4Q18 Portfolio Commentary

Janus Henderson INVESTORS

Global Research Fund
VIT Global Research Portfolio

Investment Environment

Equity markets were volatile and some major indices hit or neared correction territory. Fears of slowing global economic growth, rising trade tensions between the U.S. and China, a rising federal funds rate and the potential for a disorderly "Brexit" all played a role in driving stocks lower. The technology and industrial sectors were among the worst performers in the index during the month. While indices ended the period down, markets rebounded somewhat in the last few days of December.

Performance Discussion

The Fund underperformed its benchmark, the MSCI World Index℠, and its secondary benchmark, the MSCI All Country World Index℠. While we aim to outperform over shorter periods, our goal is to provide consistent outperformance long term by focusing on what we consider our strength: picking stocks and avoiding macroeconomic risks. Stocks are selected by our six global sector teams, which employ a bottom-up, fundamental approach to identify what we consider the best global opportunities.

Our stock selection in the energy and consumer sectors detracted most from relative performance. Stock selection in the industrial and health care sectors contributed to relative results.

Amazon was our largest detractor on an absolute basis. The stock was down after the company released earnings guidance below consensus estimates. International growth for the company has also slowed in recent months, but our general view on the stock hasn't changed. The company's scale and distribution advantage have entrenched it as the dominant e-commerce platform, which could allow it to continue gaining consumer wallet share as shopping gravitates to online and mobile purchases. Meanwhile, Amazon Web Services is improving the way companies utilize IT services, using its scale to offer a disruptive pricing model to businesses seeking IT functions in the cloud.

Activision Blizzard was another detractor. The stock fell after missing earnings expectations. We continue to believe there are some broad, favorable secular trends around video games as the demographic audience for gaming is growing and engagement is increasing. However, we did trim the position during the quarter because we believe the range of outcomes for the company has widened, and trimming the position makes room to add to position sizes of higher conviction ideas.

Highlights

- Equity markets were volatile and some major indices hit or neared correction territory.
- The Fund underperformed its benchmark during the period.
- We believe equity investors should be prepared for more volatility in the coming months. Several factors suggest that the global economy could deliver slower growth in 2019.

Portfolio Management

Team Managed

Neurocrine Biosciences was also a detractor. One of its treatments, Ingrezza, treats tardive dyskinesia, a debilitating condition characterized by involuntary and repetitive movements that can be caused by some medications such as antipsychotic therapies. After the drug's commercial launch, uptake of Ingrezza has exceeded estimates, highlighting the large market opportunity in this first indication. A recent clinical trial testing Ingrezza in the management of Tourette syndrome failed this quarter, which weighed on the stock. In our view, the market for Tourette syndrome was small relative to the approved use cases for the drug. We continue to believe Neurocrine's products address high, unmet medical needs and will grow into substantial sources of revenue for the company.

Starbucks was our top contributor on an absolute basis. Better-than-expected fourth earnings from improved same-store sales both in the U.S. and China served as a catalyst for the stock. We continue to like the company and believe its global brand and network of stores are a competitive advantage as it sells a habitual product to consumers around the world.

Merck was another top contributor. The pharmaceutical giant has reported positive earnings and revenue growth driven, in part, by sales of Keytruda, a cancer-fighting immunotherapy. We believe Keytruda still has significant growth potential; in late summer, both the FDA and European Medicines Agency approved a combination treatment of Keytruda and chemotherapy to address non-small cell lung cancer, the largest cancer indication. Late-stage clinical trials showed that this combination significantly improved overall survival for patients, reducing the risk of death by more than 50% compared to chemotherapy alone. In addition, Merck continues to research other potential indications for the drug. For example, the company recently reported positive trial data for Keytruda to treat kidney and esophageal cancers. And in November, the FDA approved Keytruda for recurring cases of liver cancer.

Another pharmaceutical company, Eli Lilly, was also a top contributor. The stock climbed after the firm reported positive results from a mid-stage clinical trial for a drug that targets two hormones in diabetes patients. In the study, Eli Lilly's drug demonstrated best-in-class blood sugar reduction and body weight loss in patients with type 2 diabetes, the most common type of diabetes globally. Eli Lilly has initiated phase 3 trials for the treatment, with results expected in late 2021. Given the promising results thus far, we believe this therapy could have multibillion-dollar sales potential. This would add to Eli Lilly's expanding roster of recently approved products, including Emgality, a migraine prevention treatment that won FDA approval in 2018, which we believe also has strong potential.

For detailed performance information, please visit janushenderson.com/performance.

Outlook

We believe equity investors should be prepared for more volatility in the coming months. The business cycle is aging, a decades-low unemployment rate in the U.S. has started to put upward pressure on wages and the Federal Reserve continues to normalize monetary policy. In addition, geopolitical risks have created headwinds, from ongoing trade tensions between the U.S. and China to uncertainty about Brexit. While these factors do not signal that a recession is imminent, in our opinion, they do suggest that the global economy could deliver slower growth in 2019.

In such an environment, we believe stocks sensitive to economic growth or interest-rate moves could be challenged. As a result, we continue to look for growth stories that we believe will persist irrespective of the business cycle, including innovation in health care and the shift to the digital economy. At the same, market volatility has led to a significant re-rating in the valuations of stocks globally. As multiples improve, we will aim to take advantage of secular growth stories that previously looked expensive. Select emerging market stocks, for example, could benefit from the potential diversification of global supply chains while companies with ample free cash flows may decide to increase dividends or repurchase shares. In our experience, focusing on these types of fundamentals makes it easier to ride out periods of market volatility and often leads to better long-term results.

Top Contributors and Detractors for the Quarter Ended 12/31/18

Top Contributors	Ending Weight (%)	Contribution (%)	Top Detractors	Ending Weight (%)	Contribution (%)
Starbucks Corporation	1.13	0.13	Amazon.com, Inc.	2.50	-0.72
HDFC Bank Ltd	1.36	0.11	Activision Blizzard, Inc.	0.00	-0.50
Merck & Co., Inc.	1.46	0.10	British American Tobacco PLC	1.20	-0.44
Eli Lilly and Company	1.09	0.08	Neurocrine Biosciences Inc	0.70	-0.43
NRG Energy Inc	1.67	0.08	Alphabet Inc.	3.16	-0.41

The holdings identified in this table, in compliance with Janus Henderson policy, do not represent all of the securities purchased, held or sold during the period. To obtain a list showing every holding as a percentage of the portfolio at the end of the most recent publicly available disclosure period, contact 800.668.0434 or visit janushenderson.com/info.

Top Contributors

Starbucks: The coffee retailer is a global brand, selling a habitual product, and we believe the company has a sustainable margin profile. Given these characteristics, we believe the stock trades at an attractive multiple relative to the market. Going forward, we like the potential for Starbucks to grow earnings per share and return cash to shareholders.

HDFC Bank: We believe HDFC Bank has one of the best management teams among Indian financial companies. We like that the company has been a consistent leader in developing new business lines, strategies and wisely allocating risk-adjusted capital to sustain returns. We believe the bank enjoys best-in-class technology, data analytics and digital customer service in India, which is now driving powerful operating leverage.

Merck: The pharmaceutical company is benefiting from the rapid sales growth of Keytruda, a leading checkpoint inhibitor for the treatment of certain cancers, including melanoma and non-small cell lung cancer. We believe Merck is well positioned to expand Keytruda for other indications in the near future. We also like the management team, which has executed clinical trials well.

Eli Lilly and Company: The pharmaceutical company is benefiting from a number of recent drug launches, including Trulicity, which helps lower blood sugar for diabetes patients; Jardiance, a treatment that lowers the risk of cardiovascular death in diabetics; Taltz, used by adults with moderate to severe psoriasis, a chronic skin condition; Olumiant, an oral drug for rheumatoid arthritis; and Emgality, a CGRP inhibitor to prevent migraines. We believe these products will help drive sales growth and lead to significant margin expansion for the company.

NRG Energy: NRG Energy owns and operates a diverse portfolio of power-generating facilities, primarily in the U.S. We think the wholesale energy provider should benefit from a long-term process of retiring coal plants and a rebound in natural gas prices. We also believe management's plan to cut costs and divest some businesses should help the company significantly grow free cash flow.

Top Detractors

Amazon: The online retailer is a major player in a number of retail categories, and offers an appealing combination of value and convenience. As a result, membership in its annual subscription service, Amazon Prime, has increased at a double-digit rate in recent years, creating a loyal base of shoppers who tend to spend more than non-Prime members. In addition, Amazon Web Services (AWS), the firm's cloud-computing business, is an industry leader. Importantly, we believe AWS has a long runway of growth, as we are only in the early stages of companies shifting workloads from onsite servers to the cloud.

Activision: Activision is a developer and publisher of interactive video games. We continue to believe there are some broad, favorable secular trends around video games as the demographic audience for gaming is growing, and engagement is increasing. However, we did trim the position during the month because we believe the range of outcomes for the company has widened, and trimming the position makes room to add to position sizes of higher conviction ideas.

British American Tobacco: The company produces a range of cigarettes and other tobacco products that it markets globally. Key brands include Dunhill, Kent, Pall Mall and Lucky Strike. British American continues to earn high returns on invested capital (ROIC), and we believe it is poised to generate steady profit growth as well as an attractive dividend yield. The company is a leader in innovation and growth, with a powerful brand portfolio and high consumer loyalty.

Neurocrine Biosciences: Neurocrine Biosciences has benefited from continued sales growth for the company's lead drug, Ingrezza. Approved by the FDA in 2017, Ingrezza treats tardive dyskinesia, a debilitating condition characterized by involuntary and repetitive movements. After the drug's commercial launch, uptake of Ingrezza has exceeded estimates. We believe Neurocrine's drug addresses a high, unmet need and will continue to gain market share. In addition, we like that Neurocrine has a second partnered drug that launched in 2018 for women's health, as well as a growing pipeline of drugs created in-house.

Alphabet: We believe the Internet search engine leader, which was formerly known as Google, is well positioned with a resilient core search business and optionality around YouTube, Waymo, cloud computing and hardware. The company is also benefiting from the secular shift toward mobile, video, programmatic and cross-device advertising.

For more information, please visit **janushenderson.com.**

Please consider the charges, risks, expenses and investment objectives carefully before investing. For a prospectus or, if available, a summary prospectus containing this and other information, please call Janus Henderson at 800.668.0434 or download the file from janushenderson.com/info. Read it carefully before you invest or send money.

Past performance is no guarantee of future results. Call 800.668.0434 or visit janushenderson.com/performance for current month-end performance.

Discussion is based on the performance of Class I Shares.

The discussion and data quoted are based upon the results, holdings and characteristics of the similarly managed Janus Henderson mutual fund. Such data may vary for the Janus Henderson VIT portfolio due to asset size, investment guidelines and other factors. We believe the mutual fund most closely reflects the portfolio management style for this strategy.

As of 12/31/18 the top ten portfolio holdings of Janus Henderson Global Research Fund are: Alphabet Inc. (3.17%), Amazon.com, Inc. (2.51%), The Coca-Cola Company (2.30%), JPMorgan Chase & Co (1.88%), Safran SA (1.84%), Mastercard Incorporated (1.74%), Visa Inc (1.74%), NRG Energy Inc (1.67%), ASML Holding NV (1.66%) and Unilever NV (1.60%). There are no assurances that any portfolio currently holds these securities or other securities mentioned.

The opinions are as of 12/31/18 and are subject to change without notice. Janus Henderson may have a business relationship with certain entities discussed. The comments should not be construed as a recommendation of individual holdings or market sectors, but as an illustration of broader themes.

Security contribution to performance is measured by using an algorithm that multiplies the daily performance of each security with the previous day's ending weight in the portfolio and is gross of advisory fees. Fixed income securities and certain equity securities, such as private placements and some share classes of equity securities, are excluded.

Performance may be affected by risks that include those associated with non-diversification, portfolio turnover, short sales, potential conflicts of interest, foreign and emerging markets, initial public offerings (IPOs), high-yield and high-risk securities, undervalued, overlooked and smaller capitalization companies, real estate related securities including Real Estate Investment Trusts (REITs), derivatives, and commodity-linked investments. Each product has different risks. Please see the prospectus for more information about risks, holdings and other details.

Foreign securities are subject to additional risks including currency fluctuations, political and economic uncertainty, increased volatility, lower liquidity and differing financial and information reporting standards, all of which are magnified in emerging markets.

MSCI World IndexSM reflects the equity market performance of global developed markets.

MSCI All Country World IndexSM reflects the equity market performance of global developed and emerging markets.

Index performance does not reflect the expenses of managing a portfolio as an index is unmanaged and not available for direct investment.

Janus Henderson Distributors

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