

Vanguard Index Funds

Quarterly Review | March 31, 2024



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Executive summary

Global markets rally in Q1

Global equity markets continued to rally in the first quarter following last year's momentum. Bond markets had a rocky start as the U.S. Federal Reserve shifted away from its more dovish stance in 2023. The markets now predict three federal funds rate cuts—down from the six predicted at the end of 2023, given stronger U.S. economic data.

In the U.S., stocks reached new 52-week highs during the first quarter. The technology sector showed strength driven by the “Magnificent Seven” stocks, continued enthusiasm around artificial intelligence, and large-cap stocks outperforming small-cap stocks. U.S. stocks continued to outpace the global stocks, although the best-performing country among developed markets was Japan, which announced an end to its negative interest rate policy. Developed markets led emerging markets, which have been weighed down by concerns over China's growth.

Within fixed income, global developed markets fell in the first quarter as yields rose. Emerging markets debt, buoyed by higher real yields, produced a positive return. Likewise, in the U.S., lower-quality credit outperformed as spreads narrowed and the default rate remained flat.

Despite market volatility, Vanguard, through its investor-owned* structure, has strived to consistently add value over its 40-plus-year history of managing index portfolios by proactively reducing costs and applying conservative securities-lending and collateral reinvestment practices. Vanguard's investment principles are rooted in setting clear goals, maintaining balance, minimizing cost, and staying disciplined with a long-term perspective.

Performance of key Vanguard index funds

Fund name (inception date)	2Q 2023	3Q 2023	4Q 2023	1Q 2024	1-year
Vanguard Total Stock Market Index Fund (07/07/1997)	8.42%	−3.30%	12.17%	10.00%	29.37%
Vanguard Total International Stock Index Fund (11/29/2010)	2.61%	−4.01%	9.98%	4.32%	13.00%
Vanguard Total Bond Market Index Fund (09/18/1995)	−0.90%	−3.08%	6.69%	−0.79%	1.67%
Vanguard Total International Bond Index Fund (05/31/2013)	0.18%	−1.50%	6.54%	0.10%	5.23%
Vanguard Short-Term Inflation-Protected Securities Index Fund (10/17/2012)	−0.69%	0.43%	2.55%	0.85%	3.16%

Source of performance figures: Vanguard, Institutional share class, as of March 31, 2024.

*Vanguard is owned by its funds, which are owned by Vanguard's fund shareholder clients.

The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so, investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at institutional.vanguard.com. Standard performance of the funds can be located on pages 8 and 23–24 of the Quarterly Review.



Fixed income market and fund performance

IN THIS SECTION:

Fixed income markets overview

Performance and attribution for Vanguard
taxable fixed income index funds



Fixed income markets overview

Figure 5.1 Treasury yields (%)

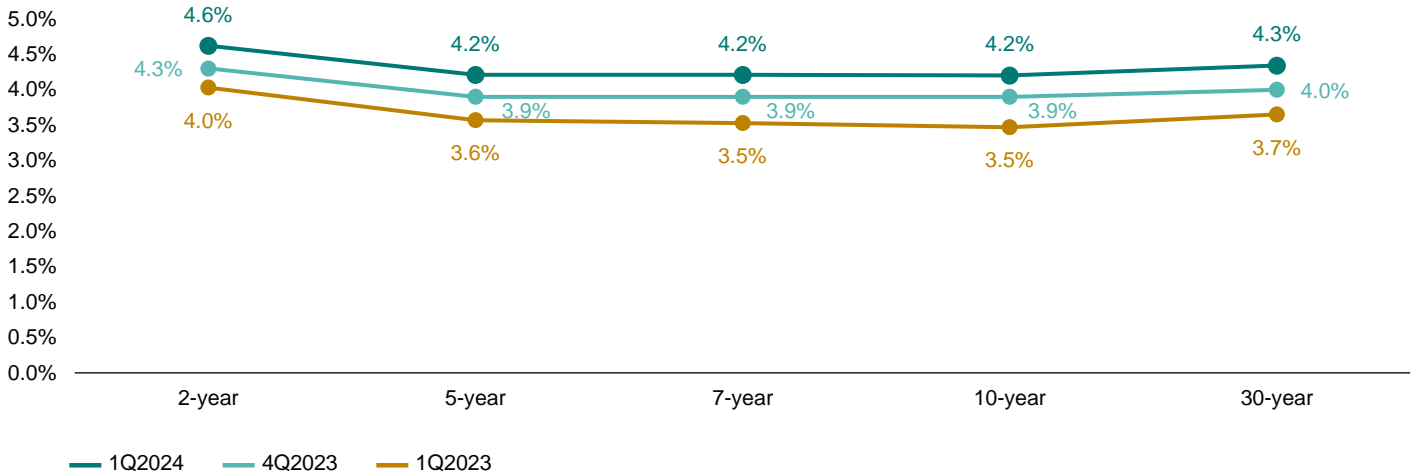
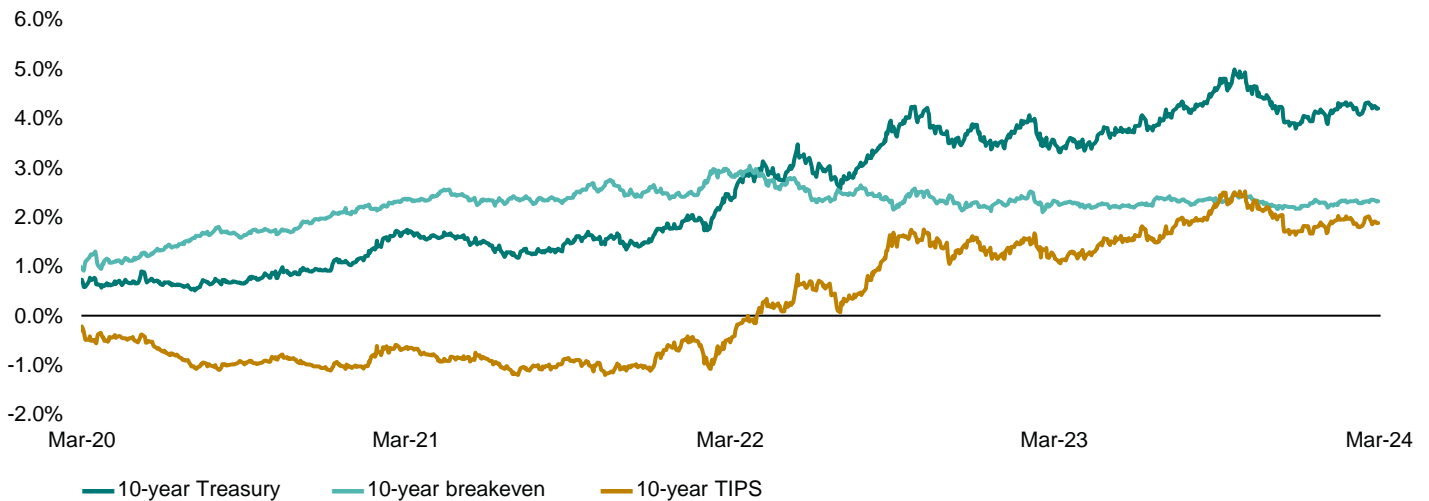


Figure 5.2 Inflation expectations*



Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.

* The break-even inflation rate represents a measure of expected inflation derived from the difference between the nominal yield on the 10-year Treasury—which includes inflation expectations—and the yield of the 10-year Treasury Inflation-Protected Security (TIPS)—which does not include inflation expectations. This delta implies what the market believes will be the average rate of inflation over the next 10 years.



Fixed income markets overview

Figure 6.1 Credit spreads (1-year)

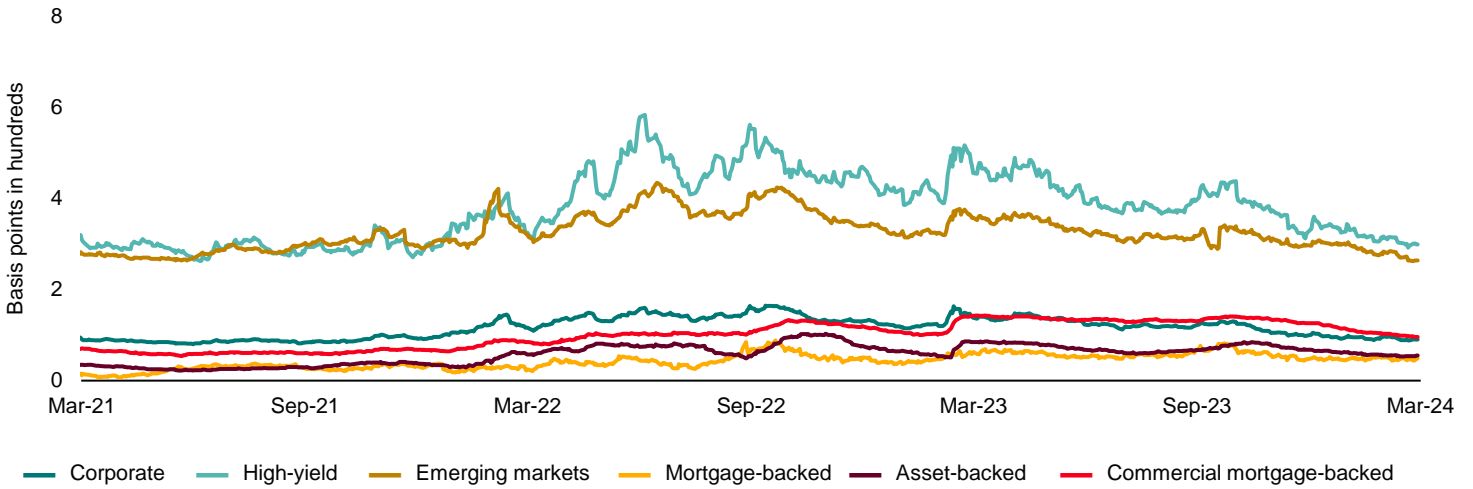
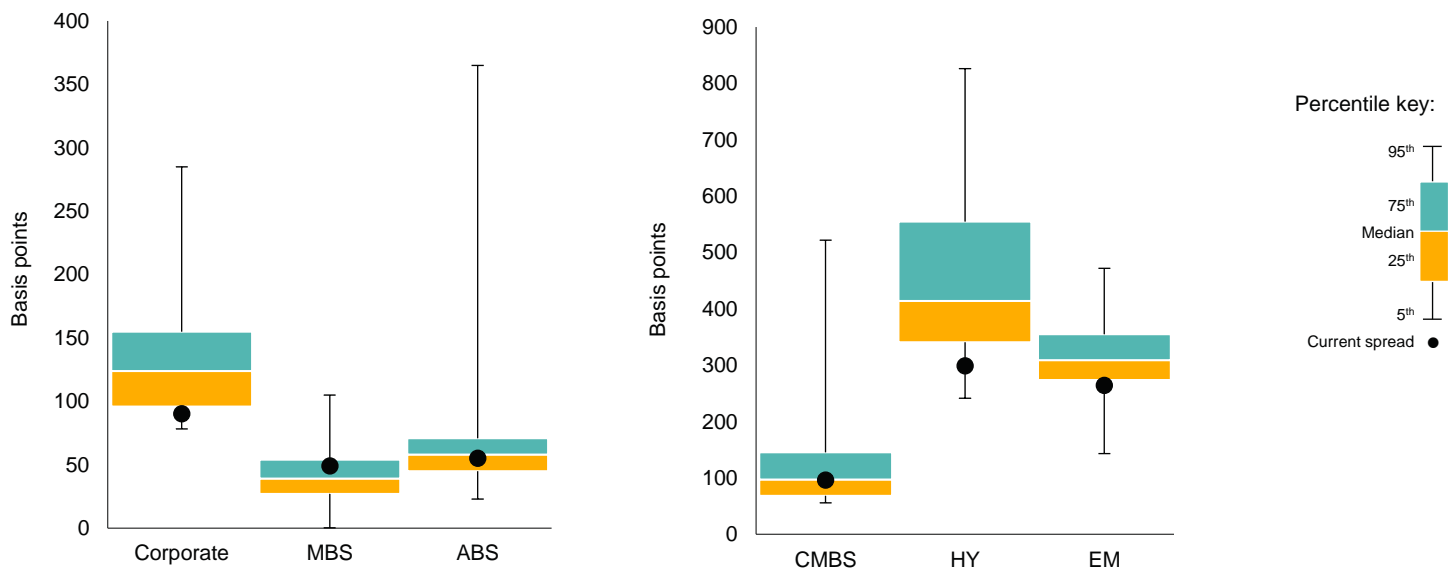


Figure 6.2 Credit spreads relative to comparable Treasuries over 20 years



Sources: Vanguard and Bloomberg. All data as of March 31, 2024, unless otherwise noted.

Note: Sectors represented by data from Bloomberg indexes: Bloomberg US Agg Corporate, Bloomberg US Corporate High Yield, Bloomberg EM USD Agg, Bloomberg US MBS Fixed Rate, Bloomberg US Agg ABS, and Bloomberg US Agg CMBS.



Fixed income markets overview

Figure 7.1 U.S. total return by sector

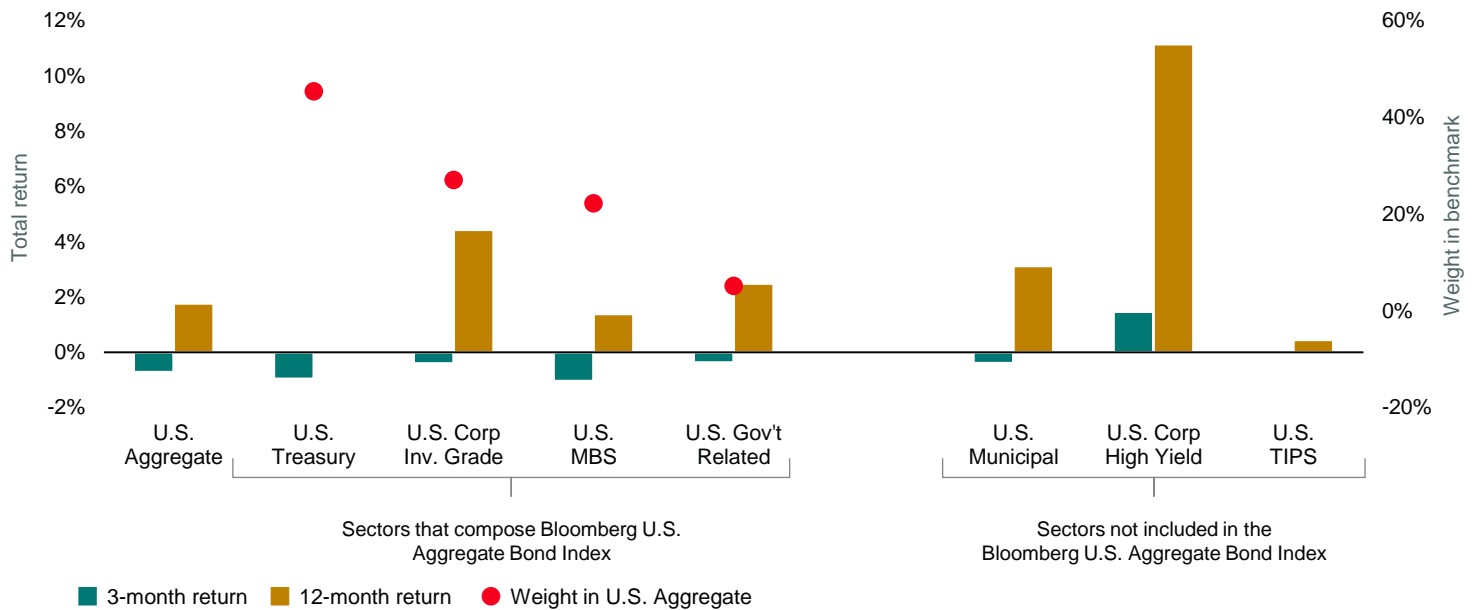
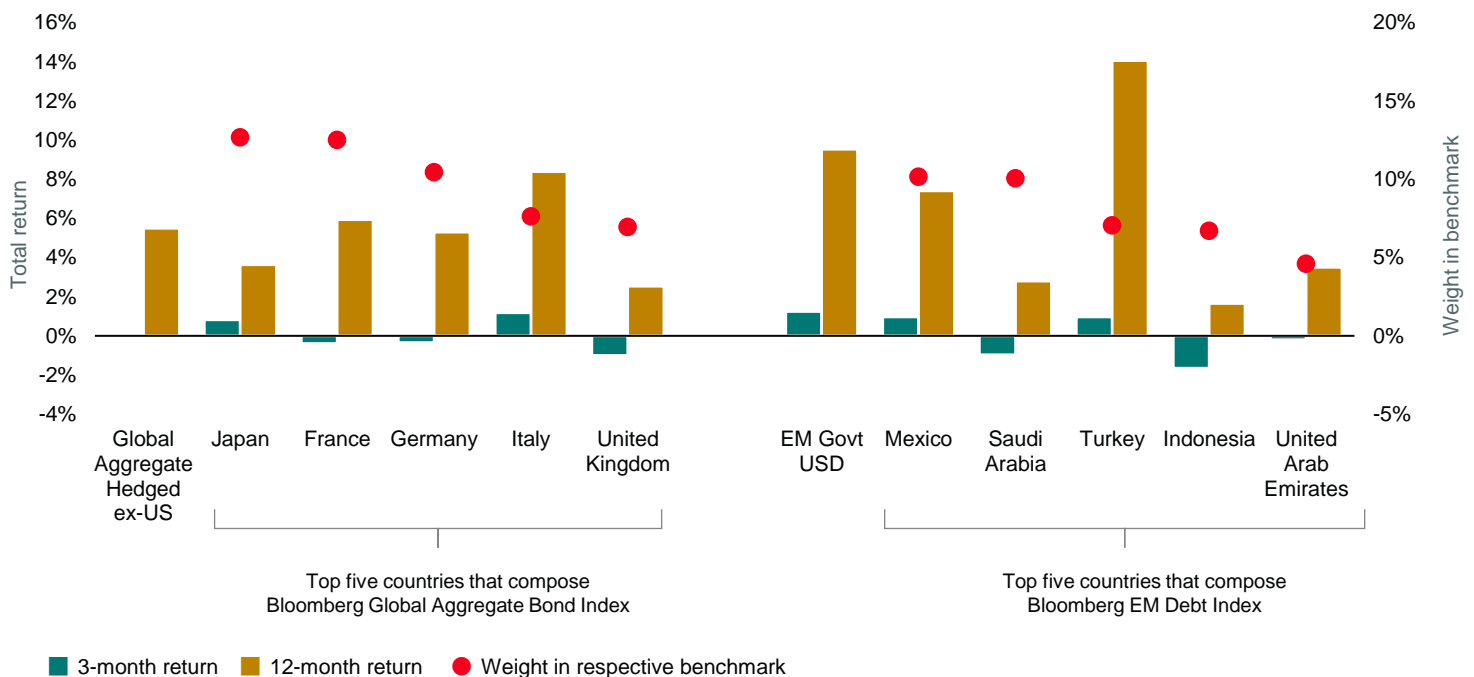


Figure 7.2 Developed and emerging markets total return by country



Sources: Vanguard and Bloomberg. All data as of March 31, 2024, unless otherwise noted.

Past performance is not a guarantee of future results. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.



Performance for all Vanguard taxable fixed income index funds

	3 months	1 year	3 years	5 years	10 years	Since inception	Inception date
Broad-market							
Vanguard Total Bond Market Index Fund (VBTIX)	6.69	5.72	-3.34	1.13	1.80	4.28	9/18/1995
Total Bond Market II Index Fund (VTBNX)	6.66	5.66	-3.36	1.05	1.76	2.62	2/17/2009
Vanguard Mortgage-Backed Securities Index Fund (VMBIX)	7.34	5.01	-2.86	0.20	1.29	1.17	10/31/2013
Vanguard Total Corporate Bond ETF (VTC)							
Market price	8.51	8.60	-3.37	2.48	—	1.68	11/7/2017
NAV	8.49	8.64	-3.35	2.48	—	1.68	11/7/2017
Short-term							
Vanguard Short-Term Bond Index Fund (VBITX)	3.40	4.88	-0.66	1.49	1.38	1.35	9/27/2011
Vanguard Short-Term Inflation-Protected Securities Index Fund (VTSPX)	2.55	4.61	2.31	3.34	1.95	1.64	10/17/2012
Vanguard Short-Term Treasury Index Fund (VSBIX)	2.53	4.28	-0.14	1.23	0.99	0.91	8/23/2010
Vanguard Short-Term Corporate Bond Index Fund (VSTBX)	4.08	6.21	-0.09	2.28	2.07	2.57	11/19/2009
Intermediate-term							
Vanguard Intermediate-Term Bond Index Fund (VBIMX)	6.87	6.09	-3.50	1.70	2.32	3.92	1/26/2006
Vanguard Intermediate-Term Treasury Index Fund (VIIGX)	5.00	4.43	-3.13	0.79	1.39	2.05	3/19/2010
Vanguard Intermediate-Term Corporate Bond Index Fund (VICBX)	8.33	8.87	-2.67	2.85	3.15	4.18	11/19/2009
Long-term							
Vanguard Long-Term Bond Index Fund (VBLLX)	13.12	7.54	-8.65	1.09	3.27	4.66	2/2/2006
Vanguard Long-Term Treasury Index Fund (VLGIX)	12.64	3.70	-11.43	-1.34	2.26	2.60	7/30/2010
Vanguard Long-Term Corporate Bond Index Fund (VLCIX)	13.81	11.05	-6.59	2.69	3.95	5.02	11/19/2009
Vanguard Extended Duration Treasury Index Fund (VEDTX)	18.72	2.09	-16.67	-3.06	2.86	3.75	11/28/2007
International/Global							
Vanguard Total International Bond Index Fund (VTIFX)	6.54	8.85	-2.48	0.91	2.45	2.30	5/31/2013
Vanguard Emerging Markets Government Bond Index Fund (VGIVX)	9.75	10.47	-3.34	1.73	—	2.80	2/11/2015
Vanguard Total World Bond ETF (BNDW)							
Market price	6.60	7.18	-2.96	1.02	—	1.22	9/4/2018
NAV	6.60	7.20	-2.94	1.02	—	1.22	9/4/2018

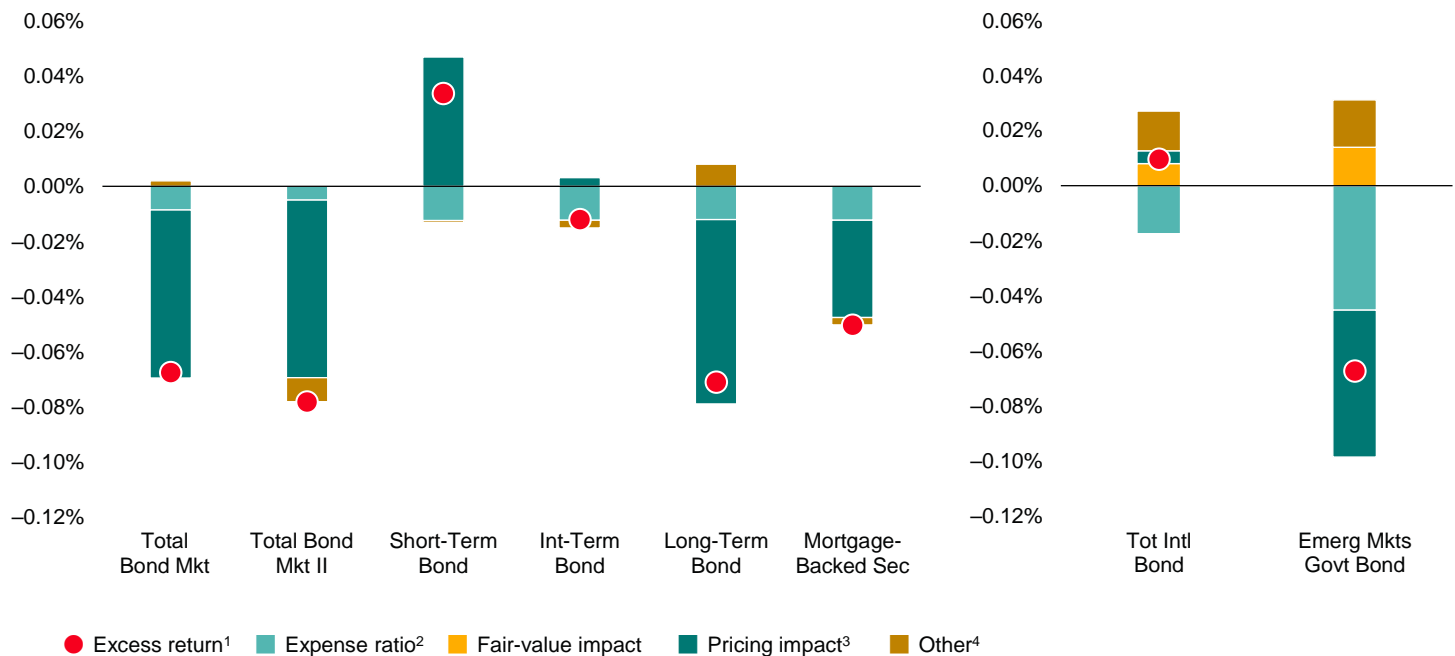
Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.

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Attribution for all Vanguard taxable fixed income index funds

Figure 9.1 Year-to-date excess return performance attribution as of March 31, 2024



	Benchmark return	Expense ratio ²	Fair-value impact	Pricing impact ³	Other ⁴	Fund return	Excess return ¹
Vanguard Total Bond Market Index Fund (VBTIX)	-0.720	-0.009	0.000	-0.061	0.002	-0.787	-0.068
Vanguard Total Bond Market II Index Fund (VTBNX)	-0.720	-0.005	0.000	-0.065	-0.009	-0.798	-0.078
Vanguard Short-Term Bond Index Fund (VBITX)	0.138	-0.012	0.000	0.047	-0.001	0.172	0.034
Vanguard Intermediate-Term Bond Index Fund (VBIMX)	-0.745	-0.012	0.000	0.003	-0.003	-0.757	-0.012
Vanguard Long-Term Bond Index Fund (VBLLX)	-2.407	-0.012	0.000	-0.067	0.008	-2.478	-0.071
Vanguard Mortgage-Backed Securities Index Fund (VMBIX)	-0.882	-0.012	0.000	-0.035	-0.003	-0.932	-0.050
Vanguard Total International Bond Index Fund (VTIFX)	0.087	-0.017	0.008	0.005	0.014	0.096	0.010
Vanguard Emerging Markets Government Bond Index Fund (VGIVX)	1.245	-0.045	0.014	-0.053	0.017	1.177	-0.067

Numbers may not total 100% due to rounding.

Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.

¹ Excess return equals fund return minus benchmark return.

² Expense ratio (ER) attribution includes the impact of compounding on fund returns over time. Consequently, a fund's ER (above) may appear larger than the published ER.

³ Pricing impact includes differences in external pricing vendor inputs.

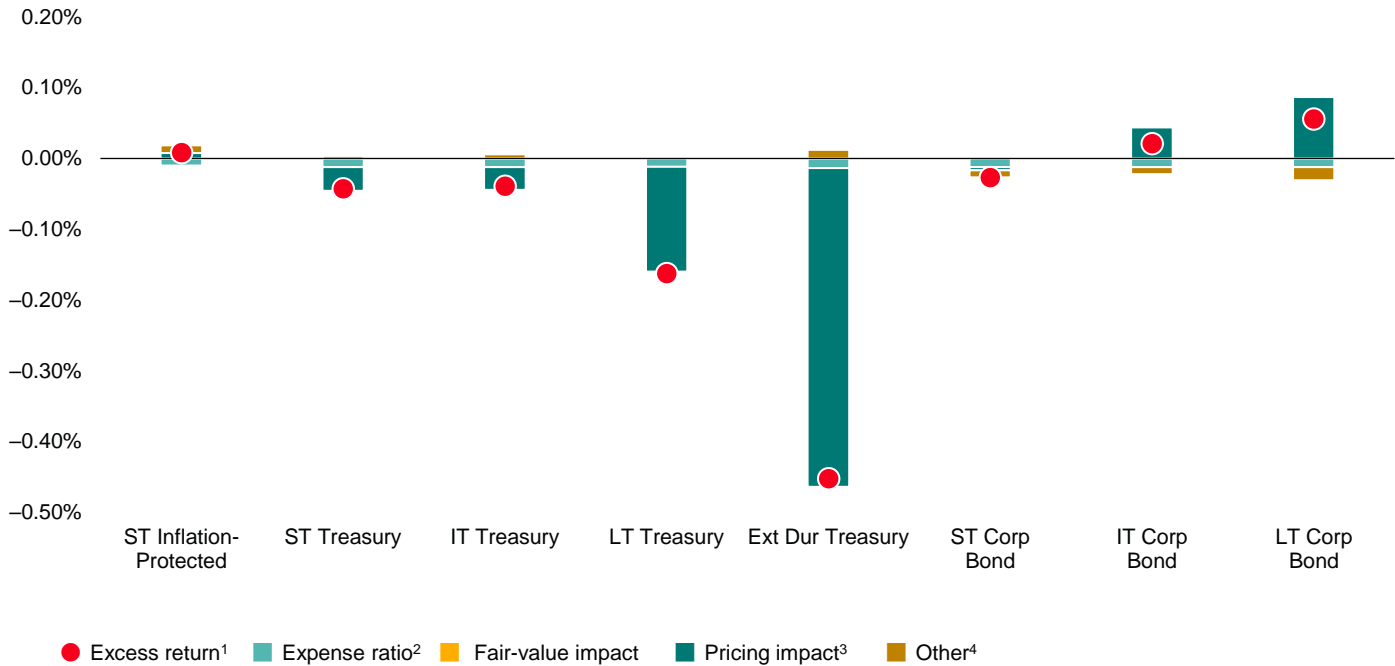
⁴ Other category may include performance impacts from the following sources: portfolio manager investment decisions, trading impact, and tax withholding differences (funds with international investments only).

Past performance is no guarantee of future returns.



Attribution for all Vanguard taxable fixed income index funds

Figure 10.1 Year-to-date excess return performance attribution as of March 31, 2024



	Benchmark return	Expense ratio ²	Fair-value impact	Pricing impact ³	Other ⁴	Fund return	Excess return ¹
Vanguard Short-Term Inflation-Protected Securities Index Fund (VTSPX)	0.846	-0.010	0.000	0.008	0.011	0.854	0.008
Vanguard Short-Term Treasury Index Fund (VSBIX)	0.279	-0.012	0.000	-0.034	0.003	0.236	-0.043
Vanguard Intermediate-Term Treasury Index Fund (VIIGX)	-0.822	-0.012	0.000	-0.032	0.006	-0.861	-0.039
Vanguard Long-Term Treasury Index Fund (VLGIX)	-3.256	-0.012	0.000	-0.148	-0.002	-3.419	-0.163
Vanguard Extended Duration Treasury Index Fund (VEDTX)	-5.668	-0.014	0.000	-0.451	0.012	-6.121	-0.453
Vanguard Short-Term Corporate Bond Index Fund (VSTBX)	0.596	-0.013	0.000	-0.005	-0.010	0.570	-0.027
Vanguard Intermediate-Term Corporate Bond Index Fund (VICBX)	-0.230	-0.012	0.000	0.044	-0.010	-0.209	0.021
Vanguard Long-Term Corporate Bond Index Fund (VLCIX)	-1.685	-0.012	0.000	0.087	-0.019	-1.629	0.056

Numbers may not total 100% due to rounding.

Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.

¹ Excess return equals fund return minus benchmark return.

² Expense ratio (ER) attribution includes the impact of compounding on fund returns over time. Consequently, a fund's ER (above) may appear larger than the published ER.

³ Pricing impact includes differences in external pricing vendor inputs.

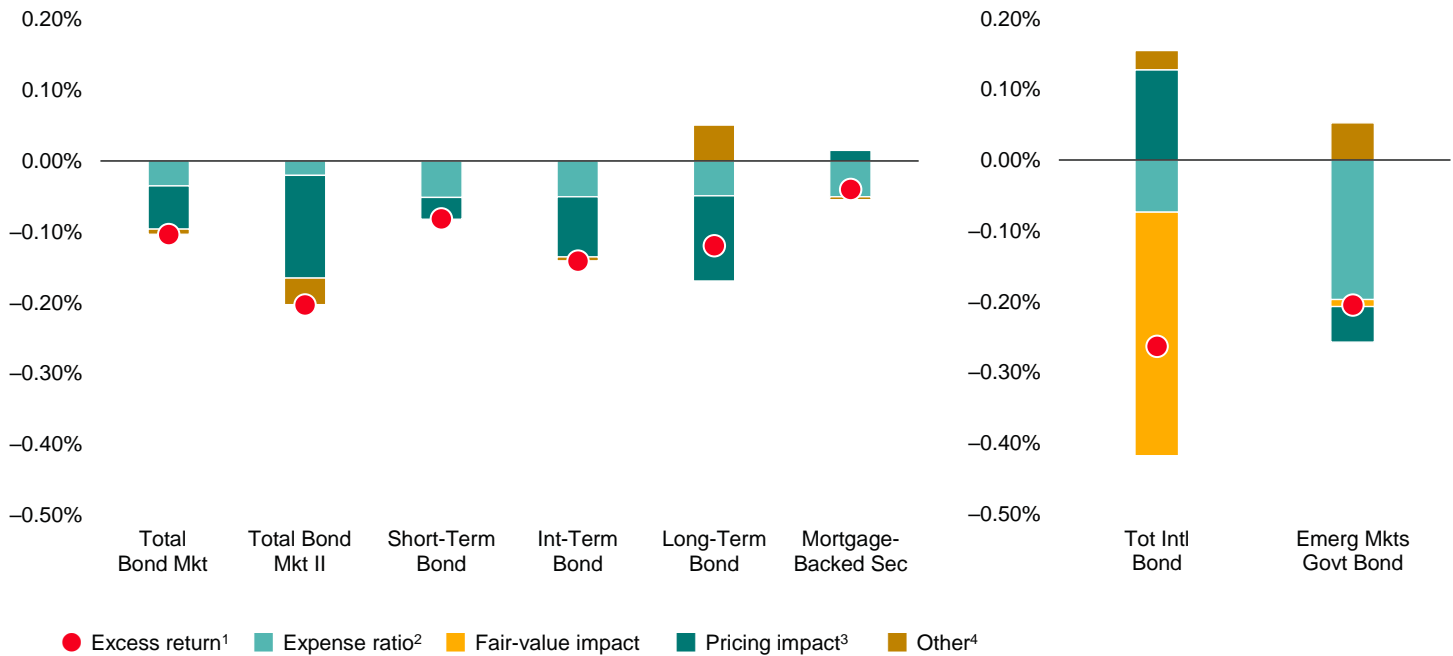
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Attribution for all Vanguard taxable fixed income index funds

Figure 11.1 One-year excess return performance attribution as of March 31, 2024



	Benchmark return	Expense ratio ²	Fair-value impact	Pricing impact ³	Other ⁴	Fund return	Excess return ¹
Vanguard Total Bond Market Index Fund (VBTIX)	1.773	-0.036	0.000	-0.061	-0.007	1.669	-0.104
Vanguard Total Bond Market II Index Fund (VTBNX)	1.773	-0.020	0.000	-0.146	-0.037	1.570	-0.204
Vanguard Short-Term Bond Index Fund (VBITX)	3.156	-0.052	0.000	-0.031	0.001	3.074	-0.082
Vanguard Intermediate-Term Bond Index Fund (VBIMX)	1.778	-0.051	0.000	-0.085	-0.005	1.637	-0.142
Vanguard Long-Term Bond Index Fund (VBLLX)	-1.146	-0.049	0.000	-0.121	0.051	-1.265	-0.120
Vanguard Mortgage-Backed Securities Index Fund (VMBIX)	1.615	-0.051	0.000	0.015	-0.004	1.575	-0.040
Vanguard Total International Bond Index Fund (VTIFX)	5.493	-0.074	-0.345	0.128	0.027	5.230	-0.263
Vanguard Emerging Markets Government Bond Index Fund (VGIVX)	9.516	-0.197	-0.010	-0.050	0.053	9.311	-0.205

Numbers may not total 100% due to rounding.

Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.

¹ Excess return equals fund return minus benchmark return.

² Expense ratio (ER) attribution includes the impact of compounding on fund returns over time. Consequently, a fund's ER (above) may appear larger than the published ER.

³ Pricing impact includes differences in external pricing vendor inputs.

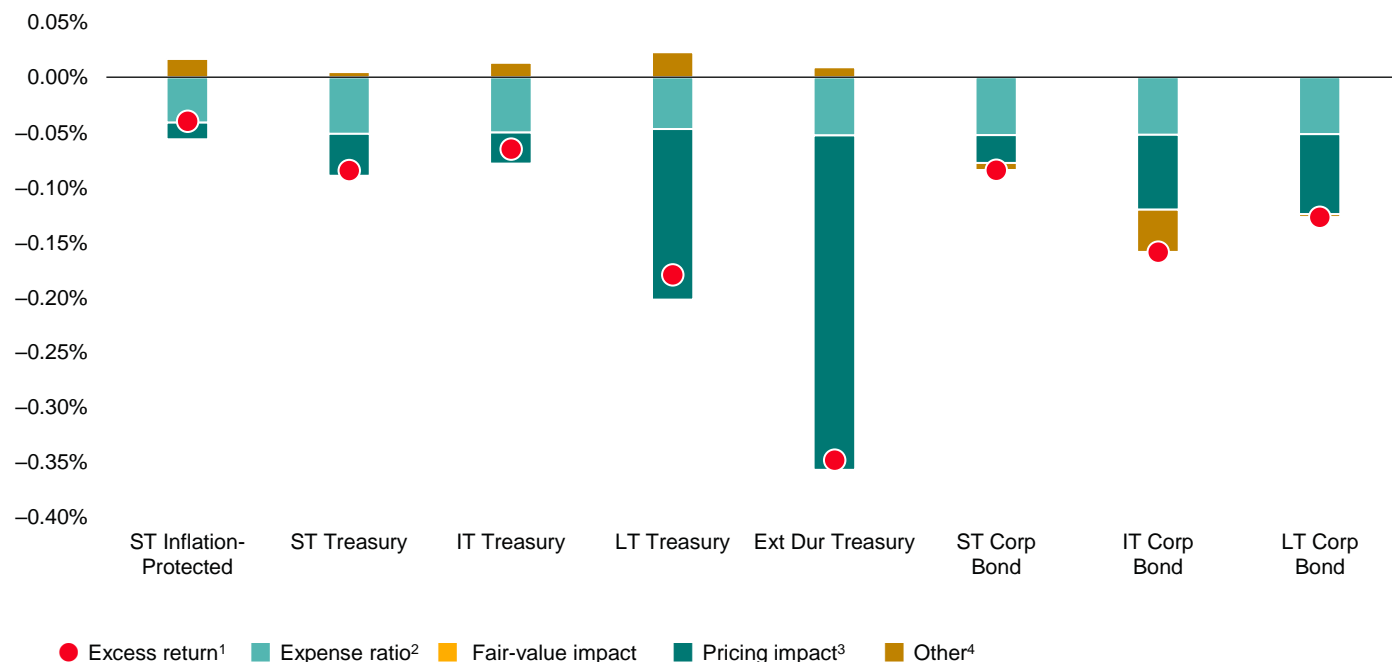
⁴ Other category may include performance impacts from the following sources: portfolio manager investment decisions, trading impact, and tax withholding differences (funds with international investments only).

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Attribution for all Vanguard taxable fixed income index funds

Figure 12.1 One-year excess return performance attribution as of March 31, 2024



	Benchmark return	Expense ratio ²	Fair-value impact	Pricing impact ³	Other ⁴	Fund return	Excess return ¹
Vanguard Short-Term Inflation-Protected Securities Index Fund (VTSPX)	3.196	-0.041	0.000	-0.015	0.017	3.156	-0.040
Vanguard Short-Term Treasury Index Fund (VSBIX)	2.944	-0.052	0.000	-0.038	0.005	2.860	-0.085
Vanguard Intermediate-Term Treasury Index Fund (VIIGX)	0.627	-0.050	0.000	-0.028	0.013	0.562	-0.065
Vanguard Long-Term Treasury Index Fund (VLGIX)	-6.085	-0.047	0.000	-0.155	0.023	-6.264	-0.179
Vanguard Extended Duration Treasury Index Fund (VEDTX)	-11.847	-0.053	0.000	-0.304	0.009	-12.195	-0.348
Vanguard Short-Term Corporate Bond Index Fund (VSTBX)	5.070	-0.053	0.000	-0.025	-0.006	4.985	-0.084
Vanguard Intermediate-Term Corporate Bond Index Fund (VICBX)	4.772	-0.052	0.000	-0.068	-0.038	4.613	-0.159
Vanguard Long-Term Corporate Bond Index Fund (VLCIX)	3.426	-0.052	0.000	-0.073	-0.003	3.299	-0.127

Numbers may not total 100% due to rounding.

Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.

¹ Excess return equals fund return minus benchmark return.

² Expense ratio (ER) attribution includes the impact of compounding on fund returns over time. Consequently, a fund's ER (above) may appear larger than the published ER.

³ Pricing impact includes differences in external pricing vendor inputs.

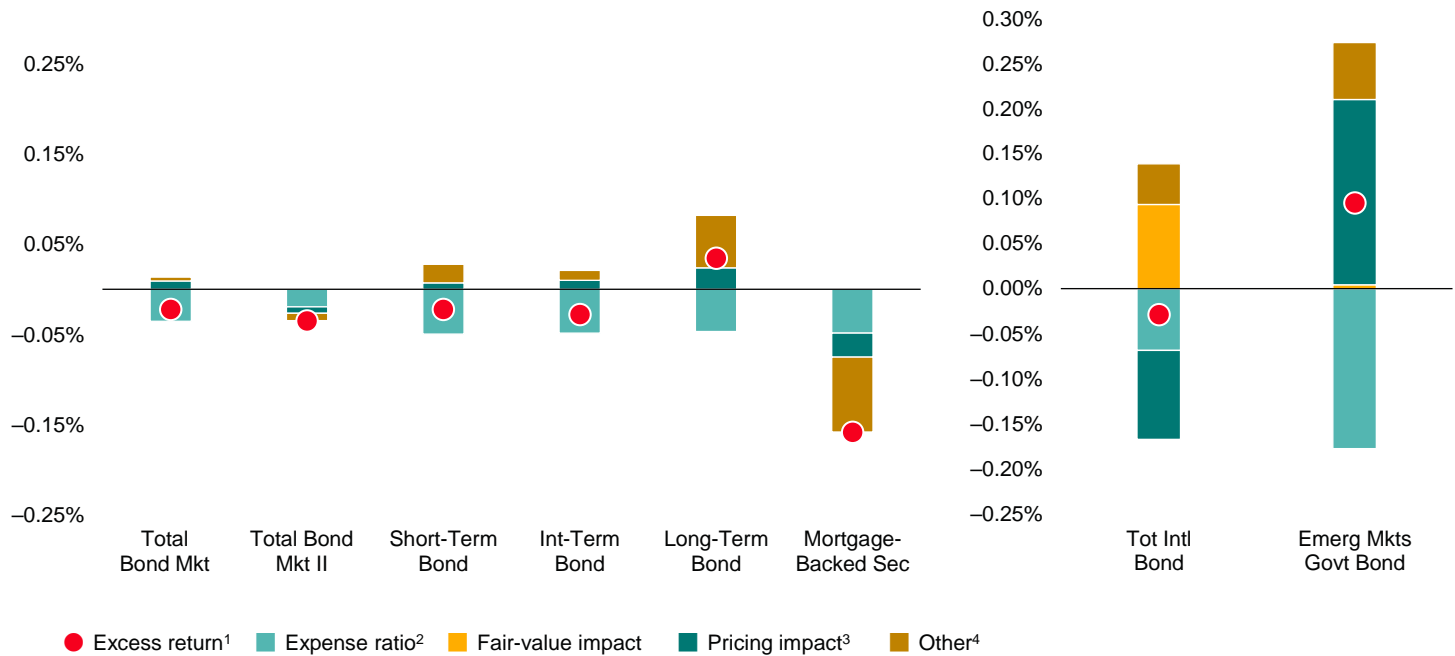
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Past performance is no guarantee of future returns.



Attribution for all Vanguard taxable fixed income index funds

Figure 13.1 Three-year excess return performance attribution as of March 31, 2024



	Benchmark return	Expense ratio ²	Fair-value impact	Pricing impact ³	Other ⁴	Fund return	Excess return ¹
Vanguard Total Bond Market Index Fund (VBTIX)	-2.387	-0.035	0.000	0.009	0.004	-2.409	-0.022
Vanguard Total Bond Market II Index Fund (VTBNX)	-2.387	-0.020	0.000	-0.007	-0.008	-2.422	-0.035
Vanguard Short-Term Bond Index Fund (VBITX)	-0.381	-0.050	0.000	0.007	0.021	-0.403	-0.022
Vanguard Intermediate-Term Bond Index Fund (VBIMX)	-2.324	-0.049	0.000	0.010	0.011	-2.351	-0.028
Vanguard Long-Term Bond Index Fund (VBLLX)	-6.043	-0.047	0.000	0.024	0.058	-6.008	0.035
Vanguard Mortgage-Backed Securities Index Fund (VMBIX)	-2.642	-0.049	0.000	-0.027	-0.083	-2.801	-0.159
Vanguard Total International Bond Index Fund (VTIFX)	-1.653	-0.069	0.093	-0.099	0.045	-1.682	-0.029
Vanguard Emerging Markets Government Bond Index Fund (VGIVX)	-1.338	-0.178	0.004	0.206	0.063	-1.243	0.095

Numbers may not total 100% due to rounding.

Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.

¹ Excess return equals fund return minus benchmark return.

² Expense ratio (ER) attribution includes the impact of compounding on fund returns over time. Consequently, a fund's ER (above) may appear larger than the published ER.

³ Pricing impact includes differences in external pricing vendor inputs.

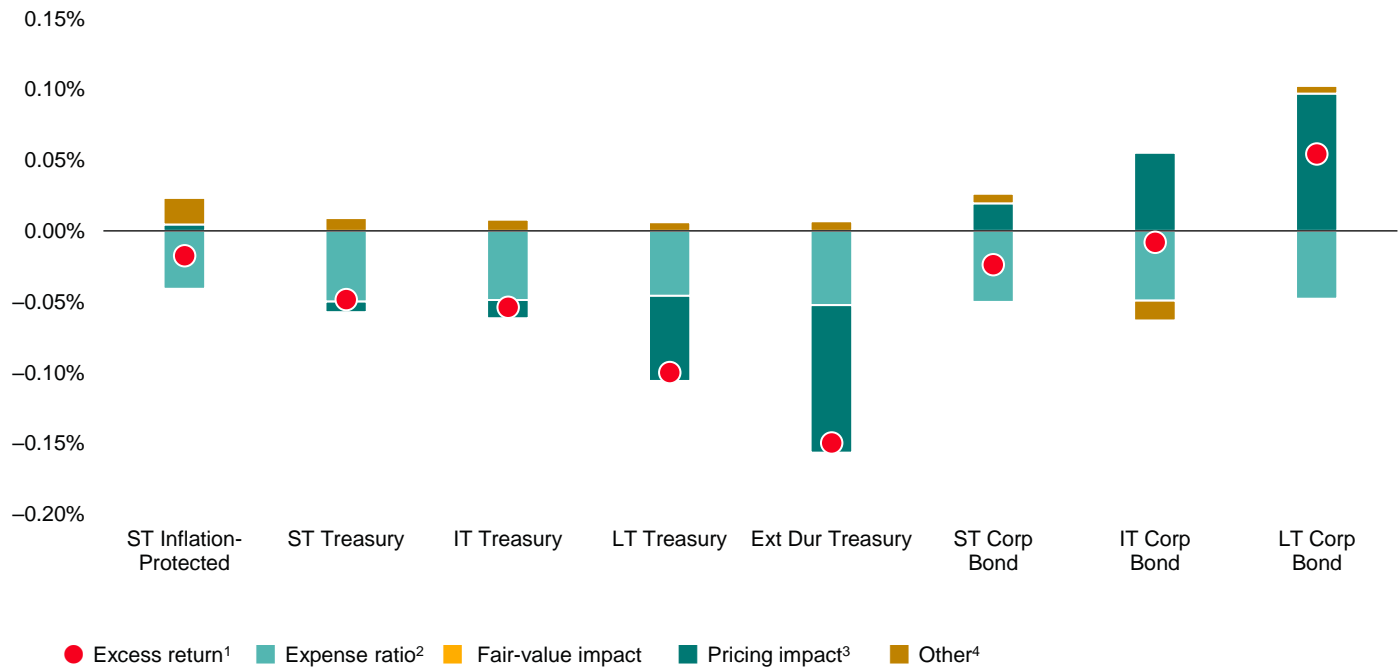
⁴ Other category may include performance impacts from the following sources: portfolio manager investment decisions, trading impact, and tax withholding differences (funds with international investments only).

Past performance is no guarantee of future returns.



Attribution for all Vanguard taxable fixed income index funds

Figure 14.1 Three-year excess return performance attribution as of March 31, 2024



	Benchmark return	Expense ratio ²	Fair-value impact	Pricing impact ³	Other ⁴	Fund return	Excess return ¹
Vanguard Short-Term Inflation-Protected Securities Index Fund (VTSPX)	2.249	-0.041	0.000	0.005	0.019	2.232	-0.017
Vanguard Short-Term Treasury Index Fund (VSBIX)	0.013	-0.050	0.000	-0.007	0.009	-0.035	-0.048
Vanguard Intermediate-Term Treasury Index Fund (VIIGX)	-2.400	-0.049	0.000	-0.013	0.008	-2.453	-0.054
Vanguard Long-Term Treasury Index Fund (VLGIX)	-8.040	-0.046	0.000	-0.060	0.006	-8.140	-0.100
Vanguard Extended Duration Treasury Index Fund (VEDTX)	-12.678	-0.052	0.000	-0.105	0.007	-12.828	-0.150
Vanguard Short-Term Corporate Bond Index Fund (VSTBX)	0.316	-0.050	0.000	0.020	0.007	0.293	-0.024
Vanguard Intermediate-Term Corporate Bond Index Fund (VICBX)	-1.416	-0.049	0.000	0.055	-0.014	-1.424	-0.008
Vanguard Long-Term Corporate Bond Index Fund (VLCIX)	-4.294	-0.048	0.000	0.097	0.005	-4.239	0.055

Numbers may not total 100% due to rounding.

Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.

¹ Excess return equals fund return minus benchmark return.

² Expense ratio (ER) attribution includes the impact of compounding on fund returns over time. Consequently, a fund's ER (above) may appear larger than the published ER.

³ Pricing impact includes differences in external pricing vendor inputs.

⁴ Other category may include performance impacts from the following sources: portfolio manager investment decisions, trading impact, and tax withholding differences (funds with international investments only).

Past performance is no guarantee of future returns.



Equity market and fund performance

IN THIS SECTION:

Equity markets overview

Performance and attribution for Vanguard equity index funds



U.S. equity markets overview

Figure 16.1 U.S. size returns

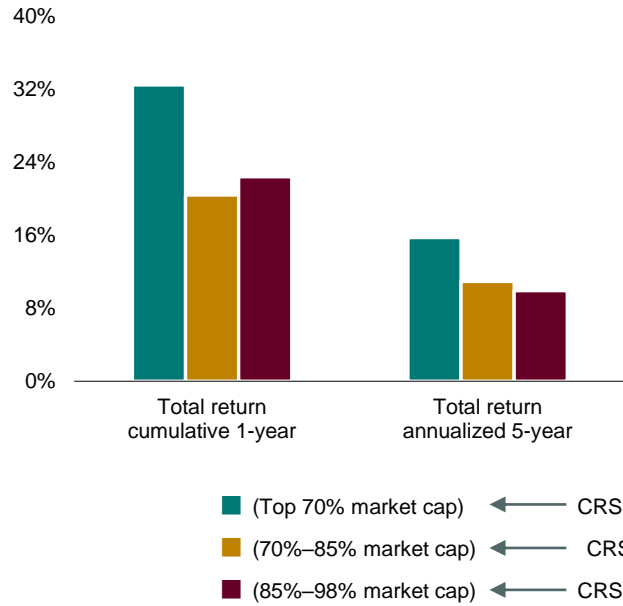
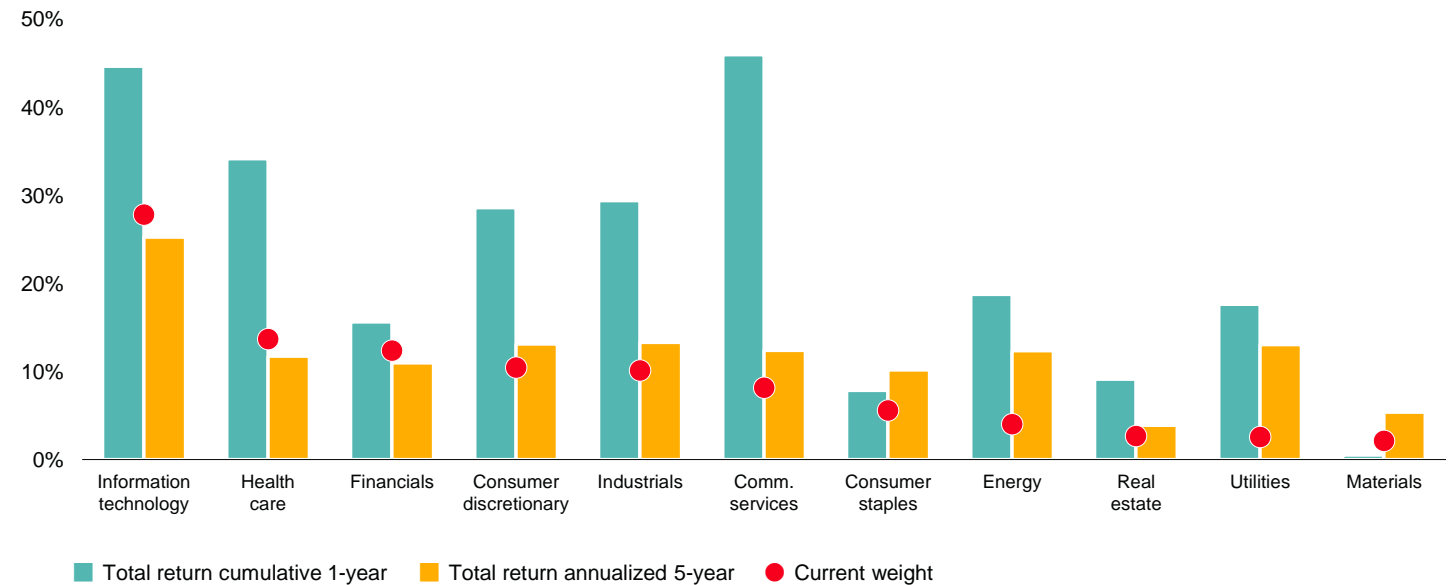


Figure 16.2 U.S. style returns



Figure 16.3 CRSP Total Stock Market: Sector exposures and returns



Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.

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.



Global equity markets overview

Figure 17.1 Regional returns

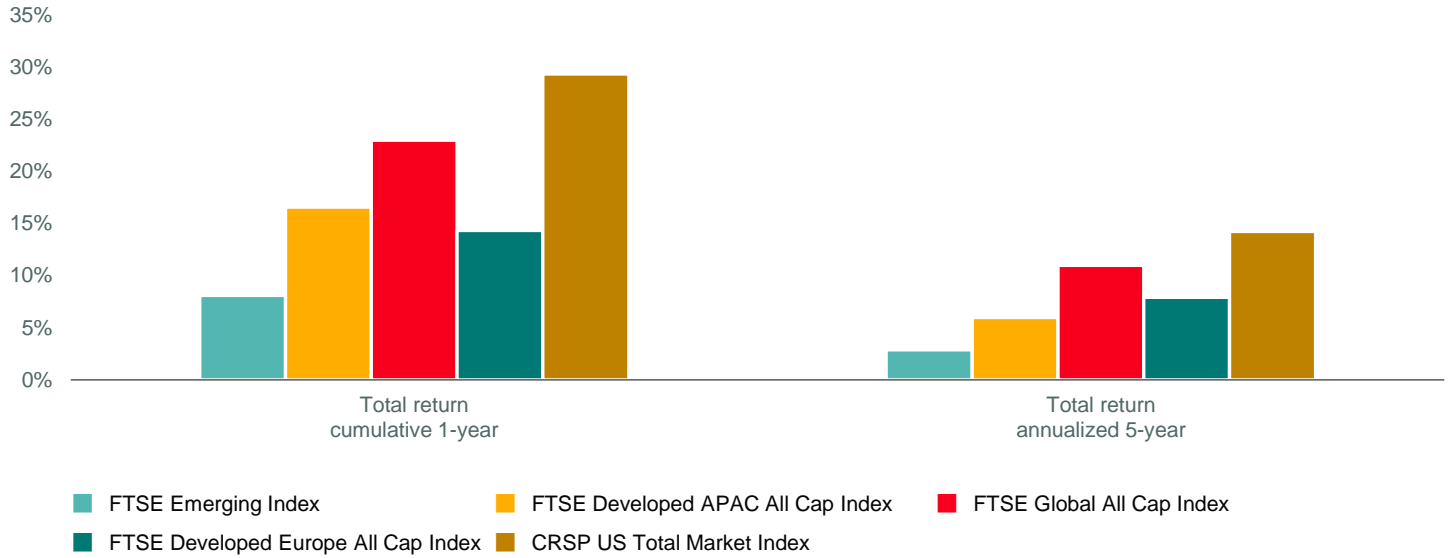


Figure 17.2 FTSE All Cap Developed ex-U.S.: Largest markets and returns¹

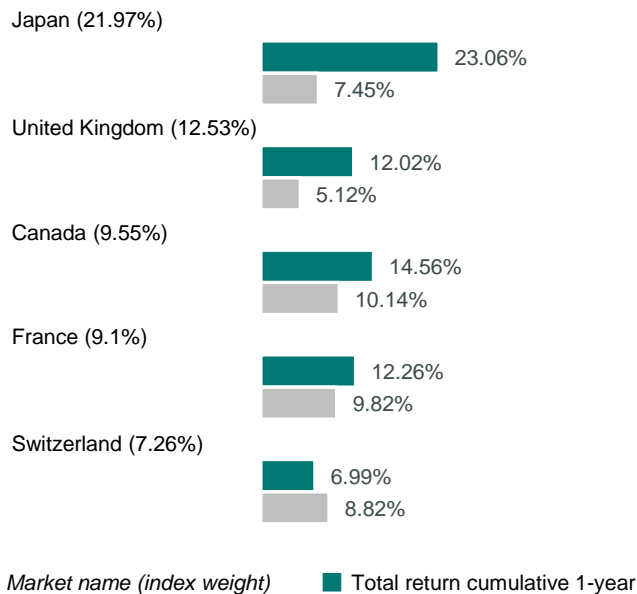
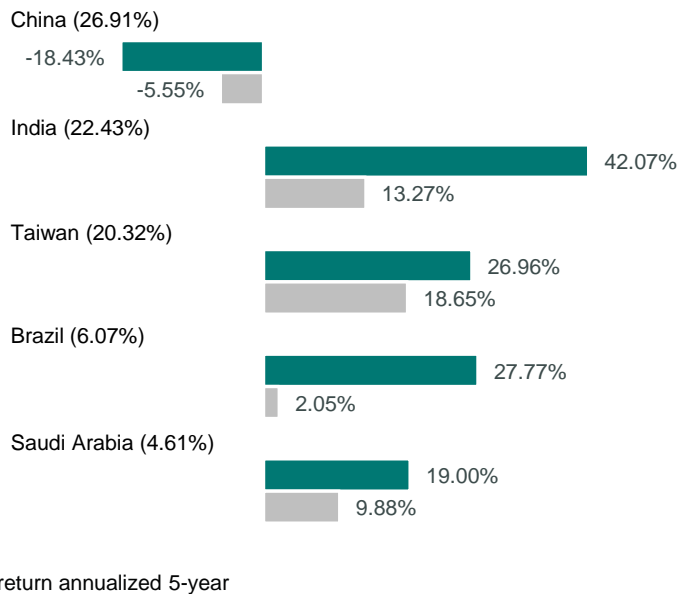


Figure 17.3 FTSE All Cap Emerging: Largest markets and returns¹



Source: FactSet. All data as of March 31, 2024, unless otherwise noted.

¹ Global benchmarks include other countries not listed above.

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.



Performance for selected Vanguard equity index funds

Figure 18.1 Fund net returns since inception

	3 months	1 year	3 years	5 years	10 years	Since inception	Inception date
Vanguard Total Stock Market Index Fund Institutional Shares	10.00	29.37	9.64	14.25	12.28	8.91	7/7/1997
Vanguard Mega Cap Index Fund Institutional Shares	10.89	32.46	11.73	15.70	13.39	11.22	2/22/2008
Vanguard Institutional Index Fund Institutional Shares	10.54	29.84	11.45	15.02	12.93	10.55	7/31/1990
Vanguard Extended Market Index Fund Institutional Shares	6.97	26.73	0.97	10.12	9.00	8.91	7/7/1997
Vanguard Large-Cap Index Fund Institutional Shares	10.38	30.41	10.70	14.92	12.81	10.49	6/30/2005
Vanguard Mid-Cap Index Fund Institutional Shares	7.86	20.45	5.72	10.94	9.90	10.03	5/21/1998
Vanguard Small-Cap Index Fund Institutional Shares	7.52	22.53	3.81	10.00	8.95	9.09	7/7/1997
Vanguard Developed Markets Index Fund Institutional Shares	5.14	14.94	3.96	7.39	5.04	4.85	1/4/2001
Vanguard Emerging Markets Stock Index Fund Institutional Shares	1.90	7.43	-3.73	2.86	3.24	6.39	6/22/2000
Vanguard Total International Stock Index Fund Institutional Shares	4.32	13.00	1.91	6.19	4.48	5.13	11/29/2010

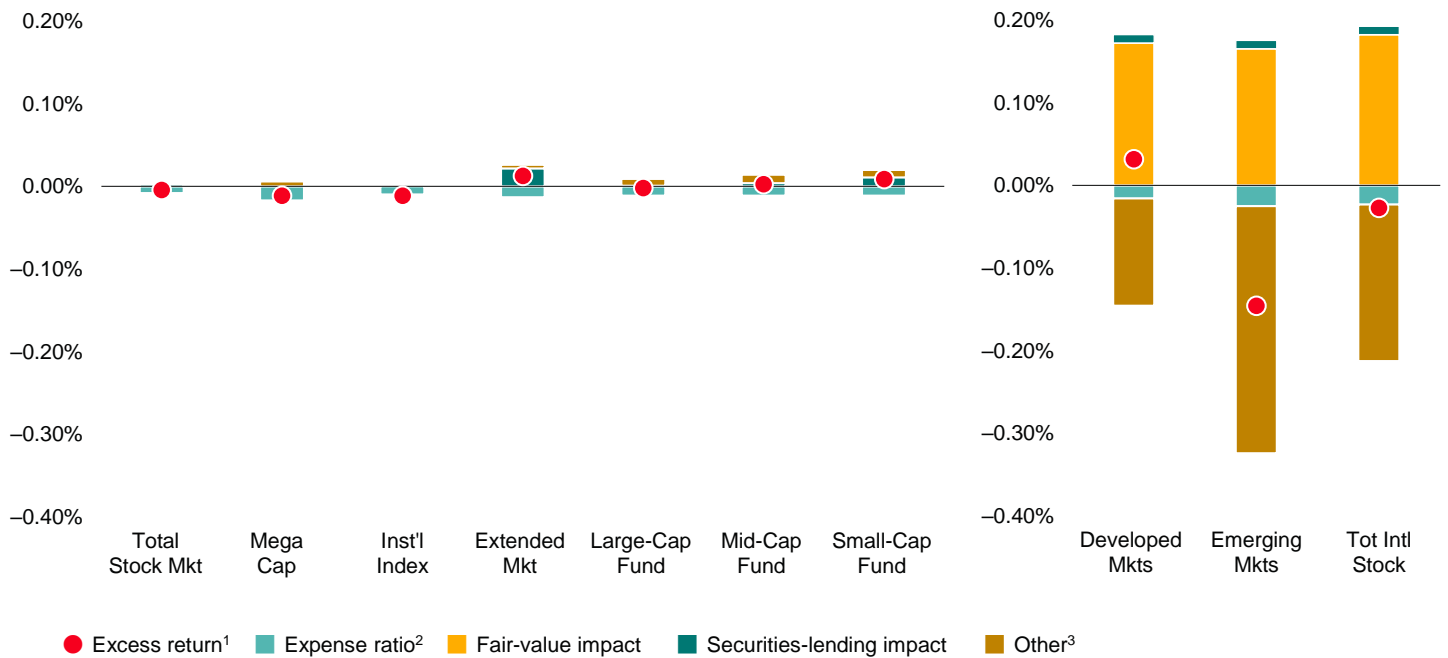
Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.

The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at institutional.vanguard.com/performance.



Attribution for selected Vanguard equity index funds

Figure 19.1 Year-to-date excess return performance attribution as of March 31, 2024



	Benchmark return	Expense ratio ²	Fair-value impact	Securities-lending impact	Other ³	Fund return	Excess return ¹
Vanguard Total Stock Market Index Fund (VIT SX)	10.008	-0.008	0.000	0.003	0.001	10.004	-0.004
Vanguard Mega Cap Index Fund (VMCTX)	10.896	-0.017	0.000	0.000	0.006	10.885	-0.011
Vanguard Institutional Index Fund (VINIX)	10.556	-0.010	0.000	0.000	-0.001	10.545	-0.011
Vanguard Extended Market Index Fund (VIEIX)	6.956	-0.013	0.000	0.022	0.004	6.969	0.013
Vanguard Large-Cap Index Fund (VLISX)	10.384	-0.011	0.000	0.001	0.008	10.382	-0.002
Vanguard Mid-Cap Index Fund (VMCIX)	7.853	-0.011	0.000	0.004	0.010	7.855	0.003
Vanguard Small-Cap Index Fund (VSCIX)	7.510	-0.011	0.000	0.011	0.009	7.519	0.009
Vanguard Developed Markets Index Fund (VTMNX)	5.111	-0.016	0.173	0.006	-0.131	5.143	0.032
Vanguard Emerging Markets Stock Index Fund (VEMIX)	2.044	-0.025	0.166	0.014	-0.301	1.898	-0.146
Vanguard Total International Stock Index Fund (VTSNX)	4.342	-0.023	0.183	0.007	-0.194	4.315	-0.027

Numbers may not total 100% due to rounding.

Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.

¹ Excess return equals fund return minus benchmark return.

² Expense ratio (ER) attribution includes the impact of compounding on fund returns over time. Consequently, a fund's ER (above) may appear larger than the published ER.

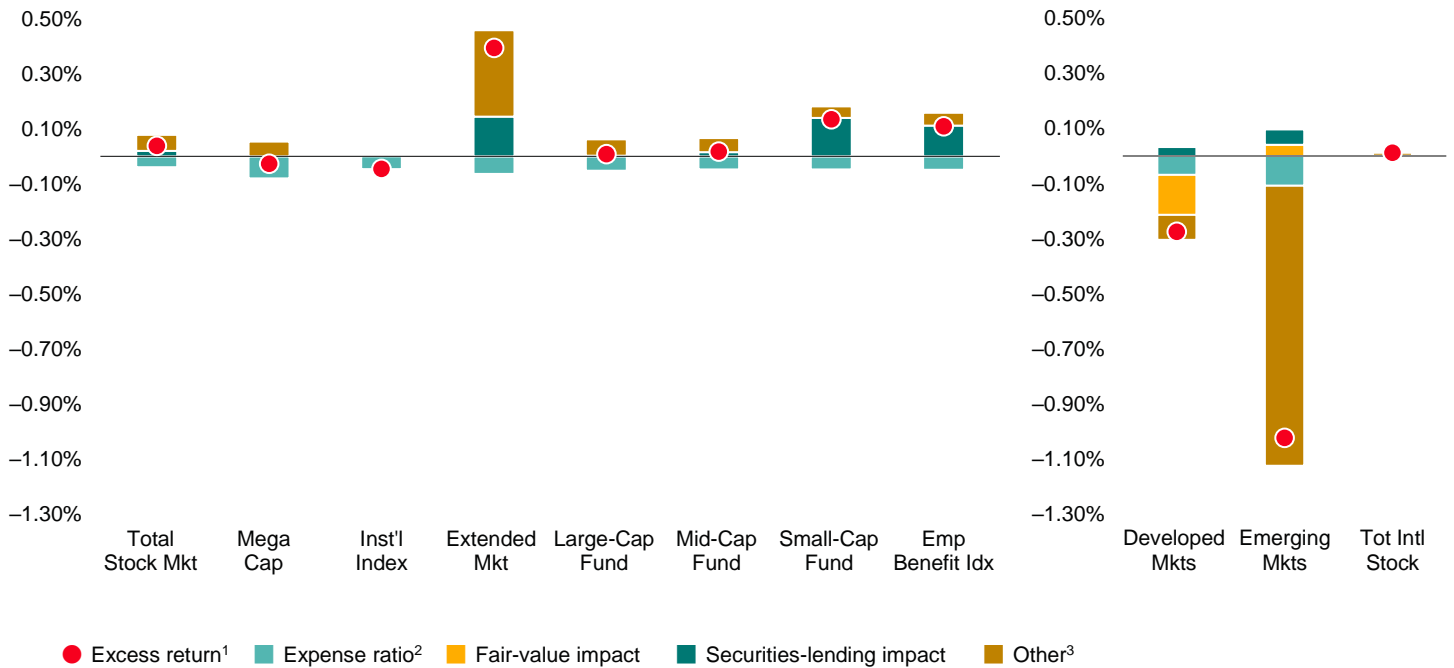
³ Other category may include performance impacts from the following sources: portfolio manager investment decisions, trading impact, tax withholding differences (funds with international investments only), and security pricing differences.

Past performance is no guarantee of future returns.



Attribution for selected Vanguard equity index funds

Figure 20.1 One-year excess return performance attribution as of March 31, 2024



	Benchmark return	Expense ratio ²	Fair-value impact	Securities-lending impact	Other ³	Fund return	Excess return ¹
Vanguard Total Stock Market Index Fund (VITSX)	29.330	-0.039	0.000	0.020	0.058	29.370	0.039
Vanguard Mega Cap Index Fund (VMCTX)	32.482	-0.080	0.000	0.000	0.054	32.455	-0.026
Vanguard Institutional Index Fund (VINIX)	29.881	-0.046	0.000	0.000	0.000	29.836	-0.045
Vanguard Extended Market Index Fund (VIEIX)	26.337	-0.064	0.000	0.145	0.314	26.732	0.395
Vanguard Large-Cap Index Fund (VLISX)	30.397	-0.052	0.000	0.003	0.059	30.407	0.009
Vanguard Mid-Cap Index Fund (VMCIX)	20.430	-0.048	0.000	0.015	0.052	20.449	0.018
Vanguard Small-Cap Index Fund (VSCIX)	22.419	-0.049	0.000	0.112	0.047	22.529	0.110
Vanguard Developed Markets Index Fund (VTMNX)	15.218	-0.069	-0.146	0.033	-0.094	14.942	-0.276
Vanguard Emerging Markets Stock Index Fund (VEMIX)	8.459	-0.108	0.040	0.056	-1.015	7.433	-1.026
Vanguard Total International Stock Index Fund (VTSNX)	13.530	-0.102	-0.127	0.037	-0.343	12.995	-0.535
Vanguard Employee Benefit Index Fund	29.881	-0.001	0.000	0.001	0.012	29.893	0.012

Numbers may not total 100% due to rounding.

Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.

¹ Excess return equals fund return minus benchmark return.

² Expense ratio (ER) attribution includes the impact of compounding on fund returns over time. Consequently, a fund's ER (above) may appear larger than the published ER.

³ Other category may include performance impacts from the following sources: portfolio manager investment decisions, trading impact, tax withholding differences (funds with international investments only), and security pricing differences.

Past performance is no guarantee of future returns.





Attribution for selected Vanguard equity index trusts

Figure 21.1 One-year excess return performance attribution as of March 31, 2024



	Benchmark return	Expense ratio ²	Fair-value impact	Securities-lending impact	Other ³	Fund return	Excess return ¹
Vanguard Institutional Total International Stock Index Trust	13.530	-0.030	-0.145	0.027	-0.281	13.102	-0.429
Vanguard Institutional Total International Stock Market Index Trust II	13.530	-0.030	-0.149	0.019	-0.248	13.124	-0.407
Vanguard Russell 1000 Growth Index Trust	38.997	-0.002	0.000	0.002	0.059	39.055	0.058
Vanguard Russell 1000 Value Index Trust	20.268	-0.003	0.000	0.019	0.028	20.312	0.043
Vanguard Russell 2000 Value Index Trust	18.752	-0.009	0.000	0.103	0.030	18.876	0.124
Vanguard Russell 2000 Growth Index Trust	20.347	-0.004	0.000	0.170	0.071	20.584	0.237
Vanguard Fiduciary Trust Company Developed Markets Index Trust	15.218	-0.020	-0.198	0.003	0.038	15.041	-0.176

Numbers may not total 100% due to rounding.

Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.

¹ Excess return equals fund return minus benchmark return.

² Expense ratio (ER) attribution includes the impact of compounding on fund returns over time. Consequently, a fund's ER (above) may appear larger than the published ER.

³ Other category may include performance impacts from the following sources: portfolio manager investment decisions, trading impact, tax withholding differences (funds with international investments only), and security pricing differences.

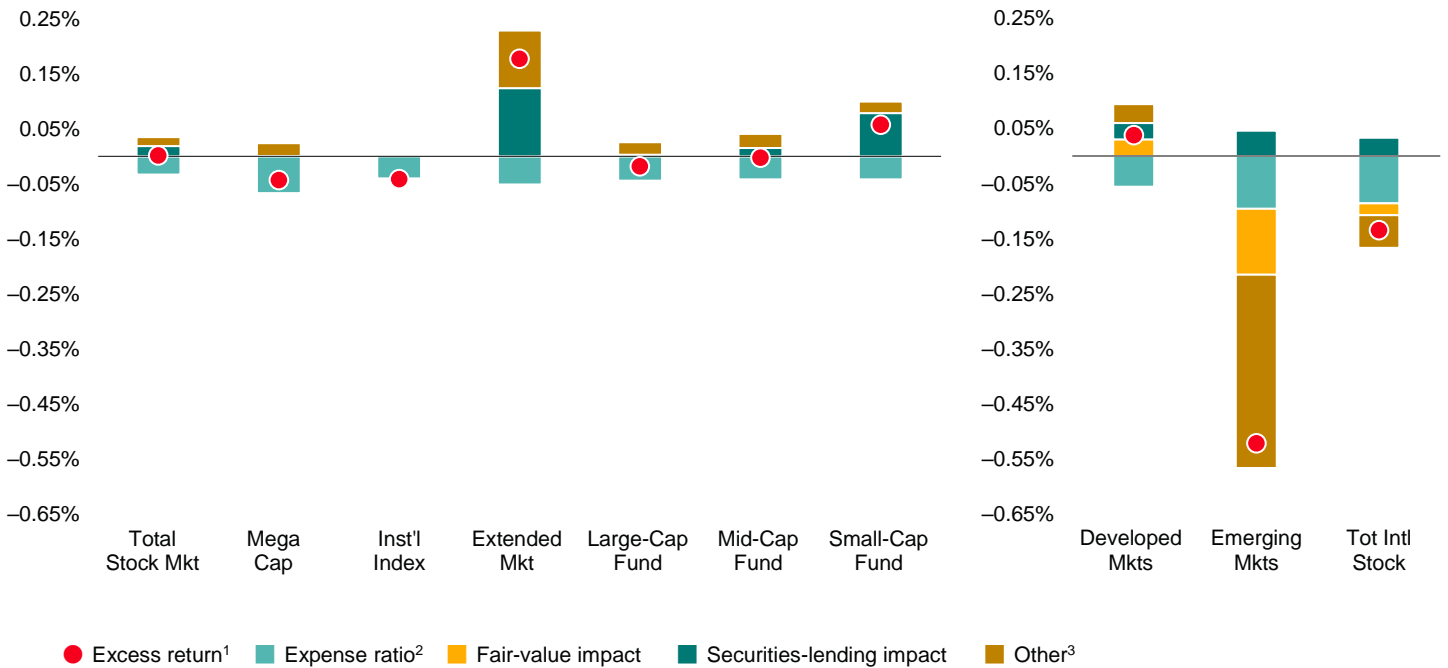
Past performance is no guarantee of future returns.





Attribution for selected Vanguard equity index funds

Figure 22.1 Three-year excess return performance attribution as of March 31, 2024



	Benchmark return	Expense ratio ²	Fair-value impact	Securities-lending impact	Other ³	Fund return	Excess return ¹
Vanguard Total Stock Market Index Fund (VITSX)	9.640	-0.033	0.000	0.019	0.016	9.642	0.002
Vanguard Mega Cap Index Fund (VMCTX)	11.776	-0.067	0.000	0.001	0.023	11.733	-0.043
Vanguard Institutional Index Fund (VINIX)	11.493	-0.040	0.000	0.000	0.000	11.453	-0.041
Vanguard Extended Market Index Fund (VIEIX)	0.789	-0.051	0.000	0.124	0.105	0.968	0.178
Vanguard Large-Cap Index Fund (VLISX)	10.718	-0.044	0.000	0.003	0.023	10.700	-0.018
Vanguard Mid-Cap Index Fund (VMCIX)	5.725	-0.042	0.000	0.015	0.026	5.724	-0.002
Vanguard Small-Cap Index Fund (VSCIX)	3.751	-0.042	0.000	0.079	0.021	3.809	0.058
Vanguard Developed Markets Index Fund (VTMNX)	3.925	-0.056	0.030	0.030	0.034	3.962	0.038
Vanguard Emerging Markets Stock Index Fund (VEMIX)	-3.211	-0.096	-0.120	0.046	-0.352	-3.734	-0.523
Vanguard Total International Stock Index Fund (VTSNX)	2.049	-0.086	-0.022	0.033	-0.059	1.914	-0.135

Numbers may not total 100% due to rounding.

Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.

¹ Excess return equals fund return minus benchmark return.

² Expense ratio (ER) attribution includes the impact of compounding on fund returns over time. Consequently, a fund's ER (above) may appear larger than the published ER.

³ Other category may include performance impacts from the following sources: portfolio manager investment decisions, trading impact, tax withholding differences (funds with international investments only), and security pricing differences.

Past performance is no guarantee of future returns.



Performance for all Vanguard equity index funds

	3 months	1 year	3 years	5 years	10 years	Since inception	Inception date
All-cap							
Vanguard Total Stock Market Index Fund Institutional Shs	10.00	29.37	9.64	14.25	12.28	8.91	7/7/1997
Vanguard Institutional Total Stock Market Index Fund Institutional Shs	10.04	29.44	9.67	14.28	12.31	9.41	8/31/2001
Vanguard High Dividend Yield ETF (VYM)							
Market price	9.04	18.37	9.54	10.62	10.12	8.53	11/10/2006
Vanguard High Dividend Yield ETF	9.09	18.37	9.56	10.62	10.12	8.53	11/10/2006
Vanguard Russell 3000 Index Fund Institutional Shs	10.00	29.25	9.72	14.27	12.25	13.47	11/1/2010
Large-cap							
Vanguard Institutional Index Fund Institutional Shs	10.54	29.84	11.45	15.02	12.93	10.55	7/31/1990
Vanguard Tax-Managed Capital Appreciation Fund Institutional Shs	10.35	29.93	10.65	14.94	12.83	8.30	2/24/1999
Vanguard FTSE Social Index Fund Institutional Shs	10.19	32.22	10.35	15.23	13.33	10.23	1/14/2003
Vanguard Large-Cap Index Fund Institutional Shs	10.38	30.41	10.70	14.92	12.81	10.49	6/30/2005
Vanguard Mega Cap Index Fund Institutional Shs	10.89	32.46	11.73	15.70	13.39	11.22	2/22/2008
Vanguard Mega Cap Growth Index Fund Institutional Shs	10.66	40.95	12.15	19.01	15.91	13.35	4/3/2008
Vanguard Mega Cap Value Index Fund Institutional Shs	9.98	21.40	10.69	11.81	10.70	9.13	3/5/2008
Vanguard Value Index Fund Institutional Shs	9.76	21.12	10.20	11.54	10.45	7.48	7/2/1998
Vanguard Growth Index Fund Institutional Shs	10.91	38.83	10.92	17.92	15.07	8.89	5/14/1998
Vanguard 500 Index Fund Admiral™ Shs	10.54	29.83	11.44	15.01	12.92	8.00	11/13/2000
Vanguard S&P 500 Growth ETF (VOOG)							
Market price	12.64	33.58	10.06	15.66	14.42	15.71	9/7/2010
Vanguard S&P 500 Growth ETF	12.71	33.60	10.07	15.66	14.42	15.71	9/7/2010
Vanguard S&P 500 Value Index Fund Institutional Shs	8.04	25.48	12.08	13.17	—	10.43	3/3/2015
Vanguard Russell 1000 Index Fund Institutional Shs	10.28	29.83	10.40	14.70	12.60	13.73	10/15/2010
Vanguard Russell 1000 Value Index Fund Institutional Shs	8.98	20.22	8.05	10.26	8.94	10.68	12/10/2010
Vanguard Russell 1000 Growth Index Fund Institutional Shs	11.39	38.97	12.45	18.45	15.91	15.85	12/6/2010
Vanguard Dividend Appreciation Index Fund Admiral Shs	7.72	20.94	9.60	12.84	11.47	11.41	12/19/2013
Vanguard Employee Benefit Index Fund	10.56	29.89	11.50	15.07	12.98	11.56	9/30/1985
Vanguard Russell 1000 Growth Index Trust	11.41	39.05	12.52	18.53	16.00	12.15	9/30/2003
Vanguard Russell 1000 Value Index Trust	8.99	20.31	8.13	10.34	9.04	8.99	9/30/2003
Mid-cap							
Vanguard Extended Market Index Fund Institutional Shs	6.97	26.73	0.97	10.12	9.00	8.91	7/7/1997
Vanguard Mid-Cap Index Fund Institutional Shs	7.86	20.45	5.72	10.94	9.90	10.03	5/21/1998
Vanguard S&P Mid-Cap 400 Index Fund Institutional Shs	9.94	23.25	6.90	11.64	9.92	10.88	3/28/2011
Vanguard S&P Mid-Cap 400 Growth Index Fund Institutional Shs	15.59	29.21	6.37	11.96	10.33	11.09	3/28/2011
Vanguard S&P Mid-Cap 400 Value Index Fund Institutional Shs	4.12	17.15	7.19	10.82	9.13	11.23	11/2/2010
Vanguard Mid-Cap Growth Index Fund Admiral Shs	7.56	21.80	3.89	11.32	10.63	12.69	9/27/2011
Vanguard Mid-Cap Value Index Fund Admiral Shs	8.12	19.10	7.37	10.17	8.93	12.29	9/27/2011
Small-cap							
Vanguard Tax-Managed Small-Cap Fund Institutional Shs	2.46	15.92	2.33	9.19	8.82	10.06	4/21/1999
Vanguard Small-Cap Index Fund Institutional Shs	7.52	22.53	3.81	10.00	8.95	9.09	7/7/1997
Vanguard Small-Cap Value Index Fund Institutional Shs	7.13	23.47	7.32	10.61	8.89	10.09	12/7/1999
Vanguard Small-Cap Growth Index Fund Institutional Shs	7.99	21.21	-1.08	8.33	8.53	9.18	5/24/2000
Vanguard S&P Small-Cap 600 Index Fund Institutional Shs	2.45	15.87	2.21	9.13	8.79	10.35	4/1/2011
Vanguard S&P Small-Cap 600 Growth ETF (VIOG)							
Market price	4.66	20.02	1.68	9.04	9.29	12.77	9/7/2010
Vanguard S&P Small-Cap 600 Growth ETF	4.72	19.94	1.72	9.03	9.29	12.77	9/7/2010
Vanguard S&P Small-Cap 600 Value Index Fund Institutional Shs	0.15	11.61	2.51	8.78	—	8.38	11/19/2014
Vanguard Russell 2000 Index Fund Institutional Shs	5.19	19.77	-0.05	8.19	7.67	9.29	12/22/2010
Vanguard Russell 2000 Value Index Fund Institutional Shs	2.90	18.76	2.22	8.21	6.90	9.48	7/13/2012
Vanguard Russell 2000 Growth Index Fund Institutional Shs	7.62	20.49	-2.59	7.49	8.03	9.56	5/25/2011

Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.

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Performance for all Vanguard equity index funds

	3 months	1 year	3 years	5 years	10 years	Since inception	Inception date
Sector							
Vanguard Real Estate Index Fund Institutional Shs	-1.16	8.58	1.78	3.74	6.24	7.91	12/2/2003
Vanguard Energy Index Fund Admiral™ Shs	13.10	18.93	29.62	12.55	3.78	7.47	10/7/2004
Vanguard Materials Index Fund Admiral Shs	7.95	16.92	7.70	12.78	8.85	9.17	2/11/2004
Vanguard Industrials Index Fund Admiral Shs	11.08	29.85	10.44	13.46	11.14	9.34	5/8/2006
Vanguard Consumer Discretionary Index Fund Admiral Shs	4.67	26.93	3.49	14.40	13.09	11.23	7/14/2005
Vanguard Consumer Staples Index Fund Admiral Shs	7.35	8.24	7.29	9.79	9.04	9.64	1/30/2004
Vanguard Health Care Index Fund Admiral Shs	8.32	15.15	7.26	11.01	11.30	10.20	2/5/2004
Vanguard Financials Index Fund Admiral Shs	11.50	34.32	9.04	12.23	10.78	5.91	2/4/2004
Vanguard Information Technology Index Fund Admiral Shs	8.60	37.09	14.44	22.30	20.40	13.98	3/25/2004
Vanguard Communication Services Index Fund Admiral Shs	11.68	37.13	1.32	10.50	6.58	7.49	3/11/2005
Vanguard Utilities Index Fund Admiral Shs	4.83	0.09	3.79	5.20	8.08	9.02	4/28/2004
International							
Vanguard Developed Markets Index Fund Institutional Shs	5.14	14.94	3.96	7.39	5.04	4.85	1/4/2001
Vanguard European Stock Index Fund Institutional Shs	4.79	14.33	5.68	8.00	4.62	4.63	5/15/2000
Vanguard Pacific Stock Index Fund Institutional Shs	5.67	15.72	0.78	5.85	5.38	3.61	5/15/2000
Vanguard Emerging Markets Stock Index Fund Institutional Shs	1.90	7.43	-3.73	2.86	3.24	6.39	6/22/2000
Vanguard International Dividend Appreciation Index Fund Admiral Shs	3.19	12.79	3.43	7.92	—	8.47	3/2/2016
Vanguard International High Dividend Yield Index Fund Admiral Shs	4.45	16.86	6.68	7.18	—	7.88	3/2/2016
Vanguard Total World Stock Index Fund Institutional Shs	7.81	22.73	6.61	10.90	8.76	10.59	10/9/2008
Vanguard FTSE All-World ex-US Index Fund Institutional Shs	4.72	13.43	2.14	6.34	4.60	3.30	4/30/2007
Vanguard FTSE All-World ex-US Small-Cap Index Fund Institutional Shs	1.47	10.29	-0.29	5.07	3.64	8.43	4/2/2009
Vanguard Global ex-U.S. Real Estate Index Fund Institutional Shs	-0.72	7.79	-5.52	-2.92	1.50	2.66	4/19/2011
Vanguard Total International Stock Index Fund Institutional Shs	4.32	13.00	1.91	6.19	4.48	5.13	11/29/2010
Vanguard Institutional Total International Stock Market Index Trust	4.35	13.10	2.01	6.30	—	7.64	6/24/2016
Vanguard Institutional Total International Stock Market Index Trust II	4.35	13.12	2.02	—	—	6.72	8/18/2020
Vanguard Developed Markets Index Trust	5.19	15.04	—	—	—	2.62	12/7/2021

Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.

The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at institutional.vanguard.com/performance.



Attribution for all Vanguard equity index funds

Year to date—Institutional share class unless otherwise noted	Benchmark return	Expense ratio ¹	Fair-value impact	Securities lending	Other ²	Fund return	Excess return ³
All-cap							
Vanguard High Dividend Yield ETF (VYM)	9.10	-0.016	0.000	0.002	0.004	9.094	-0.010
Vanguard Institutional Total Stock Market Index Fund (VITNX)	10.01	-0.008	0.000	0.002	0.037	10.039	0.031
Vanguard Russell 3000 Index Fund (VRTTX)	10.02	-0.022	0.000	0.002	-0.001	9.999	-0.021
Vanguard Total Stock Market Index Fund (VITSX)	10.01	-0.008	0.000	0.003	0.001	10.004	-0.004
Large-cap							
Vanguard 500 Index Fund Admiral™ (VFIAX)	10.56	-0.011	0.000	0.000	-0.002	10.543	-0.013
Vanguard Dividend Appreciation Index Fund Admiral (VDADX)	7.73	-0.021	0.000	0.000	0.009	7.718	-0.012
Vanguard FTSE Social Index Fund (VFTNX)	10.22	-0.033	0.000	0.001	0.001	10.193	-0.031
Vanguard Growth Index Fund (VIGIX)	10.91	-0.011	0.000	0.000	0.002	10.906	-0.009
Vanguard Institutional Index Fund (VINIX)	10.56	-0.010	0.000	0.000	-0.001	10.545	-0.011
Vanguard Large-Cap Index Fund (VLISX)	10.38	-0.011	0.000	0.001	0.008	10.382	-0.002
Vanguard Mega Cap Growth Index Fund (VMGAX)	10.68	-0.017	0.000	0.000	-0.001	10.659	-0.017
Vanguard Mega Cap Index Fund (VMCTX)	10.90	-0.017	0.000	0.000	0.006	10.885	-0.011
Vanguard Mega Cap Value Index Fund (VMVLX)	9.99	-0.016	0.000	0.000	0.006	9.980	-0.010
Vanguard Russell 1000 Growth Index Fund (VRGWX)	11.41	-0.019	0.000	0.000	-0.003	11.392	-0.023
Vanguard Russell 1000 Index Fund (VRNIX)	10.30	-0.019	0.000	0.001	0.003	10.281	-0.015
Vanguard Russell 1000 Value Index Fund (VRVIX)	8.99	-0.019	0.000	0.002	0.007	8.975	-0.010
Vanguard S&P 500 Growth ETF (VOOG)	12.75	-0.028	0.000	-0.000	-0.008	12.715	-0.036
Vanguard S&P 500 Value Index Fund (VSPVX)	8.05	-0.021	0.000	0.000	0.005	8.037	-0.017
Vanguard Tax-Managed Capital Appreciation Fund (VTCIX)	10.30	-0.016	0.000	0.000	0.066	10.345	0.049
Vanguard Value Index Fund (VIVIX)	9.75	-0.011	0.000	0.001	0.013	9.756	0.003
Mid-cap							
Vanguard Extended Market Index Fund (VIEIX)	6.96	-0.013	0.000	0.022	0.004	6.969	0.013
Vanguard Mid-Cap Growth Index Fund Admiral (VMGMX)	7.57	-0.019	0.000	0.001	0.011	7.560	-0.007
Vanguard Mid-Cap Index Fund (VMCIX)	7.85	-0.011	0.000	0.004	0.010	7.855	0.003
Vanguard Mid-Cap Value Index Fund Admiral (VMVAX)	8.10	-0.019	0.000	0.008	0.031	8.119	0.020
Vanguard S&P Mid-Cap 400 Growth Index Fund (VMFGX)	15.60	-0.023	0.000	0.000	0.008	15.585	-0.014
Vanguard S&P Mid-Cap 400 Index Fund (VSPMX)	9.95	-0.022	0.000	0.001	0.010	9.943	-0.011
Vanguard S&P Mid-Cap 400 Value Index Fund (VMFVX)	4.12	-0.021	0.000	0.003	0.017	4.116	-0.001
Small-cap							
Vanguard Russell 2000 Growth Index Fund (VRTGX)	7.58	-0.021	0.000	0.043	0.011	7.615	0.033
Vanguard Russell 2000 Index Fund (VRTIX)	5.18	-0.021	0.000	0.030	0.006	5.195	0.015
Vanguard Russell 2000 Value Index Fund (VRTVX)	2.90	-0.020	0.000	0.013	0.005	2.898	-0.003
Vanguard S&P Small-Cap 600 Growth ETF (VIOG)	4.77	-0.039	0.000	0.001	-0.010	4.724	-0.048
Vanguard S&P Small-Cap 600 Index Fund (VSMSX)	2.46	-0.020	0.000	0.006	0.007	2.454	-0.007
Vanguard S&P Small-Cap 600 Value Index Fund (VSMVX)	0.14	-0.020	0.000	0.011	0.018	0.146	0.009
Vanguard Small-Cap Growth Index Fund (VSGIX)	7.98	-0.016	0.000	0.019	-0.000	7.987	0.003
Vanguard Small-Cap Index Fund (VSCIX)	7.51	-0.011	0.000	0.011	0.009	7.519	0.009
Vanguard Small-Cap Value Index Fund (VSIIX)	7.14	-0.016	0.000	0.004	-0.004	7.126	-0.016
Vanguard Tax-Managed Small-Cap Fund (VTSIX)	2.46	-0.015	0.000	0.000	0.014	2.459	-0.002
Sector							
Vanguard Communication Services Index Fund Admiral (VTCAX)	11.66	-0.028	0.000	0.031	0.016	11.676	0.020
Vanguard Consumer Discretionary Index Fund Admiral (VCDAX)	4.68	-0.026	0.000	0.007	0.006	4.665	-0.013
Vanguard Consumer Staples Index Fund Admiral (VCSAX)	7.35	-0.027	0.000	0.015	0.006	7.348	-0.006
Vanguard Energy Index Fund Admiral (VENAX)	13.14	-0.028	0.000	0.000	-0.007	13.102	-0.035
Vanguard Financials Index Fund Admiral (VFAIX)	11.53	-0.028	0.000	0.002	-0.005	11.498	-0.031
Vanguard Health Care Index Fund Admiral (VHCIX)	8.35	-0.027	0.000	0.003	-0.006	8.321	-0.030
Vanguard Industrials Index Fund Admiral (VINAX)	11.11	-0.028	0.000	0.002	-0.005	11.078	-0.031
Vanguard Information Technology Index Fund Admiral (VITAX)	8.62	-0.027	0.000	0.002	0.000	8.599	-0.024
Vanguard Materials Index Fund Admiral (VMIAX)	7.97	-0.027	0.000	0.002	0.001	7.947	-0.023
Vanguard Real Estate Index Fund (VGSNX)	-1.15	-0.025	0.000	0.001	0.013	-1.159	-0.011
Vanguard Utilities Index Fund Admiral (VUIAX)	4.87	-0.026	0.000	0.000	-0.012	4.834	-0.037
International							
Vanguard Developed Markets Index Fund (VTMNX)	5.11	-0.016	0.173	0.006	-0.131	5.143	0.032
Vanguard Emerging Markets Stock Index Fund (VEMIX)	2.04	-0.025	0.166	0.014	-0.301	1.898	-0.146
Vanguard European Stock Index Fund (VESIX)	4.90	-0.023	-0.106	0.002	0.023	4.793	-0.105
Vanguard FTSE All-World ex-US Index Fund (VFW SX)	4.65	-0.021	0.193	0.005	-0.102	4.722	0.075
Vanguard FTSE All-World ex-US Small-Cap Index Fund (VFSNX)	1.54	-0.030	0.187	0.034	-0.256	1.474	-0.066
Vanguard Global ex-U.S. Real Estate Index Fund (VGRNX)	-0.72	-0.027	0.181	0.023	-0.181	-0.722	-0.004
Vanguard International Dividend Appreciation Index Fund Admiral (VIAAX)	3.11	-0.041	0.170	0.003	-0.048	3.189	0.084
Vanguard International High Dividend Yield Index Fund Admiral (VIHAX)	4.44	-0.057	0.154	0.004	-0.091	4.451	0.010
Vanguard Pacific Stock Index Fund (VPKIX)	5.60	-0.021	0.516	0.009	-0.426	5.673	0.078
Vanguard Total International Stock Index Fund (VTSNX)	4.34	-0.023	0.183	0.007	-0.194	4.315	-0.027
Vanguard Total World Stock Index Fund (VTWIX)	7.83	-0.021	0.075	0.004	-0.075	7.812	-0.017

Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.

¹ Expense ratio (ER) attribution includes the impact of compounding on fund returns over time. Consequently, a fund's ER (above) may appear larger than the published ER.

² Other category may include performance impacts from the following sources: portfolio manager investment decisions, trading impact, tax withholding differences (funds with international investments only), and security pricing differences.

³ Excess return equals fund return minus benchmark return.



Attribution for all Vanguard equity index funds

One year—Institutional share class unless otherwise noted	Benchmark return	Expense ratio ¹	Fair-value impact	Securities lending	Other ²	Fund return	Excess return ³
All-cap							
Vanguard High Dividend Yield ETF (VYM)	18.43	-0.071	0.000	0.006	0.010	18.373	-0.055
Vanguard Institutional Total Stock Market Index Fund (VITNX)	29.33	-0.039	0.000	0.017	0.130	29.439	0.109
Vanguard Russell 3000 Index Fund (VRTTX)	29.29	-0.104	0.000	0.016	0.049	29.255	-0.039
Vanguard Total Stock Market Index Fund (VITSX)	29.33	-0.039	0.000	0.020	0.058	29.370	0.039
Large-cap							
Vanguard 500 Index Fund Admiral™ (VFIAX)	29.88	-0.052	0.000	0.000	-0.000	29.829	-0.052
Vanguard Dividend Appreciation Index Fund Admiral (VDADX)	21.02	-0.097	0.000	0.000	0.023	20.945	-0.073
Vanguard FTSE Social Index Fund (VFTNX)	32.35	-0.159	0.000	0.003	0.033	32.223	-0.123
Vanguard Growth Index Fund (VIGIX)	38.90	-0.056	0.000	0.001	-0.012	38.834	-0.067
Vanguard Institutional Index Fund (VINIX)	29.88	-0.046	0.000	0.000	0.000	29.836	-0.045
Vanguard Large-Cap Index Fund (VLISX)	30.40	-0.052	0.000	0.003	0.059	30.407	0.009
Vanguard Mega Cap Growth Index Fund (VMGAX)	41.04	-0.085	0.000	0.000	0.001	40.952	-0.083
Vanguard Mega Cap Index Fund (VMCTX)	32.48	-0.080	0.000	0.000	0.054	32.455	-0.026
Vanguard Mega Cap Value Index Fund (VMVLX)	21.34	-0.073	0.000	0.000	0.131	21.397	0.058
Vanguard Russell 1000 Growth Index Fund (VRGWX)	39.00	-0.098	0.000	0.002	0.069	38.970	-0.027
Vanguard Russell 1000 Index Fund (VRNIX)	29.87	-0.091	0.000	0.009	0.049	29.835	-0.033
Vanguard Russell 1000 Value Index Fund (VRVIX)	20.27	-0.084	0.000	0.017	0.021	20.222	-0.046
Vanguard S&P 500 Growth ETF (VOOG)	33.73	-0.134	0.000	-0.000	0.003	33.599	-0.131
Vanguard S&P 500 Value Index Fund (VSPVX)	25.58	-0.101	0.000	0.000	0.005	25.485	-0.095
Vanguard Tax-Managed Capital Appreciation Fund (VTCIX)	29.87	-0.078	0.000	0.000	0.145	29.935	0.067
Vanguard Value Index Fund (VIVIX)	21.03	-0.049	0.000	0.005	0.135	21.123	0.091
26.34	-0.064	0.000	0.145	0.314	26.732	0.395	
Mid-cap							
Vanguard Extended Market Index Fund (VIEIX)							
Vanguard Mid-Cap Growth Index Fund Admiral (VMGMX)	21.86	-0.085	0.000	0.006	0.022	21.800	-0.058
Vanguard Mid-Cap Index Fund (VMCIX)	20.43	-0.048	0.000	0.015	0.052	20.449	0.018
Vanguard Mid-Cap Value Index Fund Admiral (VMVAX)	19.10	-0.084	0.000	0.026	0.054	19.101	-0.004
Vanguard S&P Mid-Cap 400 Growth Index Fund (VMFGX)	29.30	-0.104	0.000	0.000	0.008	29.206	-0.095
Vanguard S&P Mid-Cap 400 Index Fund (VSPMX)	23.33	-0.099	0.000	0.010	0.010	23.253	-0.079
Vanguard S&P Mid-Cap 400 Value Index Fund (VMFVX)	17.20	-0.094	0.000	0.022	0.024	17.148	-0.048
Small-cap							
Vanguard Russell 2000 Growth Index Fund (VRTGX)	20.35	-0.097	0.000	0.181	0.055	20.486	0.139
Vanguard Russell 2000 Index Fund (VRTIX)	19.71	-0.096	0.000	0.140	0.022	19.774	0.066
Vanguard Russell 2000 Value Index Fund (VRTVX)	18.75	-0.095	0.000	0.106	0.001	18.764	0.012
Vanguard S&P Small-Cap 600 Growth ETF (VIOG)	20.12	-0.180	0.000	0.005	0.002	19.943	-0.174
Vanguard S&P Small-Cap 600 Index Fund (VSMSX)	15.93	-0.093	0.000	0.018	0.016	15.872	-0.059
Vanguard S&P Small-Cap 600 Value Index Fund (VSMVX)	11.64	-0.090	0.000	0.029	0.030	11.611	-0.031
Vanguard Small-Cap Growth Index Fund (VSGIX)	21.10	-0.073	0.000	0.126	0.053	21.207	0.106
Vanguard Small-Cap Index Fund (VSCIX)	22.42	-0.049	0.000	0.112	0.047	22.529	0.110
Vanguard Small-Cap Value Index Fund (VSIX)	23.43	-0.074	0.000	0.103	0.008	23.466	0.037
Vanguard Tax-Managed Small-Cap Fund (VTSIX)	15.93	-0.070	0.000	0.000	0.061	15.923	-0.008
Sector							
Vanguard Communication Services Index Fund Admiral (VTCAX)	36.84	-0.137	0.000	0.306	0.123	37.128	0.292
Vanguard Consumer Discretionary Index Fund Admiral (VCDAX)	27.01	-0.127	0.000	0.035	0.017	26.932	-0.075
Vanguard Consumer Staples Index Fund Admiral (VCSAX)	8.30	-0.109	0.000	0.053	0.001	8.244	-0.055
Vanguard Energy Index Fund Admiral (VENAX)	19.06	-0.119	0.000	0.002	-0.013	18.926	-0.130
Vanguard Financials Index Fund Admiral (VFAIX)	34.47	-0.135	0.000	0.018	-0.024	34.325	-0.140
Vanguard Health Care Index Fund Admiral (VHCIX)	15.25	-0.115	0.000	0.009	0.006	15.146	-0.100
Vanguard Industrials Index Fund Admiral (VINAX)	29.97	-0.130	0.000	0.016	0.001	29.853	-0.114
Vanguard Information Technology Index Fund Admiral (VITAX)	37.05	-0.137	0.000	0.012	0.162	37.089	0.037
Vanguard Materials Index Fund Admiral (VMIAIX)	17.04	-0.117	0.000	0.009	-0.012	16.916	-0.120
Vanguard Real Estate Index Fund (VGSNX)	8.68	-0.109	0.000	0.004	0.002	8.580	-0.103
Vanguard Utilities Index Fund Admiral (VUIAX)	0.21	-0.100	0.000	0.001	-0.016	0.091	-0.115
International							
Vanguard Developed Markets Index Fund (VTMNX)	15.22	-0.069	-0.146	0.033	-0.094	14.942	-0.276
Vanguard Emerging Markets Stock Index Fund (VEMIX)	8.46	-0.108	0.040	0.056	-1.015	7.433	-1.026
Vanguard European Stock Index Fund (VESIX)	14.35	-0.103	-0.070	0.012	0.144	14.331	-0.017
Vanguard FTSE All-World ex-US Index Fund (VFWSX)	13.81	-0.091	-0.106	0.024	-0.206	13.434	-0.378
Vanguard FTSE All-World ex-US Small-Cap Index Fund (VFSNX)	10.93	-0.133	-0.212	0.180	-0.470	10.291	-0.635
Vanguard Global ex-U.S. Real Estate Index Fund (VGRNX)	7.89	-0.119	-0.166	0.115	0.074	7.792	-0.097
Vanguard International Dividend Appreciation Index Fund Admiral (VIAAX)	13.23	-0.181	-0.188	0.009	-0.084	12.786	-0.444
Vanguard International High Dividend Yield Index Fund Admiral (VIHAX)	17.40	-0.258	-0.080	0.019	-0.226	16.855	-0.545
Vanguard Pacific Stock Index Fund (VPKIX)	16.59	-0.093	-0.380	0.053	-0.456	15.718	-0.875
Vanguard Total International Stock Index Fund (VTSNX)	13.53	-0.102	-0.127	0.037	-0.343	12.995	-0.535
Vanguard Total World Stock Index Fund (VTWIX)	22.98	-0.098	-0.061	0.024	-0.113	22.733	-0.249

Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.

¹ Expense ratio (ER) attribution includes the impact of compounding on fund returns over time. Consequently, a fund's ER (above) may appear larger than the published ER.

² Other category may include performance impacts from the following sources: portfolio manager investment decisions, trading impact, tax withholding differences (funds with international investments only), and security pricing differences.

³ Excess return equals fund return minus benchmark return.



Attribution for all Vanguard equity index funds

Three years—Institutional share class unless otherwise noted	Benchmark return	Expense ratio ¹	Fair-value impact	Securities lending	Other ²	Fund return	Excess return ³
All-cap							
Vanguard High Dividend Yield ETF (VYM)	9.63	-0.066	0.000	0.004	-0.007	9.556	-0.069
Vanguard Institutional Total Stock Market Index Fund (VITNX)	9.64	-0.033	0.000	0.015	0.051	9.674	0.034
Vanguard Russell 3000 Index Fund (VRTTX)	9.78	-0.088	0.000	0.012	0.013	9.715	-0.062
Vanguard Total Stock Market Index Fund (VITSX)	9.64	-0.033	0.000	0.019	0.016	9.642	0.002
Large-cap							
Vanguard 500 Index Fund Admiral™ (VFIAX)	11.49	-0.045	0.000	0.000	-0.004	11.445	-0.048
Vanguard Dividend Appreciation Index Fund Admiral (VDADX)	9.69	-0.088	0.000	0.000	0.002	9.604	-0.086
Vanguard FTSE Social Index Fund (VFTNX)	10.46	-0.133	0.000	0.003	0.017	10.346	-0.113
Vanguard Growth Index Fund (VIGIX)	10.96	-0.044	0.000	0.002	0.008	10.925	-0.035
Vanguard Institutional Index Fund (VINIX)	11.49	-0.040	0.000	0.000	-0.000	11.453	-0.041
Vanguard Large-Cap Index Fund (VLISX)	10.72	-0.044	0.000	0.003	0.023	10.700	-0.018
Vanguard Mega Cap Growth Index Fund (VMGAX)	12.21	-0.067	0.000	0.001	0.008	12.147	-0.059
Vanguard Mega Cap Index Fund (VMCTX)	11.78	-0.067	0.000	0.001	0.023	11.733	-0.043
Vanguard Mega Cap Value Index Fund (VMVLX)	10.71	-0.066	0.000	0.001	0.046	10.687	-0.019
Vanguard Russell 1000 Growth Index Fund (VRGWX)	12.50	-0.079	0.000	0.003	0.023	12.449	-0.053
Vanguard Russell 1000 Index Fund (VRNIX)	10.45	-0.077	0.000	0.007	0.016	10.400	-0.054
Vanguard Russell 1000 Value Index Fund (VRVIX)	8.11	-0.076	0.000	0.011	0.001	8.047	-0.064
Vanguard S&P 500 Growth ETF (VOOG)	10.19	-0.110	0.000	0.000	-0.007	10.074	-0.117
Vanguard S&P 500 Value Index Fund (VSPVX)	12.17	-0.090	0.000	0.000	0.000	12.085	-0.089
Vanguard Tax-Managed Capital Appreciation Fund (VTCIX)	10.45	-0.066	0.000	0.000	0.263	10.651	0.197
Vanguard Value Index Fund (VIVIX)	10.20	-0.044	0.000	0.005	0.045	10.205	0.005
Mid-cap							
Vanguard Extended Market Index Fund (VIEIX)	0.79	-0.051	0.000	0.124	0.105	0.968	0.178
Vanguard Mid-Cap Growth Index Fund Admiral (VMGMX)	3.93	-0.073	0.000	0.010	0.028	3.894	-0.036
Vanguard Mid-Cap Index Fund (VMCIX)	5.73	-0.042	0.000	0.015	0.026	5.724	-0.002
Vanguard Mid-Cap Value Index Fund Admiral (VMVAX)	7.41	-0.075	0.000	0.021	0.014	7.367	-0.039
Vanguard S&P Mid-Cap 400 Growth Index Fund (VMFGX)	6.43	-0.085	0.000	0.023	0.007	6.373	-0.055
Vanguard S&P Mid-Cap 400 Index Fund (VSPMX)	6.96	-0.086	0.000	0.017	0.003	6.899	-0.065
Vanguard S&P Mid-Cap 400 Value Index Fund (VMFVX)	7.25	-0.086	0.000	0.013	0.019	7.193	-0.053
Small-cap							
Vanguard Russell 2000 Growth Index Fund (VRTGX)	-2.68	-0.078	0.000	0.137	0.025	-2.594	0.084
Vanguard Russell 2000 Index Fund (VRTIX)	-0.10	-0.080	0.000	0.114	0.018	-0.051	0.052
Vanguard Russell 2000 Value Index Fund (VRTVX)	2.22	-0.082	0.000	0.071	0.013	2.219	0.002
Vanguard S&P Small-Cap 600 Growth ETF (VIOG)	1.88	-0.153	0.000	0.007	-0.017	1.722	-0.163
Vanguard S&P Small-Cap 600 Index Fund (VSMSX)	2.28	-0.082	0.000	0.012	-0.008	2.206	-0.078
Vanguard S&P Small-Cap 600 Value Index Fund (VSMVX)	2.58	-0.082	0.000	0.016	0.001	2.511	-0.065
Vanguard Small-Cap Growth Index Fund (VSGIX)	-1.14	-0.059	0.000	0.099	0.023	-1.083	0.062
Vanguard Small-Cap Index Fund (VSCIX)	3.75	-0.042	0.000	0.079	0.021	3.809	0.058
Vanguard Small-Cap Value Index Fund (VSIIX)	7.31	-0.064	0.000	0.062	0.012	7.324	0.010
Vanguard Tax-Managed Small-Cap Fund (VTSIX)	2.28	-0.061	0.000	0.000	0.106	2.328	0.044
Sector							
Vanguard Communication Services Index Fund Admiral (VTCAX)	1.28	-0.101	0.000	0.125	0.022	1.324	0.046
Vanguard Consumer Discretionary Index Fund Admiral (VCDAX)	3.57	-0.104	0.000	0.023	0.007	3.492	-0.073
Vanguard Consumer Staples Index Fund Admiral (VCSAX)	7.36	-0.107	0.000	0.041	-0.001	7.287	-0.068
Vanguard Energy Index Fund Admiral (VENAX)	29.75	-0.130	0.000	0.002	-0.004	29.621	-0.131
Vanguard Financials Index Fund Admiral (VFAIX)	9.12	-0.109	0.000	0.017	0.016	9.040	-0.076
Vanguard Health Care Index Fund Admiral (VHCIX)	7.35	-0.107	0.000	0.008	0.012	7.259	-0.087
Vanguard Industrials Index Fund Admiral (VINAX)	10.53	-0.111	0.000	0.011	0.003	10.435	-0.096
Vanguard Information Technology Index Fund Admiral (VITAX)	14.52	-0.115	0.000	0.008	0.031	14.444	-0.075
Vanguard Materials Index Fund Admiral (VMIAIX)	7.81	-0.108	0.000	0.006	-0.002	7.702	-0.104
Vanguard Real Estate Index Fund (VGSNX)	1.87	-0.102	0.000	0.002	0.008	1.775	-0.091
Vanguard Utilities Index Fund Admiral (VUIAX)	3.90	-0.104	0.000	0.001	-0.004	3.790	-0.108
International							
Vanguard Developed Markets Index Fund (VTMNX)	3.92	-0.056	0.030	0.030	0.034	3.962	0.038
Vanguard Emerging Markets Stock Index Fund (VEMIX)	-3.21	-0.096	-0.120	0.046	-0.352	-3.734	-0.523
Vanguard European Stock Index Fund (VESIX)	5.54	-0.100	0.046	0.017	0.171	5.676	0.133
Vanguard FTSE All-World ex-US Index Fund (VFWWSX)	2.29	-0.085	-0.011	0.023	-0.074	2.142	-0.147
Vanguard FTSE All-World ex-US Small-Cap Index Fund (VFSNX)	-0.17	-0.115	0.000	0.133	-0.141	-0.295	-0.123
Vanguard Global ex-U.S. Real Estate Index Fund (VGRNX)	-5.84	-0.104	-0.001	0.080	0.339	-5.521	0.315
Vanguard International Dividend Appreciation Index Fund Admiral (VIAAX)	3.54	-0.166	-0.002	0.006	0.052	3.427	-0.109
Vanguard International High Dividend Yield Index Fund Admiral (VIHAX)	6.94	-0.235	0.019	0.020	-0.066	6.676	-0.263
Vanguard Pacific Stock Index Fund (VPKIX)	0.98	-0.081	0.006	0.034	-0.155	0.781	-0.195
Vanguard Total International Stock Index Fund (VTSNX)	2.05	-0.086	-0.022	0.033	-0.059	1.914	-0.135
Vanguard Total World Stock Index Fund (VTWIX)	6.73	-0.085	-0.008	0.021	-0.045	6.611	-0.117

Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.

¹ Expense ratio (ER) attribution includes the impact of compounding on fund returns over time. Consequently, a fund's ER (above) may appear larger than the published ER.

² Other category may include performance impacts from the following sources: portfolio manager investment decisions, trading impact, tax withholding differences (funds with international investments only), and security pricing differences.

³ Excess return equals fund return minus benchmark return.



Securities-lending

IN THIS SECTION:

Vanguard securities-lending program overview

Vanguard securities-lending by fund

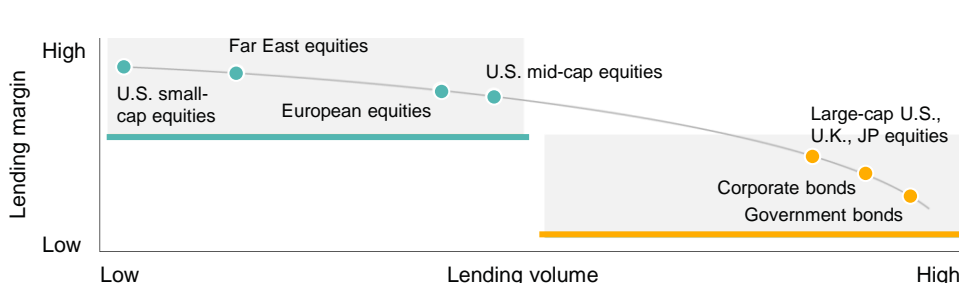


Vanguard securities-lending program overview

Lending securities from equity index funds provides an opportunity to increase portfolio returns. There are two broad strategic approaches to securities-lending: value and volume. Vanguard is a value lender, meaning we seek to optimize client outcomes by maximizing revenue generation while minimizing the percentage of the portfolio on loan to manage risk. Additionally, Vanguard's at-cost lending program returns more than 95% of securities-lending revenues directly back to the funds, one of the highest and most shareholder-friendly return rates in the industry.

Figure 29.1 Securities-lending program overview

Vanguard's lending program focuses on lending "specials"—securities with a high lending margin—to maximize the return generated by each loan.



Asset-weighted cost (2023)	3.1%
Revenue returned to funds (2023)	96.9%
Range of acceptable loans by regulations	Up to 33% of gross assets
– Best practice range by Vanguard	0% to 7% of gross assets
Weighted-average percentage of portfolios on loan	0.33% of gross assets

Sources: Brown Brothers Harriman (BBH) and Vanguard.

Vanguard Fixed Income Group's credit research team manages a list of approved borrowers and assigns each a credit limit. Vanguard considers the financial viability of all approved counterparties on an ongoing basis and monitors individual counterparty exposure daily. If necessary, the amounts on loan are adjusted based on changes in perceived creditworthiness of each borrowing institution. Collateral is reinvested in a conservative, internally managed, money market fund called the Market Liquidity Fund.

Total average market value on loan for 1Q2024

Goldman Sachs & Co. LLC	\$104,235,135,425
Morgan Stanley & Co. LLC	\$21,539,268,913
Barclays Capital Securities LTD	\$13,396,671,049
Goldman Sachs International	\$11,520,707,401
JP Morgan Securities LLC	\$11,356,066,446



Market Liquidity Fund sector allocation and key characteristics

Treasuries	29.6%
Agencies	25.6%
Certificates of deposit	16.4%
Repurchase agreements	11.0%
Commercial paper	15.2%
Cash	2.1%
Municipals	0.1%

Average maturity	17
Expense ratio	0.5 bps
SEC yield	5.40%
Number of holdings	176

Securities-lending from fixed income funds

Vanguard lends securities only from its equity funds. We lent securities from our fixed income funds until 2009, when market conditions made the risk-reward unattractive. We continually monitor market conditions and other factors, periodically reevaluating our securities-lending program's effectiveness in meeting its goal of giving our clients the best chance for investment success.

Numbers may not total 100% due to rounding.
Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.



Vanguard securities-lending by fund

Figure 30.1 2023/2024 securities-lending data by fund

	Year	Average market value of open loans	Average % on loan	Total period earned income	Income as % of average fund assets
All-cap					
Vanguard Institutional Total Stock Market Index Fund	2023	\$73,266,654	0.26%	\$5,963,411	0.02%
	2024 YTD	\$27,115,480	0.09%	\$670,466	0.00%
Vanguard Russell 3000 Index Fund	2023	\$7,069,796	0.24%	\$582,676	0.02%
	2024 YTD	\$1,247,558	0.04%	\$62,770	0.00%
Vanguard High Dividend Yield Index Fund	2023	\$36,822,279	0.06%	\$3,293,054	0.01%
	2024 YTD	\$18,101,935	0.03%	\$1,063,693	0.00%
Vanguard Total Stock Market Index Fund	2023	\$3,448,565,391	0.27%	\$308,412,738	0.02%
	2024 YTD	\$2,960,560,656	0.20%	\$42,654,169	0.00%
Large-cap					
Vanguard 500 Index Fund	2023	\$78,261,604	0.01%	\$515,874	0.00%
	2024 YTD	\$44,677,615	0.00%	\$63,525	0.00%
Vanguard Dividend Appreciation Index Fund	2023	\$664,721	0.00%	\$4,607	0.00%
	2024 YTD	\$2,349,681	0.00%	\$5,443	0.00%
Vanguard Employee Benefit Index Fund	2023	\$11,844,156	0.06%	\$258,659	0.00%
	2024 YTD	\$6,248,073	0.03%	\$5,590	0.00%
Vanguard FTSE Social Index Fund	2023	\$8,110,997	0.06%	\$700,422	0.00%
	2024 YTD	\$4,283,612	0.02%	\$124,963	0.00%
Vanguard Growth Index Fund	2023	\$91,929,916	0.06%	\$2,333,592	0.00%
	2024 YTD	\$14,195,649	0.01%	\$266,151	0.00%
Vanguard Institutional Index Fund	2023	\$21,684,834	0.01%	\$171,120	0.00%
	2024 YTD	\$5,506,195	0.00%	\$4,712	0.00%
Vanguard Large-Cap Index Fund	2023	\$22,115,441	0.06%	\$1,119,570	0.00%
	2024 YTD	\$5,255,564	0.01%	\$335,993	0.00%
Vanguard Mega Cap Growth Index Fund	2023	\$96,451	0.00%	\$1,260	0.00%
	2024 YTD	\$0	0.00%	\$0	0.00%
Vanguard Mega Cap Index Fund	2023	\$16,383	0.00%	\$274	0.00%
	2024 YTD	\$0	0.00%	\$13	0.00%
Vanguard Mega Cap Value Index Fund	2023	\$0	0.00%	\$79	0.00%
	2024 YTD	\$0	0.00%	\$21	0.00%
Vanguard Russell 1000 Growth Index Fund	2023	\$9,189,082	0.06%	\$454,236	0.00%
	2024 YTD	\$1,869,289	0.01%	\$17,343	0.00%
Vanguard Russell 1000 Growth Index Trust	2023	\$3,798,573	0.08%	\$134,326	0.00%
	2024 YTD	\$1,190,131	0.02%	\$4,469	0.00%
Vanguard Russell 1000 Index Fund	2023	\$7,488,639	0.13%	\$685,292	0.01%
	2024 YTD	\$1,515,170	0.02%	\$57,694	0.00%
Vanguard Russell 1000 Value Index Fund	2023	\$17,030,689	0.21%	\$1,733,580	0.02%
	2024 YTD	\$7,727,587	0.08%	\$175,519	0.00%
Vanguard Russell 1000 Value Index Trust	2023	\$12,338,557	0.45%	\$585,993	0.02%
	2024 YTD	\$7,856,309	0.28%	\$54,964	0.00%
Vanguard S&P 500 Growth Index Fund	2023	\$144,383	0.00%	\$3,399	0.00%
	2024 YTD	\$0	0.00%	-\$968	0.00%
Vanguard S&P 500 Value Index Fund	2023	\$1,213,664	0.03%	\$3,256	0.00%
	2024 YTD	\$75,057	0.00%	\$74	0.00%
Vanguard Tax-Managed Capital Appreciation Fund	2023	\$0	0.00%	\$0	0.00%
	2024 YTD	\$0	0.00%	\$0	0.00%
Vanguard Value Index Fund	2023	\$90,514,975	0.06%	\$6,668,070	0.00%
	2024 YTD	\$41,011,331	0.03%	\$2,153,986	0.00%

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Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.



Vanguard securities-lending by fund

Figure 31.1 2023/2024 securities-lending data by fund

	Year	Average market value of open loans	Average % on loan	Total period earned income	Income as % of average fund assets
Mid-cap					
Vanguard Extended Market Index Fund	2023	\$1,456,594,393	1.72%	\$141,973,884	0.17%
	2024 YTD	\$1,412,410,953	1.47%	\$21,415,098	0.02%
Vanguard Mid-Cap Growth Index Fund	2023	\$76,923,670	0.38%	\$2,060,779	0.01%
	2024 YTD	\$11,579,775	0.05%	\$215,557	0.00%
Vanguard Mid-Cap Index Fund	2023	\$466,749,867	0.33%	\$23,785,257	0.02%
	2024 YTD	\$167,995,838	0.11%	\$5,535,112	0.00%
Vanguard Mid-Cap Value Index Fund	2023	\$82,274,038	0.30%	\$6,749,974	0.02%
	2024 YTD	\$45,331,413	0.16%	\$2,206,188	0.01%
Vanguard S&P Mid-Cap 400 Growth Index Fund	2023	\$824,850	0.09%	\$22,124	0.00%
	2024 YTD	\$874,881	0.09%	\$3,052	0.00%
Vanguard S&P Mid-Cap 400 Index Fund	2023	\$10,597,155	0.36%	\$464,894	0.02%
	2024 YTD	\$7,173,978	0.22%	\$46,871	0.00%
Vanguard S&P Mid-Cap 400 Value Index Fund	2023	\$6,110,978	0.69%	\$320,209	0.04%
	2024 YTD	\$3,314,197	0.35%	\$25,872	0.00%
Small-cap					
Vanguard Russell 2000 Growth Index Fund	2023	\$25,497,343	2.66%	\$1,898,671	0.20%
	2024 YTD	\$10,089,002	0.94%	\$464,817	0.04%
Vanguard Russell 2000 Growth Index Trust	2023	\$72,178,361	3.95%	\$3,256,894	0.18%
	2024 YTD	\$91,537,631	4.66%	\$843,618	0.04%
Vanguard Russell 2000 Index Fund	2023	\$155,554,612	2.40%	\$10,006,211	0.15%
	2024 YTD	\$130,831,195	1.58%	\$2,468,266	0.03%
Vanguard Russell 2000 Value Index Fund	2023	\$20,719,232	2.14%	\$1,163,797	0.12%
	2024 YTD	\$7,342,668	0.76%	\$120,536	0.01%
Vanguard Russell 2000 Value Index Trust	2023	\$17,252,621	3.07%	\$620,375	0.11%
	2024 YTD	\$17,345,150	3.02%	\$92,563	0.02%
Vanguard S&P Small-Cap 600 Index Fund	2023	\$21,602,762	0.53%	\$669,764	0.02%
	2024 YTD	\$30,511,089	0.67%	\$274,362	0.01%
Vanguard S&P Small-Cap 600 Growth Index Fund	2023	\$1,615,519	0.30%	\$46,630	0.01%
	2024 YTD	\$446,836	0.07%	\$5,866	0.00%
Vanguard S&P Small-Cap 600 Value Index Fund	2023	\$9,063,206	0.69%	\$325,205	0.02%
	2024 YTD	\$13,681,920	0.96%	\$150,605	0.01%
Vanguard Small-Cap Growth Index Fund	2023	\$604,882,033	2.10%	\$45,193,301	0.16%
	2024 YTD	\$542,046,851	1.70%	\$6,037,575	0.02%
Vanguard Small-Cap Index Fund	2023	\$1,598,785,782	1.35%	\$165,861,150	0.14%
	2024 YTD	\$1,540,726,520	1.17%	\$14,072,407	0.01%
Vanguard Small-Cap Value Index Fund	2023	\$363,672,060	0.77%	\$60,848,100	0.13%
	2024 YTD	\$321,105,652	0.63%	\$1,815,220	0.00%
Vanguard Tax-Managed Small-Cap Fund	2023	\$0	0.00%	\$0	0.00%
	2024 YTD	\$0	0.00%	\$0	0.00%

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Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.



Vanguard securities-lending by fund

Figure 32.1 2023/2024 securities-lending data by fund

	Year	Average market value of open loans	Average % on loan	Total period earned income	Income as % of average fund assets
Sector					
Vanguard Consumer Discretionary Index Fund	2023	\$25,743,279	0.52%	\$2,012,783	0.04%
	2024 YTD	\$16,282,484	0.28%	\$435,567	0.01%
Vanguard Consumer Staples Index Fund	2023	\$12,571,974	0.16%	\$5,098,140	0.06%
	2024 YTD	\$5,680,017	0.07%	\$1,113,326	0.01%
Vanguard Energy Index Fund	2023	\$24,239,156	0.24%	\$328,480	0.00%
	2024 YTD	\$6,169,778	0.06%	\$21,561	0.00%
Vanguard Financials Index Fund	2023	\$26,960,922	0.30%	\$1,914,573	0.02%
	2024 YTD	\$6,767,366	0.07%	\$181,531	0.00%
Vanguard Health Care Index Fund	2023	\$37,328,070	0.19%	\$1,484,950	0.01%
	2024 YTD	\$37,065,056	0.19%	\$564,044	0.00%
Vanguard Industrials Index Fund	2023	\$13,663,734	0.32%	\$754,699	0.02%
	2024 YTD	\$8,269,259	0.17%	\$84,343	0.00%
Vanguard Information Technology Index Fund	2023	\$132,241,032	0.24%	\$7,378,383	0.01%
	2024 YTD	\$155,626,324	0.22%	\$1,629,676	0.00%
Vanguard Materials Index Fund	2023	\$6,905,519	0.18%	\$339,532	0.01%
	2024 YTD	\$6,570,812	0.17%	\$90,745	0.00%
Vanguard Real Estate II Index Fund	2023	\$30,652,421	0.38%	\$302,051	0.00%
	2024 YTD	\$13,587,620	0.16%	\$39,034	0.00%
Vanguard Real Estate Index Fund	2023	\$170,307,321	0.27%	\$2,137,999	0.00%
	2024 YTD	\$183,259,130	0.29%	\$407,775	0.00%
Vanguard Communication Services Index Fund	2023	\$21,334,986	0.70%	\$10,228,824	0.33%
	2024 YTD	\$12,526,990	0.33%	\$1,191,293	0.03%
Vanguard Utilities Index Fund	2023	\$7,603,431	0.11%	\$78,001	0.00%
	2024 YTD	\$1,896,847	0.03%	\$29,827	0.00%

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Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.



Vanguard securities-lending by fund

Figure 33.1 2023/2024 securities-lending data by fund

	Year	Average market value of open loans	Average % on loan	Total period earned income	Income as % of average fund assets
International					
Vanguard Developed Markets Index Fund	2023	\$2,241,266,061	1.38%	\$56,263,387	0.03%
	2024 YTD	\$1,834,470,163	1.03%	\$10,279,910	0.01%
Vanguard Emerging Markets Stock Index Fund	2023	\$1,301,348,487	1.33%	\$50,319,812	0.05%
	2024 YTD	\$1,466,842,046	1.47%	\$13,996,703	0.01%
Vanguard European Stock Index Fund	2023	\$96,720,439	0.42%	\$3,237,972	0.01%
	2024 YTD	\$57,909,248	0.24%	\$410,188	0.00%
Vanguard Fiduciary Trust Company Developed Markets Index Trust	2023	\$1,134,147	0.04%	\$48,213	0.00%
	2024 YTD	\$5,814,734	0.19%	\$42,088	0.00%
Vanguard FTSE All-World ex-US Index Fund	2023	\$492,229,175	0.98%	\$11,572,948	0.02%
	2024 YTD	\$431,751,098	0.82%	\$2,734,543	0.01%
Vanguard FTSE All-World ex-US Small-Cap Index Fund	2023	\$491,391,099	4.86%	\$18,192,160	0.18%
	2024 YTD	\$434,544,951	4.18%	\$3,508,788	0.03%
Vanguard Global ex-U.S. Real Estate Index Fund	2023	\$92,994,995	2.28%	\$4,596,763	0.11%
	2024 YTD	\$79,483,142	2.02%	\$904,454	0.02%
Vanguard Institutional Total International Stock Index Trust	2023	\$248,015,013	1.10%	\$6,447,012	0.03%
	2024 YTD	\$233,408,590	0.90%	\$1,249,288	0.00%
Vanguard Institutional Total International Stock Market Index Trust II	2023	\$957,371,183	0.57%	\$36,672,790	0.02%
	2024 YTD	\$730,230,854	0.38%	\$6,003,577	0.00%
Vanguard International Dividend Appreciation Index Fund	2023	\$33,849,047	0.66%	\$429,413	0.01%
	2024 YTD	\$36,231,648	0.57%	\$167,280	0.00%
Vanguard International High Dividend Yield Index Fund	2023	\$48,719,213	0.76%	\$1,175,933	0.02%
	2024 YTD	\$49,771,371	0.67%	\$309,104	0.00%
Vanguard Pacific Stock Index Fund	2023	\$150,315,364	1.67%	\$4,630,359	0.05%
	2024 YTD	\$135,503,886	1.41%	\$844,425	0.01%
Vanguard Total International Stock Index Fund	2023	\$5,257,853,479	1.42%	\$137,659,017	0.04%
	2024 YTD	\$4,389,005,714	1.10%	\$28,523,644	0.01%
Vanguard Total World Stock Index Fund	2023	\$236,448,663	0.64%	\$9,620,693	0.03%
	2024 YTD	\$186,847,084	0.43%	\$1,667,199	0.00%

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Source: Vanguard. All data as of March 31, 2024, unless otherwise noted.



Benchmark methodologies

IN THIS SECTION:

Fixed income

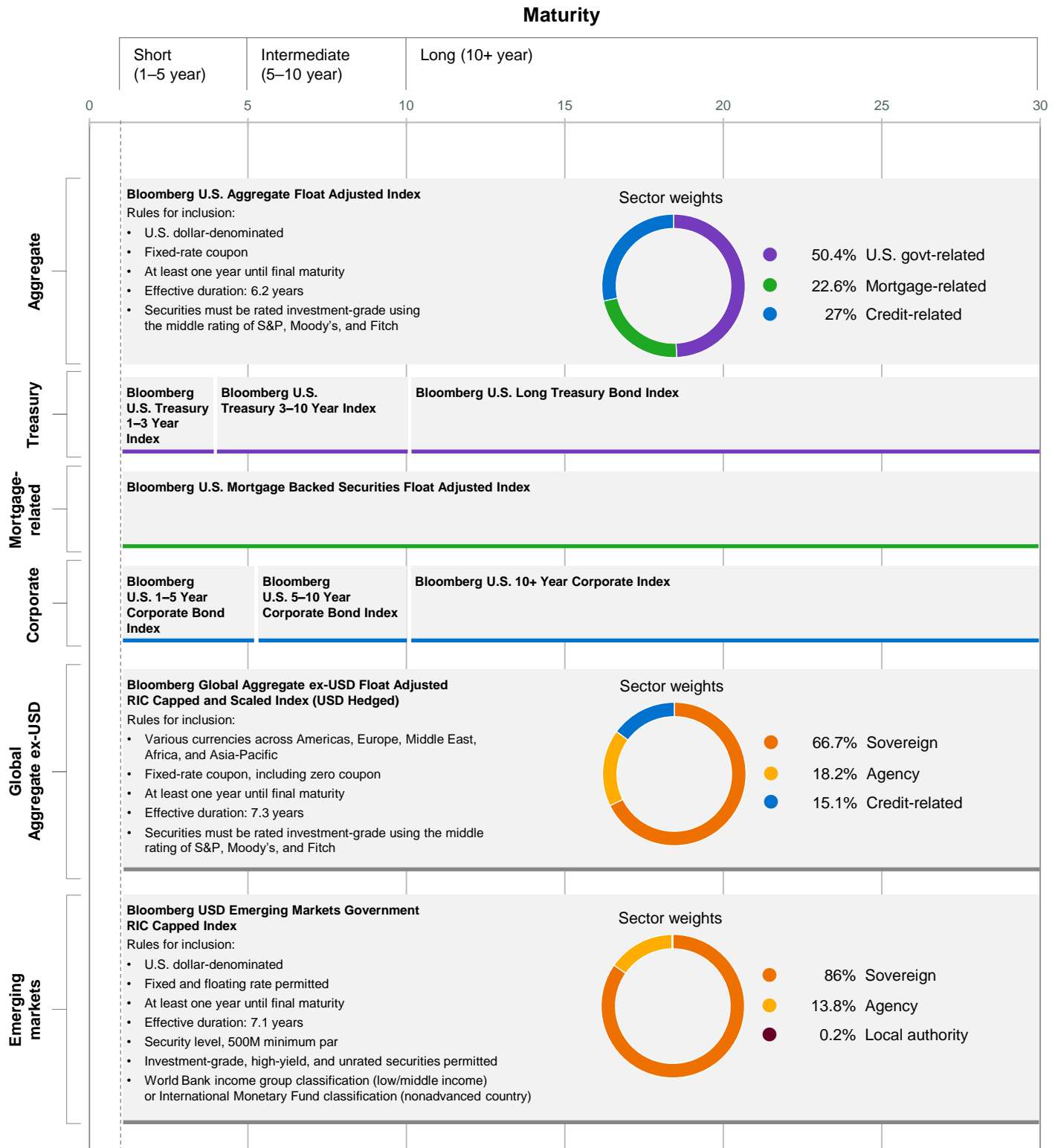
Equity



Benchmark methodologies overview

A review of U.S. and non-U.S. fixed income benchmarks

Figure 35.1 Fixed income benchmark composition



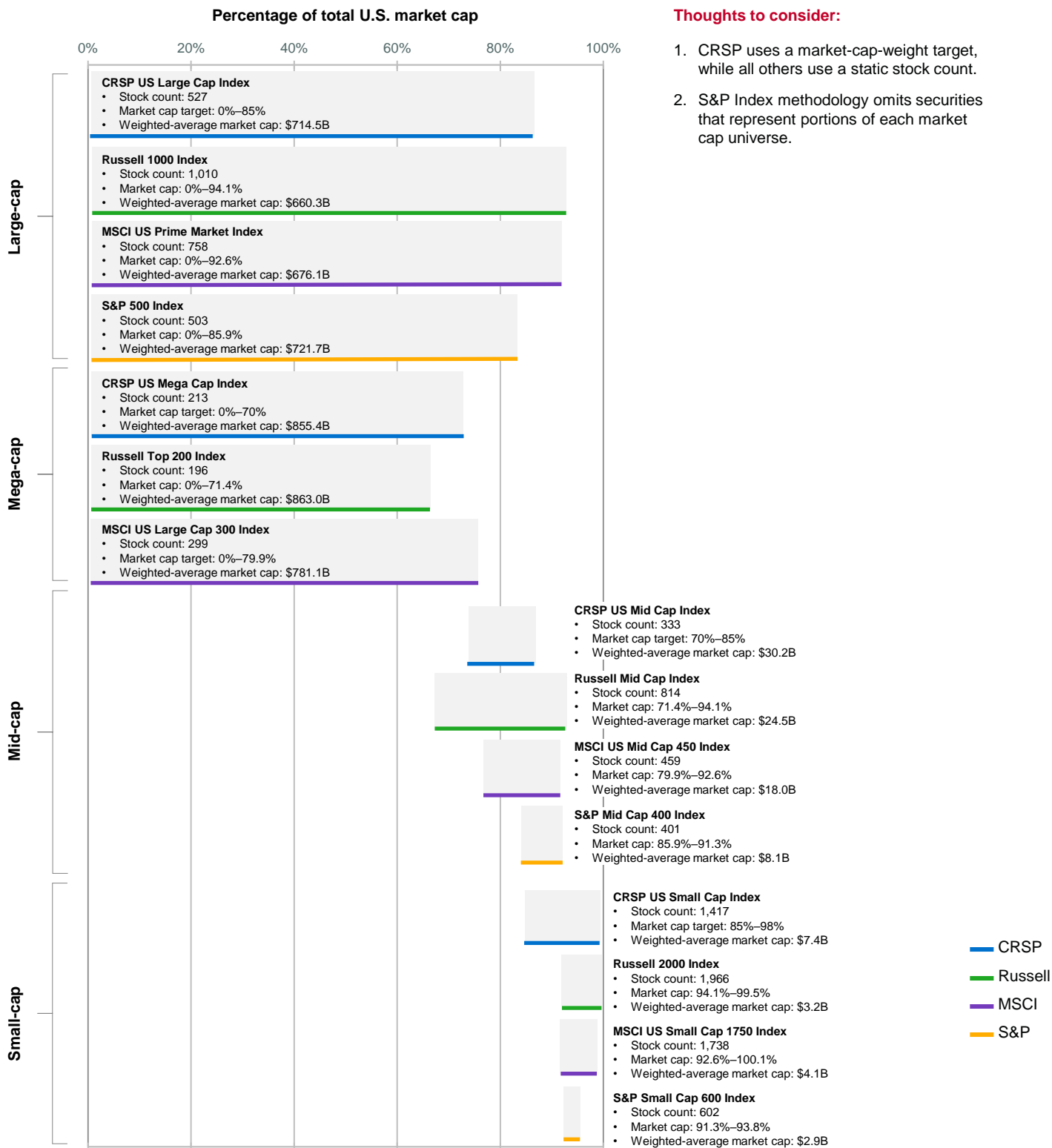
Numbers may not add to 100% due to rounding. All index characteristics data as of December 31, 2023.



Benchmark methodologies overview

Performance differences between indexes are caused by differences in construction methodology. Among the most impactful elements are exposures to market capitalization segments and regional markets, which are depicted by the charts below and on the following page.

Figure 36.1 U.S. equity benchmark methodology comparison

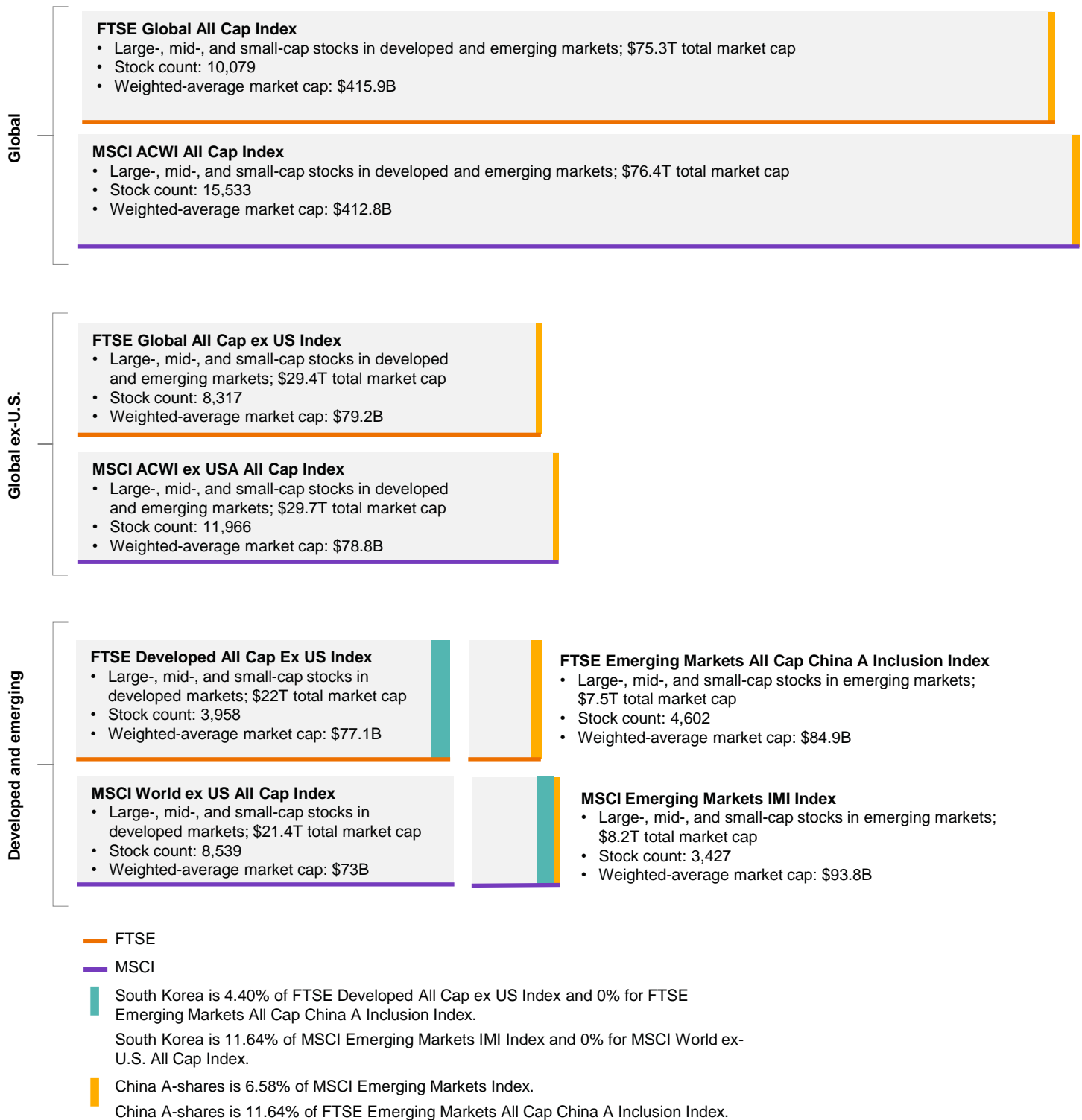


CRSP is shown as a targeted market cap, while the others are shown as a percentage of the S&P Total Stock Market. All index characteristics data as of December 31, 2023.



Benchmark methodologies overview

Figure 37.1 Global equity benchmark methodology comparison



All index characteristics data as of December 31, 2023.

Notes

Notes

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