

THE FORTRESS APPROACH

> FOUR TIME TESTED STRATEGIES - ONE PORTFOLIO



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CAMELOT
PORTFOLIOS

CAMELOT WHITE PAPER
THE FORTRESS APPROACH
FOUR TIME TESTED STRATEGIES - ONE PORTFOLIO

ABOUT CAMELOT

Camelot Portfolios, LLC is a 3rd Party Asset Management Firm located in Maumee, Ohio.
To learn more, go to www.camelotportfolios.com or call us at 419.794.0538

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“Since our founding we have built portfolios based upon our independent, risk-aligned, value-oriented investment philosophy...for the purpose of delivering client outcomes.”

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CAMELOT WHITE PAPER | THE FORTRESS APPROACH: FOUR TIME-TESTED STRATEGIES

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01 INTRODUCTION

What investment strategy or style is best? Fundamental? Quantitative? Tactical? Stock? Bonds? Alternatives? Top Down? Bottom up? Which one has “worked” best for the last 50 years?

Many investment strategies work, but they often work at different times and nobody can predict with accuracy when those times will be. Other strategies have worked at some time in the past and are unlikely to work in the future. The truth is, many strategies have worked well over long time periods, but there is no way to know which strategy will be best in the future.

Before we go further, let’s define what we mean by “work” to make sure we are on the same page. An investment or investment strategy “works” when it achieves a desired outcome. Typically, the desired outcome is to approximate or outperform the returns of a particular benchmark. But different investors often have different desired outcomes, so they may also have different definitions of “work”.

Of one thing we can be certain, no investment strategy will work 100% of the time, especially in shorter periods of time. Many investors do a great job of moving to strategies that have worked in the recent past, just in time for them to be out of favor with the market.

This often leads the investor to declare the strategy does not work and move to another strategy that worked better over that time period, just in time for the tide to reverse, causing the investor to miss out yet again.

The longer we have served investors, the more we realize the importance of behavior management in helping investors capture the returns offered by the markets.

Fourtress Portfolios combine four time-tested investment strategies into one, constructed to capture the upside returns generated by investment markets, minimize downside risk, and smooth out the ride to keep investors on track with their plan.

Can we agree on a few things? To even attempt to achieve a return better than the market, a portfolio must be invested differently. Even so, there is no guarantee of success. Risk (drawdown & volatility) is a function of asset allocation – in which parts of the market is a portfolio invested and how correlated are those components.

It is prudent to ask, “Is it reasonable to expect the future return to be similar to past returns?” Investing must be based on sound principles, as data-mining and back-tested results will rarely produce comparable results moving forward.

We believe these things to be true. We also believe our approach to investing should be dynamic – able to respond to changing market conditions, correlations, & data. We must incorporate logic, especially when there is an obvious disconnect between backward-looking data and future potential.

Let’s get started.

02 TURRET ONE



The foundation of our portfolio construction starts with broad global diversification. The holdings are spread across the United States, Developed International Countries, and Emerging Markets. Intentionally investing across asset classes is intended to provide returns in line with global stock markets.

Part 1: Global Equities.

U.S. Market capitalization is roughly 35% of world market capitalization down from approximately 50% at the turn of the century. At the same time, the U.S. is still the easiest market for U.S. investors to access, so keeping a higher exposure to domestic markets is reasonable. According to Money and Banking, the correlation (one-year returns) between the S&P 500 and MSCI EAFE from 1980 to 2014 was .66.

However, since 2000, this correlation has risen to .91 (versus .33 pre-2000), which indicates a greatly diminished diversification benefit from investing in the broad international developed market indexes.

At the same time, the returns from investing in international developed markets (MSCI EAFE) have been well below the returns in the U.S. (S&P 500). Money and Banking showed any exposure to the MSCI EAFE would have reduced returns compared to the S&P 500, but there was a slight reduction in variance (standard deviation) with a small allocation (<5%) to the MSCI EAFE. Due to the increasingly global nature of the economy and financial systems, we believe it is logical to conclude this correlation will remain high in the future. However, we believe it is also logical to believe a period of time is coming when the MSCI EAFE will out-perform the S&P 500, so avoiding exposure to the MSCI EAFE will likely be a mistake



> GLOBAL DIVERSIFICATION

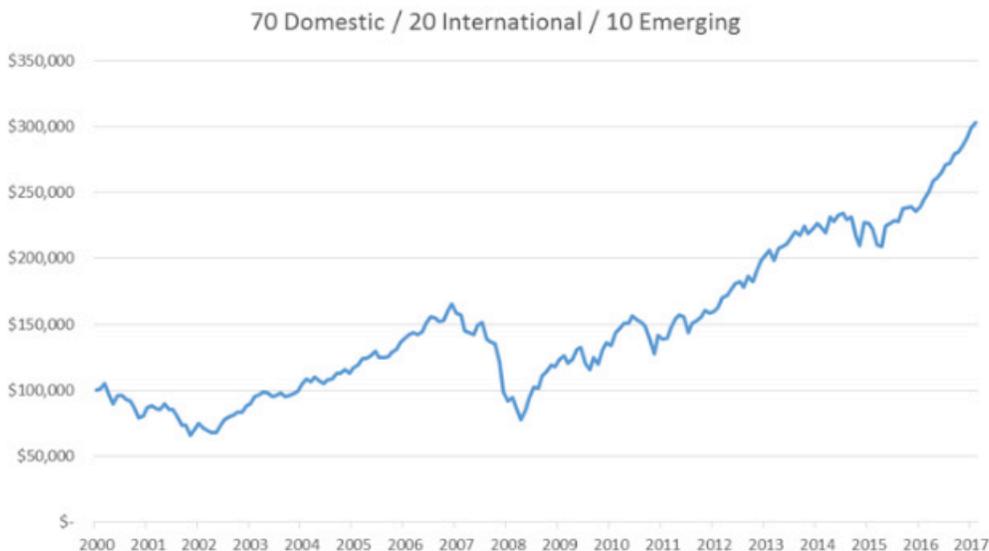
On the other hand, International Emerging Markets (MSCI EM) have soundly trounced the returns of the S&P 500 since 2000, admittedly with significantly greater volatility. Adding any MSCI EM exposure to an S&P 500 portfolio increased returns the at the expense of greater volatility.

As you can see from the tables below (70/20/10), having international exposure increased returns compared to just investing in domestic stocks, but that is only because of the exposure to emerging markets, which typically have lower correlations to US Equities and have produced higher returns.

	50 US / 50 Int	50 US / 50 EM	90 US / 10 EM
Return Annualized	5.87%	8.78%	6.90%
Volatility	17.44%	19.61%	16.44%
Max Drawdown	-53.58%	-55.91%	-51.89%

	70 Domestic 20 International 10 Emerging
Annualized Return	6.72%
Volatility	16.98%
Max Drawdown	-52.95%

Year Start: 2000	US Equity	Intl Equity	EM Equity
Returns	6.33%	4.99%	10.20%
Volatility	16.90%	20.52%	27.48%
Max Drawdown	-50.95%	-56.40%	-61.59%



> GLOBAL DIVERSIFICATION

Even so, this still does not paint an accurate picture. The MSCI EAFE outperformed the S&P 500 in 9 of 17 years from 2001-2017, including 6 years in a row (2002-2007). The underperformance for the 17-year time period is a result of the prolonged financial crisis Europe has endured since 2008. If you had invested \$1,000 in both indexes at the end of 2000 and simply held on, the MSCI EAFE would have outperformed through 2012. If annual rebalancing was incorporated, a 50/50 portfolio would have outperformed through 2013. So, while the time period in this study would have experienced lower returns with MSCI EAFE exposure, the data set likely suffers from the logical fallacy of end-point bias and eliminating international exposure should not be the conclusion. If the same logic investors typically use was applied in this scenario, investing in the S&P 500 would have been abandoned completely at some point prior to 2012 as it “underperformed” for such a long stretch, which obviously would have been a mistake.

In addition, the MSCI EAFE and MSCI EM indexes are averages of numerous countries. Individual countries and companies within the broad international indexes have performed even better with lower correlation to U.S. markets. If we can focus our international exposure to those countries and companies likely to outperform their respective indexes, and are successful, we believe there will be value added by having international exposure.

So, for our Global Asset Allocation, we will simply go 50/50 between domestic and international equity exposure as our baseline position, which still over-weights the US relative to its’ global market cap. However, instead of investing in the broad international developed indexes, we are using additional quantitative criteria, described later in this paper, to select the countries and companies we believe are likely to outperform.

(www.moneyandbanking.com/commentary/2015/11/2/is-international-diversification-dead)



> GLOBAL DIVERSIFICATION



Part 2: Global Bonds **– Corporate and Government.**

Traditional asset allocation often has a 40% exposure to bonds and a common rule of thumb is to increase this exposure with age. This strategy has worked quite well over the past 35 year, with US Bond indexes averaging 7-9% over that period of time with typically less than half the volatility of stocks.

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While bond returns for the last 35 years are relatively attractive, they benefit from the starting point of double digit interest rates in the 70s and the subsequent decline to nearly zero. It is simply not possible to experience similar returns moving forward as this decline in interest rates cannot be repeated without first experiencing a large increase, which would produce extremely low or negative bond returns for a period of time. We must do something different if we want to generate more than a 2% return in the near future.

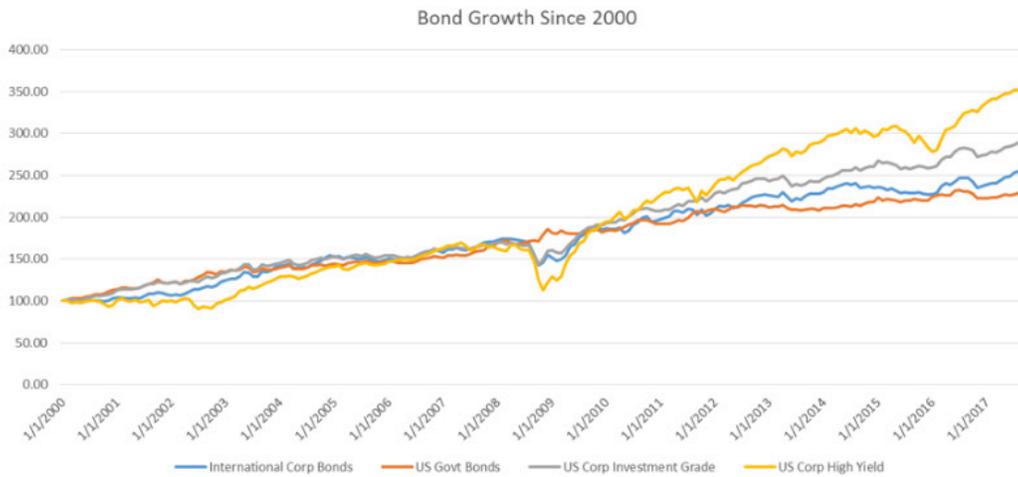
There may also be a disconnect regarding what type of bonds to have in a portfolio. Risk averse investors often gravitate

toward US Government bonds and Investment Grade Corporate bonds, believing them to be less risky. In doing so, investors have missed out on the superior returns delivered by incorporating High Yield bonds into their portfolio. While it is true, high yield bonds have experienced greater volatility during times of distress in the economy and/or financial system, investors with exposure to high yield bonds experienced less drawdown in their bond portfolio the majority of the time.

There are two primary types of risk when it comes to investing in bonds: credit risk and duration risk. Most investors only focus on credit risk and may not understand or even be aware of duration risk. Of course, duration risk has not been much of a risk over the last 35 years in aggregate – it has actually been a strong tail wind. But looking at the chart of bond portfolio drawdowns, you can see portfolios incorporating 30% High Yield were more often the least risky, experiencing less of a drawdown than the portfolio of 60% Government/40% Corporate bonds. This was the effect of duration risk, which will likely be magnified looking into the future as interest rates rise from the recent record lows.

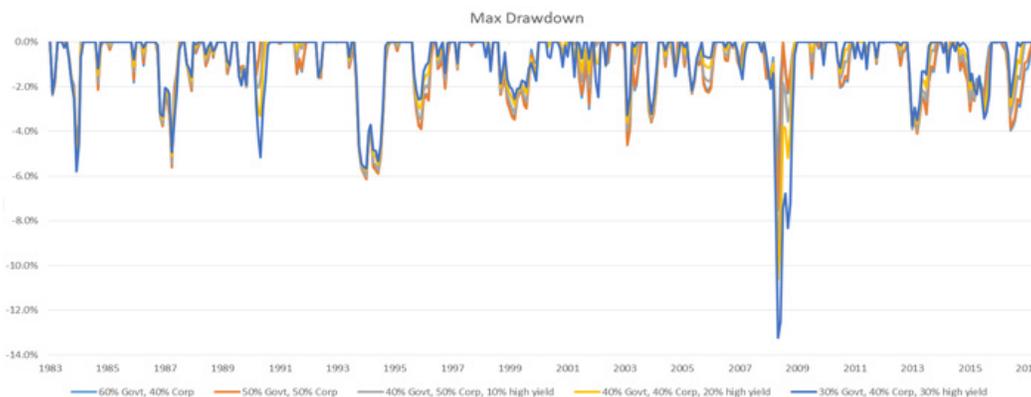
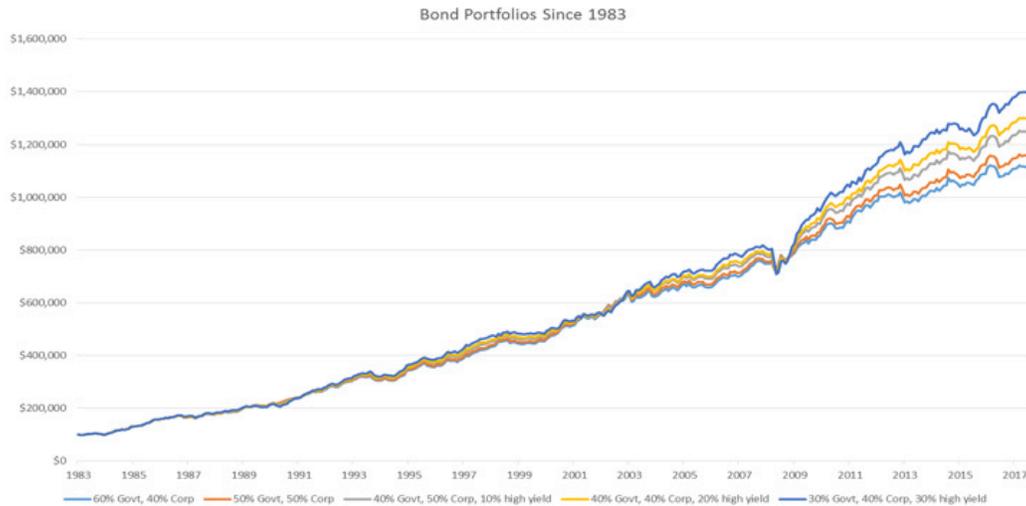
> GLOBAL DIVERSIFICATION

Since 2000	International Corp Bonds	US Govt Bonds	US Corp Investment Grade	US Corp High Yield
Return	5.43%	4.68%	6.15%	7.35%
Volatility	6.97%	3.98%	6.04%	13.01%
Max Drawdown	-18.10%	-4.64%	-15.42%	-33.31%



	60% Govt, 40% Corp	50% Govt, 50% Corp	40% Govt, 50% Corp, 10% high yield	40% Govt, 40% Corp, 20% high yield	30% Govt, 40% Corp, 30% high yield
Annualized Return	7.27%	7.39%	7.62%	7.75%	7.98%
Volatility	5.96%	6.08%	6.22%	6.32%	6.82%
Max Drawdown	-5.99%	-7.52%	-9.75%	-10.62%	-13.25%

> GLOBAL DIVERSIFICATION



**Interesting note – 60/40 portfolio was more risky most of the time w/ 40/40/20 portfolio often being the least risky.

The occurrences of extreme volatility in High Yield were all due to an increase in the yield spread over U.S. Treasuries, which can be tracked and measured. Over the last 20 years, this spread has been as low as 2.5% and as high as 22%.

But the vast majority of the time, the spread has been less than 7.5% with extended periods below 5%. For most of the last 12-18 months, this spread has been hovering between 3-4%.

Principle: Risk is relative to the price you pay for something.

> GLOBAL DIVERSIFICATION

While many investors become more afraid as prices fall, the reality is, when High Yield prices fall and the spread over Treasury yields widens, they actually become less risky as an investment. Put another way, the risk of future loss becomes less and the potential future gain is higher.

Since both types of risk (duration & credit) are currently elevated in our opinion, we designed a bond strategy to address both. In 2016, we launched an ETF bond ladder that utilizes defined-maturity ETFs investing in both Investment-Grade Corporate and High Yield bonds. The percentage exposure to High Yield can fluctuate between 20%-80% and is a function of the credit spread. The greater the spread between High Yield bonds and Treasuries, the greater the allocation to High Yield. We maintain a low duration by using bonds with maturities under 7 years.

In addition, the bond ladder takes advantage of the slope of a normal yield curve, allowing bonds to roll down the curve, which often produces excess return from price increases. We believe this approach gives us the potential to generate 50-100% greater returns than the current 5 year US Treasury Bond rates (2.25%).



While the current low & rising interest rate environment makes this approach ideal, there may come a time once interest rates move up when another approach may be warranted. As this evolution occurs, we will adjust our approach accordingly in order to optimize the risk/reward characteristics of the portfolio. As such, future commentary on this subject and updated versions of this whitepaper can be expected.

03 TURRET TWO

Our security selection process includes rigorous global research and an in-depth evaluation of risk dynamics. Finding companies that have value characteristics, specifically companies with strong cash flow has been a hallmark in Camelot constructed portfolios from our inception. This component of our Fourtress portfolio is designed to own companies with strong fundamentals, ranked and weighted based on objective (value & momentum) factors. We believe this fundamental approach to security selection provides the opportunity for attractive risk-adjusted returns over longer periods of time.

PRINCIPLES:

... FACTOR INVESTING WORKS...IN INTERVALS.

... DIFFERENT FACTORS WILL WORK AT DIFFERENT TIMES.

For decades, investment theory has been based on the Capital Asset Pricing Model (Sharpe-Lintner-Black model) introduced in The Journal of Finance in 1964 (Sharpe 1964), which proposed that investment returns can be explained by two factors: market risk & investment-specific risk.

To achieve greater returns, an investor would simply need to take greater risk. But this theory relied on two basic assumptions: 1 – investment markets are competitive and efficient & 2 – markets are made up of rational, risk-averse investors who want to maximize returns.



Naturally, there were challenges to this theory.

Possibly the most well know and credible competing theory came from Eugene Fama and Kenneth French who introduced a three-factor model which replaced Beta with two other factors: Size (market cap) and Book Value. In an nutshell, their conclusion showed smaller capitalization stocks outperformed larger capitalization stocks as did stocks with greater book values (relative to price) compared to stocks with lower book values. This research became the backbone of the hugely successful Dimensional Funds (DFA).

Fama and French published a follow up study in 2012 with a four-factor model which added Momentum as the fourth factor, indicating strong momentum patterns in many equity markets around the world. Fama also noted, “No model is completely true. They are good approximations.”

In my 20 years of experience, I have rarely (if ever) seen a strategy perform as well as indicated in back-testing - even academically sound, well-constructed studies.

> FUNDAMENTAL ANALYSIS

Often when a study shows an opportunity to generate excess returns quantitatively, more and more investors will seek to capitalize on the opportunity to the point that the opportunity is neutralized. Once the strategy stops “working” even for a short period of time, investors will abandon it for other strategies, which often allows the strategy to “work” again, after which the cycle is repeated. Even if a strategy continues to “work” over time, the excess returns are typically less than in the back-tested study. As a result, academic studies often reach different conclusions based on the time periods studied. Lapses in effectiveness are likely a result of the previously described cycles.

For a quantitative strategy to produce excess returns, it must be capitalizing on an inefficiency in the market or “behaviorally motivated investor errors” (First Trust). Combining different strategies, quantitative or otherwise, that tend to perform well at different times (low correlation) can lead to a less volatile portfolio that produces excess returns over time.

Keep in mind that correlations of assets and strategies often change over time. Two assets that have low historical correlation can experience periods when they become highly correlated. Sometimes these episodes are brief. Other times, these changes are more systemic and permanent.

Other studies have challenged the momentum factor, suggesting the excess returns from momentum no longer exist.

“Price series momentum was gradually arbitrated out starting in the early 1980s and continuing into the 1990s. The main reason for this is simple: too many traders were using these models and it was not possible for all of them to profit. Some had to lose and in the process the systems became unprofitable.” *Price Action Lab Blog Sept 22, 2015*

More recently, however, First Trust published their Quantitative Stock Selection white paper with data through September 2014 that indicates the potential for excess returns with both Value and Momentum individually, and even greater excess returns through a combined approach.

As First Trust demonstrated, the following table “summarizes the risk and return results by quintile for each of the strategies tested. As can be seen in the table, in comparison with the single model strategies, the combined model not only increased the return spread between the top and bottom quintiles, indicating greater selection skill, but also increased the return relative to risk, evidenced by a higher Sharpe Ratio.”

> FUNDAMENTAL ANALYSIS

Combined Value/Momentum, Value and Momentum Model Summary:
Average Annualized Risk/Reward for Largest 1000 Stocks by Market Value:
January 1990 – September 2014

Model	Model Quintile				
	Top Quintile	Quintile 2	Quintile 3	Quintile 4	Bottom Quintile
Combined:	16.50%	13.60%	11.70%	11.30%	8.70%
Value/Momentum	(17.20%) [.78]	(15.50%) [.68]	(15.30%) [.56]	(15.50%) [.52]	(19.90%) [.28]
Value	15.00%	12.50%	12.20%	11.60%	10.30%
	(17.00%) [.70]	(15.50%) [.60]	(15.10%) [.60]	(16.20%) [.53]	(22.00%) [.32]
Momentum	15.60%	11.20%	11.60%	11.80%	11.90%
	(18.60%) [.67]	(15.10%) [.53]	(15.50%) [.55]	(16.60%) [.52]	(21.00%) [.42]

Data Source: Clarifi

Annualized average return with annualized standard deviation in parentheses, annualized Sharpe Ratio in brackets.



Based on the preponderance of the evidence, we believe Value, Momentum, and Size are all factors likely to produce above average returns in the future. Naturally, there will be times when these particular factors underperform, enough to shake out the weak followers and allow the factors to once again “work”.

These three factors are built into our Global Equity portfolio, so the stocks selected domestically and internationally are those that rank highest when evaluated with these factors.

04 TURRET THREE

There are numerous types of investments outside the traditional stock & bond markets, many of which have low correlation of returns. These may be different assets altogether or they may be a different way of investing in the traditional markets (often by hedge funds).

As with any investment, there are fundamentals (intrinsic value, risks, etc). Some of the common alternative investment strategies include: Commodities, currencies, managed futures, timber, private equity/debt, real estate, infrastructure, and numerous hedge fund strategies (absolute return, long/short, merger arbitrage, etc) which often make use of derivatives.

Alternatives have become quite popular over the last decade as investors have taken note of the success of the endowment funds of a few Ivy League schools and pension funds, where some of the assets or strategies have experienced strong returns. As often happens, many investors jump into these strategies after they have done quite well, just in time for them to not do so well.



Many alternatives are less liquid. Therefore, investors must require a greater potential return in exchange. Likewise, some are highly volatile, which also demands a greater potential return. Others are designed to be less volatile (hedged) but still provide a moderate return – slightly less return with much less risk.

As we have already established, if an asset class or strategy has strong future return potential and is not highly correlated to traditional stocks or bonds, it can increase the potential return of a portfolio or reduce risk – or (ideally) both.

However, alternatives are not the Holy Grail some believe them to be. Many investors have been sucked into the illusion that certain alternative investments have less risk because they are private or non-traded and thus do not have daily pricing. In reality, these investors have simply traded one type of risk (short-term volatility) for another (illiquidity). They still retain the long-term return/risk profile of the asset, but are unable to get out if the long-term picture becomes unattractive.

> ALTERNATIVES

Another note of caution for alternatives – correlations often change over time. In some cases, assets that start out with low correlations become highly correlated as they grow in utilization and liquidity, diminishing the benefit of having it in a portfolio.

We have selected a few alternative assets for a portion of the portfolio. This portion of the portfolio will be more dynamic over time as we constantly assess the fundamentals (future return potential, risk profile, correlation, etc.) of the available assets. An asset will only be in our portfolio if we believe it is likely to provide a diversification benefit (low correlation) and a respectable expected future return.





Part 1 – Tactical Defensive

(trend following)

In his 2007 white paper, “A Quantitative Approach to Tactical Asset Allocation,” Meb Faber demonstrates and concludes a simple tactical or trend following strategy can increase overall returns over time compared to a buy and hold strategy. His updated study in 2015 showed significantly higher returns were achieved by incorporating a simple tactical strategy during the study period, 1973-2015.

Once again, following a tactical strategy is not the Holy Grail or magic bullet of investing. Such a strategy will likely underperform the market at least half of the time, making it difficult for investors to stick with it. The payoff comes when it avoids a substantial drawdown in the market, saving that part of the portfolio from significant short-term losses.

As did Mr. Faber, we decided to apply a tactical overlay to half of our Global Equity portfolio using a simple moving average, updated at the end of every month. This is the baseline.

Strategically, as more time elapses from the previous significant market drawdown, we may increase the percentage of the portfolio with a tactical overlay. Additionally, after a significant drawdown, we may reduce the percentage of the portfolio with the tactical overlay to less than 50%.

Part 2 – Tactical Opportunities

We also believe other tactical strategies have merit, can provide a diversification benefit, and potentially increase portfolio returns. So we have incorporated two additional tactical strategies to the portfolio. Both strategies are quantitative and utilize Robert Shiller’s CAPE Ratio (Cyclically-Adjusted Price Earnings) as a factor in determining asset selection.

Sector Rotation: The basic framework is to invest in the 5 sectors with the lowest CAPE/Historical Average CAPE (Relative CAPE). We have several additional filters to this strategy to avoid value traps, data outliers, and add more relevant data. Sectors are ranked and rebalanced quarterly.

International Country Rotation: The basic framework is to invest solely in the 10-15 countries we believe have the greatest future return potential. Countries are ranked based on the following factors: CAPE, PE, Market Cap to GDP, Debt to GDP, Unemployment, and Interest Rates. This strategy is updated and rebalanced quarterly as well.

06 PORTFOLIO CONSTRUCTION

These four turrets are combined into... you guessed it, four risk-based portfolios: Conservative, Balanced, Growth, and All Equity. A typically allocation may look something like:

Asset Class	Conservative	Balanced	Growth	All Equity
Global ETF	15	20	25	30
Tactical Opportunities	10	15	25	25
Tactical Defensive	15	25	25	30
Alternative ETF	10	10	15	15
ETF Bond	50	30	10	0

But our portfolio allocations will change over time based on data, logic, and strategic factors.

07 CONCLUSION

Investors are always looking for a Holy Grail strategy, which does not exist, nor will it ever. We believe Fourtress, by combing four successful investment strategies/styles & rebalancing, may be as close as growth-oriented investors can expect to come. Fourtress is designed to seek consistent growth over time and to minimize drawdowns that often cause investors to stray from their investment plan, if they even have one.

For investors whose objective is more income oriented, we suggest reading our Orchard Portfolios white paper and exploring our Orchard strategies (currently under construction), which are being built with similar principles.

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08 DISCLOSURES

- Past performance may not be indicative of future results. Therefore, no current or prospective client should assume that the future performance of any specific investment, investment strategy (including the investments and/or investment strategies recommended by the adviser), will be profitable or equal to past performance levels.
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