

Market Update and Model Portfolio Reviews 9/30/2018

In August we presented a case for how Global diversification has not performed as well as having a home country bias and more specifically returns in domestic large cap equities were being driven in large part due to the performance of the Information Technology and Consumer Discretionary Sectors ([pre GICS change](#)). Given that our model portfolio's have allocations to both a domestic and global assets, we found it appropriate to add in an additional benchmark as well as comparison of the benchmarks. The "Domestic" benchmark is the same benchmark we have used since the onset of these reports. As of the 8/31/2018 both the "Global" and "Domestic" benchmark top 10 equity holdings were the same (albeit the weightings were slightly different). The "Global" benchmark is intended to include essentially everything in the "Domestic" benchmark plus non domestic asset classes. Information related to these benchmarks is included in the disclosure pages at the end of this report.

YTD 9/30/18 Net of Fees	Model Compared to Global Benchmark			Model Compared to Domestic Benchmark			Global & Domestic Benchmark Compared		
	% Return Model	% Return Global Benchmark	Relative Over (Under) Performance	% Return Strategy	% Return Domestic Benchmark	Relative Over (Under) Performance	% Return Global Benchmark	% Return Domestic Benchmark	Relative Over (Under) Performance
Ultra Conservative	-0.55%	-1.18%	0.63%	-0.55%	-0.24%	-0.31%	-1.18%	-0.24%	-0.94%
Conservative	-0.20%	-0.69%	0.49%	-0.20%	0.96%	-1.16%	-0.69%	0.96%	-1.65%
Moderate	0.22%	-0.19%	0.41%	0.22%	2.17%	-1.95%	-0.19%	2.17%	-2.36%
Balanced	0.38%	0.30%	0.08%	0.38%	3.37%	-2.99%	0.30%	3.37%	-3.07%
Growth and Income	0.61%	0.79%	-0.18%	0.61%	4.57%	-3.96%	0.79%	4.57%	-3.78%
Growth	1.30%	1.29%	0.01%	1.30%	5.78%	-4.48%	1.29%	5.78%	-4.49%
Aggressive	1.77%	1.78%	-0.01%	1.77%	6.98%	-5.21%	1.78%	6.98%	-5.20%
Ultra Aggressive	2.11%	2.28%	-0.17%	2.11%	8.19%	-6.08%	2.28%	8.19%	-5.91%

MTD 9/30/18 Net of Fees	Model Compared to Global Benchmark			Model Compared to Domestic Benchmark			Global & Domestic Benchmark Compared		
	% Return Model	% Return Global Benchmark	Relative Over (Under) Performance	% Return Strategy	% Return Domestic Benchmark	Relative Over (Under) Performance	% Return Global Benchmark	% Return Domestic Benchmark	Relative Over (Under) Performance
Ultra Conservative	-0.40%	-0.47%	0.07%	-0.40%	-0.47%	0.07%	-0.47%	-0.47%	0.00%
Conservative	-0.39%	-0.42%	0.03%	-0.39%	-0.35%	-0.04%	-0.42%	-0.35%	-0.07%
Moderate	-0.36%	-0.36%	0.00%	-0.36%	-0.23%	-0.13%	-0.36%	-0.23%	-0.13%
Balanced	-0.32%	-0.30%	-0.02%	-0.32%	-0.11%	-0.21%	-0.30%	-0.11%	-0.19%
Growth and Income	-0.31%	-0.25%	-0.06%	-0.31%	0.01%	-0.32%	-0.25%	0.01%	-0.26%
Growth	-0.23%	-0.19%	-0.04%	-0.23%	0.13%	-0.36%	-0.19%	0.13%	-0.32%
Aggressive	-0.13%	-0.13%	0.00%	-0.13%	0.25%	-0.38%	-0.13%	0.25%	-0.38%
Ultra Aggressive	-0.04%	-0.07%	0.03%	-0.04%	0.38%	-0.42%	-0.07%	0.38%	-0.45%

DISCLOSURE (Click links for sources. If in print, sources available upon request). Calculations & Definitions available upon request. Measured by the Barclays US Aggregate Bond Index* - Morningstar. S&P 500 Total Return Index**. See "Model Disclosure" page for important disclosures and information – Period Measured 12/31/2017 – 9/30/2018. Performance presented net of highest advisory fee, updated 4/1/2018. Views and opinions are of Alternative Capitalis, LLC and are not intended as investment advice.

Market Update and Model Portfolio Reviews 9/30/2018

For the month of September, investment grade domestic bonds* gave back their August gains down -0.64% and down -1.6% for the year. Month over month, large cap domestic equities** were positive on the month, up **0.57%** and, year to date, up **10.56%**. Yields on the 10 Year Treasury Bond reached their highest levels since May peaking at 3.1% and ending the month at 3.05%. The slope of the yield curve did not change much while rates shifted up fairly parallel across the yield curve. We also had our third rate hike of the year with the FOMC setting the benchmark rate at 2.25%. Bank stocks were hit hard as we wound down the end of the month. Our largest detractor behind the banking sector was our long duration exposure to treasury coupon strips. Positive attribution came from relative outperformance to the domestic equity benchmark in the models large cap equity low volatility sleeve.

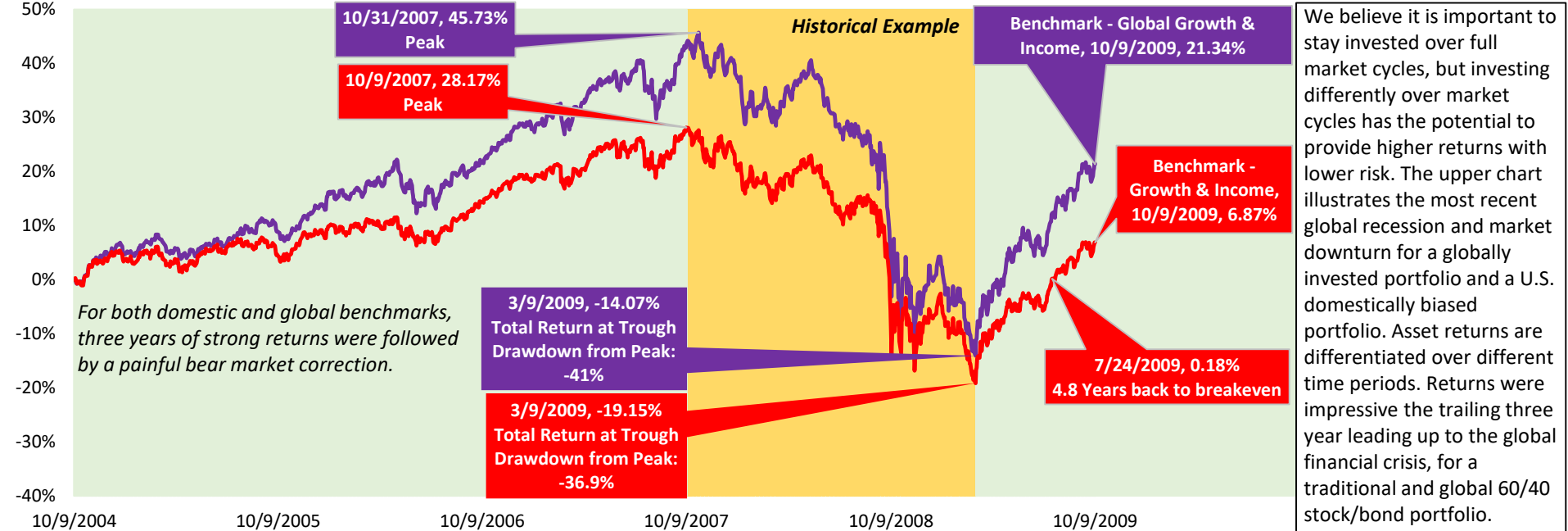
Periodic Table of Major Asset Class Returns – Why Diversification Matters

The periodic table of asset class returns is intended as a lead up to why we seek various asset classes over time. After this periodic table of asset class returns you will see, further below this table, a chart of a few hypothetical portfolio returns that lead up to the most recent financial crisis. Whether you were using a globally allocated portfolio or domestically allocated portfolio, both were impacted significantly in a downturn. Part of holding a well diversified portfolio is to help clients stay invested over the long run. In some cases, there's no place to hide. That's why we believe it is important to be selective of the asset classes we invest in depending on our view of the current market environment. Over time, asset class returns are differentiated. If you see a pattern below, be careful as history tends to rhyme but does not always repeat. Calendar year returns are color coded based on the respective asset class.

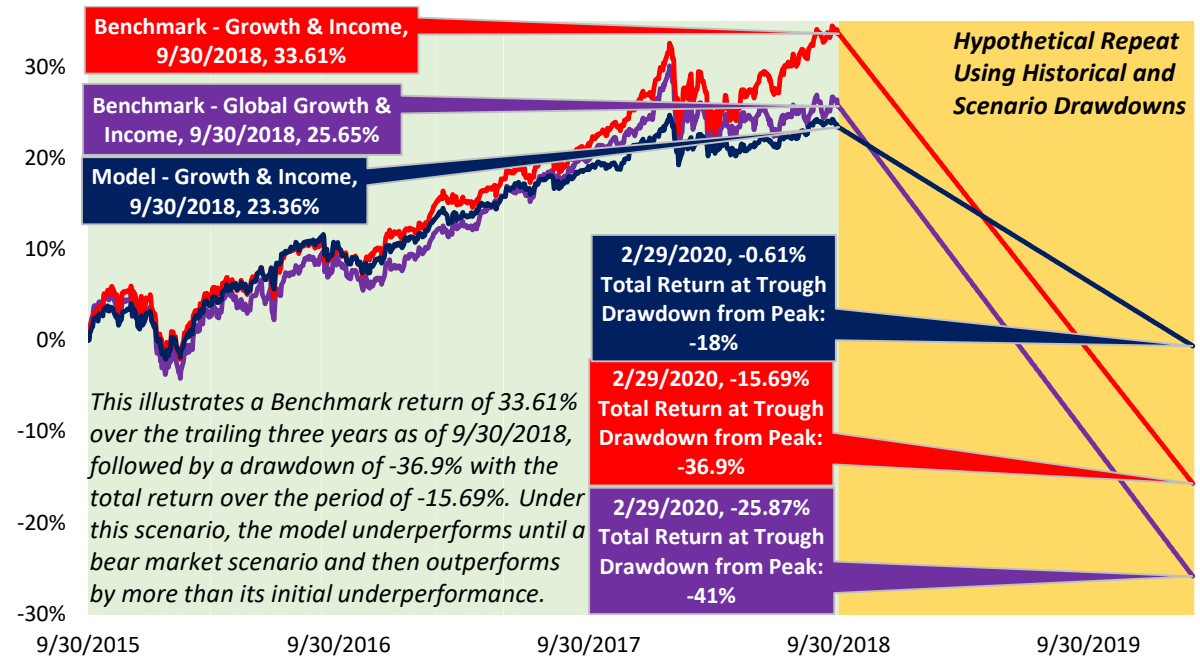
Lower - Return's over time are differentiated - Higher

Asset Class	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	YTD 9/2018	Asset Class
Emerging Market Equity	39.42	5.24	78.51	26.85	10.70	18.22	38.82	13.69	3.30	21.31	37.28	11.51	US Small-Cap
Commodities	16.23	-2.47	57.51	18.88	7.84	17.32	32.39	9.05	1.38	17.49	25.03	10.56	S&P 500
International Stock	11.17	-26.39	51.62	16.83	4.38	16.35	22.78	5.97	0.55	11.96	21.83	4.03	Bank Loan
US Bond	6.97	-29.10	31.78	15.19	2.11	16.00	7.42	4.89	-0.69	11.77	14.65	2.52	High Yield
S&P 500	5.49	-33.79	27.17	15.06	1.52	15.58	5.29	2.50	-0.81	11.19	7.48	-0.40	Municipal
Municipal	3.36	-35.65	26.46	10.13	-4.18	9.66	-2.02	1.60	-4.41	10.16	5.45	-1.43	International Stock
High Yield	2.19	-37.00	18.91	7.75	-12.14	6.78	-2.55	-2.19	-4.64	2.65	4.12	-1.60	US Bond
Bank Loan	2.08	-43.38	12.91	6.54	-13.32	4.21	-2.60	-4.90	-14.92	1.00	3.54	-2.03	Commodities
US Small-Cap	-1.57	-53.33	5.93	2.38	-18.42	-1.06	-9.52	-17.01	-24.66	0.25	1.70	-7.68	Emerging Market Equity

DISCLOSURE (Click links for sources. If in print, sources available upon request). Calculations & Definitions available upon request. Views and opinions are of Alternative Capitalis, LLC and are not intended as investment advice. Source: Morningstar as of 9/30/2018. Period Measured on calendar year returns from 2007 through 9/30/2018 (Year to date). Emerging Market Equity is represented by MSCI Emerging Markets Index. Commodities is represented by Bloomberg Commodity Index. International Stock is represented by MSCI EAFE Index. US Bond is represented by the Bloomberg Barclays Capital US Aggregate Bond Index. S&P 500 represented by the S&P 500 Index. Municipal (Bond) is represented by Bloomberg Barclays Municipal Bond Index. High Yield (Bond) is represented by ICE BofA ML US High Yield Index. Bank Loan is represented by S&P/LSTA Leveraged Loan Index. US Small-Cap is represented by Russell 2000 Index. Past performance is no guarantee of future results. See disclosure page at end of report.



We believe it is important to stay invested over full market cycles, but investing differently over market cycles has the potential to provide higher returns with lower risk. The upper chart illustrates the most recent global recession and market downturn for a globally invested portfolio and a U.S. domestically biased portfolio. Asset returns are differentiated over different time periods. Returns were impressive the trailing three year leading up to the global financial crisis, for a traditional and global 60/40 stock/bond portfolio.



Patience is a virtue with investing. We believe that measuring performance over shorter periods may cause investors to lose focus on their long-term goals. This can cause investors to shift their portfolios and lose sight of the risks of late market cycle investing. To illustrate this, we backfilled our model portfolio performance for the trailing three years and stress-tested the hypothetical results of our model portfolio allocations against the most recent bear market illustrated in the upper chart. The scenario results are provided as an illustration of our conviction for the “Risk-Off” philosophy that we have established since the start of 2017. Over a longer time horizon, we believe the defensive posturing will reward clients that maintain focus on the long run. Our ability to quantitatively and qualitatively rotate into our “Risk-On” philosophy will only be fully measured after the fact, but we are reluctant to fall for the famous last words: “This time is different.” The Growth & Income “Risk Off” Model’s scenario-based results advocate short term underperformance as potentially leading to long term out-performance.

DISCLOSURE (Click links for sources. If in print, sources available upon request). See Disclosure pages for important disclosures and explanations to the calculations above. Calculations & Definitions available upon request. Period Measured 10/9/2004 – 10/9/2009 & 9/30/2015 – 9/30/2020. Charts are not to scale with one another. For “Model – Growth and Income” see “Third Party Disclosures” page for drawdown assumptions. For both benchmark drawdown assumptions, the 9/30/2015 – 9/30/2020 drawdowns are assumed as the same drawdown used over the period measured 10/9/2004 – 10/9/2009. Views and opinions are of Alternative Capitalis, LLC and are not intended as investment advice. **The results do not represent actual trading and actual results may significantly differ from the theoretical results presented.**

Alternative Capitalis, LLC
233 Harvard St, #307,
Brookline, MA 02446*

P. 551-ALT-FIRM (258-3476)
WWW.ALTCAPITALIS.COM
Facebook.com/ALTCAPITALIS
Info@AltCapitalis.com



Model Disclosure

Alternative Capitalis, LLC is a registered investment adviser. Information presented herein is for educational purposes only and does not intend to make an offer or solicitation for the sale or purchase of any specific securities, investments, or investment strategies. Investments involve risk and unless otherwise stated, are not guaranteed. **Model Performance Disclosure:** The performance shown represents only the results of Alternative Capitalis, LLC's model portfolios for the relevant time period and do not represent the results of actual trading of investor assets. Model portfolio performance is the result of the application of the Alternative Capitalis, LLC's proprietary investment process. Model performance has inherent limitations. The results are theoretical and do not reflect any investor's actual experience with owning, trading or managing an actual investment account. Thus, the performance shown does not reflect the impact that material economic and market factors had or might have had on decision making if actual investor money had been managed. Model portfolio performance is shown net of the model advisory fee of 1.25%, the highest fee charged by Alternative Capitalis, LLC. This reflects a change from Alternative Capitalis, LLC highest fee charged to a client(s) account from 1% to 1.25% annually. April 1, 2018 model performance to most recent date presented adjusts for the higher 1.25% annual fee. Model portfolio performance is shown net of the sample trading costs based on our Custodian's, TD Ameritrade Institutional, trading costs. Performance does not reflect the deduction of other fees or expenses, including but not limited to brokerage fees, custodial fees and fees and expenses charged by mutual funds and other investment companies. Performance results shown include the reinvestment of dividends and interest on cash balances where applicable. The data used to calculate the model performance was obtained from sources deemed reliable and then organized and presented by Alternative Capitalis, LLC. The performance calculations have not been audited by any third party. Actual performance of client portfolios may differ materially due to the timing related to additional client deposits or withdrawals and the actual deployment and investment of a client portfolio, the reinvestment of dividends, the length of time various positions are held, the client's objectives and restrictions, and fees and expenses incurred by any specific individual portfolio. The performance calculations are based on a hypothetical investment of \$100,000 for both the model and benchmarks presented. On July 23, 2018, we corrected previously reported month end performance reports to account for transactions costs (trading fees) related to rebalancing model portfolios. The month end reports effected ranged from 2-28-2018 to 5-31-2018. Prior reports accounted for transaction costs related to trading fees. The four reports have been corrected and updated on Alternative Capitalis, LLC website (www.altcapitalis.com). 2-28-2018 had the largest variance in incorrect performance reported with an average of 9 BPs ("basis points") (0.09% or 9/100 of 1.00%) of overstated positive performance in the models and ranged as high as 15 BPs to as low as 2 BPs. A comparison chart of the variances in reported performance can be provided upon request. **Benchmarks:** The performance results shown are compared to the performance of the performance of a blended ETF (exchange-traded-fund) portfolio comprised of the following two ETF's symbols, SPY & AGG, are described below. The benchmarks used are investable ETFs and their performance calculation is inclusive of the highest fee charged to a client(s) account, 1.25% annually. This will reduce the total return of the investable benchmark by the annualized rate of 1.25%. The ETF symbol SPY (SPDR® S&P 500® ETF Trust) which seeks to provide investment results that, before expenses, correspond generally to the price and yield performance of the S&P 500® Index (the "Index"). Visit <https://us.spdrs.com/en/etf/spdr-sp-500-etf-SPY> for more information about the ETF. The S&P 500® Index results do not reflect fees and expenses and you typically cannot invest in an index. The ETF symbol AGG (iShares Core U.S. Aggregate Bond ETF). The iShares Core U.S. Aggregate Bond ETF seeks to track the investment results of an index composed of the total U.S. investment-grade bond market. (the "Index"). Visit <https://www.ishares.com/us/products/239458/ishares-core-total-us-bond-market-etf> for more information about the ETF. The index composed of the total U.S. investment-grade bond market results do not reflect fees and expenses and you typically cannot invest in an index. The benchmark is blended representing a weighting of a percentage (%) to SPY and percentage (%) to AGG based on the respective model weights below. Unless otherwise indicated, the benchmarks are not rebalanced to maintain their original weighting over the period measured. Instead, they are comprised of the starting allocation and will shift given the prevailing market environment over the period measured. **Return Comparison:** To benchmark the results, the ETF (exchange-traded-fund) symbol SPY (SPDR® S&P 500® ETF Trust) which seeks to provide investment results that, before expenses, correspond generally to the price and yield performance of the S&P 500® Index (the "Index"). The S&P 500 was chosen as it is generally well recognized as an indicator or representation of the stock market in general and includes a cross section of equity holdings. In addition, the ETF symbol AGG was chosen as a benchmark. The iShares Core U.S. Aggregate Bond ETF seeks to track the investment results of an index composed of the total U.S. investment-grade bond market. The total U.S. investment-grade bond market was chosen as it is generally well recognized as an indicator or representation of the bond market in general and includes a cross section of debt holdings. For each respective model benchmark the performance measurement weightings are as follows to SPY / AGG %: 20/80, 30/70, 40/60, 50/50, 60/40, 70/30, 80/20, 90/10 % respectively for Ultra Conservative, Conservative, Moderate, Balanced, Growth & Income, Growth, Aggressive, Ultra Aggressive. **OPTIONS TRADING RISK DISCLOSURE:** Options Trading – Both the purchase and writing (selling) of options contracts – involves a significant degree of risk not suitable for all investors. Investors should carefully consider the inherent risks and financial obligations associated with options trading as further detailed in the Options Clearing Corporate booklet "[Characteristics and Risks of Standardized Options.](#)" 233 Harvard St, #307, Brookline, MA 02446 is Alternative Capitalis, LLC's client facing address. All books, records, receipts, correspondence (mailing address) and day to day operations are located at 1565 West St, Wrentham, MA 02093.

The results do not represent actual trading and actual results may significantly differ from the theoretical results presented.

Continued on next page

Model Disclosure Continued

Alternative Capitalis, LLC is a registered investment adviser. Information presented herein is for educational purposes only and does not intend to make an offer or solicitation for the sale or purchase of any specific securities, investments, or investment strategies. Investments involve risk and unless otherwise stated, are not guaranteed. The results presented before 12/31/2016 for model performance assume that the weights initially held on that date were held at the onset of any performance presented before 12/31/2016. This assumes results based on discretionary models that are not purely quantitative or rules based. **Global Benchmarks:** The performance results shown are compared to the performance of the performance of a blended ETF (exchange-traded-fund) portfolio comprised of the following three ETF's symbols, VT, BNDX & BND, are described below. The benchmarks used are investable ETFs and their performance calculation is inclusive of the highest fee charged to a client(s) account, 1.25% annually. This will reduce the total return of the investable benchmark by the annualized rate of 1.25%. Additionally, the ETF's that lack the track record to cover the entirety of the period presented have been backfilled with index data that Alternative Capitalis, LLC deems appropriate as a proxy of the chosen ETF's hypothetical track record. Below is the summary of backfilled data and time period:

ETF	Earliest Available Price Data for ETF	Backfill Index 1	Earliest Available Data for Index Backfill 1	Backfill Index 2	Earliest Available Data for Index Backfill 2
BNDX	5/31/2013	ICE BofAML Global Broad Market Index	9/22/1998	N/A	N/A
VT	6/24/2008	MSCI All Country World Index TR	12/29/2000	S&P 500 (TR) Index	9/22/1998
BND	4/3/2007	Barclays US Aggregate Bond Index	9/22/1998	N/A	N/A

The ETF symbol BNDX (Vanguard Total International Bond ETF). The Vanguard Total International Bond ETF attempts to track the performance of the Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Index (USD Hedged). Visit <https://investor.vanguard.com/etf/profile/BNDX> for more information about the ETF. The ETF symbol VT (Vanguard Total World Stock ETF) seeks to track the performance of the FTSE Global All Cap Index, which covers both well-established and still-developing markets. Visit <https://investor.vanguard.com/etf/profile/VT> for more information about the ETF. The ETF symbol BND (Vanguard Total Bond Market ETF). The Vanguard Total Bond Market ETF attempts to track the performance of the Bloomberg Barclays U.S. Aggregate Float Adjusted Index and attempted to track the Bloomberg Barclays U.S. Aggregate Bond Index through December 31, 2009. Visit <https://investor.vanguard.com/etf/profile/BND> for more information about the ETF. The benchmark is blended representing a weighting of a percentage (%) to BND, percentage (%) to VT and percentage (%) to BNDX based on the respective model weights below. Unless otherwise indicated, the benchmarks are not rebalanced to maintain their original weighting over the period measured. Instead, they are comprised of the starting allocation and will shift given the prevailing market environment over the period measured. **Return Comparison:** To benchmark the results, the ETF symbol BNDX (Vanguard Total International Bond ETF) attempts to track the performance of the Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Index (USD Hedged). The Vanguard Total International Bond ETF was chosen as it is generally well recognized as an indicator or representation of the global bond market, ex-U.S. bonds, and tracks an investment-grade, non-USD denominated bond index, hedged against currency fluctuations for U.S. investors. The ETF symbol VT (Vanguard Total World Stock ETF) seeks to track the performance of the FTSE Global All Cap Index, which covers both well-established and still-developing markets. The Vanguard Total World Stock ETF was chosen as it is generally well recognized as an indicator or representation of the global stock market and tracks a market-cap-weighted index of global stocks covering approximately 98% of the domestic and emerging market capitalization. The ETF symbol BND (Vanguard Total Bond Market ETF) attempts to track the performance of the Bloomberg Barclays U.S. Aggregate Float Adjusted Index and attempted to track the Bloomberg Barclays U.S. Aggregate Bond Index through December 31, 2009. The Vanguard Total Bond Market ETF was chosen as it is generally well recognized as an indicator or representation of the U.S. Domestic bond market, and tracks a broad, market-value-weighted index of U.S. dollar-denominated, investment-grade, taxable, fixed-income securities with maturities of at least one year. For each respective model benchmark the performance measurement weightings are as follows to BND/VT/BNDX %: 66/20/14, 57.8/30/12.3, 49.5/40/10.5, 41.2/50/8.8, 33/60/7, 24.7/70/5.3, 16.5/80/3.5 and 8.2/90/1.8 % respectively for the Ultra Conservative, Conservative, Moderate, Balanced, Growth & Income, Growth, Aggressive and Ultra Aggressive Global Benchmarks. **DRAWDOWN ASSUMPTIONS:** Domestic Benchmark -36.90%, Global Benchmark -41.00%, and Growth & Income Model -18.00% (see "Third Party Disclosures" page). Limitations of the assumptions include, but are not limited to, backfill index bias, time period bias and assume no changes to the model presented over the drawdown period. An advisory fee of 1.25% is also included in the calculation for the model and benchmarks over the drawdown period. Transaction fees for the model over the drawdown period are excluded as positions are assumed to be held constant. The benchmark drawdowns use the as calculated drawdowns over the periods measured from 10/9/2007 to 3/9/2009 for the domestic benchmark and from 10/31/2007 to 3/9/2009 for the global benchmark. The Growth & Income Model uses third party software to present a hypothetical drawdown in which calculations of the current holdings were not available during the drawdown period relative to the benchmark. There is no guarantee as to the accuracy of the third party drawdown assumptions nor should one draw any conclusions as to the accuracy and likelihood of the data presented. The Growth & Income Model drawdown assumption is based on a third party report dated September 24, 2018 (This report is available upon request).

The results do not represent actual trading and actual results may significantly differ from the theoretical results presented.

Continued on next page

Alternative Capitalis, LLC
233 Harvard St, #307,
Brookline, MA 02446*

P. 551-ALT-FIRM (258-3476)
WWW.ALTCAPITALIS.COM
Facebook.com/ALTCAPITALIS
Info@AltCapitalis.com



Explanations & Disclosures Continued:

Third Party Disclosures

Hidden Levers

IMPORTANT: The projections generated by HiddenLevers regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Assumptions on rates of return and standard deviation used in this analysis are based on historical return data for each security and asset class. Past performance is no guarantee of future results. Results may vary with each use and over time. You cannot invest directly in a benchmark or index. Index results do not reflect fees, expenses, or sales charges incurred when making investments. Methodology Used to Generate this Report: Definitions: Beta - Beta measures the relationship between an investment and a major market index (the S&P 500 is used in this report). A beta of 1.0 means that a 1% rise in the S&P 500 could lead to a 1% rise in the investment, while a beta of -0.5 means that a 1% rise in the S&P 500 could lead to a 0.5% drop in the investment. The beta for an investment is determined by using regression analysis to measure the relationship between the returns of the investment and the returns of the S&P 500. HiddenLevers uses 10 years of data to measure the beta for an investment. For investments with less than 10 years of history, all available historical data is used. Cross Correlations - HiddenLevers measures the correlation between every pair of investments in the portfolio. The correlation results can vary between 1 and -1, where a correlation of 1 means that two investments move together perfectly over time, and a correlation of -1 means that two investments move in opposite directions over time. Expected Return - This is the 5-year total return of the portfolio based on the stress test scenarios selected for the report. The system takes the weighted average of the economic scenarios to calculate a one-year return, which is then compounded to determine the five-year return. Lever - HiddenLevers tracks different levers (economic indicators) like CPI, US GDP Growth, and oil prices, and uses movements in these levers to define economic scenarios. Lever Impact - The lever impacts section describes the impact of different economic levers on the portfolio as a whole. An S&P lever impact of 1.0, for example, means that a 1% rise in the S&P 500 is projected to lead to a 1% rise in the portfolio. HiddenLevers similarly measures the impact of a range of economic levers on the portfolio. Maximum Drawdown (MDD) - this is measured as the largest percentage drop in a position during the timeframe of measurement. Click the + sign on the Risk Measures box to see the timeframe of measurement for Max Drawdown in the top right hand corner of the box. Scenario - A scenario is a representation of a major macro-economic or geopolitical event which has the potential to impact investment returns. HiddenLevers models scenarios as a set of up-or-down movements in any of the economic indicators (levers) in the system. Scenario Impacts - Using HiddenLevers' stress testing model, an upside and downside impact are projected for the portfolio in each scenario. Most scenarios are modeled with multiple potential outcomes, with both positive, neutral, and negative outcomes considered. The best and worst projections are derived from running the different scenario outcomes against the portfolio in HiddenLevers model. The scenario-based stress testing model is discussed in detail in the Method section below. Sharpe Ratio - The Sharpe Ratio is the a measure for calculating risk-adjusted return, and this ratio has become the industry standard for such calculations. It was developed by Nobel laureate William F. Sharpe. The Sharpe ratio is the average return earned in excess of the risk-free rate per unit of volatility or total risk. HiddenLevers calculates the Sharpe ratio by subtracting short term (1M) T-bill rates from the portfolio's annualized total return, and then dividing by the portfolio's volatility (annualized standard deviation). Stress Test Risk/Reward - The Stress Test Risk/Reward compares the portfolio's potential downside risk against the 5 year expected return of the portfolio. Downside Risk: This is the maximum downside calculated across all of the scenarios included in the report. 5 Year Expected Return: HiddenLevers first calculates the expected return for the portfolio by calculating the one-year weighted average expected return across all included scenarios. The one-year expected return is then compounded to obtain a 5 year return estimate. Historically, major downside events occur roughly twice a decade, making 5 years an appropriate timeframe for comparison of long term returns and downside scenario risk. Volatility - HiddenLevers measures volatility as the annualized standard deviation of an investment or portfolio, expressed in percentage terms. The standard deviation is calculated using weekly data points, and is then annualized by multiplying by the square-root of 52 (number of periods in one year). Method: This report describes one or more potential scenarios, and shows the HiddenLevers-model based performance for the portfolio in each scenario. The steps below are performed to generate the projections: Scenario -> Levers -> Assets (Stocks etc) -> Portfolio Return A scenario pushes levers up or down, which in turn push assets up or down, which in turn impact a portfolio's modeled return in the scenario. As defined above, a scenario is modeled as a set of movements in the levers. Regression analysis is used to determine the historical (prior 10 year) relationship between each lever and each asset in the portfolio. The model is then run 2500 times for each scenario/portfolio combination. In each iteration, the model projects the returns for each asset using the historical regression coefficients for each lever, and using the scenario assumptions on how each lever will change. The model varies the regression coefficients for each iteration using a normal distribution around their mean (similar to a Monte Carlo model's varying of expected returns across iterations), and aggregates the results of the 2500 iterations to find a mean portfolio return with a 95% confidence interval. The confidence interval is displayed on the report as "margin of error" for each scenario. Limitations and Assumptions: This report describes one or more potential scenarios that may or may not occur. Each scenario discussed in this report is defined by the economic assumptions listed in the Macro Impact section of each scenario page. HiddenLevers does not guarantee that any particular scenario will occur as modeled in this report. HiddenLevers uses historical analysis in the creation of this report, and past performance is not a guarantee of future results. The information contained in this report is not to be construed as advice and should not be confused as any sort of advice. Investors should consider this report as only a single factor in making their investment decision. Gxworks LLC, maker of software used to create this report, makes the following disclosures: Gxworks LLC's mission is to educate and provide useful macro risk analytical tools to help provide data to assist with the investment decision process. We rely on financial data, including stock prices, provided by third parties. The data is believed to be accurate, but HiddenLevers does not guarantee or warranty this data. This report is intended only as an informational tool for you and your investment advisor, and should not in any way be construed as investment advice by HiddenLevers. If you make investment decisions based on information you receive in connection with this report, you do so at your own risk and neither HiddenLevers nor its employees will be liable for any losses that you may incur. GxWorks LLC (dba HiddenLevers), its employees, officers or affiliates, in some instances, may have long or short positions or holdings in the securities or other related investments of companies mentioned herein. Users of this should conduct their own independent research and due diligence and consult with their investment advisor before making any investment decisions or recommendations. Hidden Levers does not endorse Alternative Capitalis, LLC. Past Crashes: Financial Crisis 9/1/08 - 3/9/09 This scenario covers the timeframe from September 1, 2008 through March 9th, 2009, and measures the historical change of each lever over those dates. This scenario outcome reflects the economic movements between Sept. 1, 2008 and March 9th, 2009. For monthly and other less granular levers, the nearest time period is used. Timeframe: 6 Months. Please visit <https://www.hiddenlevers.com/> for more information.