



For Wonks Only

A credit-based financial economy (as opposed to pure cash) depends on an ever-expanding outstanding level of credit for its survival. Without additional credit, interest on previously issued liabilities cannot be paid absent the sale of existing assets, which in turn would lead to a vicious cycle of debt deflation, recession and ultimately depression. It is this expansion of private and public market credit which the Fed and the BOE have successfully engineered over the past five years, while their contemporaries (the ECB and BOJ) have until now failed, at least in terms of stimulating economic growth.



The unmodeled (for lack of historical example) experiment that all major central banks are now engaged in is to ask and then answer: What growth rate of credit is enough to pay prior bills, and what policy rate/amount of Quantitative Easing (QE) is necessary to generate that growth rate? Assuming that the interest rate on outstanding debt in the U.S. is approximately 4.5% (admittedly a slight stab in the dark because of shadow debt obligations), a Fed governor using this template would want credit to expand by at least 4.5% per year in order to prevent the necessary sale of existing assets (debt and equity) to cover annual interest costs. That is close to saying they would want nominal GDP to expand at 4.5%, but that's another story/*Investment Outlook*.

How are they doing? Chart 1 shows outstanding credit growth for recent quarters and all quarters since January 2004. The chart's definition of credit includes the standard Fed definition of private non-financial credit (corporations, households, mortgages), public liabilities (government debt), as well as financial credit. The current outstanding total approximates \$58 trillion and has been expanding at an average annual rate of 2% for the past five years, and 3.5% for the most recent 12 months.

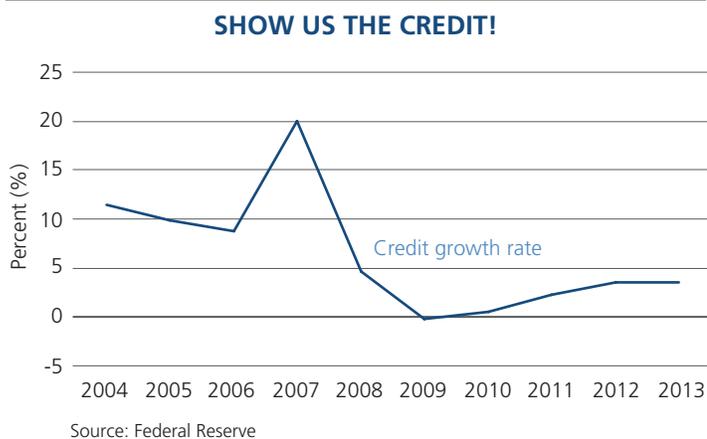


Chart 1

Put simply, if credit needs to expand at 4.5% per year, then the private and public sectors in combination must create approximately \$2.5 trillion of additional debt per year to pay for outstanding interest. They are underachieving that target in the U.S., which is the reason why GDP growth struggles at 2% real or lower and nominal GDP growth seems capped at 4.5% or lower. Credit creation is essential for economic growth in a finance-based economy such as ours. Without it, growth stagnates or withers. Its velocity/turnover is critical as well.

The velocity/turnover of credit mentioned above, in turn, is a function of price or the yield of credit. No central banker knows what that appropriate yield/price is and so Yellen/Carney/Draghi/Kuroda walk up forward interest rates carefully so as not to cause a credit collapse. **As a general rule, the projected return on financial assets (relative to their risk) must be sufficiently higher than the return on today's or forward curve levels of cash (overnight repo), otherwise holders of assets sell longer-term maturities and hold dollar bills in a mattress – lowering velocity and creating a recession/debt delevering. We are dangerously close to the crossing of the lines between long-term asset returns and forward levels of cash yields, which currently rest at 2.5%+ in 2017 and beyond. If the forward levels are not validated, however, the danger is lessened.**

Today's levels of interest rates and stock prices offer a historically unacceptable level of risk relative to return unless the policy rate is kept low – now and in the future. That is the basis for The New Neutral, PIMCO's assumption that the fed funds rate peaks at 2% or less in 2017 versus others' assumptions (Taylor, Fisher, Lacker, the market) that it goes much higher. BOE's Carney, by the way, believes his country's New Neutral is 2.5%, a level consistent with PIMCO's 2% in the U.S. **If so, existing asset prices in the U.S., while artificially high and bond yields artificially low, may continue to be so unless the Fed oversteps its interest rate line.**

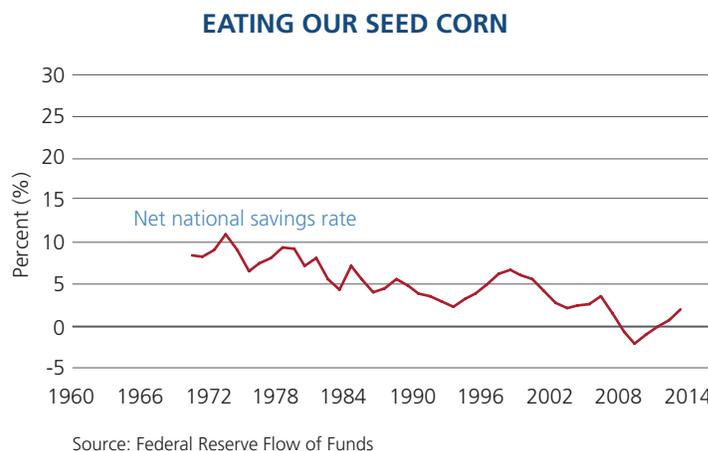


Chart 2

This global monetary experiment may in the short/intermediate term calm markets, support asset prices and promote economic growth, although at lower than historical levels. **Over the long term, however, economic growth depends on investment and a rejuvenation of capitalistic animal spirits – a condition which currently does not exist.** Central bankers are hopeful that fiscal policy (which includes deficit spending and/or tax reform) may ultimately lead to higher investment, but to date there has been little progress, as seen in Chart 2. **The U.S. and global economy ultimately cannot be safely delevered with artificially low interest rates, unless they lead to higher levels of productive investment.**

“For Wonks Only” Speed Read

1. Cross your fingers, credit growth is a necessary but not sufficient condition for economic growth. Economic growth depends on the productive use of credit growth, something that is not occurring.

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Managing Director

For a more thorough analysis, please see the February 2013 Investment Outlook, “Credit Supernova!” at <http://www.pimco.com/EN/Insights/Pages/Credit-Supernova.aspx>

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