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2018 LEADERSHIP

Jared Walker
Chief Investment Officer

Jeremi Vo
Chief Economist

Tabitha Wallace
Chief Marketing Officer

Chase Woodruff
Portfolio Manager

Dan Pointer
Portfolio Manager

Ricardo Figueiredo
Portfolio Manager

Gorda Godoladze
Portfolio Manager

Alex Spears
Portfolio Manager

Jacob Irvin
Portfolio Manager

Isaiah Chenoweth
Portfolio Manager
2018 represented a significantly volatile year in the financial markets. Asset classes across the board performed poorly despite continued economic growth. Equities performed well in Q1 following the tax reforms passed by Congress, but quickly sold off following trade concerns as the current executive administration pursued a domestic first policy. These fears were quelled going into Q2, and we saw a steady incline in equity valuations in Q3. In October, we witnessed a violent sell-off followed by a minor relief rally, then another violent sell-off in December upon news of the partial government shutdown. There was little relief in fixed income as rates rose throughout the year. Hike probabilities going into FOMC meetings in 2019 appear to point to a calmer 2019 in credit markets, and Fed commentary has gone more dovish as its inflation targets are being met in the short term.

We have begun making asset allocation a priority, and as our first move into our strategy, we began to turn over some of our ETF positions to reduce systematic risk. This played out well in October and December as selling these positions left us with cash that provided a cushion against some of the volatility. We anticipate that volatility will continue into 2019. Our allocation strategy will be critically important in 2019, as we seek to outperform our benchmarks.

Our fund returned 0.25% in 2018 with a Sharpe ratio of -0.80. We plan to allocate our portfolio to optimize our risk-adjusted return and to pursue new strategies in Fixed Income utilizing bonds rather than credit ETFs. The Equity portion of the fund returned 0.4%, substantially outperforming the S&P 500’s -4.38% return. We attribute this to the reduction of systematic risk following the closing of several positions in ETFs that we held in 2018. While equity overperformed, our Fixed Income portfolio struggled, returning -1.25% and underperforming its benchmark by -0.45%.
We plan to maintain a heavy cash position to ensure that, in the event of a recession, we have the means to purchase securities at depressed prices. We will be monitoring economic indicators closely. Following several partial inversions of the yield curve, rate hike probabilities began to level off and Fed commentary began to take a more dovish tone. Coming off a decade of quantitative easing will likely cause considerable volatility in credit and equity markets, much as it already has this year. We anticipate that, despite the Fed’s commentary, rates will continue to rise in Q2 2019, though short-term rate hikes will remain in line with the Fed’s inflation goals.

We remain optimistic heading into the first quarter of 2019, as economic data remains strong. Provided we do not see major economic slowdowns, we plan to take advantage of depressed equity prices should markets continue to sell off.

**Green and Gold Fund - 2018 Return**

![Graph showing Green and Gold Fund - 2018 Return](image)

**Green and Gold Fund 2018 Stats**

| 2018 Return: 0.25% | Standard Deviation: 2.77% | Sharpe Ratio: -0.80 |
In 2018, the U.S. stock market experienced a tremendous amount of stress, which provided excellent opportunities for the Green and Gold Fund to develop an improved investment strategy and understanding of the market. With the nine-year bull run of the S&P 500 continuing to climb higher in 2017, the volatile market in 2018 created concern of a looming bear market. However, economic data during 2018 continued to be positive. Strong GDP growth, strong labor markets and contractionary monetary policy were all present.

The U.S. economy grew 3.4% and 4.2% in the third and fourth quarters, respectively. Increased consumer spending and tax reform are believed to be the biggest drivers of growth in the economy. Across all sectors, the Green and Gold Fund adjusted valuation models based on the new corporate tax rates, but there was uncertainty on the full impact of tax cuts on corporations’ cash flows. While the extra spending from tax cuts provided temporary growth to the U.S. economy in 2018, it is possible that slow fourth-quarter earnings is an indicator of larger macroeconomic reverberations of the trade war.

This year marked the first time in almost 20 years when the number of job openings (6.94 million openings, according the Labor Department) exceeded the number of those unemployed (6.28 million). The U.S. economy also reached an unemployment rate of 3.7%, which has not been seen since 1969. Even so, we have seen some weaknesses in the labor market. The real wage growth has been hovering just above 0%, which poses an issue for policymakers. With inflation around 2% and housing prices up by 6.3% (according to the S&P CoreLogic Case Shiller Home Price Index), the labor force is having to make up income by working more hours. It is important to monitor these weaknesses and identify early indicators that could change economic conditions in 2019.

The federal funds rate has been a major input in our Fund’s expectations of economic growth in 2019. Although the Federal Reserve went through unusual political criticism for its monetary actions, it successfully hiked rates four times in 2018 to 2.5%. However, due to the slowed growth in the fourth quarter of 2018, the Green and Gold Fund believes 2019 will bring about only a small rate hike up to 2.75%-3.00%.
FIXED INCOME

Chase Woodruff

There was no shortage of commotion in Fixed Income throughout 2018. With unemployment hovering around 3.7% and the slow, but steady, increase in inflation, the market witnessed four rate hikes throughout 2018. However, the Federal Reserve Board, led by Jerome Powell, concluded 2018 with a slightly more dovish tone toward rate hikes in 2019, citing plans for only two increases.

Perhaps one of the most interesting occurrences during 2018 was the continued flattening of the yield curve and eventual inversion between the 2- and 5-year treasury yields, followed by a 1- and 5-year inversion roughly a month later. While a 2- and 10-year inversion is the generally accepted indicator of a looming recession, an inversion of any part of the yield curve should not be taken lightly.

Our Fixed Income portfolio was not invulnerable to the rate hikes and the uncertainty in the market. Due to our portfolio duration of 4.8, we saw a negative return of -1.25%, underperforming our benchmark by -0.45%. Our two short-term bond ETFs, ISTB and VCSH, held their own, with total returns of approximately 1.00% and .77%, respectively. Our mutual funds, FAGIX, FEPIX and USIBX, saw negative total returns of -6.86%, -1.31% and -1.48%, respectively. Our intermediate- and long-term bond ETFs, AGG and VCLT, returned -0.13% and -7.34%, respectively.

After much research and deliberation throughout 2018, we decided to revise our strategy for our Fixed Income portfolio heading into 2019. Moving out of mutual funds and ETFs, we will utilize individual bonds to better manage duration. We will continue to refine this strategy moving forward.

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<td>2018 Return:</td>
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The Alternatives sector portfolio experienced an annual return of -6.44% in 2018. As of the end of 2018, the Alternatives sector held positions in Powershares DB US Dollar Index Bullish ETF (UUP), Permanent Portfolio Class I ETF (PRPFX), Real Estate Select SPDR Fund (XLRE) and the Global X Silver Miners ETF (SIL). The dollar had a strong year and steadily rose in value, finishing with a 5.53% increase over the year. After careful deliberation, the portfolio exited its position in the Oppenheimer Developing Markets Fund (ODMAX) due to recent market volatility, potential credit issues in emerging markets based on a strong dollar and rising rates, and concern over the current administration’s domestic first policy. We are working to develop strategies to implement at the onset of 2019. Repositioning our individual holdings will allow the Alternatives sector the ability to explore opportunities to hedge the portfolio.

Investors could potentially run toward traditional hedging mechanisms, such as precious metals. With the dollar’s strong run, UUP had a positive 2018. PRPFX, which holds both gold and silver positions, suffered a fate similar to that of SIL, with a loss of 14.43%, due to depressed prices in silver. We are considering reducing our exposure to silver in favor of other precious metals and hedging mechanisms to protect against potentially heightened market volatility in 2019.

Looking forward to 2019, we will continue to monitor trends in interest rates, economic growth, unemployment rates and geopolitical events. As of now, it seems that indicators are pointing to a challenging year for global markets. As such, Alternatives will look for opportunities to reduce risk for the overall portfolio as the market climate continues to evolve.

**Portfolio Stats**

- **2018 Return:** -6.44%
- **Standard Deviation:** 2.16%
- **Sharpe Ratio:** -4.17
CONSUMER GOODS

Ricardo Figueiredo

The Consumer Goods portfolio performed well in 2018, returning 8.56%. With some of our holdings reaching their price targets, we sold PepsiCo (PEP) and Brunswick Corporation (BC) in April. The portfolio currently holds three individual securities: Dollar General Corp. (DG), Ford Motor Company (F) and Whirlpool Corporation (WHR).

Dollar General met earnings expectations in two of the four quarters of 2018, beating expectations in the third quarter and missing expectation in the second quarter. Dollar General operates in a market segment that benefited from the increase in consumer expenditures during the year. Dollar General expects to pursue approximately 2,075 real estate projects in 2019, including 975 new store openings, 1,000 mature store remodels and 100 store relocations.

This year, Ford announced its intent to restructure its portfolio, focusing on the SUV and pickup truck markets. The company is attempting to decrease operating costs by focusing on its most successful product segments, and also by investing in the development of electric vehicles, scheduled to be released in 2020. This strategy had a negative impact on the company's stock price.

Whirlpool saw slowing sales in the United States and abroad for most of the year, as it faced increases in steel prices resulting from the trade war. The company missed earnings expectations in the first and second quarters of the year, yet was able to beat expectations for the last quarter due primarily to increased sales in foreign markets. At the beginning of the year, the company received five awards at the CES technology fair in small and large appliances.

Moving into 2019, we will continue to re-evaluate our current positions and will search for new opportunities to fund long-term growth. We will continue to monitor economic indicators, including those related to consumer confidence and spending, as well as governmental actions that may affect the portfolio.

Portfolio Stats

2018 Return: 8.56%  Standard Deviation: 5.44%  Sharpe Ratio: 1.13
ENERGY AND UTILITIES

Gorda Godoladze

2018 was a volatile year, with fears of a global economic slowdown and interest rate increases in response to inflation. Despite a strong start, the Energy sector had a rough fourth quarter, dragging down the S&P 500 to close the year. Struggling with depressed oil prices, the Energy portfolio returned -16.17% in 2018. Overall, investors attempted to balance concerns surrounding supply and demand, foreign dependence, and trade friction.

The Energy portfolio currently consists of three holdings: Valero, Marathon Oil and the Energy Select Sector SPDR ETF (XLE). We exited our position in Haliburton in May. Throughout the fall semester, we worked to update price targets for our current holdings. With the potential rise in oil prices, we see substantial upside headed into 2019. We will continue to monitor developments in the energy markets. It is our intention to set stop loss limit orders on our current holdings in order to reduce downside risk. We are also working hard to identify new potential acquisitions for the portfolio.

Energy / Utilities - 2018 Return

Portfolio Stats

2018 Return: -16.17%  Standard Deviation: 11.94%  Sharpe Ratio: -1.57
The Financials sector experienced strong growth during most of 2018. With the Fed raising interest rates and President Trump’s corporate tax reform in full swing, the sector experienced unprecedented growth during a large portion of the year. However, early gains were offset by big losses later in the year for most of our holdings. Entering 2018, our holdings included Assured Guaranty Ltd., Blackstone Group, Financial Select Sector Spider ETF, and Invesco S&P SmallCap Financials. Assured Guaranty Ltd. was our best performer during the year. In 2018, Blackstone acquired Clarus, a leading life sciences investment firm. This acquisition enables Blackstone to address a void not only in its own portfolio, but in the industry as well.

As unemployment hovers around 3.7% and inflation rises, we should see more rate hikes in 2019. Overall, we successfully completed our 2018 goal to update price targets for all current holdings. The Financials sector portfolio is well-positioned heading into 2019.

Portfolio Stats

2018 Return: -6.44%  Standard Deviation: 4.45%  Sharpe Ratio: -2.02
HEALTHCARE

Amanda Maddox

The Green and Gold Fund Healthcare Sector returned 4.72% in 2018 and currently holds 207 shares of Baxter International (BAX), 125 shares of Gilead Sciences (GILD), 55 shares of United Health (UNH) and 266 shares of the Healthcare Select SPDR Fund (XLV). In the first quarter, Baxter reported a 43% year-over-year jump in earnings, boosted primarily by lower U.S. corporate taxes. Baxter repurchased over $500 million of its stock during the first quarter, with $2.1 billion still remaining under its share buyback program. Slowing medication delivery and clinical nutrition segments gave concern during 2018. Performance in these segments was heavily impacted by market disruptions resulting from Hurricane Maria.

Over the past three years, Gilead Sciences has lost over 35% of its value, due partly to falling hepatitis C sales as well as new competition in the HIV drug market. CEO John Milligan announced that he would step down last July, and Daniel O'Day took over the role of CEO in December of 2018. Gilead is now attempting to grow through three key therapeutic markets: hematology/oncology, inflammatory disorders, and nonalcoholic steatohepatitis (NASH). While all three of these therapeutic areas offer enormous potential in terms of their commercial opportunities, Gilead lacked a clear competitive advantage in each of these areas for the better part of 2018. With its foray into new therapies, possible acquisition targets for Gilead include Intercept, Madrigal and Viking. Gilead recently signed a sizable immuno-oncology partnership with Agenus, pointing to plans for expansion in the oncology arena.

United Health’s earnings grew to $226 billion, a 12% year-over-year growth. United Health beat EPS estimates for all four quarters of 2018. Favorable cost trends and an increase in enrollment from government programs such as Medicaid have been crucial to increased success in its managed care solutions portfolio.

Portfolio Stats

2018 Return: 4.72%  Standard Deviation: 5.03%  Sharpe Ratio: 0.43
INDUSTRIALS AND MATERIALS

Jacob Irvin

Losses were felt across the board in the historically volatile 2018 year. Fears of a global economic growth slowdown, interest rate increases, inflation and trade issues led to the worst year for stocks since 2008, and the worst December since 1931. Tariffs weighed heavily on investors in the industrials and materials sectors. Rising input costs constrained marginal earnings improvement for industrials companies, increasing investor fears that the costs may hamper future growth potential. Materials companies were hurt by falling prices due to decreased demand for commodities (such as steel, aluminum and lumber) as economic fears spurred businesses to postpone capital investment.

The portfolio currently holds Lockheed Martin (LMT) and United Parcel Service (UPS). Positions in the Industrial Select Sector SPDR ETF (XLI), the Vanguard Materials ETF (VAW), Kaiser Aluminum (KALU) and Xylum (XYL) were liquidated throughout the year to cut exposure to the industrials and materials sectors.

Lockheed Martin’s performance was lackluster. After riding the highs of single-party control over budget spending, investors were unnerved by the uncertainties created by the U.S. midterm elections. Fears of complications for defense spending were not helped by the partial government shutdown in December. Operationally, Lockheed Martin has done very well in 2018. On December 20, the company delivered its 91st F-35 aircraft for the year, meeting its stated goal of a 40% increase in F-35 production from 2017.

UPS began 2018 with a bang; but in February, the stock’s price fell to $104.38, 21.84% below its high in January, after the company released disappointing Q4 2017 results. UPS incurred an additional $125 million in costs to service customers during peak season due to capacity constraints. In response, management significantly increased its guidance for capital investment spending over the next few years.

In 2019, we will re-evaluate our target prices for Lockheed Martin Corporation and UPS. We continue to monitor further developments in the trade war as we look for exposure to the materials sector.

Portfolio Stats

2018 Return:  -15.13%   Standard Deviation:  5.19%   Sharpe Ratio  -3.41
IT AND TELECOM

Isaiah Chenoweth

In 2018, the IT/Telecom portfolio returned -0.11%. The portfolio consisted of 212 shares of Technology Select Sector SPDR Fund (XLK), 140 shares of Apple (AAPL), 220 shares of Oracle (ORCL), 70 shares of Cisco Systems (CSCO) and 114 shares of Verizon Communications (VZ).

The IT sector experienced slowing growth throughout the end of 2018 due partially to increasing interest rates and fears of an escalating trade war. Apple saw a major decline in its stock price after releasing its third-quarter earnings report. With Apple no longer including iPhone, iPad or iMac sales in its quarterly reports, some analysts, dependent on these metrics, were quite unnerved. For the year, Apple was down a total of 8.41%.

Based on its strong correlation with Apple, the portfolio sold its shares of the Technology Select Sector SPDR Fund (XLK). Not only was Apple one of the primary holdings in this ETF, we also wanted to reduce our fund’s reliance on ETFs. Cisco outperformed while Oracle’s share price traded at depressed levels during the year. Internal issues plagued Oracle in 2018, as many in upper-management positions stepped down during the year. Verizon performed well in 2018, attributed largely to its position in the race to nationwide 5G coverage.

As we head into the next year, we hope to diversify our portfolio and reduce our exposure to Apple, while also looking for value in other areas. We continue our search not only for value, but also for firms that will decrease our portfolio risk headed into a possible bear market.

Portfolio Stats

2018 Return:  -0.11%  Standard Deviation:  7.99%  Sharpe Ratio  -0.33
ABOUT UAB’S GREEN AND GOLD FUND

The Green and Gold Fund is UAB’s innovative, student-managed investment portfolio. Students gain real-world portfolio management and security analysis experience through the application of professional investment strategies and sound risk management principles. A portion of the fund’s annual return is used to provide scholarships to students in the UAB Collat School of Business. The Green and Gold Fund is a unique part of UAB’s emergence as a destination school for top students and faculty.