

Hoisington

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Quarterly Review and Outlook

First Quarter 2015

Characteristics of Extremely Over-Indebted Economies

Over the more than two thousand years of economic history, a clear record emerges regarding the relationship between the level of indebtedness of a nation and its resultant pace of economic activity. The once flourishing and powerful Mesopotamian, Roman and Bourbon dynasties, as well as the British empire, ultimately lost their great economic vigor due to the inability to prosper under crushing debt levels. In his famous paper "Of Public Finance" (1752) David Hume, the man some consider to have been the intellectual leader of the Enlightenment, wrote about the debt problems of Mesopotamia and Rome. The contemporary scholar Niall Ferguson of Harvard University also described the over-indebted conditions in all four countries mentioned above. Through the centuries there are also numerous cases of less prominent countries that suffered a similar fate of economic decline resulting from too much debt as a percent of total output.

The United States has experienced four bouts of great indebtedness: the 1830-40s, the 1860-70s, the 1920-30s and the past two decades. Japan has been suffering the consequences of a massive debt over-hang for the past three decades. In its first of three thorough studies of debt, the McKinsey Global Institute (MGI) identified 32 cases of extreme indebtedness from 1920 to 2010. Of this group, 24 were advanced economies of their day.

The countries identified in the study, as well as those previously cited, exhibited many idiosyncratic differences. Some were monarchies or various forms of dictatorships. Others were democracies, both nascent and mature. Some

countries were on the Gold Standard, while others had paper money. Some had central banks and some did not. In spite of these technical and structural differentiations, the effect of high debt levels produced the clear result of diminished economic growth. Indeed, the fact that the debt impact shows through in these diverse circumstances is a clear indication of the powerful deleterious impact of too much debt. Six characteristics seem to be uniform in all circumstances of over-indebtedness in historical studies, and these factors are evident in contemporary times in the U.S., Japanese and European economies.

Six Characteristics

1. Transitory upturns in economic growth, inflation and high-grade bond yields cannot be sustained because debt is too much of a constraint on economic activity.
2. Due to inherently weak aggregate demand, economies are subject to structural downturns without the typical cyclical pressures such as rising interest rates, inflation and exhaustion of pent-up demand.
3. Deterioration in productivity is not inflationary but just another symptom of the controlling debt influence.
4. Monetary policy is ineffectual, if not a net negative.
5. Inflation falls dramatically, increasing the risk of deflation.
6. Treasury bond yields fall to extremely low levels.

The Non-Sustainability of Transitory Gains

Nominal GDP is the most reliable of all the economic indicators since, as the sum of cash register receipts, it constitutes the top line revenues of the economy. From this stream, everything must be paid. Current nominal GDP growth shows the economy's inability to sustain progress in growth (Chart 1). The change over the four quarters ending December 31, 2014 was only 3.7%, which is barely above the average entry point for all recessions since 1948.

Nominal GDP can be sub-divided into two parts. First is the implicit price deflator, which measures price changes in the economy, and the second is real GDP, which is the change in the volume of goods. Both of these components are volatile, but the recent data shows a lack of strong momentum in economic activity. The year-over-year change in the deflator has accelerated briefly in this expansion, but the peak remained below the cyclical highs of all the expansions in every decade since the 1930s (Chart 2).

In the past fifteen years, real per capita GDP (nominal GDP divided by the price deflator and population) grew a paltry 1% per annum. This subdued growth rate should be compared to the average expansion of 2.5%, which has been recorded since 1940. The reason for the remarkably slow expansion over the past decade and a half has to do with the accumulation of too much debt. Numerous studies indicate that when total indebtedness in the

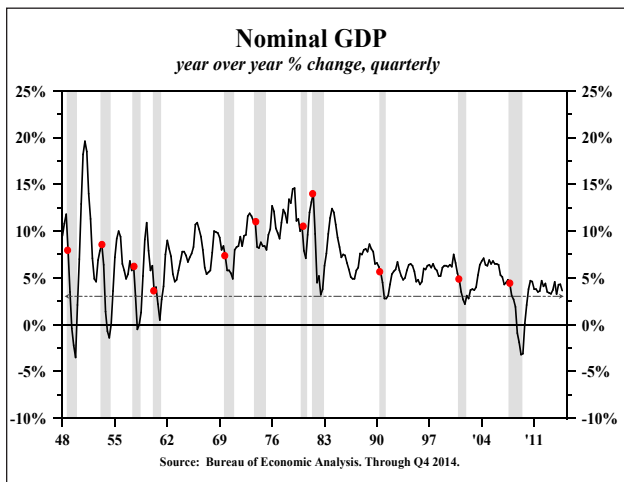


Chart 1

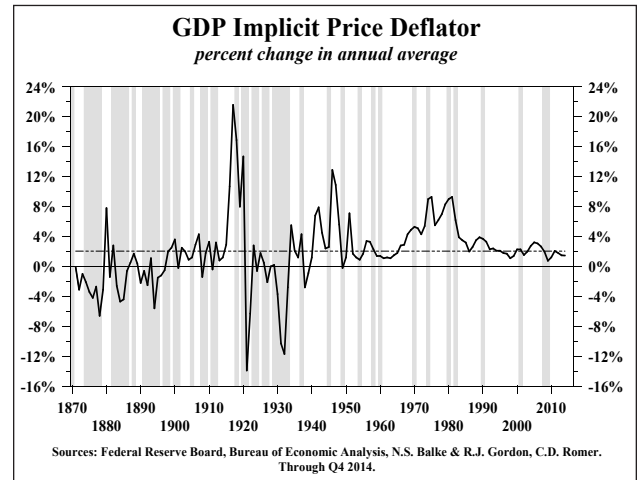


Chart 2

economy reaches certain critical levels there is a deleterious impact on real per capita growth. Those important over-indebtedness levels (roughly 275% of GDP) were crossed in the late 1990s, which is the root cause for the underperformance of the economy in this latest expansion.

It is interesting to note that in this period of slower growth and lower inflation, long-term Treasury bond yields did rise for short periods as inflationary psychology shifted higher. However, the slow growth meant that the economy was too weak to withstand higher interest rates, and the result was a shift to lower rate levels as the economy slowed. Since the U.S. economy entered the excessive debt range, eight episodes have occurred in which this yield gained 84 basis points or more (Chart 3). Nevertheless, none of these rate surges presaged the start of an enduring cyclical rise in interest rates.

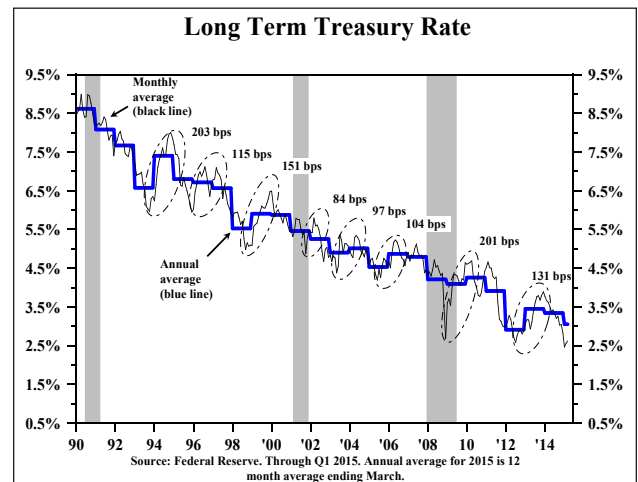


Chart 3

Downturns Without Cyclical Pressures

Many assume that economies can only contract in response to cyclical pressures like rising interest rates and inflation, fiscal restraint, over-accumulation of inventories, or the stock of consumer and corporate capital goods. This idea is valid when debt levels are normal but becomes problematic when debt is excessively high.

Large parts of Europe contracted last year for the third time in the past four years as interest rates and inflation plummeted. The Japanese economy has turned down numerous times over the past twenty years while interest rates were low. Indeed, this has happened so often that nominal GDP in Japan is currently unchanged for the past twenty-three years. This is confirmation that after a prolonged period of taking on excessive debt additional debt becomes counterproductive.

Faltering Productivity is Not Inflationary

Falling productivity does not cause faster inflation. The weaker output per hour is a consequence of the over-indebtedness as much as the other five characteristics mentioned above. Productivity is a complex variable impacted by many cyclical and structural influences. Productivity declines during recessions and declines sharply in deep ones. Nonfarm business productivity has grown at an average rate of 2.2% per annum since the series originated in 1952 (Chart 4). As a general

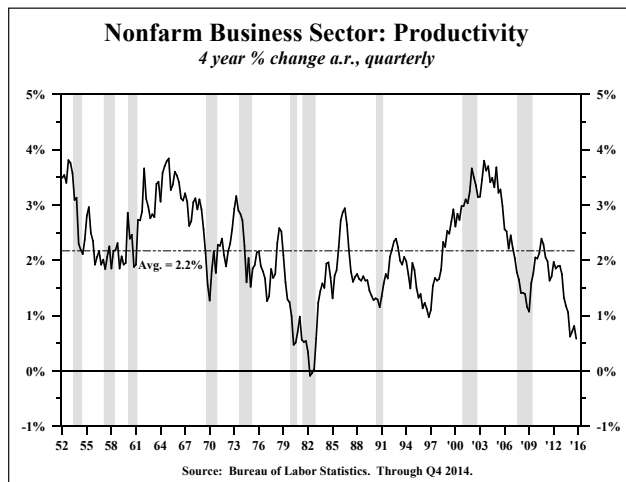


Chart 4

rule the growth rate was above the average during economic expansions and lower than the average in recessions.

Over the past four years, nonfarm productivity growth has slumped to its lowest levels since 1952, with the exception of the severe recession of 1981-82. Such a pattern is abnormally weak. Interestingly, the Consumer Price Index was unchanged in the past twelve-month period (Chart 5). In an economy purely dominated by cyclical forces, as opposed to one that is highly leveraged, both productivity and inflation would not be depressed.

Monetary Policy Is Ineffectual

Monetary policy impacts the overall economy in two areas – price effects and quantity effects. Price effects, or changes in short-term interest rates, are no longer available because rates are near the zero bound. This is a result of repeated quantitative easing by central banks. It is an attempt to lift overly indebted economies by encouraging more borrowing via low interest rates, thus causing even greater indebtedness.

Quantity effects also don't work when debt levels are excessive. In a non-debt constrained economy, central banks have the capacity, with lags, to exercise control over money and velocity. However, when the debt overhang is excessive, they lose control over both money and velocity. Central banks can expand the monetary base, but this has little or no impact on money growth. Further, central

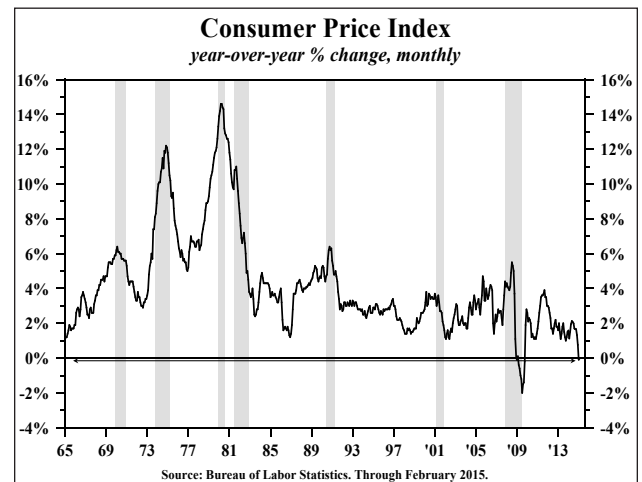
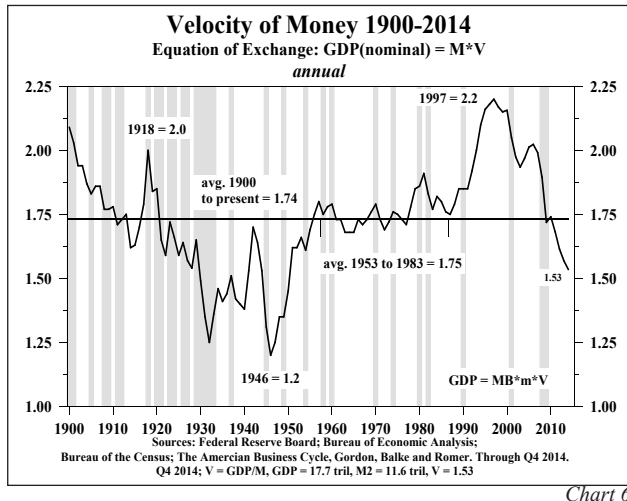


Chart 5



banks cannot control the velocity of money, which declines when there is too much unproductive debt. This happened in the 1920s and again after 1997 and is continuing to decline today (Chart 6).

Monetary policy can be used to devalue a country's currency, but this benefit is short-lived, and to the extent that it works, conditions in other countries are destabilized causing efforts at currency devaluation to invoke retaliation from trading partners.

Inflation Falls So Much That Deflation Risk Rises

Extremely high levels of public and private debt relative to GDP greatly increase the risk of deflation. Deflation, in turn, serves to destabilize an economy that is over-indebted since the borrowers have to pay back loans in harder dollars, which transfers income and wealth from borrowers and creditors.

Such a deflation risk is present in the United States and other important economies of the world. During and after the mild recessions of 1990-91 and 2000-01, the rate of inflation in Europe and the United States fell by an average of 2.5%. With inflation near zero in both economies today, even a mild recession would put both in deflation.

Real Treasury Bond Yields

In periods of extreme over-indebtedness Treasury bond yields can fall to exceptionally low levels and remain there for extended periods. This pattern is consistent with the Fisher equation that states the nominal risk-free bond yield equals the real yield plus expected inflation ($i=r+E^*$). Expected inflation may be slow to adjust to reality, but the historical record indicates that the adjustment inevitably occurs.

The Fisher equation can be rearranged algebraically so that the real yield is equal to the nominal yield minus expected inflation ($r=i-E^*$). Understanding this is critical in determining how unleveraged investors fare. Suppose that this process ultimately reduces the bond yield to 1.5% and expected inflation falls to -1%. In this situation the real yield would be 2.5%. The investor would receive the 1.5% coupon but the coupon income would be supplemented since the dollars received will have a greater purchasing power. A 1.5% nominal yield with real income lift might turn out to be an excellent return in a deflationary environment. Contrarily, earnings growth is problematic in deflation. Businesses must cut expenses faster than the prices of goods or services fall. Firms do not have experience with such an environment because deflation episodes are infrequent. If this earnings squeeze eventuated, then a 1.5% nominal bond yield and 2.5% real yield might be very attractive versus equity returns.

Global Concerns

In our review of historical and present cases of over-indebtedness, we noticed some overlapping tendencies with less regularity that are important to mention.

First, when all major economies face severe debt overhangs, no one country is able to serve as the world's engine of growth. This condition is just as much present today as it was in the 1920-30s.

Second, currency depreciations result as countries try to boost economic growth at the expense of others. Countries are forced to do this because monetary policy is ineffectual.

Third, devaluations do provide a lift to economic activity, but the benefit is only transitory because other countries that are on the losing end of the initial action retaliate. In the end every party is in worse condition, and the process destabilizes global markets.

Fourth, historically advanced economies have only cured over-indebtedness by a significant multi-year rise in the saving rate or austerity. Historically, austerity arose from one of the following: self-imposition, external demands or fortuitous circumstances.

Overview of Present Conditions

Our expectations for the economy in 2015 are that nominal GDP should grow no more than 3% this year. M2 appears to be expanding around a 6% rate, and velocity is falling at a trend rate of 3%. The risk is that velocity will be even weaker this year; thus, 3% nominal GDP growth may be too optimistic. The ratio of public and private debt to GDP rose last year and economic growth softened. The budget deficit was lower in 2014 than 2013,

but gross government debt rose again last year and a further increase is likely in 2015. This is not a positive signpost for velocity. The slower pace in nominal GDP in 2015 would continue the pattern of the past two years when nominal GDP decelerated from 4.6% in 2013 to 3.7% in 2014 on a fourth quarter to fourth quarter basis. Such slow top line growth suggests that both real growth and inflation should be slower than last year.

Many factors can cause intermittent increases in Treasury yields, but economic and inflation fundamentals are too weak for yields to remain elevated. Therefore, the environment for holding long-term Treasury bond positions should be most favorable in 2015.

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