# Defining and Investing In Recession Resistant Industries

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## Introduction

Known for their protective qualities during difficult financial and economic environments, stocks in defensive sectors have long been a part of investors' well-diversified portfolios. However, many investors and strategists seem to only discover these sectors predominantly during times of economic distress, while preferring to shift their attention to other sectors in better economic times. In large part, defensive sectors held true to its form as the Consumer Staples sector was the best performing sector in 2008, outperforming the S&P 500 by about twenty-two percentage points during one of the worst market downturns since The Great Depression in 1929. Nonetheless, we believe that by narrowly focusing on defensive industries only during down markets, investors may miss attractiveness of companies in these industries over the long-term. At Liberty One, we refer to these defensive sectors as "recession-resistant" sectors.

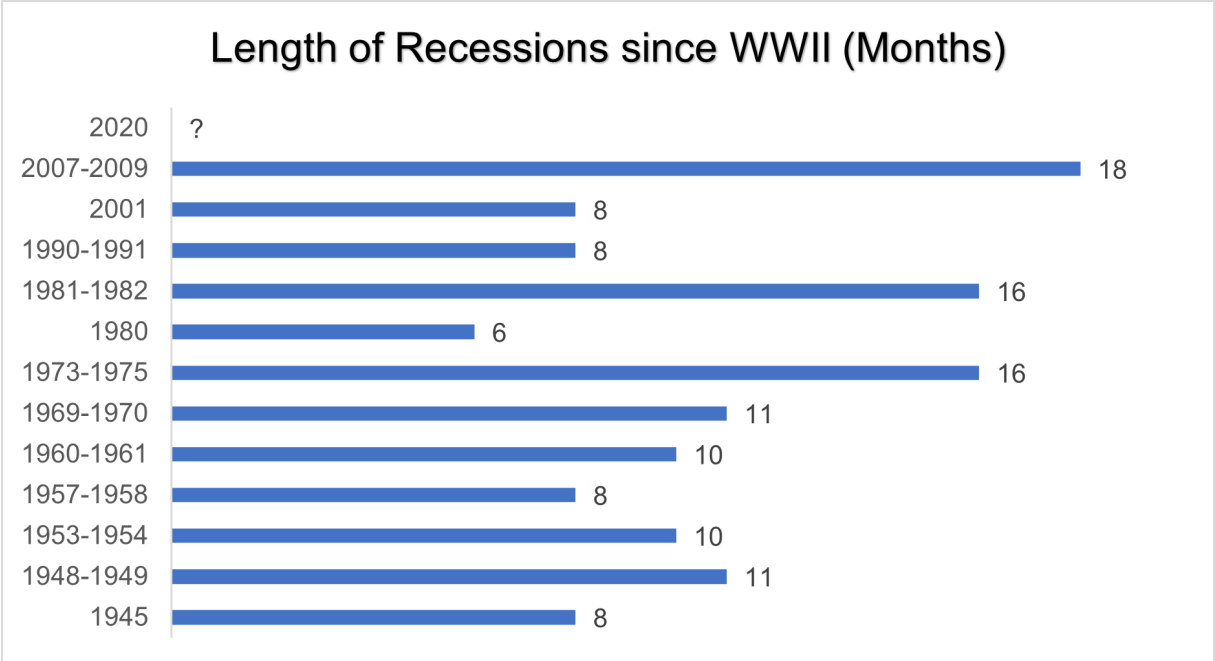
The impact of today's low interest rate environment further advances our interests in "recession-resistant" names, given increased investor desire to seek alternatives from traditional fixed income for higher income yields and capability to lower overall portfolio volatility while providing opportunities for capital appreciation.

## Defining Recessions

To understand what qualifies as recession-resistant, we first must define what a recession is. A recession is generally applied to the broader economy indicating a significant decline in economic activity that usually last for months if not years. The official definition of a recession is when the total output of values of goods and services in a country (called the Gross Domestic Product or GDP) is negative for two or more consecutive quarters (six months or more). Although this definition of a recession has generally been accepted for years, the National Bureau of Economic Research (NBER) suggests that economic activity does not necessarily need to experience two consecutive quarters of negative GDP to declare a recession. NBER defines a recession as a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales.

Recessions are considered an unavoidable part of the business cycle. Since the post-World War II era, the United States encountered thirteen different recessions, when including the most recent recession in 2020, each with its own unique set of characteristics and drivers.

**Exhibit 1.**




Source: National Bureau of Economic Research (NBER)

Although recessions can be painful for many of us, it is a natural market mechanism that promotes an efficient allocation of finite resources. Because recessions tend to magnify weaknesses in businesses where companies that are not positioned to withstand a recessionary environment may be vulnerable to sustained losses, and ultimately result in organizational failure. For example, according to an analysis from the US. Census Bureau data more than one-hundred and seventy thousand businesses shut down in the aftermath of the Great Financial Crisis. Although recessionary environments are an ordinary and expected part of investing across business cycles, the uncertain tail risk impact of recessions create significant anxiety among many businesses and investors, rendering many to place a heavy emphasis on mitigating the adverse impacts of a recession, sometimes at the expense of future growth opportunities. Such behaviors have potential implications on investment and business outcomes, thus becoming an important topic of research and interest within the global investment community.

## Behavioral Explanations of Recessions and Business Cycles

Despite decades worth of economic research, economists and central banks still find it challenging to consistently predict recessions. Part of this problem is that recessions are as much technical as they are behavioral. Modern economics is predicated on the idea that individuals make rational decisions while behavioral economics is predicated on the assumption of mixed rationality, where many if not most decisions are irrational.

Behavioral finance attempts to understand observed investor and market behaviors, differing from traditional finance which is based on assumptions on how market participants should behave. By focusing on actual behavior, researchers have observed that individuals make investment decisions in ways that differ from the approaches of traditional finance. As Meir Statman puts it, "Standard finance people are modeled as "rational", whereas behavioral finance people are modeled as "normal" (Pompian, 2019).

When observing actual market participant behaviors across business cycles, common cognitive and emotional biases have become repeatedly apparent, biases in which are contrary to the rational individual. This may partly explain the persistence of asset bubbles and crashes which presents a challenge to the concept of market efficiency.

Studying behavioral economics alone does not ascertain accuracy in predicting business cycles due to the unpredictability of human nature itself, much as it is difficult to predict the weather. However, evaluating frameworks of behavioral finance concepts and its implications on market cycles provide new insights into further understanding the evolution of business cycles and attempt to prepare investors for inevitable recessions.

## The Long-Term Case for Recession-Resistant Investing

Defensive investing in this paper relates to investments in "recession-resistant"/defensive industries in equity markets that exhibit below average volatility. This is targeted towards investors' preference for loss mitigation while reducing impacts of regret aversion should markets continue to rise.

A common understanding of "recession resistant" refers to products or services that are not greatly affected by the effects of recessions. Economists generally refer to these goods and services as necessities or essential goods. Examples of such goods and services include household staples, prescription drugs, utilities, shelter, and basic clothing. Although there is a relative subjectivity to what constitutes essential and non-essential goods, one quantifiable way to measure demand impacts of these products and services in various business cycles is through demand elasticity. Demand elasticity measures how sensitive demand for a good or service is, given a change in its environmental factors. These factors typically include price, income levels, availability of substitutes, consumer preferences, and other economic and non-economic factors.

**Table 1.**

| Type of Goods/Services | Demand Elasticity (Absolute Value) |
|---|---|
| Residential Utility | 0.30 - 0.60 |
| Household Staples | 0.43 - 0.72 |
| Prescription Drugs | 0.18 - 0.60 |
| Clothing | 0.94 - 1.96 |
| Automobiles | 1.32 - 2.58 |
| Electronics | 1.25 - 1.87 |

Source: Harvard University, Patrick L. Anderson, Richard D. McLellan, Joseph P. Overton, Dr. Gary L. Wolfram, National Bureau of Economic Research, U.S Bureau of Labor Statistics: How consumer spending change during boom, recession, and recovery periods, Liberty One Investment Management (11/20)

Table 1 draws data from a series of economic studies highlighting demand elasticity for various types of goods and services.

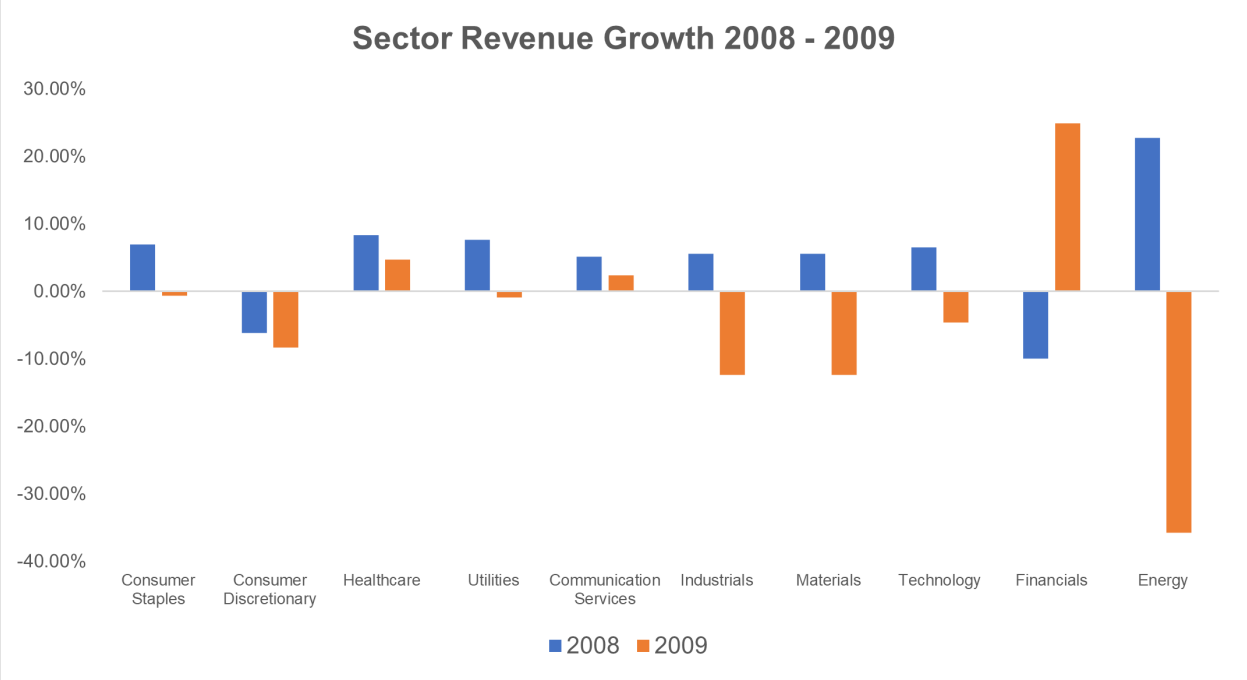
A measurement of less than 1 indicates that demand for that good or service is relatively inelastic, suggesting that demand does not fluctuate greatly given a change in its price or income levels. This is conducive to necessities and essential goods. Conversely, demand elasticity above 1 is indicative of a non-essential good, where demand for the goods and services fluctuate greater to changes in demand factors.

Demand elasticity from Table 1 confirms what we would intuitively expect from essential and non-essential goods and services. Demand for necessities such as household staples and prescription drugs are relatively inelastic while demand for discretionary goods such as automobiles and electronics are much more elastic and susceptible to changes in economic conditions. The different ranges in demand elasticity observed are driven by differences in consumer preferences, availability of substitutes, and other cross-elasticity effects. Especially apparent in more consumer-facing products and services, brand name and marketing have a larger impact on the elasticity of goods, rendering a wider range in demand elasticity for that category of product or service. Nonetheless, the evidence of different demand elasticity between necessities and non-essential goods aligns with what one would expect and affords investors additional insights when evaluating companies' revenue resiliency throughout various business cycles.

## Revenue in Recession-Resistant Industries

With greater durability in quantity demanded for their goods regardless of economic conditions, revenue in recession-resistant industries were evidently resilient during periods of economic distress.

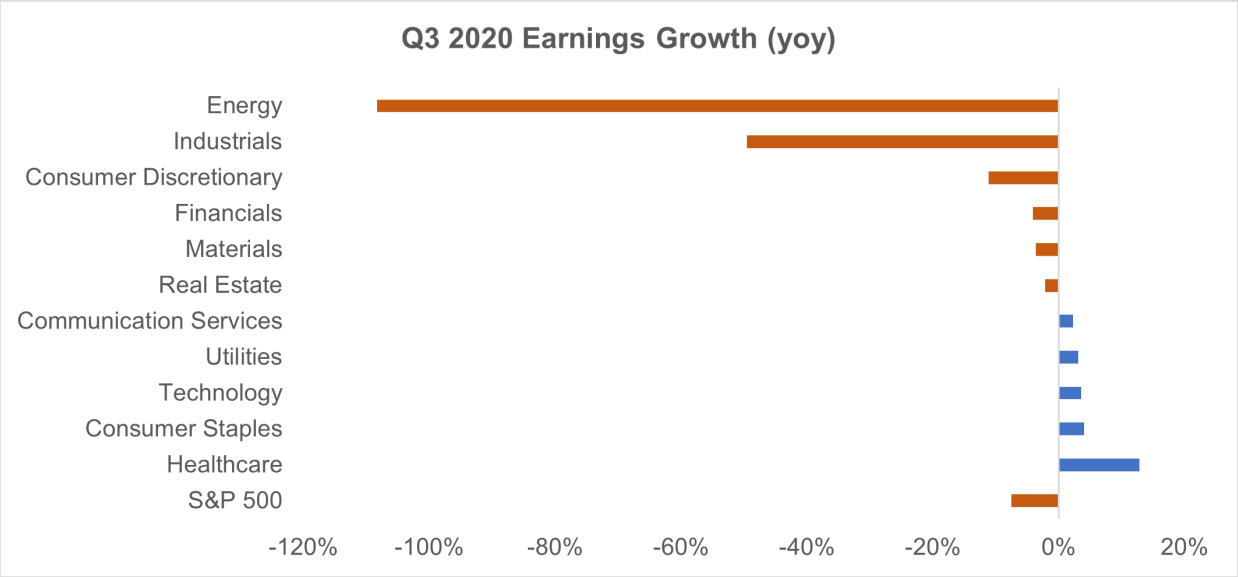
**Exhibit 2.**




Source: Factset Earnings Insight, Liberty One Investment Management (12/09)

From 2008 to 2009, defensive sector revenues held up better than cyclical industries as one would expect during tough economic times. Basic principles of microeconomics suggest that revenue growth correlates positively to the elasticity of demand for goods and services. (Hutchinson, 2015). Exhibit 2 depicts greater revenue durability in sectors like Consumer Staples, Healthcare, Communication Services, and Utilities where demand elasticity tend to be more inelastic, while Financials, Industrials, and Energy sectors that exhibit greater demand elasticity saw greater volatility in revenue growth.

**Exhibit 3.**




Source: Factset Earnings Insight, Liberty One Investment Management (12/09)

Drawing comparisons to the most recent recession in 2020 where economic drivers of the recession differed from 2008, similar results were observed, with the same recession-resistant sectors proving to be more resilient. Five out of the eleven sectors are expected to record year over year earnings growth in the third quarter of 2020, with the list dominated by the same recession-resistant sectors found in 2008. Such manifestation helps explain increased investor interests for protective qualities found in defensive industries during down markets, providing investors with some protection and further reinforcing what we would expect from these industries.

Despite performing better during periods of economic distress, there is an expectation that defensive/recession-resistant companies have growth rates below that of the broader benchmark (S&P 500) over the long-term. As depicted in Exhibit 4, the marginal rate at which defensive sector revenues trail its benchmark over the last 20 years is relatively insignificant. Sectors like healthcare and communication services yield higher revenue growth rates than the S&P 500. Furthermore, revenue growth tends to be less volatile as measured by their standard deviations while providing a more consistent and predictable stream of earnings and cash flows for businesses operating within these sectors in the long-term.

**Table 2.**

| | Healthcare | Communication Services | Consumer Staples | Utilities | S&P 500 |
|---|---|---|---|---|---|
| **Revenue Growth % (Avg)** | 8.77% | 6.94% | 4.85% | 1.87% | 6.85% |
| **Standard Devation** | 4.63% | 6.26% | 3.28% | 5.70% | 6.45% |

Source: S&P Index Services Website, Liberty One Investment Management (12/19)

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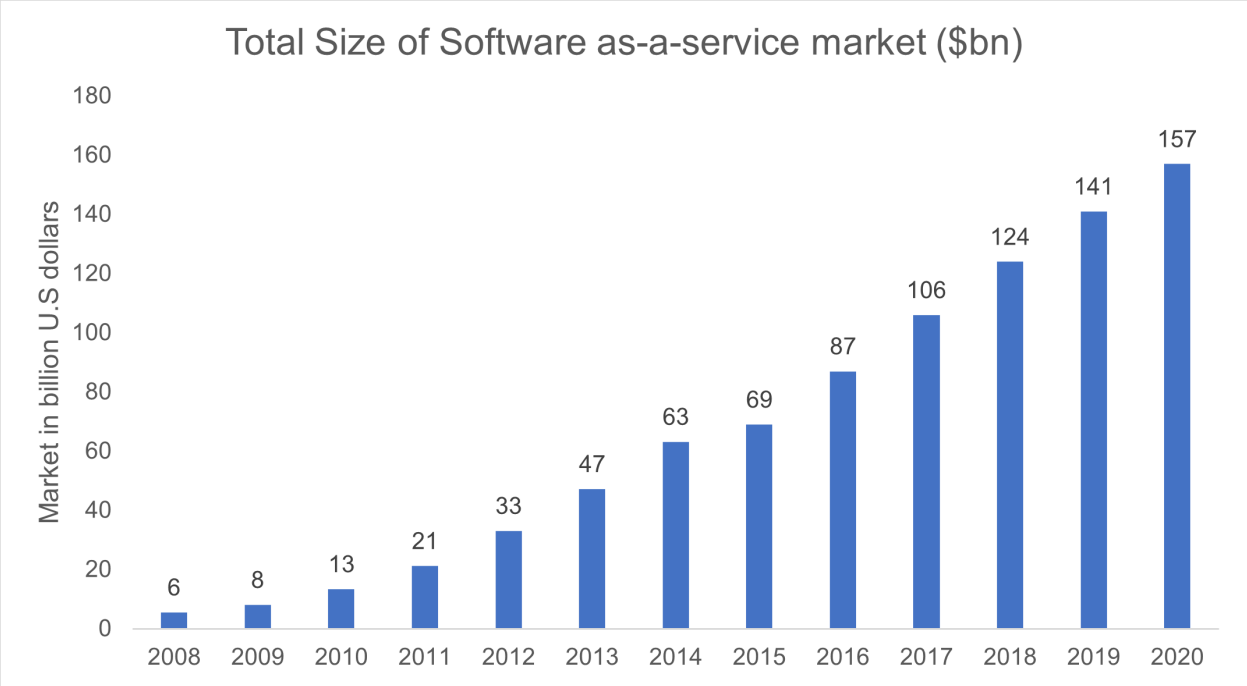
An interesting anomaly from recession-resistant industries however is the resiliency observed within the Technology sector. More importantly, according to Factset data, the two industries that are expected to contribute the most to year over year earnings growth in a recession year like 2020 are Interactive Media & Services, and Software, both of which are traditionally Technology industries. Part of this phenomenon has been a result of business model shifts within the tech industry after the Great Financial Crisis. Post-Financial Crisis, technology firms established greater revenue durability driven by recurring revenue streams through the "as-a-service" subscription business model. Offering products as a service enhanced the pricing power and durability of software companies. Unlike demand for most other goods, software vendors benefited from high customer switching costs where opportunities to find alternative products became more challenging as time passed. This rare circumstance in economics is a result of customers' reliance on the software to power complex and expensive ecosystems developed sophisticatedly within enterprises. The Software industry was the first industry to make the shift from selling products and services outright to offering it as a service. According to Gartner Insights, between 2008 to 2019, the total market size of Software-as-a-service grew from $8 billion to $141 billion, representing a 34% compound annual growth rate.

**Exhibit 4.**




Source: Gartner Insights: Forecast World Wide Total Size of Software as-a-service market (07/20)

Technological advancements in processing power, cloud computing, and consumer behaviors aided in the rise of software-as-a-service business model. This big shift in business model is being reflected in business performance and financial results of the largest technology firms in our world today. For example, Apple which most recently sold almost $200 billion worth of hardware devices like Apple iPhones and Apple Mac computers in its most recent fiscal year recently expressed optimism about the base of its paid subscription services customers, now reaching close to a quarter of a billion. Service revenue is also becoming a larger part of its revenue mix- increasing from 8% of total revenues in Q1 2014 to 23% of total revenues in Q2 2020, while becoming Apple's fastest revenue growth segment to date. Subscription based trends are also prevalent in other tech heavyweights like Amazon, Microsoft, and Adobe.

**Exhibit 5.**

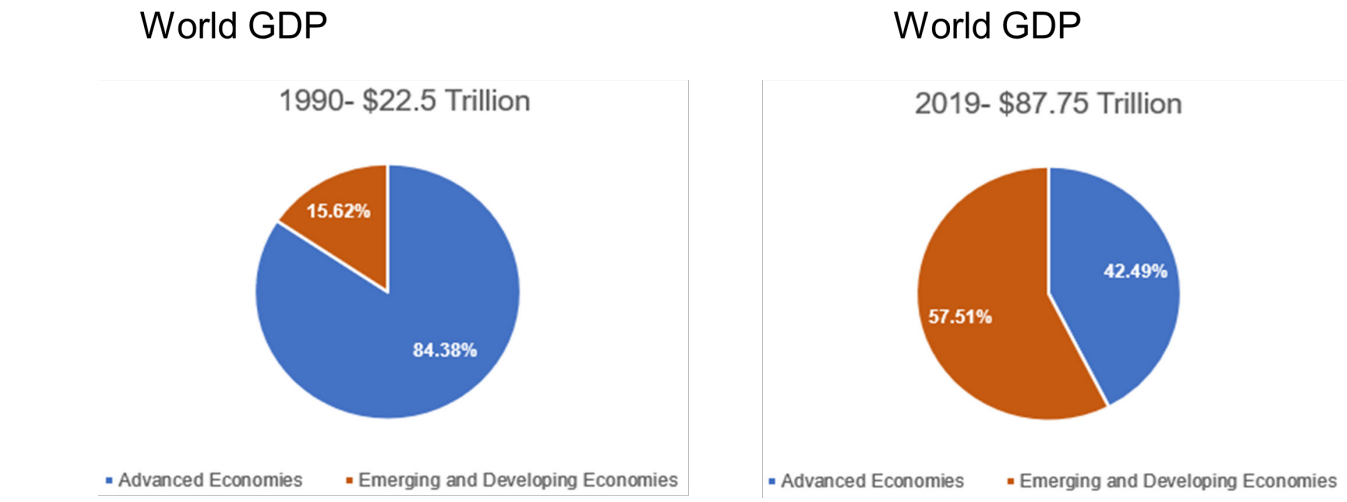

Source: Apple, Statistica, Liberty One Investment Management (10/20). Service revenues include revenue from digital content and services (eg: App Store, Apple Music, iTunes Store), AppleCare, Apple Pay, licensing and other services

The rise in subscription-based business models with enhanced revenue resiliency challenges the existing status quo of "recession-resistant". Certain industries in the Technology sector exhibit defensive-like business characteristics, with faster and more upside growth potential than traditional value/defensive industries. The added benefit that some of these technology companies operate an asset-light business model driven by its network effect further distinguishes them from traditional value companies. Championed by value investor Benjamin Graham, traditional value investing is predicated on purchasing companies trading at below a measure of per share liquidation value while modern value investors may look to other factors such as a company's ability to reinvest earnings at a high return, an increasingly more common trait among capital-light business models. Technology companies playing an important role in an economy that is becoming more digital would also be expected to benefit from being more of a necessity than a luxury good. These developments within the Technology sector confronts a reasonable argument for a possible inclusion as "recession-resistant".

## Revenue Growth Rate Opportunities

We believe that recession-resistant companies in defensive industries can grow at superior rates for a long period of time, defying a perception of being slow growth. The resiliency of recession-resistant industries revenues continues to be driven by global population growth, aging population trends in developed markets, and continued urbanization and industrialization in emerging markets. For starters, emerging markets provide multi-decade growth opportunities for large, financially sound multi-national corporations in recession-resistant industries. As Exhibit 4 illustrates, the contribution of emerging markets to world GDP expanded from 15.62% to 57.51% over the last 30 years. Such trends do not appear to be reversing, as emerging market economies are expected to grow faster than developed economies. We would anticipate that emerging market contributions will exceed over two-thirds of global GDP in the coming decades

**Exhibit 6.**

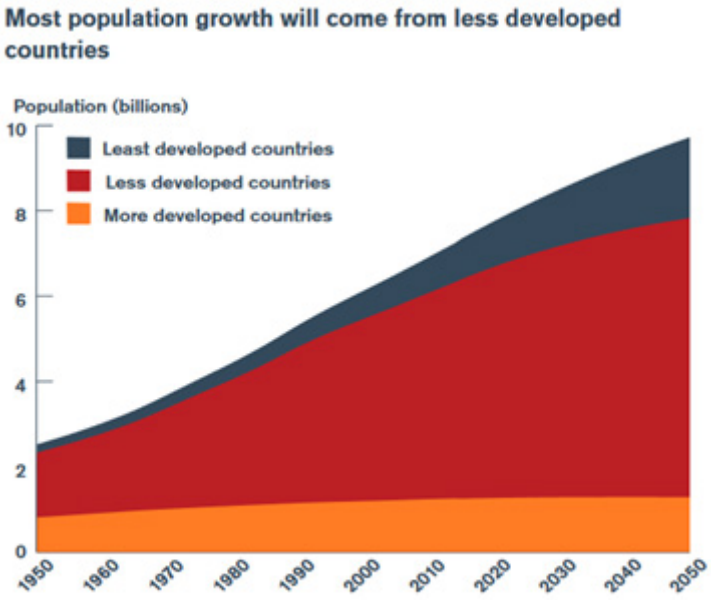



Source: International Monetary Fund, World Bank Database, December 2019

Not only do emerging markets make up a bigger share of world GDP, the size of GDP has also grown massively, nearly quadrupling in a span of 30 years. Such increase in global wealth stand to provide additional secular tailwinds for multi-national corporations operating in recession-resistant industries.

As GDP in emerging economies rise, disposable income levels begin to increase, and its population start to demand necessities like food, shelter, and healthcare. Established multi-national corporations from developed economies could then leverage their economies of scale, brand recognition, and superior research and development capabilities to benefit from the demands of a higher income population as they begin to improve their quality of life.

**Exhibit 7.**

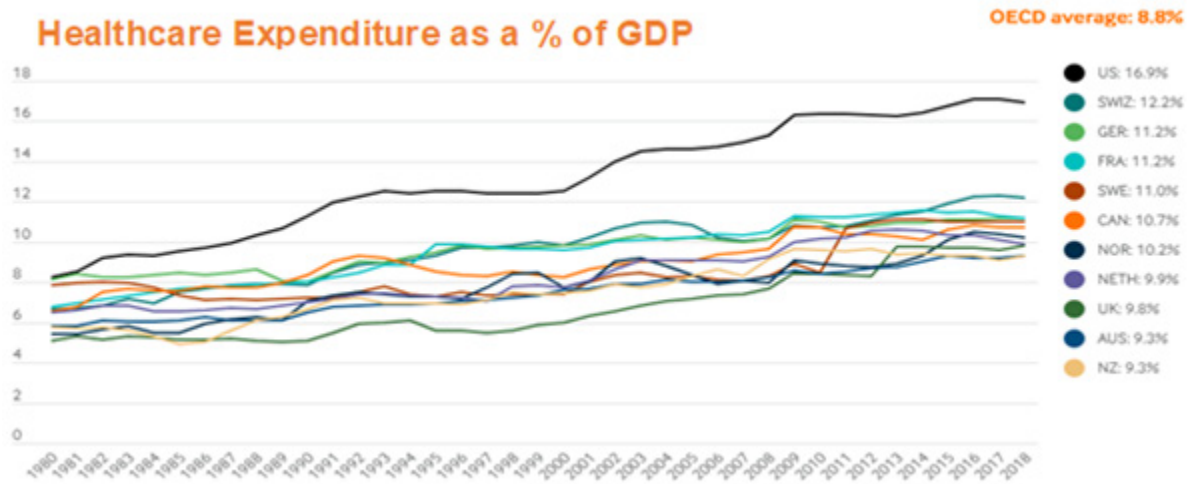



Source: United Nations Population Division, World Population Prospects: The 2012 Revision, Total Population, both sexes, using median fertility

In addition to rising income levels, increasing world population growth driven by developing countries also provide secular tailwinds to demand of essential goods. Although demographic makeup itself does not guarantee economic growth, a larger population set brings greater potential for labor force growth which in turns leads to GDP growth. Additionally, the younger generation in developing countries are becoming increasingly educated, increasing growth opportunities and extending life expectancies, both of which stand to benefit companies in recession-resistant industries.

Beyond population and income levels, aging population trends in developed economies also present recession-resistant companies with superior growth opportunities, primarily in the healthcare sector.

**Exhibit 8.**




Source: Roosa Tikkanen and Melinda K. Abrams, U.S. Health Care from a Global Perspective, 2019: Higher Spending, Worse Outcomes?

Healthcare expenditure in developed economies has risen faster than GDP growth and is expected to continue to rise as aging population challenges continue to stymie societies in developed countries. According to the Kaiser Family Foundation, the United States spent approximately 17% of its GDP on healthcare expenditure in 2018, up from 7.3% in 1970. On a constant dollar basis, total healthcare expenditure in 2018 totaled $3.47trillion compared to $77.25billion in 1970. This represents a compound annual growth rate of about 8%, far outpacing the country's GDP growth rate of 6.50% during that same period. Such trends were also consistently observed across developed Europe and part of Asia, particularly in countries like Japan. With aging demographic trends in developed countries expected to accelerate with Baby Boomers entering the latter part of their life span, public focus on building more sustainable healthcare infrastructure and systems are becoming a central focus of national governments. This incentivizes additional public-private partnership, offering investors opportunities to contribute capital to help fund and develop better healthcare systems.

Over the long-term, the reduced threat of obsolescence in recession-resistant industries elongates the duration and superiority of their growth rates. There is greater certainty that the world will continue to consume necessities and essential goods for decades to come which further enhances the attractiveness of investing in recession-resistant sectors over the longer-term

## Risks and Returns Assessment

Contrary to popular belief, risk characteristics of constituents within equities are just as diverse as any other asset classes. For example, diverse risk spectrums are widely accepted within the Fixed Income universe.

Table 3 depicts different segments of fixed income, each comprising their own set of risk and return characteristics. When investors evaluate inclusion of different fixed income components into their overall portfolio allocation, each sector is typically analyzed separately due to each having its own unique characteristics as oppose to grouping risk characteristics of all fixed income into one single category. Such practice is less common within equities, with most asset allocators anecdotally categorizing equities as a high-risk investment without consideration for the unique set of risk and return characteristics within each sector.

**Table 3.**

| Bond Sectors | |
|---|---|
| Aggregate | MBS |
| Bank Loans | Municipals |
| Convertibles | Preferred |
| Corporate | TIPS |
| High Yield | Treasury |

Source: Morningstar Fixed Income Market Categories

## Historical Relationship Between Market Sectors and the S&P 500

*Monthly returns, January 2000 - December 2019. S&P 500 Returns on Y-Axis and Sector Returns on X-Axis*

**Exhibit 9.**

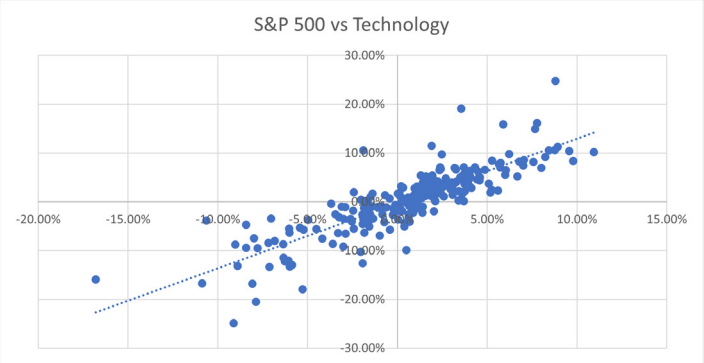



**Exhibit 10.**

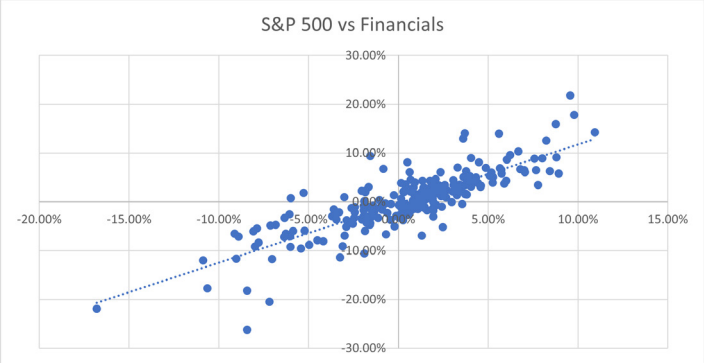



**Exhibit 11.**

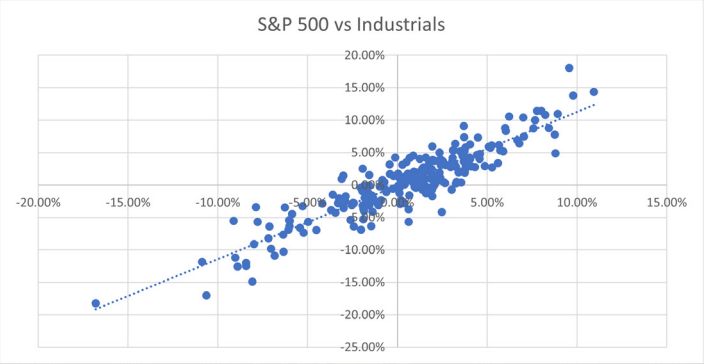
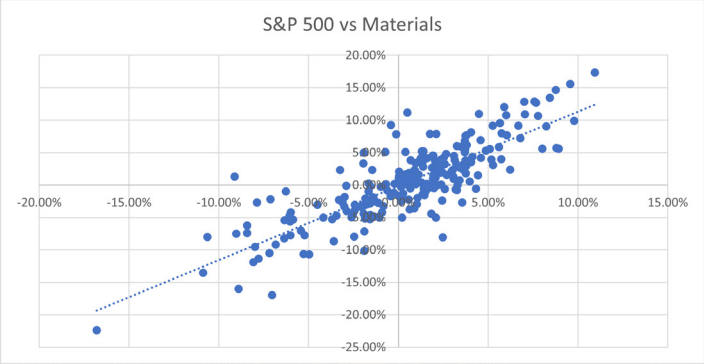



**Exhibit 12.**



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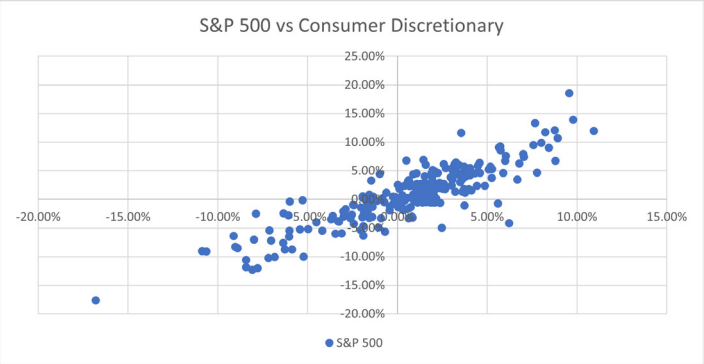
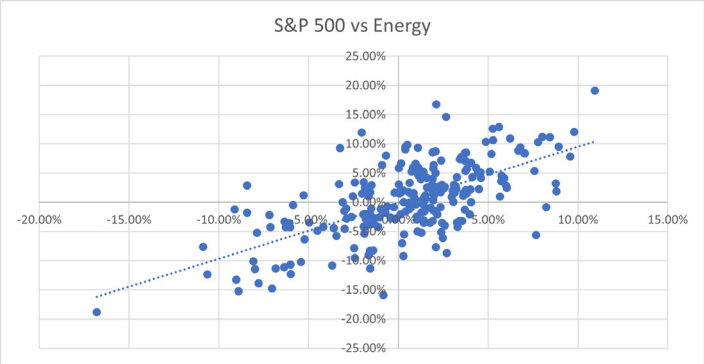



**Exhibit 14.**

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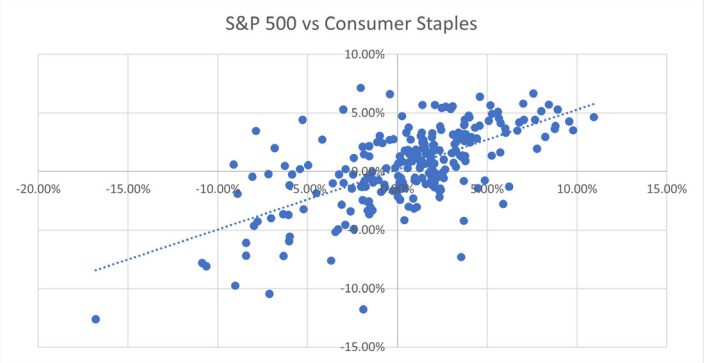
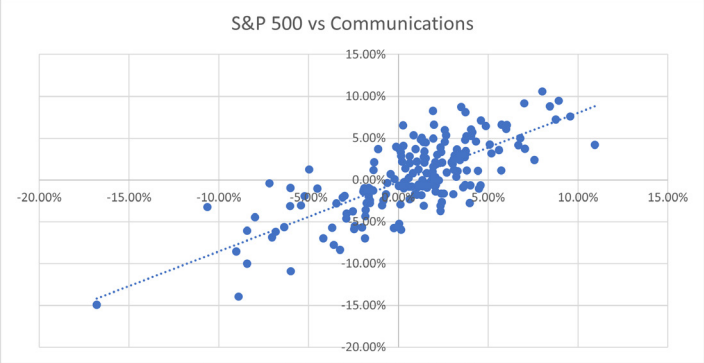



**Exhibit 16.**

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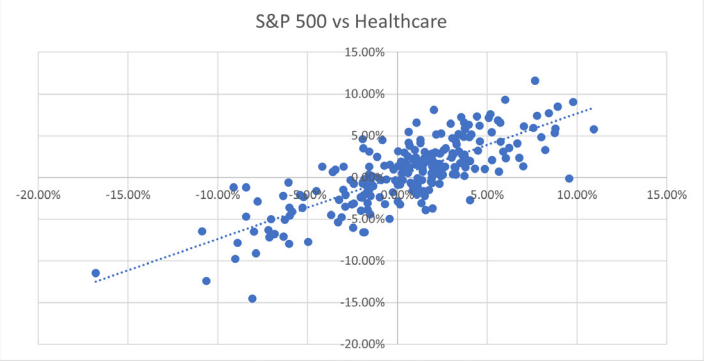
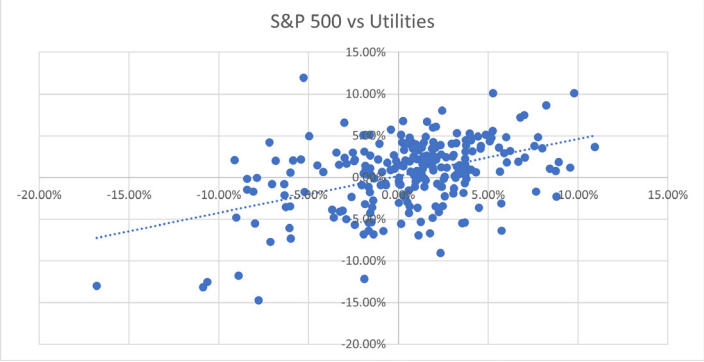



**Exhibit 16.**



While monthly return relationships between market sectors and the S&P 500 remain positive across all sectors, the strength of positive relationship is much weaker for the recession-resistant sectors than more cyclical and sensitive sectors. For example, the correlation between monthly returns of Utilities and the S&P 500 is about 44% while the correlation between Industrials and the S&P 500 is about 90%. Taking these sector relationships one step further, the R-squared measurement as illustrated in Table 4 further illustrates intra-sector variation relationships within the S&P 500.

**Table 4.**

| Sector | Correlation | R-Squared |
|---|---|---|
| Utilities | 44.52% | 19.82% |
| Consumer Staples | 63.32% | 40.90% |
| Energy | 64.94% | 42.17% |
| Communication Services | 75.90% | 57.61% |
| Healthcare | 78.37% | 61.42% |
| Materials | 82.80% | 68.56% |
| Financials | 83.32% | 69.42% |
| Technology | 84.81% | 71.93% |
| Consumer Discretionary | 87.56% | 76.86% |
| Industrials | 90.91% | 82.64 |

Source: Morningstar and Liberty One Investment Management (10/20). Sector data from S&P Indices

R-Squared is a statistical computation that measures the percentage of the security's movement that can be explained by the movement of the benchmark. In other words, how much of a security's variation can be explained by the variation in benchmark index. In most cases, a higher R-Squared value indicates that the variation of the security fits the variation of the benchmark more closely, thus variations in the benchmark can help explain variations of a security's price movements.

Drawing from the example shown in Table 3, the R-squared score of the utilities sector against the S&P 500 is 19.82%. What this suggests is that 19.82% of the variation in the utilities sector returns can be explained by the variations in the S&P 500. If we denote variations in the S&P 500 as market risks, what this suggests is that market risks explains 19.82% of the risks in the utilities sector, leaving 80.18% of risks in the utilities sector to be unexplained, or explained by factors outside of market risks.

Consequently, exposure to market risks as derived from variations in the S&P 500 differ among various sectors, presenting investors additional strategies to utilize sector compositions as a method to reduce market risks exposure. Recession-resistant sectors like Utilities and Consumer Staples affords investors such diversification opportunities. Therefore, adjusting sector composition presents investors with opportunities for enhanced diversification within equities, beyond other forms of equity diversification derived from common factors like geographical regions, size, and value.

## Risks and Returns Assessment

According to the risk-return tradeoff theory in modern finance, investors who want higher expected returns must accept higher risks. This concept is both intuitive and rational and have been widely accepted by the investing public. However, the tension between rationality and irrationality (observed in normal conditions) which is fundamental to the theory continue to challenge this concept of risk and returns. For starters, the general notion of risks is that risks deal with uncertainty. If there is high certainty that higher risks generate higher expected returns, there lies the paradox because the ability to generate higher returns no longer become uncertain. Investors with long time horizons would benefit simply by overweighting portfolios with high risk investments to generate higher returns.

**Table 5.**

| Sector | Std. Deviation | Beta | Total Return % |
|---|---|---|---|
| Utilities | 13.59% | 0.40 | 8.51% |
| Consumer Staples | 11.28% | 0.51 | 9.63% |
| Health Care | 13.73% | 0.64 | 10.29% |
| Communication Services | 16.15% | 0.78 | 7.33% |
| Technology | 17.26% | 0.94 | 13.60% |
| Consumer Discretionary | 18.08% | 0.98 | 12.12% |
| S&P 500 | 14.89% | 1.00 | 9.12% |
| Industrials | 18.63% | 1.05 | 8.68% |
| Materials | 20.16% | 1.14 | 8.11% |
| Financials | 22.75% | 1.18 | 1.87% |
| Energy | 24.99% | 1.19 | -0.96% |

Source: Morningstar, Liberty One (10/20). Data represents 20-year history Past performance does not guarantee future results. For illustrative purposes only. The graph is not representative of any Liberty One Investment Management Portfolios' performance and does not take into account fees and charges associated with actual investments.

Contrary to what the risk-return trade-off might suggest, recession-resistant industries with relatively lower risk profiles have kept pace if not outperformed the total return of the S&P 500 over the last 20 years. The low volatility factor that encapsulates these recession-resistant industries is one of the earliest identified factors. Haugen and Heins (1972) and Black, Jensen, and Scholes (1972) demonstrated that low risk (or low volatility) stocks are not associated with lower returns, meaning that on a risk-adjusted basis they offer a return advantage. Notably, the main advantage of low volatility or low beta strategies comes not necessarily from the higher total return, but from significant risk reduction as we discussed earlier in this paper. Such risk reduction could prove beneficial in today's low interest rate environment where the margin of safety for fixed income investments is much smaller than past decades.

An additional key driver of total returns for stocks within recession-resistant sectors come from its dividend return. Companies in these defensive "recession-resistant" sectors typically pay an above-average dividend and conduct friendlier shareholder policies. Dividends and share buybacks have been proven to add significant investment value over the longer-term.

## Recession-Resistant and Dividends

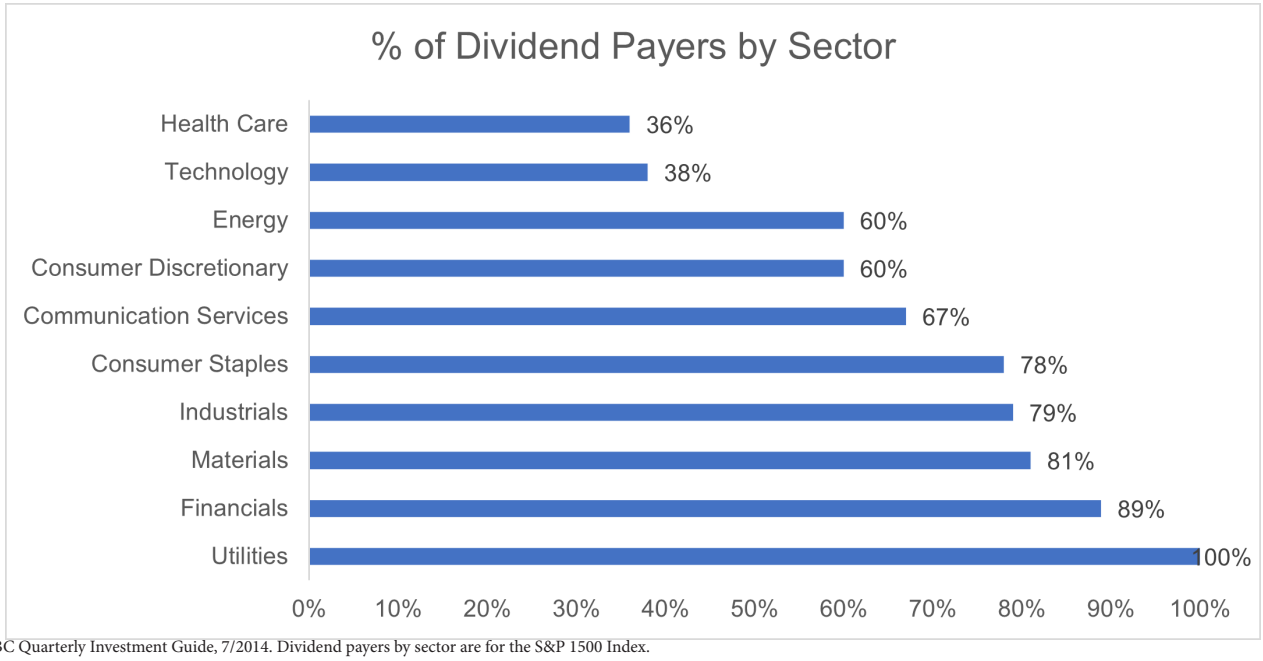
Dividends play an important role in an asset's total return, especially when compounding the reinvested dividends over the long-term. According to a recent study by Hartford funds, reinvested dividends and the power of compounding accounted for an average of 43 percent of the total return of the S&P 500 Index going back to 1930. From a more granular perspective, dividends contributed more to total returns during the 1970s, but were de-emphasized during the 1990s. Part of the reason for this was the expectation that companies were better off reinvesting capital back into its business for future growth than returning it to shareholders. This led to questionable capital allocation strategies that were masked by significant capital appreciation during this decade until the bubble burst in early 2000s, ultimately shifting investors' attention back to fundamentals such as valuations and dividends during the next decade. Despite the variation in dividend contribution to overall total return, it can be argued that dividends continue to play an important role in long-term total returns.

Certain studies consider that dividend decision influences the value of the firm (Walter, 1963), and is interlinked with the firm's investment policy. Firms that have lucrative investment opportunities available may decide to reinvest earnings back into the business, expecting the profitable capital outlay venture to increase the value of the company, resulting in capital gains (future income) to investors as opposed to distributing existing profits (current income) to investors. As concluded by Miller and Modigliani (1961), investors should not differentiate among dividends and retaining profits under perfect capital market assumptions which does not really exist in practice. In observed market behaviors, researchers often theorize that investors are risk-averse and give preference to receiving dividends rather than uncertain capital gains which are often riskier, giving dividends greater perceived value than capital gains. Furthermore, retaining capital for reinvestment opportunities instead of distributing profits can be associated with higher agency costs where management (agent) and shareholders (principal) have diverging interests on free cash flow uses which can lead to significant value destruction if invested in negative net present value (NPV) projects. Sound dividend policy has been used to mitigate such agency costs which can result in more beneficial results for investors (DeAngelo, 2005). Additionally, the signaling theory by Solomon (1963) and Ross (1977) suggests that dividend policy provides information about a stock, whereby the payment of dividends which requires existence of free cash flows becomes a positive signal for investors and can act as a warning signal about a business health should its dividend policy become unsustainable.

Fama and French (2001) studied that large firms with high profitability and low investment opportunities tend to pay dividends or vice versa. Hence, profitability, size, and availability of investment opportunities are important characteristics of dividend paying companies in the United States. These characteristics align with companies in the "recession-resistant" industries, where market share are primarily dominated by larger companies with stronger economic moats, profitability metrics are higher, and profitable investment opportunities to reinvest back in the business is more scarce given these industries are less exposed to disruptive innovations. In addition, Lintner (1956) reported that managers give importance to the stability of their firms' dividends. They do not like to cut or eliminate dividends once their policy has been set. Instead, companies determine their dividend payout policy considering their financial position, previous years' dividends, and the stability of current and future years' earnings.

The stability in present and future earnings are important factors when determining the sustainability of dividend payouts. Businesses that exhibit greater earnings visibility and lower volatility in those earnings have been able to maintain or increase their dividend payouts through the peaks and valleys of economic cycles. Such characteristics becomes more significant during times of economic distress. In a study by Bischel, CFA (2013), he reported that three sectors in particular, emerged as having the highest concentration of dividend cuts or elimination between 2007 and 2009. Those three sectors were Consumer Discretionary, Materials, and Financials.

**Exhibit 19.**




Source: CNBC Quarterly Investment Guide, 7/2014. Dividend payers by sector are for the S&P 1500 Index.

Despite having a large percentage of companies paying a dividend in Consumer Discretionary, Materials, and Financial sectors (60%, 81%, and 89% respectively), potential risks of dividend cuts or elimination are higher due to greater cyclicality in company earnings. During periods of economic distress from 2007 to 2009, 20% in the Consumer Discretionary sector, 24% in the Materials sector, and 47% in the Financials sector either cut or eliminated their dividends. This was in contrast to approximately 16% of companies in the S&P 500 cutting or eliminating their dividends during the same period. By the end of 2009 however, there were still 368 companies or 74% of the S&P 500 that paid a dividend, with about 151 companies raising their dividends that year.

Managements that cut their dividends despite establishing a dividend paying culture do appear to signal their views on the sustainability of their firms' earnings power. A deteriorating earnings profile which often can be masked by share repurchases or categorization of certain costs becomes harder to inflate through a firm's dividend policy. Because dividends extrapolate information from the statement of cash flows, the old adage that "dividends don't lie, but earnings sometimes do" becomes more applicable. As a result, dividend cuts and elimination can be an early signal of potentially deteriorating operating environment, which could result in below average long-term total returns.

As illustrated in a study a Hartford Funds and Ned Davis study (2020), companies that cut their dividends suffered negative consequences relating to their subsequent stock performances. Dividend cutters or eliminators were concluded to be more volatile (as measured by standard deviation and beta) and fared worse than companies that maintained their dividend policy.

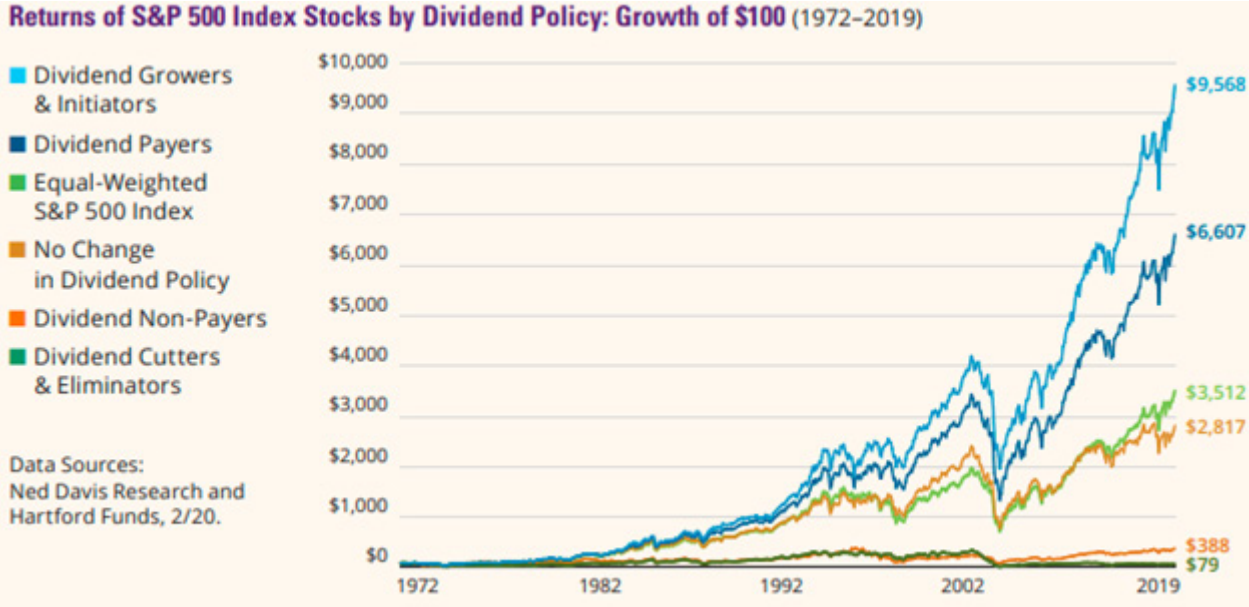
**Table 6.**
**Average Annual Returns and Volatility by Dividend Policy (03/31/1972 - 12/31/2019)**

| | Return % | Beta | Std. Deviation |
|---|---|---|---|
| Dividend Growers and Initiators | 12.87% | 0.92 | 15.61% |
| Dividend Payers | 12.79% | 0.98 | 16.36% |
| No Change in Dividend Policy | 11.85% | 1.13 | 17.92% |
| Dividend Non-Payers | 8.57% | 1.13 | 24.33% |
| Dividend Cutters or Eliminators | 10.88% | 1.23 | 24.08% |
| Equal-Weighted S&P 500 Index | 12.29% | 1.00 | 16.98% |

Source: Ned Davis Research and Hartford Funds, 2/20. Dividend policies shown are for stocks in the S&P 500 Index Past performance does not guarantee future results. For illustrative purposes only. The graph is not representative of any Hartford Funds or Liberty One Investment Management Portfolios' performance and does not take into account fees and charges associated with actual investments

In contrast to dividend cutters and eliminators, dividend growers and initiators were able to earn the highest return with less volatility since 1972 within this dataset. A potential reason to such performance can be attributed to the fact that dividend paying, or growing companies tend to increase their dividends if the company exhibits fundamental strength. This is supported by their resilient earnings and cash flows which are used to sustain its growing dividend payments.

**Exhibit 20.**




Past performance does not guarantee future results. For illustrative purposes only. The graph is not representative of any Hartford Funds or Liberty One Investment Management Portfolios' performance and does not take into account fees and charges associated with actual investments.

Given the importance of earnings and cash flow resiliency for the sustainability of dividend growth and payments, earnings in "recession-resistant" sectors as illustrated in Exhibit 4 earlier in the paper portrayed lower earnings volatility while exhibiting positive earnings growth rates over several economic cycles. Such stability is again driven by the nature of products and services that are manufactured and sold by companies operating in these industries. Despite operating in recession resistant industries, companies are not promised revenue stability nor are they guaranteed financial success. The marketplace remains extremely competitive and management teams are usually responsible for driving company results and success. The importance of management is often overlooked but could be the difference between business success and failure, which ultimately drive dividend policies and decisions.

## Importance of Management

To illustrate the importance of management and strategy, the Harvard Business Review studied 4,700 public companies to evaluate how different management strategies resulted in different business results. They categorized the data into three time periods: three years before a recession, three years after a recession, and the recession years themselves. The results were quite striking. 17% of the companies in their study did not survive a recession: They went bankrupt, were acquired, or became private. The survivors were painfully slow to recover from the battering. About 80% of them had not yet regained their prerecession growth rates for sales and profits three years after a recession; in fact, 40% of them hadn't even returned to their absolute prerecession sales and profits levels by the end of that time period. Only a small number of companies—approximately 9% of the sample—flourished after a slowdown, doing better on key financial parameters than they had before it and outperforming rivals in their industry by at least 10% in terms of sales and profits growth. The variation in results were the consequence of different strategies implemented during a recession. Companies that cut costs the fastest and deepest had the lowest probability, about 21% of getting ahead of their competition when times got better. Companies that boldly invest more during a recession do not fare that much better either, only showing 26% chance of becoming leaders after the downturn. Companies that master the delicate balance between cutting costs to survive today and investing to grow tomorrow were ones that had the highest success rate of 37% of becoming leaders in their industry after a recession.

As investors in companies and businesses, we entrust our capital to the management teams to best deploy our capital while focusing on creating as much organizational value as possible. It is therefore imperative that the interests of management and shareholders align, as the return on investment shareholders receive whether through dividends or capital gains, are dictated by management's abilities. The variation in organizational results due intangible factors outside of what industry the company operates in illustrates the positive impact of security selection and underscores the benefits of a robust, disciplined, and transparent framework when investing in recession resistant industries.

## Conclusion

Recessions and market cycles are an inevitable part of the investing journey. As observed in actual market behaviors, recessions are as much technical as they are behavioral. In such an environment, investing in recession resistant industries offer the benefit of transparency and simplicity. Investors can understand what these companies do and how they turn a profit because we purchase their products and services on a regular basis. Companies in these industries have long histories of profitable operations that turn profits into real cash flows that ultimately benefit shareholders through dividends or buybacks. During better economic times, companies in recession-resistant industries can benefit from secular trends in higher global growth, increasing healthcare investments, and digitization in our global economy. Despite not being widely accepted as a recession-resistant industry, the evolution of business models in the technology industry coupled with the essentialness of the products and services they sell in today's modern economy, creates stark similarities with companies operating in traditional recession-resistant industries. Additionally, the resiliency of these businesses during downturns mitigates fundamental risks that become heightened during recessionary environments. Such impact can be observed in the low correlation and r-squared measurements in recession resistant industries relative to the broader market.

Finally, dividends are a vital component to total stock market returns, including returns in recession resistant industries. Companies within recession-resistant industries typically pay an above average dividend that are supported by a stable earnings profile, strong cash flow generation, lower alternative investment opportunities, and high visibility of future earnings.

The sustainability of such dividends can have dramatic impacts on long-term performances as the market has shown in the past to punish dividend cutters and eliminators while rewarding companies that grow their dividends over time. We believe active management supported by strong research and diligence can protect against owning companies that eliminate or cut their dividends, trapped in a trajectory of market share losses, exhibit weak financial characteristics, and run by less than effective management teams. Ultimately, we believe investing in recession-resistant industry companies can protect investors during more turbulent times, but also offer investors attractive opportunities to invest in companies that can grow at superior rates over an exceptionally long period of time.

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