
PART II: A WORLD WITHOUT GROWTH?



By Urs Bruegger

Welcome to the second instalment of my report on the global economy. In Part I: *Why Can't The See It?* we looked at what stops the US from returning to 3.5% real average annual GDP growth rates as between 1950 and the third quarter of 2007.

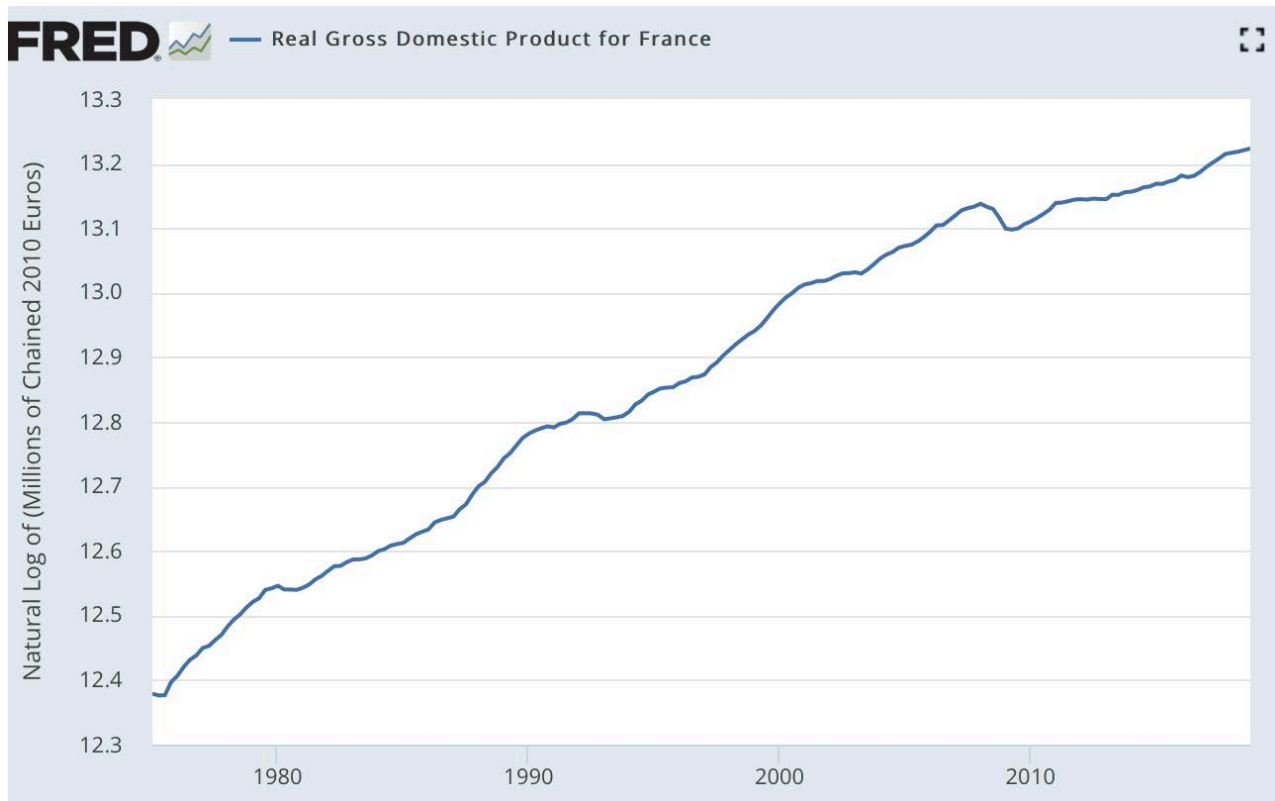
In Part II: *A World Without Growth?*, I argued that the world is unlikely to return to pre-2008 trend growth rates anytime soon and that the risks remain to the downside.

After 2008, in the western hemisphere, only Germany and Switzerland, though Switzerland only at the expense of increasing public sector contribution to GDP, continued to grow at pre-2008 rates. All other countries have seen the all too familiar pattern of significantly lower real long term growth rates.

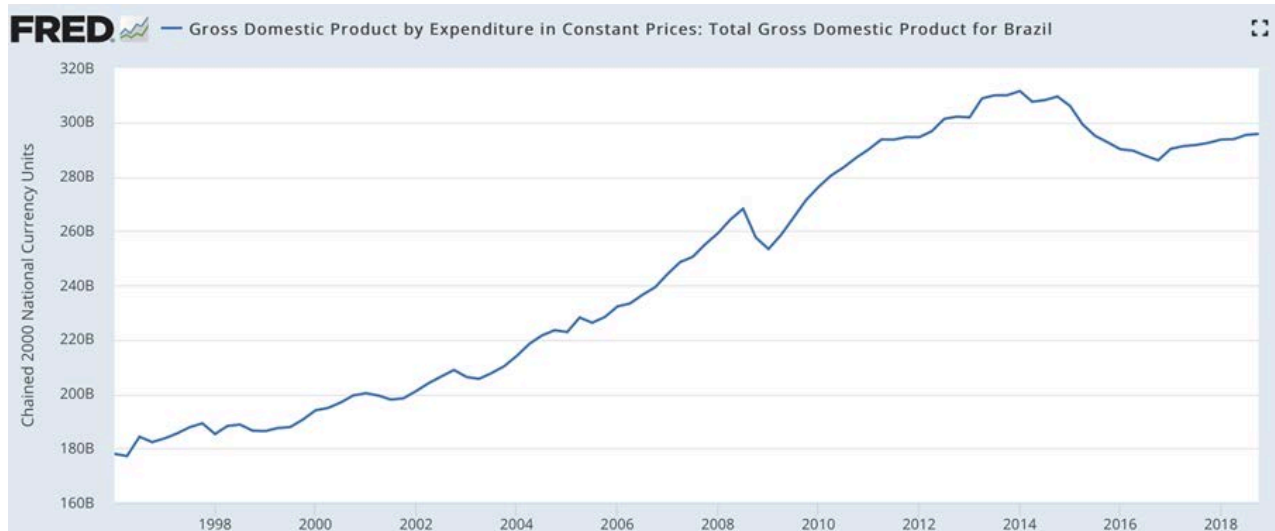
France, the second largest economy of the eurozone, saw its long term average annual real GDP growth rate drop from 2.36% pre-2008 down to 0.85%. Between 2007 and 2017, public sector

contribution to GDP has risen by 1.23% to 70.24% with the industry's share has been on a steady decline from 19.14% to 17.36%.

Real GDP (logarithmic scale) France. The country registered an average annual real GDP growth rate of 2.36% from 1975 to the end of the third quarter of 2007. Since, this rate has fallen to 0.85% , a drop of nearly 2/3.



Although emerging market economies initially recovered well from the global financial crisis, it was May 2013 that marked the turning point, when a global dollar shortage made itself noticeable. By September 2015, the Brazilian real had lost half of its value against dollar. Real GDP peaked in the first quarter of 2014 and growth has never returned to former strength.



Let us look at something Milton Friedman said in December 1967:

"These subsequent effects explain why every attempt to keep interest rates at a low level has forced the monetary authority to engage in successively larger and larger open market purchases. They explain why, historically, high and rising nominal interest rates have been associated with rapid growth in the quantity of money, as in Brazil or Chile or in the United States in recent years, and why low and falling interest rates have been associated with slow growth in the quantity of money, as in Switzerland now or in the United States from 1929 to 1933. As an empirical matter, low interest rates are a sign that monetary policy has been tight-in the sense that the quantity of money has grown slowly; high interest rates are a sign that monetary policy has been easy-in the sense that the quantity of money has grown rapidly. The broadest facts of experience run in precisely the opposite direction from that which the financial community and academic economists have all generally taken for granted.

Paradoxically, the monetary authority could assure low nominal rates of interest-but to do so it would have to start out in what seems like the opposite direction, by engaging in a deflationary monetary policy. Similarly, it could assure high nominal interest rates by engaging in an inflationary policy and accepting a temporary movement in interest rates in the opposite direction.

These considerations not only explain why monetary policy cannot peg interest rates; they also explain why interest rates are such a misleading indicator of whether monetary policy is "tight" or "easy." For that, it is far better to look at the rate of change of the quantity of money."

What Mr Friedman said in December 1967 is as valid today as then.

Imagine the US economy as a closed system, the Fed being replaced by a computer programme with variable settings in the rate of change in the quantity of money. The US grew at an average annual real rate of 3.5% from 1950 to 2008. This seems both to be the maximum rate it can grow at (ceiling value in Friedman's Plucking Model), as well the rate it should always grow at, over any given extended periods of time.

Set the programme to 2%, likely what we will see is an economy that not only cannot exceed 2% growth but also remains at risk of deflation. Set it to 5%, expect 3.5% growth and 1.5% inflation. Set it higher, like money supply in 1981 was in the US, say to 10%, the economy would still grow at a rate of 3.5% but with 6.5% inflation. In reality, these processes are more complex but the principal functioning remains the same.

Which leads us to the fun part, the actual workings of the global monetary system as it has evolved into today. It is based on two dollars, the real dollar issued in the US, and the dollar created by global banks not as a dollar but as a dollar liability. The monetary system has a

structure like an iceberg, i.e. the tip, the visible bit, is the dollar, controlled by the Fed, while the larger submerged bottom represents the dollar-liability dollar part, created by banks.

The creation of iceberg bottom money is subject to two principal factors, a) risk/reward considerations and b) balance sheet capacities of large global banks.

Deutsche Bank's share price in USD. DB was a key actor in the dollar-liability dollar market. This was so profitable the bank saw its stock price propelled to \$140 in 2007.



The principle, simplified, of dollar-liability dollar creation is as follows: Person A owns a US Treasury worth \$1million. A lends it out in the international repo markets for a fee to B who uses it as a collateral to raise a \$1m loan. The effects are A still owns a \$1m treasury, while B temporarily has use of the Treasury as a collateral and has \$1m in cash = total \$2m. B has three months before having to return the collateral so B decides to lend out the same collateral in the repo markets for a fee to C for two months. C uses the Treasury to secure a \$1m loan. By this time, the available money would be 1m dollars and 2m dollar-liability dollars = total \$3m. In practice, such repo chains may become longer, with a much ratchet-up multiplier in times of risk-on.

The flaw with this system is that it only works as long as it keeps expanding. If it goes into reverse it can even freeze. When it froze in 2007, and the collateral was US Treasuries, this proved to be still money, convertible into 1m dollars, whereas the 2m dollar-liability dollars will have vanished into thin air. If the collateral turned out to be AAA rated subprime, worthless, \$3 million will have gone into thin air.

Because creating these dollar-liability dollars has been such a lucrative business, the participating banks had developed an insatiable appetite for ever more and more collateral, of more and more dubious quality. Since the system depends on expansion, and there are only so

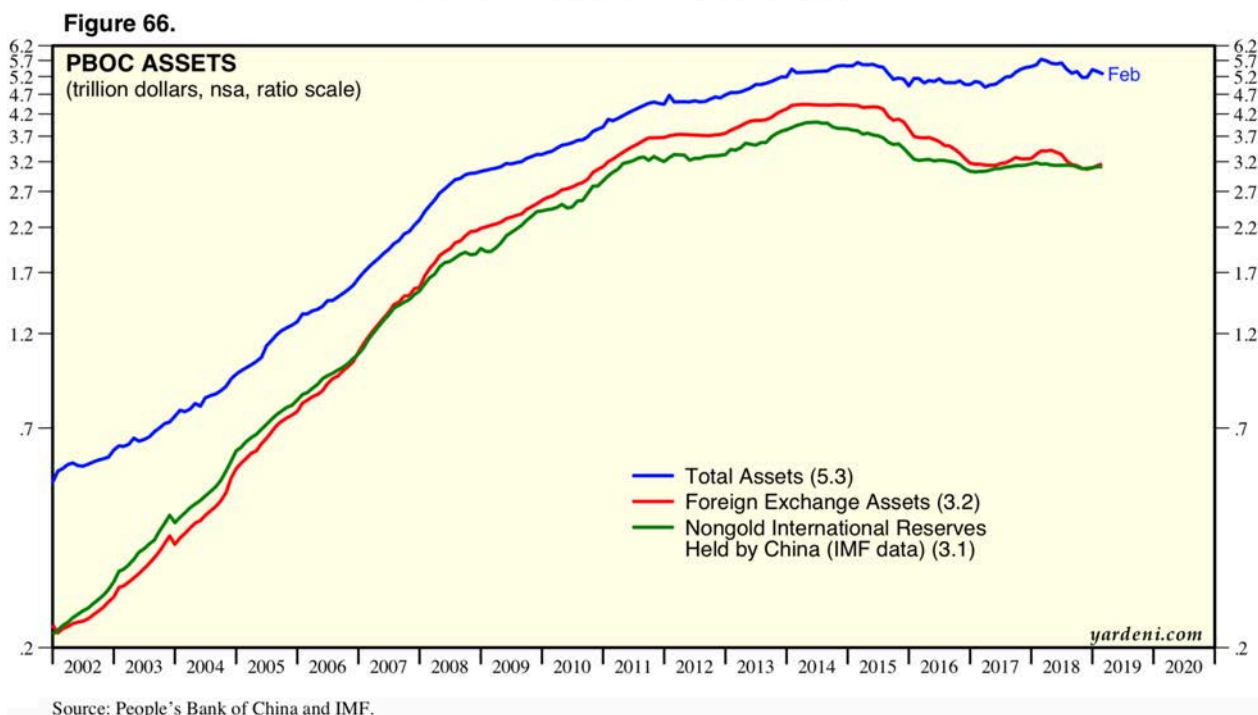
many Treasuries in the world, the banks started to create their own collateral, at best in the form of mortgage-backed securities (MBS), at worst from bundled subprime mortgage debt. This began a self-feeding cycle of fast increasing money supply (the bottom part of the iceberg while the tip remained the same), leading to inflated real estate prices especially in liquid markets such as the US and the UK, causing money moving to riskier potentially higher yielding investing, commonly known as the hunt for yield, driving up emerging market asset prices, while parallel, perceptions of risks diminished.

By the time Deutsche Bank stock price reached \$140 in 2007, the system was so overextended, it burst and let all air out.

It fixed itself somehow afterwards and continued to feed emerging market economies abundantly with dollar denominated assets until May 2013, when it got a puncture. The supply of dollar-liability dollars suddenly dried up. This left many in developing economies scrambling for dollars that were in short supply, commonly referred to as tapering.

The consequences of the dollar shortage that came to light in emerging economies in 2013 first, have been severe. A closer look at the People's Bank of China's balance sheet is highly revealing:

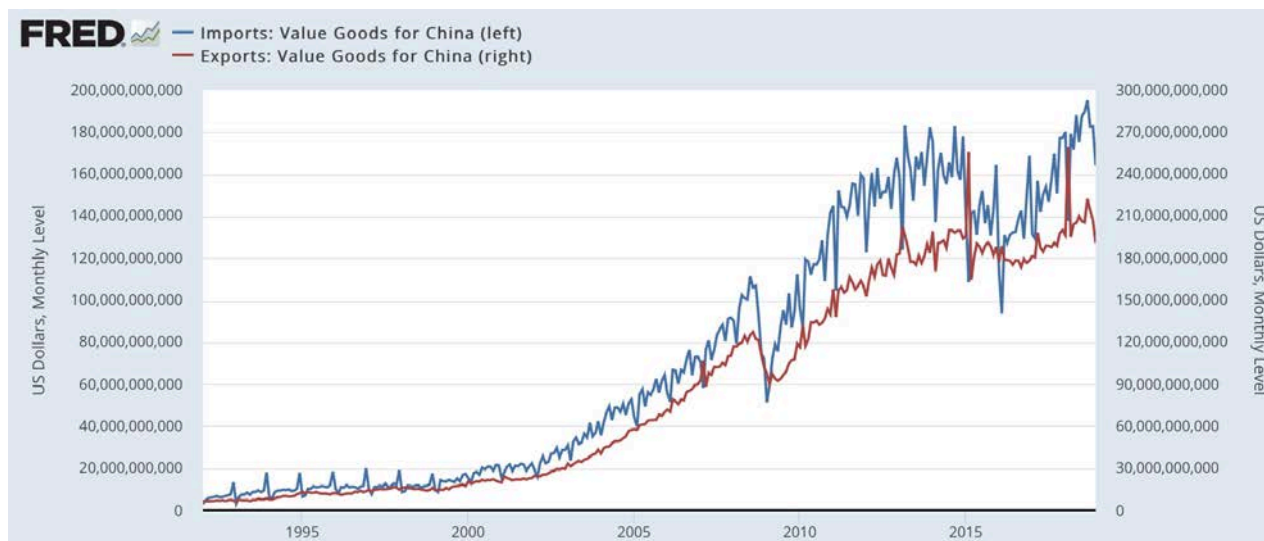
PBOC Balance Sheet



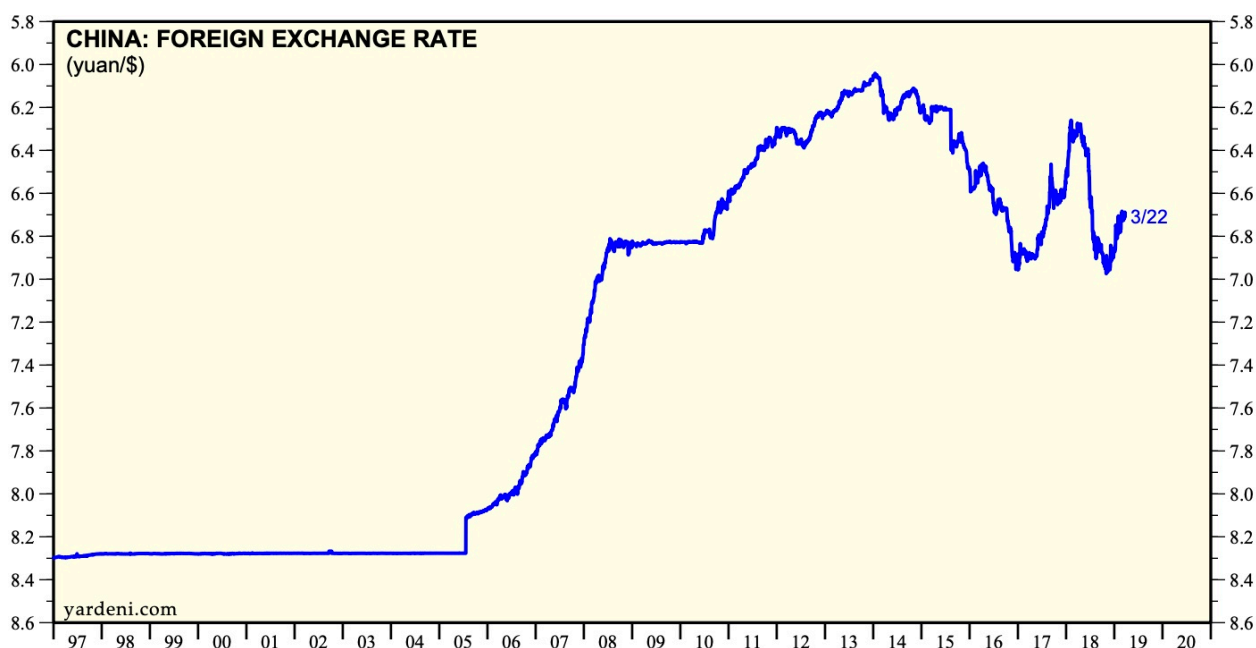
What immediately strikes the observer in the graph above is that the central bank appears to have been unable to expand its balance sheet from around 2014 onwards, with the share of foreign exchange assets to total assets sliding.

Central banks create local currency on the liability side, holding foreign exchange as assets, dollar denominated mostly, against their liability on the asset side. If a central bank cannot

increase its balance sheet, it cannot increase the quantity of local money, its economy cannot grow.



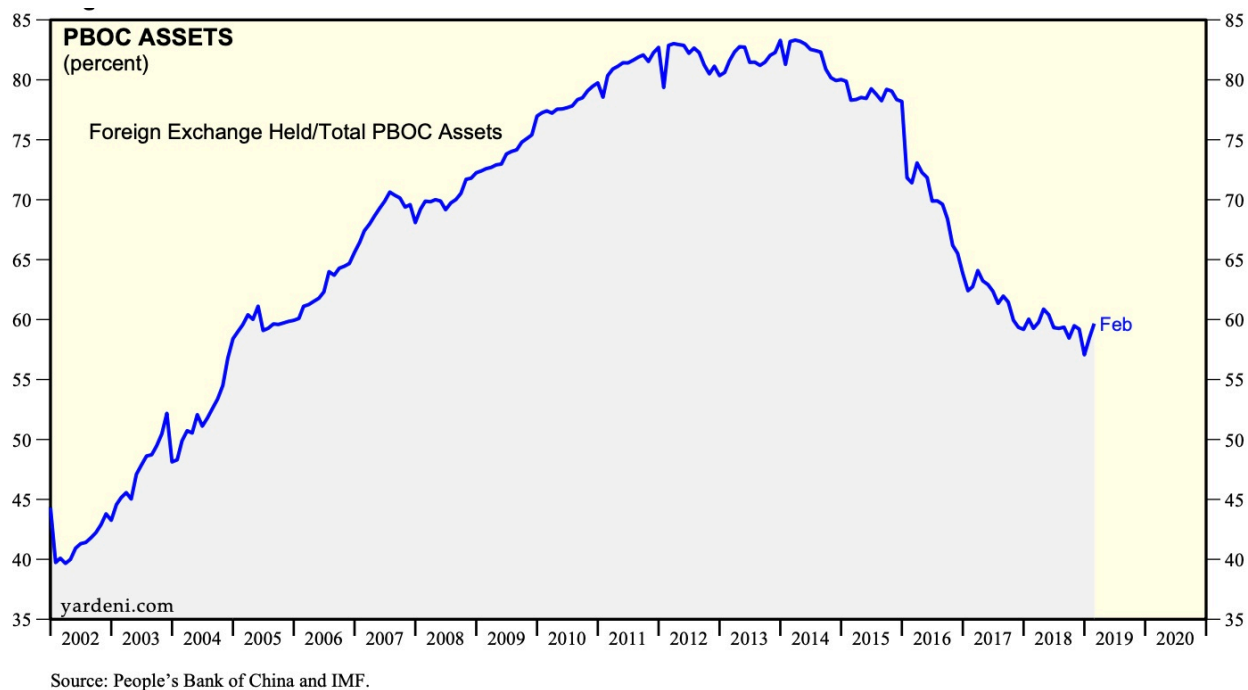
Both China's exports and imports have been stagnating since 2014, coinciding with the PBOC's balance sheet moving sideways.



Source: Morgan Stanley Capital International.

The yuan started to lose in value against the dollar during the period commonly referred to as tapering. Ever since, the CNY/USD exchange rate appears to reflect the deterioration in the ratio of foreign exchange held / total assets of the PBOC's balance sheet.

Are we moving towards a world with no growth? The picture on top shows the Golden Gate Bridge which opened in 1937. Then as now, economic growth has remained depressed over an extended period of time.



In 1944, at Bretton Woods, delegates from 44 nations agreed on a series of new rules for the international monetary system.

Today, all the signs point to insufficient money supply again. This time it is in a complex form, in a largely credit-based system, built on the only currency that matters in the global monetary system, sufficiently liquid to accommodate large volumes, the global reserve, that is the dollar.

Today, the system still works. It expands a bit and contracts a bit, like a punctured accordion. It does not do much risky business anymore. It only produces iceberg bottom money from the safest and most liquid collateral, US Treasuries. With its puncture though, it is in a slow and creeping, seemingly unstoppable state of decay, that may now have even reached Germany that has so far escaped "Japanification".

A solution seems not to be at hand. It is heartening to see the US addressing the hardship extended periods of slow economic growth cause, especially to lower income households, that have seen their real disposable income stagnating or even falling, in what has been now more than a decade. This is a domestically directed approach though, addressing the fallouts affecting the financially lesser privileged 60% of US citizens, but it does not aim at the root of the cause.

Solving this needs true out of the box thinking. It needs discarding of widely held views of the central banker as the supernatural figure who saved the world in 2007 and said QE is money. In the face of increasing evidence, such claims become more and more antiquated.

There is hope but the future looks ominous.