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Stress-testing your holdings for times like this.

INTRODUCTION:

The financial markets have been tumultuous and volatile over the past few weeks. At HJ Sims, we have been utilizing our scenario and stress testing tools to evaluate portfolios and help position our investors. In this paper, we will summarize the market environment and test four hypothetical portfolios against three scenarios: the COVID-19 Pandemic, a Global Recession and a Negative Interest Rate Environment.

MARKET COMMENTARY:

Superlatives have lost shock value for most of us investors. We tend to be optimists so we are sorely tested when we hear analysts or politicians talk about the baddest, the worst, and the worst yet to come. Those who have crafted balanced, diversified portfolios should be breathing easy. Yet we see veteran traders finish the day exhausted and stunned by the movements and behaviors they have witnessed, with ratios askew, evaluations upside down, futures like yoyos, seemingly unable to hedge their positions as nearly everything seems correlated to the downside. Most are now working from home and missing much of the communication flow and body language that have been so important to market making. Daily trading is extremely volatile both to the upside and downside, with breathtaking market swings reminiscent of 1929, 1987, and 2008.

It is not surprising that many investors have sidled out of the way of algorithmic dominoes, de-leveraging funds, unwinding tender option bond trust strategies, hordes of panicked sellers and fear-of-losing-out buyers, and all the ensuing market dislocations. As Warren Buffet wrote in 2004, "Only when the tide goes out do you see who's been swimming naked." But for clear-eyed divers and those good at digging clams out from under the seaweed, you have an ocean of possibility. In the week ended March 18th alone, domestic stock funds had outflows of $11.7 billion, investment grade corporate bond funds had $2.9 billion of withdrawals and municipal bond funds lost $11.5 billion. Many of these securities are still floating around and worthy of attention in portfolios constantly being sifted for suitability and value.

Central banks have made yeoman's efforts to assure breathless investors that the financial system is sound. They finger the blame on liquidity issues rather than any sort of fundamental distress, so the Federal Reserve and its counterparts have taken or announced a series of emergency measures to bolster overnight and short term funding needs. They slashed interest rates to zero, lowered the rate that they charge banks for overnight loans, and set up a plan to buy $700 billion of U.S. government and mortgage-backed securities. The Fed has relaxed the requirements for deposits that banks must hold as reserves to meet cash demand and increase lending, offered billions of U.S dollars to other central banks so that they can in turn lend to those that need the money, relaunched programs to buy commercial paper, loan money to primary dealers, and is funneling huge amounts of cash daily to money markets. To stabilize a market short of buyers, the Fed is now stepping in to buy investment grade corporate bonds and municipal bonds in the secondary market as well. This means a lot of liquidity, never before seen as necessary, for bonds second only to U.S. Treasuries in credit quality and should be very reassuring to income-seekers.

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The U.S. economy had been on a roll for 128 straight months, an all-time record, then turned on a dime in a matter of weeks. The textbook definition of uncertainty enveloped the market and a swirling dark cloud of recession fear still hangs over trading floors and kitchen tables. We find silver linings every few days in promising medical reports or Washington press releases and then sink again when we see scrolling case numbers jump or hear talk of stalemates. Stocks declined dramatically in the month of March and trading has actually been halted several times. It even felt like bond trading had some temporary, self-imposed halts. Tax-exempt and taxable bonds of all qualities, maturities and features have sold off in dramatic fashion before they, like stocks and gold, turned upward again on news of a third stimulus. Only oil is trading in a parallel universe, primarily affected by geo-political foot stomping.

So where do we go from here?

As you know, here at HJ Sims, we have a growing team of advisors supported by traders, analysts, and strategists, standing ready to help you construct, monitor, and strengthen portfolios to weather market conditions as extraordinary as this one. In addition to our proprietary products, we have made available a wide array of securities and instruments to meet the investment needs and goals of any client. Today, we are going to show you how certain hypothetical holdings may react to a number of specific shock-and-awe events.

Using the new tools we are making available, we will be able to analyze any portfolio, show how it will respond to stress, and point to ways in which you can diversify in order to meet short-term as well as long-term goals.

Let's get started.

Below we examine how four hypothetical portfolios respond to three adverse scenarios we selected. The portfolios have the following asset allocations:

- Foundations Portfolio – 60% Global Equity – 20% Fixed Income - 20% Alternatives
  - Alternatives represent products such as HJ SIMS Private Placements, Hedge Funds, and Non-Traded REITs
- Standard Global 60/40 - 60% MSCI ACWI Index – 40% Aggregate Bond Index
- Standard US Equity – 100% S&P500 Index
- Standard IG Tax-Free Acct – 90% Investment-Grade Municipal Bonds - 10% Cash

The three scenarios we reviewed were:

- Negative Rates
- Global Recession
- COVID-19 Pandemic

Under each scenario, we examined the best and worst cases and the effects each would have on the portfolios. The illustrations – as well as the key assumptions behind each scenario, and the key market levers used to generate each return – appear on the pages to follow…

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SCENARIO 1:

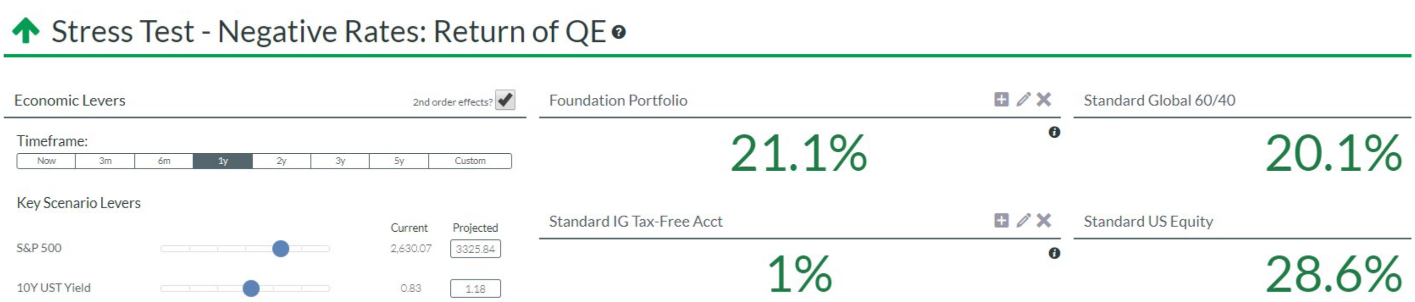
Negative Rates – What if the Fed initiates a quantitative easing program akin to the unconventional moves made during the Great Recession?

Summary: The Fed has already been purchasing $60 billion worth of short-term Treasuries per month since Q3 2019 to help maintain control over the yield curve which had inverted in August. The Fed might create money out of thin air to purchase government securities on the market to jumpstart lending and investment and also underwrite a payroll tax holiday to help keep workers and small businesses solvent. The liquidity injections provided by QE could erode USD strength which is trading at multi-year highs.

Key Scenario Levers:

- S&P 500 Index: +29%
- 10 Year U.S. Treasury Yield: +0.48 pts

Discoveries: More money in the system feeds equities back into our raging bull market. Fixed income rates will stay low, but distributions can remain at satisfying levels for investors. As shown, owning Equities in your portfolio can make a substantial, positive impact with this strategy.



Source: Axxcess Wealth Management and Hidden Levers
Note: Advisory fees are not included in these projections.

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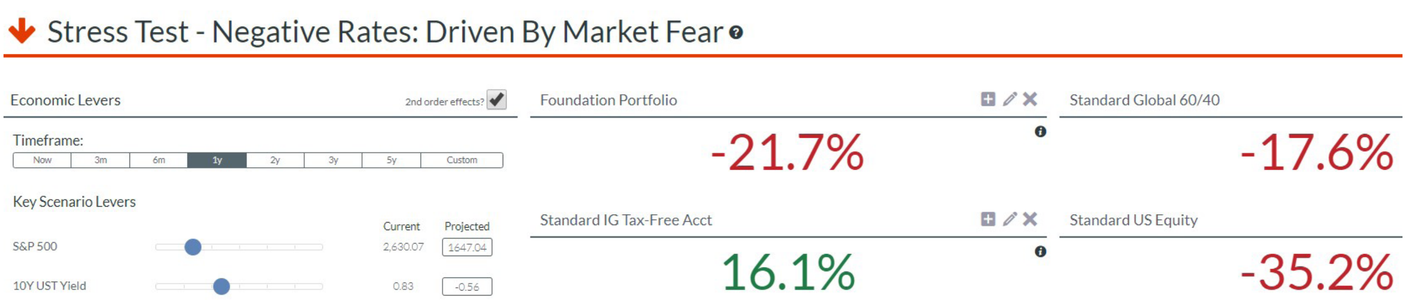
Negative Rates – What if capital flight into U.S. government bonds leads to such high demand that it pulls interest rates on 2-year and 10-year Treasuries into negative territory?

Summary: Bond markets are giving a much more profound signal about a dire future for the global economy than Equity markets. Negative rates would reflect serious irrationality of investors who would be taking small losses to stash money and would unload such holdings as the crisis dissipates. Even if the economic fallout related to COVID-19 is short-lived or mild, negative rates on US Treasuries would be a pessimistic warning about the global economy.

Key Scenario Levers:

- S&P 500 Index: -36%
- 10 Year U.S. Treasury Yield: -1.26 pts

Discoveries: This seems to be the most popular discussion these days. It would be detrimental to equity growth. Fixed Income values would rise, but income would be sacrificed leaving many desperate to pay bills. The most unlikely of scenarios, as the US has seen what poor results come from negative rates in other countries.



Source: Axxcess Wealth Management and Hidden Levers
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SCENARIO 2:

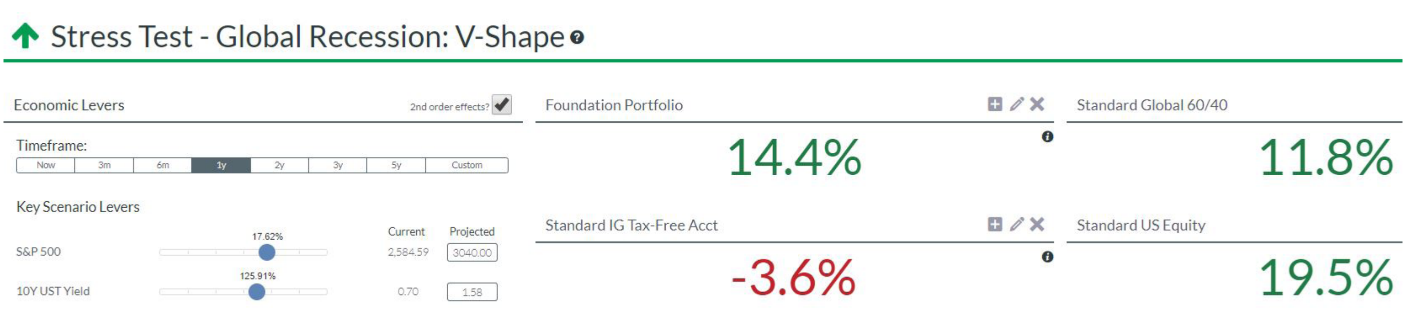
Global Recession - What if U.S. GDP briefly turns negative as a result of COVID-19, but recovers quickly due to U.S. fiscal policy measures?

Summary: Supply-chains corporate travel and US retail consumption have seen unprecedented dislocation due to the coronavirus outbreak. Jan + Feb 2020 blowout jobs numbers show that the US could recover quickly due to robust pre-outbreak HR demand. The unprecedented $2.2T fiscal policy response, which includes a payroll tax cut, bailouts for US air carriers, and loans for small business, is a stimulus to counteract the economic fallout.

Key Scenario Levers:

- S&P 500 Index: +18%
- 10 Year U.S. Treasury Yield: +0.88 pts

Discoveries: This can be a temporary 'Band-Aid' for the economy, reversing decline and preventing negative rates. We have not yet seen the financial records for most companies in light of this threat which can jump start a further decline.



Source: Axxcess Wealth Management and Hidden Levers
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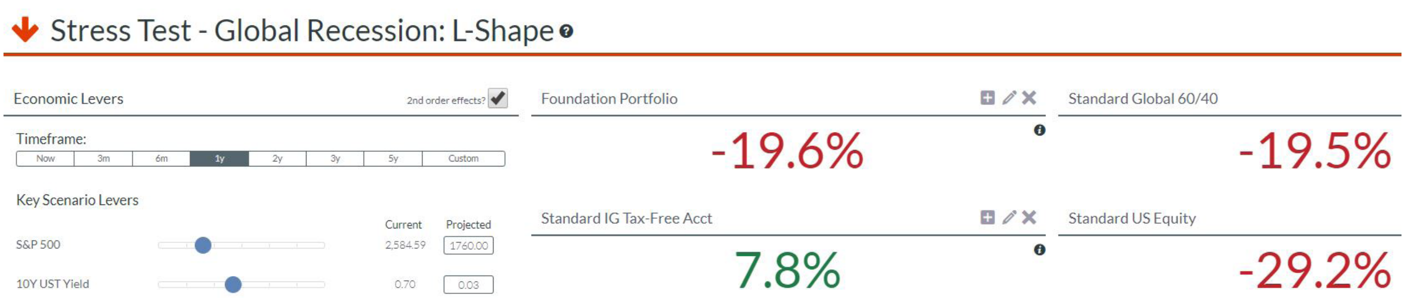
Global Recession - What if the U.S. coronavirus outbreak triggers a full business cycle reset?

Summary: COVID-19 has caused an unprecedented rupture in supply and demand, including oil prices under $20/barrel. The maximum draw down on the S&P for past business cycle resets (2000 & 2008) has been about 50%. Past recessions of this type have lasted multiple years and are characterized by dislocations in many sectors of the economy.

Key Scenario Levers:

- S&P 500 Index: -32%
- 10 Year U.S. Treasury Yield: -0.67 pts

Discoveries: Cash under your mattress or holding existing Investment-Grade Fixed Income will be the only place to hide. This will further the pain from current levels of decline and will overtake the Financial Crisis of 2008 as the worst in history.



Source: Axxcess Wealth Management and Hidden Levers
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SCENARIO 3:

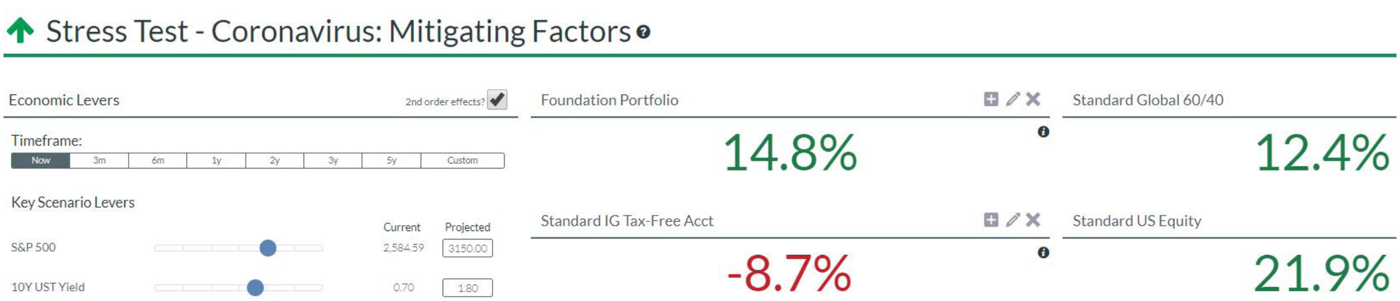
COVID-19 - What if the U.S. outbreak follows the COVID-19 arc in China and Korea hitting peak daily infections within a few weeks of full lockdown?

Summary: The number of new infections in China has slowed dramatically after the Chinese governments drastic containment measures. Korea also claims to be past peak infections. While global equities are well in correction territory, the Shanghai index has made a swift recovery due to being past peak rate of new cases and is in positive territory YTD. If the US is spared the worst effects, it would be due to vigilant public health efforts and/or warm summer weather limiting the spread of the virus.

Key Scenario Levers:

- S&P 500 Index: +22%
- 10 Year U.S. Treasury Yield: +1.10 pts

Discoveries: This is the best-possible case considering the recent news we hear out of China. A sustainable and quick turnaround will make this virus all but a speed bump in 2020. Alternatives that do not act in tandem to the rest of the market can certainly add value moving forward.



Source: Axxcess Wealth Management and Hidden Levers
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COVID-19 - What if a severe epidemic spreads across the U.S. as during the 1918 Spanish flu?

Summary: The decline in US GDP would be severe 4-6 percentage points depending on the degree of infection acceleration and the degree of disruption to international trade. Recent projections indicate that the virus could infect twice the impacted by the 1918 Spanish Flu - with tens of million potentially dying worldwide. The economic cost of quarantining whole nations or large regions would be devastating.

Key Scenario Levers:

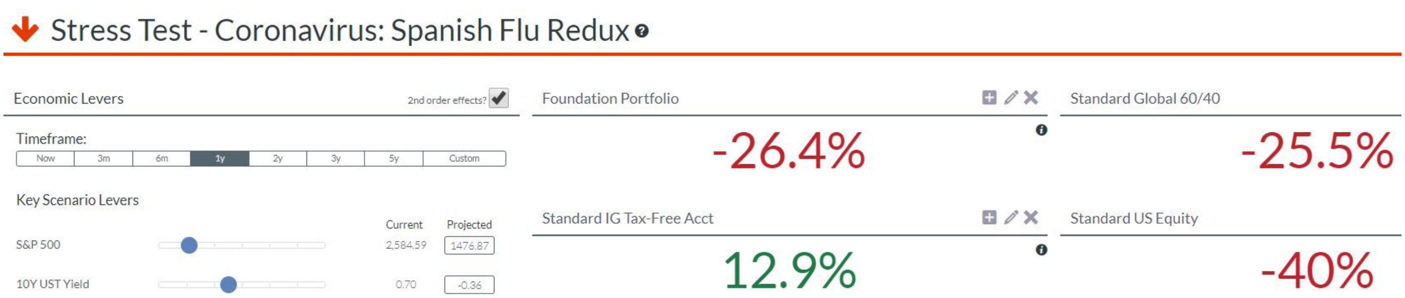
- S&P 500 Index: -43%
- 10 Year U.S. Treasury Yield: -1.06 pts

Discoveries: A similar outcome to a Global Recession, with Bond values not taking as much of a hit. This outcome would also surpass the Financial Crisis leaving many in financial distress.

CONCLUSION:

As you can see from the outputs, having DIVERSIFIED and UNCORRELATED ASSETS is key to buffering a portfolio in volatile economic times. Of the 3 scenarios and 6 outcomes, our hypothetical Foundation Portfolio most often provided better potential upside. Tactical trades may help to cushion or enhance returns, but your HJ Sims representative can guide you through all your options in accordance with your investment objectives. Our aim is to help provide peace of mind by carefully reviewing your holdings, holistically, to see if you are positioned to provide a balance between your tolerance for risk and risk needed to achieve your goals.

Interested in reviewing your current investment portfolio to any of one these scenarios or all? Contact your HJ Sims financial professional or call us at 1-800-HJS-1935 to learn more.



Source: Axxcess Wealth Management and Hidden Levers
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IMPORTANT:

The projections generated by HiddenLevers regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results.

Assumptions on rates of return and standard deviation used in this analysis are based on historical return data for each security and asset class. Past performance is no guarantee of future results. Results may vary with each use and over time.

METHODOLOGY USED TO GENERATE THIS REPORT:

Definitions:

Lever - This software tracks different levers (economic indicators) like CPI, US GDP Growth, and oil prices, and uses movements in these levers to define economic scenarios.

Macro Impact - The macro impact section for each scenario shows the assumptions on how the economic levers will change if this scenario occurs. These lever movements drive the model of portfolio performance in the scenario.

Scenario - A scenario is a representation of a major macroeconomic or geopolitical event which has the potential to impact investment returns. Scenarios are modeled as a set of up-or-down movements in any of the economic indicators (levers) in the system.

Scenario Progress - Each scenario's progress is measured by the change in a key lever defined for the scenario. For example, an oil spike scenario might project that oil prices rise to $150/barrel. If oil prices rise toward that level, the scenario's progress will rise toward 100% (reached if prices hit $150/barrel). As scenario progress rises, the incremental impact of the scenario diminishes.

Timeframe - Each scenario is assumed to play out over the timeframe displayed. The portfolio return projections are the total return modeled over that timeframe, including dividends and interest.

Method:

This report describes one or more potential scenarios, and shows the HiddenLevers-model based performance for the portfolio in each scenario. The steps below are performed to generate the projections:

Scenario > Levers > Assets (Stocks etc) > Portfolio Return

A scenario pushes levers up or down, which in turn push assets up or down, which in turn impact a portfolio's modeled return in the scenario. As defined above, a scenario is modeled as a set of movements in the levers. Regression analysis is used to determine the historical (prior 10 year) relationship between each lever and each asset in the portfolio.

The model is then run 2500 times for each scenario/portfolio combination. In each iteration, the model projects the returns for each asset using the historical regression coefficients for each lever, and using the scenario assumptions on how each lever will change. The model varies the regression coefficients for each iteration using a normal distribution around their mean (similar to a Monte Carlo model's varying of expected returns across iterations), and aggregates the results of the 2500 iterations to find a mean portfolio return with a 95% confidence interval. The confidence interval is displayed on the report as "margin of error" for each scenario.

Detailed Lever Definitions:

10Y UST Yield: The 10 year treasury yield is used as a benchmark to determine borrowing rates across the economy, including in the housing sector, as GSEs like Fannie and Freddie use the 10 year rate as a benchmark in determining wholesale mortgage rates.

CPI: Consumer Price Index (CPI-U) Annual Change. The US Inflation rate is measured by the Consumer Price Index, an index comprised by a basket of goods determined by the Bureau of Labor Statistics.

EUR: The current exchange rate of Euros to US Dollars, expressed in US Dollars.

Gold: The current price of gold as measured by the last daily settlement price of the COMEX front month gold contract.

Oil: The WTI (West Texas Intermediate) front-month oil contract is the most commonly used benchmark for the price of oil.

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Retail Sales: Annual % change in nominal retail and food service sales, as measured by the US Census Bureau. Since consumer spending accounts for roughly two-thirds of the US economy, retail sales is considered among the most important US economic indicators.

S&P 500: The S&P 500® is widely regarded as the best single gauge of large-cap U.S. equities. There is over USD 8 trillion benchmarked to the index, with index assets comprising approximately USD 2 trillion of this total. The index includes 500 leading companies and captures approximately 80% coverage of available market capitalization.

Unemployment: The US Unemployment Rate (U-3), as calculated by the United States Bureau of Labor, which includes those who are unemployed and have actively looked for work within the last four weeks.

US GDP Growth: US GDP (Gross Domestic Product) is measured by the Bureau of Economic Analysis. Real GDP growth (annualized) is reported on each quarter by the BEA.

US Home Prices: The Case-Shiller index, which measures the values of homes in the twenty largest metros in the US relative to their value in 2000.

USD: The ICE U.S. Dollar Index (USDX) futures contract is a leading benchmark for the international value of the US dollar and the world's most widely-recognized traded currency index. In a single transaction the USDX enables market participants to monitor moves in the value of the US dollar relative to a basket of world currencies, as well as hedge their portfolios against the risk of a move in the dollar.

Limitations and Assumptions:

This report describes one or more potential scenarios that may or may not occur. Each scenario discussed in this report is defined by the economic assumptions listed in the Macro Impact section of each scenario page.

GxWorks LLC does not guarantee that any particular scenario will occur as modeled in this report. GxWorks uses historical analysis in the creation of this report, and past performance is not a guarantee of future results. The information contained in this report is not to be construed as advice and should not be confused as any sort of advice. Investment professionals should consider this report as only a single factor in making their investment decision.

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