

John Hancock  
Mid Cap Growth Fund

Quarterly portfolio holdings 6/30/2023

# Fund's investments

## As of 6-30-23 (unaudited)

	Shares	Value
<b>Common stocks 97.6%</b>		<b>\$1,384,444,127</b>
(Cost \$1,239,128,235)		
<b>Communication services 7.2%</b>		<b>102,554,555</b>
<b>Entertainment 6.1%</b>		
Liberty Media Corp.-Liberty Formula One, Series C (A)	292,947	22,053,050
Live Nation Entertainment, Inc. (A)	211,205	19,242,888
Spotify Technology SA (A)	286,763	46,039,800
<b>Interactive media and services 1.1%</b>		
ZoomInfo Technologies, Inc. (A)	599,402	15,218,817
<b>Consumer discretionary 15.0%</b>		<b>212,727,537</b>
<b>Automobile components 0.7%</b>		
Mobileye Global, Inc., Class A (A)(B)	245,955	9,449,591
<b>Automobiles 0.8%</b>		
Rivian Automotive, Inc., Class A (A)	695,285	11,583,448
<b>Broadline retail 1.0%</b>		
Global-e Online, Ltd. (A)	355,497	14,554,047
<b>Hotels, restaurants and leisure 5.8%</b>		
Aramark	384,288	16,543,598
Chipotle Mexican Grill, Inc. (A)	10,393	22,230,627
DraftKings, Inc., Class A (A)	712,362	18,927,458
Las Vegas Sands Corp. (A)	414,597	24,046,626
<b>Household durables 1.2%</b>		
Lennar Corp., A Shares	135,802	17,017,349
<b>Specialty retail 3.1%</b>		
Burlington Stores, Inc. (A)	68,311	10,751,468
Ross Stores, Inc.	297,067	33,310,123
<b>Textiles, apparel and luxury goods 2.4%</b>		
Deckers Outdoor Corp. (A)	65,029	34,313,202
<b>Consumer staples 5.2%</b>		<b>74,188,263</b>
<b>Beverages 2.3%</b>		
Celsius Holdings, Inc. (A)(B)	217,708	32,479,857
<b>Food products 1.9%</b>		
Lamb Weston Holdings, Inc.	237,749	27,329,248
<b>Personal care products 1.0%</b>		
e.l.f. Beauty, Inc. (A)	125,879	14,379,158
<b>Energy 4.2%</b>		<b>59,717,017</b>
<b>Oil, gas and consumable fuels 4.2%</b>		
Cheniere Energy, Inc.	118,851	18,108,138
Diamondback Energy, Inc.	101,490	13,331,726
Pioneer Natural Resources Company	60,149	12,461,670
Targa Resources Corp.	207,825	15,815,483
<b>Financials 6.2%</b>		<b>88,382,067</b>
<b>Capital markets 3.6%</b>		
Ares Management Corp., Class A	249,539	24,043,083
Tradeweb Markets, Inc., Class A	404,270	27,684,410
<b>Financial services 2.6%</b>		
Block, Inc. (A)	550,617	36,654,574

	Shares	Value
<b>Health care 25.5%</b>		<b>\$362,118,906</b>
<b>Biotechnology 3.7%</b>		
Exact Sciences Corp. (A)	436,469	40,984,439
United Therapeutics Corp. (A)	49,969	11,030,657
<b>Health care equipment and supplies 14.5%</b>		
Align Technology, Inc. (A)	140,065	49,532,587
DexCom, Inc. (A)	398,091	51,158,671
Hologic, Inc. (A)	164,832	13,346,447
Inspire Medical Systems, Inc. (A)	94,964	30,829,113
Insulet Corp. (A)	118,586	34,193,087
Shockwave Medical, Inc. (A)	94,463	26,960,685
<b>Health care providers and services 1.3%</b>		
agilon health, Inc. (A)(B)	1,073,743	18,618,704
<b>Health care technology 3.4%</b>		
Veeva Systems, Inc., Class A (A)	245,466	48,535,992
<b>Life sciences tools and services 1.8%</b>		
Agilent Technologies, Inc.	114,294	13,743,854
Medpace Holdings, Inc. (A)	51,624	12,398,536
<b>Pharmaceuticals 0.8%</b>		
Jazz Pharmaceuticals PLC (A)	87,006	10,786,134
<b>Industrials 17.1%</b>		<b>241,747,118</b>
<b>Aerospace and defense 1.3%</b>		
Axon Enterprise, Inc. (A)	92,270	18,003,722
<b>Building products 2.7%</b>		
Builders FirstSource, Inc. (A)	114,392	15,557,312
Johnson Controls International PLC	344,984	23,507,210
<b>Commercial services and supplies 2.2%</b>		
Copart, Inc. (A)	335,545	30,605,059
<b>Construction and engineering 2.7%</b>		
Fluor Corp. (A)	723,194	21,406,542
MasTec, Inc. (A)	143,995	16,987,090
<b>Machinery 1.5%</b>		
The Toro Company	204,525	20,789,966
<b>Professional services 6.7%</b>		
CoStar Group, Inc. (A)	382,027	34,000,403
EXL Service Holdings, Inc. (A)	138,134	20,866,522
Paycom Software, Inc.	124,590	40,023,292
<b>Information technology 15.8%</b>		<b>223,751,981</b>
<b>Electronic equipment, instruments and components 2.8%</b>		
Flex, Ltd. (A)	1,438,936	39,772,191
<b>IT services 3.2%</b>		
Gartner, Inc. (A)	38,177	13,373,785
MongoDB, Inc. (A)	25,495	10,478,190
Okta, Inc. (A)	303,282	21,032,607
<b>Semiconductors and semiconductor equipment 4.8%</b>		
First Solar, Inc. (A)	50,737	9,644,596
MKS Instruments, Inc.	146,162	15,800,112
SolarEdge Technologies, Inc. (A)	90,833	24,438,619
Universal Display Corp.	125,913	18,147,841
<b>Software 5.0%</b>		
DocuSign, Inc. (A)	513,555	26,237,525

	Shares	Value
<b>Information technology (continued)</b>		
<b>Software (continued)</b>		
Workday, Inc., Class A (A)	198,444	\$44,826,515
<b>Materials 1.4%</b>		<b>19,256,683</b>
<b>Chemicals 1.4%</b>		
Albemarle Corp.	86,318	19,256,683
<b>Preferred securities 0.4%</b>		<b>\$6,580,550</b>
(Cost \$9,360,258)		
<b>Information technology 0.4%</b>		<b>6,580,550</b>
<b>Software 0.4%</b>		
Essence Group Holdings Corp. (A)(C)(D)	2,958,957	3,461,980
Lookout, Inc., Series F (A)(C)(D)	392,767	3,118,570
<b>Exchange-traded funds 0.7%</b>		<b>\$10,183,739</b>
(Cost \$9,138,900)		
iShares Russell Mid-Cap Growth ETF (B)	105,389	10,183,739
	<b>Yield (%)</b>	<b>Shares</b>
<b>Short-term investments 2.0%</b>		<b>\$28,250,860</b>
(Cost \$28,248,438)		
<b>Short-term funds 2.0%</b>		
John Hancock Collateral Trust (E)	5.1773(F)	2,003,469
State Street Institutional U.S. Government Money Market Fund, Premier Class	5.0063(F)	8,226,586
<b>Total investments (Cost \$1,285,875,831) 100.7%</b>		<b>\$1,429,459,276</b>
<b>Other assets and liabilities, net (0.7%)</b>		<b>(10,449,879)</b>
<b>Total net assets 100.0%</b>		<b>\$1,419,009,397</b>

The percentage shown for each investment category is the total value of the category as a percentage of the net assets of the fund.

**Security Abbreviations and Legend**

- (A) Non-income producing security.
- (B) All or a portion of this security is on loan as of 6-30-23. The value of securities on loan amounted to \$19,654,598.
- (C) Restricted security as to resale. For more information on this security refer to the Notes to fund's investments.
- (D) Security is valued using significant unobservable inputs and is classified as Level 3 in the fair value hierarchy.
- (E) Investment is an affiliate of the fund, the advisor and/or subadvisor. This security represents the investment of cash collateral received for securities lending.
- (F) The rate shown is the annualized seven-day yield as of 6-30-23.

## Notes to Fund's investments (unaudited)

**Security valuation.** Investments are stated at value as of the scheduled close of regular trading on the New York Stock Exchange (NYSE), normally at 4:00 P.M., Eastern Time. In case of emergency or other disruption resulting in the NYSE not opening for trading or the NYSE closing at a time other than the regularly scheduled close, the net asset value (NAV) may be determined as of the regularly scheduled close of the NYSE pursuant to the Advisor's Valuation Policies and Procedures.

In order to value the securities, the fund uses the following valuation techniques: Equity securities, including exchange-traded or closed-end funds, are typically valued at the last sale price or official closing price on the exchange or principal market where the security trades. In the event there were no sales during the day or closing prices are not available, the securities are valued using the last available bid price. Investments by the fund in open-end mutual funds, including John Hancock Collateral Trust (JHCT), are valued at their respective NAVs each business day.

In certain instances, the Pricing Committee of the Advisor may determine to value equity securities using prices obtained from another exchange or market if trading on the exchange or market on which prices are typically obtained did not open for trading as scheduled, or if trading closed earlier than scheduled, and trading occurred as normal on another exchange or market.

Other portfolio securities and assets, for which reliable market quotations are not readily available, are valued at fair value as determined in good faith by the Pricing Committee following procedures established by the Advisor and adopted by the Board of Trustees. The frequency with which these fair valuation procedures are used cannot be predicted and fair value of securities may differ significantly from the value that would have been used had a ready market for such securities existed.

The fund uses a three tier hierarchy to prioritize the pricing assumptions, referred to as inputs, used in valuation techniques to measure fair value. Level 1 includes securities valued using quoted prices in active markets for identical securities, including registered investment companies. Level 2 includes securities valued using other significant observable inputs. Observable inputs may include quoted prices for similar securities, interest rates, prepayment speeds and credit risk. Prices for securities valued using these inputs are received from independent pricing vendors and brokers and are based on an evaluation of the inputs described. Level 3 includes securities valued using significant unobservable inputs when market prices are not readily available or reliable, including the Advisor's assumptions in determining the fair value of investments. Factors used in determining value may include market or issuer specific events or trends, changes in interest rates and credit quality. The inputs or methodology used for valuing securities are not necessarily an indication of the risks associated with investing in those securities. Changes in valuation techniques and related inputs may result in transfers into or out of an assigned level within the disclosure hierarchy.

The following is a summary of the values by input classification of the fund's investments as of June 30, 2023, by major security category or type:

	Total value at 6-30-23	Level 1 quoted price	Level 2 significant observable inputs	Level 3 significant unobservable inputs
<b>Investments in securities:</b>				
<b>Assets</b>				
Common stocks	\$1,384,444,127	\$1,384,444,127	—	—
Preferred securities	6,580,550	—	—	\$6,580,550
Exchange-traded funds	10,183,739	10,183,739	—	—
Short-term investments	28,250,860	28,250,860	—	—
<b>Total investments in securities</b>	<b>\$1,429,459,276</b>	<b>\$1,422,878,726</b>	<b>—</b>	<b>\$6,580,550</b>

**Investment in affiliated underlying funds.** The fund may invest in affiliated underlying funds that are managed by the Advisor and its affiliates. Information regarding the fund's fiscal year to date purchases and sales of the affiliated underlying funds as well as income and capital gains earned by the fund, if any, is as follows:

Affiliate	Ending share amount	Beginning value	Cost of purchases	Proceeds from shares sold	Realized gain (loss)	Change in unrealized appreciation (depreciation)	Dividends and distributions		Ending value
							Income distributions received	Capital gain distributions received	
John Hancock Collateral Trust	2,003,469	\$44,683,221	\$170,902,957	\$(195,549,350)	\$(13,630)	\$1,076	\$169,984	—	\$20,024,274

**Restricted securities.** The fund may hold restricted securities which are restricted as to resale and the fund has limited rights to registration under the Securities Act of 1933. Disposal may involve time-consuming negotiations and expenses, and prompt sale at an acceptable price may be difficult to achieve. The following table summarizes the restricted securities held at June 30, 2023:

Issuer, Description	Original acquisition date	Acquisition cost	Beginning share amount	Shares purchased	Shares sold	Ending share amount	Value as a percentage of net assets	Ending value
Essence Group Holdings Corp.	5-1-14 <sup>1</sup>	\$5,083,384	2,958,957	—	—	2,958,957	0.2%	\$3,461,980
Lookout, Inc., Series F	7-31-14 <sup>1</sup>	4,276,874	392,767	—	—	392,767	0.2%	3,118,570

Issuer, Description	Original acquisition date	Acquisition cost	Beginning share amount	Shares purchased	Shares sold	Ending share amount	Value as a percentage of net assets	Ending value
								<b>\$6,580,550</b>

<sup>1</sup> Reflects original acquisition date of security transferred in a merger with John Hancock Funds II Mid Cap Growth Fund which took place after market close on 10-15-21. For additional information on the fund's significant accounting policies and risks, please refer to the fund's most recent semiannual or annual shareholder report and prospectus.