


Vanguard update: COVID-19 special edition

Times are uncertain. **Our support is not.**



Vanguard[®]



Partnership is a word Vanguard has always taken to heart. But never more so than in these unprecedented times. You can count on us to be there for you. We have decades of expertise in virtual support and are putting that to work on every front.

Our teams are steadfastly tracking and analyzing the market to ensure you have the most current information we can provide. They're standing by on the other end of the phone when you need to talk. They're implementing processes to assist you with evolving needs. And they're in Washington advocating for all investors, workers, businesses, and the broader economy to ensure response legislation focuses on the best interests of everyone.

We'll continue to do everything we can to help navigate this uncertain landscape.

Market and economic outlook

State of the market

Vanguard economists believe the U.S. and global economies are in a recession and expect negative growth for 2020, but **a robust recovery remains possible** if lock-down measures can be lifted in the second quarter.

Have we hit bottom?

Uncertainty about the progression of the virus and containment efforts obscures an understanding of whether or not equity markets have hit bottom.



Monetary policy is providing short-term solutions

Economic stimulus have largely helped in keeping markets functioning.

Fiscal policy is the key to a comeback

An aggressive fiscal policy response can help to make this a sharp yet short recession, followed by a speedy recovery.

- In this particular shock, we believe it is vital to maintain the source of employment and keep the source of jobs as intact as possible.

Recovery variables

This is an orchestrated economic slowdown unlike anything we have seen before and the strength of eventual **recovery will depend on multiple variables.**

- The duration of mandated containment measures
- Containment efforts and averting a second wave of infection
- The depth and breadth of unemployment and business failure
- The extent to which consumers overcome fear of resuming normal behavior

Vanguard Operations



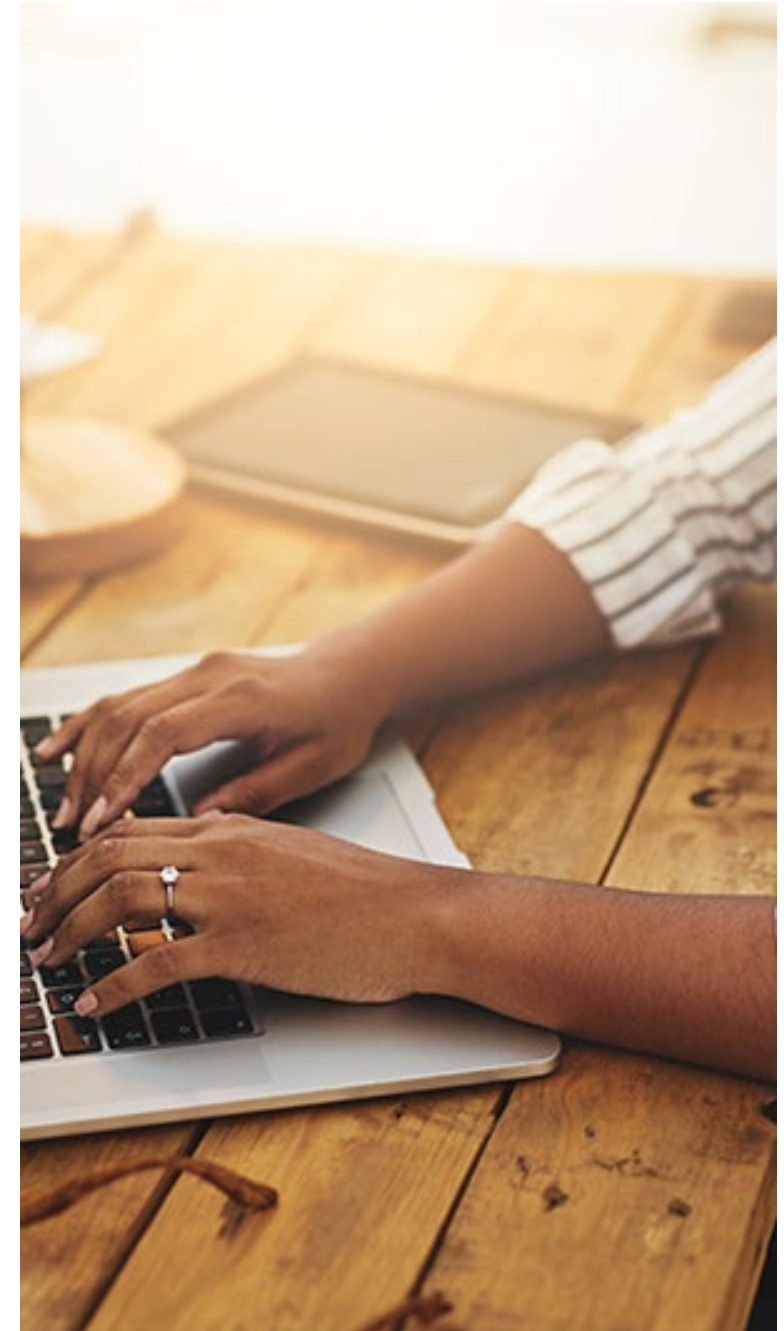
Operating at full capacity

With decades of business contingency planning and expertise in virtual support, we've been able to pivot extremely quickly in response to COVID-19.

Nearly 95% of crew—18,000 employees—are working remotely.

Information security

Our Information Technology team has made certain that all systems and technology are equipped with the appropriate hardware and software and that top-level protocols are in place to ensure the security of client and participant data.



Crew well-being

Business-critical crew members remain in the office. Facilities have been modified to increase safety and enhanced sick leave and caregiver benefits are in place.

Sponsor and participant support

Vanguard has engaged in outreach to provide factual information and affirm our support.

- Standard call center hours remain in effect
- Associates are working extended hours and taking time to provide additional guidance as needed
- Robust online content is available, including a dedicated landing page and accessible education through webcasts with Vanguard leaders
- Vanguard continues to offer advice services where it is appropriate

Mission-critical operations

Every Vanguard fund portfolio can be managed from any global trading hub and all mission-critical functions are distributed across regions.

Participant insights



Participants are seeking information

There has been increased engagement across Vanguard's digital platforms and call centers, showing an understandable level of anxiety.

- Overall engagement up **15%**¹
- **53.6%** of total web traffic led to the dedicated Market Volatility landing page²
- CARES Act volume attributes to **26%** of our overall call volume during this time frame²
- Technology has remained fully operational throughout the increased engagement

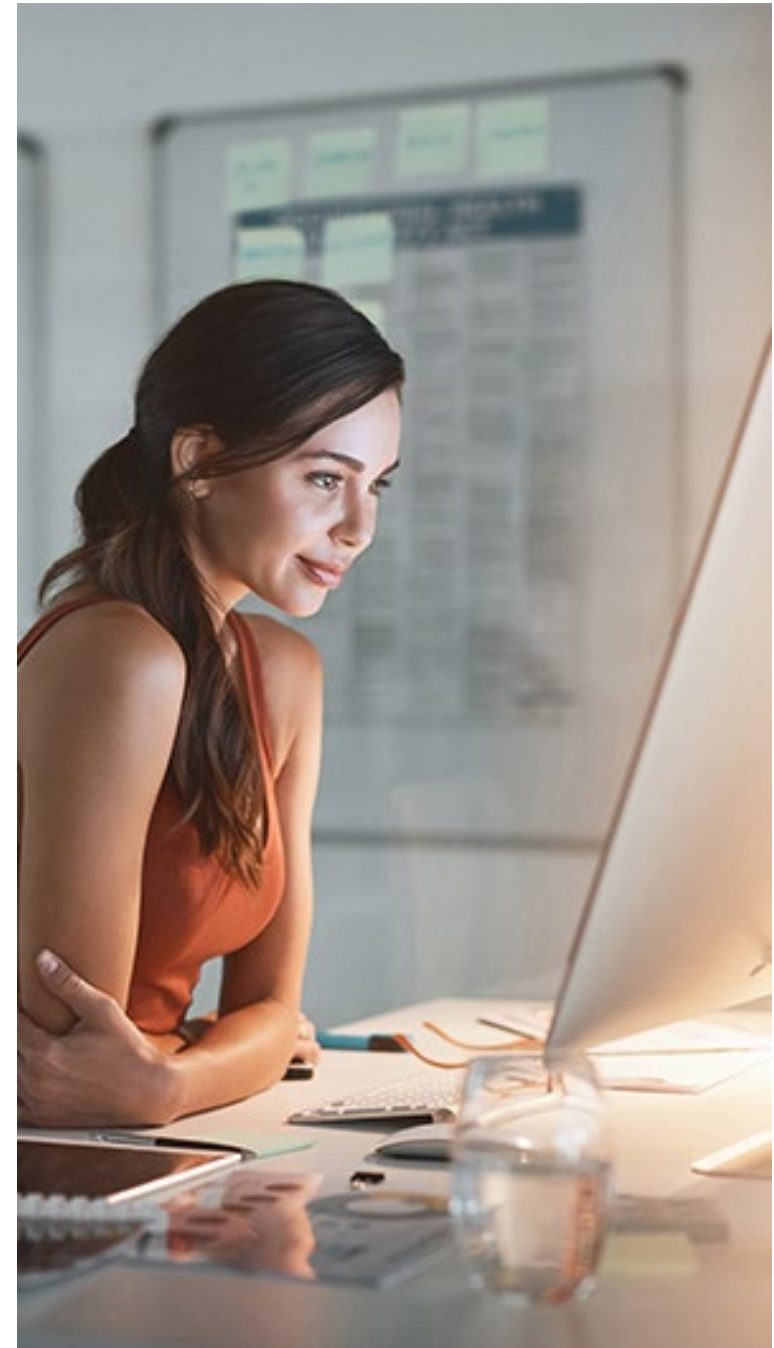
Most investors are staying the course

Trading is up, but the vast majority of participants are focusing on the long term. From early February to April 24, **4.3%** of our non VMAP participants made an exchange, compared to **2.1%** during the same time period last year. **01.4%** of pure TDF participants have traded, vs. **8.0%** of all other participants.³

¹ Vanguard leaders talk volatility, March 31, 2020.

² Vanguard, CARES Act executive summary, April 17, 2020.

³ Vanguard Market Volatility Benchmark, April 24, 2020.



Prior to the market volatility:

- Between **0.21%–0.26%** of participants traded in a given week. Starting the week of February 24, trading increased, however more **than 99% of participants** did not trade. Managed account participants are excluded from this analysis.¹
- Approximately **0.16% of participants initiated a loan in a given week**. Starting February 24, loan issuances were up slightly, but overall remained stable. As of March 23, loan issuances were lower than they were before the market volatility began.¹

Direction of trades¹

Short-term reserves	+\$6.8B
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Fixed income	+\$1.4B
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TDF	- \$3.6B
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Other balanced	- \$0.5B
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U.S. equities	- \$3.6B
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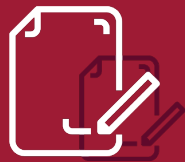
International equities	- \$0.6B
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Company stock	+\$56M
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Brokerage	+\$123M
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¹ Vanguard, Market Volatility Benchmark, April 17, 2020.

CARES Act



Fee waivers

Vanguard is waiving participant-paid loan and withdrawal fees related to COVID-19 for qualifying participants.

Distribution waivers

Required minimum distributions (RMDs) have been waived for 2020.

- Those who have already taken an RMD for 2020 may be able to reverse the distribution

Financial relief

Early withdrawal penalties have been waived and loan limits have increased for participants who certify they are affected by COVID-19.

- \$100K withdrawal limit for 2020 across all plans/IRAs
- No penalty tax or mandatory withholding
- Three-year window to spread out taxes or repay a withdrawal to plan or IRA

Financial relief (Loans)

There are special rules pertaining to both optional and mandatory loans. A presentation on how this affects your plan will be coming soon.

Time stipulations

- Increased limits can be adopted for loans established up to 180 days from the enactment date
- Deadline for plan amendments relating to outbreak is 2022

Client adoption

- Percentage of clients adopting coronavirus related distributions (CRD): **98.14%**¹
- Percentage of clients adopting loan limit increases: **64.19%**

Continuing support

Vanguard remains actively involved in the legislative process and regulatory changes resulting from COVID-19. We will continue to establish processes and controls for the evolving needs of your plan, your workforce and your business.



Participant CARES Act transactions

Transaction volume	Number of requests	Average amount requested
Coronavirus distribution (CRD) ² Withdrawals at 100K limit: 315	10,056	\$18,400
Loans issuances ² Loans over 50K: 128	2,162*	\$12,500
RMD waivers	1,044	N/A**
Loan repayment suspensions	5,921	N/A**

* All loan issuances in plans that have adopted the loan limit increase.

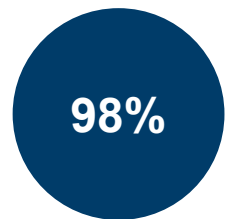
** Not applicable to CARES Act provisions referenced.

¹ Vanguard, CARES Act executive summary, April 17, 2020.

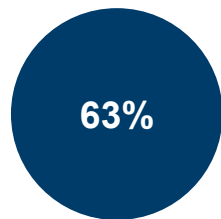
Adoption by participant¹

Plans < 10,000

Average number of elections received: **233**



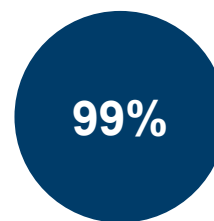
Withdrawals
Average



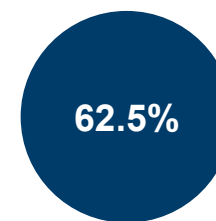
Loan Limits
Average

Plans > 10,000

Average number of elections received: **53.5**



Withdrawals
Average



Loan Limits
Average

**Participants are focusing
on the long term.**

¹ Vanguard, CARES Act executive summary, April 17, 2020.

Important information

We recommend that you consult a tax or financial advisor about your individual situation.

All investing is subject to risk, including the possible loss of the money you invest.

For institutional use only. Not for distribution to retail investors.

Important information

For more information about any fund, visit institutional.vanguard.com or call 866-499-8473 to obtain a prospectus or, if available, a summary prospectus. Investment objectives, risks, charges, expenses, and other important information are contained in the prospectus; read and consider it carefully before investing.

Vanguard ETF® Shares are not redeemable with the issuing fund other than in very large aggregations worth millions of dollars. Instead, investors must buy or sell Vanguard ETF Shares in the secondary market and hold those shares in a brokerage account. In doing so, the investor may incur brokerage commissions and may pay more than net asset value when buying and receive less than net asset value when selling.

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While U.S. Treasury or government agency securities provide substantial protection against credit risk, they do not protect investors against price changes due to changing interest rates. Unlike stocks and bonds, U.S. Treasury bills are guaranteed as to the timely payment of principal and interest.

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