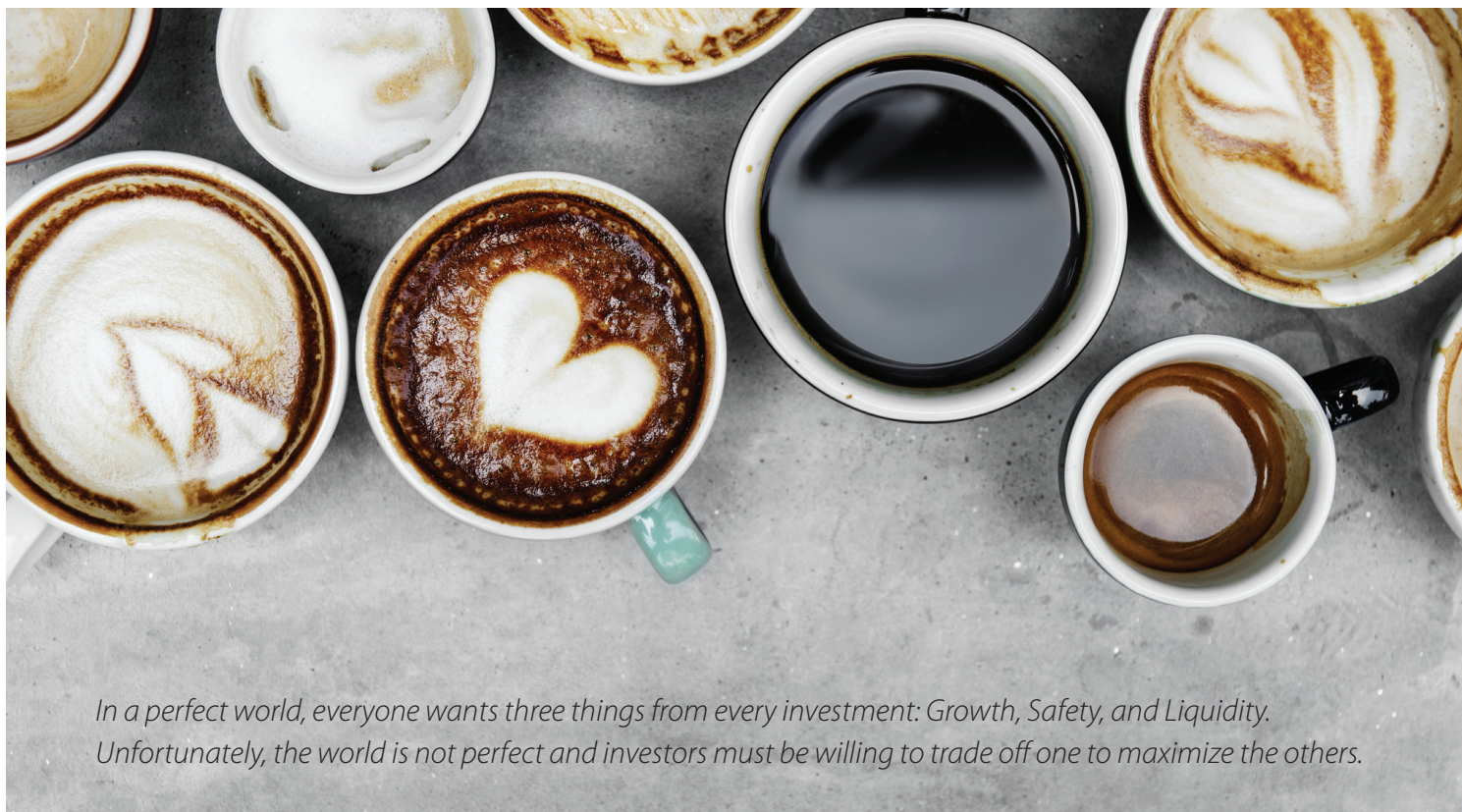


A Different View of Diversification



In a perfect world, everyone wants three things from every investment: Growth, Safety, and Liquidity. Unfortunately, the world is not perfect and investors must be willing to trade off one to maximize the others.

Consultants commonly employ computer-generated diversification models to reduce portfolio risk. Classically, this involves pairing different investments that have low correlation; in other words, when one is falling, another is rising. The result is to reduce the aggregate portfolio volatility. Unfortunately, this is a lot more easily said than done. Over the past half-century, economists have devised mathematical models designed to calculate correlation and risk. In theory, their purpose is to benefit investors by projecting better results than a single investment or grouping of similar investments can provide. However, these models all suffer from a common liability: they're based on past performance (which cannot future results).

There are multiple competing hypotheses about how markets behave. One, the Efficient-Markets Hypothesis (Fama 1970) holds that markets respond to real world conditions rapidly and efficiently, making it impossible for investors to out-perform the markets by seeking under-valued stocks. In other words, markets "know everything" so an investor can't "beat them." By

implication, the only way to increase return is increase risk. Unfortunately, there is little actual direct correlation between risk and return.

A second hypothesis proposed by Shiller (1992), assumes markets are not efficient responding to random future events. Because markets do not "know everything," there is opportunity — at least long-term — to best markets by value investing. Campbell and Shiller (1988) proposed that 10-year earnings data offered a more reliable means of judging equity valuation. The function of a CAPE (Cyclically-Adjusted Price to Earnings) Index is to measure not market price but value, and seeking under-valued investments offers a means to improve investment results (see also Shiller 2000). Efficient-Markets Hypothesis rejects this idea. Ironically, in 2013, both Shiller and Fama (and Hansen, Fama's colleague), shared the Nobel Prize in Economic Science for providing insight into ways investment markets operate.

More recently, many traditional assumptions about how markets behave have been

disrupted. Following the Dot-Com bubble explosion (2000-2002) and then Mortgage Security Crisis (2007-2009), market volatility has exploded, creating market bubbles (Shiller 2000) which make predictability far more difficult than previously. Benson and King (2015) observed that global and US market movements were more closely correlated (doing the same thing at the same time) when they declined rather than rose. This observation of systematic asymmetry means that the value of diversification across different broad markets as a strategy to de-risk a portfolio is skewed in the negative. In other words, when markets fall, everything falls and there is no good safe harbor but when markets rise, picking is a crap shoot. One conclusion is that classical portfolio diversification by asset class may no longer offer the level of risk reduction it did previously.

Portfolios are also de-risked by pairing equities with bonds. In theory, bonds move in opposition to equities and while bonds have lower returns, that trade-off is justified by the reduced risk. This concept comes from the Efficient Frontier Model

(Markowitz, 1952) which sought to describe how the risk and return ratios of different portfolios shifted based on different equity to bond mixes. The idea is that bonds, with less volatility, stabilize the total portfolio as well as providing an inverse correlation. This strategy is common advice for older investors who have lower risk tolerance than younger people. However, it ignores the notion that reducing return to achieve reduced risk may provide no net improvement, particularly when inflation is factored.

Sharpe (1966) proposed a way to calculate the relationship between risk and return: the Risk-adjusted Return (Sharpe Ratio). Subsequently, numerous variations have been derived. The concept is that investors need to consider expected return in conjunction with anticipated risk. In other words, the expected result (return) and probability of achieving it (risk) produces a Risk-adjusted Return which factors both without presuming a linear correlation between the two. The lesson is that when low return and low risk investments, such as bonds, are selected, there may be no net realized benefit (Risk-adjusted Return). The financial crisis of 2008 diminished the success of this classic approach because unlike previously, during the Great Recession, both equity and bond prices fell. Traditionally they move in opposition.

Another casualty of the 21st Century's extreme volatility is an income strategy known as the 4% Rule (Bengen, 1994). This rule proposes that a portfolio composed of a 50/50 mix of equities and bonds can sustain a permanent lifetime income by withdrawing 4% of the portfolio value annually, increasing 3% per year for inflation. Subsequently, the validity of this proposal has been questioned (Scott et al., 2008; Voegtlin and Pfau, 2014). Bengen's data analysis in the early 1990's neither foresaw the extreme market volatility of the 21st Century nor the loss of diversifying movement of bonds relative to equities. There are many theories that seek to explain this disconnect, but a simple one is that times changed. Prior to the mid-1990s, the broad stock markets were relatively steady and predictable but beginning around 1995, an unprecedented degree of volatility arrived and appears to be here for the foreseeable future. In part, this may simply be due to the digital age, where increasingly, investors rely on instant information to make investment choices, causing the world to "shrink." Far more now than in Bengen's day, an economic event in one part of the world can convey an instantaneous impact on US markets. The consequence is that

more than ever before, global markets move in unison, if not lock-step with each other and the opportunity to diversify by traditional methods is diminished

DALBAR, an independent financial research firm that has analyzed investor returns since 1994, recently reported that during 2018, the average investor earned much less than benchmark market indices (see Longo 2019). Similarly, Morningstar (Kinnel 2014) reported that from 2003-2013, where the average Mutual Fund returned 7.3%, the average Mutual Fund investor gained just 4.8%, fully 2.5% less than expected. These failures are broadly attributed to imperfect timing by investors who sought to "beat" the market.

However, all these theories of portfolio de-risking may well be a case of missing the forest for the trees. Returning to the fundamental assumption that investors all want Growth, Safety and Liquidity, it's instructive to think in terms of diversifying by pairings of those variables rather than different financial products. Recognizing that to maximize two variables, a third must be traded off provides three pairings:

- Growth plus Liquidity
- Safety plus Growth
- Liquidity plus Safety

When portfolios are diversified by these three pairings, the results can be better and more predictable because collectively, all three components are more fully represented without relying on past performance to forecast future results. Fundamentally, the financial services world consists of three industries: Securities, Insurance, and Banking. Each broadly represents one pairing so diversification by pairings also infers diversification by industries.

Pairing 1: Growth plus Liquidity describes the **Securities Industry**. Market investments offer upside potential and, in most cases, short-term access to funds but without guarantees of principal protection: Growth plus Liquidity, less Safety. Thus, one can infer, for example, that a portfolio of different stocks and mutual funds, regardless of how "diverse," falls entirely within the Growth and Liquidity basket and is therefore not truly diversified. But this concept is not new. Standard portfolio theory recognizes two categories of market risk: systematic and unsystematic. Unsystematic Risk is that associated with individual investment risk; what portfolio diversification is intended to mitigate. Systematic Risk is the risk associated with the markets themselves and cannot be

reduced by equity portfolio diversification. In other words, diversification within securities can only reduce unsystematic risk. Given the 21st Century's heightened volatility and disproportionately higher correlation with falling markets, systematic risk has increased disproportionately to unsystematic.

Pairing 2: Growth plus Safety is from the Insurance Industry (Fixed Index Annuities, Cash Value Life Insurance, etc.). These products offer the potential of Growth with complete down-side Safety but at the expense of short-term unrestricted Liquidity. An argument for bonds in this pairing category might be made although increasingly less so. To this point, Ibbotson (2018) endorsed the concept that Fixed Indexed Annuities, specifically those without caps, do a better job of de-risking a portfolio than bonds. Not only do they provide complete down-market protection but also can offer, on average, greater return (see also DeMasters 2018). However, in recognition of limits on unrestricted Liquidity, one does not use these products to achieve short-term financial goals. And, of course, having a portfolio entirely composed of annuities would not be well diversified.

Pairing 3: Safety plus Liquidity predominantly comes from the **Banking Industry** (banks and credit unions). Un-timed deposits (money market, share or passbook savings accounts) in these institutions are fully insured (to stated limits) and offer unrestricted access but at the expense of high Growth. However, time deposits (CDs), especially those with longer maturities, may not fit this pairing because they impose strict limits on Liquidity in exchange for relatively minor increases in return.

Ultimately, these Growth, Safety, Liquidity associations are broad generalizations, and within each industry there is a wide array of choices that tend to blur the lines of distinction. Yet, the concept of diversification by objective pairing across multiple industries rather than seeking to diversify entirely within one industry may offer a more objective way to diversify without having to rely on past performance to attempt to predict the future. Therefore, rather than seeking to construct an entire portfolio within, for example, securities (a single pairing), a truly independent advisor would identify different pairings for different objectives then "shop" within each pairing industry for a product that best conforms to that specific planning objective. This, of course, requires a thorough needs analysis before offering any recommendation about industry, company or product.

Some relevant variables might include:

- Short-term access: When and how much Liquidity a client may need.
- Income: How much and when; in conjunction with other sources (pensions, Social Security, etc.).
- Tax implications.
- Inheritance desires.

After these variables (and more) are determined and compared with available assets, then a Growth, Safety, Liquidity pairing is assigned which highlights one of the three industries. At that point, company and product recommendations can be made. By starting with the premise that the pairing identifies the industry and products are selected from there, a broader diversification can be made, thereby increasing the probability of total portfolio success. It's what a true fiduciary advisor looks like. Conversely, whenever a product is recommended in advance of a broad objective analysis, the result becomes little more than product-peddling. Finally, lest anyone gets the wrong impression, there is no such thing as one industry that is all good or all bad. No one financial industry is universally right for everyone and no one industry is right for anyone's every dollar. 



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A complete list of Literature Cited is available, contact author Michael Tove.

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