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Hyperinflation: A Trip Down Memory Lane

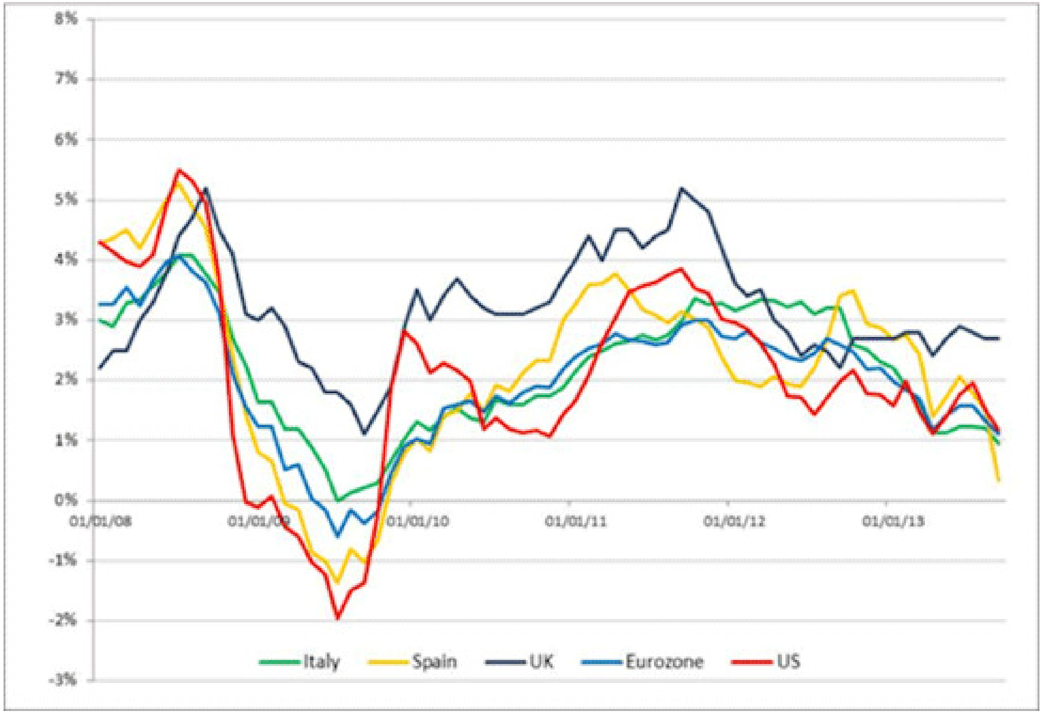
By Daniel R Wessels

Most people perceive the root cause of hyperinflation is because central banks are printing too much money to finance their growing government deficits, i.e. irresponsible fiscal policies are leading to a vicious cycle of price hikes in the economy and eventually a total loss of confidence in the value of a currency.

Since the advent of the global financial crisis of 2008 central banks in the USA, Europe and Japan certainly have "printed" money (i.e. quantitative easing) on an unprecedented scale in order to prevent a catastrophic economic meltdown. No wonder that some investors, notably the gold bugs, are holding the opinion that gold – the perceived safe haven and ultimate store of wealth – is the only viable investment option in a world awash by "worthless" currencies and resultant hyperinflation going forward.

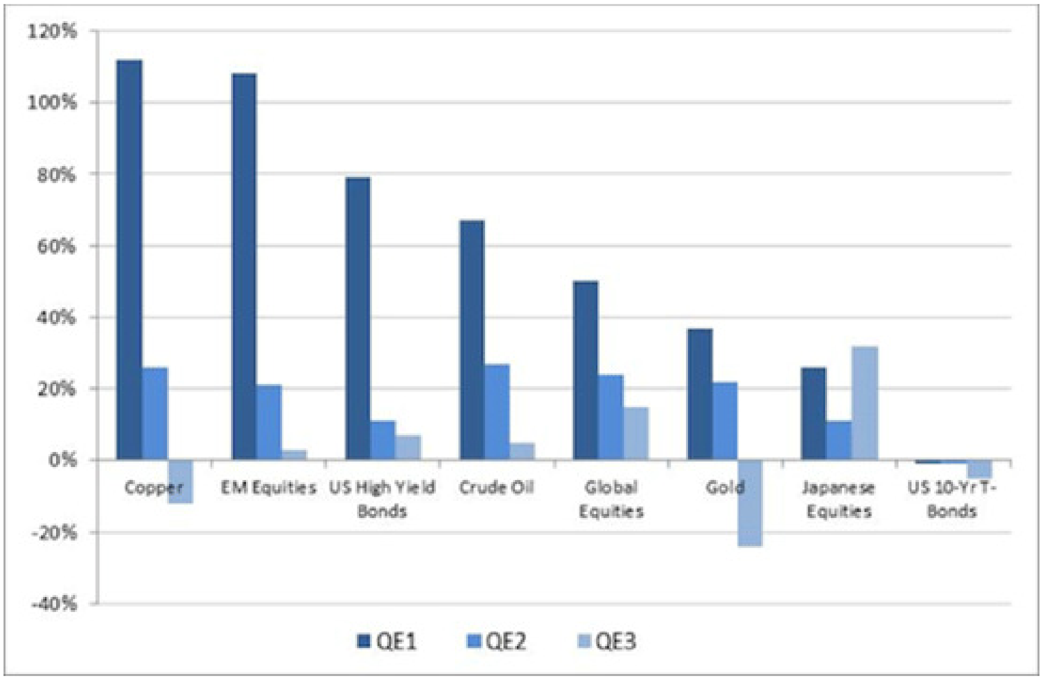
Yet, hyperinflation, at least in the economically important countries of the world is not happening and perhaps not likely to happen. For example, see the chart below that illustrate inflation trends in some major economies since 2008. In the immediate aftermath of the crisis deflation (falling prices) actually occurred, but the pursuing of "quantitative easing" and stabilising of economies brought inflation back to normal. Overall, QE has had very little effect on consumer price inflation.

Consumer price inflation in the Western World



Financial Times

Yet, as a side note it is worthwhile to remember that QE (in total three different rounds) certainly has had a significant positive effect on asset prices across the spectrum. Furthermore, with the exception of Japanese equities – well, they always tend to be the exception! – every subsequent round has had less positive effects than the previous round.



Financial Times

James Montier, a renowned author and strategist of the globally-respected asset management firm, *GMO L.L.C.*, opined in an article [1] published earlier this year why hyperinflation and the causes thereof is generally misunderstood by the public. He illustrated this by referring to previous episodes of hyperinflation and identified in each case the real causes thereof.

[1] "Hyperinflations, Hysteria, and False Memories" by James Montier, February 2013, A GMO L.L.C. publication

“The standard view”

Hyperinflation is argued to occur when the government prints too much money, causing rising prices. As prices rise, the velocity of circulation increases – no one wants to hold cash for very long if its value keeps falling. Time horizons shorten as workers demand wages at increasingly regular intervals (weekly, daily, hourly, etc.), and dash out to spend their cash as soon as they can. This means that even though the money supply is growing as rapidly as the government can crank the handle of the printing press, it can never keep up with rising prices. As prices rise, velocity rises, and so forth…

Against this backdrop, a government will run a deficit because tax revenue can’t keep up with its spending, so it prints money to make up the gap.

“False memories lead to misperceptions”

False memory refers to cases in which people remember events differently from the way they happened or, in the most dramatic cases, remember events that never happened at all.

“In the largest false memory study to date, 5,269 participants were asked about their memories for three true and one of five fabricated political events. Each fabricated event was accompanied by a photographic image purportedly depicting that event. Approximately half the participants falsely remembered that the false event happened … Political orientation appeared to influence the formation of false memories, with conservatives more likely to falsely remember seeing Barack Obama shaking hands with the president of Iran, and liberals more likely to remember George W. Bush vacationing with a baseball celebrity during the Hurricane Katrina disaster.”

It seems to me as if the standard view of hyperinflations is akin to a false memory. We have all heard that “central banks printing money leads to hyperinflations" so often that it must just be true. It is a simple, short narrative – exactly the kind that produces false memories.

"An alternative view of hyperinflations"

If simply "printing money" really did lead to hyperinflations, then we should expect to see hyperinflations all of the time. Any government that issues its own currency under a floating exchange rate effectively spends by printing money (as a matter of logic, if the government is the sole issuer of currency, it has to spend before it can collect any taxes at all, otherwise there is nothing to pay the taxes with). Yet, hyperinflations are thankfully rare events, representing occasions when populations lose complete faith in their currencies.

"Common characteristics of hyperinflation"

1. Large supply shocks. Often, but not always, wars of one form or another cause large supply shocks. Regime change is also often seen as a cause. The role of supply shocks is critical in the creation of hyperinflations. They represent a hit to potential output and thus are a key mechanism for creating the excess demand so often seen during hyperinflations.

2. Big debts denominated in a foreign currency. This practice leads to the devaluation of the currency, which in turn leads to the rising price level.

3. Distributive conflict/transmission mechanism. Crucially, the need for this element was pointed out by Joan Robinson in 1938. She wrote "Neither exchange depreciation nor a budget deficit can account for inflation by itself. But if the rise in money wages is brought into the story, the part which each plays can be clearly seen. With the collapse of the mark in 1921 [also, see the Weimar Republic story below), import prices rose abruptly, dragging home prices after them. The sudden rise in cost of living led to urgent demands for higher wages. Unemployment was low . . . profits were rising with prices, and

the German workers were faced with starvation. Wage rises had to be granted. Rising wages, increasing both home costs and home money incomes, counteracted the effect of exchange depreciation in stimulating exports and restricting imports. Each rise in wages, therefore, precipitated a further fall in the exchange rate, and each fall in the exchange rate called forth a further rise in wages. This process became automatic when wages began to be paid on a cost-of-living basis."

Understanding these factors helps to explain why saying that hyperinflations are the result of printing money just isn't helpful; it is too simple and misses the major drivers of hyperinflations. The monetary response is endogenous to the process, not a driving force. As Robinson opined in her review, "A clear grasp of the distinction between a necessary and a sufficient condition seems to be all that is required settling the controversy. It is true that a train cannot move when the brake is on, but it would be foolish to say that the cause of motion in a train is that the brake is removed."

"A brief history of hyperinflation examples"

Weimar Republic Hyperinflation (1922-23)

Germany's productive capacity had been significantly damaged by World War I, both in terms of the losses inflicted and the resources redirected to military use. Allied troops occupied the Ruhr Valley – the seat of much of Germany's manufacturing base. These events clearly constituted a large supply shock.

The Republic faced very large foreign claims from war reparations, which had to be repaid in gold. Germany was supposed to export to earn the gold needed to make the payments, but with productive capacity not even capable of meeting domestic demand; there was no chance of exports coming to the rescue.

In 1927, Karl Helfferich (a senior banker at Deutsche Bank) argued that the reparations were to blame for the hyperinflation. He noted that the unfavourable trade balance (lots of imports but no exports) led to depreciation of the currency: "The depreciation of the mark was the beginning of this chain of cause and effect; inflation is not the cause of the increase in prices and of the depreciation of the mark; but depreciation of the mark is the cause of the increase in prices and of the paper mark issues."

Hungarian Hyperinflation (1945-46)

It appears as if nothing was learnt from the experience of the Weimar Republic as the Hungarian hyperinflation following the end of World War II followed almost exactly the same dynamics.

[Contrary to the classical view, it is worthwhile to note] for at least a couple of months of its hyperinflation, the authorities literally could not print currency: the retreating fascists had stolen the currency printing plates!

War was once again the terrible supply shock that was visited upon Hungary. Some estimates suggest that as much as 50% of Hungary's capital stock was destroyed (and some 90% damaged) due to Hungary's role as a battlefield. Reparations again played their part. Hungary faced requirements to pay financial reparations as well as payments in goods to the occupying Soviet army.

Chinese Hyperinflation (1937-49)

War (both international and civil) once again played a part in this particular hyperinflation as Japan invaded China in 1937. The Japanese army occupied more than one-third of China and, as a result, important tax revenues from the eastern cities were lost to the Japanese. When the conflict finally ended, it was replaced with a civil war. These terrible events clearly provided a massive and prolonged supply shock to the economy.

Between 1937 and 1949, three governments – the Nationalists, the Japanese, and the Communists – occupied China. Each one issued its own currency (indeed, multiple currencies were issued by each authority). These bodies effectively engaged in monetary warfare, with each stating that the currency of their enemies was falling rapidly in value. This lack of faith created a vicious feedback cycle common in hyperinflations as people held onto the currencies for as little time as possible.

The Bolivian (1984-85) and Brazilian Hyperinflation (1987-94)

The roots of the Bolivian experience with hyperinflation can be traced to its near monoculture export base and its heavy reliance on external finance. The former feature meant that when mineral prices fell in the early 1980s (especially tin prices) it had a very serious impact upon GDP and inflation – effectively a classic supply shock.

Bolivia also struggled with heavy external borrowing. Between 1973 and 1981, public long-term external debt rose from $640 million to $2.7 billion. This, of course, left the country vulnerable to any "capital stops." In the wake of the Mexican default in 1982, such a capital stop occurred. Add into this mix a newly democratically elected government and the scene was set for disaster.

In an effort to dedollarise the economy, President Hernán Siles Zuazo ordered the conversion of all domestic dollar-denominated contracts into peso terms. This unfortunately created yet another run on the peso. The Bolivian authorities also attempted to honour the external debt, creating domestic unrest. By 1984, there was a policy of 100% indexation for all wages, with a four-month adjustment period. This eventually shrank to just one month. The classic wage-price spiral resulted.

As with Bolivia, Brazil was subject to the same supply shocks - both physical (oil) and capital related (external debt financing) in the early 1980s. However, Brazil managed to postpone the arrival of outright hyperinflation longer than many of its neighbours at the cost of very high inflation for a prolonged period.

Various stabilization attempts [were] made by the authorities. Each of these, though ultimately failing, helped reduce inflation on a temporary basis (often due to price freezes). However, each of these plans inflicted a set of costs upon the economy, which cumulatively took their toll (e.g. the very high levels of capital flight that Brazil suffered) as everyone got used to the "tricks" deployed. The effect was that the failure of each plan resulted in higher and higher movements in prices.

Georgian Hyperinflation (1992-94)

When Georgia became independent in 1991, it was tightly integrated with Russia and the other members of the former Soviet Union (FSU). In particular, Georgia was a massive importer of energy (gas and refined oil products); its exports were to other FSU states and relied on the railway and road routes to Russia. The large supply shock underlying the Georgian hyperinflation experience was clearly the break-up of the FSU and its wider impact. The key terms of trade moved sharply against Georgia in 1992 and 1993 as the prices of its key energy imports soared. Added to this nightmare mix were civil unrest and the severing of Georgia's rail link to Russia. Output collapsed, with a 56% decline recorded between 1991 and 1992. As has often been observed in the previous examples, the fiscal position of the government deteriorated massively as tax receipts collapsed and expenditure levels were maintained in the face of the terrible domestic situation and import needs. The deficit went from 3% of GDP in 1991 to 26% in 1993. Nearly 80% of the deficit was financed by external loans.

As the ruble zone ceased to exist, the Central Bank of Russia stopped supplying bank notes to the FSU states, so Georgia introduced the coupon in April 1993 and it became the sole legal tender in August of that year. The Georgian National Bank had to accommodate the spending by the government, and having exhausted its foreign exchange reserves, the currency began to depreciate massively.

Zimbabwean Hyperinflation (2007-09)

For our final thumbnail, let's turn to one of the most recent examples of hyperinflation – Zimbabwe. The usual suspects for generating hyperinflation all seemed to play their role here. Zimbabwe began its descent into economic chaos in 1999 when a drought impacted the large agricultural sector. Land reallocation in 2000 and 2001 further increased the supply shock as farms went from those with productive owners to those with little or no interest in farming. Output fell by 50% between 2000 and 2008, with tobacco (a major export earner) dropping 64%, and maize by 76%.

Agriculture wasn't the only sector to suffer. The infrastructure of the economy was crumbling: the national rail system could no longer transport the country's mining exports. In 2007 there was a 57% decline in export mineral shipments. Manufacturing was crucified as well, with output falling 29% in 2005, 18% in 2006, and 28% in 2007. The result of this carnage was an unemployment rate of 80%!

The agricultural collapse created the second of characteristics – large debts in a foreign currency. Of course, Zimbabwe already had a large external debt, but this was largely to official creditors, who kept adding the non-payment to the loan itself. However, with virtually no domestic food production, Zimbabwe was forced to import and pay for those imports in foreign currencies. Given this backdrop, Zimbabwe witnessed large-scale emigration, decreasing the tax base further and worsening the budget deficit situation.

"The bottom line"

To say that the printing of money by central banks to finance government deficits creates hyperinflations is far too simplistic. Hyperinflation is not purely a monetary phenomenon. To claim that is to miss the root causes that underlie these extraordinary periods. It takes something much worse than simply printing money. To create the situations that give rise to hyperinflations, history teaches us that a massive supply shock, often coupled with external debts denominated in a foreign currency, is required, and that social unrest and distributive conflict help to transmit the shock more broadly.

On the basis of these preconditions, I would argue that those forecasting hyperinflation in nations such as the US, the UK, or Japan are suffering from hyperinflation hysteria. If one were to worry about hyperinflation anywhere, I believe it would have to be with respect to the break-up of the eurozone. Such an event could create the preconditions for hyperinflation. Indeed, the past warns of this potential outcome: the collapse of the Austro-Hungarian Empire, and the Soviet Union all led to the emergence of hyperinflation.