John Hancock Investment Management

Third quarter 2022

Attribution report

John Hancock Diversified Macro Fund

Managed by

Graham Capital Management

Portfolio management of the John Hancock Diversified Macro Fund is provided by Graham Capital Management, the Fund's sub-adviser. John Hancock Investment Management Distributors LLC is the Fund's distributor.

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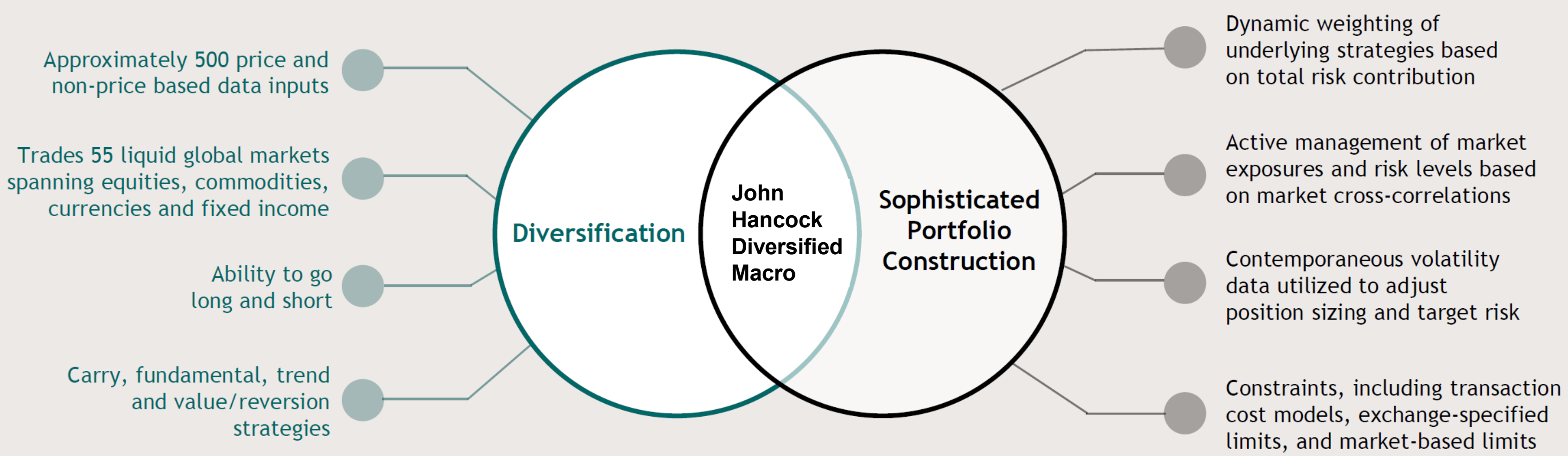
John Hancock Diversified Macro Fund
Overview

- John Hancock Diversified Macro Fund generates returns from a variety of fundamental and price-based indicators. The strategy generates directional long and short signals to trade opportunistically in rising and falling markets.
- Diversification is at the core of the strategy, both at the model and market level.
  - Incorporates hundreds of discrete data series to generate return forecasts across global equity, commodity, currency, and fixed income markets.
  - Signals have no long or short bias and are generated based on yield, macro fundamental forecasts, directional price trends, and departures from historical valuations.
  - Forecasts are combined by a proprietary portfolio construction process (the Risk Overlay) to ensure diversification at the market level and component strategy level.

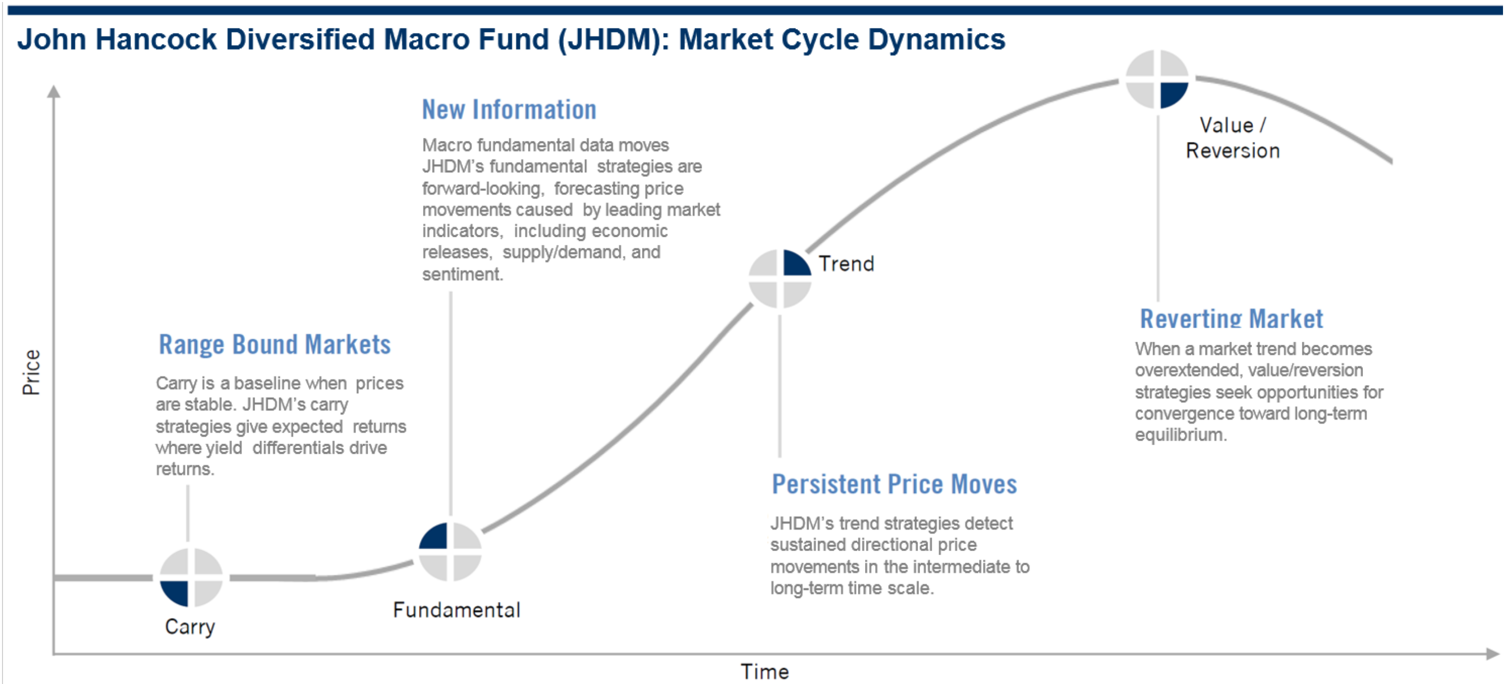
John Hancock Diversified Macro Fund Key Characteristics



Diversification does not guarantee a profit or eliminate the risk of loss. No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment.

John Hancock Diversified Macro Fund
Theoretical foundation

- It is difficult for any single trading strategy to perform well in all market environments. Diverse portfolios with complementary drivers may fare better over time.
- GCM's Quantitative Research team developed the strategy by identifying well-defined market conditions in a typical market cycle and then deliberately choosing trading styles that can potentially perform well in these different environments.
- The fund combines multiple trading strategies in a single portfolio, with the objective of performing well across a variety of market conditions.
- Further, each underlying strategy was constructed in such a way as to provide diversifying performance to the others. Each strategy is run at all times, but tends to behave differently in various market conditions.
- Through portfolio construction, strategies are dynamically weighted while the level of market diversification is also incorporated, with the goal of enhancing returns.



For illustrative purposes only.

John Hancock Diversified Macro Fund
Complementary performance and dynamic weightings

Complementary performance of component strategies

- The fund's underlying strategies are specifically designed to behave differently during various market environments and therefore can complement one another from a performance perspective.

- GCM's research indicates that all four component strategies should have approximately equal performance over time.

Positive Performance | Flat Performance | Negative Performance

	2019	2020	2021	YTD 2022
Carry	Negative	Flat	Positive	Positive
Fundamental	Flat	Negative	Positive	Positive
Trend	Positive	Positive	Negative	Positive
Value/Reversion	Positive	Positive	Positive	Positive
Overall Portfolio	Positive	Negative	Negative	Positive

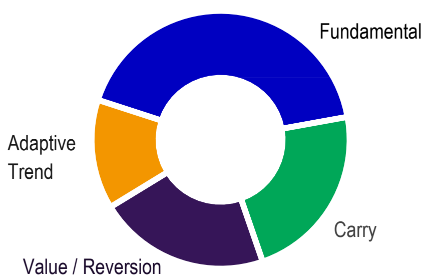
*Based on performance since fund inception on July 29, 2019 through September 30, 2022. Note that 2019 reflects a partial year.

Dynamic weighting methodology

- While the component strategies are constructed to be diversifying over the long run, the fund seeks to run a balanced portfolio at all times in terms of the overall risk contribution by trading style.

- The fund utilizes a targeted risk contribution methodology which assesses the rolling correlation and volatility of the underlying strategies and gives a larger allocation to strategies that are the most diversifying while reducing allocations to strategies that are temporarily aligned.

JH Diversified Macro Fund

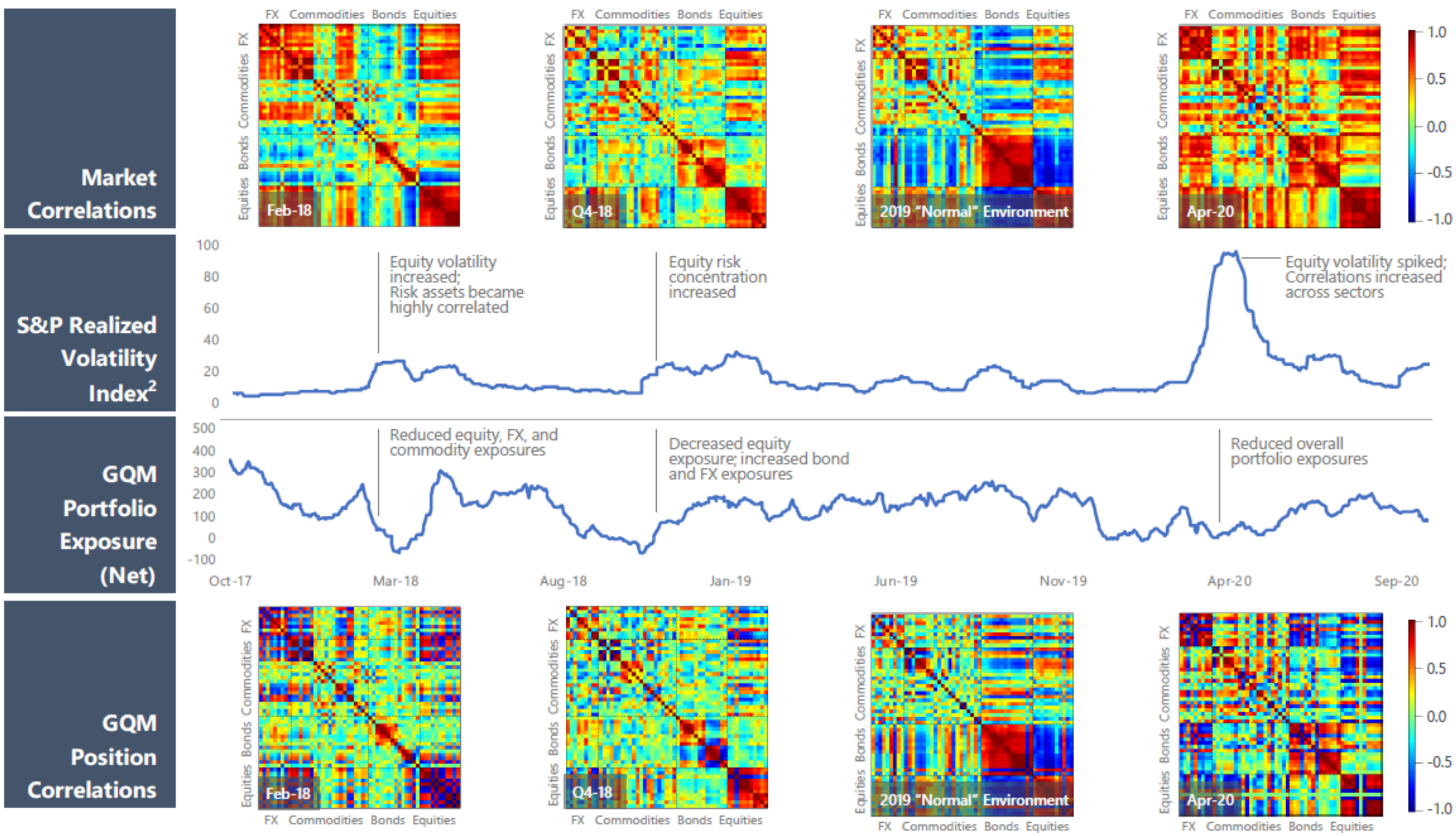


Directional, long and short strategy that utilizes a variety of fundamental and price-based indicators to establish return forecasts across global markets. Represents average allocation since inception.

For illustrative purposes only. Past performance is not indicative of future results. Diversification does not guarantee a profit or eliminate the risk of loss. No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment.

John Hancock Diversified Macro Fund
Positioning in recent market extremes

GCM's quantitative portfolio construction process actively manages portfolio risk using short-term estimates of market risk, including correlations and volatilities. For example, when market correlations and/or volatility levels are high, the strategy may modify positions to ensure that it achieves portfolio volatility targets and remains diversified. Below we highlight examples from February 2018, Q4 2018, and March and April 2020 when market correlations and volatility levels increased while GQM maintained a balanced, diversified portfolio. These illustrations should not suggest hat the portfolio is able to maintain consistent diversification at all times. Further, portfolio diversification does not necessarily correlate to a particular level of performance and may be disadvantageous under certain market conditions.



John Hancock Diversified Macro Fund
Fund performance

Standardized performance (%) as of September 30, 2022

John Hancock Diversified Macro Fund	QTD	YTD	1 Year	3 Year	5 Year	Since Inception (7/29/2019)
Without sales charge (Class I)	0.19	18.28	15.93	3.70	-	4.46
Without sales charge (Class A)	0.10	18.10	15.58	3.39	-	4.17
With 5% maximum sales charge (Class A)	-4.92	12.14	9.81	1.64	-	2.48
ICE BofA 0-3 Month U.S. Treasury Bill Index	0.48	0.64	0.65	0.56	-	0.64

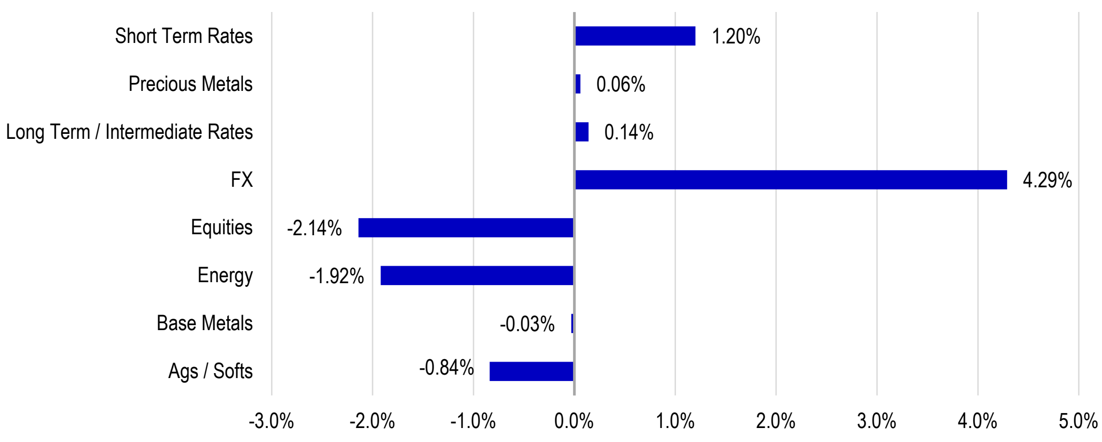
The performance data shown represents past performance, which does not guarantee future results. Investment returns and principal value will fluctuate, so that investors' shares, when sold, may be worth more or less than their original cost. See performance data current to the most recent month end, which may be higher or lower than that cited. Performance figures assume that all distributions are reinvested. Performance shown is for the share class indicated only. The performance of other share classes will vary.

The Fund's Class A share net annual operating expense ratio as of the current prospectus is 1.66% and gross of 1.67% with a contractual waiver date of 7/31/2023. Class I share expenses are currently at 1.42% gross and 1.41% net. Expenses for other share classes will vary, which will affect returns. Performance figures assume that all distributions are reinvested. Performance quoted without sales charges would be reduced if the sales charges were applied. Contractual through 7/31/2023.
The Intercontinental Exchange (ICE) Bank of America (BofA) 0–3 Month U.S. Treasury Bill Index tracks the performance of U.S. dollar-denominated U.S. Treasury bills publicly issued in the U.S. domestic market with a remaining term to final maturity of less than three months. It is not possible to invest in an index.

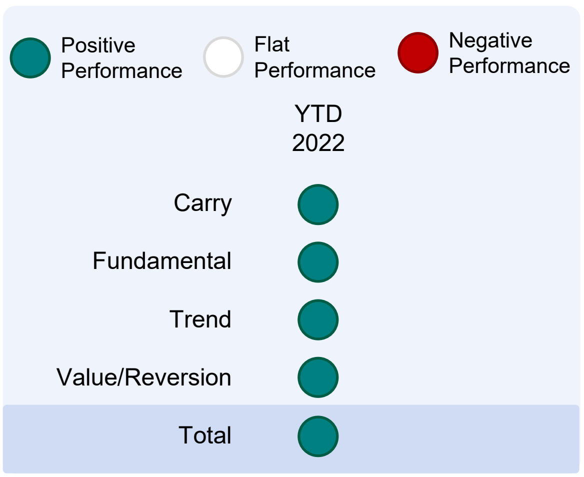
John Hancock Diversified Macro Fund
Performance attributions as of September 30, 2022

Sector Name	July	August	September	Q3	2022 YTD
Ags / Softs	-0.21%	0.16%	-0.79%	-0.84%	**-0.30%**
Base Metals	0.03%	-0.12%	0.07%	-0.03%	**0.18%**
Energy	0.07%	-0.76%	-1.24%	-1.92%	**9.98%**
Equities	0.11%	-0.74%	-1.52%	-2.14%	**-1.84%**
FX	-0.27%	1.98%	2.54%	4.29%	**9.15%**
Long Term / Intermediate Rates	0.21%	-0.18%	0.12%	0.14%	**-3.23%**
Precious Metals	-0.42%	0.50%	-0.02%	0.06%	**0.47%**
Short Term Rates	-0.34%	0.70%	0.83%	1.20%	**4.53%**
Total	**-0.82%**	**1.53%**	**-0.07%**	**0.63%**	**19.68%**

Performance by sector – Q3 2022



Performance by Component Strategy



The gross performance information does not reflect reductions for fees and expenses of the fund. Had the fees been reflected, performance would have been lower. Past performance is not indicative of future results.

John Hancock Diversified Macro Fund

Quarterly commentary

July 2022

The Graham Quant Macro Portfolio experienced losses in commodities, most notably from mixed positions in precious metals and long positions in various agricultural commodity markets. Long agricultural commodity positions were driven by a combination of carry, trend, and value strategies while long energy positions were driven by a combination of the underlying strategies. In currencies, losses resulted from short exposure to the Japanese yen, Australian dollar, and New Zealand dollar versus the U.S. dollar. Long U.S. dollar positions continued to be influenced by a combination of carry, trend, and value strategies as well as portfolio construction considerations. The Portfolio also experienced modest losses in fixed income, primarily due to evolving positions on the front end of the yield curve in Europe, with smaller losses from short positions in Australian and U.K bonds. The macro fundamental and trend sub-strategies were primarily responsible for generating short fixed income positions. The Portfolio produced modest profits in equities, most notably from mixed positions in Asian benchmark indices. Short equity positions were driven mainly by the macro fundamental and trend sub-strategies.

August 2022

The Graham Quant Macro Portfolio generated strong gains in currencies due to long U.S. dollar exposure vs. the British pound sterling, Japanese yen, euro, Swiss franc, and Australian dollar, among others. Long U.S. dollar positions continued to be influenced by a combination of carry, trend, and value strategies as well as portfolio construction considerations. The Portfolio also recorded profits in fixed income, mainly from short positions on the front end of the yield curve in Europe and across the yield curve in the U.K. The macro fundamental and trend sub-strategies were primarily responsible for generating short fixed income positions. In commodities, short positions in precious metals and mixed positions in various agricultural commodities resulted in positive performance, which was partially offset by losses from long positions in crude oil and gasoline. Short positions in precious metals were mainly influenced by carry, macro fundamental, and trend strategies, while agricultural commodity positions were driven by a combination of the underlying strategies. Losses in equities were driven primarily by evolving positions in European benchmark indices and long positions in U.S. benchmark indices. Equity positions were generated by a combination of sub-strategies.

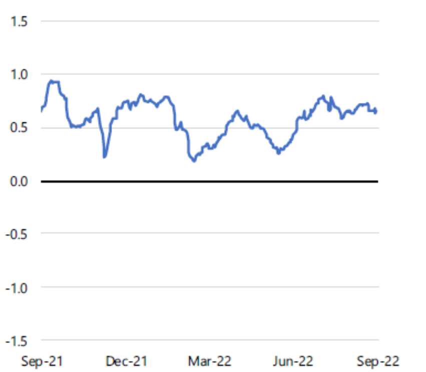
September 2022

The Graham Quant Macro Portfolio experienced losses in commodities due to long positions in energy, especially natural gas and, to a lesser extent, oil, as well as from various agricultural commodities including wheat, soybeans, and cotton. Long positions in energy were driven by carry, trend, and value models while agricultural commodity positions were driven by a combination of the underlying strategies. The Portfolio also recorded losses in equities due to modest long positions in global benchmark indices. Long equity positions were generated by a combination of sub-strategies and supplemented by portfolio construction considerations as these positions have low correlation to other positions in the portfolio. The Portfolio generated strong gains in currencies due to a stronger U.S. dollar versus the Australian dollar, British pound sterling, Japanese yen, New Zealand dollar, and euro, among others. Long U.S. dollar positions continued to be influenced by a combination of carry, trend, and value strategies as well as portfolio construction considerations. Positive performance in fixed income was driven mainly by modest short positions across the yield curve in the U.S. and U.K. Gains were partially offset by losses from long positions in European bonds. The trend sub-strategies were primarily responsible for generating short fixed income positions

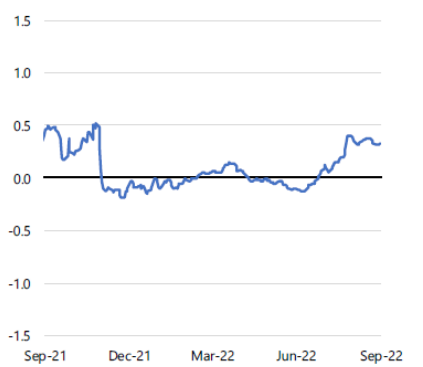
John Hancock Diversified Macro Fund
Quarterly positioning

Delta by sector (Last 12 months ending Q3 2022)

Currency Delta (USD) (%)

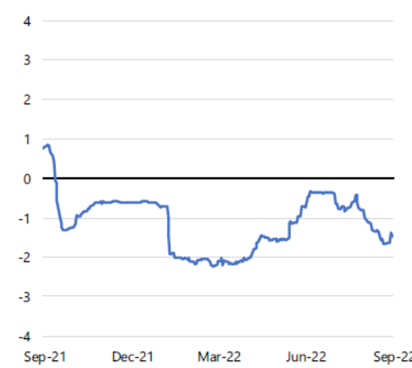


Equity Delta (%)



Long Term/Intermediate Rates Delta (%)

Short Term Rates Delta (%)



Ags/Softs Delta (%)

Base Metals Delta (%)

Energy Delta (%)

Precious Metals Delta (%)

Delta is a measure of sensitivity of the value of a portfolio to changes in the value of the underlying assets. Delta represents the change in portfolio value in response to 1% increase in the value of the underlying assets. This commentary is provided for informational purposes only, is subject to change and is not intended to be investment advice. No forecasts are guaranteed. The information contained here is based on sources believed to be reliable, but it is neither all inclusive nor guaranteed by John Hancock Investment Management.

John Hancock Diversified Macro Fund
Top 10 contributors to risk as of September 30, 2022

Position Name	Incremental VaR	Position
GBPUSD 12/23/2022	13.47	Short
JPYUSD 12/23/2022	13.06	Short
GOLD 100 OZ FUTR Dec22	9.50	Short
AUDUSD 12/23/2022	8.60	Short
LONG GILT FUTURE Dec22	8.10	Short
3MO EURO EURIBOR Dec23	7.11	Short
SILVER FUTURE Dec22	7.04	Short
3 MONTH SOFR FUT Dec23	6.96	Short
CHFUSD 12/23/2022	6.73	Short
US LONG BOND(CBT) Dec22	6.68	Short

Holdings will vary over time.
VaR statistics: GCM uses a one day 97.5% Monte Carlo VaR that measures both upside and downside exceedances of realized profit and loss outside two standard deviation bands (95% confidence interval). The calculated VaR is as provided by RiskMetrics. The daily profit (or loss) of the strategy, however, has exceeded its VaR as calculated by RiskMetrics, up to two times more often than is statistically predicted. This suggests that RiskMetrics' VaR underreports the strategy's risk and would need to be significantly higher to meet its predicted rate of exceedances. FX Incremental VaR represents the value at risk associated with foreign currency positions versus the U.S. dollar. Incremental VaR statistics for the FX crosses are calculated under the assumption that the 'long leg' of a cross-rate position is deemed to be long versus the U.S. dollar, while the 'short leg' of a cross-rate position is deemed to be short versus the U.S. dollar (thereby resulting in a Long/Short VaR and Gross Exposure that are artificially inflated).

John Hancock Diversified Macro Fund

Net exposures as of September 30, 2022

Exposure by sector (%)

Sector	Gross Exposure	Net Exposure	Net Position
Equities	34.05	26.03	Long
Ags / Softs	14.16	11.39	Long
Energy	5.65	5.65	Long
Base Metals	3.13	-0.34	Short
Precious Metals	11.44	-11.44	Short
Short Term Rates	13.21	-13.21	Short
Long Term / Intermediate Rates	28.99	-17.64	Short
FX	61.24	-51.57	Short
Portfolio	**171.87**	**-51.13**	

Exposure by region (%)

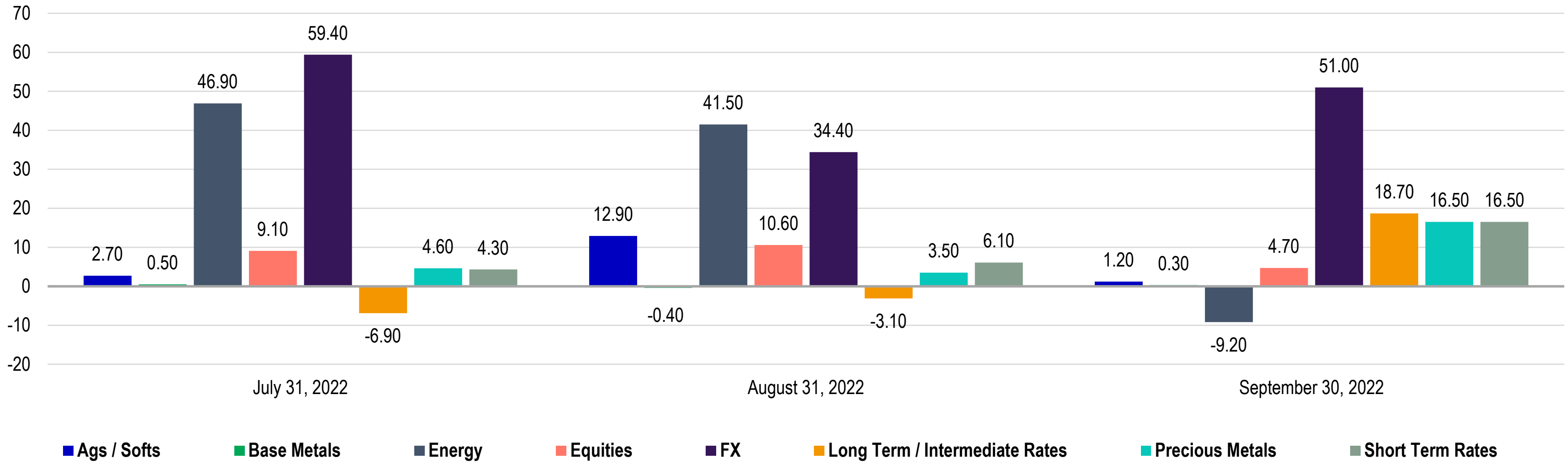
Region	Gross Exposure	Net Exposure	Net Position
Latin & South America	4.06	4.06	Long
Eurozone	20.79	3.05	Long
Scandinavia	0.08	-0.08	Short
Canada	2.27	-0.72	Short
Japan	32.72	-2.36	Short
Asia	2.86	-2.86	Short
Switzerland	10.72	-10.72	Short
Australia/NZ	16.06	-13.20	Short
US	50.33	-13.51	Short
UK	31.98	-14.80	Short
Portfolio	**171.87**	**-51.13**	

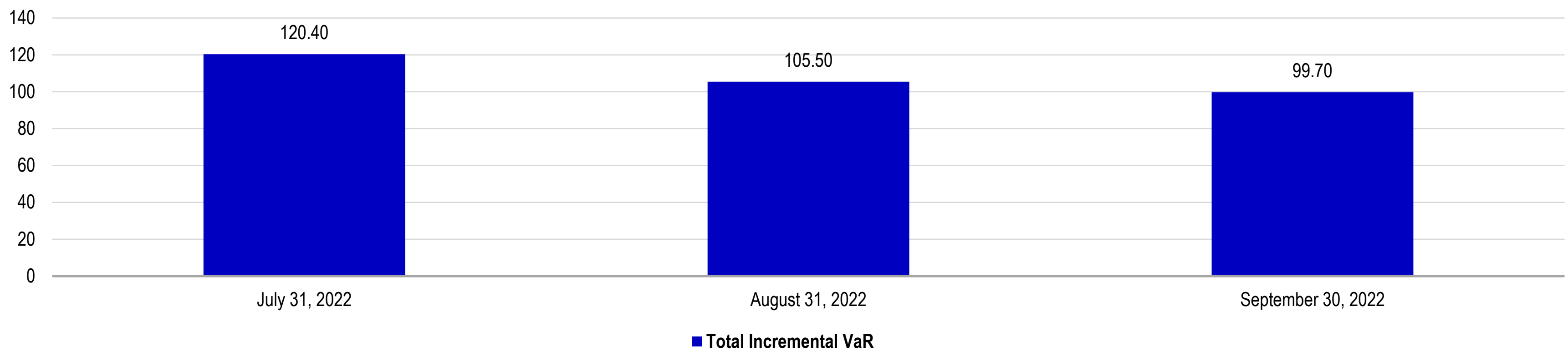
Allocations will vary over time.

John Hancock Diversified Macro Fund

Incremental Value at Risk (VaR) by sector as of September 30, 2022

Sector VaR (bps)





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Additional information

John Hancock Diversified Macro Fund

Class (A) JDJAX **Class (C) JDJCX** **Class (I) JDJIX**

Quantitative models may not accurately predict future market movements or characteristics, which may negatively impact performance. The use of hedging and derivatives could produce disproportionate gains or losses and may increase costs. The fund's use of derivatives may result in a leveraged portfolio which may not be successful and may create additional risks, including heightened price and return volatility. Exposure to commodities and commodities markets may also subject the fund to greater volatility than investments in traditional securities. Commodity investments can be volatile and are affected by speculation, supply-and-demand dynamics, geopolitical stability, and other factors. Large company stocks may underperform the market as a whole. Foreign investing has additional risks, such as currency and market volatility and political and social instability. The securities of small companies are subject to higher volatility than those of larger, more established companies. Fixed-income investments are subject to interest-rate and credit risk; their value will normally decline as interest rates rise or if an issuer is unable or unwilling to make principal or interest payments. The extent to which a security may be sold or a derivative position closed without negatively impacting its market value may be impaired by reduced market activity or participation, legal restrictions, or other economic and market impediments. By investing in a subsidiary, the fund is indirectly exposed to the risks associated with the subsidiary's investments and operations. The tax treatment of commodity-related investments and income from the subsidiary may be adversely affected by future U.S. tax legislation, regulation, or guidance. Please see the fund's prospectus for additional risks.

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Clients should carefully consider a fund's investment objectives, risks, charges, and expenses before investing. To request a prospectus or summary prospectus with this and other important information, call us at 866-582-2777, or visit us at jhinvestments.com.