

No Boom, No Bust: Part I

This is my three-part series on the recessionary cycle. Over the next three weeks, each post will explore the signals of an impending recession. I'll explore these signals within the context of current global economic conditions and also in the U.S. My last post will be dedicated to what these collective signals mean for global growth, particularly emerging market countries in 2016 and beyond.

An important strategic decision that fixed-income managers will have to make in the coming two years is the allocation between U.S. Treasuries and other sovereign bonds, particularly emerging markets (EM). This decision is largely dependent on the broader judgement of the world economy: if the global economy accelerates, most EM currencies will rally and the risk premia on EM assets will fall. Otherwise, risky assets, including EM bonds and currencies, will suffer. With the Great Recession having ended more than six years ago, it is legitimate to ask: where is the world economy headed, toward renewed growth or a slump?

The Nature of Recession

Recessions need to be understood in the context of the “boom-bust” economic cycle inherent in free market capitalism. In recent decades, prolonged economic booms have always preceded recessions. For instance, the boom in the U.S. savings and loan industry gave way to the 1990s recession. A prolonged boom in all things dot-com and technology led to the 2001 recession. The Great Recession in 2008 was preceded by a massive residential property market boom in the U.S.

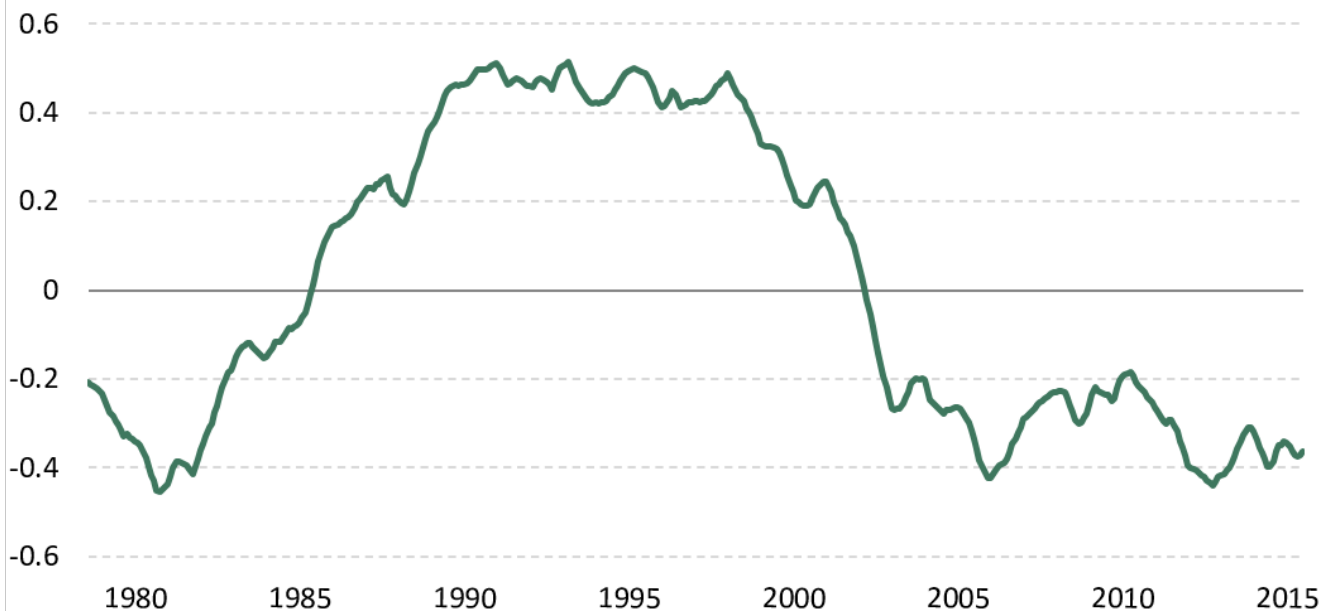
The nature of the cyclical process and recession in the West has undergone profound changes in the postwar era. Prior to the late 1990s, excessive growth in aggregate demand and rising inflation often defined economic recessions. The Korean War in the 1950s, the Vietnam War in the 1960s, the collapse of the Bretton Woods System in the 1970s, and severe oil shocks in the 1980s all spurred periods of inflationary tensions in the U.S. economy, prompting the Federal Reserve (Fed) to impose monetary tightening that eventually brought the economy to its knees.

However, since the late 1990s, “supply gluts” have become the defining characteristic of economic contractions, leading to declining inflation, interest rates, and even periods of price declines. The burst of the technology bubble in 2000 and the housing meltdown in 2008 were both deeply rooted in over-investment, over-leverage, and over-supply.

The changing nature of business cycles is partially captured by shifts in the correlation between equities and bonds, as evidenced in [Chart 1](#) below. Prior to the late 1990s, stocks and bonds were positively correlated, with the implication that rising bond yields primarily reflected rising inflationary expectations. The positive correlation suggested that higher bond yields reflected economic ailment, and therefore higher yields were a bad development for stock prices.

Stocks and bonds have become negatively correlated since the late 1990s. Markets in this time period suggest that inflation has fallen to such low levels that the rise and fall in bond yields primarily reflects the ebb and flow of expected real economic growth. As a result, rising bond yields are associated with improving corporate profitability, and therefore higher stock prices, and vice versa. Excessively low bond yields often indicate supply gluts, spreading risk aversion, and recessions.

Chart 1: U.S. Equity and Bond Yield 6-Month Moving Correlation Between S&P 500 and 10-Year Treasury Monthly Returns (Shown as a 5-year moving average); As of July 22, 2015



Source: Bloomberg (© 2015, Bloomberg Finance LP) and Thomson Datastream

Signals for Recession

It is more of an art than a science to forecast a recession, as there is no hard and fast rule to precisely pinpoint the time when an economic contraction might take place. For years, investors have noticed a set of economic conditions or market signals that seem to be able to predict recession, but lead times have varied widely. The 2008 recession has greatly complicated the situation by introducing many powerful new factors such as zero interest-rate policy (ZIRP) and central bank quantitative easing (QE), which may have contaminated some of the traditional market signals.

Regardless, it is always useful to start with what has worked in the past. There are three general categories of signals that warn of escalating recession risk: policy, economic, and market signals.

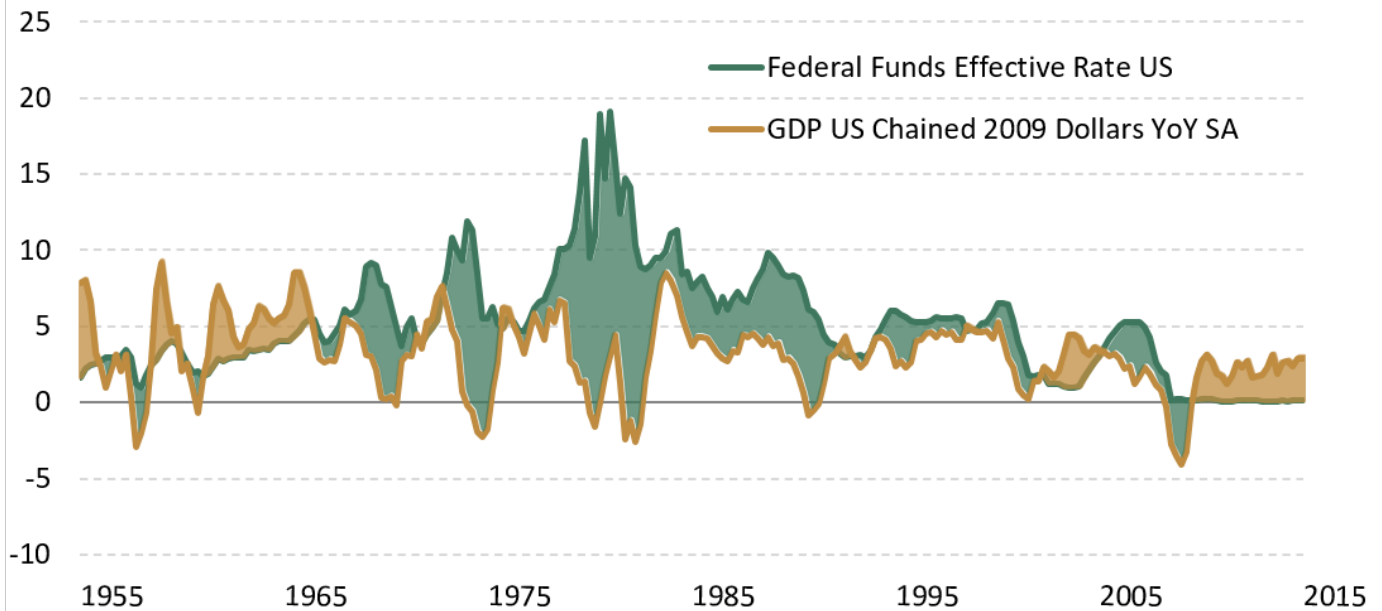
Policy Signals

Monetary Policy

Fed monetary tightening has always preceded recession. There have been a total of nine economic recessions in the U.S. economy since 1955, each of them led by rising short-term interest rates. On average, a recession usually occurs about 32 months into a rising rate cycle, although the time lag varies widely.

Most importantly, the Fed has recently signaled its willingness to raise rates, though the timing and extent of policy tightening remains unclear. With low domestic growth and very low global growth, it is not possible for the Fed to meaningfully increase rates. Based on the historical norm and from a monetary policy viewpoint, we are still a long way off from the recession.

Chart 2: Fed Policy and Recessions *As of June 30, 2015*

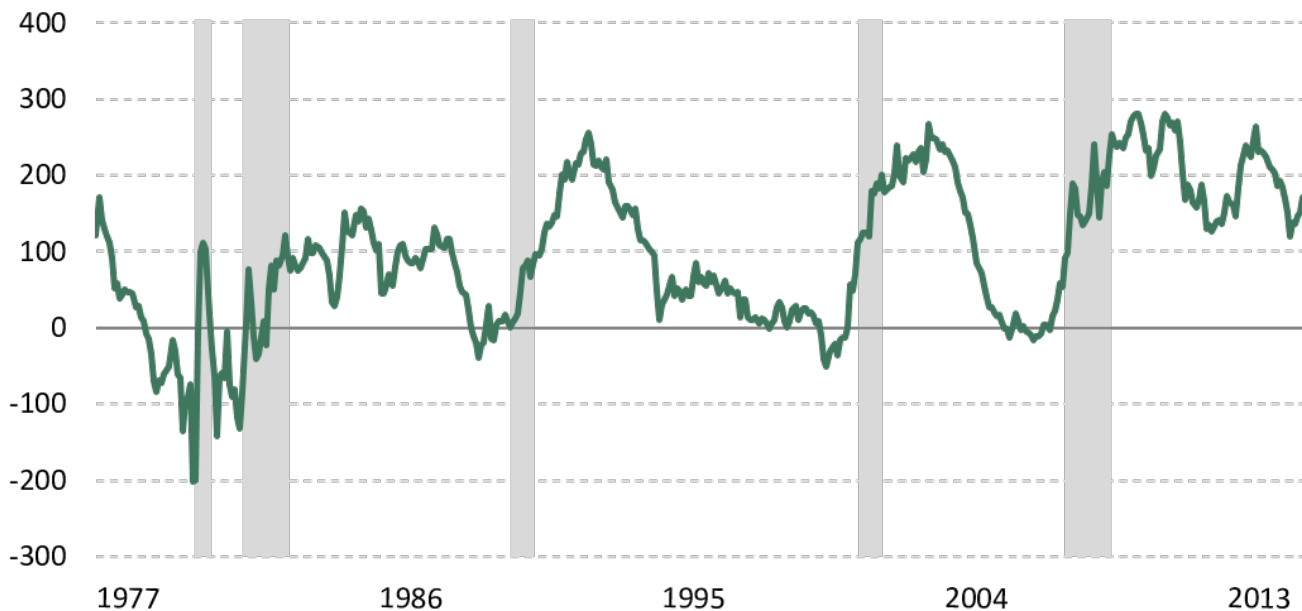


Source: Bloomberg (© 2015, Bloomberg Finance LP)

Treasury Yield Curves

U.S. Treasury yield curves are the time-tested and most reliable predictors for recession, as shown in **Chart 3** below. Usually an inverted 10-2 curve signals an impending economic contraction. On average, there is an 18-month lead between curve inversion and recession. Using the spread between 10-year bonds and the fed funds rate also produces a similar result.

Chart 3: Treasury Yield Curve and Recessions *As of June 30, 2015*



Source: Bloomberg (© 2015, Bloomberg Finance LP)

The predictive nature of the yield curve lies in the fact that the short end of the curve represents current monetary policy, while the long end of the curve depicts the marketplace's collective judgement of future nominal growth. Curve inversion indicates that current monetary policy has become too tight relative to future nominal growth, or the so-called "choke point" of monetary policy has been reached. A recession usually follows curve inversion.

Currently, the 10-2 spread in the U.S. Treasury market is 175 basis points (bps), which is narrower than the maximum level seen in 2010-2011 but far from inversion. The current spread suggests that monetary conditions have tightened somewhat (via a strong U.S. dollar and higher bond yields) and the economy is growing at a slower pace compared to the early years of economic recovery, but has nonetheless remained in expansion mode.

Some believe that ZIRP and QE have greatly contaminated and distorted the bond market, rendering traditional market signals invalid. This school of thought is debatable. The natural economic response to central banks suppressing rates at levels far below their equilibrium is an inflationary boom. In reality, however, we have inched even closer to deflation, suggesting that central banks have simply delivered what is required by the underlying economy.

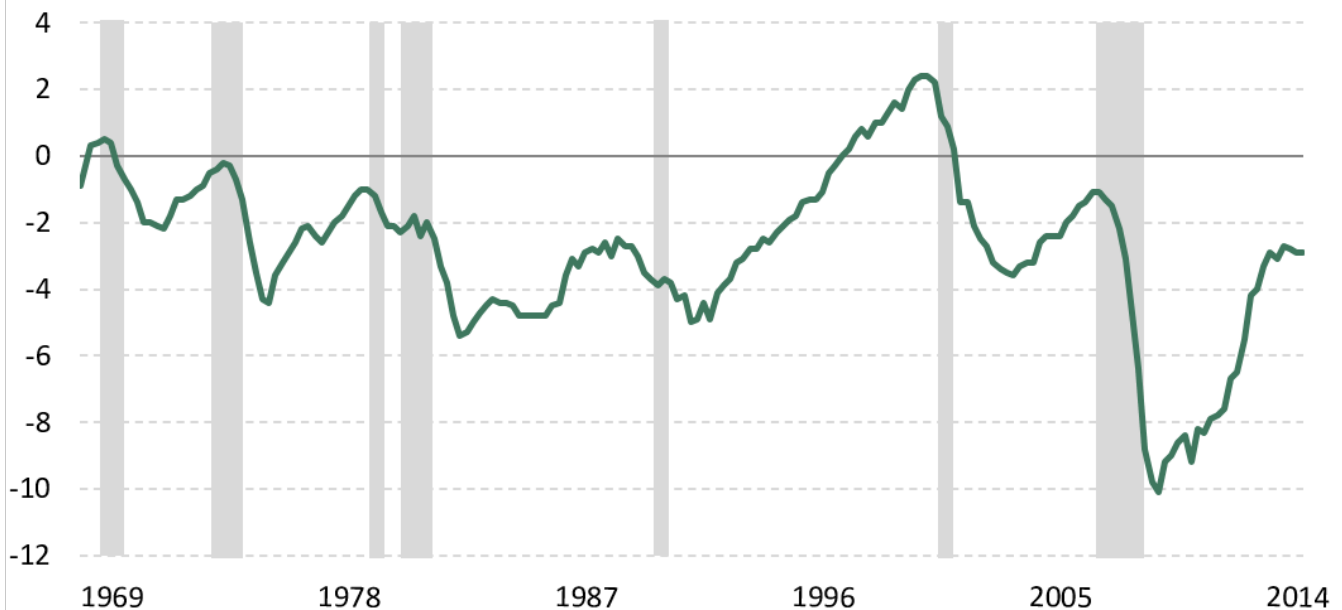
The bottom line is that if a recession is indeed lurking around the corner, we should see substantial curve flattening. Curve inversion is not possible while the short end of the curve is anchored at zero, although for the Japanese economy, an economic slump or recession usually follows whenever the 10-2 curve flattens to less than 70 basis points. What usually occurs in Japan is not the situation in the U.S.

Economic Signals

Budget Balance

A country's budget can also provide important signals of a recession. Increasing fiscal constraint often precedes recession, as evidenced in [Chart 4](#). However, the relationship between shrinking budget deficits and recessions is primarily a reflection of the internal stabilizer effect—a boom leads to rising budgetary revenues and decreasing transfer payments, creating an autonomous fiscal constraint.

Chart 4: U.S. Budget Balance % GDP; As of June 30, 2015



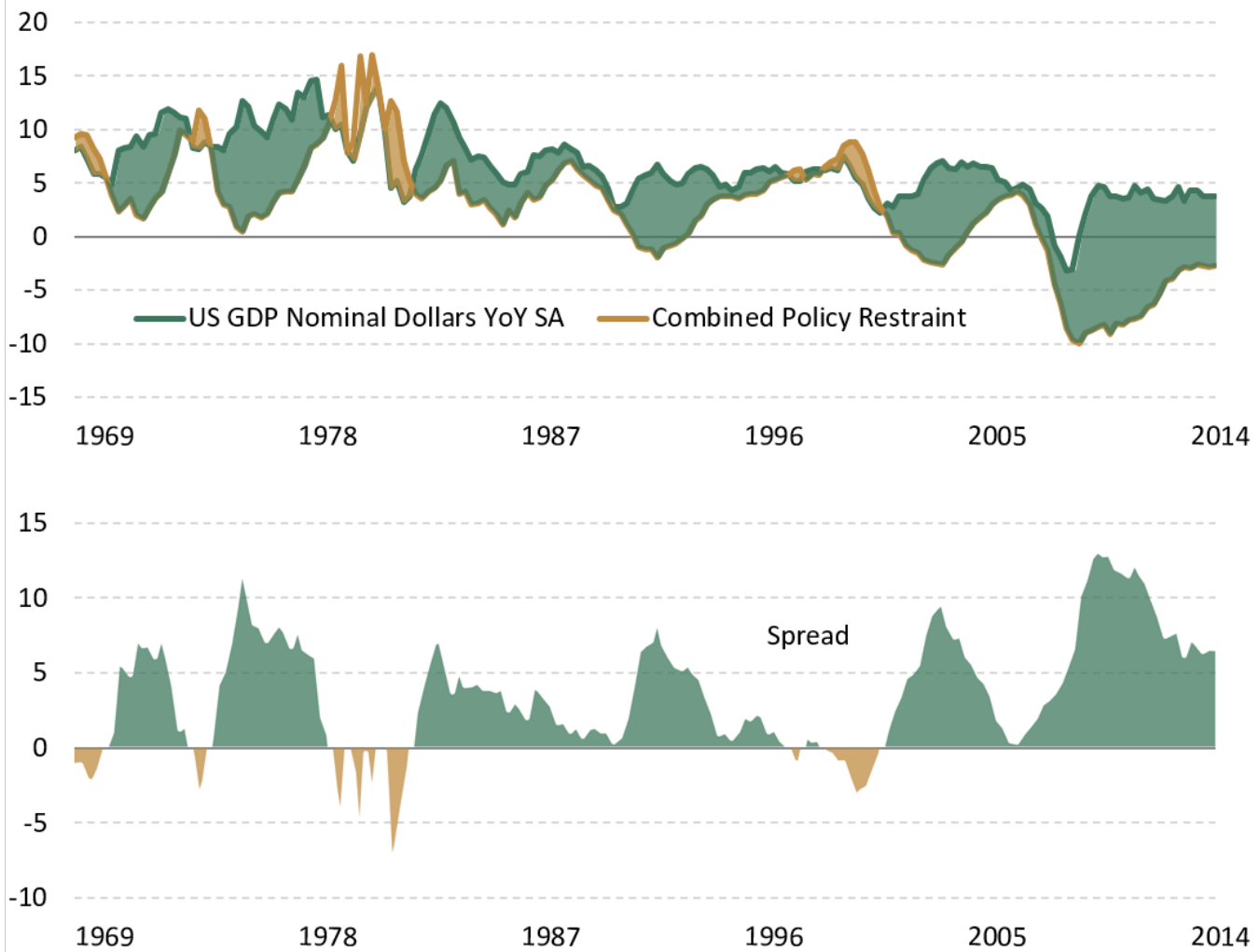
Source: Bloomberg (© 2015, Bloomberg Finance LP)

Although the ebbs and flows of the fiscal balance are very counter-cyclical, the combined impact of both monetary policy and fiscal balance on the economy is worth monitoring. History suggests that when combined policy restraint (CPR) from both monetary and fiscal fronts—expressed as fiscal balance as a share of gross domestic product (GDP) plus the fed funds rate—approaches the level of nominal GDP growth, the risk of recession starts to escalate. This relationship makes sense: if the CPR of an economy approaches or even exceeds the speed of nominal expansion, the growth process should stop or even reverse, resulting in recession.

Chart 5 below shows four times when CPR has exceeded nominal growth in the U.S. economy, resulting in a negative spread since 1969 (see the bottom panel of Chart 5). Out of these four times, three successfully predicted recession. Although the gap did not fall into negative territory in other times such as 1990 and 2007, the spread between the two series narrowed to almost nothing, indicating very tight monetary and fiscal policies relative to nominal growth.

Currently, there is still a large cushion in CPR, primarily because of very stimulative U.S. monetary policy. Fiscal tightening provides cause for concern, but so far it mainly reflects a growing economy and revenue base in the U.S. Nevertheless, with growth advancing at a rather subdued pace, any aggressive spending cuts or efforts to raise taxes could cause growth to dip, triggering a technical recession.

Chart 5: Combined Policy Restraint and Risk of Recession As of June 30, 2015



Source: Bloomberg (© 2015, Bloomberg Finance LP)

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