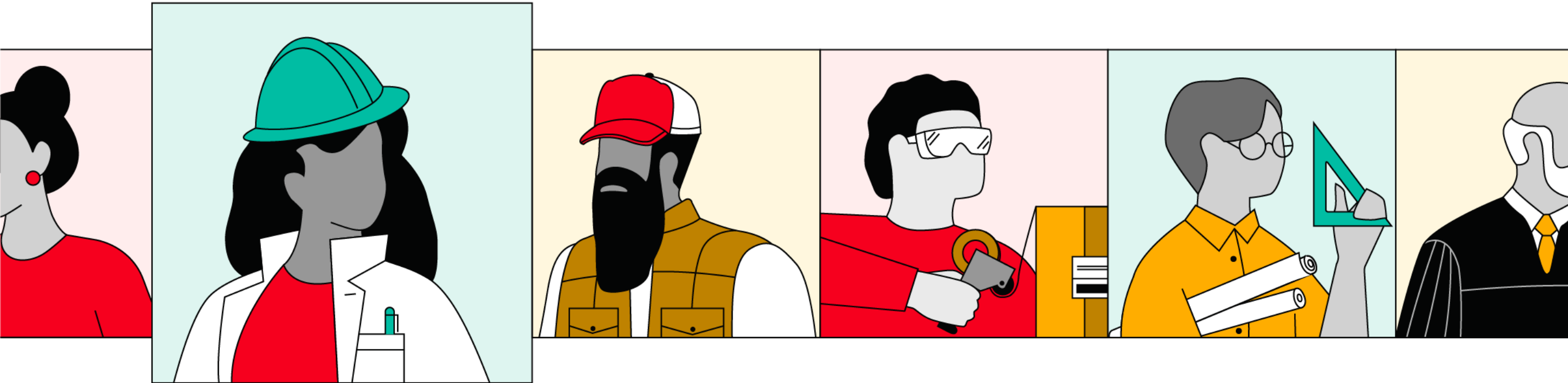


# Manufacturing



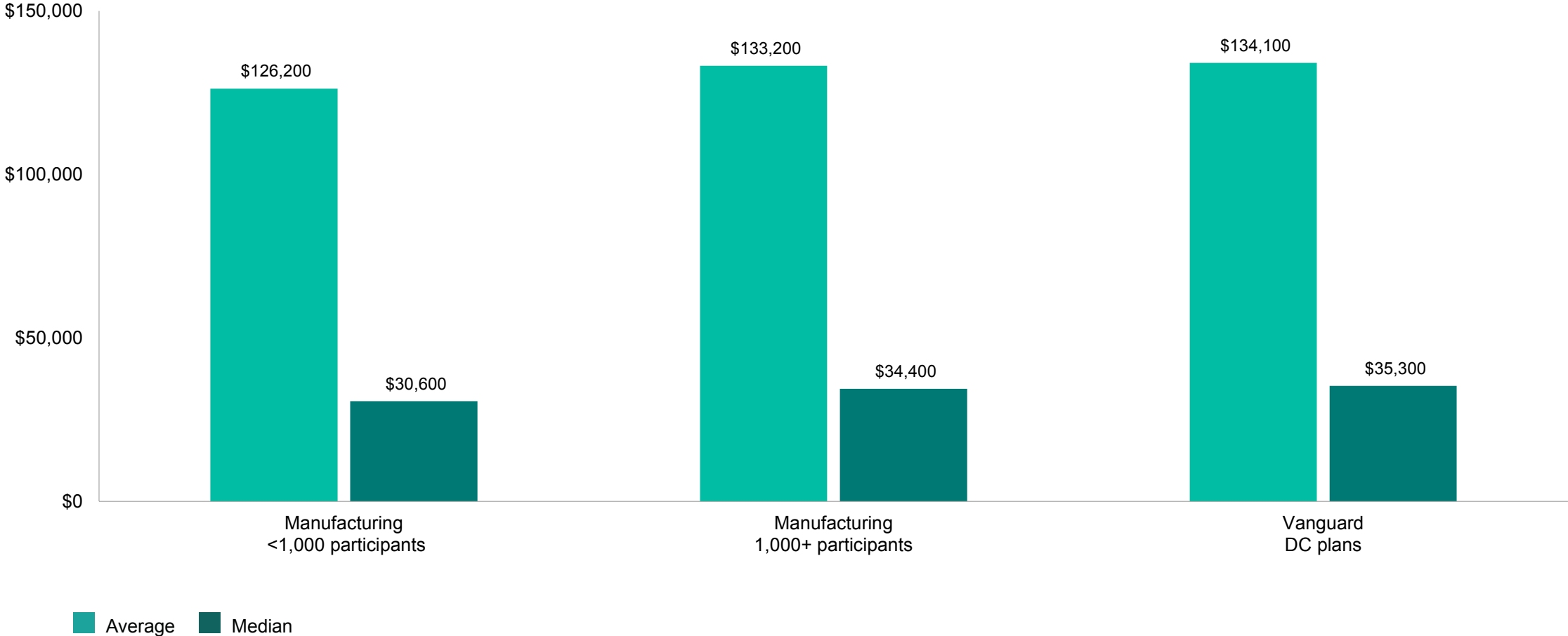
# Benchmark population

	Manufacturing <1,000 participants	Manufacturing 1,000+ participants	Vanguard DC plans
Number of plans	202	166	1,550
Number of participants	76,316	795,187	4.8 million
Average number of participants	378	4,790	3,100
Median number of participants	308	2,788	610
Amount of assets	\$9.6 billion	\$105.9 billion	\$644.7 billion
Average assets	\$47.7 million	\$638.1 million	\$418.9 million
Median assets	\$34.2 million	\$297.2 million	\$79.5 million

The manufacturing industry is defined as NAICS (North American Industry Classification System) sectors 31, 32, and 33.

Source: Vanguard, as of December 31, 2023.

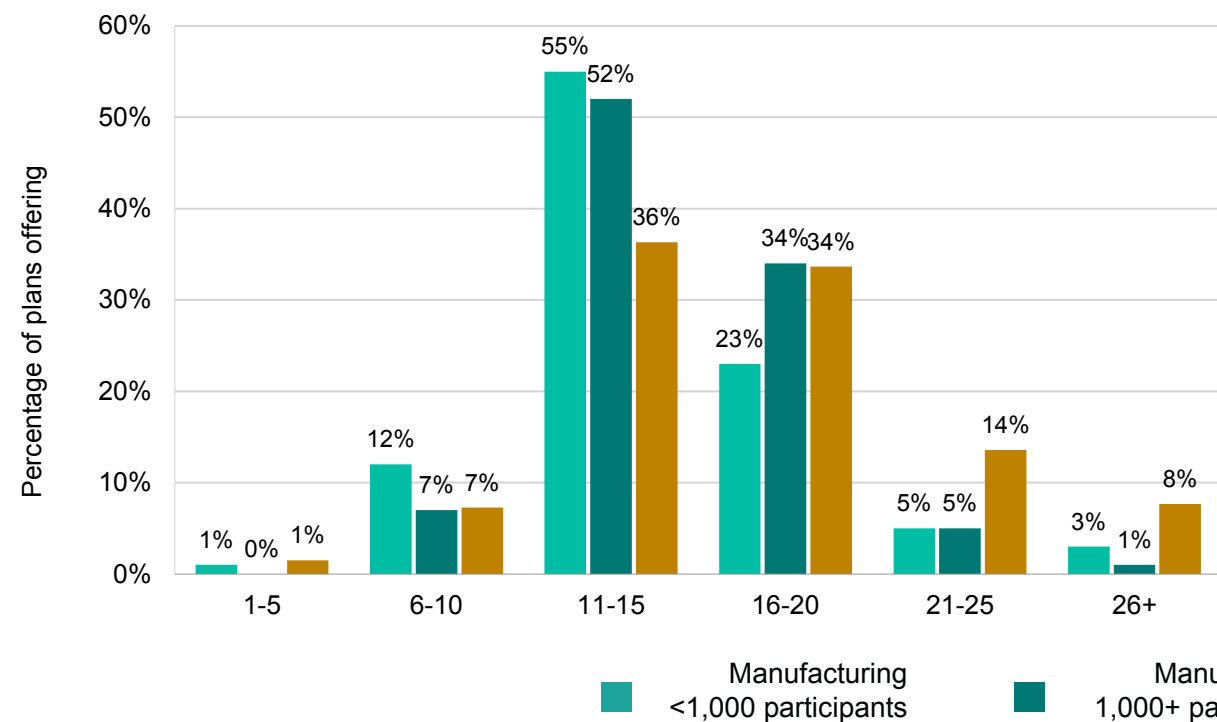
# Participant balances



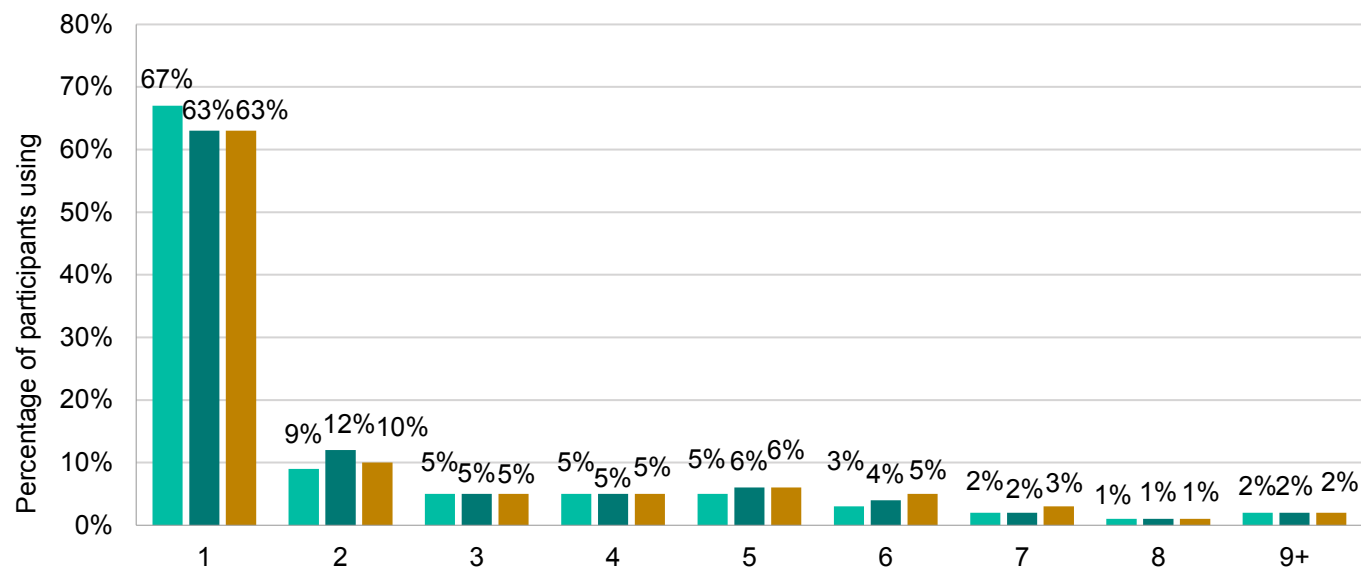
Source: Vanguard, as of December 31, 2023.  
Bars in chart may not align precisely with percentages due to rounding.

# Number of fund options offered and used

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



Funds used per participant



<b>Average funds offered</b>	14.7	15.1	17.5
<b>Median funds offered</b>	14	15	16
<b>Average funds used</b>	2.1	2.2	2.3
<b>Median funds used</b>	1	1	1

Source: Vanguard, as of December 31, 2023.

Bars in chart may not align precisely with percentages due to rounding.

# Types of investment options offered and used\*

	Manufacturing <1,000 participants		Manufacturing 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*
<b>Cash</b>	<b>99%</b>	<b>15%</b>	<b>100%</b>	<b>11%</b>	<b>99%</b>	<b>11%</b>
Money market	65%	7%	68%	3%	71%	6%
Stable value/GIC	72%	14%	83%	10%	68%	10%
<b>Bond funds</b>	<b>99%</b>	<b>13%</b>	<b>100%</b>	<b>14%</b>	<b>99%</b>	<b>17%</b>
Active	72%	7%	83%	5%	80%	7%
Index	86%	11%	95%	12%	90%	14%
Inflation-protected securities	22%	3%	20%	2%	35%	3%
Multisector	6%	2%	5%	1%	7%	2%
High-yield	9%	5%	5%	4%	18%	4%
International	18%	2%	16%	5%	19%	5%
Emerging markets	0%	0%	0%	0%	1%	2%
<b>Balanced funds</b>	<b>99%</b>	<b>86%</b>	<b>100%</b>	<b>89%</b>	<b>99%</b>	<b>86%</b>
Traditional balanced	65%	13%	51%	10%	63%	13%
Target-risk	1%	2%	3%	1%	2%	1%
Target-date	95%	81%	100%	87%	96%	83%
<b>Company stock</b>	<b>3%</b>	<b>26%</b>	<b>23%</b>	<b>40%</b>	<b>8%</b>	<b>23%</b>
<b>Self-directed brokerage</b>	<b>8%</b>	<b>2%</b>	<b>16%</b>	<b>1%</b>	<b>21%</b>	<b>1%</b>

\* Among participants offered the option.  
Source: Vanguard, as of December 31, 2023.

# Types of investment options offered and used\* (continued)

	Manufacturing <1,000 participants		Manufacturing 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*
<b>Equity funds</b>	<b>100%</b>	<b>28%</b>	<b>100%</b>	<b>26%</b>	<b>99%</b>	<b>31%</b>
<b>Domestic equity funds</b>	<b>100%</b>	<b>27%</b>	<b>100%</b>	<b>26%</b>	<b>99%</b>	<b>30%</b>
Large-cap index	99%	20%	99%	21%	99%	14%
Large-cap active	87%	16%	91%	12%	89%	26%
Large-cap value	86%	9%	82%	8%	87%	9%
Large-cap growth	90%	14%	90%	10%	90%	13%
Large-cap blend	100%	20%	99%	20%	99%	24%
Mid-cap index	83%	10%	89%	13%	84%	14%
Mid-cap active	42%	7%	42%	7%	52%	7%
Small-cap index	53%	9%	50%	10%	63%	11%
Small-cap active	63%	7%	65%	6%	64%	7%
Socially responsible	4%	1%	10%	2%	17%	5%
<b>International equity funds</b>	<b>96%</b>	<b>13%</b>	<b>100%</b>	<b>16%</b>	<b>97%</b>	<b>19%</b>
Index international	67%	8%	93%	12%	81%	14%
Active international	80%	10%	88%	8%	83%	9%
Emerging markets	19%	4%	23%	4%	35%	9%
<b>Global equity funds</b>	<b>11%</b>	<b>6%</b>	<b>6%</b>	<b>3%</b>	<b>16%</b>	<b>3%</b>

\* Among participants offered the option.  
Source: Vanguard, as of December 31, 2023.

# Types of investment options offered and used\* (continued)

	Manufacturing <1,000 participants		Manufacturing 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*
<b>Sector funds</b>	<b>22%</b>	<b>5%</b>	<b>26%</b>	<b>4%</b>	<b>39%</b>	<b>6%</b>
REIT	16%	4%	20%	4%	33%	5%
Health care	5%	13%	1%	1%	8%	6%
Energy	1%	6%	0%	0%	4%	4%
Precious metals	0%	2%	0%	0%	2%	2%
Technology	0%	3%	1%	6%	3%	5%
Utilities	1%	2%	0%	0%	1%	2%
Natural resources	0%	23%	1%	15%	1%	4%
Financials	0%	0%	0%	0%	<0.5%	<0.5%
Communications	0%	8%	0%	0%	<0.5%	1%
Consumer	0%	0%	0%	0%	<0.5%	1%
Industrials	0%	0%	0%	0%	<0.5%	<0.5%

\* Among participants offered the option.  
Source: Vanguard, as of December 31, 2023.

# Target-date fund availability and use

		Manufacturing <1,000 participants	Manufacturing 1,000+ participants	Vanguard DC plans
Percentage of plans offering		95%	100%	96%
Plan assets invested*		39%	44%	41%
Percentage of plan assets*	<10%	3%	0%	5%
	10%–19%	8%	2%	8%
	20%–29%	20%	7%	17%
	30%–39%	22%	26%	20%
	40%–49%	14%	30%	18%
	50%+	33%	35%	32%
Percentage of participants using*		81%	87%	83%
Percentage of participant assets**		64%	62%	62%
Percentage of participant assets in target-date funds**	1%–24%	7%	8%	10%
	25%–49%	6%	8%	8%
	50%–74%	3%	4%	4%
	75%–99%	4%	9%	6%
	100%	79%	71%	72%
Percentage of participants owning**	One target-date fund only	76%	69%	70%
	One target-date fund plus other funds	18%	26%	24%
	Two or more target-date funds only	2%	1%	2%
	Two or more target-date funds plus other funds	3%	4%	4%

\* Among plans offering target-date options.

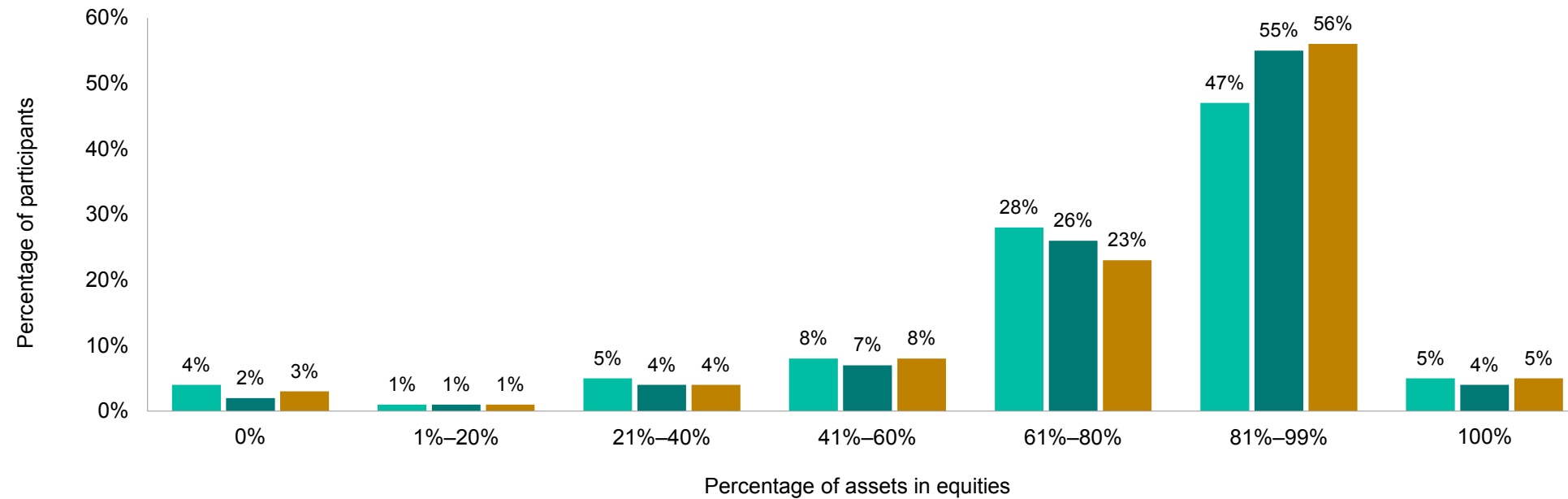
\*\* Among participants owning target-date options.

Source: Vanguard, as of December 31, 2023.

Percentages may not total 100% because of rounding.



# Participant equity exposure

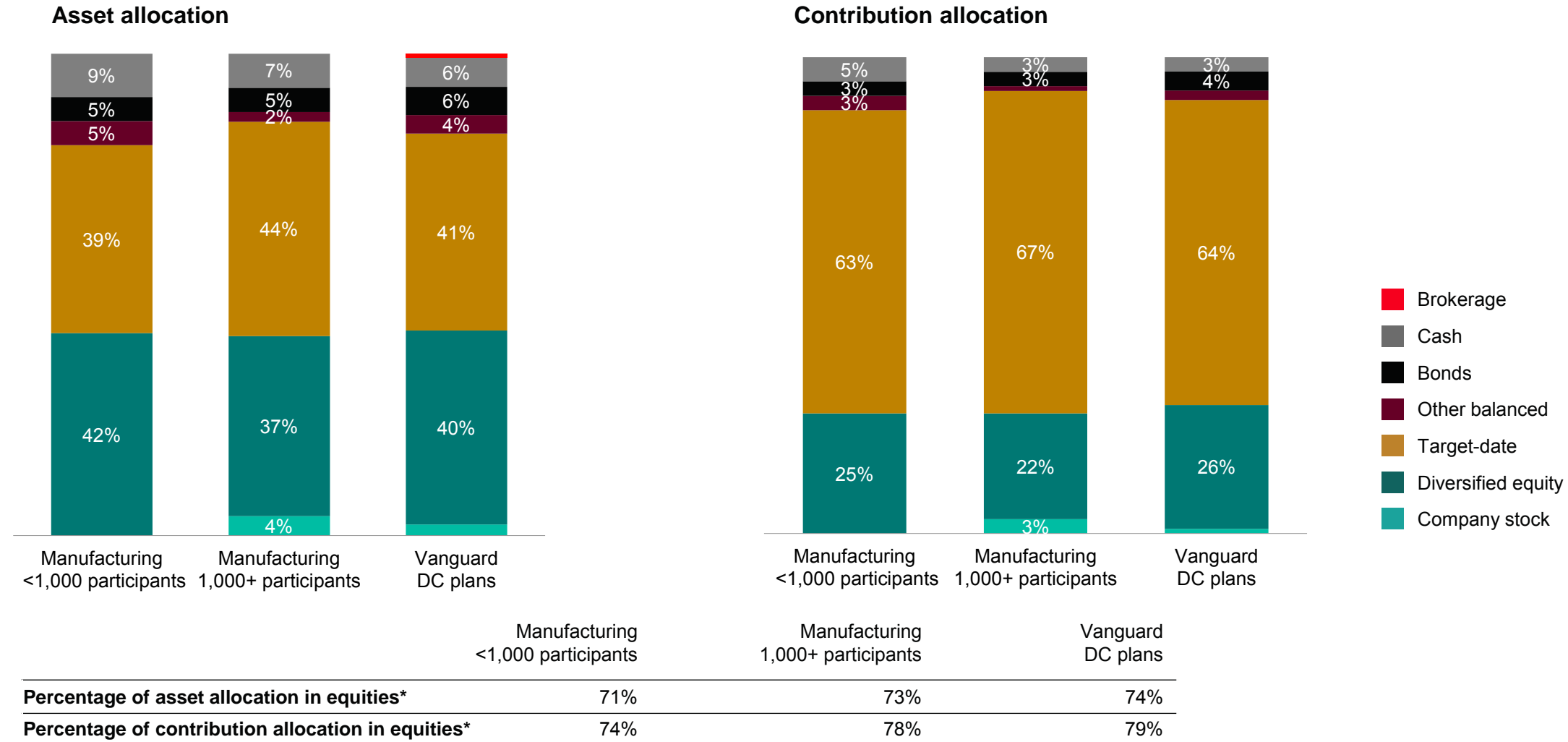


	Manufacturing <1,000 participants	Manufacturing 1,000+ participants	Vanguard DC plans
<b>Average percentage in equities</b>	73%	77%	78%
<b>Median percentage in equities</b>	84%	85%	87%

Source: Vanguard, as of December 31, 2023.

Bars in 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, 2023.

Bars in chart may not align precisely with percentages due to rounding.

# Participants with professionally managed allocations

		Manufacturing <1,000 participants	Manufacturing 1,000+ participants	Vanguard DC plans
<b>All participants</b>	Single target-date fund	61%	60%	58%
	Single balanced fund	1%	0%	1%
	Managed account program	3%	6%	7%
	<b>Total</b>	<b>65%</b>	<b>66%</b>	<b>66%</b>
<b>New plan entrants during the year</b>	Single target-date fund	91%	91%	86%
	Single balanced fund	0%	0%	1%
	Managed account program	1%	2%	2%
	<b>Total</b>	<b>92%</b>	<b>93%</b>	<b>89%</b>

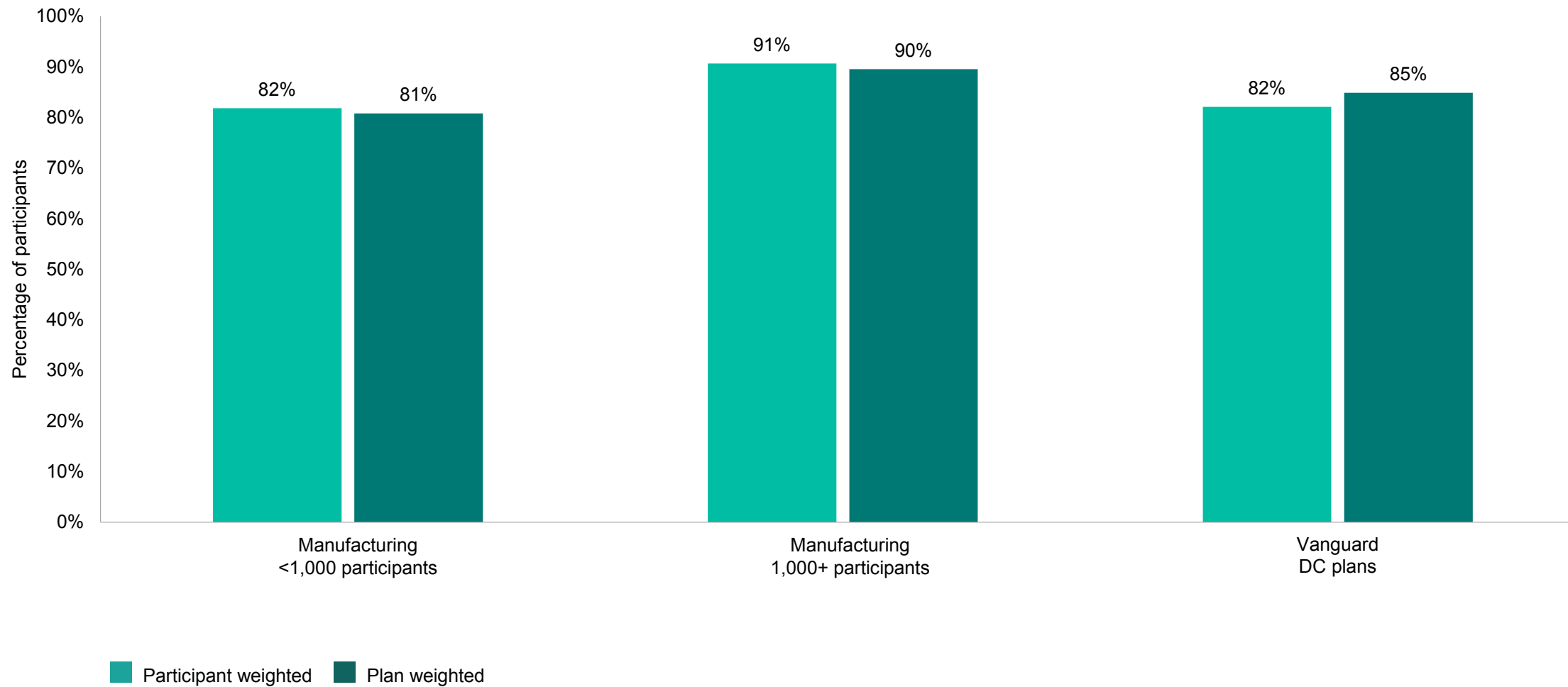
Source: Vanguard, as of December 31, 2023.

# Automatic enrollment options\*

		Manufacturing <1,000 participants	Manufacturing 1,000+ participants	Vanguard DC plans
<b>Automatic enrollment*</b>	Number of plans	117	143	842
	Percentage of plans	60%	88%	59%
<b>Default automatic enrollment rate</b>	1 percent	3%	1%	2%
	2 percent	3%	6%	5%
	3 percent	39%	36%	33%
	4 percent	11%	8%	14%
	5 percent	23%	17%	17%
	6 percent or more	21%	31%	29%
<b>Default automatic increase rate</b>	1 percent	65%	76%	67%
	2 percent	2%	1%	2%
	Voluntary election	26%	21%	25%
	Service feature not offered	8%	2%	6%
<b>Default automatic increase cap</b>	<6 percent	0%	3%	2%
	6 to 9 percent	21%	15%	17%
	10 to 14 percent	54%	42%	49%
	15 to 19 percent	18%	25%	22%
	20+ percent	3%	12%	6%
	No cap	5%	3%	4%
<b>Default fund</b>	Target-date fund	100%	100%	98%
	Other balanced fund	0%	0%	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, 2023.  
 Percentages may not total 100% because of rounding.

# Participation rates



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

# Participant deferral rates

		Manufacturing <1,000 participants	Manufacturing 1,000+ participants	Vanguard DC plans
Deferral rates	Average	7.4%	7.3%	7.4%
	Median	6.0%	6.0%	6.2%
Distribution of rates	<4.0%	25%	27%	24%
	4.0%–6.0%	22%	20%	20%
	6.1%–9.9%	28%	30%	32%
	10.0%–14.9%	17%	16%	17%
	15.0%+	7%	7%	7%

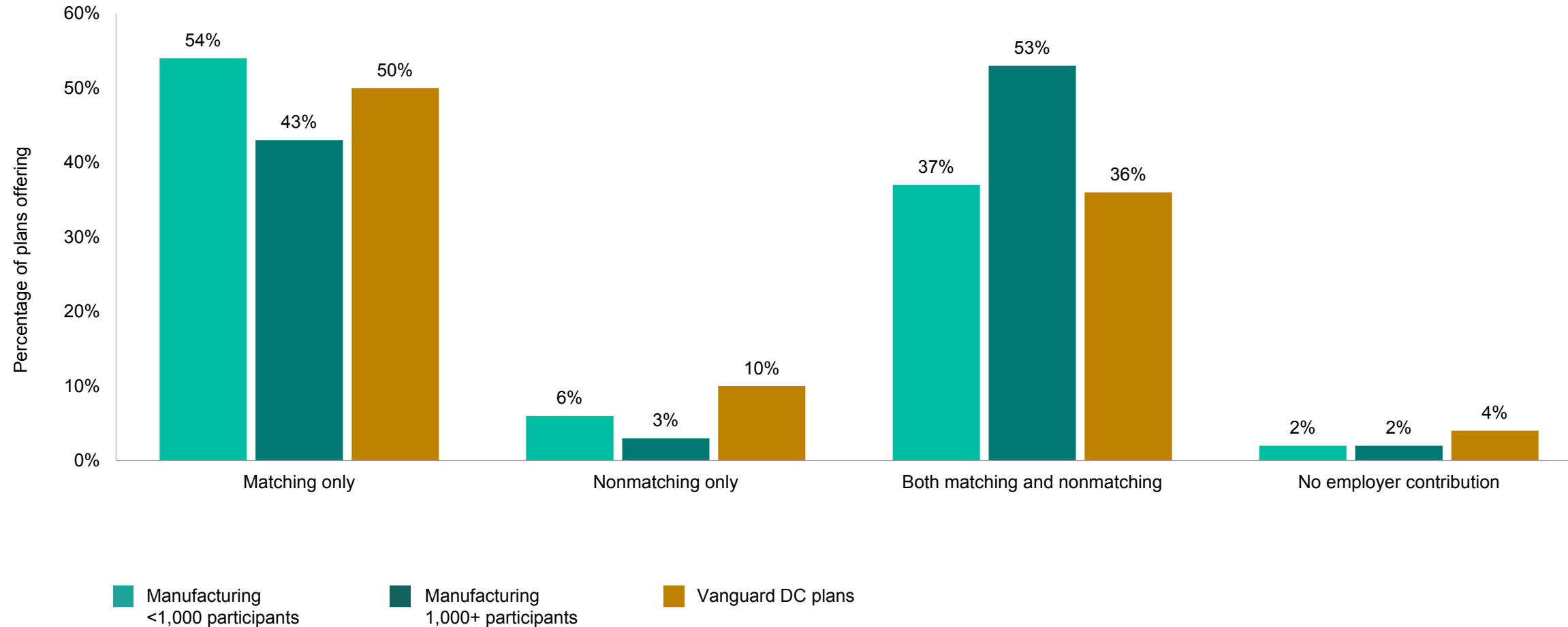
Source: Vanguard active plans with nondiscrimination testing completed during the past two years. Percentages may not total 100% because of rounding.

# Aggregate participant and employer contribution rates

		Manufacturing <1,000 participants	Manufacturing 1,000+ participants	Vanguard DC plans
<b>Total saving rate</b>	Average	11%	12%	12%
	Median	10%	12%	11%
<b>Distribution of rates</b>	<5.0%	17%	15%	14%
	5.0%–8.9%	24%	17%	20%
	9.0%–11.9%	19%	19%	21%
	12.0%–14.9%	17%	18%	20%
	15.0%+	23%	32%	25%

Source: Vanguard active plans with nondiscrimination testing completed during the past two years. Percentages may not total 100% because of rounding.

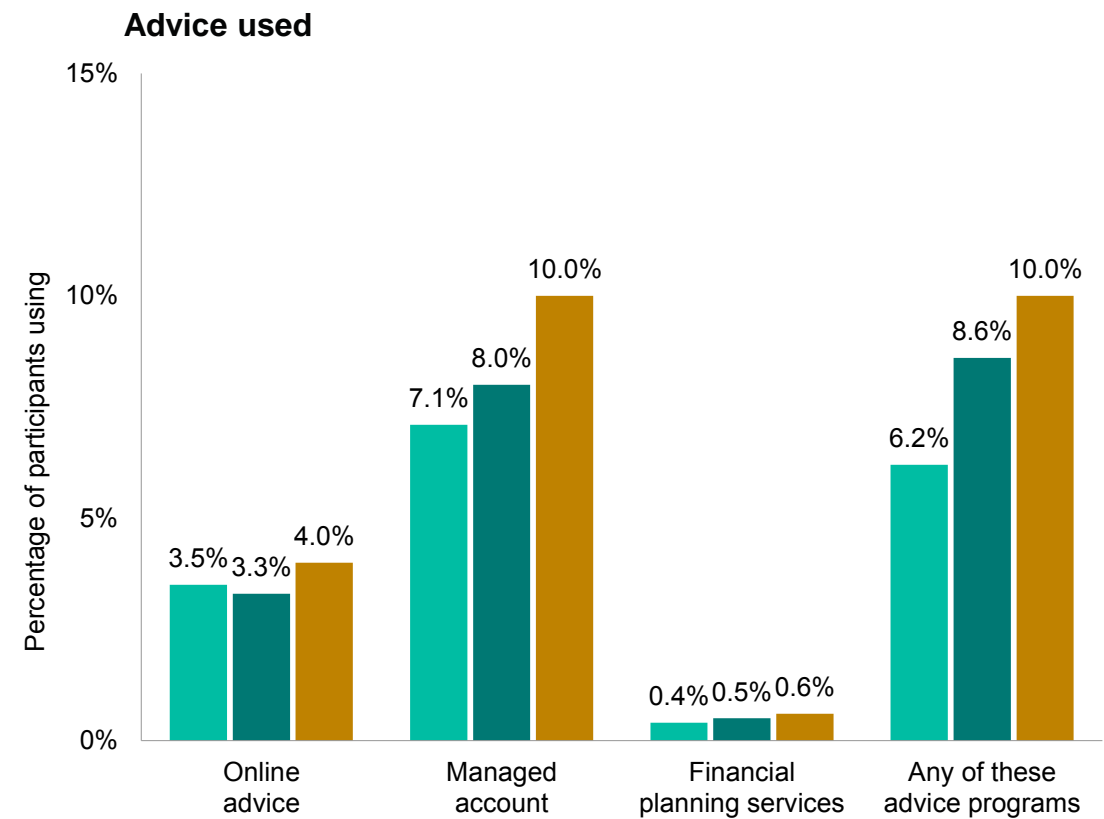
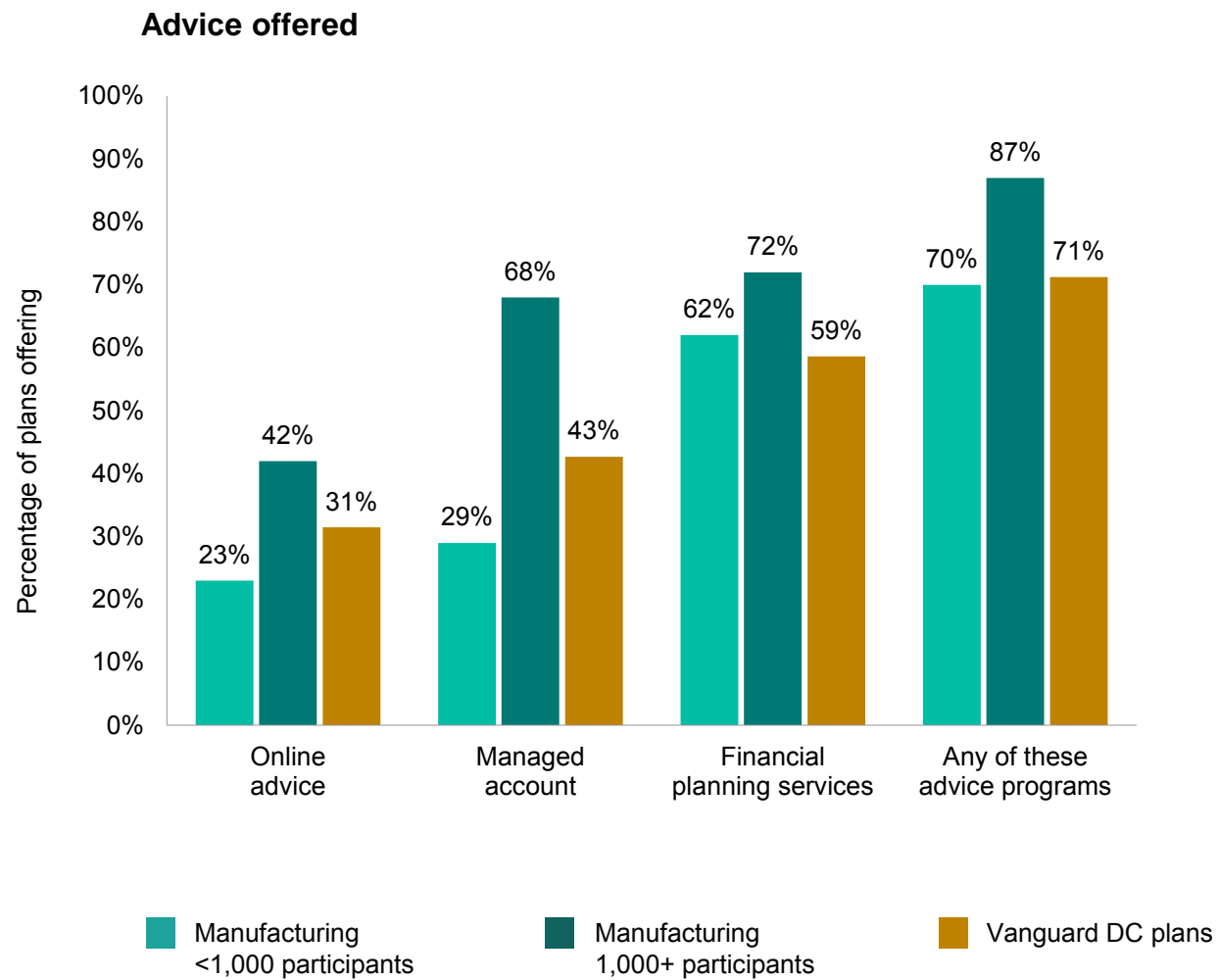
# Types of employer contributions



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



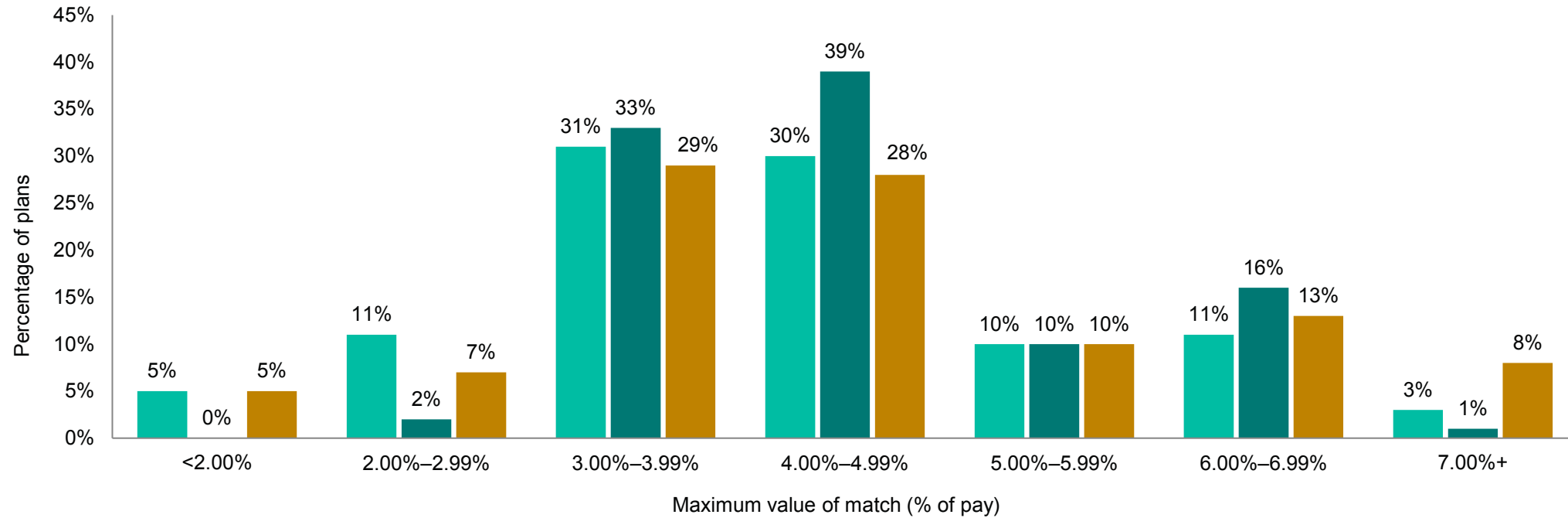
# Advice services



Source: Vanguard, as of December 31, 2023.

Bars in chart may not align precisely with percentages due to rounding.

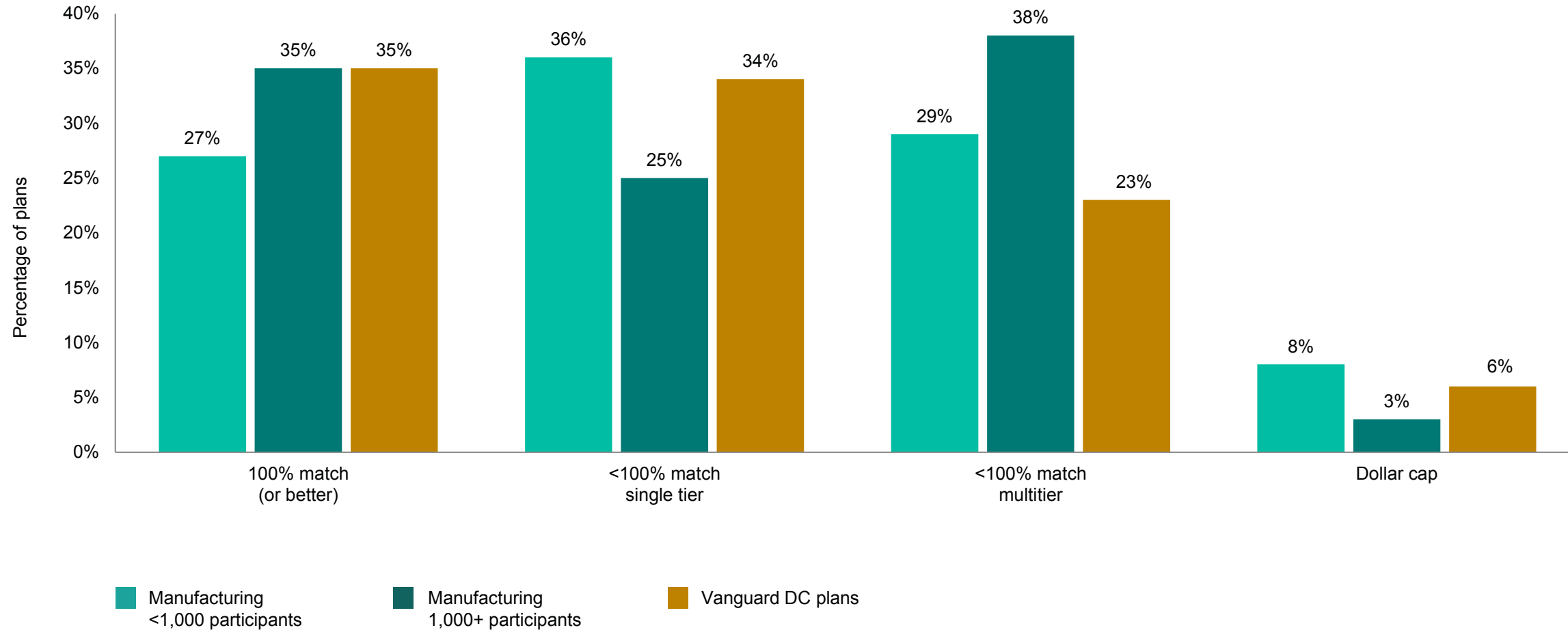
# Matching contributions



	Manufacturing <1,000 participants	Manufacturing 1,000+ participants	Vanguard DC plans
<b>Average value</b>	3.9%	4.2%	4.6%
<b>Median value</b>	4.0%	4.0%	4.0%

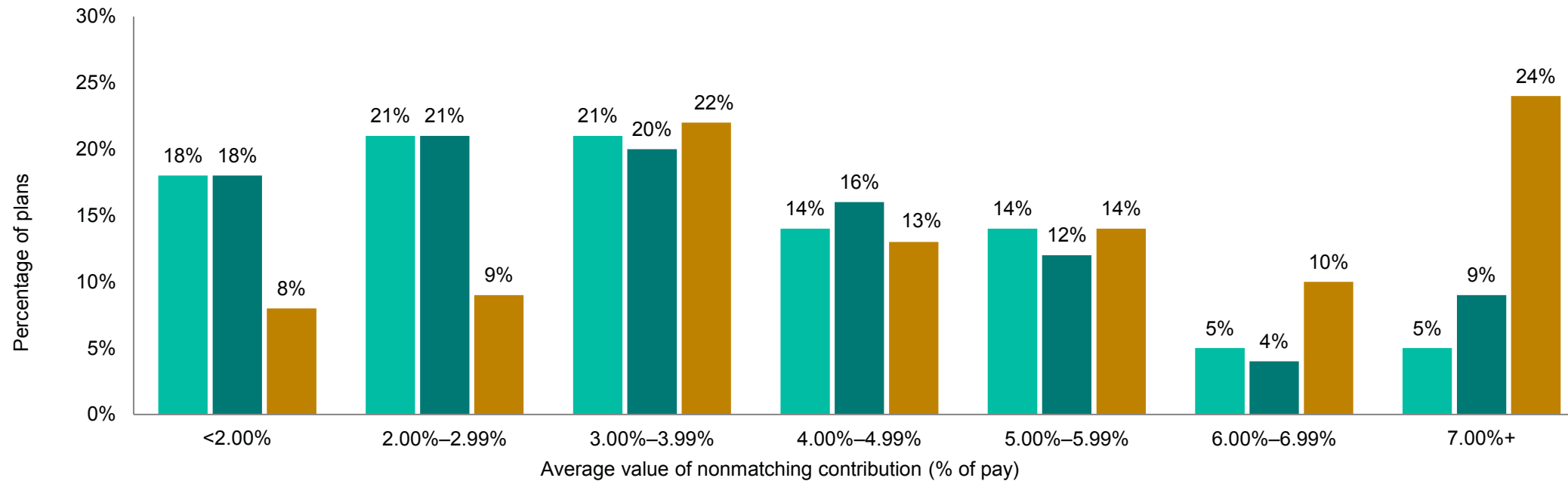
Source: Vanguard active plans with nondiscrimination testing completed during the past two years. Bars in chart may not align precisely with percentages due to rounding.

# Matching formulas



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

# Nonmatching/Profit-sharing employer contributions



	Manufacturing <1,000 participants	Manufacturing 1,000+ participants	Vanguard DC plans
<b>Average value</b>	3.8%	4.9%	5.4%
<b>Median value</b>	3.2%	3.6%	4.4%

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

# Roth availability and use

		Manufacturing <1,000 participants	Manufacturing 1,000+ participants	Vanguard DC plans
Percentage of plans offering Roth (among plans with elective deferrals)		62%	91%	82%
Percentage of plan assets invested in Roth*		2.6%	2.4%	4.4%
Distribution of percentage of plan assets in Roth	<1%	13%	9%	9%
	1%–2%	46%	47%	34%
	3%–5%	29%	41%	33%
	6%–9%	8%	1%	15%
	10%–14%	2%	1%	5%
	15%+	2%	1%	3%
Percentage of participants with assets in Roth*		13%	13%	18%
Percentage of participant assets in Roth**		15%	13%	18%
Distribution of participant assets in Roth	1%–24%	57%	64%	50%
	25%–49%	23%	21%	24%
	50%–74%	15%	12%	14%
	75%–99%	3%	3%	6%
	100%	1%	1%	3%
Percentage of participants making Roth contributions (past 12 months)***		14%	14%	17%
Percentage of participant contributions going to Roth**		56%	51%	54%
Distribution of percentage of participant contributions to Roth	1%–24%	20%	25%	22%
	25%–49%	24%	28%	26%
	50%–74%	18%	15%	15%
	75%–99%	6%	7%	7%
	100%	33%	25%	29%

\* Among plans offering Roth.

\*\* Among participants using Roth.

\*\*\* Among participants making elective deferrals.

Source: Vanguard, as of December 31, 2023.

Percentages may not total 100% because of rounding.

# Participant loans and in-service withdrawals

		Manufacturing <1,000 participants	Manufacturing 1,000+ participants	Vanguard DC plans
<b>Outstanding loans*</b>	Percentage of participants with outstanding loans	15%	15%	13%
	Percentage of account balance in loans	9%	9%	9%
	Average loan balance	\$9,744	\$9,581	\$10,708
<b>Percentage of active participants with outstanding loans*</b>	No loans	85%	85%	87%
	One loan	13%	13%	10%
	Two loans	2%	2%	3%
	Three+ loans	0%	0%	0%
<b>Loans issued past 12 months*</b>	Average per 1,000 active participants	123	126	105
	Average loan amount	\$10,306	\$9,776	\$10,646
<b>Nonhardship withdrawals taken past 12 months**</b>	Average per 1,000 active participants	150	124	113
	Average withdrawal amount	\$18,640	\$19,591	\$17,112
<b>Hardship withdrawals taken past 12 months**</b>	Average per 1,000 active participants	55	112	68
	Average withdrawal amount	\$5,529	\$3,965	\$4,730

\* Among plans allowing loans.

\*\* Among participants allowed in-service withdrawals.

Source: Vanguard, as of December 31, 2023.

Percentages may not total 100% because of rounding.

# 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. Diversification does not ensure a profit or protect against a loss.

*A stable value investment is neither insured nor guaranteed by the U.S. government. There is no assurance that the investment will be able to maintain a stable net asset value, and it is possible to lose money in such an investment.*

Investments in target-date funds are subject to the risks of their underlying funds. The year in the fund name refers to the approximate year (the target date) when an investor in the fund would retire and leave the workforce. The fund will gradually shift its emphasis from more aggressive investments to more conservative ones based on its target date. An investment in target-date funds is not guaranteed at any time, including on or after the target date.

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