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The Risks of Driverless Investing

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<https://www.soa.org/Library/Essays/2018/securing-future-retirements/2018-securing-future-retirements-rudolph.pdf>

Driverless cars are close enough to start thinking about ramifications and unintended consequences. Driverless investing, using passive strategies by individuals and institutions, is already here. Should we be worried? Should we take ownership of our decision-making process, consider contrarian viewpoints and build scenarios? The answer to both of these questions is yes.

The financial ecosystem is a complex adaptive system, evolving and reacting over time in a Darwinian way. Incentives matter, leading practices in ways that pay handsomely until efficiencies and new market competitors arrive to reduce compensation or until the practice blows up, often helped along by excessive leverage.

How does an individual stay one step ahead of the game when thinking about their retirement? By taking ownership of the process. It is their retirement, and their life choices determine the outcome. Advisers can be brought in to help, and many are able to do the heavy lifting. Recognizing the roll of cycles and human behavior is useful. Market timing is hard, if not impossible. Interest rates rise, interest rates fall. Stocks go up, stocks go down. Momentum works until it doesn't. Growth investing may outperform for a time, attract assets and then do poorly. A fund is rewarded with a "five-star" rating, with investors only later realizing that past results really were not predictive. The same happens with value stocks, high yield bonds, real estate or gold. No asset class is immune from financial cycles.

The next phase of the cycle generally starts when it's least expected. Trigger points can be obvious, like when a natural disaster occurs or war breaks out, but more frequently markets turn quietly. This is the nature of a complex adaptive system, where reality is nonlinear. An example is a sand dune, where avalanche risk builds up until movement on one piece of the hill triggers the weaknesses of the system that have built up and the dune collapses. Bubbles build, with pressure increasing, until the system can stand it no more. There are many unintended consequences during a crisis, for example as illiquid assets bought on margin require the most liquid assets to be sold. Even those who have invested conservatively will be impacted. Those without leverage (debt) have a greater ability to ride it out. This is called time arbitrage, having a longer time horizon than others, and is typical of value investors.

Emerging risks are always lurking, just out of our reach. If you know which ones to worry about, you are clairvoyant. That does not describe me or anyone I know. Listening to people with long time horizons can help an investor prepare for the future.

Active Investing

Active investors believe they can generate higher returns than a pre-selected benchmark without adding commensurate risk (as opposed to beta returns). The sources vary but include creating additional returns through sector allocation, individual stock selection or investing differently than a target duration bond. By definition, you have added basis risk, diverging from the benchmark and challenging the academic concepts associated with the efficient market hypothesis. Many active investors incorporate leverage in their strategies, either borrowing on margin or using derivatives to build their portfolios. When they do, it is important for the saver to consider tail scenarios where the portfolio performs poorly.

There are many reasons active investors believe they can “beat the market.” An experienced investor may think they have learned from previous cycles and will be better situated to take advantage of the next one. They may assume common sense and judgement will allow them to navigate the markets better than competitors. The investor may have developed, and have confidence in, a specific strategy they believe outperforms.

Traditional benchmarks often use market weighted indices, where the assets are weighted based on market capitalization. An S&P 500 index fund, for example, ranks all 500 companies in the index by market cap and invests proportionally among them. This concentrates the investment in overvalued stocks. A recent strategy used by some active investors is to create what they believe is a better benchmark, altering the scheme by making it equal weighted or using alternative weightings based on dividends or volatility. I view this as part passive and part active since the investor is still following a defined benchmark, just not the one commonly used. They still set up rules-based benchmarks and follow them, rather than doing fundamental research to identify assets to purchase.

The active investor often is overflowing with confidence, but sometimes that confidence is hard to see. A value investor, always trying to “invert,” will constantly be trying to understand what was missed or what the other side of the trade is thinking. They hold a humble confidence and present a humility that is often mistakenly interpreted as a lack of confidence.

Passive Investing

Passive investing has become quite popular of late, due mainly to the lower fees charged and the recent inability for active investors to outperform their benchmark. Many savers have at least a portion of their assets in a passive strategy. They argue that active

investors have not earned their fees, so are not smarter than the wisdom of markets as personified by an index.

Successful savers create their own personal investment policy statement, determining their goals and objectives along with any constraints. Those on track to meet their goals can argue they have no need for alpha, preferring to take less risk instead. Many lottery winners forget this strategy, feeling obligated to “do something” with their money like start a restaurant or buy the current hot stock.

Many athletes forget their top earning years are limited and either spend at unsustainable rates or become involved in money pit projects. Samuel Clemens, who wrote under the nautical pseudonym Mark Twain, is a stellar example of this behavior. He continued working late in life to secure his family’s future (and helped Ulysses S. Grant, former general and president, do the same).¹

A benefit of passive investing is that the saver sticks to their benchmark, limiting the basis risk accepted. This is a simple strategy and, for many, more likely to be successful. The problem is that it is not exciting, and some are drawn into a contest against their neighbor as they try to “keep up with the Joneses.” Few, with notable exceptions like noted value investor Warren Buffett, talk about their mistakes at a cocktail party. No matter their overall results, the conversation always turns to the big winner in their portfolio, how they saw Amazon before anyone else or sold short General Motors before its reorganization. Buffett, in contrast, continually talks about errors of both commission and omission.

Some analysis has shown that many so-called active investors really don’t vary much from passive index funds. They are referred to as closet indexers, and the concern is the higher fees they charge without adding value. Be wary of these charlatans.

Counters to Passive Investing

One risk not often associated with passive investing is concentration risk. While an active investor with a single position clearly has concentration risk, the recent popularity of passive investing adds a different form of concentration risk as something to consider. When everyone owns the same thing and has the same strategy, when investor confidence goes sour and selling begins, so do the questions. Will passive investors watch patiently from the sidelines or try not to be the last man out? A problem with getting out is knowing when it is time to get back in. Some investors who accurately exited the market in 2007 have yet to return and missed out on a record-breaking rally.

Passive investors do not always use index funds, but as more blindly accept whatever the market offers, it should be easier for active investors to exploit anomalies. Arbitrage is much harder when a majority of investors are looking for opportunities. Some have

¹ Perry, Mark. Grant and Twain: The Story of a Friendship That Changed America. Random House 2004.

suggested that Buffett's comments encouraging his wife to invest in index funds are quite self-serving.² It would be a dream scenario for someone like Buffett to know that Mr. Market would have to accept whatever he offered since he would become the de facto market mover as the lone discriminating buyer and seller.

A recently introduced concern for investors is the growth of central bank balance sheets. This is happening in developed countries around the world, with Japan, the United States and the European Union leading the way. It is said that the Swiss National Bank owns \$3 billion of Apple's market capitalization among its half trillion dollar portfolio.³ Joining sovereign wealth funds, these public investment vehicles have grown beyond a place where countries invest the money made from oil or manage public pensions. How does this change the marketplace, both when accumulating stocks and when divesting them? These are questions, and risks, that have no clear answer. When liquidity is tight, these funds may cash out to limit losses. Or it may be a mix that goes beyond these two options. It is an unknown, creating uncertainty and risk. It's not even clear that these are passive investors. It is a hybrid mandate at times, giving money that must be invested but told to do it wisely. As these positions are unwound, they could trigger problems if they are unable to avoid large price discontinuities.

Every retail company in the world today worries about the impact of companies like Amazon and 3G Capital. Amazon's low-cost model that focuses on revenue causes stock prices to drop when rumors of its entry to an industry are heard (e.g., grocery stores and drug stores were both hit hard when Amazon bought Whole Foods in 2017). The zero-based budgeting methods favored by 3G Capital quickly lower costs as each expense must be defended every single year. Even companies not rumored to be takeover candidates introduce variations of these strategies to reduce expenses and increase intrinsic value. Investment flexibility may become valuable when merger speculation spikes.

A Bad Scenario

Passive investment strategies appear to have a positive impact on investors during healthy times, but do they create systemic risk when liquidity is tight? Probably not if only a small portion of investments utilize the approach, but the risk increases as fewer active investors remain to drive marginal supply and demand curves.

A prescient example to heed is portfolio insurance, which automatically bought and sold stocks to maintain proportionality relative to a liquid investment like Treasury bonds. This worked great when only a few investors used it, but the Mark Rubenstein-developed strategy called portfolio insurance led to a drop of over 20% in the S&P 500 index during

² https://www.huffingtonpost.com/druce-vertes-cfa/active-investing-versus-p_b_9256026.html

³ <https://qz.com/1140322/check-out-the-swiss-central-banks-insane-90-billion-investment-portfolio/>

a 1987 pullback known as Black Monday.⁴ When stocks fall, this requires rebalancing, leading to more sales pressure, falling prices and a downward price spiral. Some think passive investing could create similar results during a financial crisis. Where an active investor can jump in and be a buyer when the price becomes favorable, stabilizing markets, a market driven by passive strategies could be procyclical, extending losses during a crisis (and gains during a bubble).

Much like overuse of antibiotics, which are positive or neutral to individuals but detrimental to society as viruses have more opportunity to evolve, passive funds may in the short run increase investor returns but in the long term may be systemically risky. Minor pullbacks could cascade into major drops.

What Should an Individual Do?

Driverless investing seems reasonable, taking emotions and momentum out of the decision-making process, but an individual investor must always remain vigilant to changes in the marketplace and retain ownership of the decision-making process. Much as I described in an earlier essay in this series, a personalized approach to enterprise risk management encourages redundancy built with flexibility and awareness of the current environment. Relying on government policy is not the solution. Thinking about contrarian scenarios that consider incentives and tail scenarios are no guarantee but may provide resiliency that allows savers to meet their long-term objectives. Good luck to all!

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⁴ <https://www.marketwatch.com/story/heres-one-key-factor-that-amplified-the-1987-stock-market-crash-2017-10-16#false>