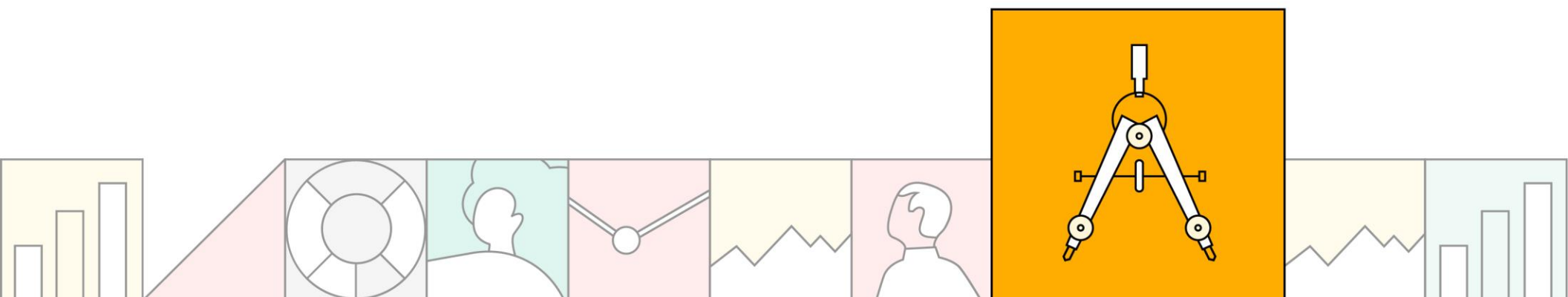


Custom DC plan benchmarks

Architecture and engineering

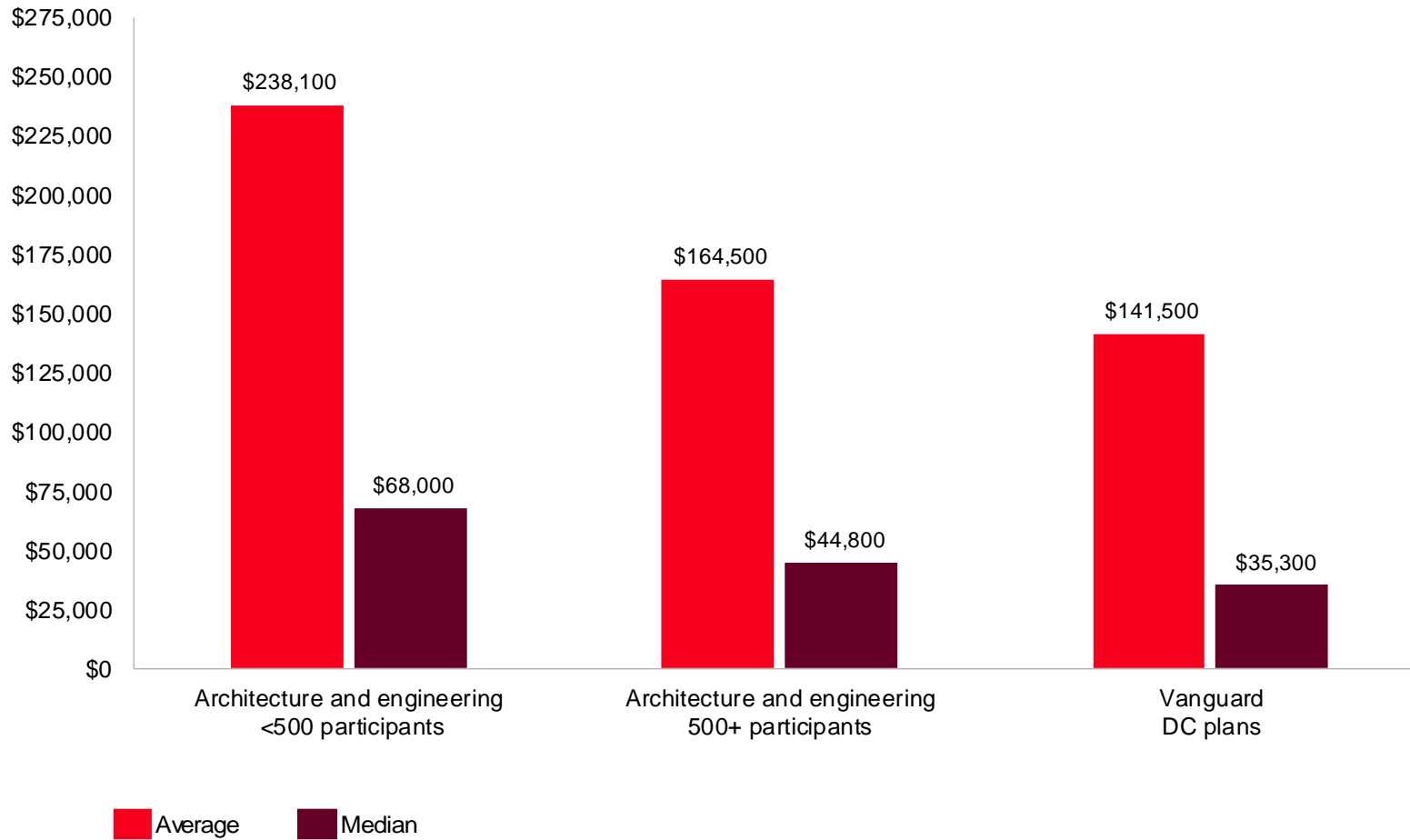


Benchmark population

	Architecture and engineering <500 participants	Architecture and engineering 500+ participants	Vanguard DC plans
Number of plans	27	30	1,675
Number of participants	5,414	122,363	4.7 million
Average number of participants	201	4,079	2,850
Median number of participants	167	1,463	530
Amount of assets	\$1.3 billion	\$20.1 billion	\$670 billion
Average assets	\$47.7 million	\$671.1 million	\$401.4 million
Median assets	\$43.1 million	\$254.8 million	\$78.8 million

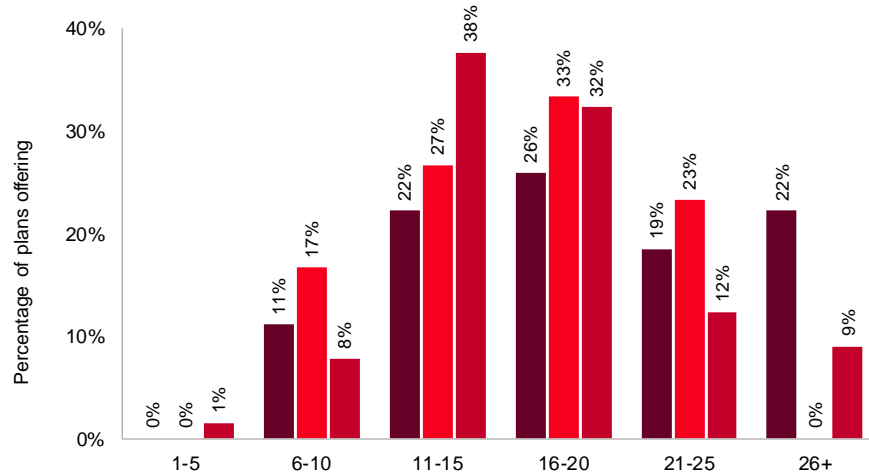
Architectural, engineering & related services is defined by the NAICS (North American Industry Classification System) code 5413.

Participant balances

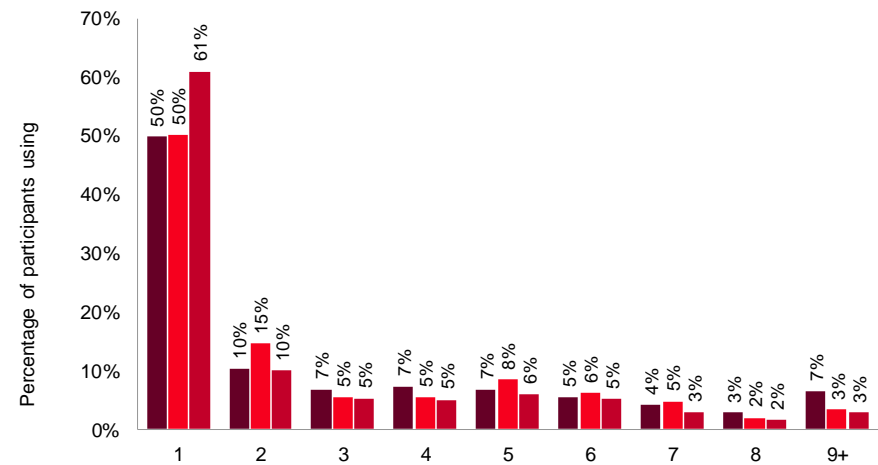


Number of fund options offered and used

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



Funds used per participant



	Average funds offered	Median funds offered	Average funds used	Median funds used
Architecture and engineering <500 participants	21.6	18	3.1	2
Architecture and engineering 500+ participants	16.4	17	2.8	1
Vanguard DC plans	17.5	16	2.4	1

Types of investment options offered and used*

	Architecture and engineering <500 participants		Architecture and engineering 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%	17%	100%	17%	99%	13%
Money market	70	10	53	5	69	6
Stable value / GIC	70	15	90	16	67	11
Bond	96%	23%	100%	23%	98%	18%
Active	81	15	80	7	79	7
Index	89	14	87	20	89	15
Inflation protected securities	44	6	33	4	34	3
Multi-sector	0	0	3	8	7	2
High-yield	30	8	17	3	17	4
International	19	2	27	2	19	3
Global	4	2	3	2	6	2
Emerging markets	0	0	0	0	1	3
Balanced funds	100%	79%	100%	82%	99%	86%
Traditional balanced	81	20	60	12	63	13
Target-risk	26	29	0	0	13	9
Target-date	93	69	100	79	95	82
Company stock	4%	100%	10%	80%	8%	38%
Self-directed brokerage	7%	3%	10%	2%	20%	1%

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

Types of investment options offered and used* (continued)

	Architecture and engineering <500 participants		Architecture and engineering 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%	46%	100%	39%	99%	32%
Domestic equity funds	100%	44%	100%	38%	99%	31%
Large-cap index	100	31	100	29	98	24
Large-cap active	96	27	87	21	91	17
Large-cap value	96	17	83	13	87	10
Large-cap growth	96	21	97	13	91	14
Large-cap blend	100	31	100	29	99	24
Mid-cap index	89	17	97	22	82	15
Mid-cap active	70	13	57	13	53	8
Small-cap index	81	16	70	18	63	11
Small-cap active	70	12	73	10	64	8
Socially responsible	30	4	23	1	13	6
International equity funds	100%	24%	100%	24%	97%	20%
Index international	81	14	93	14	77	14
Active international	89	18	87	16	83	11
Emerging markets	44	12	27	7	35	9
Global equity funds	37%	13%	13%	5%	18%	4%
Sector funds	52%	14%	37%	8%	36%	7%
REIT	52	11	33	8	32	6
Health care	19	12	0	0	9	6
Energy	15	11	3	7	5	4
Precious metals	4	1	3	5	2	2
Technology	4	12	0	0	3	6
Utilities	4	2	3	4	1	2
Natural resources	0	0	0	0	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	4	1	0	0	<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

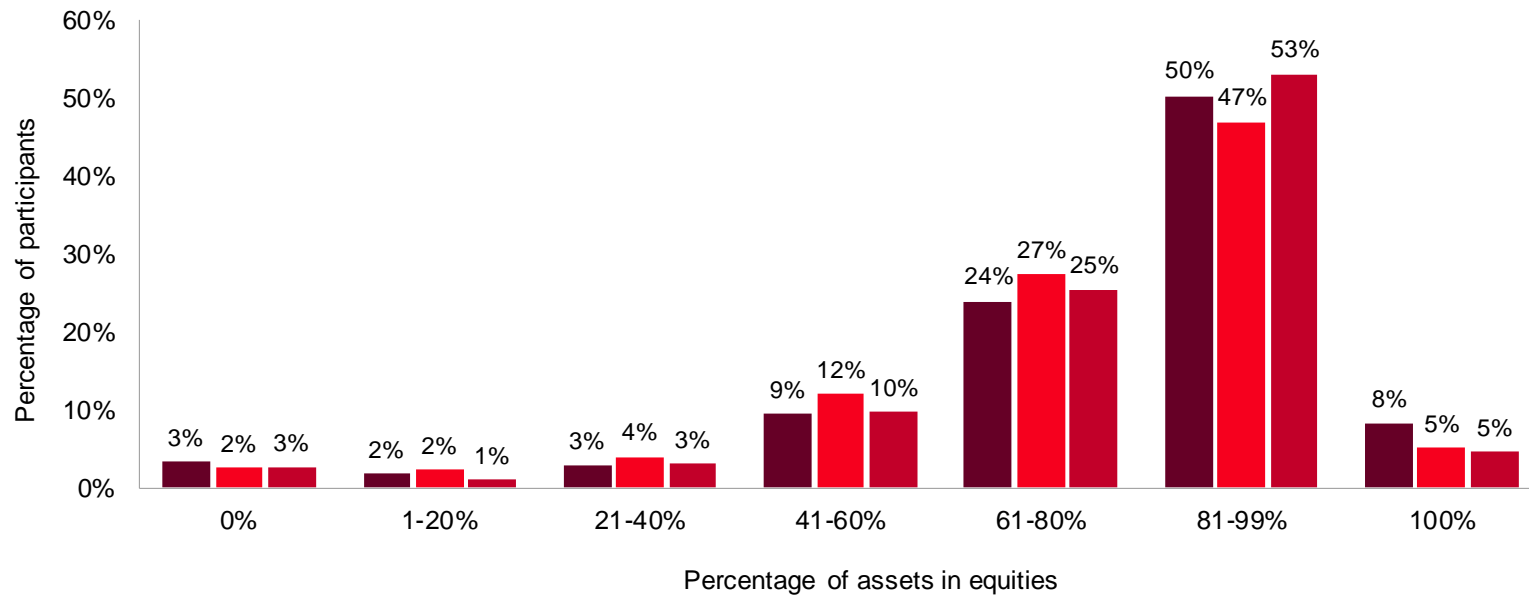
	Architecture and engineering <500 participants	Architecture and engineering 500+ participants	Vanguard DC plans
Percentage of plans offering	93%	100%	95%
Plan assets invested*	27%	37%	38%
Percentage of plan assets*			
<10%	0%	0%	5%
10–19%	28%	7%	11%
20–29%	40%	17%	19%
30–39%	12%	47%	23%
40–49%	8%	13%	14%
50%+	12%	17%	28%
Percentage of participants using *	69%	79%	82%
Percentage of participant assets**	55%	55%	60%
Percentage of participant assets in target-date funds**			
1–24%	13%	15%	10%
25–49%	9%	10%	9%
50–74%	5%	6%	4%
75–99%	6%	10%	6%
100%	67%	60%	71%
Percentage of participants owning**			
One target-date fund only	64%	58%	69%
One target-date fund plus other funds	29%	35%	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.

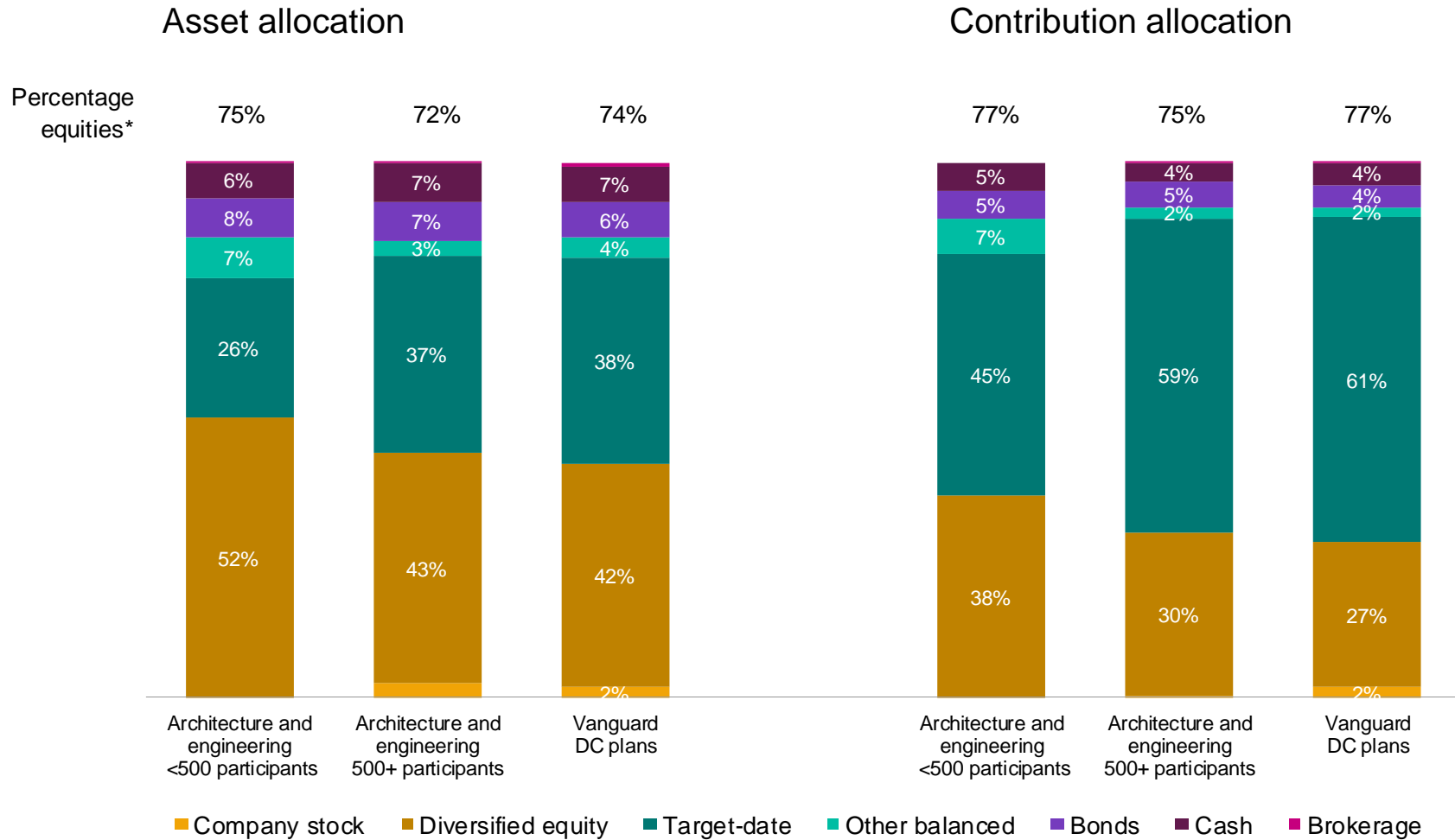
Source: Vanguard, as of December 31, 2021.

Participant equity exposure



	Average percentage in equities	Median percentage in equities
Architecture and engineering <500 participants	77%	87%
Architecture and engineering 500+ participants	74%	83%
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

	Architecture and engineering <500 participants	Architecture and engineering 500+ participants	Vanguard DC plans
All participants			
Single target-date fund	42%	46%	56%
Single balanced fund	2%	<0.5%	1%
Managed account program	3%	7%	7%
Total	47%	53%	64%
New plan entrants during the year			
Single target-date fund	77%	82%	85%
Single balanced fund	1%	<0.5%	1%
Managed account program	1%	2%	2%
Total	79%	84%	88%

Automatic enrollment options*

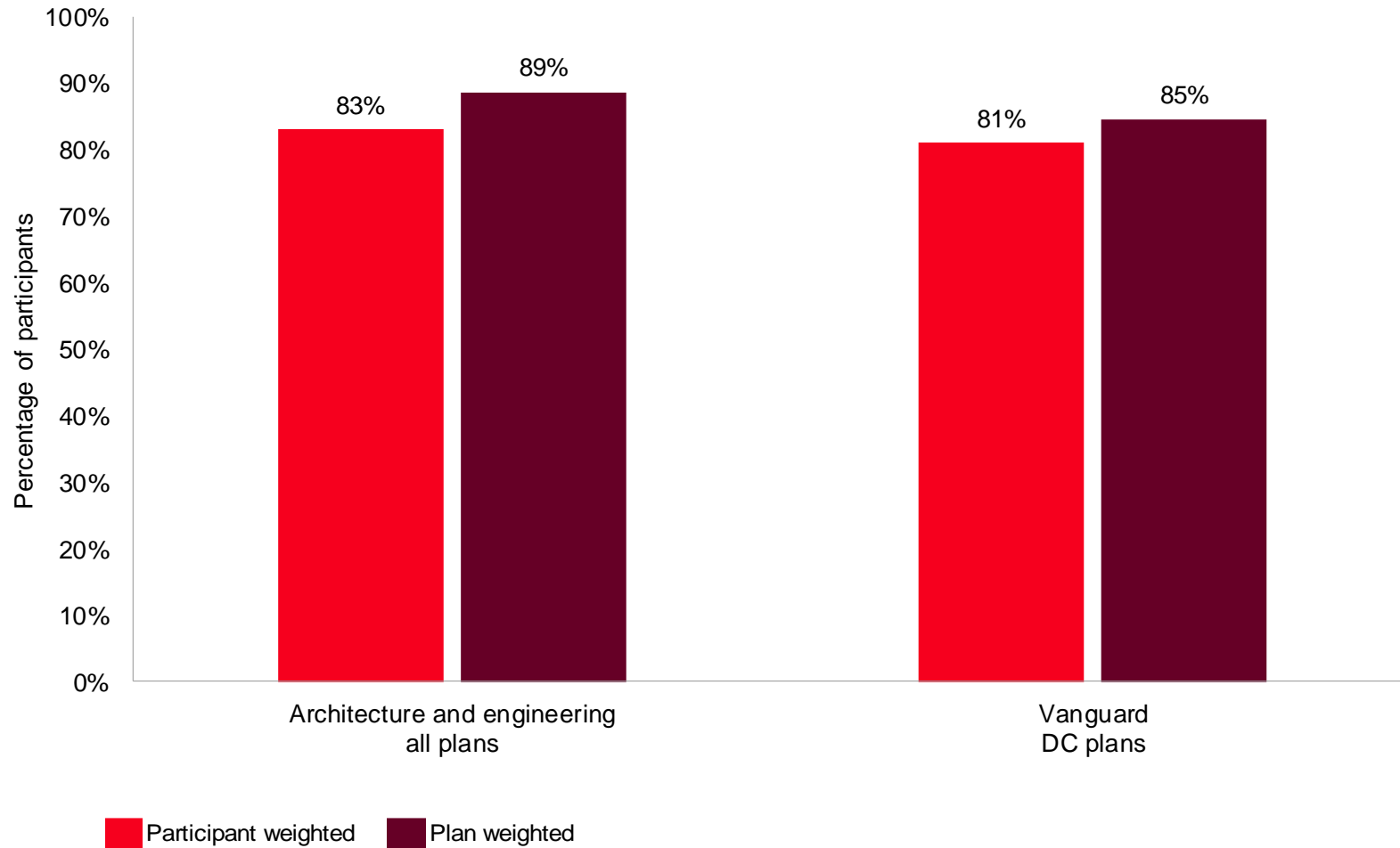
	Architecture and engineering all plans	Vanguard DC plans
Automatic enrollment*		
Number of plans	33	859
Percentage of plans	60%	56%
Default automatic enrollment rate		
1 percent	0%	1%
2 percent	0%	5%
3 percent	42%	36%
4 percent	21%	14%
5 percent	3%	17%
6 percent or more	33%	27%
Default automatic increase rate		
1 percent	67%	67%
2 percent	3%	2%
Voluntary election	24%	24%
Service feature not offered	6%	7%
Default automatic increase cap		
<6 percent	4%	2%
6 to 9 percent	0%	18%
10 to 14 percent	65%	48%
15 to 19 percent	17%	18%
>20 percent	4%	6%
No cap	9%	8%
Default fund		
Target-date fund	100%	98%
Other balanced fund	0%	1%
Money market or stable value fund	0%	1%

*Limited to plans using Vanguard's automatic enrollment service.

Note – Total industry shown due to insufficient sample.

Source: Vanguard, as of December 31, 2021.

Participation rates



Note – Total industry shown due to insufficient sample.

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

Participant deferral rates

	Architecture and engineering all plans	Vanguard DC plans
Deferral rates		
Average	8.1%	7.3%
Median	6.9%	6.1%
Distribution of rates		
<4.0%	21%	26%
4.0% – 6.0%	20%	20%
6.1% – 9.9%	30%	31%
10.0% – 14.9%	20%	16%
15.0%+	10%	7%

Note – Total industry shown due to insufficient sample.

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

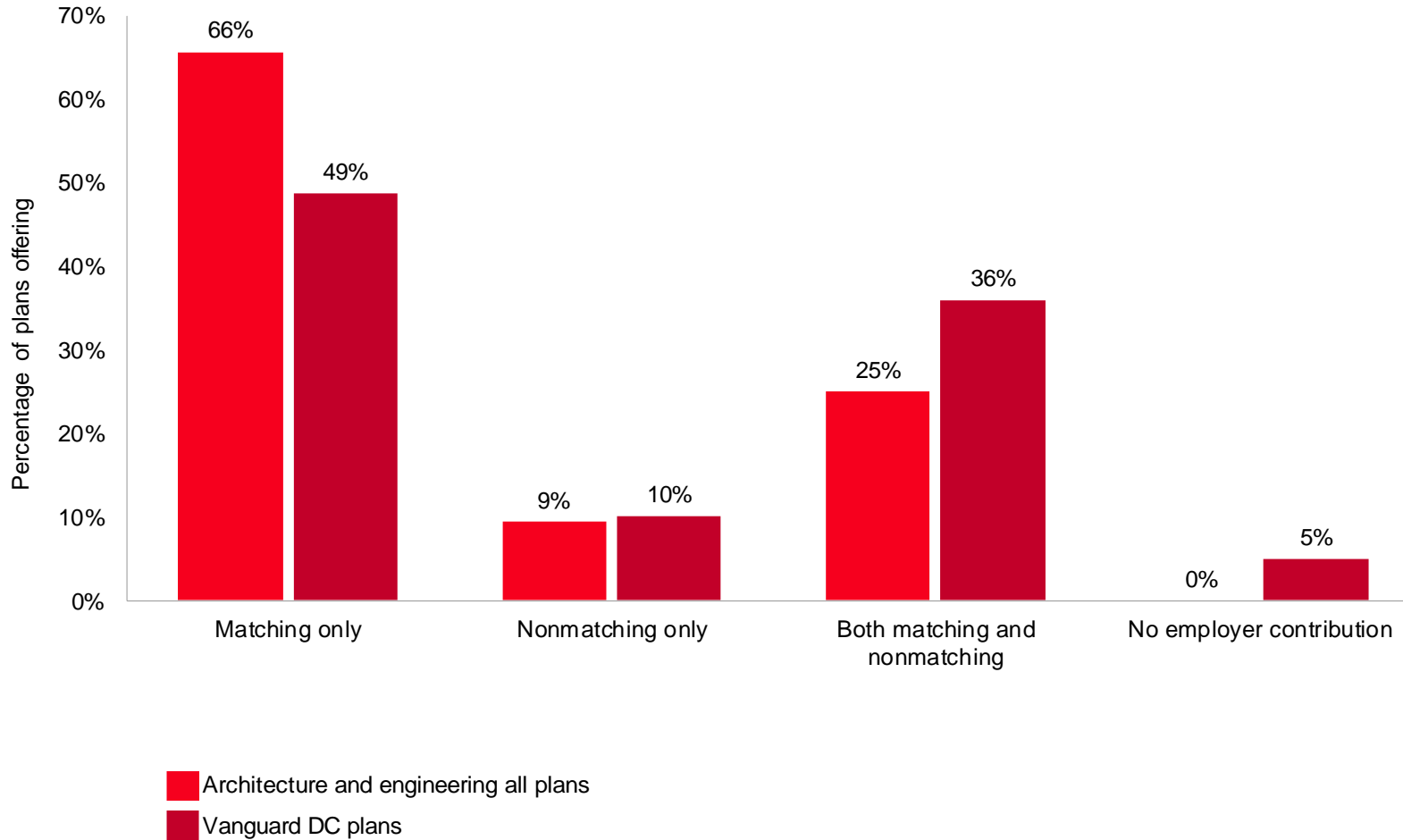
Aggregate participant and employer contribution rates

	Architecture and engineering all plans	Vanguard DC plans
Total savings rate		
Average	12.6%	11.2%
Median	11.9%	10.4%
Distribution of rates		
<5.0%	12%	18%
5.0% – 8.9%	18%	21%
9.0% – 11.9%	21%	22%
12.0% – 14.9%	17%	16%
15.0% +	32%	23%

Note – Total industry shown due to insufficient sample.

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

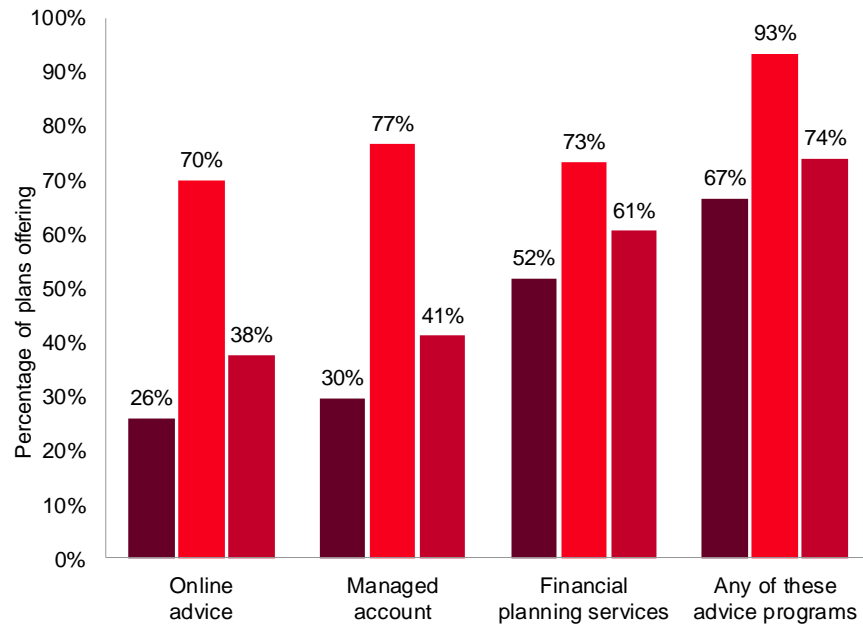
Types of employer contributions



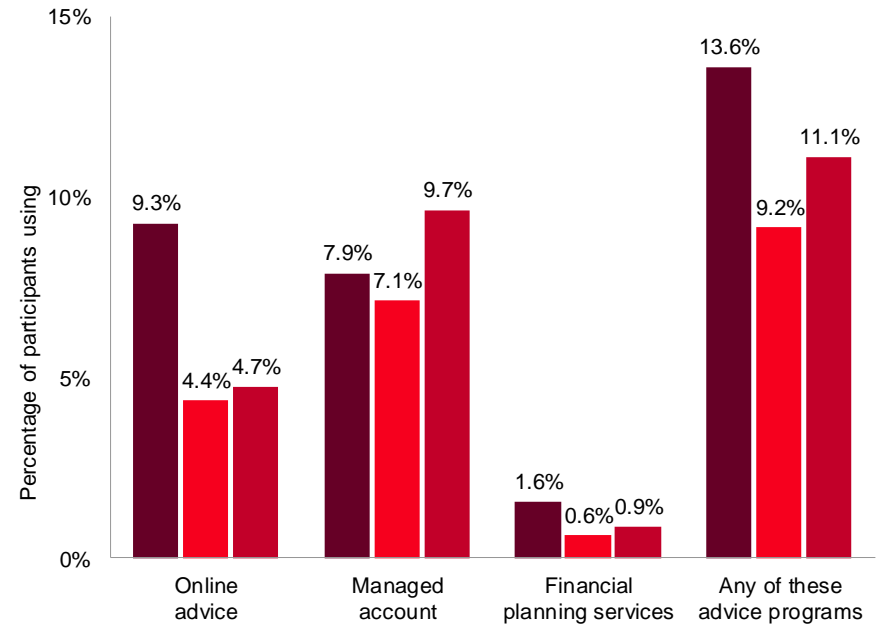
Note – Total industry shown due to insufficient sample.
Source: Vanguard active plans with nondiscrimination testing completed during the past two years.

Advice services

Advice offered

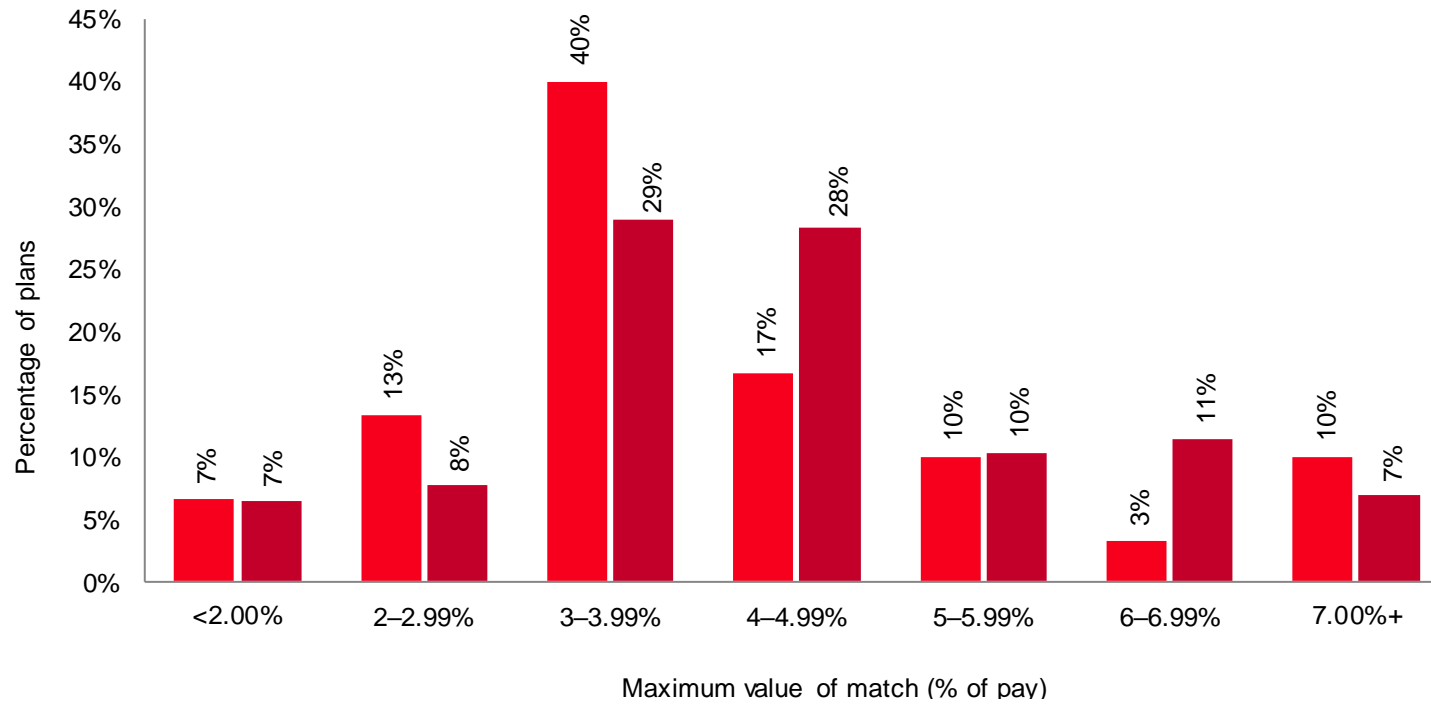


Advice used



- Architecture and engineering <500 participants
- Architecture and engineering 500+ participants
- Vanguard DC plans

Matching contributions

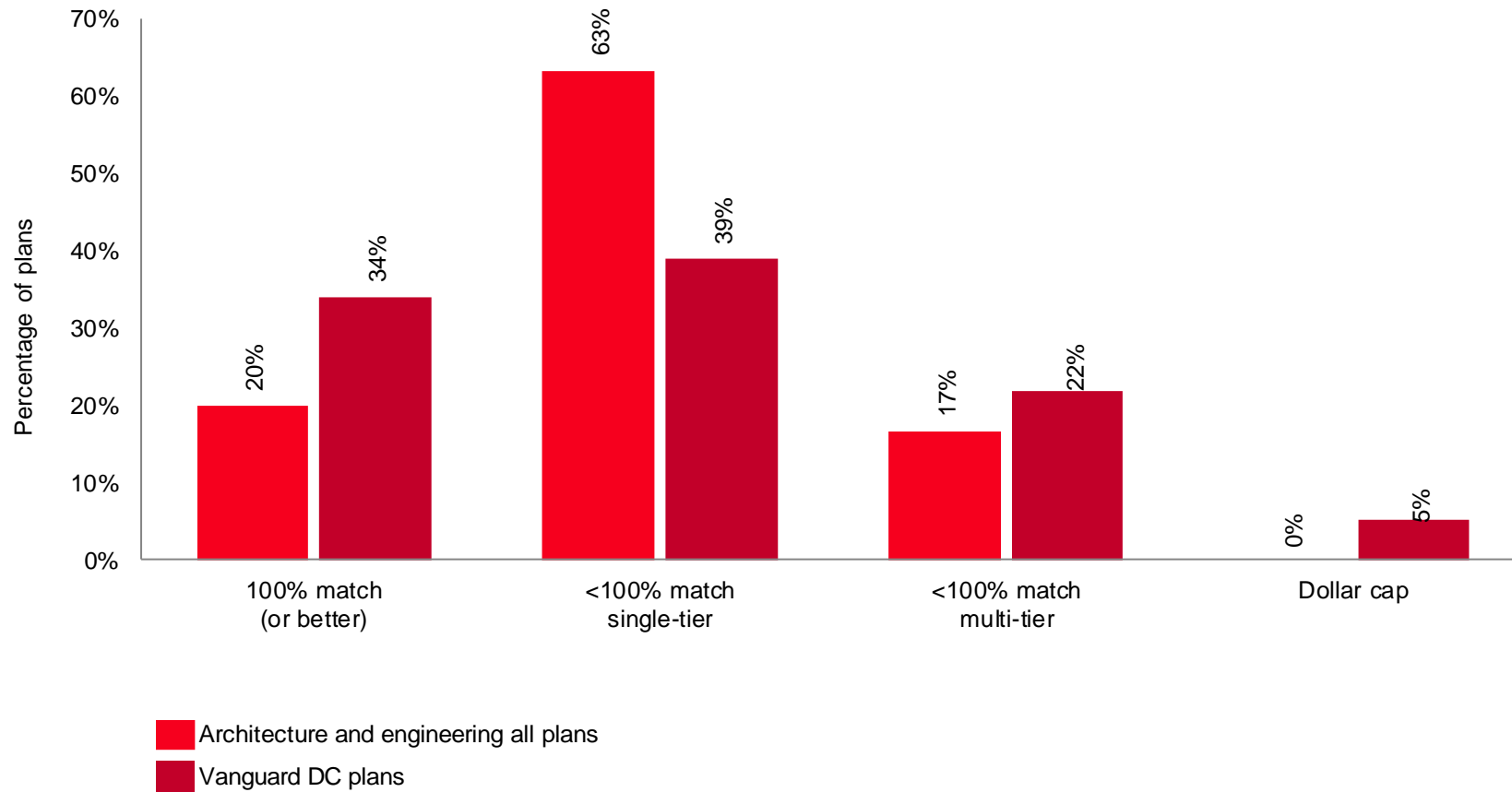


	Average value	Median value
Architecture and engineering all plans	4.4%	3.3%
Vanguard DC plans	4.4%	4.0%

Note – Total industry shown due to insufficient sample.

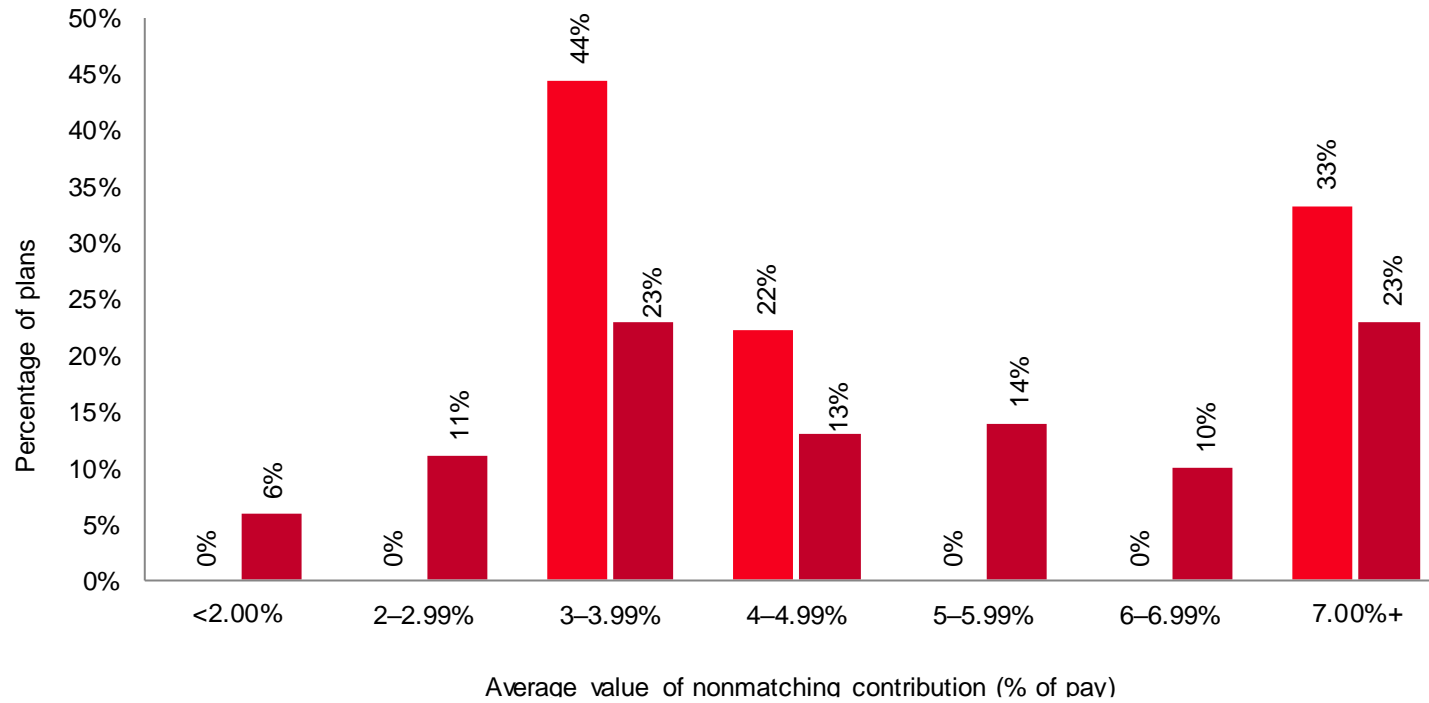
Source: Vanguard active plans with nondiscrimination testing completed during the past two years.

Matching formulas



Note – Total industry shown due to insufficient sample.
Source: Vanguard active plans with nondiscrimination testing completed during the past two years.

Nonmatching / profit-sharing contributions



	Average value	Median value
Architecture and engineering all plans	7.7%	5.0%
Vanguard DC plans	5.1%	4.2%

Note – Total industry shown due to insufficient sample.

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

Roth availability and use

	Architecture and engineering <500 participants	Architecture and engineering 500+ participants	Vanguard DC plans
Percentage of plans offering Roth	92%	100%	77%
Percentage of plan assets invested in Roth*	4.0%	3.7%	3.5%
Distribution of percentage of plan assets in Roth			
<1%	13%	7%	20%
1–2%	35%	10%	38%
3–5%	26%	53%	25%
6–9%	22%	27%	12%
10–14%	4%	0%	3%
15%+	0%	3%	2%
Percentage of participants with assets in Roth*	24%	20%	16%
Percentage of participant assets in Roth**	16%	18%	17%
Distribution of participant assets in Roth			
1–24%	48%	47%	55%
25–49%	22%	24%	22%
50–74%	18%	18%	14%
75–99%	10%	8%	6%
100%	2%	4%	3%
Percentage of participants making Roth contributions (past 12 mo)***	26%	22%	16%
Percentage of participant contributions going to Roth**	66%	57%	53%
Distribution of percentage of participant contributions to Roth			
1–24%	13%	18%	23%
25–49%	19%	23%	25%
50–74%	17%	17%	15%
75–99%	7%	7%	7%
100%	45%	34%	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

	Architecture and engineering <500 participants	Architecture and engineering 500+ participants	Vanguard DC plans
Outstanding loans*			
Percentage of participants with outstanding loans	6%	7%	13%
Percentage of account balance in loans	6%	7%	8%
Average loan balance	14,610	11,737	10,614
Number of outstanding loans per participant*			
No loans	94%	93%	87%
One loan	5%	7%	10%
Two loans	1%	1%	3%
Three+ loans	0%	0%	0%
Loans issued past 12 months*			
Average per 1,000 active participants	32	60	91
Average loan amount	20,235	13,664	11,498
Nonhardship withdrawals taken past 12 months**			
Average per 1,000 active participants	42	85	96
Average withdrawal amount	92,847	34,700	22,018
Hardship withdrawals taken past 12 months**			
Average per 1,000 active participants	4	16	36
Average withdrawal amount	7,242	7,518	6,074

*Among plans allowing loans.

**Among participants allowed in-service withdrawals.

Source: Vanguard, as of December 31, 2021.

Important information

All investing is subject to risk, including the possible loss of the money you invest. Be aware that fluctuations in the financial markets and other factors may cause declines in the value of your account. There is no guarantee that any particular asset allocation or mix of funds will meet your investment objectives or provide you with a given level of income.

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