Brace Your Wealth For The Next Storm

Jack Damelio

2022 Senior Thesis

Department of Economics

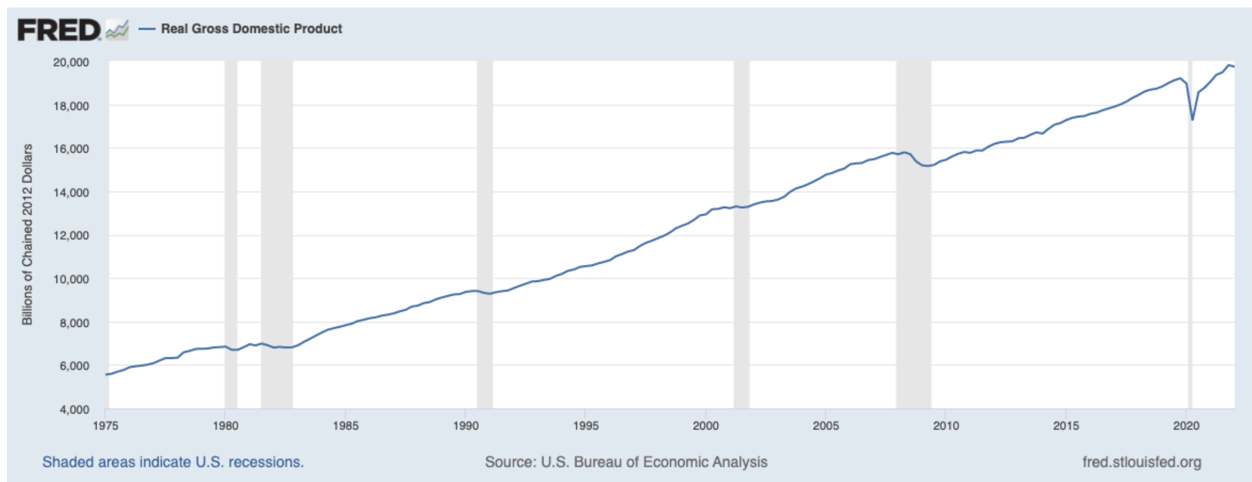
Pomona College

I. Introduction

Economic recessions have been a regular occurrence in the U.S. economy since the country's inception. Since 1857, recessions (varying in size) have occurred approximately every three and a quarter years. The root cause of a recession can come in many forms. It can come from an overheated (where demand outweighs supply) economy in which bubbles burst in certain parts of the economy. In other instances, a sudden shock to the economy or hawkish central bank can be the primary cause. The most recent, and arguably one of the most unique, is the recession caused by the Coronavirus pandemic. Although short lived, this caused GDP to drop by nearly 20% and sparked massive fear in the minds of Americans as their health and finances were held in uncertainty. The Great Depression, the 2001 Tech Bubble & the 2008-2009 housing crisis were other notable recessions that caused the country to hold their breath as almost all asset values plummeted. There have been numerous recessions that have caused financial hardship for many Americans. There have been millions of people who have lost homes, much of their life savings, and in extreme cases their life.

A recession occurs when there is a general decline in economic growth in real gross domestic product (GDP). Real GDP calculates the value of the goods and services produced in an economy while also adjusting for inflation. During most years, analysts will see real GDP rise between 1 and 4 percent, year over year. However, during times of economic recession, real GDP growth will either flatten or be negative. For example, during the 2008-2009 recession, the U.S. saw real GDP drop by 2.6%. Since, all goods and services in an economy is accounted for when measuring real GDP, negative growth indicates that the majority of the economy is struggling, not just

one individual economic component. Over the course of the American economy, GDP has generally grown over the decades (see figure 6). However, when GDP does not continue its traditional growth pattern, a recession can occur. However, this does not indicate that all sectors of the economy struggle equally during a recession. Therefore, understanding which aspects of the economy are more or less resilient to an economic recessionary environment could be beneficial when the next one arises.



The frequency of recessions throughout history is also important to understand if one is to be better prepared for the next one. Economists have measured that since 1857, a recession has occurred approximately just over every three years. There are recessions that have more significance and/or magnitude, but nonetheless, the economy enters a stage of stagnantancy or regressing growth about every 3.25 years. The length of recessions also can vary dramatically. Since the start of the Free Banking Era in the 1830s the longest recorded recession was the Panic of 1873 (“The Long Depression”) which lasted for five years and five months. Conversely, the shortest recession during that time span was the Covid-19 recession which only lasted approximately two months.

The U.S. financial markets are often impacted significantly from a recession. First and foremost, there is often a surge in volatility among most major asset classes during a recession. This paper will focus on how one can develop a responsible investment strategy to weather a recession, while also focusing on long term success. History has shown that recessions should be expected over time. Therefore, how can Americans be proactive in anticipation of a recession? Readers will be provided a solution to this question through three methods: examining previous literature on proven successful investment strategies, an interview with a Merrill Lynch wealth management advisor of 25+ years, and through conducting personal research on the performance of different asset classes during previous recessions.

II. Literature Review

A significant portion of this paper will focus on existing literature because of the immense amount of research and analysis available on the subject by experts with many years of experience in the financial industry. The research surrounding investor recession protection is extensive and fairly consistent. There are many that recommend maintaining a consistent and unwavering investment approach. However, time and time again the finances of many Americans are destroyed by recessions. Part of recession preparation should incorporate understanding and acknowledgment into which type of investor and investment methodology are most susceptible to the next recession. Shan Lei in her paper, "Investment Strategies During the Great Recession: Who Remains Calm and who Panics?" attempted to determine which investment strategies are most commonly used by individuals with different demographics and backgrounds. There are many predictable ways to determine which type of individual will be most affected by a

recession. The study focuses on research from the Great Recession (2007-2009) and investment strategies used by different investors. In addition, the paper discusses in detail the difference in performance among individuals who did and those who did not have a financial adviser during the Great Recession. There was significant correlation between a better performing portfolio and the likelihood that an investor had a financial adviser. Understanding the traits of a recession-prepped investor compared to one that is not, is something that this paper will explain in greater detail.

There is immense research among economists and investors on varying investment strategies that help investors hedge best against recessions. Nanny Dunnan (1991), in her work “Recession Strategies” gives investors her take on how to prepare for potential downside in the economy. She breaks down the approach she suggests to investors when dealing with CDs and Treasury Bonds, Foreign currencies, multinational stocks, recession-proof stocks, utilities, and solvent companies. This work has many benefits since it provides advice on such varying investment options which will be explored in more detail later in this paper. Similarly to Dunnan, Michelle Fox wrote the article “Worried about a recession? Don’t panic, say financial advisors, but do be prepared” where it provides many valuable insights to investors. She explains the reaction that the market has to an inverted yield curve and how investors should respond to it. She also includes interviews with financial experts in her article that describe strategies that they believe investors should incorporate into their decision making. The strategies described by both authors will be summarized and explained thoroughly in this paper to give all readers a fundamental understanding of the research

and advice in existence that they can use to protect themselves against the next recession.

Understanding the perspective of the realities that businesses face is also crucial for investors. In order to give readers some insight into this I will explain John Kitching, Robert Blackburn, and David Smallbone's work in their paper "Business Strategies and Performance During Difficult Economic Conditions". In this paper they dive deeply into the decisions that firms should and should not make given their situation and the environment around them. Ultimately, this paper can give readers some awareness regarding which firms are best positioned to do comparatively well during a struggling economic environment. Furthermore, Martin Reeves and Michael S. Deimler constructed a research paper called "Strategies for winning in the current and post recession environment." This paper provides further awareness on the actions that businesses take in recessionary environments, but also how they can position themselves to excel post-recession.

When dealing with recessions there are a multitude of complex strategies and differing pieces of advice for investors. For some investors, the immense amount of guidance can leave them hesitant and uncertain in which advice they should follow. To simplify things for investors, this paper will include an independent research section that examines the performance of common investment classes during recessions dating back to the Great Depression. These investment classes include stocks, bonds, commodities and real estate. A detailed overview of how each investment class performed during and post recessions will be provided. The goal is to supply investors

with knowledge and awareness on how they should invest if they want more protection against a recession.

Shan Lei, a professor of Finance at Salisbury University, conducted intensive research on personal characteristics of investors and concluded that some of them can partially predict investment decisions during a recession in her paper, “Investment Strategies During the Great Recession: Who Remains Calm and who Panics?”. She first explains that there is correlation between investors who held a losing stock during the Great Recession and the same investor having less investable assets and a lower savings rate. Additionally, these individuals were disproportionately female and had lower levels of education. While investors who were more proactive with their investments during an economic downturn and had less losses tended to be business owners, highly educated and claimed to understand finances well. This demonstrates the importance of financial literacy for every investor. To increase financial literacy individuals can either spend time educating themselves and/or hire a financial adviser to help guide them through struggling and successful economic times.

More specifically, Lei describes investment strategies during a recession into four different categories. Strategy 1 applied to investors who tried to benefit from the Great Recession by making emotional decisions and taking on risk. Strategy 2 applied to those who did not react to the economic downturn at all and let their assets shrink. Strategy 3 applied to those who made minimal changes in an attempt to minimize their losses. Strategy 4 applies to investors who’s investment plan was predetermined prior to the recession and unwavered during the recession. Her research demonstrated that 14% of investors followed strategy 1, 19% of investors chose strategy 2, 23% of

investors chose strategy 3 and 44% of investors chose strategy 4. This suggests that over 50% of investors - to some extent - deviated from their long-term investment plan during the Great Recession.

Investor success when using strategies 1 and 2 is far less likely than when using strategies 3 and 4. In order for a successful implementation of Strategy 1, Lei notes that investors needed a combination of expert financial knowledge as well as luck. She also explained that users of Strategy 1 were commonly subject to overconfidence bias (when investors overestimated their investing abilities and knowledge). Therefore, investors should be reflective and aware of this possibility by keeping a detailed record of trades and looking for any tendencies. According to famed “Value Investing Strategies”, strategy 2 or the “do nothing” strategy is slightly more favorable as long as the investments in the portfolio are intended to be held for the long-term”. However, it can be problematic when certain asset classes fluctuate much more than others, causing an imbalance in portfolio. Investors should be aware of this possibility and continually rebalance their portfolio so that each investment class is weighted proportionally to their desire. Strategy 2 can also be problematic when investors change their typical investing plan in response to the downturn and end up doing nothing to support their investments. Evidence from Lei suggests that investors who use Financial Advisors were much more likely to incorporate strategies 3 and 4. Unfortunately, the research demonstrates that investors who choose strategy 4 were heavily dependent on their demographics. Hispanic investors, women, and those with lower education levels were far less likely to use strategy 4 and disproportionately used strategy 2 more frequently. Acknowledging this reality hopefully can assist both those that are

disproportionately affected and Financial Planners. By being aware, those affected can make the extra effort to educate themselves and prepare for the next downturn, while Financial professionals with strong morals should also be motivated to assist Female, Hispanic, and low educated investors more than they were prior once they are aware of this reality.

An immense amount of research has been conducted by economists all over the world on the best strategies to implement during a recession. In order to help readers develop an educated opinion, I will explain some of the most credible existing research and investment strategies on recessions. Author Nancy Dunnan, one of the world's most respected financial advisers, and her work in her article “Recession Strategies''. As an introduction, Dunnan describes that “regardless of whether you are an optimist or pessimist, there is no question that we are in for tougher times”. This mentality in itself is of value, because as history has demonstrated, no matter the present state of the economy, economic downturns will eventually occur either tomorrow, years from today, or somewhere in between. When investors are dealing with CDs and Treasuries, Dunnan advises to lock down high yields (if they are available) with CDs or Treasury notes that have 2-4 year maturities. Even though higher yields are paid with longer term bonds, investors should have the flexibility to be able to react to potentially higher inflation in the future. Today, experts anticipate inflation rates to climb, which typically causes the Federal Reserve to increase interest rates, which is what CD and Treasuries investors want. An alternative to buying 2-4 year CDs or Treasuries is to buy shares of a mutual fund that has a portfolio contained with mostly treasuries or an index fund that tracks bond or CD movement. Dunnan also notes that in a low interest-rate

environment, foreign currencies are most attractive as inflation could spike domestically. Therefore, one conservative strategy she advises is to invest with “foreign-dominated money market funds" when interests are low domestically. Another option for investors in a low interest-rate environment are multinational stocks. When the dollar is weakened, U.S. exports should be excelling. Multinational stocks such as McDonald’s, IBM, and Boeing are a few that she mentions because of their foreign ties. When objectively looking at U.S. stocks she claims that some sectors typically fare a lot better during a recession. These include electricity, water, food, and drugs because they are all goods that people view as necessities. Therefore, regardless of whether the economy is suffering, the last thing to disappear from a person’s spending is like those four industries. The utilities that Dunnan recommends are Brooklyn Union Gas and Potomac Electric but these two firms are irrelevant to the present-day financial outlook since she wrote this in 1991. However she does mention that at the time of her writing, the market was down 20% and she suggested that bluechip stocks were at great value. As of March 2022, the market is currently also down nearly 20%, indicating that bluechip stocks could be a great way to go for investors. Although these are just a few of the many investment strategies in the world, they should help guide investors towards having the right mentality depending on the current state of the economy.

Michelle Fox, a member of CNBC’s finance team, wrote an interesting column in 2019 called “Worried about a recession? Don’t panic, say financial advisors, but do be prepared”. At the time of the article, she mentioned that many investors were concerned with the “inverted yield curve” at the time. An inverted yield curve is a commonly used predictor of a recession. It refers to the bond market when short term treasury bond

rates exceed the price of long term treasury bond rates. Typically, this is not the case since the longer maturity fixed-income (bonds) treasury securities normally are associated with higher interest rates than short term fixed-income treasury securities. Fox acknowledges that while an inverted yield curve may be an early indicator of a recession, there are surely many other economic metrics to be watchful of when there is recession expectation. For example, she interviews the Co-Founder, president and chief investment officer of the wealth-management firm Lassus Wherley, Diahann Lassus who openly admits that “We will eventually go into recession. The business cycle is the business cycle. The real question is when and for how long?” but explains that retail sales and home buying are excellent indicators of consumer tendencies. The president of ClientFirst Strategy in New York, Mitch Goldberg, recommends analyzing the “price of copper, sovereign bond interest rates and things that are ‘breaking’.” (Fox) It is evident that incorporating a variety of metrics that indicate economic health is essential when estimating the likelihood of a near-approaching recession.

Michelle Fox’s article transitions into providing tangible actions that investors can use to prepare for a recession. The first, and possibly the most important, is “Focus, don’t panic”. Many investors are susceptible to making financial decisions based on emotions rather than logic. Fox explains that one way to avoid this investment pitfall is to look at your to-do list and if you do not have one, make one. The next piece of advice on the list is to “Take stock of your personal life”. Fox encourages investors to take a birds-eye glance at their personal life. Do you enjoy your job? Do you think your job is secure? How is your health? Do you have a child? These are all examples of questions that Fox believes all people should consider at some point in their life to ensure that

their personal life is secure and resilient. The next piece of advice from Fox is to “Make a plan”. This entails looking at your entire financial situation and plan in terms of setting goals and tracking progress towards those goals. However, Fox does emphasize to not stress about falling behind track of goals, especially for those who are far from retirement. This includes the fact that downturns and recessions will occur throughout an investors time horizon therefore they should be accounted for when creating goals. Another strategy Fox describes is accumulating cash into your portfolio. There are two benefits of holding onto cash. First, everyone should ensure that their cash reserves are large enough to weather a large recession so people are not forced to sell stocks at low prices. Secondly, having excess cash allows investors to invest when they believe the stock market is near its bottom, allowing them to purchase blue-chip equities are cheap prices. Lastly, Fox tells readers that when the next recession hits “It’s not the end of the world”. This is an important mentality to hold onto for investors as recessions can cause emotional uncertainty, but remaining calm and poised will undoubtedly help investors make clearer and more logical decisions with their finances.

What many uneducated investors fail to realize is that recessions do not guarantee money loss for everyone and there are strategies that could help prevent the impact of a downturn. John Kitching, Robert Blackburn, and David Smallbone all dive into this into their research paper, “Business Strategies and Performance During Difficult Economic Conditions”. The primary objective of their research is to identify the ways that businesses typically respond to difficult economic conditions and, therefore, create a prediction for which businesses are able to respond relatively effectively to struggling economic conditions. The authors argue that many innovative and resilient

company's play an important role in helping the economy come out of a recession and identifying those companies could be extremely beneficial to any investor.

Understanding the mentality behind businesses is a key aspect of their analysis. In a recessionary environment, the authors claim that businesses are faced with three options. The first is called a "retrenchment strategy" where business shrinks, lower costs in investments such as R&D, onboarding employees, etc. This is the most commonly used strategy for business, especially in the short-term. Conversely, businesses could use the "investment strategy" which includes expanding their commitment to innovation and marketing. Although a much more risky venture, this strategy would allow businesses to potentially expose the weaknesses of their competition and leave the recession in a better situation than they were in before it started. Lastly, business could utilize an "ambidextrous strategy" which is a combination of the two previous strategies. This allows businesses to cut down on costs on non necessity items but also choose to invest in things that could take their firm to the next level. All three options have arguments that support them and decisions on which strategy to utilize should be down relative to the business's unique situation, but the authors argue that understanding that some firms are better positioned to adapt swiftly and effectively during a recession should be accounted for when investing.

The performance of businesses during recessionary environments is highly unpredictable and volatile. The success or failure of a business during a poor economic situation is dependent on a variety of variables. In order for an investor to develop an effective strategy to achieve optimal performance during a recession, authors Blackbone, Kitching, and Smallbone believe that there are several fundamental

understandings that any investor must have about the operational side of a business. Below are many of their key points and a summary explaining them:

- **"No single strategy"**
  - It is very difficult to guarantee the success and survival of a company. Factors that are at play include resources, government actions, suppliers, customer behavior, partner relations etc. Understanding that a bullet-proof strategy for business success prediction does not exist and each individual business should be examined independently.
- **"Business characteristics and performance"**
  - Although media sources suggest that small businesses are more susceptible to struggles during a recession, the literature and research they have examined indicate this is not true. Both large and small enterprises are at approximately equal risk to the effects of a recession.
- **"Past and future performance"**
  - Investors should never use pre-recession accomplishments as a predictor for performance during or after a recession. Recessions fundamentally change the landscape in which businesses operate, often causing businesses to see a change in production (negative or positive) once a recession begins.
- **"Cost efficiencies might no be sufficient"**
  - Businesses that plainly attempt to minimize losses and become defensive during a recession can often not be the ideal strategy. The authors argue

that many firms who are strategically investing in innovation and advancement frequently excel, although it is a risky venture.

- **"Business size"**
    - While the author's do acknowledge that research indicates that there is "no overall simple 'net' effect of recession by size of firm", environmental shocks cause firms to operate differently depending on their size. For example, larger businesses have many more resources to examine the most intelligent financial decisions for their firm, but smaller businesses have the ability to change their prices, products, expenses, etc more swiftly.
- **"Business strategies during the Great Recession"**
    - Both retrenchment and investment strategies were used by firms during this recession. When implementing a retrenchment strategy, some of the most common maneuvers were laying off staff/reducing staff pay and longer work periods for employees towards the top of the food chain. For firms that implemented an investment and aggressive strategy, data is minimal thus far for those effects, but some firms were certainly able to find ways to take advantage of the unique economic environment.
- **"The role of government"**
    - The decisions made by the government play an important role in the performance and actions taken by firms during a recession according to the authors. They suggest that the government may encourage "cross-sector and cross-specialism linkages… with organizations in order to

> spark ideas for innovation". The government also serves as the backbone for large corporations if they do enter the verge of bankruptcy or failure, which was commonly seen during the Great Recession.

John Kitching, Robert Blackburn, and David Smallbone explain that understanding the potential actions of businesses during recessionary environments is essential to any investor's market analysis. While all firms desire to innovate and exploit market opportunities, given individual circumstances and risk-tolerance, this may not be the wise decision for every firm. This decision is crucial to the performance for many businesses as recessionary environments pose high-risk to essentially all firms within the economy. These authors provide investors with the foundational understanding of the options that businesses do have during economic shocks and why some firms should elect to go one direction while others should go in the opposite direction. Ultimately, their work provides investors with the framework to comprehend what it takes for a firm to exit a recession in a better position than they were prior to the recession.

The work by Martin Reeves and Michael S. Deimler in their paper "Strategies for winning in the current and post recession environment" supplements the paper previously discussed by Blackburn, Kitching and Smallbone's work. Reeves and Deimler similarly discuss the mentality that business's face during recessionary environments. Their paper was written in 2009, amidst the Great Recession, and was intended to be used to inform investors on how businesses should be handling the struggling economy. Their hypothesis is that during a recession a majority of firms take the same action that "bears do in winter - by hibernating", but this strategy is only

successful in the short term and if a recessionary environment is prolonged, it could result in these defensive firms to crumble in the long run.

The authors suggest that all businesses should have two focuses during a recession: survival and adaptation. The first, survival, is undoubtedly the most pivotal mindset that any business leader has to have. It is proven that recessions pose high-risks to all firms, regardless of size. In fact, over the last five significant recessions, the number of companies that have fallen out of the *Fortune 500* has hit a peak at some point over each recession as seen in figure 1.

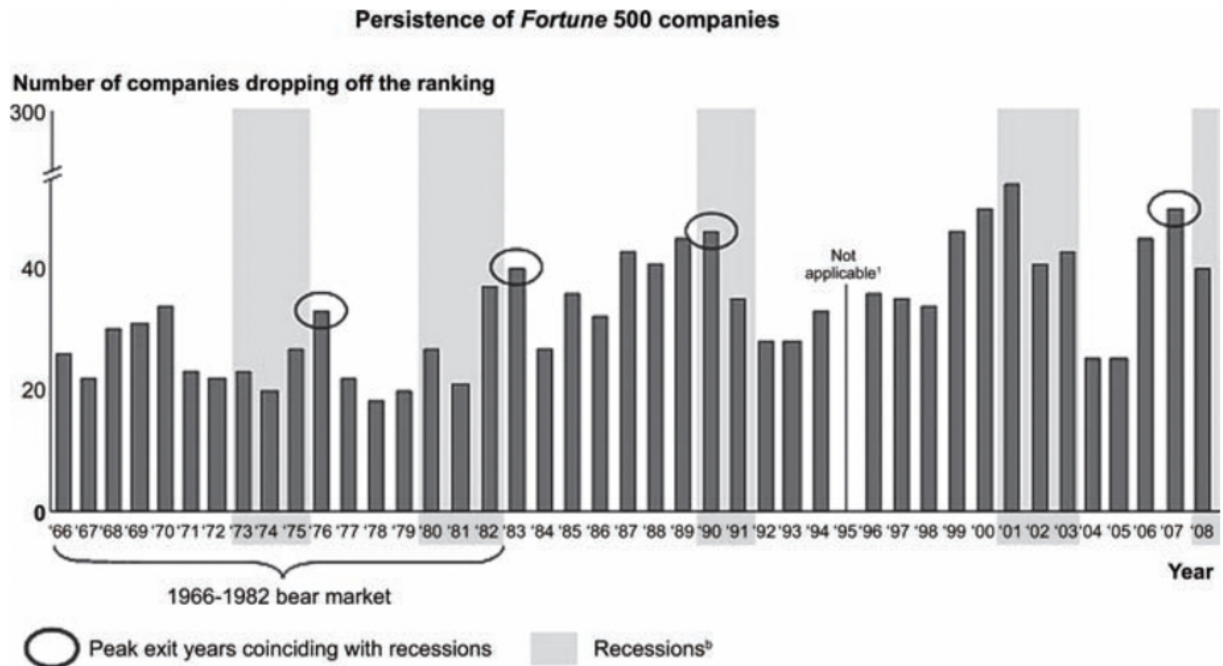


Figure 1: *Fortune* 500 Company Inflow and Outflow

If the largest firms in the country are as risk to market volatility this consistently, it solidifies the argument that all businesses need to make it a priority to ensure that they minimize aspects of their that are most susceptible to market volatility. Some common ways that firms mitigate risk is through "investing in customer retention, managing credit, exercising prudence in capital investment, divesting non-core assets, and

securing lines of credit and additional equity capital" (Diemler and Reeves 10). While fostering healthy survival tactics is essential to any firm, the authors also believe it is important to become adaptive during a downturn.

From the investor perspective, it is imperative to understand which companies are best positioned to be agile in troubling times. Authors Diemler and Reeves, provide insight into some metrics to pay attention to strategies that have been proven to be effective for businesses during recessionary environments. I will summarize their findings below:

- Sales growth
  - A growth in sales is an important metric to pay attention to for investors. The data demonstrates that companies that outperformed their competitors in total shareholder return (TSR) had more growth in their sales than EBIT (Earnings Before Interest and Taxes) or Dividends from 1966 to 1982. Therefore, according to this study, investors should check the growth in sales of a company over their EBIT or Dividend growth before investing.
- Adhering to the customer
  - Businesses that offer new products or differing sizing of products are both indicators of a business that is being agile and adaptive. An example is the way U-Haul, a truck-rental company, handled the 1989-1992 recession. At the time, there was heavy price competition within the industry. They decided to differentiate by providing customers with industry low rental charges, but offered customers the option to add on

packaging supplies to their rental (boxes, tape, etc). In turn, U-haul saw a 10 percent profit margin while the rest of the industry had a 3 percent profit margin average. In this example U-haul did not act defensively during the recession, rather they priced their trucks competitively and created an alternate way to profit from their customers. For investors, identifying firms that have the flexibility to make changes to their product offerings can be very helpful.

- Pricing Models
  - Recessions typically cause customers to rethink their expenses and risks. In order to mitigate some of the risk for consumers, many firms can adjust their pricing model to meet consumer desires. Long-term contracts and bundling services are one way to do so. During the 1980s, both Rolls-Royce and General Electric were selling aircraft engines and allowed airlines to pay on a utilization basis. Therefore airlines only had to pay for the amount they actually used the engine, which ultimately allowed them to win most of the engine market share and it increased the revenue received from each client. Firms that have versatile pricing models have the ability to cater towards the demands of consumers in both bull and bear markets, making them very attractive for investors.

There will always be differing opinions in where the economy is headed. Some people will be proven to be correct while others will be wrong. According to value investing fundamentals, it is never wise to guess which predictions will be correct or make your own predictions. Rather investors should decide which companies are best

positioned to have success in the long-term. All companies have the ability to become defensive and contract if needed, but not all firms are adaptive and innovative. Companies that do have the adaptive and innovative component are best positioned to have relative success regardless of whether the economy is thriving or is struggling. Investors that understand proper business analysis, as Diemler and Reeves provide some insight into, will be equipped with the knowledge to make educated predictions on which firms are most sustainable and profitable in the long run.

III. Personal Interview

This project has led me to learn from many experienced and intelligent financial experts. I was fortunate to actually speak with a Forbes 2022 Forbes ranked wealth management advisor and ask him what he recommends for any investor that has worries about a future recession. Although this individual has requested to keep his name out of the paper he has been a financial adviser at Merrill Lynch for approximately 25 years. The team he works with manages over two billion dollars in client assets collectively. Admittedly, he claims that he always leans on the conservative side for client investments, knowing that downturns in the economy are bound to occur and denying that reality would be foolish. There are several strategies and actions he would suggest but he stated that they “are all relative to the client’s individual risk tolerance”. However, the advice he did provide was assuming an hypothetical investor has a moderate risk tolerance (rather to a conservative or aggressive risk tolerance).

The first action is to diversify the investors portfolio. He emphasizes that diversification ensures that not all aspects of the portfolio will be affected equally by a recession. Creating a portfolio that has a wide variety of “non-correlated assets" is the

most important piece of advice he would give to any investor. He also would advise investors to create less equity exposure in the portfolio if fearful of a recession. Stocks are notoriously more volatile during recessionary environments and the less stock exposure in a portfolio, the more secure the funds inside will be. Additionally, he suggests that investors ensure that the vast majority of the equity remaining in the portfolio is of high quality. More specifically, buying more dividend and value based stocks rather than small cap, growth stocks is a much safer decision. Besides the equity portion of a portfolio, there are a few options he would recommend. First, he suggests investing in gold (or other quality commodities) at a minimum rate of 5-10% of anyone's given portfolio. Gold has proven to be a stable asset during times of economic downturn he claims. Another suggestion is to not reinvest the low quality equity that has been sold immediately. This allows investors to increase their cash reserves in incase of a true emergency situation, but additionally, they can reinvest that cash into the market when the investor believes that they can buy stocks at a significant discount. He recommends holding onto 10% of your portfolio in cash when anticipating a recession but in certain situations that number could be as high as 20-30%. Overall, he claims that a typical portfolio for a moderate risk tolerance investor should be made up of roughly 40% bonds, 5-10% gold, 10% cash, and 40% high quality stocks. However, one action that almost all investors will need to take is a periodic rebalance of their portfolio. In other words, maintaining a proportionally diversified portfolio is important. If an investor's equity investment sees unproportional growth compared to the rest of their portfolio, they should sell some equity to “rebalance” their investments to the proper diverse ratio.

There are also some more specific maneuvers he suggested to optimize an investors portfolio. For instance, when reducing the amount of equities in a portfolio it is not ideal to sell shares of stock out of regular investment accounts because every profit made is taxable. The best way to avoid these taxes is to reduce the equities in a tax-deferred account. The most common tax-deferred accounts are Individual Retirement Accounts (IRAs). By lessening the exposure to equities, specifically growth/volatile stocks, in a tax-deferred account investors can liquidate those funds without paying capital gains tax on the sales. The caveat is that all money in IRAs can not be withdrawn until a certain age threshold without serious tax consequences. It should be noted if an investor reduces equity exposure (or any asset class exposure) in an IRA they must be certain they are financially secure enough to live off of other funds until they can liquidate their tax-deferred accounts, penalty free. A second action investors can take is effective only if they have a strong intuition of future economic difficulties. In this case, investors can buy put-options on the broad based indexes with their taxable accounts, claims he. This serves as a simple hedge against downturns in the market as their put-option makes investors money if the market goes down. This does limit the upside potential if the economy does well and their other investments do well so this maneuver should only be done when there is significant reason to anticipate a recession. Lastly, he says investors can also place money into long-short hedge funds. However, there are significant drawbacks to making this decision because the money invested is much less liquid and the investment itself is more expensive than alternatives. Nonetheless, this is an option to look into for investors worried about a recession. All three options explained by the adviser offer protection against an

economic downturn, but they certainly all carry their pros and cons. If an investor is interested in executing one of these maneuvers, they should ensure they have done adequate research beforehand.

The interview explained that all of these decisions are relative to the investors' individual financial situation. If the investor is young and their time horizon is extremely long, he would not advise many of these financial protection tactics. “All of these decisions are an attempt to time the market correctly and more times than not, that is not a winning strategy” says the Merrill Lynch adviser. With enough time in the stock market and a consistent investment plan, investors should trust that the economy will continue to grow larger and quality investments should grow with it. Therefore, if an investor's time horizon is lengthy he advises to simply invest in quality assets, sit back, and watch them grow.

IV. Data

The data section of this paper focuses on personal research on the performance of the stock market, bond market, commodity market, and real estate market during past recessions. To estimate the stock market performance I will be examining the S&P 500, an index that tracks the prices of the largest 500 firms in the U.S. economy, providing much insight into the overall health and performance of the stock market. To estimate the bond market performance, I collected data from the ICE US Treasury 7-10 Year Bond Index, the one of commonly used metrics to estimate medium term bond prices with $16.46 billion under management. For estimation of the commodity market, I will be using Gold prices as my estimate, which is the most widely invested commodity. Lastly, for real estate prices I will be using the average historical prices of the House

Price Index (HPI) which is an index that focuses on the fluctuations in the prices of single-family houses in the United States. The objective of this research is to uncover any trends within these different asset classes before, during, and after recessions.

Data on the S&P 500 prices, bond prices, and gold prices were all collected and purchased through a database called MacroTrends. All three asset classes have daily price data and I collected data on each asset class during the months of a recession along with the two months leading up to the recession and the two months following the recession. This allows me to mitigate the argument that the price fluctuations had already been accounted for in the markets, therefore allowing the data to demonstrate the full effect of the recession. It should be hypothesized that fluctuations in each asset class should be greater without the inclusion of a two month buffer because that timeline is the true timeline of the recession. Housing price data was collected on a monthly basis - the 15th of every month. Similarly, I collected data on fluctuations during the months leading up to the recession and the months post-recession as well. Lastly, the data demonstrated is consolidated into annualized returns for each asset class during the past five recessions in U.S. history and then ultimately the average annualized return - putting all five recessions together. This will indicate the historic performance of each asset class during recessions, giving investors insight into which asset class will assist them in creating a resilient portfolio.

Although past performance is not a reliable predictor of the future, my research indicates historical performances of varying asset classes during recessions which will prove the importance of diversification for investors. The objective is to simply advise on

recession protection by simply summarizing historical data in a clear and concise manner.

Without 2 month buffer	Asset Class		S&P 500 AR	Gold AR	10-Year Treasury Bond Index	Real Estate AR
Recession						
1981-1982			-0.01%	1.17%	-6.85%	-4.21%
1990-1991			-0.18%	-1.18%	7.28%	-6.82%
2001			-7.96%	4.02%	9.26%	3.87%
2007-2009			-26.28%	11.02%	3.84%	-10.98%
2020			-34.74%	42.09%	7.54%	6.43%
Average AR			-13.83%	**11.42%**	4.21%	-2.34%

Figure 2: Annualized Returns (AR) data without 2 month buffer

When analyzing the annualized returns on the four asset classes during the last five recessions, some very interesting results are shown. Figure 2 demonstrates that the S&P 500 annualized return had the largest losses during the last three recessions and had the lowest average annualized return by a landslide. This aligns directly with the advise given by the Merrill Lynch adviser who recommended reducing equity exposure if an investor suspects a recession is on the horizon. However, the large drop seen in the S&P 500 is common for the index. In fact, since 1980 the S&P 500 has grown by 11,885.51% and has seen many years of massively positive returns. While extremely volatile compared to the other asset classes, over time the S&P 500 has proven to be a very reliable long-term investment for investors. The bottom line is that overcommitment towards equity in a portfolio is a risky venture and when recessions have occurred in the past, the S&P 500 has consistently seen poor performance. Therefore, this reidentifies the importance that investors diversify their financial portfolio.

On the contrary, the annualized returns for Gold have been quite impressive during the past five recessions. With a constantly positive performance over four out of

the five recessions and a 11.42% averaged annualized return. This is because during uncertain or troubling economic environments many investors turn to Gold to protect their investments. While a company's stock may plummet during a recession due to poor expected earnings, Gold does not have earnings or a balance sheet and the commodity is simply valued by the investors themselves. Therefore, Gold is ideal for an investor who is worrisome about a recession or wants to create protection against a recession in their portfolio. It should be noted that during stable economic environments, Gold traditionally does not perform as well as some of the other asset classes so do not expect Gold to outperform the S&P 500 during a thriving economy. Many financial experts, including Merrill Lynch's financial advisor that I interviewed with, suggest devoting anywhere between 5-15% of an individuals portfolio into Gold.

Similarly the bond index demonstrates positive annualized returns during the last four recessions and average annualized return of 4.21%. Bonds can be also used as a hedge against recessions because when the demand for stocks falls, many people look for stable and secure investments and bonds fit the description. While bonds may not produce the highest return on investment they are ideal for investors who are conservative and do not want to lose money. Furthermore, investors who have money that they want to keep safe and secure, bonds are a great option. Once again, diversifying the portfolio by including a variety of asset classes, including bonds, is always encouraged.

Lastly, the annualized returns for the real estate index were not superb during the last five recessions. With a negative average annualized return of -2.34% it demonstrates that real estate performance has struggled during recessionary

environments. Although the 2007-2009 housing crisis contributed to this performance substantially with annualized return of -10.98% during that recession alone, it still demonstrates that real estate is not a foolproof investment during difficult economic times. However, real estate has done extraordinarily well since 1980 over all. I believe this indicates that individuals are not as comfortable committing to large purchases (homes, cars, etc) during uncertain or unstable economic times. Nonetheless, real estate still has performed better than equities by a substantial margin during these past five recessions. Real estate investment is just another option for investors looking to diversify their portfolio and if owning tangible real estate as an investment is unaffordable, investors should consider investing in a real estate index fund - similar to the fund that this data is pulled from.

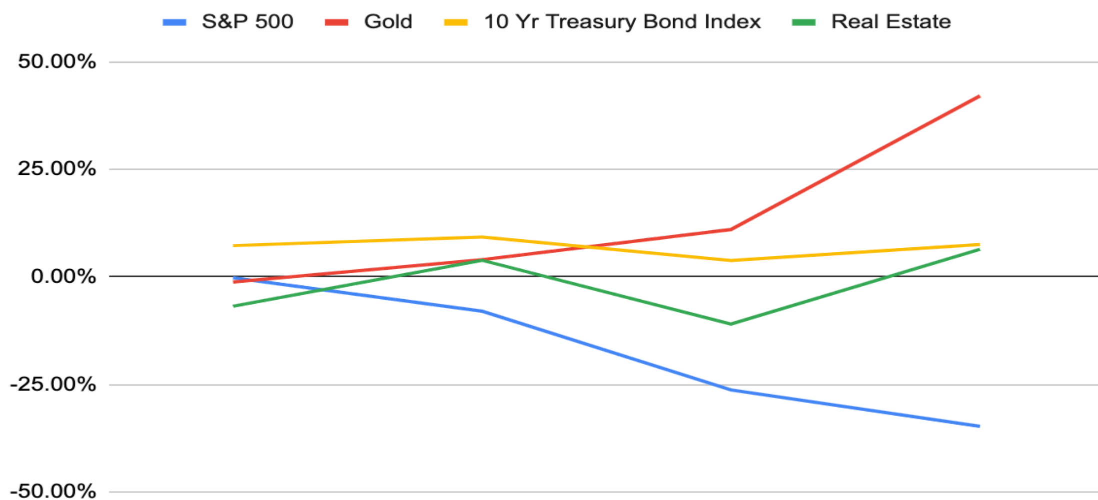


Figure 3: Annualized Returns (AR) graph without 2 month buffer

The graph above in figure 3 mirrors the data presented in figure two. However, through this graph readers can more easily identify which asset class has been volatile from recession to recession and which asset class has been relatively stable. It simply

demonstrates Gold (red line) as the superior investment during the last five recessions. Bonds (yellow line) as the next highest performing asset class which also has been extremely stable throughout past recessions. Real Estate (green line) ranks as the third best performing asset class as it has hovered above and below the 0% annualized return line over the last five recessions. Lastly the graph indicates how the S&P 500 (blue line) has increasingly performed worse over the course of the last five recessions.

With 2 month Buffer	Asset Class		**S&P 500 AR**	**Gold AR**	**10-Year Treasury Bond Index A**	**Real Estate AR**
Recession						
1981-1982			0.36%	0.91%	-8.56%	-3.98%
1990-1991			2.83%	-2.05%	8.94%	-5.47%
2001			-15.60%	2.77%	8.20%	5.04%
2007-2009			-19.72%	15.91%	4.47%	-9.67%
2020			-12.10%	36.62%	9.94%	8.86%
Average AR			-8.85%	**10.83%**	4.60%	-1.04%

Figure 4: Annualized Returns (AR) data with 2 month buffer

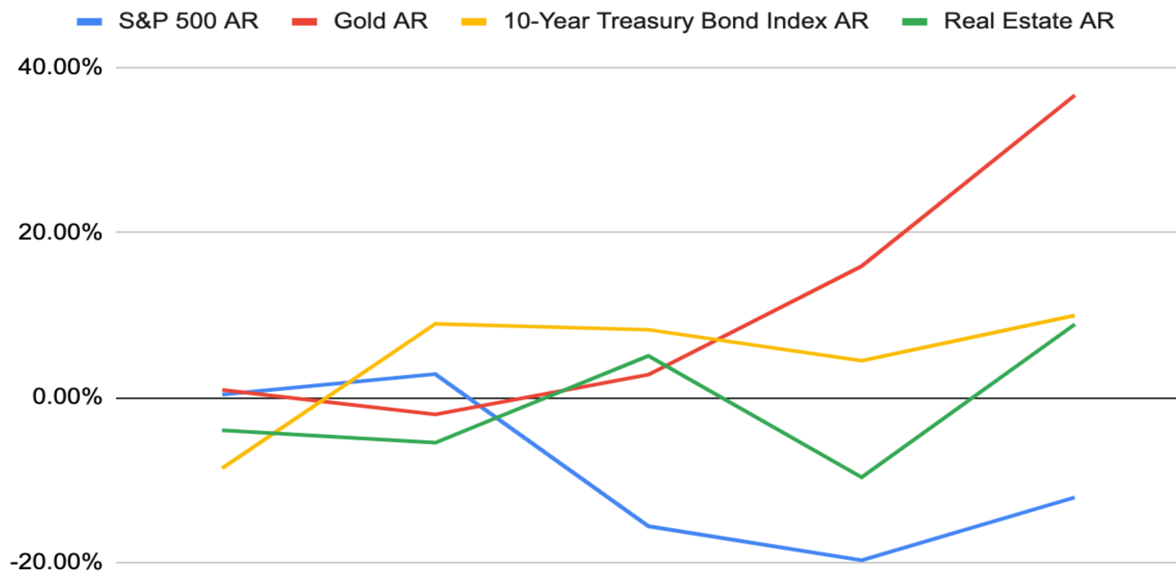


Figure 5: Annualized Returns (AR) graph with 2 month buffer

Since the start and end date of a recession often does not demonstrate the entire picture of the performance of the economy, I repeated the same data collection method but added two month buffers before and after each recession. To summarize the statistical differences in figures four and five, all asset classes, except for bonds, saw a substantial drop in volatility. This should be expected since the timeline of recessions without the buffer is the true timeline of the economic downturn, indicating that the markets performed better during the two buffer months on each end of the recessions than during the recession. It therefore, futhers the point that recessions cannot be predicted with certainty and can occur even shortly after seemingly stable economic conditions.

V. Conclusion

The reality is that at any point, an individual's investment could decrease by 20, 40, or technically even 100 percent of its value. Almost all investments are associated with some risk, some greater and some less than others. While individual investments can spiral downward at any point, one stock downturn alone cannot cause a recession. While the thought of a recession is associated with sensations of fear and anxiety for almost any investor there are ways to prepare. Researching and educating yourself on the existing recession resiliency strategies is essential to any investors portfolio health and success. Through research on existing literature, an interview with an elite Merrill Lynch financial adviser, and personal research there are some obvious takeaways that should be incorporated into any investor’s investment plan.

First, investors need to ensure that their portfolio is well diversified. Diversifying a portfolio ensures investors that if one sector of the economy plummets, only a fraction of their investments will be affected. Rebalancing portfolios is also important for all investors. While some aspects of an individual's portfolio might disproportionately grow or fall compared to the rest, ensuring that a well balanced ratio of many asset classes is maintained is essential. Lastly, investors need to do their best to not make emotionally charged financial decisions. Recessions are going to occur and they are a part of the life cycle of the U.S. economy. When the next recession arrives, investors need to maintain consistency with their original investment approach and avoid making spontaneous decisions. If all of these lessons are executed properly, any investors finances should be well equipped to handle the next financial storm.

References

DUNNAN, NANCY. "Recession Strategies." *ABA Journal*, vol. 77, no. 1, American Bar Association, 1991, pp. 82–83, http://www.jstor.org/stable/20761365.

Fox, M. (2019, August 16). *Worried about a recession? don't panic, say financial advisors, but do be prepared*. CNBC. Retrieved January 23, 2022, from https://www.cnbc.com/2019/08/15/how-to-protect-yourself-against-a-recession.html

Gulati, R., Nohria, N., & Wohlgezogen, F. (2010). Roaring out of recession. *Harvard business review*, *88*(3), 62-69.

Kitching, J., Blackburn, R., & Smallbone, D. (n.d.). *Business Strategies and Performance During Difficult Economic Conditions*.

Latham, S., & Braun, M. (2011). Economic recessions, strategy, and performance: a synthesis. *Journal of Strategy and Management*.

Lei, S. (2021). Investment Strategies During the Great Recession: Who Remains Calm, and Who Panics?--The Role of Financial Planners. *Journal of Personal Finance*, *20*(1).

Norman, E. J., Sirmans, G. S., & Benjamin, J. D. (1995). The Historical Environment of Real Estate Returns. *The Journal of Real Estate Portfolio Management*, *1*(1), 1–24. http://www.jstor.org/stable/44154362

Reeves, M., & Deimler, M. S. (2009). Strategies for winning in the current and post-recession environment. *Strategy & Leadership*.

Roberts, K. (2003), "What strategic investments should you make during a recession to gain competitive advantage in the recovery?", *Strategy & Leadership*, Vol. 31 No. 4, pp. 31-39. https://doi.org/10.1108/10878570310483960

STIGLITZ, J. E. (1999). INTEREST RATES, RISK, AND IMPERFECT MARKETS: PUZZLES AND POLICIES. *Oxford Review of Economic Policy*, *15*(2), 59–76. http://www.jstor.org/stable/23606912

U.S. Bureau of Economic Analysis, Real Gross Domestic Product [GDPC1], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/GDPC1, April 30, 2022.