A Playbook for Recovery from the COVID-19 Crisis

The COVID-19 pandemic has created the greatest global growth shock in more than 50 years. As we enter a new investment regime characterized by heightened uncertainty and risk, investors can benefit from outlining potential scenarios and thinking about how portfolios might be adapted for different environments. Here we present an update to the scenarios we set out in April of this year.

Our Asset Allocation Committee's Three Economic Scenarios

1 Base case: "U-shaped" recovery

In this updated scenario, the virus peaks in the U.S. in Q4. Subsequent waves cause regional rolling lockdowns with a less severe economic impact than that of the lockdown in Q3. The U.S. economy recovers to pre-crisis levels by the end of 2021.

2 Bull case: "V-shaped" recovery

In this updated scenario, the virus peaks in the U.S. in Q3 and subsequent waves are minor enough that the economy re-opens without severe delays. Europe implements collective fiscal support. The U.S. economy recovers to pre-crisis levels by mid-2021.

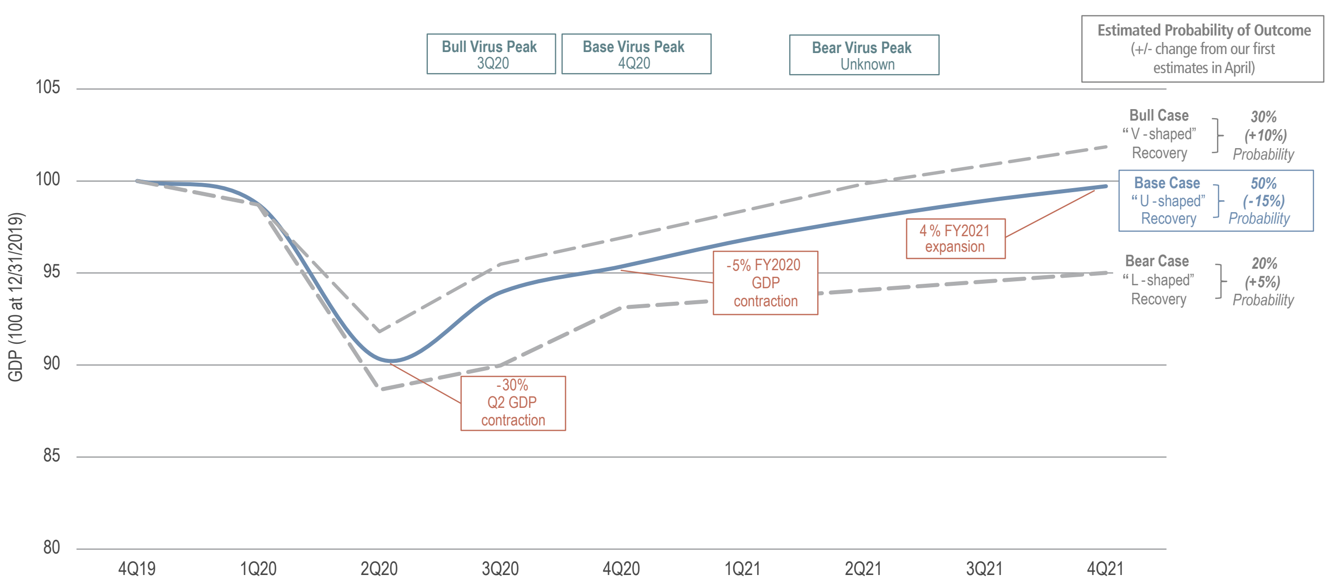
3 Bear case: "L-shaped" recovery

In this updated scenario, the U.S. fails to control the virus and also reduces stimulus, leading to widespread lockdowns and ongoing business closures. The U.S. economy remains smaller than pre-COVID-19 for the foreseeable future due to a structural change in consumption. Negative rates and central bank asset purchases expand and corporate taxes rise.

In all cases, governments incur large fiscal deficits, and central banks maintain high levels of stimulus and very low rates for longer.

OUR BASE CASE REMAINS A U-SHAPED RECOVERY, BUT WITH INCREASED UNCERTAINTY

Estimated Path of U.S. GDP Growth



Source: Neuberger Berman. GDP quarterly growth is presented annualized. For illustrative and discussion purposes only. Nothing herein constitutes a prediction or projection of future events or future market or economic behavior. The duration and characteristics of past market/economic cycles and market behavior, including length and recovery time of past recessions and market downturns, is no indication of the duration and characteristics of any current or future market/economic cycles or behavior. Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed or any historical results.

Our Base-Case Playbook

Overview: Phase one of the crisis saw an indiscriminate sell-off and market dysfunction, as uncertainty and unreliable virus data led to a rush to havens. Phase two saw a sharp rebound as more data appeared and huge policy interventions supported markets. We now believe we are entering phase three, in which investors face reality and count costs and **sector- and security-level differentiation begins**.

Equities: Quality Equities & Volatility Monetization

Quality companies appear more able to adapt and sustain dividends, but the strong rally in U.S. large caps now makes a case for seeking **quality in small caps and other regions; thematic equities** can be a source of long-term growth while select **REITs with limited lockdown exposure** may help sustain income. Ongoing uncertainty is likely to keep volatility high: certain hedge fund and put-option writing strategies can **trade volatility or monetize the volatility premium**.

Fixed Income: Investment Grade Credit & China

Low rates for longer will intensify the search for yield, and **companies are likely to focus on deleveraging**, favoring bondholders over shareholders. Investment grade still looks attractive, even after spreads tightened from the initial shock, and the Federal Reserve appears committed to supporting the sector. **China's onshore bond market** proved resilient through the crisis and could be an attractive source of yield in the recovery.

Alternatives: Private Markets & Uncorrelated Strategies

Private equity entered the crisis with **substantial "dry powder"** that can be used to help companies through the crisis. **Significant market dislocation and distress** could create opportunities in the secondary market for private equity funds and private debt. Certain uncorrelated hedge fund strategies may be less exposed to volatility in traditional markets, or able to **trade or monetize that volatility**.

Below, we outline a playbook for all three scenarios. The bull case may warrant a tilt toward value equities, high yield and emerging markets. The bear case may warrant a tilt toward core bonds and alternatives.

	BASE	BULL	BEAR
EQUITY	**Quality Equity** Ex-U.S. Large and U.S. Small Cap Selective REITs Quantitative/Factors **Thematic Equity** **Volatility Monetization** Long-Short Equity Put Option Writing	**Value Equity** Large and Small Cap REITs Quantitative/Factors **Emerging Markets Equity** **Thematic Equity**	**Equity Income** **Thematic Equity** **Volatility Monetization** Long-Short Equity Put Option Writing Low Market Beta Hedge Funds
FIXED INCOME	**Credit** Investment Grade Quality High Yield Opportunistic Credit Emerging Markets Debt China Onshore Bonds	**Credit** Investment Grade High Yield High Yield Municipal Bonds Opportunistic Credit Emerging Markets Debt	**Core Bond** **Credit** Investment Grade China Onshore Bonds
ALTERNATIVES	**Private Equity** **Private Debt** Credit Opportunities Distressed and Special Situations	**Private Equity** **Commodities**	**Private Equity** Secondaries **Private Debt** Credit Opportunities Distressed and Special Situations

Source: Neuberger Berman. For illustrative and discussion purposes only. This material is general in nature and is not directed to any category of investors and should not be regarded as individualized, a recommendation, investment advice or a suggestion to engage in or refrain from any investment-related course of action. Investing entails risks, including possible loss of principal.