
Minsky's Financial Instability Hypothesis



Anybody familiar with Ray Dalio's theory on the economic machine will notice the influence of economist Hyman Minsky.

Unfortunately, Minsky's work was largely ignored by mainstream economists during his lifetime (he passed away in 96'). This was because he preferred making logical inferences rather than trying to quantify and abstract the economic system into neat little mathematical models. These models often provided little use in understanding the "real" world, yet they continued to be the *method du' jour*.

It wasn't until the financial crisis of 08' and the end of the decades long period that economists termed "The Great Moderation" — where it was believed that financial risk had been conquered — that Minsky was "discovered" by mainstream economics.

Minsky's big contribution to the field was highlighting the importance of the composition of finance. Specifically, the relationship of debt to output. Prior to Minsky economists largely ignored the structure of the financial sector and the role that debt played in the stability of markets.

He came up with the "financial-instability hypothesis" which stated that long stretches of prosperity sow the seeds for coming crises. Economic stability breeds instability.

Minsky understood how recency bias drives myopia in the human decision making process. Economic actors end up extrapolating low volatility into the future which leads to more risk taking in the present through the use of leverage (credit).

The theory was established by defining what investment *is*, and its role in an economy. Which, put simply, investment is the exchange of money today for money in the future. That money (investment) can come from one of two sources: the economic actors' (consumer, company, government) *own* cash flows, or from the cash flows of *others* (lenders). And it's the balance between these two sources of investment that comprises the stability of the financial system.

According to Minsky, the financial cycle typically follows three stages of financing; these are:

1. Hedge financing
2. Speculative financing
3. Ponzi financing

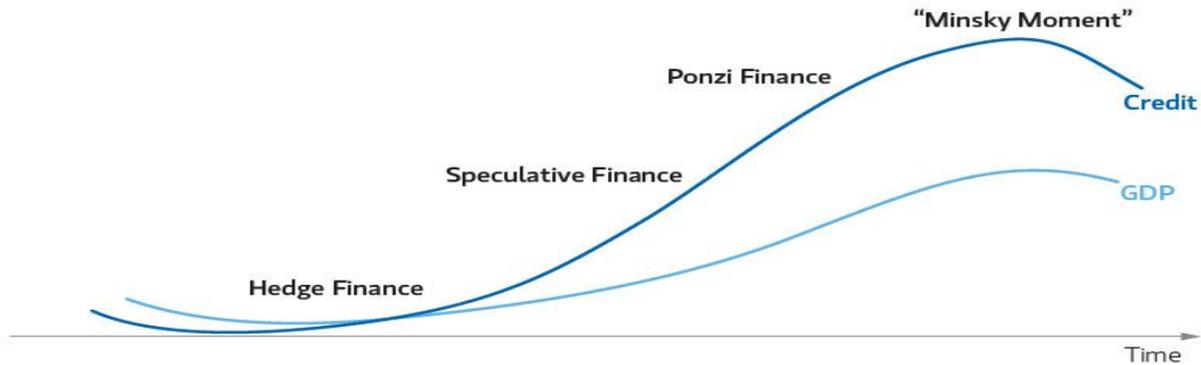
Hedge financing is the most stable of the three. It's when the economic actor relies on its own stable cash flows to repay any borrowings. It's when the actor's earnings far outweigh its limited borrowings.

Speculative financing is when the actor uses its own cash flow to pay the interest on its debt, but must assume more debt to repay the principal; thus rolling its debt over. This stage of financing is less stable than hedge financing.

And lastly, there's Ponzi financing, which is the most unstable of the three stages of financing. Ponzi financing is where the actor's cash flows do not cover either the principal or interest payments on its debts. The actor is completely reliant on the appreciation of the underlying asset in the hopes that it'll be enough to cover its liabilities.

Minsky argued that financial cycles naturally progress from each stage of financing to the latter; driven by human greed and carelessness. When economies enter the Ponzi stage, they become increasingly unstable and eventually experience a "Minsky Moment" which is a sudden collapse in asset values, leaving both lenders and borrowers exposed. This is the deleveraging phase of the debt cycle as put forth by Bridgewater.

Stylized "Minsky Cycle"

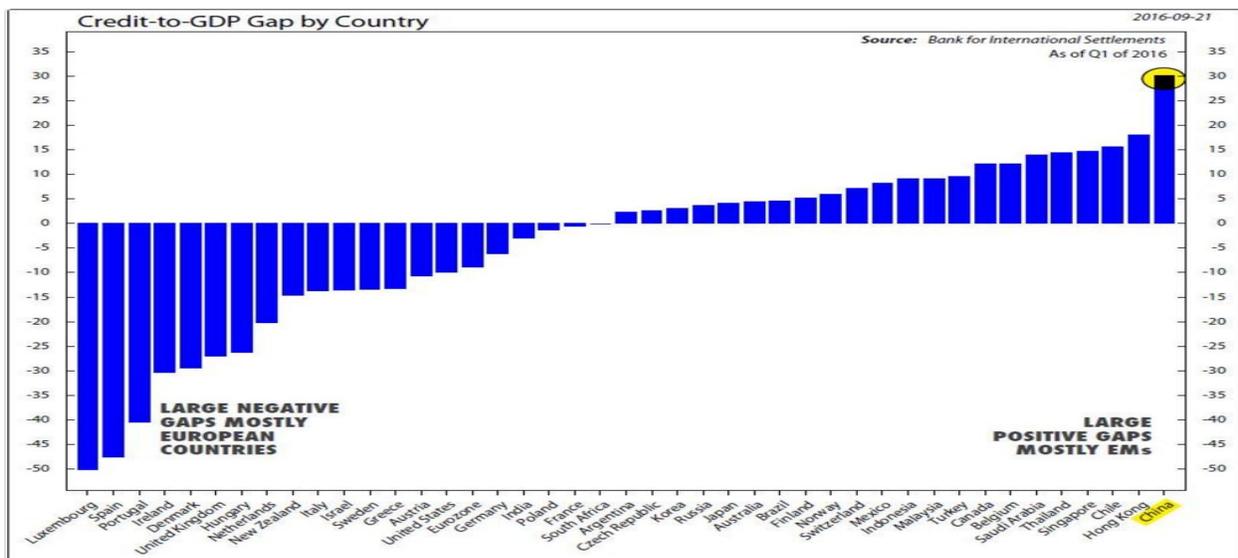


One of the tools Minsky developed to gauge which stage in the credit cycle an economy is in is the credit-to-gdp gap, or credit-gap.

The credit-gap is simply the difference between the credit-to-gdp ratio and its long-term trend. The credit-to-gdp ratio is the ratio of a country's total private non-financial debt to its gross domestic product. The larger the credit gap, the more the economy is at risk of a financial shock.

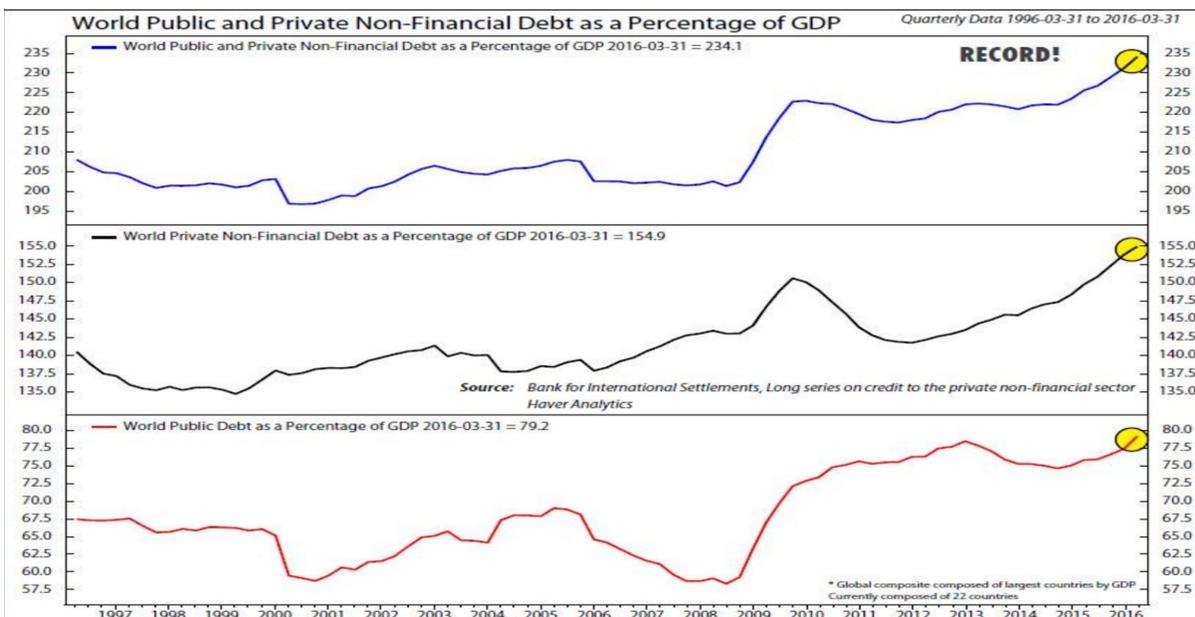
The Bank of International Settlements (BIS) keeps track of the credit gaps for all major countries which you can [find here](#).

You'll be hearing a lot more about Minsky and his financial-instability theory in the near future because there are a growing number of economies that are at record credit-gaps; meaning they're in extremely advanced stages of ponzi finance.



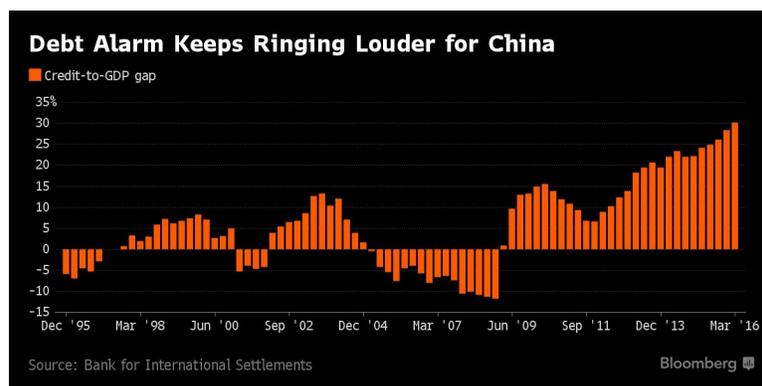
The BIS views any economy with a credit-gap over 10% to be at risk of financial instability. As we can see, the majority of countries above the 10% threshold are emerging markets.

We should expect these credit-gaps to widen further as global debt increases and gdp contracts. Global debt-to-gdp is pushing to record highs.

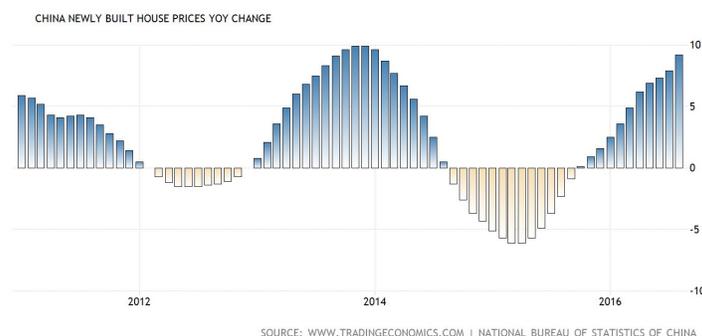


China is the worst offender by a wide margin and is currently in the latter innings of the most extreme ponzi stage in recent economic history.

China's total credit increased 107% over just the last eight years to 255% of GDP (this is conservative and likely underestimating the true debt amount). These debt-to-income levels are beyond high for a developing economy, making a banking crises all but assured.



With outstanding loans of \$28 trillion, more than that of both the US and Japan combined, the deleveraging is going to be a messy one. It's believed that it will cost as much as 40% of gdp for China to recapitalize its banks and extinguish the bad loans.



And despite promises from leadership to reign in the credit excess, debt continues to expand at a quickening pace.

Remember, the continuation of the ponzi stage relies on the appreciation of underlying assets. For the Chinese, this is primarily the housing sector where much of their worth is stored. Keep an eye out for real estate to turn over again. That's likely when we'll see China finally have its "Minsky Moment".