

Evoke | ARIS Insights: The Blank Slate Portfolio

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You woke up this morning and everything you thought you knew about investing had remarkably vanished. You can no longer depend on your memory of conventional wisdom and must seriously consider redeveloping your core investment tenets from a blank slate. Today's task is to construct a portfolio that seeks high returns while minimizing risk (let's call it the "Blank Slate Portfolio"). For the purposes of this discussion, we will set aside the "safe money" portion of the portfolio since a low return-low risk allocation can usually be constructed with little effort. Let us walk through the logical steps together.

Conceptual Framework

Step #1: from what universe should we select individual investments that can help us meet our high return goal? For starters, we should exclude anything that doesn't reasonably offer attractive long-term returns because it would run counter to the main objective.

Step #2: which high returning investments should we choose? Since we wish to minimize risk, it is imperative that we avoid overconcentration in assets that generally go up and down together. Instead, a diversified mix of strategies that are reliably different from one another can help reduce risk. If this step is well executed, there is potential for the overall risk to be even lower than conventional portfolios (and the return higher)!

This edition of *ARIS Insights* can end here because the formula is that straightforward. Of course, additional details are needed to successfully implement this approach in practice. To that we now turn.

We will begin with potentially high returning investments that are easily accessible, liquid, low cost and tax efficient. Stocks certainly fit the criteria. Over the past 50 years, global equities have delivered about 9% on average each year.¹ The attractive long-term returns of stocks are well documented and widely recognized. For this reason, the vast majority of conventional portfolios are dominated by this single asset class. Therefore, the traditional asset allocation tends to rise and fall with the stock market. The remainder of this piece will explore additional high returning investments that should be considered alongside stocks because they can meaningfully reduce risk without sacrificing returns.

Consider Treasuries, the safe-haven asset that has historically represented a good diversifier to equities. Before your memory was erased you had assumed that this asset class is low returning. However, Treasuries can be structured to produce an equity-like return with the modest use of leverage. Many investors may be surprised to learn that levered long-term Treasuries have slightly outperformed global equities over the past 50 years!²

How about inflation hedges such as TIPS (Treasury Inflation-Protected Securities) or commodities? TIPS can be levered just like Treasuries to offer an equity-like long-term return. Commodities generally come in two forms: commodity futures and commodity producer equities. The latter typically has a high expected return because of the equity structure while offering diversifying characteristics due to the underlying exposure to commodities.

¹ Bloomberg, MSCI World Index, 12/31/1969 – 2/29/2020.

² Bloomberg, MSCI World Index, 12/31/1969 – 2/29/2020. Bloomberg Barclays US Long Treasury Index, 1/31/1973 – 2/29/2020. Prior to inception, ARIS backfilled using the Long-Term Government Bond Return data from the 2016 SBBI Yearbook by Roger G. Ibbotson (Appendix A-6). ARIS scaled the excess return of Treasuries by 1.4x in order to target a long-term volatility in line with equities.

The risk-equalizing approach of taking various asset classes and structuring them to have an equity-like expected return is commonly termed “risk parity.” Table 1 shows the long-term returns and standard deviation of the four aforementioned asset classes, all of which are readily available to investors.

Table 1: Long-Term Returns of 4 Diverse Liquid Asset Classes (“Risk Parity”)³

Asset Class	Index	Inception Date	Annualized Return	Annual Volatility
Equities	MSCI World (net)	Jan. 1970	9%	15%
Treasuries (levered 1.4X) ⁴	Barclays US Aggregate Long-Term Treasury ⁵	Jan. 1970	10%	15%
Commodities	<ul style="list-style-type: none"> • 60% Morningstar Global Upstream Natural Res.⁶ • 40% Gold 	Jan. 1970	10%	15%
TIPS (levered 1.4X) ⁴	Merrill Lynch 15+ Yr. US Inflation-Linked Bonds	May 1998	9%	15%

*All data is through 2/29/2020.

Consistent with the goal of seeking low total portfolio risk, the focus thus far has been on liquid market segments that are diversifying. Equities, Treasuries, TIPS and commodities tend to outperform in varying economic environments. Since each can be designed to have an equity-like return over time, a balanced mix of all four asset classes creates the opportunity to earn high returns with less risk than an equity-concentrated portfolio.

Some other commonly used liquid asset classes such as high yield bonds may be considered but should not be viewed as highly diversifying versus equities since the underlying return drivers are very similar (e.g., they both suffered significant losses in 2008 and thus far in 2020). To achieve lower risk with high returning investments, it is crucial that the underlying strategies don’t go up and down together. If they predominantly behave like stocks, then adding them to the portfolio does not help with the low risk objective.

Moving on to less liquid strategies, the most beneficial additions to our Blank Slate Portfolio are those that deliver high returns and are uncorrelated to the above asset classes. These strategies can markedly reduce portfolio risk because gains in these areas can potentially offset losses during down years elsewhere in the portfolio.

Three different examples of reliably uncorrelated investments involve strategies that in various forms hedge away market risk. For instance, the performance of market neutral hedge funds that go long and short in equal amounts has nothing to do with whether the market goes up or down, since returns are generated when the longs outperform the shorts. Many of these funds were up during historical bear markets including 2008. Another example is a manager that may be net

³ Source: Bloomberg as of 2/29/2020. For periods prior to the inception of applicable indices above, ARIS backfilled using an approximate proxy based on relevance and ARIS analysis. Please see the disclosure for Asset Class Return Methodology and for Relevant Index Descriptions in the back of this Insight for more detail on methodology and calculations for all indices included. For discussion purposes only. Use of a different methodology and different set of assumptions will likely lead to materially different results from those presented here.

⁴ ARIS scaled the excess returns of Treasuries and TIPS by 1.4x in order to target a long-term volatility in line with equities.

⁵ This index started in February 1973. Prior to inception, ARIS backfilled this index using the Long-Term Government Bond Return data from the 2016 SBBI Yearbook by Roger G. Ibbotson (Appendix A-6).

⁶ This index started in January 2001. Prior to inception, ARIS backfilled this index using a custom index consisting of energy producers (2/3 of allocation) and miners (1/3 of allocation). Please see Relevant Index Descriptions in the back for detail.

long or short at any point in time but averages zero net exposure over time. The returns will be dependably uncorrelated to markets over the long run because of the zero average net exposure. Finally, there are managers that invest opportunistically across various markets while diligently hedging undesired market exposure to minimize the impact of unpredictable market forces. We call these three types of strategies hedge funds that hedge (in contrast to most that do not fully hedge and are more highly correlated to equities).

One additional category of assets to include in our Blank Slate Portfolio is illiquid, private funds. The fields of private real estate, direct lending, healthcare royalties, among many others, provide investment opportunities in less efficient markets that are different from the aforementioned strategies. These investments offer the potential for outsized returns with additional diversification benefits.

Putting it all together, the Blank Slate Portfolio is well diversified across 8 unique return streams: equities, Treasuries, commodities, TIPS, 3 types of hedge funds and investments in private assets. All of these strategies are expected to compete with and be diversifying to equities over time. Table 2 visually summarizes the returns of these 8 groups broken into 3-year blocks to demonstrate the virtues of diversification. The data includes index returns for equities, Treasuries, commodities and TIPS. We use actual returns for 3 hedge fund managers that fit the aforesaid investment styles.⁷ For private assets, we utilize a private real estate index return because of its long history.

Table 2: Historical Results of 8 Diverse, High Returning Strategies⁸

	'00 – '02	'03 – '05	'06 – '08	'09 – '11	'12 – '14	'15 – '17	'18 – '20	All Periods
1 st	TIPS 21%	Commod 25%	Hedge A 14%	Hedge B 23%	Equities 15%	Real Estate 10%	Treasuries 16%	Hedge A 11%
2 nd	Treasuries 17%	Equities 19%	Treasuries 14%	Commod 19%	Real Estate 12%	Equities 9%	TIPS 12%	TIPS 10%
3 rd	Hedge A 13%	Hedge B 18%	Commod 11%	TIPS 19%	Hedge A 11%	Hedge A 8%	Real Estate 6%	Treasuries 10%
4 th	Real Estate 8%	Real Estate 14%	Hedge B 8%	Hedge A 13%	Hedge C 11%	Hedge C 8%	Hedge C 5%	Hedge B 9%
5 th	Hedge B 6%	Hedge A 13%	Real Estate 7%	Hedge C 11%	Treasuries 6%	Commod 5%	Hedge A 5%	Hedge C 9%
6 th	Commod 3%	TIPS 13%	Hedge C 5%	Equities 11%	TIPS 3%	TIPS 4%	Equities 3%	Commod 9%
7 th	Equities -17%	Treasuries 7%	TIPS 2%	Treasuries 10%	Hedge B 3%	Treasuries 3%	Hedge B 2%	Real Estate 8%
8 th	--	--	Equities -8%	Real Estate -2%	Commod -3%	Hedge B 3%	Commod 1%	Equities 4%
Equal-Weighted	8%	16%	8%	14%	8%	7%	7%	10%

*All data is through 2/29/2020.

⁷ All hedge fund manager performance is representative of actual net-of-fees returns as reported by the managers, without independent verification from ARIS. Note, ARIS has existing relationships with these managers through investments made from client portfolios and the Advanced Research Alpha Fund.

⁸ Source: Bloomberg, 12/31/1999 through 2/29/2020. For periods prior to the inception of applicable indices above, ARIS backfilled using an approximate proxy based on relevance and ARIS analysis. Please see the disclosure for Asset Class Return Methodology and for Relevant Index Descriptions in the back of this presentation for more detail on methodology and calculations for all indices included. ARIS scaled the excess returns of Treasuries and TIPS by 1.4x in order to target a long-term volatility in line with equity markets.

What is striking about the data presented is the contrast between the volatility of each individual strategy and the stability of the equal-weighted mix. Also noteworthy is that equities have underperformed the other 7 investments by a large margin over the past 20+ years. In short, it is far better to invest in many diverse strategies (more than 8 would be even better) with equity-like returns because of the consistency and downside protection that it produces. The vast majority of portfolios today do not invest this way and instead opt for a more equity-centric approach that experiences wilder swings and often underperforms a more diversified mix over time.

Implementing the Blank Slate Portfolio

Transitioning from theory to practice, the Blank Slate Portfolio clearly is not for everyone. One major challenge with implementing this approach in real life is the fact that, unlike you, the rest of the world is not starting with a blank slate. Long-established conventions govern portfolio theory and compel investor behavior. These embedded principles are perpetually reinforced by what is seen, read and heard everywhere and every day. Investing differently is only for those highly convicted because of the inevitable periods of relative underperformance when compared to peers. Therefore, one material risk is the temptation to change course at the wrong time. In our experience from working with clients for over 20 years, this possibility should not be underestimated.

Another important hurdle to overcome is the natural instinct to automatically sell underperforming investments in the portfolio. Investors should recognize that it is completely normal for one or more segments to experience relative underperformance, even for an extended period. This can be expected in a well-diversified approach as the various assets go up and down at different times. Therefore, if you have conviction in the investment, it is generally not a sign of a problem when something is doing poorly, but might be a signal to consider adding more.

At ARIS, our practice has been evolving towards the framework described here. We recently launched an exchange traded fund to try and solve the problem of efficiently gaining exposure to a balanced mix of liquid, diverse asset classes. In addition, we have focused our efforts on identifying interesting low correlation return streams that can further diversify client portfolios. Five years ago, we developed the Advanced Research Alpha Fund to combine difficult-to-access low correlation hedge fund managers in a single vehicle with no incremental management fee to clients. We feel that these two funds may help fill a gap that exists in the industry despite the presence of tens of thousands of investment products. Finally, we continue to source a variety of private investments in real estate, direct lending, healthcare royalties and other low correlation strategies to further enhance return and reduce portfolio risk.

We live in an environment that is brimming with risks. The Coronavirus outbreak, increasing political uncertainty, and unprecedented government interventions contribute to the growing range of potential economic outcomes and increasing risk of extreme events. We feel strongly that the investment approach represented by the Blank Slate Portfolio will be needed for investors looking to achieve their target returns with strong downside protection in the challenging market environment ahead.

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ASSET CLASS RETURN METHODOLOGY:

To calculate return, risk and correlation statistics for these asset classes going back to the respective inception date, ARIS used the following methodology sourced from Bloomberg for all indices provided.

Equities, 12/31/69 – 2/29/20: MSCI World Index (NDDUWI).

Treasuries, 12/31/69 – 01/31/73: Long-Term Government Bond Return data from the 2016 SBBI Yearbook by Roger G. Ibbotson (Appendix A-6). 01/31/73 – 2/29/20: Barclays US Aggregate Long-Term Treasury Index (LUTLTRUU). 40% leverage was applied to the returns by multiplying the excess returns above the Merrill Lynch 3-Month Treasury Bill Index (GOO1) by 1.4 and adding to the Merrill Lynch 3-Month Treasury Bill Index (GOO1).

TIPS, 4/30/98 – 2/29/20: Merrill Lynch 15+Yr. Inflation Linked Index (G8QI). 40% leverage was applied to the returns by multiplying the excess returns above the Merrill Lynch 3-Month Treasury Bill Index (GOO1) by 1.4 and adding to the Merrill Lynch 3-Month Treasury Bill Index (GOO1).

Commodity Equities, 12/31/69 – 12/31/00: custom index of 2/3 energy and 1/3 metals producers provided by GMO; 12/31/00 – 2/29/20: Morningstar Global Upstream Natural Resource TR Index (MUNRT).

Gold, the percent change of the spot price of gold (XAU) for all periods.

RELEVANT INDEX DESCRIPTIONS:

The indexes included in this presentation are provided for purposes of comparison only and include dividends and/or interest income. They do not reflect fees or expenses, are unmanaged, and fully invested. There may be no correlation between the performance of any index and any strategies employed by ARIS. The comparison of these strategies' performance to this indexes may be inappropriate because, for instance, their portfolios may not be as diversified and may be more or less volatile than the index, and may include a short portfolio and derivative securities.

Equities: The MSCI World Index is made up of 1,612 large and mid-cap common stocks from the world's 23 "developed markets," as defined by MSCI, Inc. According to MSCI, Inc., the index covers approximately 85% of the free float-adjusted market capitalization in each represented country.

Treasuries: The Bloomberg Barclays US Long-Term Treasury Index is a long index that measures US dollar-denominated, fixed-rate, nominal debt issued by the US Treasury with 10 years or more to maturity. 2016 SBBI Yearbook: U.S Capital Markets Performance by Asset Class 1926-2015 authored by Roger G. Ibbotson was used as a proxy to backfill Long-Term Treasury Return data prior to the inception of the Bloomberg Barclays index above.

Commodities: The Morningstar Global Upstream Natural Resources Index reflects the performance of a selection of equity securities that are traded in or are issued by companies domiciled in global developed or emerging markets (including the U.S.). The companies included in the index have significant business operations in the ownership, management and/or production of natural resources in energy, agriculture, precious or industrial metals, timber and water resources sectors. The Energy/Metals Index is a basket of global Energy and Metals commodity producers. The allocation is 2/3 Energy and 1/3 Metals. Energy is comprised of the Integrated Oil & Gas companies and Exploration & Production companies. Metals consists of industrial metal mining companies (iron ore, bauxite, copper, lead, etc.). In order to go back to the 1970s, a variety of different industry classification systems needed to be stitched together, including GICS, SIC, and MSCI industry codes. Data was provided by GMO.

Real Estate: The NFI-ODCE (NCREIF Fund Index - Open-End Diversified Core Equity) is a fund-level capitalization weighted, time-weighted return index and includes property investments at ownership share, cash balances and leverage (i.e., returns reflect the fund's actual asset ownership positions and financing strategy) with history dating to 1998.

TIPS: The Bank of America Merrill Lynch 15+ Year US Inflation-Linked Treasury Index is an unmanaged index comprised of U.S. Treasury Inflation Protected Securities with at least \$1 billion in outstanding face value and a remaining term to final maturity greater than or equal to 1.5 years.

Cash: The Merrill Lynch 3-Mo US T-Bill Index is an unmanaged index that is comprised of a single U.S. Treasury issue with approximately three months to final maturity, purchased at the beginning of each month and held for one full month. The 2016 SBBI Yearbook: U.S Capital Markets Performance by Asset Class 1926-2015 authored by Roger G. Ibbotson was used as a proxy to backfill Long-Term Treasury Return data prior to the inception of the Bloomberg Barclays index above.

No representation is being made that any account will or is likely to achieve returns similar to those shown for the hedge fund managers. Trading in futures is risky and can result in losses as well as profits. Performance as of the current month is estimated and subject to change.