Vanguard

Vanguard U.S. investor wealth changes during coronavirus market volatility: Widening the frame

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- For the quarter ended March 31, 2020, the S&P 500 Index returned –19.6%. Vanguard's economists believe we are in a global recession.
- But when the time frame is widened to three years, more than three-quarters of Vanguard investors' wealth increased.
- This perspective suggests that investors should take a long view in thinking about market shocks and portfolio wealth.

The unfolding global coronavirus pandemic precipitated unusual market volatility during the first quarter of 2020. Vanguard's economists believe we are in a global recession.[1] U.S. markets reached a peak on February 19, 2020,[2] fell 34% in late March, and then rose 16% through the end of the month. For the quarter ended March 31, 2020, the S&P 500 returned –19.6% (see **Figure 1**).

This report examines the changes in Vanguard U.S. household wealth during the first quarter of 2020 and then "widens" or broadens the frame of reference (in accordance with the behavioral economics meaning of that term[3]) to include one- and three-year perspectives. Changes in wealth are a function of market returns, new contributions, and any withdrawals.

Figure 1. Benchmark returns as of March 31, 2020

	S&P 500	Bloomberg Barclays Aggregate Bond Index	FTSE All-World ex US Index	70/30 Balanced*
3-month	–19.6%	3.1%	–23.4%	–13.9%
1-year	–7.0	8.9	–15.3	–4.0
3-year	5.1	4.8	–1.9	4.0
5-year	6.7	3.4	–0.4	4.6
10-year	10.5	3.9	2.4	7.6

Past performance is no guarantee of future returns.

The performance of an index is not an exact representation of any particular investment as you cannot invest directly in an index.

*Balanced composite based on CRSP U.S. Total Market Index (56%), FTSE All-World ex U.S. Index (14%), and Bloomberg Barclays US aggregated index (30%) for the period shown, rebalanced monthly.

Source: Vanguard 2020.

1 See Davis, Joseph, 2020, *A Recession At Hand—And a Quick End,* available at https://investornews.vanguard/a-recession-at-hand-and-a-quick-end/.
2 As measured by the S&P 500.
3 See Kahneman, Daniel, 2011, *Thinking Fast and Slow*, New York: Farrar, Straus And Giroux.

Our study population included 6.5 million Vanguard defined contribution (DC) plan and retail investor households that were continuous investors between March 31, 2017, and March 31, 2020.[4] Retail investors were older and had longer relationships with Vanguard and higher account balances (see **Figure 2**). DC investors held higher equity allocations.

Figure 2. Characteristics of study households as of March 31, 2020

Vanguard households, continuous sample from March 31, 2017, to March 31, 2020*

	DC	Retail
Number	2.8M	3.7M
Median values		
Age	49	57
Length of account ownership	12	16
Balance	$56,400	$77,700
Equity allocation**	82%	76%
Retail account structure		
IRA only	—	49%
Taxable only	—	18%
IRA and taxable	—	33%

*We limited our study sample to households with at least four months' Vanguard account tenure as of March 31, 2017.

**Equity allocation is as of December 31, 2019.

Source: Vanguard 2020.

During the first quarter of 2020, both DC and retail households experienced wealth declines of 14%—a figure nearly identical to the return of a 70% stock/30% bond benchmark portfolio during that time (see **Figure 3**).

As expected, wealth changes varied with underlying equity allocations. We measured those allocations as of December 31, 2019. DC and retail households with zero equity had, unsurprisingly, essentially no change in wealth. At the other extreme, both DC and retail investors with all-equity allocations had wealth declines of 20%—a figure nearly identical to the return of the S&P 500 Index.

Generational wealth declines were highest for the Millennial and Generation X cohorts, which tend to hold higher equity allocations. Accordingly, declines were lower for the Early Boomer and Silent Generation cohorts, which tend to hold lower equity allocations. Women, men, and households with two or more members all experienced similar declines.

But when we extended the time frame to cover the one-year period ended March 31, 2020, declines were more muted. DC investors with equity allocations of less than 75% saw their wealth increase or stay the same. This was partly due to ongoing contributions, which help offset market volatility. DC and retail investors with 100% equity allocations had wealth declines of 7% to 8%, similar to the 7% drop in the S&P 500 over the same period. Many of these investors had been Vanguard clients for 12 to 16 years, encompassing the 2008 financial crisis.

4 We limited our study sample to households with at least four months of Vanguard account tenure as of March 31, 2017. DC households consisted of one account owner. Among retail households, 74% of accounts were held by single account owners and 26% by two or more. The study sample included both self-directed and advised households.

When we widened the study's time frame to three years, nearly all investors saw increases in wealth, as shown in Figure 3. A hypothetical 70/30 balanced portfolio would have grown by 12.4% over the three-year period ended March 31, 2020. Retail households' wealth rose 12%, similar to the return of a 70/30 balanced portfolio. DC investors had higher increases because most received ongoing employee and employer contributions. Wealth generally climbed along with allocations to equities.

Gains were highest for the Millennial and Generation X cohorts, which tend to have lower balances. Ongoing contributions and additional investments had a larger impact on these younger groups.

The Silent Generation saw DC wealth decline 5% over the period. The youngest members were born in 1945 and at the end of 2019 would have been 74 years old. Required minimum distributions (RMDs) from DC accounts leave the plan, whereas those from traditional IRAs may be invested in another taxable account.

Figure 3. Median change in wealth

Vanguard households, continuous sample from March 31, 2017, to March 31, 2020*

	December 31, 2019, to March 31, 2020		March 31, 2019, to March 31, 2020		March 31, 2017, to March 31, 2020	
	DC	Retail	DC	Retail	DC	Retail
All	–14%	–14%	–1%	–5%	35%	12%
Equity allocation**						
0% equity	1%	<0.5%	3%	2%	11%	5%
1–25% equity	–1%	–3%	4%	1%	20%	11%
26–50% equity	–7%	–8%	1%	–1%	22%	11%
51–75% equity	–13%	–13%	<0.5%	–4%	33%	13%
76–99% equity	–17%	–18%	–2%	–7%	47%	14%
100% equity	–20%	–20%	–7%	–8%	23%	15%
Generation						
Millennials	–16%	–16%	3%	–1%	88%	25%
Generation X	–15%	–16%	–1%	–5%	34%	14%
Late Boomers	–12%	–14%	–1%	–4%	25%	13%
Early Boomers	–10%	–13%	–2%	–4%	12%	9%
Silent Generation	–8%	–13%	–5%	–6%	–5%	3%
Gender						
Male	–15%	–15%	–1%	–5%	33%	10%
Female	–14%	–14%	<0.5%	–5%	36%	10%
2+ household members		–14%		–4%		15%

*We limited our study sample to households with at least four months' Vanguard account tenure as of March 31, 2017.
**Equity allocation is as of December 31, 2019. For retail households, 100% equity was measured as 98%+ equities to accommodate the small cash position nearly all brokerage platform clients hold.

Source: Vanguard 2020.

Thus far we have been examining wealth change for the median Vanguard investor. But Vanguard investors display wide heterogeneity in age, length of account ownership, wealth accumulation, and equity allocation. **Figure 4** examines the distribution of changes in wealth. During the first quarter of 2020, most Vanguard investors—92% of DC and 86% of retail households—saw declines in wealth. These investors had median equity allocations ranging from 40% to 98%.

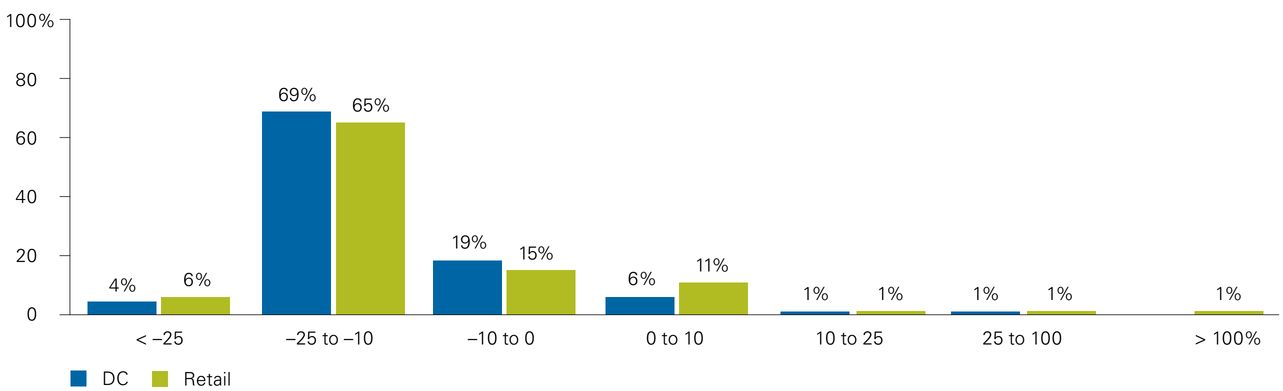
When we expanded the time frame to three years, 89% of DC and 76% of retail households had increases in wealth. These investors generally had higher balances and benefited from positive market returns.

Despite the sharp U.S. equity market drop during the first quarter of 2020, Vanguard U.S. individual investors who tended to hold balanced portfolios experienced smaller wealth declines than the headline market statistics indicated. The S&P 500 declined 19.6%, while Vanguard investors experienced a 14% wealth decline. Declines were highest for investors holding higher allocations to equities. When the time frame was widened to three years, more than three-quarters of these investors increased their wealth.

These figures suggest that investors should take a long view in thinking about market shocks and portfolio wealth. Widening the time frame can provide the psychological peace of mind necessary to avoid overreacting to short-term market declines, including those associated with the current pandemic. At the time of publication, the S&P 500 has rebounded by 12.6%.[5] We will continue to monitor the markets' impact on investors.

Figure 4. Distribution of change in wealth

Vanguard households, continuous sample from March 31, 2017, to March 31, 2020*
a. December 31, 2019, to March 31, 2020



Change in balance	< –25%	–25% to –10%	–10% to 0%	0% to 10%	10% to 25%	25% to 100%	> 100%
DC median equity**	90%	85%	60%	0%	64%	72%	68%
Retail median equity**	98%	85%	40%	0%	61%	70%	71%
DC median balance	$20,800	$65,800	$48,200	$42,800	$14,600	$6,700	$2,500
Retail median balance	$38,600	$90,700	$153,600	$11,100	$67,400	$80,400	$103,100

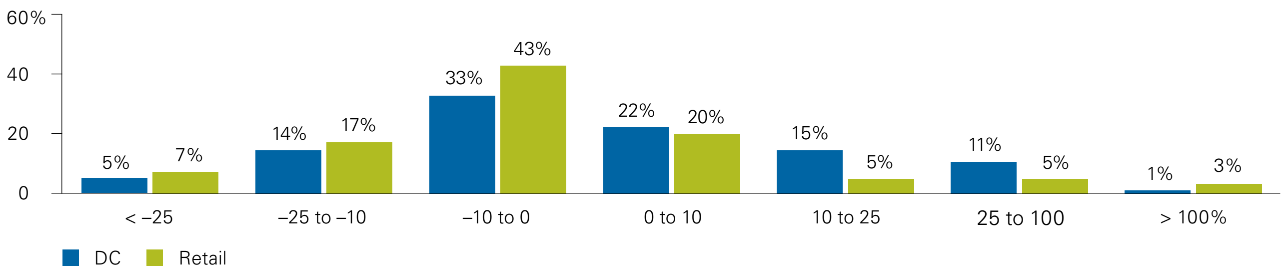
*We limited our study sample to households with at least four months' Vanguard account tenure as of March 31, 2017.
**Equity allocation is as of December 31, 2019.

Source: Vanguard 2020.

5 As of April 30, 2020, compared to March 31, 2020.

Figure 4. Distribution of change in wealth (continued)

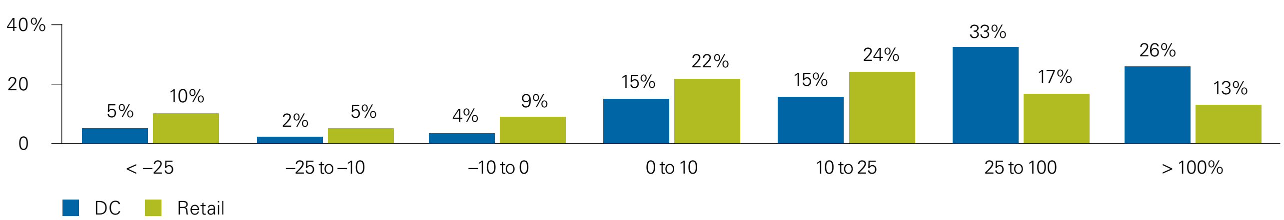
b. March 31, 2019, to March 31, 2020



	Change in balance						
	< –25%	–25% to –10%	–10% to 0%	0% to 10%	10% to 25%	25% to 100%	> 100%
DC median equity**	82%	90%	78%	75%	81%	83%	83%
Retail median equity**	82%	90%	76%	34%	74%	71%	64%
DC median balance	$12,000	$25,900	$110,247	$102,100	$46,000	$22,000	$9,300
Retail median balance	$27,200	$85,000	$107,800	$48,200	$78,700	$79,900	$137,200

*We limited our study sample to households with at least four months' Vanguard account tenure as of March 31, 2017.
**Equity allocation is as of December 31, 2019.

c. March 31, 2017, to March 31, 2020



	Change in balance						
	< –25%	–25% to –10%	–10% to 0%	0% to 10%	10% to 25%	25% to 100%	> 100%
DC median equity**	75%	77%	77%	80%	77%	80%	87%
Retail median equity**	76%	72%	73%	64%	83%	82%	76%
DC median balance	$8,800	$32,000	$41,700	$32,300	$160,900	$107,800	$27,500
Retail median balance	$27,200	$85,000	$107,800	$48,200	$78,700	$79,900	$137,200

*We limited our study sample to households with at least four months' Vanguard account tenure as of March 31, 2017.
**Equity allocation is as of December 31, 2019.

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