

Surfing with the Tides: The Macroeconomic Case for Active Asset Allocation

Ryan Kimmel | March 2019



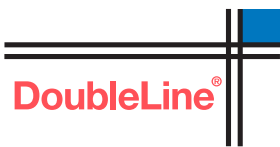
From the flawless right-hand point breaks of Santa Barbara and Malibu to the thumping beach breaks of Oxnard and Newport Beach, Southern California hosts an abundance of surf spots. On the best days, these surf breaks are world class. Unfortunately for the surfers among us, the requisite conditions don't always line up, leaving us to make do with less-than-ideal surf. Such is life.

Of the numerous variables which determine surf quality, perhaps the most impactful is the ebb and flow of the tides. Most surf breaks are "tide sensitive," their quality varying greatly with tidal conditions. Some are most rideable at low tide. For instance, at low tide, the "Queen of the Coast," Rincon in Carpinteria, forms waves of machine-like perfection. But extreme high tides overwhelm the line-up, turning Rincon dormant. Other breaks are surfable only at high tide. In fact, these locations become downright dangerous at low tide as previously submerged rocks and reefs become exposed or lurk just beneath the surface. Mindful of these dynamics, seasoned surfers always consult the local tide tables before deciding where to surf and when. A careful consideration of the local tides can mean the difference between an all-time surf session or a bust.

In like fashion, global financial markets are driven by a multitude of variables. Perhaps one of the most important drivers is the ebb and flow of economic activity: the economic or business cycle. Empirical analysis reveals significant variability in asset-class performance depending on the state of the economic cycle. Investors who seek to outperform the broader market must consider this when making asset-allocation decisions. No single asset class outperforms in all stages of the cycle. Certain assets perform better in economic expansions while others outperform in contractions. Allocating to the wrong asset class with respect to the cycle can be extremely costly.

Unfortunately for investors, there are no tide charts for economic cycles. Investors must rely on a host of indicators to identify inflection points in economic activity and make the corresponding allocation decisions. This is a complex exercise of interpretation, requiring experience, expertise, judgment and process. DoubleLine's Multi-Asset Growth (MAG) investment strategy starts with a rigorous examination of global economic indicators and financial conditions in order to form a view on the state of the economic cycle. Then under our Strategic Asset Allocation framework, we set the strategy's medium-term allocation to government bonds, credit, stocks and commodities, along with other portfolio characteristics such as duration.

Views and opinions expressed herein are those of the individual portfolio manager and do not necessarily reflect the views of DoubleLine Capital LP, its affiliates or employees.



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The Economic Cycle

Like the rising and falling tides, a country's economic activity fluctuates depending on the level of aggregate demand as driven by consumption, investment, government spending and net exports. During economic expansions, aggregate demand increases, which supports a country's total output or gross domestic product (GDP). Expansions are followed by contractions, or recessions. The National Bureau of Economic Research (NBER), a private, non-profit research organization whose activities include dating business cycles, defines a recession as a significant decline in broad economic activity, lasting more than a few months. Recessions are normally visible in real GDP, real income, employment, industrial production and wholesale-retail sales.¹

According to data compiled by the NBER, the average economic cycle in the U.S. has lasted about six years in the post-war era, with expansions lasting about five years and contractions about one year. A stylized representation of an economic cycle can be seen on the previous page. (Figure 1)

A critical feature of the business cycle is the interplay of inflation and growth. While inflation dynamics can be secular, i.e., independent of the economic cycle, inflation tends to accelerate during the later stages of the expansion period as excess capacity is absorbed and wages increase. Rising inflation forces central banks to tighten monetary policy in an effort to prevent or remedy an overheating of the economy. Eventually, restrictive monetary policy halts the expansion, ushering in a recession. As former Federal Reserve Chairman Ben Bernanke pointed out during a January 2019 panel with former Fed Chair Janet Yellen and current Fed Chairman Jerome Powell, "But as Janet says, expansions don't die of old age. I'd like to say they get murdered, instead."

All economic cycles are unique to their particular time and place, but as Mark Twain supposedly said, "History't repeat itself but it often rhymes."

The Economic Cycle

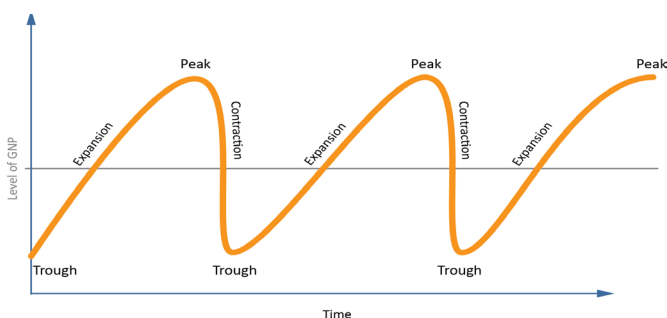


Figure 1
For illustrative purposes only

Asset-Class Performance and the Economic Cycle

Asset-class performance is highly dependent on the state of the economic cycle and medium-term growth and inflation regimes. Figure 2 shows annualized real returns for equities, U.S. Treasuries, U.S. corporate credit and commodities in periods with low-, stable- and high-growth regimes since 1926. The analysis shows that equities produce attractive returns in calendar quarters with stable to strong economic growth. In periods of low growth, which we categorize as quarters with real GDP of less than 1% quarter-over-quarter (QoQ) annualized, equities produce returns of only 0.3%. Clearly, investors should strive to allocate to equities during periods of stable to high growth and underweight equities in periods of low growth.²

Asset-Class Performance During Growth Regimes

Real Returns based on Annualized Quarterly Returns

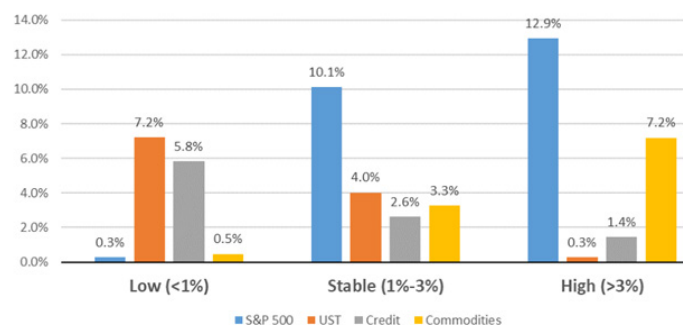


Figure 2
Source: DoubleLine

Figure 3 shows annualized real returns for the four asset classes in periods of low, stable and high inflation. Equities appear to produce attractive returns in periods of low to stable inflation and tend to generate negative returns during periods of high inflation, which we define as having a headline Consumer Price Index (CPI) greater than 5%.

Asset-Class Performance During Inflationary Times

Real Returns based on Annualized Quarterly Returns

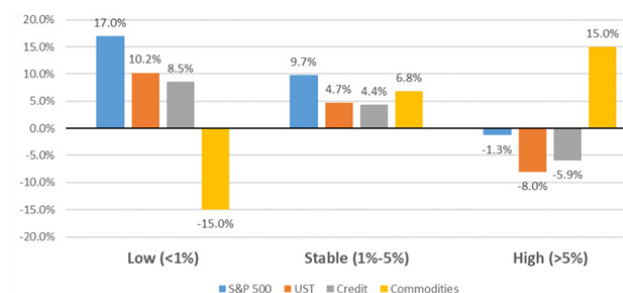
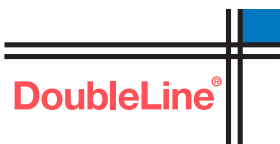


Figure 3
Source: DoubleLine



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Treasuries and U.S. corporate credit tend to outperform equities and commodities in periods of low growth. Conversely, both government bonds and credit tend to underperform other asset classes in periods of high growth and high inflation.

The diversification provided by Treasuries relative to equities in periods of low growth is beneficial for portfolios as Treasuries tend to rise in value and dampen volatility during recessionary periods. However, stocks and bonds do not always exhibit negative correlation to each other. In periods of high inflation, as witnessed in the U.S. during the late 1960s through early 1980s, the stock-bond correlation can be positive. Positive stock-bond correlation reduces the diversification benefit from government bonds. As seen in *Figure 4*, the stock-bond correlation was consistently positive during the late 1960s through early 1980s, a period which coincided with higher core inflation.

Stock-Bond Correlation and Core Inflation

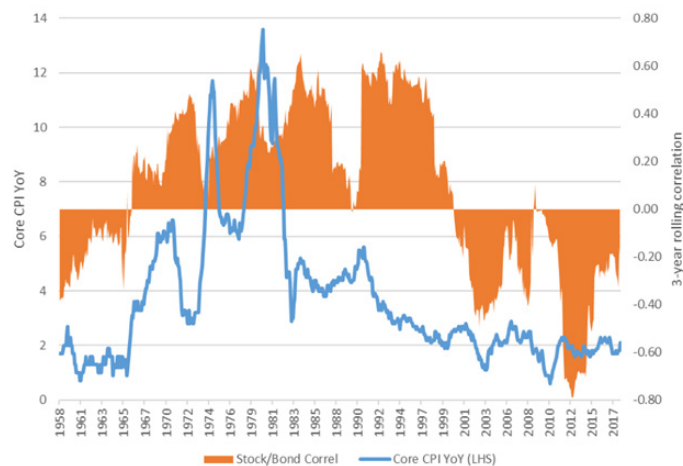


Figure 4
Source: DoubleLine, Bloomberg, Ibbotson

Empirical evidence shows that commodities produce attractive real returns in periods of high inflation and thus can be an effective diversifier to both stocks and bonds during such environments.

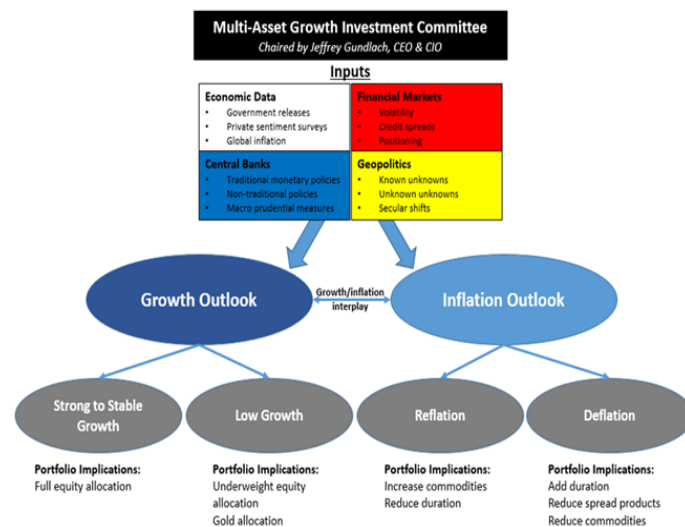
To summarize the analysis above, no single asset class outperforms in all economic regimes. History shows that different asset classes tend to outperform and underperform given the context of the economic cycle and rate of inflation. This dynamism creates opportunities for actively managed asset allocation to outperform the relatively static asset weightings of traditional asset-allocation strategies.

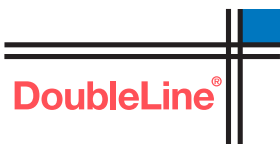
DoubleLine Strategic Asset Allocation Framework

Traditional asset-allocation strategies are generally agnostic to the economic cycle, maintaining a fixed allocation to different asset classes regardless of the growth and inflation regime. One of the more common asset-allocation strategies is the 60/40 portfolio, which allocates 60% to equities and 40% to fixed income. While this strategy has generated annualized real returns of 5.7% since 1926 with annualized volatility around 14.1%, it suffers from large drawdowns, particularly during recessionary and stagflationary periods.³

Predicting recessions is easier said than done. There is no crystal ball to signal with absolute certainty the imminent arrival of the next recession. That said, tools do exist to help diagnose the macroeconomic environment. At DoubleLine, the Multi-Asset Growth (MAG) investment committee holds two meetings which drive asset-allocation decisions: the weekly MAG meeting and the monthly Global Asset Allocation (GAA) meeting. Chaired by DoubleLine Chief Executive Officer and Chief Investment Officer Jeffrey Gundlach, the committee reviews a wide data set covering global growth and inflation, global financial markets, central bank policies and geopolitics. Each chart book is tailored to the developments taking place during that particular week. As part of the Strategic Asset Allocation framework, the investment committee synthesizes the key macroeconomic and financial market inputs and develops a diagnosis for the state of the economic cycle.

Strategic Asset Allocation Decision Tree





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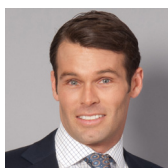
Careful scrutiny of the macroeconomic landscape helps the committee identify inflection points in growth and inflation. If the investment committee expects growth to remain stable, the MAG strategy will likely be geared toward a full equity allocation. However, if the committee expects a slowdown in growth or possibly elevated risk of a recession, the equity allocation will likely be reduced, and the strategy's bond allocation will be increased. If a reflationary environment or period of rising inflation is expected, the committee may reduce the interest-rate exposure in the portfolio and consider inflation hedges, such as commodities. If an onset of deflation is identified, a higher portfolio duration would be considered along with a reduction in commodities and other inflation-sensitive exposures. Through this application of our Strategic Asset Allocation framework, the MAG investment team seeks to participate in the equity and credit price appreciation during economic expansions while limiting the drawdowns experienced during economic contractions. The team seeks to benefit from duration during low-inflation periods while taking less duration during reflationary periods.

Identification of macroeconomic turning points and adaptation asset allocation is not a rote process. Successful decision-making requires considerable quantitative analysis and qualitative judgment. The MAG investment committee comprises a diverse group of seasoned investment professionals whose expertise covers a broad range of asset classes, including global stocks and bonds, emerging markets, commodities and currencies. Some committee members have worked and navigated multiple economic cycles together for decades. The team has been in the trenches together during some of the most extreme market environments. This continuity is extremely valuable during market inflection points. At DoubleLine, we monitor the global macroeconomic landscape, searching for potential catalysts for the next market turn.

Conclusion

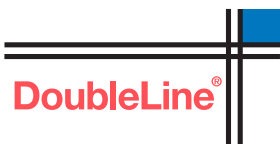
Asset-class performance is highly dependent on the state of the economic cycle and the medium-term growth and inflation dynamics. History shows that equities perform well in stable to high-growth regimes and underperform in low-growth regimes and negative-growth regimes (recessions). Government bonds show a higher sensitivity to inflation and, along with other interest-rate sensitive securities, underperform in reflationary environments and outperform in deflationary environments.

Traditional asset allocation is agnostic to the economic cycle and generally maintains a static allocation regardless of the growth and inflation regimes, making such strategies susceptible to large drawdowns observed during recessions and stagflationary periods. DoubleLine believes superior risk-adjusted performance can be achieved through active asset allocation, implemented under our Strategic Asset Allocation framework, incorporating the investment committee's view of growth and inflation. We prefer to take advantage of the ebb and flow of the economic cycle and inflation regime, as it's a lot harder to go against the tide. ■



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Mr. Kimmel joined DoubleLine in 2013. He is an Analyst for the firm's Multi-Asset Growth Strategy. Prior to DoubleLine, Mr. Kimmel was a Proprietary Trader at The Gelber Group, trading currencies for the Foreign Currency Group. Previous to that he was an Investment Banking Analyst in Morgan Stanley's Mergers and Acquisitions Group. Mr. Kimmel holds a B.A. in Business Economics from the University of California, Los Angeles and holds an MBA from the Anderson School of Management at the University of California, Los Angeles.



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¹ <http://www.nber.org/cycles.html>

² Analysis is based on data starting December 1926 and ending December 2018. Equity performance based on S&P 500 monthly returns from data provided from Ibbotson before January 31, 1988 and Bloomberg from January 31, 1988 to present. Thirty-year Treasury performance is based on data from Ibbotson before June 30, 1973 and the Bloomberg Barclays U.S. Long Treasury Total Return Index from June 30, 1973 to present. Long U.S. Corporate bond performance is based on data from Ibbotson before June 30, 1973 and the Bloomberg Barclays U.S. Credit Total Return Index from January 31, 1973 to present. Commodities returns from September 30, 1959 to December 31, 1970 are based on work from Gorton and Rouwenhorst, which generated a commodity return series based on front-month commodity futures with equal weighting. Commodities returns from January 31, 1970 to present are based on the S&P Goldman Sachs Commodity Index Total Return Index. High growth denotes quarters when real GDP is greater than 3.0% QoQ annualized. Stable growth: between 1.0% and 3.0%. Low growth: less than 1.0%. High inflation denotes quarters when headline CPI is greater than 5.0% QoQ annualized. Stable inflation: between 1.0% and 5.0%. Low inflation: less than 1.0%.

³ Based on data from Bloomberg and Ibbotson. The 60/40 portfolio assumes a 60% allocation to S&P 500, 32% exposure to U.S. Long Treasuries, and 8% Long U.S. Corporate Credit.

Basis Point - A basis point (bps) equals 0.01%.

Consumer Price Index (CPI) - This index, compiled by the U.S. Bureau of Labor Statistics, examines the weighted average of the prices of a basket of consumer goods and services, such as transportation, food and medical care. It is calculated by averaging price changes for each item in the basket. Changes in the CPI are used to assess price changes associated with the cost of living. The CPI is one of the most frequently used statistics for identifying periods of inflation or deflation.

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GDP - Gross domestic product (GDP) is the monetary value of all the finished goods and services produced within a country's borders in a specific time period.

Core Inflation - The change in costs of goods and services, but does not include those from the food and energy sectors. This measure of these items because their prices are much more volatile. It is most often calculated using the price index (CPI).

Inflation - Inflation is the decline of purchasing power of a given currency over time. A quantitative estimate of the rate at which the decline in purchasing power occurs can be reflected in the increase of an average price level of a basket of selected goods and services in an economy over some period of time. The rise in the general level of prices, often expressed as a percentage, means that a unit of currency effectively buys less than it did in prior periods.

Headline Inflation - The raw inflation figure reported through the Consumer Price Index (CPI) that is released monthly by the Bureau of Labor Statistics. The CPI calculates the cost to purchase a fixed basket of goods, as a way of determining how much inflation is occurring in the broad economy. The CPI uses a base year and indexes the current year's prices according to the base year's values.

S&P 500 Index - Standard & Poor's U.S. 500 Index, a capitalized-weighted index of 500 stocks.

Stagflation - Period characterized by slow economic growth and relatively high unemployment – or economic stagnation – which is at the same time accompanied by rising prices (i.e., inflation). Stagflation can be alternatively defined as a period of inflation combined with a decline in the gross domestic product (GDP).

You cannot invest directly in an index.

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