

Q3 2025 Vanguard Financial Advisor Services™

ETF Industry Perspectives

ONEETF spotlights

TWO

ETF industry trends and developments

ONEETF spotlights

Markets rebound after volatile start to Q2

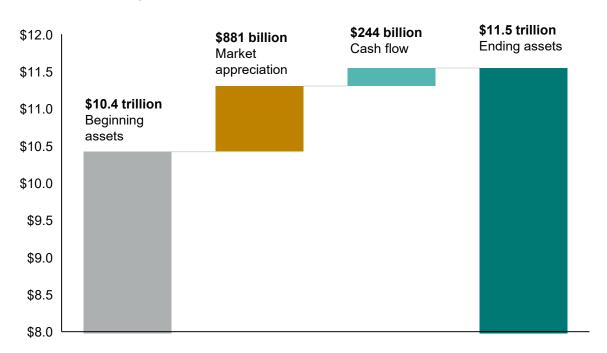
ETF assets rose by over a trillion dollars due to market appreciation of \$881 billion bolstered by \$244 billion in flows

- Despite volatility early in Q2—the VIX volatility index reached 33.62 on April 9, 2025 and yields on 10-year Treasury notes dropped ~50 bps from January highs—markets ended the quarter near all-time highs
- International markets, both equity and fixed income, saw record inflows, benefitting from investors diversifying amid U.S. volatility
 - International equity saw inflows of \$51 billion during the quarter, while international fixed income saw \$10 billion

Asset class returns as of June 30, 2025

	Quarter	12 months
U.S. equity	11.00%	15.13%
International equity	12.59%	18.24%
U.S. fixed income	1.22%	6.07%
International fixed income	1.95%	6.01%

ETF industry assets in Q2 2025



Sources: Vanguard, based on data from Morningstar, Inc., as of June 30, 2025.

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.

Note: U.S. equity returns are represented by the CRSP US Total Market Index, international equity returns by the FTSE Global All Cap ex US Index, U.S. fixed income returns by the Bloomberg US Aggregate Float Adjusted Index; and international fixed income returns by the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index (USD Hedged). **Source:** Morningstar, Inc., as of June 30, 2025.

ETF flows are on pace for a record year after a solid first half

ETF flows reached \$244 billion, outpacing previous Q2s

 Overall inflows slowed in April, except for categories such as ultrashort fixed income, as investors sought refuge from a roiled market

Fixed income saw a push in May

- Munis more than doubled flows from Q1
- Notably, foreign and long government ETFs accounted for nearly a third of fixed income flows during the month

Equity flows saw a renewed push in June

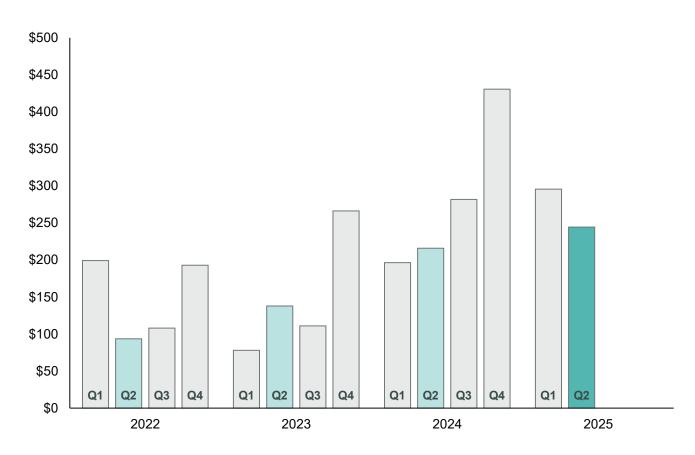
 While flows mostly went into large blend ETFs, international ETFs also saw an increase

Monthly industry cash flow by asset class (\$B)

	April	Мау	June	Q2	2025
Equity	\$31.4	\$47.6	\$63.2	\$142.2	\$313.3
Fixed income	\$13.1	\$39.2	\$23.8	\$76.1	\$179.5
Other	\$13.9	\$2.2	\$10.0	\$26.1	\$47.2
Total	\$58.4	\$89.0	\$97.0	\$244.4	\$540.0

Notes: Data based on U.S.-listed issues only, not including exchange-traded notes (ETNs). "Other" includes ETFs in Morningstar's Allocation, Alternative, Commodities, and Miscellaneous categories. Differences in totals are due to rounding. **Sources:** Vanguard, based on data from Morningstar, Inc., as of June 30, 2025.

Quarterly industry cash flow (\$B)



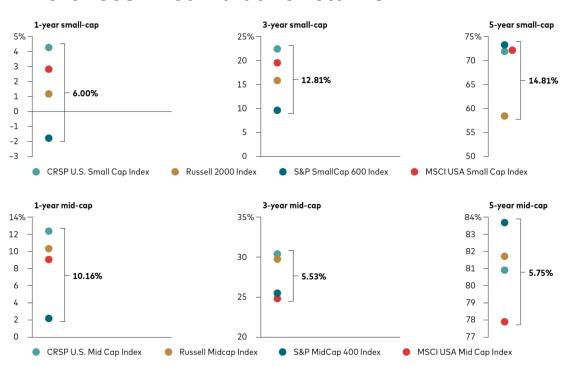
Sources: Vanguard, based on data from Morningstar, Inc., as of June 30, 2025.

Spotlight on equity

For small- and mid-cap strategies, not all indexes are created equal

- Over the past three years, \$463 billion has poured into the top four S&P 500 ETFs, suggesting its advisors' preference for gaining large-cap exposure
 - However, advisors tend to use more varied approaches to their small- and mid-cap exposure, including both active and passive strategies
- When looking to complete clients' equity exposure, it's important to pay attention to overlap within their portfolios
 - Advisors can create unintended tilts within portfolios by not considering the differences between index methodologies or active share
 - It's important to prioritize creating a cohesive portfolio to accompany potential returns.

Differences in cumulative returns



Source: Morningstar, Inc., from June 1, 2020, through May 31, 2025.

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.

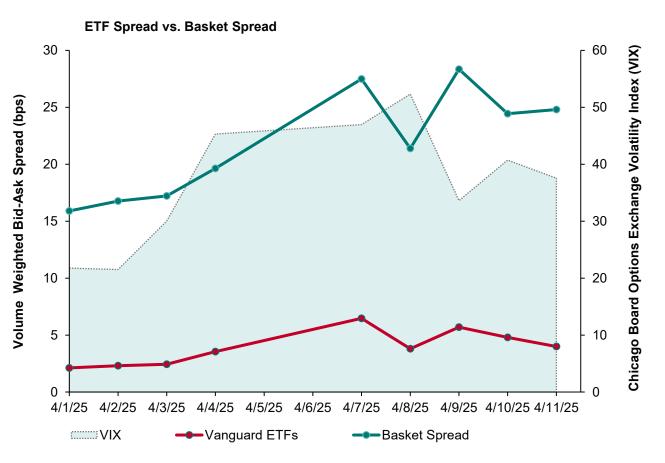


TWO ETF industry trends and developments

Liberation Day recap

- On April 2, 2025, Liberation Day occurred where the U.S. announced broad tariffs on many countries
- While the VIX increased as much as 52.33 on April 8¹, ETF spreads still remained significantly lower than their basket spreads in the days that followed
 - Basket spreads increased at a higher rate than Vanguard ETF spreads during this period
- When markets heat up, it's important to keep in mind these trading tips:
 - Avoid trading on volatile days if you can
 - Consider limit or marketable limit orders, which provide time for market makers to refresh quotes and add additional liquidity
 - A limit order further allows investors to set the price for executing a trade so that it is only fulfilled at the target price. While this runs the risk of the trade not being fulfilled or only partially fulfilled, it avoids the risk of a negative trade impact.
 - For larger trades, contact our Capital Markets team to help

As volatility spiked, ETF spreads offered relative stability



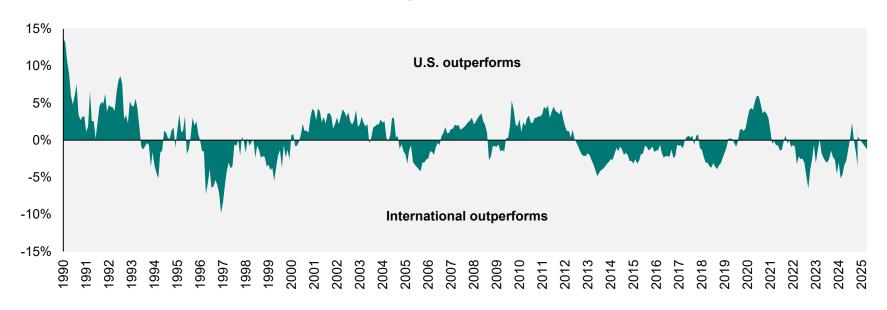
Source: Bloomberg, as of April 11, 2025.

^{1:} FactSet, as of April 8, 2025.

International bonds: When the flows come marching in

- Over April and May 2025, international bonds captured over \$5.8 billion, a marked increase over the past few years
 - Many of these flows are going into global bonds as opposed to strictly emerging markets bonds
- This matches an overall move to diversify, considering tariff-related volatility in U.S. markets and a renewed interest in international assets—both equity and fixed income
- As advisors investigate broadening international bond exposure, consider the differences between high-quality international bonds and emerging markets (see next slide)

Performance of U.S. fixed income vs. global ex-USD fixed income



	U.S. Agg	Global Agg x-U.S.
Average rolling returns	5.28%	5.09%
Volatility of returns	5.26%	4.33%
% outperformed	48.71%	51.29%

Note: Volatility measured by standard deviation.

Source: Bloomberg indexes using the U.S. Aggregate Index and Global ex U.S. (hedged) Index based on rolling 1-year return figures, from March 1, 1990, through May 31, 2025.

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.



International bonds: What to consider

Investment-grade ex-U.S. bonds

- Currency risk can significantly impact returns
 - Consider USD-hedged options to counter volatility and enhance yield productivity
- Developed markets, apart from U.S.
 Treasuries exposure, may offer portfolio diversification
- Developed markets tend to have a lower default risk and offer more liquidity than emerging markets

Emerging market bonds

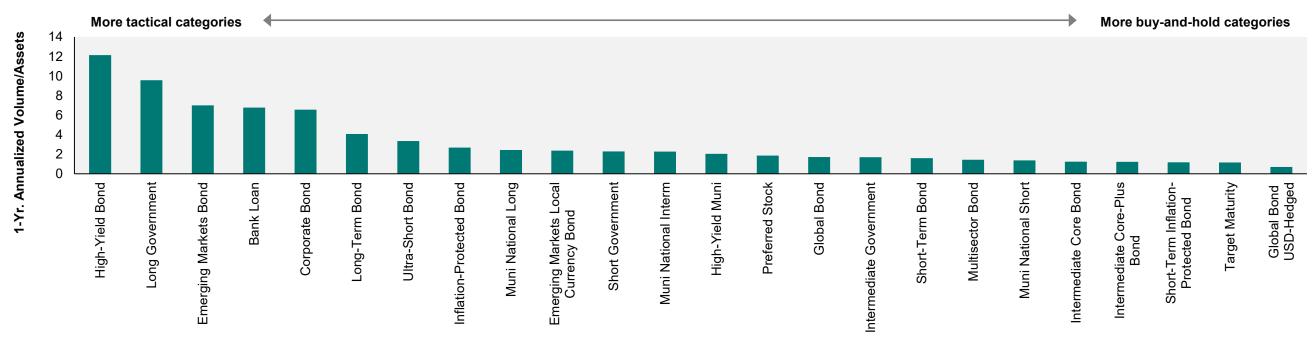
- Potentially offer higher yield to compensate for higher risk, including default risk
 - Risk may be lower when using USD-denominated products
- Emerging market fixed income ETFs offer access to growing economies, creating potential opportunities for higher returns
- More likely to experience geopolitical and economic instability, hence, be aware of country exposure and look to diversify

Using passive actively and active passively within fixed income

- Advisors are using broad market active ETFs that offer wide investment flexibility and a complete set of alpha-seeking strategies
 - Three of the top five "buy-and-hold" categories offer more broad exposure such as the total bond market or total global bond market

- Meanwhile, advisors more frequently leverage index solutions for sector and duration positioning
 - The top five "tactical" categories offer sector or maturity precision

Morningstar categories ranked by asset turnover



Note: Volume is represented by 12-month annualized volume in dollars, and assets are represented by AUM of the Morningstar category. Morningstar categories with under \$5 billion in AUM were excluded. **Source:** Vanguard calculations using Morningstar, Inc., as of May 31, 2025.

Appendix

ETF market snapshot

Total ETF assets under management industry-wide at quarter-end: \$11.55 trillion

Product strategy

	AUM
Index	\$10.4 trillion
Active	\$1.1 trillion

Investment category

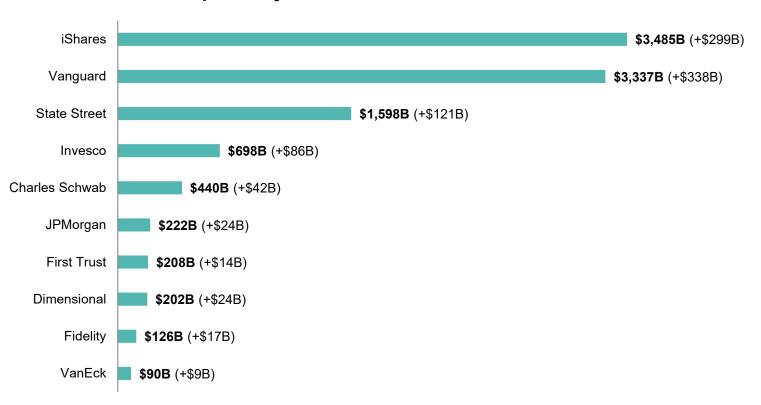
	AUM
Equity	\$9.0 trillion
Fixed income	\$2.0 trillion
Other	\$0.5 trillion

Number of ETFs available

	Number
ETF launches in Q2 2025	229
ETF closures in Q4 2024	46
Total U.S. ETFs	4,256

Notes: Data based on U.S.-listed issues only, not including ETNs. "Other" includes ETFs in Morningstar's Allocation, Alternative, Commodities, and Miscellaneous categories. Differences in totals are due to rounding. **Sources:** Vanguard, based on data from Morningstar, Inc., as of June 30, 2025.

Issuer assets and quarterly cash flow



Cash flows

Equity ETF cash flow in Q2: \$142.2 billion

Broad equity categories (\$B)

U.S.	\$75.1
International	\$50.6
Sector	-\$3.4
Nontraditional	\$17.4

Breakdown of U.S. equity (\$B)

	Value	Blend	Growth
Large-cap	\$11.6	\$50.4	\$22.9
Mid-cap	-\$2.7	\$3.8	-\$0.7
Small-cap	- \$1.7	-\$7.6	- \$1.0

Note: Data based on U.S.-listed issues only, not including ETNs. Data exclude \$15.8 billion in "Alternative" assets. This category includes \$15.5 billion in "Digital Assets," including cryptocurrencies. **Sources:** Vanguard, based on data from Morningstar, Inc., as of June 30, 2025.

Fixed income ETF cash flow in Q2: \$76.1 billion

Broad fixed income categories (\$B)

U.S. taxable	\$54.0
International	\$10.3
Municipal	\$8.6

Breakdown of U.S. taxable fixed income (\$B)

	Short-term	Intermediate- term	Long-term
Government	\$17.3	\$5.1	- \$1.0
Investment-grade	\$10.1	\$28.4	- \$3.7
High-yield	\$4.6		
Other	\$3.8		

Notes: Data based on U.S.-listed issues only, not including ETNs. "Other" includes ETFs in Morningstar's Preferred Stock, Bank Loan, Multisector Bond, Nontraditional Bond, and Target Maturity categories. **Sources:** Vanguard, based on data from Morningstar, Inc., as of June 30, 2025.

U.S. ETF industry leaders

Equity index total: \$8.28T

Rank	Company	Assets
1	Vanguard	\$2,810.2 B
2	iShares	\$2,508.6 B
3	State Street	\$1,311.3 B
4	Invesco	\$630.7 B
5	Charles Schwab	\$376.3 B
6	First Trust	\$119.2 B
7	VanEck	\$69.3 B
8	WisdomTree	\$58.8 B
9	JPMorgan	\$56.6 B
10	Global X	\$55.5 B

Active equity total: \$716.5B

Rank	Company	Assets
1	Dimensional	\$182.4 B
2	JPMorgan	\$104.6 B
3	American Century	\$68.2 B
4	Capital Group	\$53.5 B
5	First Trust	\$47.1 B
6	iShares	\$28.0 B
7	Fidelity	\$26.5 B
8	Innovator	\$24.9 B
9	YieldMax ETFs	\$14.7 B
10	ARK	\$12.6 B

Fixed income index total: \$1.63T

Rank	Company	Assets
1	iShares	\$766.1 B
2	Vanguard	\$514.7 B
3	State Street	\$150.7 B
4	Charles Schwab	\$62.9 B
5	Invesco	\$48.8 B
6	WisdomTree	\$21.4 B
7	VanEck	\$17.6 B
8	Goldman Sachs	\$8.1 B
9	F/m Investments	\$7.6 B
10	Xtrackers	\$5.5 B

Active fixed income total: \$368.9B

Rank	Company	Assets
1	JPMorgan	\$58.7 B
2	First Trust	\$37.3 B
3	Janus Henderson	\$32.7 B
4	PIMCO	\$31.5 B
5	Fidelity	\$24.8 B
6	iShares	\$24.1 B
7	Dimensional	\$19.8 B
8	PGIM	\$16.3 B
9	Capital Group	\$16.2 B
10	State Street	\$12.9 B

Note: Data based on U.S.-listed issues only, not including ETNs.

Sources: Vanguard, based on data from Morningstar, Inc., as of June 30, 2025.

Vanguard ETFs®

Equity

Large-cap	Symbol	Expense ratio
Total Stock Market	VTI	0.03%
Russell 3000	VTHR	0.07%
Mega Cap	MGC	0.07%
Mega Cap Growth	MGK	0.07%
Mega Cap Value	MGV	0.07%
S&P 500	VOO	0.03%
S&P 500 Growth	VOOG	0.07%
S&P 500 Value	VOOV	0.07%
Russell 1000	VONE	0.07%
Russell 1000 Growth	VONG	0.07%
Russell 1000 Value	VONV	0.07%
Large-Cap	VV	0.04%
Growth	VUG	0.04%
Value	VTV	0.04%
Mid-cap	Symbol	Expense ratio
Extended Market	VXF	0.06%
Mid-Cap	VO	0.04%
Mid-Cap Growth	VOT	0.07%
Mid-Cap Value	VOE	0.07%
S&P Mid-Cap 400	IVOO	0.07%
S&P Mid-Cap 400 Growth	IVOG	0.10%
S&P Mid-Cap 400 Value	IVOV	0.10%

Small-cap	Symbol	Expense ratio
Small-Cap	VB	0.05%
Small-Cap Growth	VBK	0.07%
Small-Cap Value	VBR	0.07%
S&P Small-Cap 600	VIOO	0.07%
S&P Small-Cap 600 Growth	VIOG	0.10%
S&P Small-Cap 600 Value	VIOV	0.10%
Russell 2000	VTWO	0.07%
Russell 2000 Growth	VTWG	0.10%
Russell 2000 Value	VTWV	0.10%
International/global	Symbol	Expense ratio
Total World Stock	VT	0.06%
Total International Stock	VXUS	0.05%
FTSE All-World ex-US	VEU	0.04%
FTSE All-World ex-US Small-Cap	VSS	0.08%
Global ex-U.S. Real Estate	VNQI	0.12%
FTSE Developed Markets	VEA	0.03%
FTSE Europe	VGK	0.06%
FTSE Pacific	VPL	0.07%
FTSE Emerging Markets	VWO	0.07%
ESG	Symbol	Expense ratio
ESG U.S. Stock	ESGV	0.09%
ESG International Stock	VSGX	0.10%

Sector	Symbol	Expense ratio
Consumer Discretionary	VCR	0.09%
Consumer Staples	VDC	0.09%
Energy	VDE	0.09%
Financials	VFH	0.09%
Health Care	VHT	0.09%
Industrials	VIS	0.09%
Information Technology	VGT	0.09%
Materials	VAW	0.09%
Real Estate	VNQ	0.13%
Communication Services	VOX	0.09%
Utilities	VPU	0.09%
Dividend	Symbol	Expense ratio
Dividend Appreciation	VIG	0.05%
International Dividend Appreciation	VIGI	0.10%
High Dividend Yield	VYM	0.06%
International High Dividend Yield	VYMI	0.17%

Note: Expense ratios are as of each ETF's most recent prospectus.

Source: Vanguard, as of June 30, 2025.

Vanguard ETFs

Fixed income

Broad market	Symbol	Expense ratio
Total Bond Market	BND	0.03%
Short-Term Bond	BSV	0.03%
Intermediate-Term Bond	BIV	0.03%
Long-Term Bond	BLV	0.03%
Treasury/agency	Symbol	Expense ratio
0-3 Month Treasury Bill	VBIL	0.07%
Ultra-Short Treasury	VGUS	0.07%
Short-Term Treasury	VGSH	0.03%
Intermediate-Term Treasury	VGIT	0.03%
Long-Term Treasury	VGLT	0.03%
Extended Duration Treasury	EDV	0.05%
Short-Term Inflation-Protected Securities	VTIP	0.03%
Mortgage-Backed Securities	VMBS	0.03%
Investment grade	Symbol	Expense ratio
Short-Term Corporate Bond	VCSH	0.03%
Intermediate-Term Corporate Bond	VCIT	0.03%
Long-Term Corporate Bond	VCLT	0.03%
Total Corporate Bond	VTC	0.03%
Ultra-Short Bond ETF	VUSB	0.10%

International/global	Symbol	Expense ratio
Total International Bond	BNDX	0.07%
Total World Bond	BNDW	0.05%
Emerging Markets Government Bond	VWOB	0.15%
ESG	Symbol	Expense ratio
ESG U.S. Corporate Bond	VCEB	0.12%

Note: Expense ratios are as of each ETF's most recent prospectus.

Source: Vanguard, as of June 30, 2025.

Important information

For more information about Vanguard funds or ETF Shares, contact your financial advisor 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 and 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.

All investing is subject to risk, which may result in loss of principal. 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. Prices of mid- and small-cap stocks often fluctuate more than those of large-company stocks. Funds that concentrate on a relatively narrow market sector face the risk of higher share-price volatility.

Investments in bond funds are subject to the risk that an issuer will fail to make payments on time, and that bond prices will decline because of rising interest rates or negative perceptions of an issuer's ability to make payments. Diversification does not ensure a profit or protect against a loss. U.S. government backing of Treasury or agency securities applies only to the underlying securities and does not prevent share-price fluctuations. Unlike stocks and bonds, U.S. Treasury bills are guaranteed as to the timely payment of principal and interest.

Investments in stocks or bonds issued by non-U.S. companies are subject to risks including country/regional risk and currency risk. These risks are especially high in emerging markets.

Although the income from a municipal bond fund is exempt from federal tax, you may owe taxes on any capital gains realized through the fund's trading or through your own redemption of shares. For some investors, a portion of the fund's income may be subject to state and local taxes, as well as to the federal Alternative Minimum Tax.

The Factor Funds are subject to investment style risk, which is the chance that returns from the types of stocks in which a Factor Fund invests will trail returns from U.S. stock markets. The Factor Funds are also subject to manager risk, which is the chance that poor security selection will cause a Factor Fund to underperform its relevant benchmark or other funds with a similar investment objective, and sector risk, which is the chance that significant problems will affect a particular sector in which a Factor Fund invests, or that returns from that sector will trail returns from the overall stock market.

ESG funds are subject to ESG investment risk, which is the chance that the stocks or bonds screened by the index provider or advisor, as applicable, for ESG criteria generally will underperform the market as a whole or, in the aggregate, will trail returns of other funds screened for ESG criteria. The index provider or advisor's assessment of a company, based on the company's level of involvement in a particular industry or their own ESG criteria, may differ from that of other funds or an investor's assessment of such company. As a result, the companies deemed eligible by the index provider or advisor may not reflect the beliefs and values of any particular investor and may not exhibit positive or favorable ESG characteristics. The evaluation of companies for ESG screening or integration is dependent on the timely and accurate reporting of ESG data by the companies. Successful application of the screens will depend on the index provider or advisor's proper identification and analysis of ESG data. The advisor may not be successful in assessing and identifying companies that have or will have a positive impact or support a given position. In some circumstances, companies could ultimately have a negative or no impact or support of a given position.

© 2025 Morningstar, Inc. All Rights Reserved. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information. Past performance is no guarantee of future results.

"Bloomberg®" is a service mark of Bloomberg Finance L.P. and its affiliates, including Bloomberg Index Services Limited ("BISL"), the administrator of the index (collectively, "Bloomberg"), and has been licensed for use for certain purposes by Vanguard. Bloomberg is not affiliated with Vanguard, and Bloomberg does not approve, endorse, review, or recommend the Vanguard funds. Bloomberg does not guarantee the timeliness, accurateness, or completeness of any data or information relating to the Vanguard funds.

© 2025 The Vanguard Group, Inc. All rights reserved. Vanguard Marketing Corporation, Distributor of the Funds.

For financial advisors and institutions only. Not for public distribution.

PID 3001470 (4680056) DOLU 01/28/2027

Investment Products: Not a Deposit • Not FDIC Insured • Not Guaranteed by the Bank • May Lose Value • Not Insured by Any Federal Government Agency

Important information

VIGM, S.A. de C.V. Asesor en Inversiones Independiente ("Vanguard Mexico") registration number: 30119-001-(14831)-19/09/2018. The registration of Vanguard Mexico before the Comisión Nacional Bancaria y de Valores ("CNBV") as an Asesor en Inversiones Independiente is not a certification of Vanguard Mexico's compliance with regulation applicable to Advisory Investment Services (Servicios de Inversión Asesorados) nor a certification on the accuracy of the information provided herein. The supervision scope of the CNBV is limited to Advisory Investment Services only and not all services provided by Vanguard Mexico.

This material is solely for informational purposes and does not constitute an offer or solicitation to sell or a solicitation of an offer to buy any security, nor shall any such securities be offered or sold to any person, in any jurisdiction in which an offer, solicitation, purchase or sale would be unlawful under the securities law of that jurisdiction. Reliance upon information in this material is at the sole discretion of the recipient.

Securities information provided in this document must be reviewed together with the offering information of each of the securities which may be found on Vanguard's website: https://www.vanguardmexico.com/institutional/products/en/list/overview or www.vanguard.com

Vanguard Mexico may recommend products of The Vanguard Group Inc. and its affiliates and such affiliates and their clients may maintain positions in the securities recommended by Vanguard Mexico.

ETFs can be bought and sold only through a broker and cannot be redeemed with the issuing fund other than in very large aggregations. Investing in ETFs entails stockbroker commission and a bid-offer spread which should be considered fully before investing. The market price of ETF Shares may be more or less than net asset value.

All investments are subject to risk, including the possible loss of the money you invest. Investments in bond funds are subject to interest rate, credit, and inflation risk. Governmental backing of securities applies only to the underlying securities and does not prevent share-price fluctuations. High-yield bonds generally have medium- and lower-range credit quality ratings and are therefore subject to a higher level of credit risk than bonds with higher credit quality ratings.

There is no guarantee that any forecasts made will come to pass. Past performance is no guarantee of future results.

Prices of mid- and small-cap stocks often fluctuate more than those of large-company stocks. Funds that concentrate on a relatively narrow market sector face the risk of higher share-price volatility. Stocks of companies are subject to national and regional political and economic risks and to the risk of currency fluctuations, these risks are especially high in emerging markets. Changes in exchange rates may have an adverse effect on the value, price or income of a fund.

The information contained in this material derived from third-party sources is deemed reliable, however Vanguard Mexico and The Vanguard Group Inc. are not responsible and do not guarantee the completeness or accuracy of such information.

This document should not be considered as an investment recommendation, a recommendation can only be provided by Vanquard Mexico upon completion of the relevant profiling and legal processes.

This document is for educational purposes only and does not take into consideration your background and specific circumstances nor any other investment profiling circumstances that could be material for taking an investment decision. We recommend getting professional advice based on your individual circumstances before taking an investment decision.

These materials are intended for institutional and sophisticated investors use only and not for public distribution.

Materials are provided only for the recipient's exclusive use and shall not be distributed to any other individual or entity. Broker-dealers, advisers, and other intermediaries must determine whether their clients are eligible for investment in the products discussed herein.

The information contained herein does not constitute an offer or solicitation and may not be treated as such in any jurisdiction where such an offer or solicitation is against the law, or to anyone for whom it is unlawful to make such an offer or solicitation, or if the person making the offer or solicitation is not qualified to do so.

THESE MATERIALS ARE PROVIDED FOR THE EXCLUSIVE USE OF RECIPIENT AND CONTAIN HIGHLY CONFIDENTIAL INFORMATION, WHICH SHALL NOT BE REPRODUCED OR TRANSMITTED TO ANY THIRD PARTIES WITHOUT VANGUARD'S PRIOR WRITTEN CONSENT. THE CONTENTS OF THESE MATERIALS SHALL NOT BE UNDERSTOOD AS AN OFFER OR SOLICITATION TO BUY OR SELL SECURITIES IN BRAZIL AND VANGUARD IS NOT MAKING ANY REPRESENTATION WITH RESPECT TO THE ELIGIBILITY OF ANY RECIPIENT OF THESE MATERIALS TO ACQUIRE THE INTERESTS IN THE SECURITIES DESCRIBED HEREIN UNDER THE LAWS OF BRAZIL. SUCH SECURITIES HAVE NOT BEEN REGISTERED IN BRAZIL AND NONE OF THE INTERESTS IN SUCH SECURITIES MAY BE OFFERED, SOLD, OR DELIVERED, DIRECTLY OR INDIRECTLY, IN BRAZIL OR TO ANY RESIDENT OF BRAZIL EXCEPT PURSUANT TO THE APPLICABLE LAWS AND REGULATIONS OF BRAZIL.

THIS DOCUMENT WAS SENT BY VANGUARD SPECIFICALLY TO ITS RECIPIENT AND CONTAINS HIGHLY CONFIDENTIAL INFORMATION, WHICH SHALL NOT BE REPRODUCED OR TRANSMITTED TO ANY THIRD PARTIES WITHOUT VANGUARD'S PRIOR AND WRITTEN CONSENT. THE CONTENTS OF THIS MESSAGE SHALL NOT BE UNDERSTOOD AS AN OFFER OR SOLICITATION TO BUY OR SELL SECURITIES IN BRAZIL.

This document is provided at the request of and for the exclusive use of the recipient and does not constitute, and is not intended to constitute, a public offer in the Republic of Colombia, or an unlawful promotion of financial/capital market products. The offer of the financial products described herein is addressed to fewer than one hundred specifically identified investors. The financial products described herein may not be promoted or marketed in Colombia or to Colombian residents, unless such promotion and marketing is made in compliance with Decree 2555/2010 and other applicable rules and regulations related to the promotion of foreign financial/capital market products in Colombia.

The financial products described herein are not and will not be registered before the Colombian National Registry of Securities and Issuers (Registro Nacional de Valores y Emisores - RNVE) maintained by the Colombian Financial Superintendency, or before the Colombian Stock Exchange. Accordingly, the distribution of any documentation in regard to the financial products described here in will not constitute a public offering of securities in Colombia.

The financial products described herein may not be offered, sold or negotiated in Colombia, except under circumstances which do not constitute a public offering of securities under applicable Colombian securities laws and regulations; provided that, any authorized person of a firm authorized to offer foreign securities in Colombia must abide by the terms of Decree 2555/2010 to offer such products privately to its Colombian clients.

The distribution of this material and the offering of securities may be restricted in certain jurisdictions. The information contained in this material is for general guidance only, and it is the responsibility of any person or persons in possession of this material and wishing to make application for securities to inform themselves of, and to observe, all applicable laws and regulations of any relevant jurisdiction. Prospective applicants for securities should inform themselves of any applicable legal requirements, exchange control regulations and applicable taxes in the countries of their respective citizenship, residence or domicile.

Important information

This document and its content should not be considered as an offer, if it were the case the offer of the securities described herein would be made in accordance with general rule No. 336 of the Financial Market Commission (Comisión para el Mercado Financiero). The securities described herein are not registered under Securities Market Law, nor in the Securities Registry nor in the Foreign Securities Registry of the Chilean Financial Market Commission, and therefore such securities are not subject to its oversight. Since such securities are not registered in Chile, the issuer is not obligated to provide public information in Chile regarding the securities. The securities shall not be subject to public offering unless they are duly registered in the corresponding Securities Registry in Chile. The issuer of the securities is not registered in the Registries maintained by the Chilean Financial Market Commission, therefore it is not subject to the supervision of the Chilean Financial Market Commission or the obligations of continuous information.

El presente documento y su contenido no deberá considerarse como una oferta, en su caso la oferta de los valores aquí descritos se realizaría conforme a la norma de carácter general No. 336 de la Comisión para el Mercado Financiero. Los valores aquí descritos, al ser valores no inscritos bajo la Ley de Mercado de Valores en el Registro de Valores o en el Registro de Valores extranjeros que lleva la Comisión para el Mercado Financiero, no están sujetos a la fiscalización de ésta. Por tratarse de valores no inscritos, no existe la obligación por parte del emisor de entregar en Chile información pública respecto de esos valores. Los valores no podrán ser objeto de oferta pública mientras no sean inscritos en el Registro de Valores correspondiente. El emisor de los valores no se encuentra inscrito en los Registros que mantiene la Comisión para el Mercado Financiero, por lo que no se encuentra sometido a la fiscalización de la Comisión para el Mercado financiero ni a las obligaciones de información continua.

The securities described herein have not been registered under the Peruvian Securities Market Law (Decreto Supremo No 093-2002-EF) or before the Superintendencia del Mercado de Valores (the "SMV"). There will be no public offering of the securities in Peru and the securities may only be offered or sold to institutional investors (as defined in Appendix I of the Institutional Investors Market Regulation) in Peru by means of a private placement. The securities offered and sold in Peru may not be sold or transferred to any person other than an institutional investor unless such securities have been registered with the Registro Público del Mercado de Valores kept by the SMV. The SMV has not reviewed the information provided to the investor. This material is for the exclusive use of institutional investors in Peru and is not for public distribution.

The financial products described herein may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act 2003 of Bermuda. Additionally, non-Bermudian persons may not carry on or engage in any trade or business in Bermuda unless such persons are authorized to do so under applicable Bermuda legislation. Engaging in the activity of offering or marketing the financial products described herein in Bermuda to persons in Bermuda may be deemed to be carrying on business in Bermuda.

Vanguard Mexico does not intend, and is not licensed or registered, to conduct business in, from or within the Cayman Islands, and the interests in the financial products described herein shall not be offered to members of the public in the Cayman Islands.

The financial products described herein have not been and will not be registered with the Securities Commission of The Bahamas. The financial products described herein are offered to persons who are non-resident or otherwise deemed non-resident for Bahamian Exchange Control purposes. The financial products described herein are not intended for persons (natural persons or legal entities) for which an offer or purchase would contravene the laws of their state (on account of nationality or domicile/registered office of the person concerned or for other reasons). Further, the offer constitutes an exempt distribution for the purposes of the Securities Industry Act, 2011 and the Securities Industry Regulations, 2012 of the Commonwealth of The Bahamas.

This document is not, and is not intended as, a public offer or advertisement of, or solicitation in respect of, securities, investments, or other investment business in the British Virgin Islands ("BVI"), and is not an offer to sell, or a solicitation or invitation to make offers to purchase or subscribe for, any securities, other investments, or services constituting investment business in BVI. Neither the securities mentioned in this document nor any prospectus or other document relating to them have been or are intended to be registered or filed with the Financial Services Commission of BVI or any department thereof.

This document is not intended to be distributed to individuals that are members of the public in the BVI or otherwise to individuals

in the BVI. The funds are only available to, and any invitation or offer to subscribe, purchase, or otherwise acquire such funds will be made only to, persons outside the BVI, with the exception of persons resident in the BVI solely by virtue of being a company incorporated in the BVI or persons who are not considered to be "members of the public" under the Securities and Investment Business Act, 2010 ("SIBA").

Any person who receives this document in the BVI (other than a person who is not considered a member of the public in the BVI for purposes of SIBA, or a person resident in the BVI solely by virtue of being a company incorporated in the BVI and this document is received at its registered office in the BVI) should not act or rely on this document or any of its contents.

This document is not intended to provide tax advice or make and exhaustive analysis of the tax regime of the securities described herein. We strongly recommend seeking professional tax advice from a tax specialist.

Data provided by Morningstar is property of Morningstar and Morningstar's data providers and it should therefore not be copied or distributed. Morningstar and its data providers are not responsible for any certification or representation with respect to data validity, certainty, or accuracy and are therefore not responsible for any losses derived from the use of such information.

Bloomberg® and Bloomberg Indexes mentioned herein are service marks of Bloomberg Finance LP and its affiliates, including Bloomberg Index Services Limited ("BISL"), the administrator of the index (collectively, "Bloomberg") and have been licensed for use for certain purposes by Vanguard. Bloomberg is not affiliated with Vanguard and Bloomberg does not approve, endorse, review, or recommend the Financial Products included in this document. Bloomberg does not guarantee the timeliness, accurateness or completeness of any data or information related to the Financial Products included in this document.

Vanguard Mexico is not responsible for and does not prepare, edit, or endorse the content, advertising, products, or other materials on or available from any website owned or operated by a third party that may be linked to this email/document via hyperlink. The fact that Vanguard Mexico has provided a link to a third party's website does not constitute an implicit or explicit endorsement, authorization, sponsorship, or affiliation by Vanguard with respect to such website, its content, its owners, providers, or services. You shall use any such third-party content at your own risk and Vanguard Mexico is not liable for any loss or damage that you may suffer by using third party websites or any content, advertising, products, or other materials in connection therewith.

The sale of the VTI, VTHR, MGC, MGK, MGV, VOO, VOOG, VOOV, VONE, VONV, VV, VUG, VTV, VXF, VO, VOT, VOE, IVOO, IVOG, IVOV, VB, VBK, VBR, VIOO, VIOG, VIOV, VTWO, VTWO, VTWO, VTWV, VT, VXUS, VEU, VSS, VNQI, VEA, VGK, VPL, VWO, ESGV, VSGX, VCR, VDC, VDE, VFH, VHT, VIS, VGT, VAW, VNQ, VOX, VPU, VIG, VIGI, VYM, VYMI, BND, BSV, BIV, BLV, VBIL, VGUS, VGSH, VGIT, VGLT, EDV, VTIP, VMBS, VCSH, VCIT, VCLT, VTC, VUSB, BNDX, BNDW, VWOB and/or the VCEB qualifies as a private placement pursuant to section 2 of Uruguayan law 18.627. Vanguard represents and agrees that it has not offered or sold, and will not offer or sell, any VTI, VTHR, MGC, MGK, MGV, VOO, VOOG, VOOV, VONE, VONV, VV, VUG, VTV, VXF, VO, VOT, VOE, IVOO, IVOG, IVOV, VB, VBK, VBR, VIOO, VIOG, VIOV, VTWO, VTWG, VTWV, VT, VXUS, VEU, VSS, VNQI, VEA, VGK, VPL, VWO, ESGV, VSGX, VCR, VDC, VDE, VFH, VHT, VIS, VGT, VAW, VNQ, VOX, VPU, VIG, VIGI, VYM, VYMI, BND, BSV, BIV, BLV, VBIL, VGUS, VGSH, VGIT, VGLT, EDV, VTIP, VMBS, VCSH, VCIT, VCLT, VTC, VUSB, BNDX, BNDW, VWOB and/or the VCEB to the public in Uruguay, except in circumstances which do not constitute a public offering or distribution under Uruguayan laws and regulations. Neither the VTI, VTHR, MGC, MGK, MGV, VOO, VOOG, VOOV, VONE, VONV, VV, VUG, VTV, VXF, VO, VOT, VOE, IVOO, IVOG, IVOV, VB, VBK, VBR, VIOO, VIOG, VIOV, VTWO, VTWO, VTWV, VT, VXUS, VEU, VSS, VNQI, VEA, VGK, VPL, VWO, ESGV, VSGX, VCR, VDC, VDE, VFH, VHT, VIS, VGT, VAW, VNQ, VOX, VPU, VIG, VIGI, VYMI, BND, BSV, BIV, BLV, VBIL, VGUS, VGSH, VGIT, VGLT, EDV, VTIP, VMBS, VCSH, VCIT, VCLT, VTC, VUSB, BNDX, BNDW, VWOB and/or the VCEB nor issuer are or will be registered with the Superintendency of Financial Services of the Central Bank of Uruguay to be publicly offered in Uruguay.

The VTI, VTHR, MGC, MGK, MGV, VOO, VOOG, VOOV, VONE, VONV, VV, VUG, VTV, VXF, VO, VOT, VOE, IVOO, IVOG, IVOV, VB, VBK, VBR, VIOO, VIOG, VIOV, VTWO, VTWG, VTWV, VT, VXUS, VEU, VSS, VNQI, VEA, VGK, VPL, VWO, ESGV, VSGX, VCR, VDC, VDE, VFH, VHT, VIS, VGT, VAW, VNQ, VOX, VPU, VIG, VIGI, VYM, VYMI, BND, BSV, BIV, BLV, VBIL, VGUS, VGSH, VGIT, VGLT, EDV, VTIP, VMBS, VCSH, VCIT, VCLT, VTC, VUSB, BNDX, BNDW, VWOB and/or the VCEB correspond to investment funds that are not investment funds regulated by Uruguayan law 16,774 dated 27 September 1996, as amended.