percentage of plan assets invested in Roth*	3.8%	4.8%	3.5%
Distribution of percentage of plan assets in Roth			
<1%	17%	17%	20%
1–2%	34%	35%	38%
3–5%	25%	34%	25%
6–9%	20%	8%	12%
10–14%	3%	4%	3%
15%+	1%	2%	2%
Percentage of participants with assets in Roth*	19%	21%	16%
Percentage of participant assets in Roth**	17%	18%	17%
Distribution of participant assets in Roth			
1–24%	53%	55%	55%
25–49%	24%	23%	22%
50–74%	17%	15%	14%
75–99%	5%	5%	6%
100%	2%	2%	3%
Percentage of participants making Roth contributions (past 12 mo)***	21%	17%	16%
Percentage of participant contributions going to Roth**	58%	56%	53%
Distribution of percentage of participant contributions to Roth			
1–24%	19%	22%	23%
25–49%	22%	23%	25%
50–74%	16%	14%	15%
75–99%	6%	8%	7%
100%	37%	33%	30%

*Among plans offering Roth.

**Among participants using Roth.

***Among participants making elective deferrals.

Source: Vanguard, as of December 31, 2021.

Participant loans and in-service withdrawals

	Technology <1,000 participants	Technology 1,000+ participants	Vanguard DC plans
Outstanding loans*			
Percentage of participants with outstanding loans	10%	9%	13%
Percentage of account balance in loans	7%	8%	8%
Average loan balance	12,757	12,733	10,614
Number of outstanding loans per participant*			
No loans	90%	91%	87%
One loan	8%	7%	10%
Two loans	2%	2%	3%
Three+ loans	0%	0%	0%
Loans issued past 12 months*			
Average per 1,000 active participants	92	68	91
Average loan amount	15,099	14,430	11,498
Nonhardship withdrawals taken past 12 months**			
Average per 1,000 active participants	102	129	96
Average withdrawal amount	36,866	19,914	22,018
Hardship withdrawals taken past 12 months**			
Average per 1,000 active participants	24	20	36
Average withdrawal amount	9,565	8,321	6,074

*Among plans allowing loans.

**Among participants allowed in-service withdrawals.

Source: Vanguard, as of December 31, 2021.

Important information

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