John Hancock Hedged Equity & Income Fund Form N-CSR March 01, 2019 UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM N-CSR

CERTIFIED SHAREHOLDER REPORT OF REGISTERED

MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number 811-22441

<u>John Hancock Hedged Equity & Income Fund</u> (Exact name of registrant as specified in charter)

200 Berkeley Street, Boston, Massachusetts 02116 (Address of principal executive offices) (Zip code)

Salvatore Schiavone

Treasurer 200 Berkeley Street

Boston, Massachusetts 02116

(Name and address of agent for service)

Registrant's telephone number, including area code: 617-663-4497

Date of fiscal year end: December 31

Date of reporting period: December 31, 2018

John Hancock

Hedged Equity & Income Fund

Ticker: HEQ

Annual report 12/31/18

Beginning on January 1, 2021, as permitted by regulations adopted by the Securities and Exchange Commission, paper copies of the fund's shareholder reports such as this one will no longer be sent by mail, unless you specifically request paper copies of the reports from the transfer agent or from your financial intermediary. Instead, the reports will be made available on our website, and you will be notified by mail each time a report is posted and be provided with a website link to access the report.

If you have already elected to receive shareholder reports electronically, you will not be affected by this change and you do not need to take any action. You may elect to receive shareholder reports and other communications electronically by calling the transfer agent, Computershare, at 800-852-0218, by going to "Communication Preferences" at computershare.com/investor, or by contacting your financial intermediary.

You may elect to receive all reports in paper, free of charge, at any time. You can inform the transfer agent or your financial intermediary that you wish to continue receiving paper copies of your shareholder reports by following the instructions listed above. Your election to receive reports in paper will apply to all funds held with John Hancock Investments or your financial intermediary.

Managed distribution plan

The fund has adopted a managed distribution plan (Plan). Under the Plan, the fund makes quarterly distributions of an amount equal to \$0.376 per share, which will be paid quarterly until further notice. The fund may make additional distributions: (i) for purposes of not incurring federal income tax at the fund level of investment company taxable income and net capital gain, if any, not included in such regular distributions; and (ii) for purposes of not incurring federal excise tax on ordinary income and capital gain net income, if any, not included in such regular distributions.

The Plan provides that the Board of Trustees of the fund may amend the terms of the Plan or terminate the Plan at any time without prior notice to the fund's shareholders. The Plan is subject to periodic review by the fund's Board of Trustees.

You should not draw any conclusions about the fund's investment performance from the amount of the fund's distributions or from the terms of the fund's Plan. The fund's total return at NAV is presented in the Financial highlights section.

With each distribution that does not consist solely of net income, the fund will issue a notice to shareholders and an accompanying press release that will provide detailed information regarding the amount and composition of the distribution and other related information. The amounts and sources of distributions reported in the notice to shareholders are only estimates and are not provided for tax reporting purposes. The actual amounts and sources of the amounts for tax reporting purposes will depend upon the fund's investment experience during the remainder of its fiscal year and may be subject to changes based on tax regulations. The fund will send you a Form 1099-DIV for the calendar year that will tell you how to report these distributions for federal income tax purposes. The fund may, at times, distribute more than its net investment income and net realized capital gains; therefore, a portion of your distribution may result in a return of capital. A return of capital may occur, for example, when some or all of the money that you invested in the fund is paid back to you. A return of capital does not necessarily reflect the fund's investment performance and should not be confused with yield or income.

A message to shareholders

Dear shareholder,

The past year proved a challenging one for equity investors as stock markets across many major economies worldwide posted losses. In the United States, new tariffs on a range of imports and heightened fears of a full-blown trade war with China weighed on investor sentiment despite relatively supportive U.S. economic fundamentals. Global economic growth slowed, and international markets have faced some challenging headwinds that may not abate in the near future.

Concerns about the potential for a more widespread global economic slowdown led to a significant increase in volatility as well as a flight to quality, particularly in the final months of the year. While at John Hancock Investments we believe that the bull market appears to be in the later innings, the economic underpinnings in the United States suggest that there's still room for stocks to run.

Your best resource in unpredictable and volatile markets is your financial advisor, who can help position your portfolio so that it's sufficiently diversified to meet your long-term objectives and to withstand the inevitable turbulence along the way.

On behalf of everyone at John Hancock Investments, I'd like to take this opportunity to welcome new shareholders and to thank existing shareholders for the continued trust you've placed in us.

Sincerely,

Andrew G. Arnott
President and CEO,
John Hancock Investments
Head of Wealth and Asset Management,
United States and Europe

This commentary reflects the CEO's views, which are subject to change at any time. Investing involves risks, including the potential loss of principal. Diversification does not guarantee a profit or eliminate the risk of a loss. It is not possible to invest directly in an index. For more up-to-date information, please visit our website at jhinvestments.com.

John Hancock Hedged Equity & Income Fund

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Your fund at a glance

INVESTMENT OBJECTIVE

The fund seeks to provide total return with a focus on current income and gains and also consisting of long-term capital appreciation.

AVERAGE ANNUAL TOTAL RETURNS AS OF 12/31/18 (%)

The MSCI All Country World Index is a free float-adjusted market-capitalization-weighted index that is designed to measure the equity market performance of developed and emerging markets.

It is not possible to invest directly in an index. Index figures do not reflect expenses and sales charges, which would result in lower returns.

The performance data contained within this material represents past performance, which does not guarantee future results.

Investment returns and principal value will fluctuate and a shareholder may sustain losses. Further, the fund's performance at net asset value (NAV) is different from the fund's performance at closing market price because the closing market price is subject to the dynamics of secondary market trading. Market risk may be increased when shares are purchased at a premium to NAV or sold at a discount to NAV. Current month-end performance may be higher or lower than the performance cited. The fund's most recent performance can be found at jhinvestment.com or by calling 800-852-0218.

PERFORMANCE HIGHLIGHTS OVER THE LAST TWELVE MONTHS

Trade tensions, interest-rate increases hurt equities

Global stocks suffered broad losses, weighed down by a combination of trade, interest-rate, and political risks.

The fund's equity exposure hurt relative results

The fund was down for the period and underperformed a comparative index, the MSCI All Country World Index, owing primarily to stock selection and sector allocation within its equity strategy.

Options and high-yield strategies also detracted from performance

The fund's equity option overlay and high-yield exposure detracted from relative results.

PORTFOLIO COMPOSITION AS OF 12/31/18 (%)

SECTOR COMPOSITION AS OF 12/31/18 (%)

A note about risks

As is the case with all exchange-listed closed-end funds, shares of this fund may trade at a discount or a premium to the fund's net asset value (NAV). An investment in the fund is subject to investment and market risks, including the possible loss of the entire principal invested. There is no guarantee prior distribution levels will be maintained, and distributions may include a substantial return of capital. A return of capital is the return of all or a portion of a shareholder's investment in the fund. For the fiscal year ended December 31,2018, the fund's aggregate distributions included a return of capital of \$0.25 per share, or 17% of aggregate distributions, which could impact the tax treatment of a subsequent sale of fund shares. See the financial highlights and notes to the financial statements for details of the return of capital and risks associated with distributions made by the fund. The fund's prospectus includes additional information regarding returns of capital and the risks associated with distributions made by the fund, including potential tax implications. Fixed-income investments are subject to interest-rate risk; their value will normally decline as interest rates rise. An issuer of securities held by the fund may default, have its credit rating downgraded, or otherwise perform poorly, which may affect fund performance. Derivatives transactions, including hedging and other strategic transactions, may increase a fund's volatility and could produce disproportionate losses, potentially more than the fund's principal investment. Liquidity the extent to which a security may be sold or a derivative position closed without negatively affecting its market value may be impaired by reduced trading volume, heightened volatility, rising interest rates, and other market conditions. Foreign investing, especially in emerging markets, has additional risks, such as currency and market volatility and political and social instability. Investments in higher-yielding, lower-rated securities include a higher risk of default. The primary risks associated with the use of futures contracts and options are imperfect correlation, unanticipated market movement, and counterparty risk. Cybersecurity incidents may allow an unauthorized party to gain access to fund assets, customer data, or proprietary information, or cause a fund or its service providers to suffer data corruption or lose operational functionality. Similar incidents affecting issuers of a fund's securities may negatively impact performance.

Discussion of fund performance

What were the main factors driving market performance during the 12 months ended December 31, 2018?

Global equity markets lost ground over the period, finishing the year in negative territory. Escalating inflation risks knocked the rallying market off course, leading to a sharp correction and a large spike in volatility at the beginning of February. Through the late spring and summer, an intensification of trade war rhetoric, strong U.S. economic data, and a strengthening U.S. dollar formed a divergence between markets as the United States broadly outperformed international markets, most notably China and other developing economies. Global equities finished the year in a turbulent downtrend, weighed down by the stress of higher interest rates, tariff uncertainty, and shifts in political power.

The fund underperformed for the period. What trends led to these results?

The fund generated a negative absolute return and underperformed a comparative benchmark, the MSCI All Country World Index. Underperformance was driven by weak security selection, particularly in the consumer discretionary, consumer staples, and industrials sectors. Sector allocation was also a detractor, particularly the equity portfolio's underweight allocations to the information technology and healthcare sectors.

The fund's global high-yield and option strategies also detracted from performance, while the beta hedge, which is designed to reduce equity exposure through selling futures on the S&P 500 Index, MSCI EAFE Index, and STOXX 50 Index, contributed to results as global markets declined over the year.

TOP 10 HOLDINGS AS OF 12-31-18 (%)		COUNTRY COMPOSITION AS OF 12-31-18 (%)		
Novartis AG	1.8	United States	40.8	
Roche Holding AG	1.7	United Kingdom	11.0	
TOTAL SA	1.6	Japan	8.1	
Verizon Communications, Inc.	1.4	Switzerland	6.8	
AstraZeneca PLC	1.3	France	4.2	
Unilever NV	1.3	Netherlands	3.0	
The Coca-Cola Company	1.3	Canada	2.8	
QUALCOMM, Inc.	1.2	Italy	2.7	
Zurich Insurance Group AG	1.1	Finland	2.2	
Royal Dutch Shell PLC, B Shares	1.1	Australia	2.1	
TOTAL	13.8	Other countries	16.3	
		TOTAL	100.0	
As a percentage of net assets.		As a percentage of net assets.		
Cash and cash equivalents are not includ	ed.			
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Which holdings and strategies had the most significant positive and negative impacts?

The top relative detractors were retail company L Brands, Inc. and our decision not to hold global e-commerce retailer Amazon.com, Inc., although we did initiate a position in this firm late in the period. The top relative contributors were media and entertainment company SES SA and pharmaceutical manufacturer AstraZeneca PLC.

How was the fund positioned at the end of the period?

From a factor perspective, while we maintain exposure to value and growth for capital appreciation, we're increasingly looking to quality and low volatility to mitigate downside participation. At the end of the period, the fund's largest overweights were in energy and utilities, while the largest underweights were in information technology and consumer staples. From a regional perspective, the fund was most overweight in Europe and most underweight in North America.

Economic data suggests that the global cycle has peaked, and we expect a deceleration of growth. Signs of a slowdown are appearing in developed markets as input costs rise and ongoing trade disputes depress exports. We also expect growth in emerging markets to continue to weaken due to global trade tensions, higher funding costs, and lower domestic demand.

Can you tell us about a recent manager change?

Effective December 31, 2018, Kent M. Stahl, CFA, retired.

MANAGED BY

Gregg R. Thomas, CFA

On the fund since 2011 Investing since 1993

The views expressed in this report are exclusively those of Gregg R. Thomas, CFA, Wellington Management Company LLP, and are subject to change. They are not meant as investment advice. Please note that the holdings discussed in this report may not have been held by the fund for the entire period. Portfolio composition is subject to review in accordance with the fund's investment strategy and may vary in the future. Current and future portfolio holdings are subject to risk.

Fund's investments AS OF 12-31-18

AS OF 12-31-16	~1	** •
	Shares	
Common stocks 80.6%		\$142,367,037
(Cost \$163,549,399)		
Communication services		15,108,826
8.6%		13,100,020
Diversified		
telecommunication		
services 5.3%		
AT&T, Inc.	13,354	381,123
BCE, Inc.	37,034	1,462,968
BT Group PLC	528,085	1,605,692
CenturyLink, Inc.	13,171	199,541
China Telecom Corp.,	501.055	256 724
Ltd., H Shares	301,033	256,724
China Unicom Hong	240.220	255 042
Kong, Ltd.	240,230	255,943
Hellenic		
Telecommunications	15,792	172,305
Organization SA	,	•
KT Corp.	8,424	224,627
LG Uplus Corp. (A)	42,081	
Magyar Telekom	,	,
Telecommunications	76.545	120,390
PLC	,	,
O2 Czech Republic AS	31,143	334,832
Proximus SADP	3,418	92,487
Spark New Zealand,	•	
Ltd.	63,538	177,234
Telefonica Deutschland		
Holding AG	28,588	112,520
Telenor ASA	40.163	779,977
Verizon	,	,
Communications, Inc.	43 575	2,449,787
(B)	13,575	2,112,707
Entertainment 0.2%		
Avex, Inc.	7,210	91,320
DeNA Company, Ltd.	6,260	104,416
Konami Holdings Corp.	900	39,548
NHN Entertainment	700	
Corp. (A)	1,945	100,009
Nintendo Company,		
Ltd.	273	72,492
Interactive media and		
services 0.6%		
Alphabet, Inc., Class A		
•	388	405,444
(A)	120	0.388
Autohome, Inc., ADR	120	9,388
Baidu, Inc., ADR (A)	312	49,483
	1,405	184,181

Facebook, Inc., Class A		
(A)		
Gree, Inc.	30,510	120,573
Momo, Inc., ADR (A)	709	16,839
SINA Corp. (A)	528	28,322
Yahoo Japan Corp.	90,820	225,935
Media 1.7%		
Cheil Worldwide, Inc.	21.019	625 155
(A)	31,016	625,155
Eutelsat	2,017	39,737
Communications SA	2,017	39,131
Fuji Media Holdings,	5 425	74,935
Inc.	5,435	14,933
Gendai Agency, Inc.	3,360	13,471
Metropole Television	6,559	105,510
SA	0,557	103,310
Nippon Television	10,110	148,837
Holdings, Inc.	10,110	170,037
Omnicom Group, Inc.	8,129	595,368
ProSiebenSat.1 Media SE	4,759	84,680

 $^{7\}mathrm{JOHN}$ HANCOCK HEDGED EQUITY & INCOME FUND | ANNUAREE NOTES TO FINANCIAL STATEMENTS

Shares Value

Communication

services (continued) Media

(continued)

Proto Corp.

1,960 \$24,964

RTL

Group SA 3,251 174,223

SES SA 40,118768,104