



**Annual Report** | October 31, 2023

# Vanguard Global ex-U.S. Real Estate Index Fund

See the inside front cover for important information about your fund's annual and semiannual shareholder reports.

# Important information about shareholder reports

Beginning in July 2024, amendments adopted by the Securities and Exchange Commission will substantially impact the design, content, and transmission of shareholder reports. Shareholder reports will provide key fund information in a clear and concise format and must be mailed to each shareholder that has not elected to receive the reports electronically. Financial statements will no longer be included in the shareholder report but will be available at [vanguard.com](http://vanguard.com), can be mailed upon request, or can be accessed on the SEC’s website at [www.sec.gov](http://www.sec.gov).

You may elect to receive shareholder reports and other communications from the fund electronically by contacting your financial intermediary (such as a broker-dealer or bank) or, if you invest directly with the fund, by calling Vanguard at one of the phone numbers on the back cover of this report or by logging on to [vanguard.com](http://vanguard.com).

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Please note: The opinions expressed in this report are just that—informed opinions. They should not be considered promises or advice. Also, please keep in mind that the information and opinions cover the period through the date on the front of this report. Of course, the risks of investing in your fund are spelled out in the prospectus.

## Your Fund's Performance at a Glance

- For the 12 months ended October 31, 2023, Vanguard Global ex-U.S. Real Estate Index Fund returned -0.38% for Admiral Shares, -0.29% for Institutional Shares, and 0.22% for ETF Shares (based on net asset value). The fund's benchmark returned -0.71%. The fund's returns were higher than the return of its benchmark, in part because of differences in the prices of securities used by the fund to calculate its net asset value and the quoted or published prices for the same securities.<sup>1</sup>
- Early on, inflation in many developed markets eased off multidecade highs amid ongoing interest rate hikes by central banks. Unexpected resilience in labor markets and consumer spending helped dial back expectations of a sustained global recession, but the prospect of higher interest rates for longer and heightened geopolitical tensions weighed on market sentiment toward the close of the period.
- The rising interest rate environment held back the performance of real estate investment trusts (REITs) as well as real estate management and development companies.
- By region, emerging markets and Europe were the largest contributors. The Pacific and the Middle East were the biggest laggards.

### Market Barometer

	Average Annual Total Returns Periods Ended October 31, 2023		
	One Year	Three Years	Five Years
<b>Stocks</b>			
Russell 1000 Index (Large-caps)	9.48%	9.53%	10.71%
Russell 2000 Index (Small-caps)	-8.56	3.95	3.31
Russell 3000 Index (Broad U.S. market)	8.38	9.19	10.23
FTSE All-World ex US Index (International)	12.35	3.51	3.88
<b>Bonds</b>			
Bloomberg U.S. Aggregate Float Adjusted Index (Broad taxable market)	0.53%	-5.51%	0.03%
Bloomberg Municipal Bond Index (Broad tax-exempt market)	2.64	-2.48	1.00
FTSE Three-Month U.S. Treasury Bill Index	4.94	1.93	1.80
<b>CPI</b>			
Consumer Price Index	3.24%	5.72%	4.00%

Fund returns are adjusted to reflect the 0.25% fee on purchases and redemptions of fund shares. The fees do not apply to the ETF shares.

<sup>1</sup> See Note 1 in the Notes to Financial Statements.

# About Your Fund's Expenses

As a shareholder of the fund, you incur ongoing costs, which include costs for portfolio management, administrative services, and shareholder reports (like this one), among others. Operating expenses, which are deducted from a fund's gross income, directly reduce the investment return of the fund.

A fund's expenses are expressed as a percentage of its average net assets. This figure is known as the expense ratio. The following examples are intended to help you understand the ongoing costs (in dollars) of investing in your fund and to compare these costs with those of other mutual funds. The examples are based on an investment of \$1,000 made at the beginning of the period shown and held for the entire period.

The accompanying table illustrates your fund's costs in two ways:

- **Based on actual fund return.** This section helps you to estimate the actual expenses that you paid over the period. The "Ending Account Value" shown is derived from the fund's actual return, and the third column shows the dollar amount that would have been paid by an investor who started with \$1,000 in the fund. You may use the information here, together with the amount you invested, to estimate the expenses that you paid over the period.

To do so, simply divide your account value by \$1,000 (for example, an \$8,600 account value divided by \$1,000 = 8.6), then multiply the result by the number given for your fund under the heading "Expenses Paid During Period."

- **Based on hypothetical 5% yearly return.** This section is intended to help you compare your fund's costs with those of other mutual funds. It assumes that the fund had a yearly return of 5% before expenses, but that the expense ratio is unchanged. In this case—because the return used is not the fund's actual return—the results do not apply to your investment. The example is useful in making comparisons because the Securities and Exchange Commission requires all mutual funds to calculate expenses based on a 5% return. You can assess your fund's costs by comparing this hypothetical example with the hypothetical examples that appear in shareholder reports of other funds.

Note that the expenses shown in the table are meant to highlight and help you compare *ongoing* costs only and do not reflect transaction costs incurred by the fund for buying and selling securities. Further, the expenses do not include any purchase, redemption, or account service fees described in the fund prospectus. If such fees were applied to your account, your costs would be higher. Your fund does not carry a "sales load."

The calculations assume no shares were bought or sold during the period. Your actual costs may have been higher or lower, depending on the amount of your investment and the timing of any purchases or redemptions.

You can find more information about the fund's expenses, including annual expense ratios, in the Financial Statements section of this report. For additional information on operating expenses and other shareholder costs, please refer to your fund's current prospectus.

Six Months Ended October 31, 2023

	Beginning Account Value 4/30/2023	Ending Account Value 10/31/2023	Expenses Paid During Period
<b>Based on Actual Fund Return</b>			
Global ex-U.S. Real Estate Index Fund			
ETF Shares	\$1,000.00	\$886.90	\$0.57
Admiral™ Shares	1,000.00	886.80	0.57
Institutional Shares	1,000.00	886.90	0.52
<b>Based on Hypothetical 5% Yearly Return</b>			
Global ex-U.S. Real Estate Index Fund			
ETF Shares	\$1,000.00	\$1,024.60	\$0.61
Admiral Shares	1,000.00	1,024.60	0.61
Institutional Shares	1,000.00	1,024.65	0.56

The calculations are based on expenses incurred in the most recent six-month period. The fund's annualized six-month expense ratios for that period are 0.12% for ETF Shares, 0.12% for Admiral Shares and 0.11% for Institutional Shares. The dollar amounts shown as "Expenses Paid" are equal to the annualized expense ratio multiplied by the average account value over the period, multiplied by the number of days in the most recent six-month period, then divided by the number of days in the most recent 12-month period (184/365).

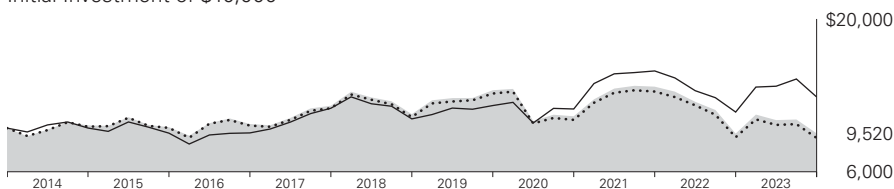
# Global ex-U.S. Real Estate Index Fund

## Performance Summary

All of the returns in this report represent past performance, which is not a guarantee of future results that may be achieved by the fund. (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 [vanguard.com/performance](http://vanguard.com/performance).) Note, too, that both investment returns and principal value can fluctuate widely, so an investor's shares, when sold, could be worth more or less than their original cost. The returns shown do not reflect taxes that a shareholder would pay on fund distributions or on the sale of fund shares.

Cumulative Performance: October 31, 2013, Through October 31, 2023

Initial Investment of \$10,000



Average Annual Total Returns  
Periods Ended October 31, 2023

	One Year	Five Years	Ten Years	Final Value of a \$10,000 Investment
Global ex-U.S. Real Estate Index Fund ETF Shares Net Asset Value	0.22%	-3.33%	-0.49%	\$ 9,520
Global ex-U.S. Real Estate Index Fund ETF Shares Market Price	0.58	-3.26	-0.50	9,510
S&P Global ex-U.S. Property Index	-0.71	-3.76	-0.94	9,099
MSCI All Country World Index ex USA	12.07	3.46	2.54	12,854

	One Year	Five Years	Ten Years	Final Value of a \$10,000 Investment
Global ex-U.S. Real Estate Index Fund Admiral Shares	-0.38%	-3.41%	-0.53%	\$9,487
S&P Global ex-U.S. Property Index	-0.71	-3.76	-0.94	9,099

Vanguard fund returns are adjusted to reflect the 0.25% fee on purchases and redemptions. The fees do not apply to the ETF Shares. See Financial Highlights for dividend and capital gains information.

Global ex-U.S. Real Estate Index Fund

	Average Annual Total Returns Periods Ended October 31, 2023			Final Value of a \$5,000,000 Investment
	One Year	Five Years	Ten Years	
Global ex-U.S. Real Estate Index Fund Institutional Shares	-0.29%	-3.41%	-0.52%	\$4,747,625
S&P Global ex-U.S. Property Index	-0.71	-3.76	-0.94	4,549,353

Cumulative Returns of ETF Shares: October 31, 2013, Through October 31, 2023

	One Year	Five Years	Ten Years
Global ex-U.S. Real Estate Index Fund ETF Shares Market Price	0.58%	-15.28%	-4.90%
Global ex-U.S. Real Estate Index Fund ETF Shares Net Asset Value	0.22	-15.57	-4.80
S&P Global ex-U.S. Property Index	-0.71	-17.44	-9.01

For the ETF Shares, the market price is determined by the midpoint of the bid-offer spread as of the closing time of the New York Stock Exchange (generally 4 p.m., Eastern time). The net asset value is also determined as of the NYSE closing time. For more information about how the ETF Shares' market prices have compared with their net asset value, visit [vanguard.com](http://vanguard.com), select your ETF, click on Price, and then scroll down to the Premium/Discount chart. The ETF premium/discount chart there shows the percentage and days on which the ETF Shares' market price was above or below the NAV.

## Fund Allocation

As of October 31, 2023

Japan	25.1%
Australia	9.8
Hong Kong	8.7
United Kingdom	7.3
Singapore	6.5
China	6.1
Germany	3.9
Sweden	3.0
India	2.8
France	2.6
Canada	2.6
United Arab Emirates	2.5
Switzerland	2.3
Belgium	1.9
Israel	1.6
Mexico	1.5
Philippines	1.4
South Africa	1.4
Taiwan	1.3
Thailand	1.2
Other	6.5

The table reflects the fund's investments, except for short-term investments and derivatives.

The fund may invest in derivatives (such as futures and swap contracts) for various reasons, including, but not limited to, attempting to remain fully invested and tracking its target index as closely as possible.



# Financial Statements

## Schedule of Investments

As of October 31, 2023

The fund files its complete schedule of portfolio holdings with the Securities and Exchange Commission (SEC) for the first and third quarters of each fiscal year as an exhibit to its reports on Form N-PORT. The fund's Form N-PORT reports are available on the SEC's website at [www.sec.gov](http://www.sec.gov).

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
<b>Common Stocks (99.3%)</b>					
<b>Australia (9.7%)</b>			<b>Austria (0.3%)</b>		
Goodman Group	7,992,584	105,757	<sup>1</sup> CA Immobilien		
Scentre Group	24,229,040	37,535	Anlagen AG	198,968	6,728
Stockland	11,136,700	25,135	* IMMOFINANZ AG	146,920	2,957
Mirvac Group	18,407,425	21,357			<b>9,685</b>
Dexus	5,003,929	20,667	<b>Belgium (1.8%)</b>		
GPT Group	8,929,072	20,607	Warehouses De		
Vicinity Ltd.	18,063,641	19,565	Pauw CVA	750,308	18,565
Lendlease Corp. Ltd.	3,203,885	12,689	Aedifica SA	220,700	12,040
Charter Hall Group	2,207,073	12,227	Cofinimmo SA	157,612	9,801
National Storage			VGP NV	64,573	5,257
REIT	5,831,942	7,436	Montea NV	70,554	4,987
Region RE Ltd.	5,347,883	6,687	<sup>1</sup> Shurgard Self		
Charter Hall Long			Storage Ltd.		
Wale REIT	3,088,931	5,934	(XBRU)	115,355	4,317
HomeCo Daily			Xior Student Housing		
Needs REIT	8,295,886	5,657	NV	130,191	3,746
Charter Hall Retail			Retail Estates NV	56,561	3,444
REIT	2,397,768	4,659	Intervest Offices &		
BWP Trust	2,238,374	4,629	Warehouses NV	130,413	2,769
Centuria Industrial			Care Property Invest		
REIT	2,503,331	4,531	NV	172,222	2,128
Lifestyle					<b>67,054</b>
Communities Ltd.	452,624	4,503	<b>Brazil (0.6%)</b>		
Ingenia Communities			Allos SA	1,955,414	8,882
Group	1,745,268	4,344	Multiplan		
Waypoint REIT Ltd.	3,153,787	4,259	Empreendimentos		
Arena REIT	1,638,943	3,316	Imobiliarios SA	1,247,388	6,121
HMC Capital Ltd.	1,134,207	3,081	Iguatemi SA (BVMF)	1,034,090	4,116
Centuria Capital			JHFS Participacoes		
Group	3,737,440	2,734	SA	1,400,901	1,192
Charter Hall Social			LOG Commercial		
Infrastructure REIT	1,573,535	2,384	Propiedades e		
Rural Funds Group	1,790,726	2,041	Participacoes SA	186,869	768
<sup>1</sup> HealthCo REIT	2,193,120	1,916	Terra Santa		
Growthpoint			Propriedades		
Properties			Agricolas SA	145,596	510
Australia Ltd.	1,287,120	1,616	Lavvi		
* Abacus Storage King	2,505,806	1,585	Empreendimentos		
Dexus Industria REIT	981,466	1,484	Imobiliarios SA	351,759	472
Hotel Property			* Moura Dubeux		
Investments Ltd.	898,683	1,460	Engenharia SA	206,300	418
Centuria Office REIT	2,010,673	1,400			<b>22,479</b>
Cromwell Property			<b>Canada (2.5%)</b>		
Group	6,542,157	1,334	Canadian Apartment		
Abacus Group	2,030,702	1,237	Properties REIT	382,088	11,247
GDI Property Group			RioCan REIT	685,522	8,330
Partnership	2,472,703	810	Tricon Residential		
		<b>354,576</b>	Inc.	1,206,634	7,996
			Granite REIT	147,473	6,716

Global ex-U.S. Real Estate Index Fund

		Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
	Choice Properties REIT	748,707	6,500			
1	SmartCentres REIT	330,797	5,126			
	Dream Industrial REIT	596,594	5,038			
1	Boardwalk REIT	104,337	4,872			
	First Capital REIT	481,976	4,532	*.1	Sunac China Holdings Ltd.	15,492,000 3,231
	H&R REIT	603,363	3,711	1	China Jinmao Holdings Group Ltd.	25,413,054 3,117
	StorageVault Canada Inc.	1,104,490	3,425	*	Hopson Development Holdings Ltd.	4,488,718 2,628
	Allied Properties REIT	290,519	3,321		China Overseas Grand Oceans Group Ltd.	6,935,079 2,364
1	Killam Apartment REIT	269,134	3,041		Shanghai Lujiazui Finance & Trade Zone Development Co. Ltd. Class B	5,241,008 2,086
	InterRent REIT	320,765	2,720		Shanghai Zhangjiang High-Tech Park Development Co. Ltd. Class A	581,427 1,907
1	CT REIT	244,110	2,227		Poly Property Group Co. Ltd.	9,213,048 1,896
1	Crombie REIT	240,237	2,110	*.1	Seazen Group Ltd. Shenzhen Investment Ltd.	11,596,666 1,882
1	Primaris REIT	221,867	1,989	*	Shenzhen Overseas Chinese Town Co. Ltd. Class A	10,742,201 1,579
1	NorthWest Healthcare Properties REIT	547,956	1,585		Yuexiu REIT	10,178,970 1,457
1	DREAM Unlimited Corp. Class A	102,138	1,247		Shui On Land Ltd.	16,154,038 1,424
1	Artis REIT	255,044	1,133		Seazen Holdings Co. Ltd. Class A	848,853 1,378
1	Slate Grocery REIT Class U	135,450	962		Hangzhou Binjiang Real Estate Group Co. Ltd. Class A	1,164,418 1,333
1.2	Minto Apartment REIT	91,984	862	*.1	Radiance Holdings Group Co. Ltd. Gemdale Corp. Class A	2,983,000 1,239
1	BSR REIT	78,848	832		Shanghai Jinqiao Export Processing Zone Development Co. Ltd. Class B	1,343,331 1,186
1	Morguard North American Residential REIT	87,113	824		Shanghai Lingang Holdings Corp. Ltd. Class A	771,263 1,131
1	Nexus Industrial REIT	157,396	738		Midea Real Estate Holding Ltd.	1,594,016 1,090
1	PRO REIT	131,353	405		Guangzhou R&F Properties Co. Ltd. Class H	7,574,213 1,065
1	Dream Office REIT	72,344	397		Shanghai Lujiazui Finance & Trade Zone Development Co. Ltd. Class A	832,563 1,041
1	BTB REIT	186,529	386	*	China South City Holdings Ltd.	19,452,111 1,032
1	True North Commercial REIT	202,693	212		Xinhu Zhongbao Co. Ltd. Class A	3,167,900 1,031
			<b>92,484</b>		China Enterprise Co. Ltd. Class A	1,992,369 920
					Huafa Industrial Co. Ltd. Zhuhai Class A	802,106 920
					SOHO China Ltd.	8,742,545 905
<b>Chile (0.3%)</b>				*.1		
	Parque Arauco SA	3,062,733	4,187			
	Cencosud Shopping SA	2,240,811	3,254			
*	Plaza SA	1,381,636	1,670			
			<b>9,111</b>			
<b>China (6.1%)</b>						
	China Resources Land Ltd.	13,290,446	49,748			
	China Overseas Land & Investment Ltd.	17,333,710	32,711	1.2		
2	Longfor Group Holdings Ltd.	7,679,008	11,179	*.1		
	Wharf Holdings Ltd.	4,402,652	11,171			
	China Vanke Co. Ltd. Class H	10,146,383	9,493			
	Yuexiu Property Co. Ltd.	6,931,982	7,210			
	C&D International Investment Group Ltd.	3,009,000	6,770			
	Poly Developments and Holdings Group Co. Ltd. Class A	4,492,557	6,761			
	China Vanke Co. Ltd. Class A	3,711,126	5,740			
*.1	Country Garden Holdings Co. Ltd.	54,133,163	4,841	*		

Global ex-U.S. Real Estate Index Fund

		Shares	Market Value* (\$000)		Shares	Market Value* (\$000)	
2	Red Star Macalline Group Corp. Ltd. Class H	2,862,236	903				
	Shanghai Wanye Enterprises Co. Ltd. Class A	345,066	854		1,042,729	446	
*.1	Agile Group Holdings Ltd.	8,352,159	800	1	Suning Universal Co. Ltd. Class A	1,173,847	441
*.1	Sino-Ocean Group Holding Ltd.	14,426,829	765	*	China Merchants Commercial REIT	2,670,000	437
	Gemdale Properties & Investment Corp. Ltd.	25,538,000	757		Beijing North Star Co. Ltd. Class H	4,054,000	410
*	Gree Real Estate Co. Ltd. Class A	710,337	692		China-Singapore Suzhou Industrial Park Development Group Co. Ltd. Class A	354,088	396
	Joy City Property Ltd.	21,637,500	683	*	China Fortune Land Development Co. Ltd. Class A	1,459,800	375
1	Powerlong Real Estate Holdings Ltd.	6,718,139	669	*	Greatown Holdings Ltd. Class A	843,400	369
	Financial Street Holdings Co. Ltd. Class A	1,152,751	649		Shanghai Shibei Hi-Tech Co. Ltd. Class B	2,181,859	356
	China World Trade Center Co. Ltd. Class A	237,559	644	*	Shanghai Industrial Development Co. Ltd. Class A	685,100	355
*.1	Kwg Group Holdings Ltd.	6,699,490	643	*.3	Jiayuan International Group Ltd.	15,242,000	337
*.1,2,3	Redco Properties Group Ltd.	3,558,000	605		Rongan Property Co. Ltd. Class A	883,200	336
*	LVGEM China Real Estate Investment Co. Ltd.	5,236,000	587		Shanghai Shibei Hi-Tech Co. Ltd. Class A	525,000	330
*	Lushang Freda Pharmaceutical Co. Ltd. Class A	390,870	584		Shenzhen SEG Co. Ltd. Class A	321,800	312
*	Grandjoy Holdings Group Co. Ltd. Class A	1,174,299	558		Shenzhen Heungkong Holding Co. Ltd. Class A	1,198,800	311
	Nanjing Gaoke Co. Ltd. Class A	636,695	535	*	Jiangsu Zhongnan Construction Group Co. Ltd. Class A	1,464,622	302
	Red Star Macalline Group Corp. Ltd. Class A	897,012	522		Shenzhen Zhenye Group Co. Ltd. Class A	503,400	297
	Shanghai Lingang Holdings Corp. Ltd. Class B	901,673	509		Hefei Urban Construction Development Co. Ltd. Class A	314,465	295
	Beijing Capital Development Co. Ltd. Class A	983,750	500		China Union Holdings Ltd. Class A	548,200	294
	Cinda Real Estate Co. Ltd. Class A	928,723	495		Suzhou New District Hi-Tech Industrial Co. Ltd. Class A	429,300	283
	Shanghai Jinqiao Export Processing Zone Development Co. Ltd. Class A	312,965	480	*	Guangdong Highsun Group Co. Ltd. Class A	976,703	271
	Shenzhen Special Economic Zone Real Estate & Properties Group Co. Ltd. Class A	290,700	476		Bright Real Estate Group Co. Ltd. Class A	826,200	252
	Shunfa Hengye Corp. Class A	873,120	463		China Wuyi Co. Ltd. Class A	583,800	251
*	Jinke Properties Group Co. Ltd. Class A	1,997,495	461		Shenzhen Properties & Resources Development Group Ltd. Class A	195,900	240
*.1	Logan Group Co. Ltd.	4,769,984	457				
*	RiseSun Real Estate Development Co. Ltd. Class A	1,661,687	449				

Global ex-U.S. Real Estate Index Fund

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
* Guangdong Shironzhaoye Co. Ltd. Class A	260,700	237			
* Beijing North Star Co. Ltd. Class A	815,473	231	1	Deutsche EuroShop AG	63,232 1,149
Shenzhen Centralcon Investment Holding Co. Ltd. Class A	244,800	216	*.1	BRANICKS Group AG	178,462 738
*.1 China SCE Group Holdings Ltd.	9,629,766	214	*.1,2	VIB Vermoegen AG	50,707 609
* Chongqing Dima Industry Co. Ltd. Class A	907,700	195		ADLER Group SA	575,463 255
1 Times China Holdings Ltd.	3,979,000	183			<b>141,357</b>
* Yuzhou Group Holdings Co. Ltd.	5,883,383	107		<b>Greece (0.1%)</b>	
* Zhongliang Holdings Group Co. Ltd.	2,384,000	87	*	LAMDA Development SA	387,797 2,497
*.3 Yango Group Co. Ltd. Class A	1,591,019	80	*	Dimand SA	36,947 420
*.3 Datang Group Holdings Ltd.	1,172,000	75			<b>2,917</b>
* Redsun Properties Group Ltd.	3,834,000	49		<b>Hong Kong (8.7%)</b>	
		<b>220,687</b>		Sun Hung Kai Properties Ltd.	7,019,441 72,080
<b>Egypt (0.1%)</b>				Link REIT	11,942,486 54,806
Talaat Moustafa Group	4,622,349	3,365		CK Asset Holdings Ltd.	8,860,113 44,286
Heliopolis Housing Madinet Masr For Housing & Development	1,813,827	690		Wharf Real Estate Investment Co. Ltd.	7,203,652 25,199
* Palm Hills Developments SAE	5,882,371	459		Henderson Land Development Co. Ltd.	6,082,936 15,916
		<b>5,123</b>		Sino Land Co. Ltd.	15,602,022 15,576
<b>Finland (0.3%)</b>				Hongkong Land Holdings Ltd.	4,841,212 15,355
Kojamo OYJ	828,271	7,076	2	ESR Group Ltd.	11,000,200 14,134
* Citycon OYJ	369,616	1,955		New World Development Co. Ltd.	6,463,000 11,862
		<b>9,031</b>		Hang Lung Properties Ltd.	8,167,932 10,736
<b>France (2.6%)</b>				Swire Properties Ltd.	4,894,000 9,476
Gecina SA	239,207	23,488		Hysan Development Co. Ltd.	2,756,655 5,074
* Unibail-Rodamco-Westfield	472,573	23,416		Hang Lung Group Ltd.	3,751,103 4,996
Klepierre SA	908,790	22,069		Kerry Properties Ltd.	2,700,332 4,544
Covivio SA	225,637	9,669		Fortune REIT	6,850,861 3,833
ICADE	145,833	4,765	*	Champion REIT	8,684,512 2,743
Mercialys SA	434,785	3,704	*	Shun Tak Holdings Ltd.	11,132,000 1,452
Carmila SA	259,798	3,640		Sunlight REIT	4,648,400 1,286
Nexity SA	227,321	3,176	1	Prosperity REIT	5,749,649 993
Altea SCA	21,364	1,521	*	SF REIT	2,367,000 772
		<b>95,448</b>		GR Properties Ltd.	4,508,000 276
<b>Germany (3.9%)</b>			*.3	Zensun Enterprises Ltd.	2,112,000 45
Vonovia SE	3,799,008	87,461		Sinic Holdings Group Co. Ltd.	2,979,000 —
* LEG Immobilien SE (XETR)	345,802	21,617			<b>315,440</b>
*.1 Aroundtown SA	4,008,589	9,059		<b>India (2.7%)</b>	
* TAG Immobilien AG	816,445	8,927		DLF Ltd.	2,900,140 19,647
Deutsche Wohnen SE	241,085	5,188		Embassy Office Parks REIT	3,056,242 11,437
* Grand City Properties SA	336,314	3,007	2	Macrotech Developers Ltd.	1,129,094 10,686
Hamborner REIT AG	331,212	2,191	*	Godrej Properties Ltd.	534,436 10,665
2 Instone Real Estate Group SE	202,586	1,156		Phoenix Mills Ltd.	443,907 9,684
				Oberoi Realty Ltd.	546,067 7,463
				Prestige Estates Projects Ltd.	657,600 6,050
				Brigade Enterprises Ltd.	585,480 4,326
			2	Mindspace Business Parks REIT	1,034,576 3,839

Global ex-U.S. Real Estate Index Fund

	Shares	Market Value* (\$'000)		Shares	Market Value* (\$'000)
<sup>2</sup> Brookfield India Real Estate Trust	1,172,745	3,424	* Summit Real Estate Holdings Ltd.	167,272	1,603
Mahindra Lifespace Developers Ltd.	353,075	2,083	Mega Or Holdings Ltd.	106,406	1,460
* Indiabulls Real Estate Ltd.	2,228,034	1,960	Israel Canada T.R Ltd.	616,868	1,298
Sobha Ltd.	169,454	1,451	Isras Investment Co. Ltd.	7,355	1,244
Anant Raj Ltd.	483,316	1,410	Aura Investments Ltd.	592,265	1,232
Sunteck Realty Ltd.	226,816	1,169	Blue Square Real Estate Ltd.	24,609	1,206
* D B Realty Ltd.	492,280	1,012	Africa Israel Residences Ltd.	28,402	1,204
NESCO Ltd.	100,299	779	Menivim-The New REIT Ltd.	3,215,997	1,109
* Hemisphere Properties India Ltd.	405,305	662	G City Ltd.	409,701	992
Kolte-Patil Developers Ltd.	86,901	501	Electra Real Estate Ltd.	109,504	883
Ashiana Housing Ltd.	181,747	468	* Argo Properties NV	57,487	707
Ganesh Housing Corp. Ltd.	96,785	440	Prashkovsky Investments and Construction Ltd.	36,891	672
* Keystone Realtors Ltd.	64,059	419	* IES Holdings Ltd.	13,050	631
		<b>99,575</b>	Israel Land Development Co. Ltd.	83,528	522
<b>Indonesia (0.3%)</b>			Gav-Yam Lands Corp. Ltd.	84,903	480
Ciputra Development Tbk PT	40,407,791	2,820	* Property & Building Corp. Ltd.	12,314	378
* Bumi Serpong Damai Tbk PT	36,600,127	2,315	* Norstar Holdings Inc.	173,005	319
Pakuwon Jati Tbk PT	68,488,128	1,724			<b>57,832</b>
Summarecon Agung Tbk PT	49,337,081	1,661	<b>Italy (0.0%)</b>		
* Lippo Karawaci Tbk PT	156,155,349	865	Immobiliare Grande Distribuzione SIIQ SpA	249,396	512
* Alam Sutera Realty Tbk PT	49,096,897	513	<b>Japan (24.9%)</b>		
Puradelta Lestari Tbk PT	40,018,900	430	Mitsui Fudosan Co. Ltd.	4,366,457	94,642
* Mega Manunggal Property Tbk PT	3,380,600	73	Daiwa House Industry Co. Ltd.	3,103,974	85,377
*.3 Hanson International Tbk PT	444,252,900	—	Mitsubishi Estate Co. Ltd.	6,173,945	79,029
*.3 Armidian Karyatama Tbk PT	34,315,100	—	Sumitomo Realty & Development Co. Ltd.	2,219,767	55,703
		<b>10,401</b>	Daito Trust Construction Co. Ltd.	305,225	32,740
<b>Ireland (0.1%)</b>			Nippon Building Fund Inc.	7,931	31,866
Irish Residential Properties REIT plc	1,979,327	1,907	Hulic Co. Ltd.	2,782,937	25,514
<b>Israel (1.6%)</b>			Japan Real Estate Investment Corp.	6,631	24,630
Azrieli Group Ltd.	168,701	7,264	Nomura Real Estate Master Fund Inc.	21,956	24,228
Melirson Ltd.	116,787	6,330	Japan Metropolitan Fund Investment	32,487	20,965
Mivne Real Estate KD Ltd.	2,767,008	5,971	GLP J-Reit	22,898	20,509
Amot Investments Ltd.	1,004,846	4,208	Nippon Prologis REIT Inc.	11,502	20,466
* Airport City Ltd.	300,105	3,952	Daiwa House REIT Investment Corp.	9,928	17,570
* Big Shopping Centers Ltd.	55,768	3,909	Tokyu Fudosan Holdings Corp.	2,810,744	16,376
Alony Hetz Properties & Investments Ltd.	717,501	3,500	Orix JREIT Inc.	12,823	14,737
REIT 1 Ltd.	899,802	3,254	United Urban Investment Corp.	14,404	14,522
Sella Capital Real Estate Ltd.	1,007,950	1,791			
YH Dimri Construction & Development Ltd.	31,898	1,713			

## Global ex-U.S. Real Estate Index Fund

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)	
Advance Residence Investment Corp.	6,433	13,987		Global One Real Estate Investment Corp.	4,783	3,628
Tokyo Tatemono Co. Ltd.	973,183	12,922		Fukuoka REIT Corp.	3,351	3,608
Nomura Real Estate Holdings Inc.	529,329	12,363		Katitas Co. Ltd.	242,192	3,233
Invincible Investment Corp.	31,178	11,991		CRE Logistics REIT Inc.	2,916	3,064
Japan Prime Realty Investment Corp.	4,628	10,840		SAMTY Co. Ltd.	186,200	3,062
1 Sekisui House REIT Inc.	20,350	10,718	1	Hankyu Hanshin REIT Inc.	3,217	3,022
Nippon Accommodations Fund Inc.	2,345	9,448	1	Starts Corp. Inc.	153,300	2,912
Japan Hotel REIT Investment Corp.	20,769	9,442	1	Ichigo Office REIT Investment Corp.	4,895	2,746
Activia Properties Inc.	3,372	9,123	1	SOSiLA Logistics REIT Inc.	3,358	2,660
Industrial & Infrastructure Fund Investment Corp.	9,833	8,838		Advance Logistics Investment Corp.	3,101	2,526
LaSalle Logiport REIT	8,659	8,492		Samty Residential Investment Corp.	3,352	2,503
1 Kenedix Office Investment Corp.	7,920	8,260	*	Mirai Corp.	8,224	2,483
Mitsui Fudosan Logistics Park Inc.	2,668	8,066		Ichigo Inc.	1,065,100	2,331
Japan Logistics Fund Inc.	4,330	8,020		Takara Leben Real Estate Investment Corp.	3,248	2,127
AEON REIT Investment Corp.	8,196	7,803		One REIT Inc.	1,171	2,029
Daiwa Securities Living Investments Corp.	10,522	7,780	1	Leopalace21 Corp.	901,750	1,940
Frontier Real Estate Investment Corp.	2,376	7,108		Keihanshin Building Co. Ltd.	199,700	1,832
Mori Hills REIT Investment Corp.	7,537	7,054	1	Health Care & Medical Investment Corp.	1,682	1,575
Kenedix Residential Next Investment Corp.	4,976	6,952		Starts Proceed Investment Corp.	1,137	1,562
Comforia Residential REIT Inc.	3,126	6,634		Tosei Corp.	128,500	1,518
Hulic REIT Inc.	5,937	6,056	*.1	Sankei Real Estate Inc.	2,208	1,338
Mitsubishi Estate Logistics REIT Investment Corp.	2,348	5,909		Tosei REIT Investment Corp.	1,445	1,302
Mori Trust REIT Inc.	12,041	5,870	1	ESCON Japan REIT Investment Corp.	1,641	1,286
Daiwa Office Investment Corp.	1,329	5,814		Sun Frontier Fudousan Co. Ltd.	125,200	1,215
1 NTT UD REIT Investment Corp.	6,504	5,362		Mirarath Holdings Inc.	384,952	1,122
Japan Excellent Inc.	5,912	5,189		TKP Corp.	74,900	1,019
Tokyu REIT Inc.	4,292	5,122		TOC Co. Ltd.	219,629	926
Aeon Mall Co. Ltd.	441,983	5,026		Goldcrest Co. Ltd.	64,740	923
Kenedix Retail REIT Corp.	2,779	4,863	1	Marimo Regional Revitalization REIT Inc.	1,034	868
NIPPON REIT Investment Corp.	2,083	4,812	*.1	Ichigo Hotel REIT Investment Corp.	1,215	841
1 Hoshino Resorts REIT Inc.	1,198	4,713		Tokaido REIT Inc.	1,008	840
Heiwa Real Estate REIT Inc.	4,621	4,320		Xymax REIT Investment Corp.	1,082	836
Star Asia Investment Corp.	11,032	4,157		JSB Co. Ltd.	52,906	807
Heiwa Real Estate Co. Ltd.	148,832	3,810		Arealink Co. Ltd.	41,500	754
				SRE Holdings Corp.	46,600	714
				LA Holdings Co. Ltd.	22,500	694
				CRE Inc.	64,400	671
				Nippon Commercial Development Co. Ltd.	50,500	669
				Raysum Co. Ltd.	29,700	640
				Dear Life Co. Ltd.	118,800	592
				Ooedo Onsen REIT Investment Corp.	1,154	497
				Nisshin Group Holdings Co. Ltd.	130,500	440

Global ex-U.S. Real Estate Index Fund

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
Japan Property Management Center Co. Ltd.	58,100	430			
Star Mica Holdings Co. Ltd.	101,900	409			
		<b>905,932</b>			
<b>Kuwait (0.4%)</b>					
Mabaneer Co. KPSC	2,964,179	7,910			
Salhia Real Estate Co. KSCP	1,944,411	2,520			
Commercial Real Estate Co. KSC	6,780,318	2,155			
Kuwait Real Estate Co. KSC	2,708,608	1,393			
* National Real Estate Co. KPSC	4,653,788	1,002			
* Al Mazaya Holding Co. KSCP	2,950,773	520			
		<b>15,500</b>			
<b>Malaysia (0.6%)</b>					
IOI Properties Group Bhd.	8,471,400	3,290			
Sunway REIT	9,400,134	2,940			
Axis REIT	7,462,800	2,835			
IGB REIT	7,689,200	2,744			
Sime Darby Property Bhd.	15,859,300	2,048			
SP Setia Bhd. Group	9,322,900	1,646			
Pavilion REIT	5,234,900	1,329			
Mah Sing Group Bhd.	7,526,725	1,297			
Eco World Development Group Bhd. (XKLS)	5,839,200	1,238			
Matrix Concepts Holdings Bhd.	3,735,442	1,206			
OSK Holdings Bhd.	4,232,300	1,048			
UEM Sunrise Bhd.	5,710,765	954			
Eco World International Bhd.	3,898,000	278			
		<b>22,853</b>			
<b>Mexico (1.5%)</b>					
Fibra Uno Administracion SA de CV	13,116,085	19,911			
Corp. Inmobiliaria Vesta SAB de CV	3,749,250	11,756			
Prologis Property Mexico SA de CV	2,788,668	9,994			
TF Administradora Industrial S de RL de CV	3,596,020	5,836			
<sup>2</sup> FIBRA Macquarie Mexico	3,369,090	5,221			
		<b>52,718</b>			
<b>Netherlands (0.5%)</b>					
<sup>2</sup> CTP NV	497,090	7,247			
Eurocommercial Properties NV	199,336	4,280			
Wereldhave NV	187,437	2,827			
Vastned Retail NV	82,969	1,662			
NSI NV	83,339	1,505			
		<b>17,521</b>			
<b>New Zealand (0.4%)</b>					
Goodman Property Trust	4,884,672	5,721			
Precinct Properties Group	6,250,310	4,046			
Kiwi Property Group Ltd.	7,286,643	3,291			
Argosy Property Ltd.	3,960,240	2,448			
		<b>15,506</b>			
<b>Norway (0.1%)</b>					
<sup>2</sup> Entra ASA	330,800	2,585			
<b>Philippines (1.4%)</b>					
SM Prime Holdings Inc.	53,560,607	28,338			
Ayala Land Inc.	27,715,660	13,638			
Robinson's Land Corp.	8,069,372	1,984			
AREIT Inc.	3,217,020	1,859			
Megaworld Corp.	49,684,100	1,735			
RL Commercial REIT Inc.	17,130,500	1,430			
MREIT Inc.	4,658,000	1,000			
Citicore Energy REIT Corp.	11,200,000	499			
Filinvest Land Inc.	25,890,000	278			
Vista Land & Lifescapes Inc.	592,257	17			
		<b>50,778</b>			
<b>Qatar (0.3%)</b>					
Barwa Real Estate Co.	10,014,223	6,968			
United Development Co. QSC	8,070,229	2,161			
* Ezdan Holding Group QSC	7,466,036	1,709			
* Mazaya Real Estate Development QPSC	2,530,327	418			
		<b>11,256</b>			
<b>Russia (0.0%)</b>					
*. <sup>3</sup> Etalon Group plc GDR (Registered)	993,429	—			
*. <sup>3</sup> INGRAD PJSC	43,530	—			
		<b>—</b>			
<b>Saudi Arabia (0.9%)</b>					
* Dar Al Arkan Real Estate Development Co.	2,478,365	9,981			
* Emaar Economic City Arabian Centres Co. Ltd.	2,599,400	5,071			
Arriyadh Development Co.	757,099	4,048			
* Saudi Real Estate Co.	409,484	2,185			
Retal Urban Development Co.	616,718	1,967			
Riyad REIT Fund	712,678	1,518			
Alandalus Property Co.	577,872	1,254			
Al Rajhi REIT	212,578	1,193			
Derayah REIT	538,922	1,189			
Sedco Capital REIT Fund	486,079	1,023			
Bonyan REIT	426,260	891			
Alkabeer REIT	286,537	706			
	409,624	688			

Global ex-U.S. Real Estate Index Fund

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
Sumou Real Estate Co.	63,728	648			
Musharaka Real Estate Income Fund	352,128	522			
Alinma Retail REIT Fund	399,185	482			
Al Maather REIT Fund	195,300	477			
Alahli REIT Fund 1	207,105	432			
		<b>34,275</b>			
<b>Singapore (6.4%)</b>					
CapitalLand Ascendas REIT	16,516,584	31,382			
CapitalLand Integrated Commercial Trust	23,489,168	30,189			
Capitaland Investment Ltd.	11,135,538	23,910			
Mapletree Logistics Trust	15,422,823	16,562			
Mapletree Industrial Trust	9,596,091	15,084			
City Developments Ltd.	2,359,590	10,891			
Mapletree Pan Asia Commercial Trust	10,699,641	10,399			
Frasers Logistics & Commercial Trust	13,497,352	10,253			
UOL Group Ltd.	2,158,578	9,297			
Suntec REIT	10,414,727	8,369			
Keppel DC REIT	6,230,224	7,689			
Frasers Centrepoint Trust	4,993,040	7,553			
CapitalLand Ascott Trust	10,553,012	6,939			
ESR-LOGOS REIT	27,941,861	5,605			
Keppel REIT	9,194,515	5,339			
Parkway Life REIT	1,790,097	4,392			
PARAGON REIT	5,747,200	3,336			
Capitaland India Trust	4,611,842	3,233			
CapitalLand China Trust	5,456,208	3,148			
Lendlease Global Commercial REIT	8,095,389	3,015			
AIMS APAC REIT	3,169,988	2,778			
CDL Hospitality Trusts	3,164,199	2,237			
Starhill Global REIT	6,608,268	2,150			
Far East Hospitality Trust	4,929,692	2,129			
Cromwell European REIT	1,475,966	1,795			
Digital Core REIT Management Pte. Ltd.	3,374,000	1,705			
Sasseur REIT	2,506,800	1,145			
Hong Fok Corp. Ltd.	1,759,600	1,117			
Yanlord Land Group Ltd.	2,554,104	1,055			
Keppel Pacific Oak US REIT	3,654,900	672			
Manulife US REIT	8,322,910	416			
Prime US REIT	2,899,900	270			
EC World REIT	1,188,500	225			
Eagle Hospitality Trust	2,602,300	—			
		<b>234,279</b>			
			<b>South Africa (1.4%)</b>		
			* NEPI Rockcastle NV Growthpoint Properties Ltd.	2,244,961	12,132
			Redefine Properties Ltd.	16,086,503	8,362
			* Fortress Real Estate Investments Ltd.	33,191,790	6,242
			Vukile Property Fund Ltd.	5,546,379	3,899
			Resilient REIT Ltd.	4,215,543	2,813
			Hyprop Investments Ltd.	1,400,665	2,793
			Equites Property Fund Ltd.	1,672,828	2,550
			Attacq Ltd.	3,641,501	2,240
			* Stor-Age Property REIT Ltd.	3,500,374	1,516
			* Fortress Real Estate Investments Ltd. Class B	2,203,608	1,420
			SA Corporate Real Estate Ltd.	4,024,684	1,276
			Burstone Group Ltd.	11,697,582	1,200
			Fairvest Ltd. Class B	2,789,399	1,109
			Emira Property Fund Ltd.	6,327,120	1,063
				1,111,393	495
					<b>49,110</b>
			<b>South Korea (0.3%)</b>		
			JR Global REIT	764,783	2,231
			ESR Kendall Square REIT Co. Ltd.	752,620	1,786
			Shinhan Alpha REIT Co. Ltd.	343,428	1,560
			SK REITs Co. Ltd.	548,630	1,529
			LOTTE REIT Co. Ltd.	565,700	1,206
			Koramco Energy Plus REIT	226,356	893
			* SK D&D Co. Ltd.	33,512	682
			D&D Platform REIT Co. Ltd.	254,263	556
			NH All One REIT Co. Ltd.	202,358	489
			Mirae Asset Maps Asia Pacific Real Estate 1 Investment	163,911	472
			IGIS Value Plus REIT Co. Ltd.	103,106	314
			E KOCREF CR-REIT Co. Ltd.	52,558	191
			Haesung Industrial Co. Ltd.	31,206	165
			Dongwon Development Co. Ltd.	44,769	106
			Shinhan Seobu T&D REIT Co. Ltd.	2,351	6
					<b>12,186</b>
			<b>Spain (0.6%)</b>		
			Merlin Properties Socimi SA	1,549,058	12,916
			Immobiliaria Colonial Socimi SA	1,335,404	7,492
			Lar Espana Real Estate Socimi SA	232,729	1,351
			* Aedas Homes SA	61,297	978



## Global ex-U.S. Real Estate Index Fund

		Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
*.1,2	Metrovacesa SA	71,483	580			
			<b>23,317</b>			
<b>Sweden (3.0%)</b>						
	Castellum AB	1,981,138	18,987			
	Sagax AB Class B	956,227	17,310			
*	Fastighets AB Balder Class B	3,091,006	13,133			
	Fabege AB	1,140,050	8,506			
	Wihlborgs Fastigheter AB	1,244,645	8,068			
	Wallenstam AB Class B	2,036,879	6,889			
	Hufvudstaden AB Class A	542,020	5,779			
	Catena AB	150,846	4,997			
	Pandox AB	416,798	4,102			
	Atrium Ljungberg AB Class B	245,857	3,781			
	Nyfosa AB	660,821	3,198			
	Dios Fastigheter AB	487,403	2,638			
	Cibus Nordic Real Estate AB publ	267,105	2,507			
	NP3 Fastigheter AB	142,692	1,907			
	Platzer Fastigheter Holding AB Class B	301,257	1,582			
	Corem Property Group AB Class B	2,389,592	1,543			
1	Samhallsbyggnadsbolaget i Norden AB	5,296,411	1,541			
	Sagax AB Class D	618,850	1,393			
*.1	Neobo Fastigheter AB	577,201	466			
	Corem Property Group AB Class D	9,778	139			
			<b>108,466</b>			
<b>Switzerland (2.3%)</b>						
	Swiss Prime Site AG (Registered)	356,518	33,138			
	PSP Swiss Property AG (Registered)	213,146	26,225			
	Allreal Holding AG (Registered)	71,746	11,513			
	Mobimo Holding AG (Registered)	33,736	9,318			
	Intershop Holding AG	5,378	3,569			
*.1	Peach Property Group AG	58,587	770			
			<b>84,533</b>			
<b>Taiwan (1.3%)</b>						
	Highwealth Construction Corp.	7,368,890	9,259			
	Ruentex Development Co. Ltd.	8,670,483	8,695			
	Huaku Development Co. Ltd.	1,078,854	3,047			
	Farglory Land Development Co. Ltd.	1,210,631	2,231			
	Chong Hong Construction Co. Ltd.	975,297	2,173			
	Sakura Development Co. Ltd.	1,447,271	1,942			
	Delpha Construction Co. Ltd.	2,265,000	1,886			
	Kindom Development Co. Ltd.				1,748,900	1,843
	Prince Housing & Development Corp.				5,031,478	1,653
	Da-Li Development Co. Ltd.				1,377,550	1,350
	Advancetek Enterprise Co. Ltd.				1,222,000	1,320
	I-Sunny Construction & Development Co. Ltd.				515,848	1,267
	Cathay Real Estate Development Co. Ltd.				2,252,100	1,056
1	Fu Hua Innovation Co. Ltd.				1,276,215	1,016
	Hung Sheng Construction Ltd.				1,638,520	908
	KEE TAI Properties Co. Ltd.				1,890,869	879
	Hong Pu Real Estate Development Co. Ltd.				994,194	829
	Yungshin Construction & Development Co. Ltd.				310,000	796
*	Radium Life Tech Co. Ltd.				2,555,000	690
	Yea Shin International Development Co. Ltd.				849,842	676
	Crowell Development Corp.				777,000	656
*	Kuo Yang Construction Co. Ltd.				1,140,802	634
1	Huang Hsiang Construction Corp.				500,000	595
	Shin Ruenn Development Co. Ltd.				385,000	590
	GTM Holdings Corp.				584,000	529
*	Shining Building Business Co. Ltd.				1,631,869	512
*	King's Town Construction Co. Ltd.				365,000	344
	Hung Ching Development & Construction Co. Ltd.				78,000	55
*.3	Taiwan Land Development Corp.				2,224,000	—
						<b>47,431</b>
<b>Thailand (1.2%)</b>						
	Central Pattana PCL				6,255,300	10,882
	WHA Corp. PCL				34,109,686	4,749
	Land & Houses PCL (Registered)				16,738,900	3,516
	CPN Retail Growth Leasehold REIT				9,005,235	2,379

## Global ex-U.S. Real Estate Index Fund

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
Lotus's Retail Growth Freehold And Leasehold Property Fund	7,293,300	2,332			
WHA Premium Growth Freehold & Leasehold REIT Class F	8,729,996	2,197			
Frasers Property Thailand Industrial Freehold & Leasehold REIT	6,696,700	1,789			
Amata Corp. PCL	2,671,723	1,769			
Supalai PCL	3,236,481	1,658			
MBK PCL	3,621,200	1,614			
AP Thailand PCL	4,509,820	1,356			
Quality Houses PCL	20,439,400	1,274			
Sansiri PCL	29,533,525	1,258			
IMPACT Growth REIT	3,295,100	1,145			
Origin Property PCL Class F	4,215,398	1,050			
Prukso Holding PCL	2,973,900	1,035			
BA Airport Leasehold REIT	3,782,300	862			
1 SC Asset Corp. PCL	8,828,640	831			
* Bangkok Land PCL	40,393,795	775			
Prukso Real Estate PCL	3,024,500	526			
Assetwise PCL	1,801,800	432			
Hemaraj Leasehold REIT	2,117,000	342			
1 Singha Estate PCL	13,087,000	321			
Noble Development PCL	3,124,328	301			
Sansiri PCL NDVR	192,075	8			
		<b>44,401</b>			
<b>Turkey (0.3%)</b>					
Emlak Konut Gayrimenkul Yatirim Ortakligi A/S	8,152,853	1,888			
* Peker Gayrimenkul Yatirim Ortakligi A/S	1,695,305	1,639			
* Is Gayrimenkul Yatirim Ortakligi A/S	2,136,544	1,634			
Yeni Gimat Gayrimenkul Ortakligi A/S	902,883	1,184			
Torunlar Gayrimenkul Yatirim Ortakligi A/S	697,724	826			
Ziraat Gayrimenkul Yatirim Ortakligi A/S	4,091,001	703			
* Kuyumcukent Gayrimenkul Yatirimlari A/S	356,735	668			
* AKIS Gayrimenkul Yatirimi A/S	1,603,541	643			
* Servet Gayrimenkul Yatirim Ortakligi A/S	48,870	604			
Pasifik Gayrimenkul Yatirim Ortakligi	2,515,422	569			
* Reysas Gayrimenkul Yatirim Ortakligi A/S	704,982	565			
* Ozak Gayrimenkul Yatirim Ortakligi	1,823,618	564			
* Akfen Gayrimenkul Yatirim Ortakligi A/S	2,715,221	417			
* Sinpas Gayrimenkul Yatirim Ortakligi A/S	3,629,214	356			
* Kizilbuk Gayrimenkul Yatirim Ortakligi A/S	485,078	297			
					<b>12,557</b>
<b>United Arab Emirates (2.5%)</b>					
Emaar Properties PJSC	28,980,133	52,796			
Aldar Properties PJSC	17,647,859	24,999			
Emaar Development PJSC	3,753,483	6,334			
TECOM Group PJSC	2,917,564	2,066			
* RAK Properties PJSC	4,604,135	1,342			
* Deyaar Development PJSC	5,188,846	832			
*,3 Eshraq Investments PJSC	6,402,405	759			
* Manazel PJSC	5,937,519	585			
					<b>89,713</b>
<b>United Kingdom (7.3%)</b>					
Segro plc	5,714,556	49,672			
Land Securities Group plc	3,506,537	24,306			
UNITE Group plc	1,847,718	19,553			
British Land Co. plc	4,366,822	15,831			
Tritax Big Box REIT plc	8,853,852	14,741			
Derwent London plc	522,776	11,618			
Shaftesbury Capital plc	9,076,139	11,506			
Grainger plc	3,445,942	9,537			
Big Yellow Group plc	814,828	9,476			
LondonMetric Property plc	4,571,320	9,212			
Safestore Holdings plc	1,017,523	8,467			
LXI REIT plc	7,976,178	8,336			
Assura plc	13,799,740	6,874			
Primary Health Properties plc	6,223,944	6,800			
Great Portland Estates plc	1,184,000	5,621			
Sirius Real Estate Ltd.	5,467,849	5,313			
Supermarket Income REIT plc	5,782,576	5,106			
Hammerson plc	17,974,640	4,823			
Workspace Group plc	637,596	3,747			
Empiric Student Property REIT plc	2,819,271	2,897			
* Urban Logistics REIT plc	2,193,476	2,782			
UK Commercial Property REIT Ltd.	3,962,188	2,542			
Balanced Commercial Property Trust Ltd.	3,277,773	2,520			

Global ex-U.S. Real Estate Index Fund

	Shares	Market Value* (\$'000)
Target Healthcare REIT plc	2,869,387	2,518
PRS REIT plc	2,441,044	2,143
Custodian Property Income REIT plc	2,053,213	2,053
Picton Property Income Ltd.	2,557,544	2,024
Impact Healthcare REIT plc (XLON)	1,928,272	1,945
Warehouse Reit plc	1,988,898	1,755
<sup>3</sup> Home REIT plc	3,771,148	1,744
NewRiver REIT plc	1,463,313	1,391
<sup>1</sup> Life Science REIT plc	1,612,660	1,204
Schroder REIT Ltd.	2,434,206	1,200
Helical plc	491,500	1,148
<sup>2</sup> Triple Point Social Housing REIT plc	1,606,784	1,061
Standard Life Investment Property Income Trust REIT Ltd.	1,865,797	1,058
AEW UK REIT plc	730,752	833
<sup>2</sup> Regional REIT Ltd.	2,165,724	742
CLS Holdings plc	620,213	655

		<b>264,754</b>
<b>Total Common Stocks (Cost \$5,233,540)</b>		<b>3,615,290</b>

**Preferred Stock (0.0%)**

Iguatemi SA Preference Shares (Cost \$56)	34,973	69
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**Warrants (0.0%)**

<sup>*,3</sup> MBK PCL Exp. 11/15/23	127,968	58
<sup>*</sup> Eco World Development Group Bhd. Exp. 4/12/29	1,186,080	50

	Shares	Market Value* (\$'000)
<sup>*</sup> Noble Development PCL Exp. 1/12/24	783,375	—
<b>Total Warrants (Cost \$48)</b>		<b>108</b>

**Temporary Cash Investments (2.5%)**

**Money Market Fund (2.5%)**

<sup>4,5</sup> Vanguard Market Liquidity Fund, 5.420% (Cost \$91,740)	917,662	91,757
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<b>Total Investments (101.8%) (Cost \$5,325,384)</b>		<b>3,707,224</b>
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<b>Other Assets and Liabilities—Net (-1.8%)</b>		<b>(66,293)</b>
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<b>Net Assets (100%)</b>		<b>3,640,931</b>
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Cost is in \$'000.

• See Note A in Notes to Financial Statements.

<sup>\*</sup> Non-income-producing security.

<sup>1</sup> Includes partial security positions on loan to broker-dealers. The total value of securities on loan is \$82,315,000.

<sup>2</sup> Security exempt from registration under Rule 144A of the Securities Act of 1933. Such securities may be sold in transactions exempt from registration, normally to qualified institutional buyers. At October 31, 2023, the aggregate value was \$66,547,000, representing 1.8% of net assets.

<sup>3</sup> Security value determined using significant unobservable inputs.

<sup>4</sup> Affiliated money market fund available only to Vanguard funds and certain trusts and accounts managed by Vanguard. Rate shown is the 7-day yield.

<sup>5</sup> Collateral of \$91,954,000 was received for securities on loan, of which \$91,755,000 is held in Vanguard Market Liquidity Fund and \$199,000 is held in cash.

GDR—Global Depositary Receipt.

REIT—Real Estate Investment Trust.

**Derivative Financial Instruments Outstanding as of Period End**

**Futures Contracts**

	Expiration	Number of Long (Short) Contracts	Notional Amount	Value and Unrealized Appreciation (Depreciation) (\$'000)
<b>Long Futures Contracts</b>				
MSCI EAFE Index	December 2023	187	18,458	(788)
MSCI Emerging Markets Index	December 2023	129	5,929	(299)
Topix Index	December 2023	16	2,379	(83)
				(1,170)

Global ex-U.S. Real Estate Index Fund

Forward Currency Contracts

Counterparty	Contract Settlement Date	Contract Amount (000)		Unrealized Appreciation (\$000)	Unrealized Depreciation (\$000)
		Receive	Deliver		
Standard Chartered Bank	12/20/23	AUD 4,641	USD 2,947	2	—
State Street Bank & Trust Co.	12/20/23	AUD 2,000	USD 1,288	—	(17)
State Street Bank & Trust Co.	12/20/23	INR 76,148	USD 913	—	—
Royal Bank of Canada	12/20/23	JPY 111,290	USD 764	—	(24)
Toronto-Dominion Bank	12/20/23	USD 5,103	AUD 7,916	73	—
Toronto-Dominion Bank	12/20/23	USD 611	CAD 829	13	—
State Street Bank & Trust Co.	12/20/23	USD 2,268	CHF 2,000	56	—
JPMorgan Chase Bank, N.A.	12/20/23	USD 3,419	EUR 3,172	55	—
Toronto-Dominion Bank	12/20/23	USD 2,180	GBP 1,749	53	—
UBS AG	12/20/23	USD 1,258	HKD 9,825	1	—
State Street Bank & Trust Co.	12/20/23	USD 4,231	JPY 616,171	131	—
Royal Bank of Canada	12/20/23	USD 2,116	JPY 307,657	68	—
Barclays Bank plc	12/20/23	USD 183	SEK 2,027	1	—
JPMorgan Chase Bank, N.A.	12/20/23	USD 2,970	SGD 4,037	15	—
State Street Bank & Trust Co.	12/20/23	USD 114	ZAR 2,190	—	(3)
				468	(44)

AUD—Australian dollar.

CAD—Canadian dollar.

CHF—Swiss franc.

EUR—euro.

GBP—British pound.

HKD—Hong Kong dollar.

INR—Indian rupee.

JPY—Japanese yen.

SEK—Swedish krona.

SGD—Singapore dollar.

USD—U.S. dollar.

ZAR—South African rand.

# Statement of Assets and Liabilities

As of October 31, 2023

(\$000s, except shares, footnotes, and per-share amounts)	Amount
<b>Assets</b>	
Investments in Securities, at Value <sup>1</sup>	
Unaffiliated Issuers (Cost \$5,233,644)	3,615,467
Affiliated Issuers (Cost \$91,740)	91,757
Total Investments in Securities	3,707,224
Investment in Vanguard	133
Cash	199
Cash Collateral Pledged—Futures Contracts	717
Cash Collateral Pledged—Forward Currency Contracts	60
Foreign Currency, at Value (Cost \$4,039)	3,961
Receivables for Investment Securities Sold	26,934
Receivables for Accrued Income	21,342
Receivables for Capital Shares Issued	4,861
Variation Margin Receivable—Futures Contracts	16
Unrealized Appreciation—Forward Currency Contracts	468
<b>Total Assets</b>	<b>3,765,915</b>
<b>Liabilities</b>	
Due to Custodian	28,833
Collateral for Securities on Loan	91,954
Payables for Capital Shares Redeemed	116
Payables to Vanguard	346
Unrealized Depreciation—Forward Currency Contracts	44
Deferred Foreign Capital Gains Taxes	3,691
<b>Total Liabilities</b>	<b>124,984</b>
<b>Net Assets</b>	<b>3,640,931</b>

<sup>1</sup> Includes \$82,315,000 of securities on loan.

## Statement of Assets and Liabilities (continued)

At October 31, 2023, net assets consisted of:

(\$000s, except shares, footnotes, and per-share amounts)	Amount
Paid-in Capital	6,170,472
Total Distributable Earnings (Loss)	(2,529,541)
<b>Net Assets</b>	<b>3,640,931</b>

## ETF Shares—Net Assets

Applicable to 85,715,100 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	3,198,469
<b>Net Asset Value Per Share—ETF Shares</b>	<b>\$37.32</b>

## Admiral Shares—Net Assets

Applicable to 12,354,766 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	279,532
<b>Net Asset Value Per Share—Admiral Shares</b>	<b>\$22.63</b>

## Institutional Shares—Net Assets

Applicable to 2,162,598 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	162,930
<b>Net Asset Value Per Share—Institutional Shares</b>	<b>\$75.34</b>

# Statement of Operations

Year Ended  
October 31, 2023

(\$000)

<b>Investment Income</b>	
<b>Income</b>	
Dividends <sup>1</sup>	164,659
Interest <sup>2</sup>	301
Securities Lending—Net	4,078
Total Income	169,038
<b>Expenses</b>	
The Vanguard Group—Note B	
Investment Advisory Services	284
Management and Administrative—ETF Shares	3,099
Management and Administrative—Admiral Shares	295
Management and Administrative—Institutional Shares	141
Marketing and Distribution—ETF Shares	108
Marketing and Distribution—Admiral Shares	16
Marketing and Distribution—Institutional Shares	4
Custodian Fees	515
Auditing Fees	38
Shareholders' Reports—ETF Shares	320
Shareholders' Reports—Admiral Shares	7
Shareholders' Reports—Institutional Shares	—
Trustees' Fees and Expenses	2
Other Expenses	232
Total Expenses	5,061
Expenses Paid Indirectly	(2)
Net Expenses	5,059
<b>Net Investment Income</b>	<b>163,979</b>
<b>Realized Net Gain (Loss)</b>	
Investment Securities Sold <sup>2,3,4</sup>	(185,891)
Futures Contracts	2,963
Forward Currency Contracts	140
Foreign Currencies	(752)
<b>Realized Net Gain (Loss)</b>	<b>(183,540)</b>

## Statement of Operations (continued)

	Year Ended October 31, 2023
	(\$000)
<b>Change in Unrealized Appreciation (Depreciation)</b>	
Investment Securities <sup>2,5</sup>	42,886
Futures Contracts	(820)
Forward Currency Contracts	(32)
Foreign Currencies	172
<b>Change in Unrealized Appreciation (Depreciation)</b>	<b>42,206</b>
<b>Net Increase (Decrease) in Net Assets Resulting from Operations</b>	<b>22,645</b>

1 Dividends are net of foreign withholding taxes of \$14,426,000.

2 Interest income, realized net gain (loss), and change in unrealized appreciation (depreciation) from an affiliated company of the fund were \$244,000, \$1,000, and \$2,000, respectively. Purchases and sales are for temporary cash investment purposes.

3 Realized gain (loss) is net of foreign capital gain taxes of \$2,000.

4 Includes \$10,529,000 of net gain (loss) resulting from in-kind redemptions.

5 The change in unrealized appreciation (depreciation) is net of the change in deferred foreign capital gains taxes of \$2,104,000.



## Statement of Changes in Net Assets

	Year Ended October 31,	
	2023 (\$'000)	2022 (\$'000)
<b>Increase (Decrease) in Net Assets</b>		
<b>Operations</b>		
Net Investment Income	163,979	172,729
Realized Net Gain (Loss)	(183,540)	(225,490)
Change in Unrealized Appreciation (Depreciation)	42,206	(1,704,830)
Net Increase (Decrease) in Net Assets Resulting from Operations	22,645	(1,757,591)
<b>Distributions</b>		
ETF Shares	(21,147)	(254,915)
Admiral Shares	(1,898)	(25,162)
Institutional Shares	(898)	(10,731)
Total Distributions	(23,943)	(290,808)
<b>Capital Share Transactions</b>		
ETF Shares	(157,325)	81,681
Admiral Shares	(33,152)	(10,341)
Institutional Shares	25,326	1,732
Net Increase (Decrease) from Capital Share Transactions	(165,151)	73,072
Total Increase (Decrease)	(166,449)	(1,975,327)
<b>Net Assets</b>		
Beginning of Period	3,807,380	5,782,707
End of Period	3,640,931	3,807,380

See accompanying Notes, which are an integral part of the Financial Statements.

# Financial Highlights

## ETF Shares

For a Share Outstanding Throughout Each Period	Year Ended October 31,				
	2023	2022	2021	2020	2019
<b>Net Asset Value, Beginning of Period</b>	<b>\$37.45</b>	<b>\$57.39</b>	<b>\$47.04</b>	<b>\$60.79</b>	<b>\$52.99</b>
<b>Investment Operations</b>					
Net Investment Income <sup>1</sup>	1.641	1.679	2.145	1.761	2.033
Net Realized and Unrealized Gain (Loss) on Investments	(1.536)	(18.724)	9.312	(11.864)	7.969
Total from Investment Operations	.105	(17.045)	11.457	(10.103)	10.002
<b>Distributions</b>					
Dividends from Net Investment Income	(.235)	(2.895)	(1.107)	(3.647)	(2.202)
Distributions from Realized Capital Gains	—	—	—	—	—
Total Distributions	(.235)	(2.895)	(1.107)	(3.647)	(2.202)
<b>Net Asset Value, End of Period</b>	<b>\$37.32</b>	<b>\$37.45</b>	<b>\$57.39</b>	<b>\$47.04</b>	<b>\$60.79</b>
<b>Total Return</b>	<b>0.22%</b>	<b>-31.15%</b>	<b>24.47%</b>	<b>-17.71%</b>	<b>19.47%</b>

## Ratios/Supplemental Data

Net Assets, End of Period (Millions)	\$3,198	\$3,355	\$5,071	\$4,219	\$5,945
Ratio of Total Expenses to Average Net Assets	0.12% <sup>2</sup>	0.12%	0.12%	0.12%	0.12%
Ratio of Net Investment Income to Average Net Assets	4.00%	3.48%	3.80%	3.44%	3.54%
Portfolio Turnover Rate <sup>3</sup>	5%	10%	7%	11%	7%

1 Calculated based on average shares outstanding.

2 The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.12%.

3 Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

## Financial Highlights

### Admiral Shares

For a Share Outstanding Throughout Each Period	Year Ended October 31,				
	2023	2022	2021	2020	2019
<b>Net Asset Value, Beginning of Period</b>	<b>\$22.73</b>	<b>\$34.80</b>	<b>\$28.51</b>	<b>\$36.84</b>	<b>\$32.11</b>
<b>Investment Operations</b>					
Net Investment Income <sup>1</sup>	.995	1.017	1.302	1.079	1.236
Net Realized and Unrealized Gain (Loss) on Investments	(.954)	(11.332)	5.656	(7.199)	4.828
Total from Investment Operations	.041	(10.315)	6.958	(6.120)	6.064
<b>Distributions</b>					
Dividends from Net Investment Income	(.141)	(1.755)	(.668)	(2.210)	(1.334)
Distributions from Realized Capital Gains	—	—	—	—	—
Total Distributions	(.141)	(1.755)	(.668)	(2.210)	(1.334)
<b>Net Asset Value, End of Period</b>	<b>\$22.63</b>	<b>\$22.73</b>	<b>\$34.80</b>	<b>\$28.51</b>	<b>\$36.84</b>
<b>Total Return<sup>2</sup></b>	<b>0.12%</b>	<b>-31.06%</b>	<b>24.48%</b>	<b>-17.71%</b>	<b>19.46%</b>

### Ratios/Supplemental Data

Net Assets, End of Period (Millions)	\$280	\$313	\$499	\$421	\$617
Ratio of Total Expenses to Average Net Assets	0.12% <sup>3</sup>	0.12%	0.12%	0.12%	0.12%
Ratio of Net Investment Income to Average Net Assets	4.00%	3.47%	3.80%	3.49%	3.55%
Portfolio Turnover Rate <sup>4</sup>	5%	10%	7%	11%	7%

1 Calculated based on average shares outstanding.

2 Total returns do not include transaction or account service fees that may have applied in the periods shown. Fund prospectuses provide information about any applicable transaction and account service fees.

3 The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.12%.

4 Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

## Financial Highlights

### Institutional Shares

For a Share Outstanding Throughout Each Period	Year Ended October 31,				
	2023	2022	2021	2020	2019
<b>Net Asset Value, Beginning of Period</b>	<b>\$75.62</b>	<b>\$115.86</b>	<b>\$94.98</b>	<b>\$122.73</b>	<b>\$106.98</b>
<b>Investment Operations</b>					
Net Investment Income <sup>1</sup>	3.320	3.391	4.376	3.646	4.143
Net Realized and Unrealized Gain (Loss) on Investments	(3.115)	(37.785) <sup>2</sup>	18.763	(24.030)	16.064
Total from Investment Operations	.205	(34.394)	23.139	(20.384)	20.207
<b>Distributions</b>					
Dividends from Net Investment Income	(.485)	(5.846)	(2.259)	(7.366)	(4.457)
Distributions from Realized Capital Gains	—	—	—	—	—
Total Distributions	(.485)	(5.846)	(2.259)	(7.366)	(4.457)
<b>Net Asset Value, End of Period</b>	<b>\$75.34</b>	<b>\$75.62</b>	<b>\$115.86</b>	<b>\$94.98</b>	<b>\$122.73</b>
<b>Total Return<sup>3</sup></b>	<b>0.20%</b>	<b>-31.10%</b>	<b>24.44%</b>	<b>-17.71%</b>	<b>19.46%</b>

### Ratios/Supplemental Data

Net Assets, End of Period (Millions)	\$163	\$140	\$213	\$205	\$232
Ratio of Total Expenses to Average Net Assets	0.11% <sup>4</sup>	0.11%	0.11%	0.11%	0.11%
Ratio of Net Investment Income to Average Net Assets	4.02%	3.48%	3.84%	3.55%	3.57%
Portfolio Turnover Rate <sup>5</sup>	5%	10%	7%	11%	7%

1 Calculated based on average shares outstanding.

2 Includes increases from purchase and redemption fees of \$0.01.

3 Total returns do not include transaction fees that may have applied in the periods shown. Fund prospectuses provide information about any applicable transaction fees.

4 The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.11%.

5 Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

## Notes to Financial Statements

Vanguard Global ex-U.S. Real Estate Index Fund is registered under the Investment Company Act of 1940 as an open-end investment company, or mutual fund. The fund offers three classes of shares: ETF Shares, Admiral Shares, and Institutional Shares. Each of the share classes has different eligibility and minimum purchase requirements, and is designed for different types of investors. ETF Shares are listed for trading on Nasdaq; they can be purchased and sold through a broker.

A. The following significant accounting policies conform to generally accepted accounting principles for U.S. investment companies. The fund consistently follows such policies in preparing its financial statements.

1. **Security Valuation:** Securities are valued as of the close of trading on the New York Stock Exchange (generally 4 p.m., Eastern time) on the valuation date. Equity securities are valued at the latest quoted sales prices or official closing prices taken from the primary market in which each security trades; such securities not traded on the valuation date are valued at the mean of the latest quoted bid and asked prices. Securities for which market quotations are not readily available, or whose values have been affected by events occurring before the fund's pricing time but after the close of the securities' primary markets, are valued by methods deemed by the valuation designee to represent fair value and subject to oversight by the board of trustees. These procedures include obtaining quotations from an independent pricing service, monitoring news to identify significant market- or security-specific events, and evaluating changes in the values of foreign market proxies (for example, ADRs, futures contracts, or exchange-traded funds), between the time the foreign markets close and the fund's pricing time. When fair-value pricing is employed, the prices of securities used by a fund to calculate its net asset value may differ from quoted or published prices for the same securities. Investments in Vanguard Market Liquidity Fund are valued at that fund's net asset value.

2. **Foreign Currency:** Securities and other assets and liabilities denominated in foreign currencies are translated into U.S. dollars using exchange rates obtained from an independent third party as of the fund's pricing time on the valuation date. Realized gains (losses) and unrealized appreciation (depreciation) on investment securities include the effects of changes in exchange rates since the securities were purchased, combined with the effects of changes in security prices. Fluctuations in the value of other assets and liabilities resulting from changes in exchange rates are recorded as unrealized foreign currency gains (losses) until the assets or liabilities are settled in cash, at which time they are recorded as realized foreign currency gains (losses).

3. **Futures Contracts:** The fund uses index futures contracts to a limited extent, with the objectives of maintaining full exposure to the stock market, maintaining liquidity, and minimizing transaction costs. The fund may purchase futures contracts to immediately invest incoming cash in the market, or sell futures in response to cash outflows, thereby simulating a fully invested position in the underlying index while maintaining a cash balance for liquidity. The primary risks associated with the use of futures contracts are imperfect correlation between changes in market values of stocks held by the fund and the prices of futures contracts, and the possibility of an illiquid market. Counterparty risk involving futures is mitigated because a regulated clearinghouse is the counterparty instead of the clearing broker. To further mitigate counterparty risk, the fund trades futures contracts on an exchange, monitors the financial strength of its clearing brokers and clearinghouse, and has entered into clearing agreements with its clearing brokers. The clearinghouse imposes initial margin requirements to secure the fund's performance and requires daily settlement of variation margin representing changes in the market value of each contract. Any securities pledged as initial margin for open contracts are noted in the Schedule of Investments.

Futures contracts are valued at their quoted daily settlement prices. The notional amounts of the contracts are not recorded in the Statement of Assets and Liabilities. Fluctuations in the value of the contracts are recorded in the Statement of Assets and Liabilities as an asset (liability) and in

the Statement of Operations as unrealized appreciation (depreciation) until the contracts are closed, when they are recorded as realized gains (losses) on futures contracts.

During the year ended October 31, 2023, the fund's average investments in long and short futures contracts represented 1% and 0% of net assets, respectively, based on the average of the notional amounts at each quarter-end during the period.

4. **Forward Currency Contracts:** The fund enters into forward currency contracts to protect the value of securities and related receivables and payables against changes in future foreign exchange rates. The fund's risks in using these contracts include movement in the values of the foreign currencies relative to the U.S. dollar and the ability of the counterparties to fulfill their obligations under the contracts. The fund mitigates its counterparty risk by entering into forward currency contracts only with a diverse group of prequalified counterparties, monitoring their financial strength, entering into master netting arrangements with its counterparties, and requiring its counterparties to transfer collateral as security for their performance. In the absence of a default, the collateral pledged or received by the fund cannot be repledged, resold, or rehypothecated. The master netting arrangements provide that, in the event of a counterparty's default (including bankruptcy), the fund may terminate the forward currency contracts, determine the net amount owed by either party in accordance with its master netting arrangements, and sell or retain any collateral held up to the net amount owed to the fund under the master netting arrangements. The forward currency contracts contain provisions whereby a counterparty may terminate open contracts if the fund's net assets decline below a certain level, triggering a payment by the fund if the fund is in a net liability position at the time of the termination. The payment amount would be reduced by any collateral the fund has pledged. Any securities pledged as collateral for open contracts are noted in the Schedule of Investments. The value of collateral received or pledged is compared daily to the value of the forward currency contracts exposure with each counterparty, and any difference, if in excess of a specified minimum transfer amount, is adjusted and settled within two business days.

Forward currency contracts are valued at their quoted daily prices obtained from an independent third party, adjusted for currency risk based on the expiration date of each contract. The notional amounts of the contracts are not recorded in the Statement of Assets and Liabilities. Fluctuations in the value of the contracts are recorded in the Statement of Assets and Liabilities as an asset (liability) and in the Statement of Operations as unrealized appreciation (depreciation) until the contracts are closed, when they are recorded as realized gains (losses) on forward currency contracts.

During the year ended October 31, 2023, the fund's average investment in forward currency contracts represented 1% of net assets, based on the average of the notional amounts at each quarter-end during the period.

5. **Federal Income Taxes:** The fund intends to continue to qualify as a regulated investment company and distribute virtually all of its taxable income. The fund's tax returns are open to examination by the relevant tax authorities until expiration of the applicable statute of limitations, which is generally three years after the filing of the tax return. Management has analyzed the fund's tax positions taken for all open federal and state income tax years, and has concluded that no provision for income tax is required in the fund's financial statements.

6. **Distributions:** Distributions to shareholders are recorded on the ex-dividend date. Distributions are determined on a tax basis at the fiscal year-end and may differ from net investment income and realized capital gains for financial reporting purposes.

7. **Securities Lending:** To earn additional income, the fund lends its securities to qualified institutional borrowers. Security loans are subject to termination by the fund at any time, and are required to be secured at all times by collateral in an amount at least equal to the market value of

securities loaned. Daily market fluctuations could cause the value of loaned securities to be more or less than the value of the collateral received. When this occurs, the collateral is adjusted and settled before the opening of the market on the next business day. The fund further mitigates its counterparty risk by entering into securities lending transactions only with a diverse group of prequalified counterparties, monitoring their financial strength, and entering into master securities lending agreements with its counterparties. The master securities lending agreements provide that, in the event of a counterparty's default (including bankruptcy), the fund may terminate any loans with that borrower, determine the net amount owed, and sell or retain the collateral up to the net amount owed to the fund; however, such actions may be subject to legal proceedings. While collateral mitigates counterparty risk, in the event of a default, the fund may experience delays and costs in recovering the securities loaned. The fund invests cash collateral received in Vanguard Market Liquidity Fund, and records a liability in the Statement of Assets and Liabilities for the return of the collateral, during the period the securities are on loan. Collateral investments in Vanguard Market Liquidity Fund are subject to market appreciation or depreciation. Securities lending income represents fees charged to borrowers plus income earned on invested cash collateral, less expenses associated with the loan. During the term of the loan, the fund is entitled to all distributions made on or in respect of the loaned securities.

8. Credit Facilities and Interfund Lending Program: The fund and certain other funds managed by The Vanguard Group ("Vanguard") participate in a \$4.3 billion committed credit facility provided by a syndicate of lenders pursuant to a credit agreement and an uncommitted credit facility provided by Vanguard. Both facilities may be renewed annually. Each fund is individually liable for its borrowings, if any, under the credit facilities. Borrowings may be utilized for temporary or emergency purposes and are subject to the fund's regulatory and contractual borrowing restrictions. With respect to the committed credit facility, the participating funds are charged administrative fees and an annual commitment fee of 0.10% of the undrawn committed amount of the facility, which are allocated to the funds based on a method approved by the fund's board of trustees and included in Management and Administrative expenses on the fund's Statement of Operations. Any borrowings under either facility bear interest at an agreed-upon spread plus the higher of the federal funds effective rate, the overnight bank funding rate, or the Daily Simple Secured Overnight Financing Rate inclusive of an additional agreed-upon spread. However, borrowings under the uncommitted credit facility may bear interest based upon an alternate rate agreed to by the fund and Vanguard.

In accordance with an exemptive order (the "Order") from the SEC, the fund may participate in a joint lending and borrowing program that allows registered open-end Vanguard funds to borrow money from and lend money to each other for temporary or emergency purposes (the "Interfund Lending Program"), subject to compliance with the terms and conditions of the Order, and to the extent permitted by the fund's investment objective and investment policies. Interfund loans and borrowings normally extend overnight but can have a maximum duration of seven days. Loans may be called on one business day's notice. The interest rate to be charged is governed by the conditions of the Order and internal procedures adopted by the board of trustees. The board of trustees is responsible for overseeing the Interfund Lending Program.

For the year ended October 31, 2023, the fund did not utilize the credit facilities or the Interfund Lending Program.

9. Other: Dividend income is recorded on the ex-dividend date. Non-cash dividends included in income, if any, are recorded at the fair value of the securities received. Interest income includes income distributions received from Vanguard Market Liquidity Fund and is accrued daily. Security transactions are accounted for on the date securities are bought or sold. Costs used to determine realized gains (losses) on the sale of investment securities are those of the specific securities sold. Fees assessed on capital share transactions are credited to paid-in capital.

Taxes on foreign dividends and capital gains have been provided for in accordance with the applicable countries' tax rules and rates. Deferred foreign capital gains tax, if any, is accrued daily based upon net unrealized gains. The fund has filed tax reclaims for previously withheld taxes on dividends earned in certain European Union countries. These filings are subject to various administrative and judicial proceedings within these countries. Amounts related to these reclaims are recorded when there are no significant uncertainties as to the ultimate resolution of proceedings, the likelihood of receipt of these reclaims, and the potential timing of payment. Such tax reclaims and related professional fees, if any, are included in dividend income and other expenses, respectively.

Each class of shares has equal rights as to assets and earnings, except that each class separately bears certain class-specific expenses related to maintenance of shareholder accounts (included in Management and Administrative expenses) and shareholder reporting. Marketing and distribution expenses are allocated to each class of shares based on a method approved by the board of trustees. Income, other non-class-specific expenses, and gains and losses on investments are allocated to each class of shares based on its relative net assets.

**B.** In accordance with the terms of a Funds' Service Agreement (the "FSA") between Vanguard and the fund, Vanguard furnishes to the fund investment advisory, corporate management, administrative, marketing, and distribution services at Vanguard's cost of operations (as defined by the FSA). These costs of operations are allocated to the fund based on methods and guidelines approved by the board of trustees and are generally settled twice a month.

Upon the request of Vanguard, the fund may invest up to 0.40% of its net assets as capital in Vanguard. At October 31, 2023, the fund had contributed to Vanguard capital in the amount of \$133,000, representing less than 0.01% of the fund's net assets and 0.05% of Vanguard's capital received pursuant to the FSA. The fund's trustees and officers are also directors and employees, respectively, of Vanguard.

**C.** The fund's custodian bank has agreed to reduce its fees when the fund maintains cash on deposit in the non-interest-bearing custody account. For the year ended October 31, 2023, custodian fee offset arrangements reduced the fund's expenses by \$2,000 (an annual rate of less than 0.01% of average net assets).

**D.** Various inputs may be used to determine the value of the fund's investments and derivatives. These inputs are summarized in three broad levels for financial statement purposes. The inputs or methodologies used to value securities are not necessarily an indication of the risk associated with investing in those securities.

**Level 1**—Quoted prices in active markets for identical securities.

**Level 2**—Other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.).

**Level 3**—Significant unobservable inputs (including the fund's own assumptions used to determine the fair value of investments). Any investments and derivatives valued with significant unobservable inputs are noted on the Schedule of Investments.



The following table summarizes the market value of the fund's investments and derivatives as of October 31, 2023, based on the inputs used to value them:

	Level 1 (\$000)	Level 2 (\$000)	Level 3 (\$000)	Total (\$000)
<b>Investments</b>				
<b>Assets</b>				
Common Stocks—North and South America	167,681	9,111	—	176,792
Common Stocks—Other	—	3,434,673	3,825	3,438,498
Preferred Stock	69	—	—	69
Warrants	—	50	58	108
Temporary Cash Investments	91,757	—	—	91,757
<b>Total</b>	<b>259,507</b>	<b>3,443,834</b>	<b>3,883</b>	<b>3,707,224</b>
<b>Derivative Financial Instruments</b>				
<b>Assets</b>				
Forward Currency Contracts	—	468	—	468
<b>Liabilities</b>				
Futures Contracts <sup>1</sup>	1,170	—	—	1,170
Forward Currency Contracts	—	44	—	44
<b>Total</b>	<b>1,170</b>	<b>44</b>	<b>—</b>	<b>1,214</b>

<sup>1</sup> Includes cumulative appreciation (depreciation) on futures contracts and centrally cleared swaps, if any, as reported in the Schedule of Investments. Only current day's variation margin is reported within the Statement of Assets and Liabilities.

E. At October 31, 2023, the fair values of derivatives were reflected in the Statement of Assets and Liabilities as follows:

Statement of Assets and Liabilities	Equity Contracts (\$000)	Foreign Exchange Contracts (\$000)	Total (\$000)
Unrealized Appreciation—Forward Currency Contracts	—	468	468
Unrealized Depreciation—Futures Contracts <sup>1</sup>	1,170	—	1,170
Unrealized Depreciation—Forward Currency Contracts	—	44	44
<b>Total Liabilities</b>	<b>1,170</b>	<b>44</b>	<b>1,214</b>

<sup>1</sup> Includes cumulative appreciation (depreciation) on futures contracts and centrally cleared swaps, if any, as reported in the Schedule of Investments. Only current day's variation margin is reported within the Statement of Assets and Liabilities.

Realized net gain (loss) and the change in unrealized appreciation (depreciation) on derivatives for the year ended October 31, 2023, were:

	Equity Contracts (\$000)	Foreign Exchange Contracts (\$000)	Total (\$000)
Realized Net Gain (Loss) on Derivatives			
Futures Contracts	2,963	—	2,963
Forward Currency Contracts	—	140	140
Realized Net Gain (Loss) on Derivatives	2,963	140	3,103
Change in Unrealized Appreciation (Depreciation) on Derivatives			
Futures Contracts	(820)	—	(820)
Forward Currency Contracts	—	(32)	(32)
Change in Unrealized Appreciation (Depreciation) on Derivatives	(820)	(32)	(852)

F. Permanent differences between book-basis and tax-basis components of net assets are reclassified among capital accounts in the financial statements to reflect their tax character. These reclassifications have no effect on net assets or net asset value per share. As of period end, permanent differences primarily attributable to the accounting for applicable in-kind redemptions, foreign currency transactions, passive foreign investment companies, and tax expense on capital gains were reclassified between the following accounts:

	Amount (\$000)
Paid-in Capital	5,444
Total Distributable Earnings (Loss)	(5,444)

Temporary differences between book-basis and tax-basis components of total distributable earnings (loss) arise when certain items of income, gain, or loss are recognized in different periods for financial statement and tax purposes; these differences will reverse at some time in the future. The differences are primarily related to capital loss carryforwards; the deferral of losses from wash sales; the recognition of unrealized gains or losses from certain derivative contracts; the recognition of unrealized gains from passive foreign investment companies; and the classification of securities for tax purposes. As of period end, the tax-basis components of total distributable earnings (loss) are detailed in the table as follows:

	Amount (\$000)
Undistributed Ordinary Income	127,348
Undistributed Long-Term Gains	—
Net Unrealized Gains (Losses)	(1,672,046)
Capital Loss Carryforwards	(986,169)
Qualified Late-Year Losses	—
Other Temporary Differences	1,326
Total	(2,529,541)

The tax character of distributions paid was as follows:

	Year Ended October 31,	
	2023 Amount (\$000)	2022 Amount (\$000)
Ordinary Income*	23,943	290,808
Long-Term Capital Gains	—	—
Total	23,943	290,808

\* Includes short-term capital gains, if any.

As of October 31, 2023, gross unrealized appreciation and depreciation for investments and derivatives based on cost for U.S. federal income tax purposes were as follows:

	Amount (\$000)
Tax Cost	5,374,390
Gross Unrealized Appreciation	175,228
Gross Unrealized Depreciation	(1,842,459)
Net Unrealized Appreciation (Depreciation)	(1,667,231)

G. During the year ended October 31, 2023, the fund purchased \$357,519,000 of investment securities and sold \$389,629,000 of investment securities, other than temporary cash investments. Purchases and sales include \$52,619,000 and \$207,412,000, respectively, in connection with in-kind purchases and redemptions of the fund's capital shares.

H. Capital share transactions for each class of shares were:

	Year Ended October 31,			
	2023		2022	
	Amount (\$000)	Shares (000)	Amount (\$000)	Shares (000)
<b>ETF Shares</b>				
Issued <sup>1</sup>	77,245	1,944	192,647	3,818
Issued in Lieu of Cash Distributions	—	—	—	—
Redeemed <sup>2</sup>	(234,570)	(5,800)	(110,966)	(2,600)
Net Increase (Decrease)—ETF Shares	(157,325)	(3,856)	81,681	1,218
<b>Admiral Shares</b>				
Issued <sup>1</sup>	38,297	1,497	80,760	2,822
Issued in Lieu of Cash Distributions	1,549	61	19,717	624
Redeemed <sup>2</sup>	(72,998)	(2,958)	(110,818)	(4,043)
Net Increase (Decrease)—Admiral Shares	(33,152)	(1,400)	(10,341)	(597)

	Year Ended October 31,			
	2023		2022	
	Amount (\$000)	Shares (000)	Amount (\$000)	Shares (000)
<b>Institutional Shares</b>				
Issued <sup>1</sup>	25,220	309	4	—
Issued in Lieu of Cash Distributions	151	2	1,728	16
Redeemed <sup>2</sup>	(45)	—	—	—
Net Increase (Decrease)—Institutional Shares	25,326	311	1,732	16

1 Includes purchase fees for fiscal 2023 and 2022 of \$159,000 and \$254,000, respectively (fund totals).

2 Net of redemption fees for fiscal 2023 and 2022 of \$173,000 and \$326,000, respectively (fund totals).

I. Significant market disruptions, such as those caused by pandemics (e.g., COVID-19 pandemic), natural or environmental disasters, war (e.g., Russia's invasion of Ukraine), acts of terrorism, or other events, can adversely affect local and global markets and normal market operations. Any such disruptions could have an adverse impact on the value of the fund's investments and fund performance.

To the extent the fund's investment portfolio reflects concentration in a particular market, industry, sector, country or asset class, the fund may be adversely affected by the performance of these concentrations and may be subject to increased price volatility and other risks.

The use of derivatives may expose the fund to various risks. Derivatives can be highly volatile, and any initial investment is generally small relative to the notional amount so that transactions may be leveraged in terms of market exposure. A relatively small market movement may have a potentially larger impact on derivatives than on standard securities. Leveraged derivatives positions can, therefore, increase volatility. Additional information regarding the fund's use of derivative(s) and the specific risks associated is described under significant accounting policies.

At October 31, 2023, one shareholder was a record or beneficial owner of 25% of the fund's net assets. If this shareholder were to redeem its investment in the fund, the redemption might result in an increase in the fund's expense ratio, cause the fund to incur higher transaction costs, or lead to the realization of taxable capital gains.

J. Management has determined that no events or transactions occurred subsequent to October 31, 2023, that would require recognition or disclosure in these financial statements.

# Report of Independent Registered Public Accounting Firm

To the Board of Trustees of Vanguard International Equity Index Funds and Shareholders of Vanguard Global ex-U.S. Real Estate Index Fund

## ***Opinion on the Financial Statements***

We have audited the accompanying statement of assets and liabilities, including the schedule of investments, of Vanguard Global ex-U.S. Real Estate Index Fund (one of the funds constituting Vanguard International Equity Index Funds, referred to hereafter as the "Fund") as of October 31, 2023, the related statement of operations for the year ended October 31, 2023, the statement of changes in net assets for each of the two years in the period ended October 31, 2023, including the related notes, and the financial highlights for each of the five years in the period ended October 31, 2023 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Fund as of October 31, 2023, the results of its operations for the year then ended, the changes in its net assets for each of the two years in the period ended October 31, 2023 and the financial highlights for each of the five years in the period ended October 31, 2023 in conformity with accounting principles generally accepted in the United States of America.

## ***Basis for Opinion***

These financial statements are the responsibility of the Fund's management. Our responsibility is to express an opinion on the Fund's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Fund in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our procedures included confirmation of securities owned as of October 31, 2023 by correspondence with the custodian, transfer agent and brokers; when replies were not received from brokers, we performed other auditing procedures. We believe that our audits provide a reasonable basis for our opinion.

/s/PricewaterhouseCoopers LLP  
Philadelphia, Pennsylvania  
December 19, 2023

We have served as the auditor of one or more investment companies in The Vanguard Group of Funds since 1975.

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**Tax information (unaudited)**

The fund hereby designates \$1,312,000, or if subsequently determined to be different, the maximum amount allowable by law, as qualified dividend income for individual shareholders for the fiscal year.

The fund hereby designates \$70,000, or if subsequently determined to be different, the maximum amount allowable by law, of interest earned from obligations of the U.S. government which is generally exempt from state income tax.

The fund designates to shareholders foreign source income of \$178,776,000 and foreign taxes paid of \$13,780,000, or if subsequently determined to be different, the maximum amounts allowable by law. Form 1099-DIV reports calendar-year amounts that can be included on the income tax return of shareholders.

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# The People Who Govern Your Fund

The trustees of your mutual fund are there to see that the fund is operated and managed in your best interests since, as a shareholder, you are a part owner of the fund. Your fund's trustees also serve on the board of directors of The Vanguard Group, Inc., which is owned by the Vanguard funds and provides services to them.

A majority of Vanguard's board members are independent, meaning that they have no affiliation with Vanguard or the funds they oversee, apart from the sizable personal investments they have made as private individuals. The independent board members have distinguished backgrounds in business, academia, and public service. Each of the trustees and executive officers oversees 205 Vanguard funds.

Information for each trustee and executive officer of the fund appears below. That information, as well as the Vanguard fund count, is as of the date on the cover of this fund report. The mailing address of the trustees and officers is P.O. Box 876, Valley Forge, PA 19482. More information about the trustees is in the *Statement of Additional Information*, which can be obtained, without charge, by contacting Vanguard at 800-662-7447, or online at [vanguard.com](http://vanguard.com).

## Interested Trustee<sup>1</sup>

### **Mortimer J. Buckley**

Born in 1969. Trustee since January 2018. Principal occupation(s) during the past five years and other experience: chairman of the board (2019–present) of Vanguard and of each of the investment companies served by Vanguard; chief executive officer (2018–present) of Vanguard; chief executive officer, president, and trustee (2018–present) of each of the investment companies served by Vanguard; president and director (2017–present) of Vanguard; and president (2018–present) of Vanguard Marketing Corporation. Chief investment officer (2013–2017), managing director (2002–2017), head of the Retail Investor Group (2006–2012), and chief information officer (2001–2006) of Vanguard. Member of the board of governors of the Investment Company Institute and the board of governors of FINRA.

## Independent Trustees

### **Tara Bunch**

Born in 1962. Trustee since November 2021. Principal occupation(s) during the past five years and other experience: head of global operations at Airbnb (2020–present). Vice president of AppleCare (2012–2020). Member of the board of directors of Out & Equal, the advisory board of the University of California, Berkeley School of Engineering, and the advisory board of Santa Clara University's Leavey School of Business.

### **Emerson U. Fullwood**

Born in 1948. Trustee since January 2008. Principal occupation(s) during the past five years and other experience: executive chief staff and marketing officer for North America and corporate vice president (retired 2008) of Xerox Corporation (document management products and services). Former president of the Worldwide Channels Group, Latin America, and Worldwide Customer Service and executive chief staff officer of Developing Markets of Xerox. Executive in residence and 2009–2010 Distinguished Minett Professor at the Rochester Institute of Technology. Member of the board of directors of the University of Rochester Medical Center, the Monroe Community College Foundation, the United Way of Rochester, North Carolina A&T University, Roberts Wesleyan College, and the Rochester Philharmonic Orchestra. Trustee of the University of Rochester.

### **F. Joseph Loughrey**

Born in 1949. Trustee since October 2009. Principal occupation(s) during the past five years and other experience: president and chief operating officer (retired 2009) and vice chairman of the board (2008–2009) of Cummins Inc. (industrial machinery). Director of the V Foundation. Member of the advisory council for the College of Arts and Letters at the University of Notre Dame. Chairman of the board of Saint Anselm College.

### **Mark Loughridge**

Born in 1953. Trustee since March 2012. Principal occupation(s) during the past five years and other experience: senior vice president and chief financial

<sup>1</sup> Mr. Buckley is considered an "interested person," as defined in the Investment Company Act of 1940, because he is an officer of the Vanguard funds.

officer (retired 2013) of IBM (information technology services). Fiduciary member of IBM's Retirement Plan Committee (2004–2013), senior vice president and general manager (2002–2004) of IBM Global Financing, vice president and controller (1998–2002) of IBM, and a variety of other prior management roles at IBM. Member of the Council on Chicago Booth.

#### **Scott C. Malpass**

Born in 1962. Trustee since March 2012. Principal occupation(s) during the past five years and other experience: chief investment officer (retired 2020) and vice president (retired 2020) of the University of Notre Dame. Chair of the board of Catholic Investment Services, Inc. (investment advisors). Member of the board of superintendence of the Institute for the Works of Religion, the Notre Dame 403(b) Investment Committee, and the board of directors of Paxos Trust Company (finance).

#### **Deanna Mulligan**

Born in 1963. Trustee since January 2018. Principal occupation(s) during the past five years and other experience: chief executive officer of Purposeful (advisory firm for CEOs and C-level executives; 2021–present). Board chair (2020), chief executive officer (2011–2020), and president (2010–2019) of The Guardian Life Insurance Company of America. Chief operating officer (2010–2011) and executive vice president (2008–2010) of Individual Life and Disability of the Guardian Life Insurance Company of America. Director of DuPont. Member of the board of the Economic Club of New York. Trustee of the Partnership for New York City (business leadership), Chief Executives for Corporate Purpose, and the NewYork-Presbyterian Hospital.

#### **André F. Perold**

Born in 1952. Trustee since December 2004. Principal occupation(s) during the past five years and other experience: George Gund Professor of Finance and Banking, Emeritus at the Harvard Business School (retired 2011). Chief investment officer and partner of HighVista Strategies (private investment firm). Member of the board of RIT Capital Partners (investment firm).

#### **Sarah Bloom Raskin**

Born in 1961. Trustee since January 2018. Principal occupation(s) during the past five years and other experience: deputy secretary (2014–2017) of the United States Department of the Treasury. Governor (2010–2014) of the Federal Reserve Board. Commissioner (2007–2010) of financial regulation for the State of Maryland. Colin W. Brown Distinguished Professor of the Practice of Law, Duke Law School (2021–present); Rubenstein Fellow, Duke University (2017–2020); Distinguished Fellow of the Global Financial Markets Center, Duke Law School (2020–2022); and Senior Fellow, Duke Center on Risk

(2020–present). Partner of Kaya Partners (climate policy advisory services). Member of the board of directors of Arcadia (energy solution technology).

#### **Grant Reid**

Born in 1959. Trustee since July 2023. Principal occupation(s) during the past five years and other experience: chief executive officer and president (2014–2022) and member of the board of directors (2015–2022) of Mars, Incorporated (multinational manufacturer). Member of the board of directors of Marriott International, Inc. Chair of Agribusiness Task Force, Sustainable Markets Initiative.

#### **David Thomas**

Born in 1956. Trustee since July 2021. Principal occupation(s) during the past five years and other experience: president of Morehouse College (2018–present). Professor of business administration, emeritus at Harvard University (2017–2018). Dean (2011–2016) and professor of management (2016–2017) at the Georgetown University McDonough School of Business. Director of DTE Energy Company. Trustee of Common Fund.

#### **Peter F. Volanakis**

Born in 1955. Trustee since July 2009. Principal occupation(s) during the past five years and other experience: president and chief operating officer (retired 2010) of Corning Incorporated (communications equipment) and director of Corning Incorporated (2000–2010) and Dow Corning (2001–2010). Director (2012) of SPX Corporation (multi-industry manufacturing). Overseer of the Amos Tuck School of Business Administration, Dartmouth College (2001–2013). Member of the BMW Group Mobility Council.

## Executive Officers

### Jacqueline Angell

Born in 1974. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Chief compliance officer (November 2022–present) of Vanguard and of each of the investment companies served by Vanguard. Chief compliance officer (2018–2022) and deputy chief compliance officer (2017–2019) of State Street.

### Christine M. Buchanan

Born in 1970. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Chief financial officer (2021–present) and treasurer (2017–2022) of each of the investment companies served by Vanguard. Partner (2005–2017) at KPMG (audit, tax, and advisory services).

### John Galloway

Born in 1973. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Investment stewardship officer (September 2020–present) of each of the investment companies served by Vanguard. Head of Investor Advocacy (February 2020–present) and head of Marketing Strategy and Planning (2017–2020) at Vanguard. Special assistant to the President of the United States (2015).

### Ashley Grim

Born in 1984. Principal occupation(s) during the past five years and other experience: treasurer (February 2022–present) of each of the investment companies served by Vanguard. Fund transfer agent controller (2019–2022) and director of Audit Services (2017–2019) at Vanguard. Senior manager (2015–2017) at PriceWaterhouseCoopers (audit and assurance, consulting, and tax services).

### Jodi Miller

Born in 1980. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Finance director (2022–present) of each of the investment companies served by Vanguard. Head of Enterprise Investment Services (2020–present), head of Retail Client Services and Operations (2020–2022), and head of Retail Strategic Support (2018–2020) at Vanguard.

### Anne E. Robinson

Born in 1970. Principal occupation(s) during the past five years and other experience: general counsel (2016–present) of Vanguard. Secretary (2016–present) of Vanguard and of each of the investment companies served by Vanguard. Managing director (2016–present) of Vanguard. Managing director and general counsel of Global Cards and Consumer Services (2014–2016) at Citigroup. Counsel (2003–2014) at American Express. Nonexecutive director (2022–present) of the board of National Grid (energy).

### Michael Rollings

Born in 1963. Principal occupation(s) during the past five years and other experience: finance director (2017–present) and treasurer (2017) of each of the investment companies served by Vanguard. Managing director (2016–present) of Vanguard. Chief financial officer (2016–present) of Vanguard. Director (2016–present) of Vanguard Marketing Corporation. Executive vice president and chief financial officer (2006–2016) of MassMutual Financial Group.

## Vanguard Senior Management Team

Matthew Benchener

Joseph Brennan

Mortimer J. Buckley

Gregory Davis

John James

Chris D. McIsaac

Thomas M. Rampulla

Karin A. Risi

Anne E. Robinson

Michael Rollings

Nitin Tandon

Lauren Valente



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You can review information about your fund on the SEC's website, and you can receive copies of this information, for a fee, by sending a request via email addressed to [publicinfo@sec.gov](mailto:publicinfo@sec.gov).

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