

When Debt comes calling.

Sarel Oberholster

ccpt@iafrica.com

“... the struggle (for existence) will generally be more severe between species of the same genus, when they come into competition with each other, than species of distinct genera.” Charles Darwin - The Origin of Species.

When Central Banks create money, banks lend it out. When Central Banks recklessly create money, banks recklessly lend it out. When Central Banks flood the markets with liquidity, then bankers flood the markets with debt. It is an economic miracle until Debt comes calling.

What is the true nature of the money creation beast? Let's dispel a few myths first. Debt upon creation is money, you can effect a payment with it. Debt so used represents the use of future earnings today. Debt once used has a claim on future earnings for its repayment unless you plan to settle it from capital. Money creation and particularly liquidity provision to the banking sector is only effective as an economic stimulant upon its conversion to debt. Liquidity injections to “carry” defaulting debt have no stimulatory effect. Total debt formation in the modern economy is not restrained by savings. It is predominantly a multiple of the monetary injections into the system. It is economic dishonesty to describe the monetary conditions, when monetary stimulation created excess supply of debt, as a savings glut. Each experiment in excessive money creation has resulted in a systemic failure in the institutions of money, the banks and the extensions of banks in the modern world of securitisations, commercial paper, asset backed securities, credit derivatives, and credit swaps. The money creation model can be applied to achieve an event of minor magnitude or expanded into an event of proportions similar to an economic nuclear bomb. It just depends on the borders of applied ruthlessness of the people in charge. It can be played on a national scale or it can be played on an international scale. It can be played by one nation or it can be played in concert by any number of nations. In this many writers have observed that the ultimate disaster visited upon the economy will match the furore of the preceding money creation game.

The “Crash of 1929” is a famous historical event of systemic banking failure. The aftermath of the destructive event had left a dysfunctional money exchange system in which prices of assets, goods, services and labour were distorted beyond the means of the remnants of the distressed monetary system. This was laboriously repaired only when steps were taken to clear the excess debt from the economy. The extreme money creation game, expensive wars, corruption and the suspension of individual rights in the security interests of the state are common bedfellows. The relative liquidity of “Stock Exchanges” makes it the first recipient of significance in the money creation game and shares in inflationary or better still hyperinflationary mood is considered highly desirable. Since 1987 it is viewed by the speculative crowd and officialdom alike as an absolute requirement for economic prosperity.

These characteristics make the 1920's an interesting study in playing the money creation game. It is however not appropriate to postulate the outcomes of playing the money creation game as a stock exchange crash scenario or a Weimar Germany Hyperinflation scenario or a 1970's type stagflation. The process of discovering the cause and effect elements of excessive money creation and debt stimulation lies in history but also in very obvious economic logic. The official response is an important component. Money supply can be expected to continue to increase if for instance an expensive war needs funding. The 1990 Japanese systemic experience is one not in the shadow of a war effort. I have picked five events of ruthlessly played money creation games to evaluate potential outcomes as I searched for the answer to what happens after Debt comes calling?

1922-1923 Hyperinflation in the Weimar Germany

The allied forces imposed an impossible war debt on a broken down Germany. The German government responded in many ways to deal with it but the desperate money creation game is what interests us. "Something" needed to be done and somehow the government needed to pay for it. Germany was isolated and could not gain access to sufficient international funding or finance itself through trade debt and current account deficits. Yet it had to repay an impossible war debt. It is a common feature of ruthlessly played money creation games; the "needs" far exceeded the "resources" of government. This particular money creation experiment was conducted inside a (seemingly) contained national border. When government needed something it simply paid for it by creating the money. It worked and the speed at which Germany restored industry astounded the rest of the world. Know this as a fact; the game of money creation always works and continues to work right up to systemic failure. The consequence of money creation is always debt. Thus one could easily call it the debt creation game. It is a game of compounding in an exponential curve. The virtuous initial stages of money creation can only be sustained through more money creation and debt encouragement. This has been proven endless times in human history yet governments keep trying to achieve that elusive virtuous cycle of the money game without inheriting the debt consequences. Each proclaiming success along the way and each eventually suffering the consequences.

Thankfully it is seldom possible to play the money game to extremes and we therefore see any serious political or economic "national crisis" as a prerequisite. The German nation had an insurmountable national calamity in the early 1920's to facilitate their historic money creation game. Money created will always find its way into the economy in the form of rising prices. The confusion that many observers have is the limitation of the term "inflation" to consumption type assets. The reality of monetary inflation is that it can broadly but not absolutely be managed to manifest in almost any type of asset class whether investment or consumption type assets. It is not a prerequisite

for monetary inflation that rising prices should only manifest in consumption goods.

Weimar Germany experienced the full Monty. They got a “wholesale inflation” where the inflation index went from 1 in 1914 to 14 in 1921 and exploded to 726 billion by the end of 1923. The number is so high that it is irrelevant. The consequence is what really matters: wave upon wave of money creation lifted all prices to systemic bank failure followed by the ultimate result of unbridled money creation, currency failure. Life as a bank official in 1923 Germany was no fun. An extremely important consequence that must be noted is that the capital of the middle class got “wiped out” together with the term savings of the nation, in this case the collective pension savings of the German nation.

Monetary order was restored in almost childlike simplicity with classic monetary and fiscal discipline. Economic order required the addition of the Dawes plan of USA international trade support. A new currency was created to replace the old but made subject to money creation restraints and the market was allowed to clear the debt in the market way of repayment or insolvency. Debt formation was officially discouraged with a policy of “Kreditstop”. The money creation restraints restored the “store of value” characteristic of the new money and it was accepted at stable prices as a conduit for exchange. Exactly as one would expect from a money.

The final word on Weimar Germany is that government printed and spent the money, thus no distribution restraint was introduced. The Weimar German government had to take the full blame for the economic calamity that they had created. No advanced economy government had followed in the footsteps of Weimar Germany since. In the advanced economy the requirement is that the money creation must be distributed to the private sector and the channel is debt.

USA 1924 to 1929 and the Crash of 1929

The USA emerged as the last man standing from WW1. The economic advantage of supplying the world at war and the capital inherent to an economy unscathed by the war placed it in an enviable economic position by 1920. USA credit was granted when exports could not be paid for by war ravished allied countries. The USA as a destination for new beginnings, fantastic industrialisation, innovation and significant investment, propelled the USA economy into a commanding position on the world economic stage. An abundance of raw materials, investment funding and human capital created a dominant producer economy. Export proceeds are a money creation elixir. Foreign exchange is converted into the local currency at the exporting country and initiates the money creation process. The debt against exports was “money” not backed by gold and successfully bypassed the restraints of a gold standard for a while. Exports paid for in debt started compounding. A multi nation concerted export/import reciprocal relationship of debt financed exports was created by the USA towards its trading partners in the years of

1924 to 1929. Financed by reconstruction loans from the USA, even Germany could participate in this buy-now-pay-later exporter relationship with the USA. Internal debt creation by a mostly unregulated banking industry saw monetary debt creation explode in the USA. Uninhibited leveraged speculation in financial assets fuelled by money creation emerged and the USA was to fall in love with it. The money creation inherent to the debt creation built a truly spectacular stock exchange bubble. Broad public participation through "Investment Trusts" or closed end mutual funds for the masses and margin (on debt) trading for the brave and reckless alike was the opium for this speculative frenzy. This was a hyperinflation event in a financial asset class but never reported as such. Leveraged closed-end mutual funds mushroomed in the late 1920's alongside a few open ended mutual funds, the latter funds mostly survived and are the evolutionary forebears to the current mutual fund industry. The leveraged debt driven speculative mania came crashing down in October 1929 when debt saturation gave rise to systemic banking failure. Banks were unable to facilitate orderly settlements due to a breakdown in confidence. How did this happen?

The expanding export driven money supply in an unregulated banking environment fuelled debt creation, which in turn created the speculative asset bubble. Distribution of the debt in an expanding circle is dependent on a continuation of the inflation and hyperinflation of the assets used as collateral. The money creation gave rise to extreme liquidity and negative real interest rates (you are actually earning tax free interest by incurring debt) to truly maximise debt absorption in the economy. Lesser systemic events will warn about what will eventually become a systemic bank failure. Ruthless leaders will ignore the warnings of lesser systemic events and answer with a renewed money creation cycle. The asset bubble will continue to expand until debt reaches the highest risk borrowers. Repayment ability is suspended upon expectations of asset inflation. The debt saturation stage is reached in this final phase. An inability to find new debtors of acceptable quality combined with defaulting risky debtors trigger a systemic bank failure usually in the grip of speculative fever in all investment asset classes. Continued asset inflation and asset hyperinflation becomes increasingly difficult to engineer. The process must stop or a new uninflated asset class must be found to inflate. The final step would be to ignore the systemic failure and further expand liquidity and debt on the exponential curve to the ultimate consequence, a total destruction of the currency (Weimar Germany).

Banks defaulted in 1929 as the dominant systemic event. However, do not fixate on the label "bank". The financial sector of the economy is sophisticated and subject to innovation. The term "bank" must be seen as the money distribution machinery of the financial sector and can include any entity that trades predominantly in credit (buying and selling). Bank has a different meaning in each era investigated but distribution of credit is the common denominator.

The 1929 crash happened with the Weimar Germany hyperinflation disaster still fresh in the minds of interventionists. The USA was not to follow in the footsteps of Weimar Germany towards total destruction of its currency. The

official response to the debt event is a crucial element in the research into the money creation game. The Weimar Germany initial response to the debt event was to simply double the money creation effort. Solve all problems along the way by “printing” more money until it is cheaper to burn the money than to buy fire wood. Not a single asset class was spared and Weimar Germany exposed the world to the inevitable end of a money creation game taken to the abyss. Weimar Germany was banking intermediation failure in Hyperinflationary mode.

The Hoover’s response in the USA was to allow the market to heal the monetary damage relying on “rugged individualism”. *“It is not the function of the government to relieve individuals of their responsibilities to their neighbours, or to relieve private institutions of their responsibilities to the public”- Herbert Hoover.* The harsh reality of Hoover’s “rugged individualism” culled the reckless speculation and excessive debt formation. Hoover’s policies accepted banking intermediation failure in deflationary mode as an appropriate measure allowing the market to clear the excesses and malinvestment which would restore the health of the banking sector. Compare this for instance with the Bank of Japan policy of accommodating banking failure and the subsequent endemic liquidity provision to this day from the Bank of Japan to keep the banking sector from implosion. Interventionism won in the November 1932 election with Roosevelt’s “New Deal” being preferred by the electorate. Regulated debt management returned when Roosevelt passed a number of measures into law, more than a few later ruled unconstitutional, to channel the clearing of the debt by the market in a planned fashion. The Roosevelt measures were fraught with inefficiencies and vested interests particularly those of farming, labour, bankers and indebted home owners. The structured policies of the “New Deal” era included going as far as the creation of the Home Owners Loan Corporation in 1933 to bail out bankers and home owners alike with government funds. The Roosevelt administration refined tax collection, introduced unbridled state intervention and particularly Federal Government intervention on the back of an economic crises created by interventionist policies pre 1929.

The one feature of the 1929 crash and aftermath that is currently constantly abused is the failure of “money” to facilitate settlements. The deflationary effect of minus 10% inflation and interest rates near zero resulted in near 10% real (inflation adjusted) interest rate. It is argued that this is a good reason to increase the money supply when the reality is that the market enforced its own version of a penalty interest rate upon an economy that binged on credit. The solution would have been to provide for the orderly settlement of transactions without stimulating more debt formation while allowing the market adjustment of clearing the debt to take place. The Private Debt to GDP ratio only peaked in 1934 as a result of the debt overhang pre October 1929 and the depression that followed.

The nasty bear market of the late 1960’s and early 1970’s

The lessons of Weimar Germany and the very harsh medicine of the 1929 aftermath would foster financial discipline in a generation of war hardened survivors. This faded slowly until the new generation of officials of the 1960's. An expensive Vietnam War needed to be financed and again the money creation genie is let out the bottle. The USA got sucked deeper and deeper into this very unpopular war. Each time it expanded participation it also required a commensurate economic stimulatory response. The resulting speculative bubble was a milder version of the preamble to the 1929 crash but the mutual fund industry were to again play its part together with the usual greedy pricing and over valuation scandals.

This time the speculation would be relatively mild and contained mostly inside the "open ended mutual fund" industry, the now popular survivor from the crash of 1929. The Dow Jones rose for 43 consecutive months from mid 1962 to the end of 1965 known as the go-go years. The place to be was in mutual funds. Again debt would infiltrate in the background on the expectation of asset price inflation. This was just comparatively speaking, a mini bubble and the systemic event was restricted to the collapse of the values of investments in mutual funds. The collapse of the stock exchange bubble did not escape into the rest of the economy until the 1970's.

Of great interest is how it happened. The trust fund, mutual fund, hedge fund industry had a long history of inside trading scandals, price timing mismatches that produced risk free profits to select insiders and many more dubious practices. The speculative demand and the cash flowing into the mutual funds caused investments to be routed to thinly traded securities and even un-traded securities. The collapse was triggered when the pricing mechanism for these securities failed and the funds were unable to calculate unit values (sound familiar?). Investors ignored the 1st warning when on 20 December 1968, the Mates Fund became the first significant victim. The feel good 1969 market would see the final speculative spike. It was only by mid 1970 that investors made a run on the mutual funds. Still the collateral damage across the world economies was sufficient to see the stagnation of the 1970's. The money creation game never ends, it simply changes shape according to the circumstances of its history. What was the official response?

The 1970's saw the experiment of managed money supply growth combined with negative real interest rates. The Vietnam War was only to end in 1975. Money creation had to continue. It is always during the stagnation period that the penalty for the monetary sins of the recent and immediate past is paid. The policy measures introduced after the systemic event and the market's response thereto will decide the flavour of the medicine. The interesting aspect of the late 1960's and its aftermath in the stagflation of the 1970's was the constant presence of money creation. August 15, 1971 saw the arrival of pure fiat money when Nixon declared the gold window closed. The systemic event of the late 1960's had instilled a caution yet it did not terminate the process. The importance of the official response to a systemic event is vividly illustrated. An unrelenting inflation spiral was introduced into consumption assets. Stock exchanges did not benefit in real terms but inflation and negative real interest rates saw wealth distributed away from capital formation

into subsidised debt. Habitual over-indulgers in debt still lust after this period when they saw all their debt inflated away. The extent of the money creation was managed but still it followed the very similar patterns as before. The compounding nature of inflating the prices of certain asset classes manifested in a predictable fashion. Two wicked asset bubbles were later to emerge. The oil price crisis and the gold price spike to \$850, with a search for an inflationary hedge and a store for value at the heart of it.

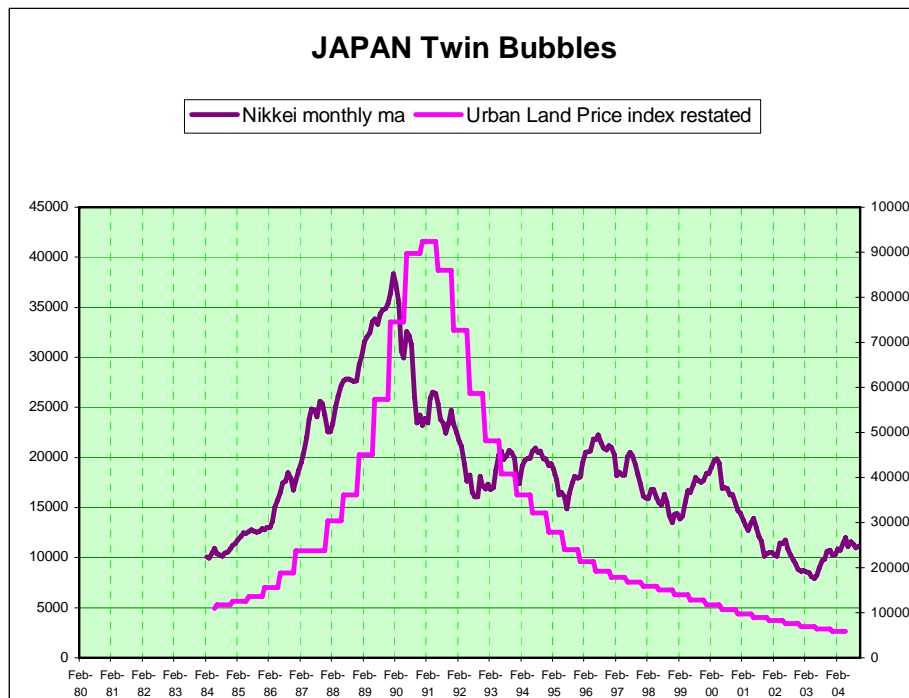
The expectation of inflation destroyed most of the benefits of perpetuating money creation. It was only during the 1980's that the excess money creation was contained and addressed. Inflation in consumables was named as public enemy number one, higher in status than unemployment. Debtors were the only outright beneficiaries of the inflation policies of the 1970's in a zero sum game. The conditioned inflation expectation was broken during the Paul Volker years.

1990 to 2007 - Explosive debt and Japanese money creation.

This period is unique in accommodating a money creation process that moved through a number of systemic events but never abated. That is a prerequisite for a systemic event of historic proportions. Perhaps it is suitable to characterise the process of debt creation in an exponential curve by way of a simple example. Picture a chess board. Start at the left bottom square and place one gold coin of 1 oz on the first square, two on the 2nd, four on the 3rd, eight on the 4th, 16 on the 5th and continue in this manner until you get to the last square. There are only 64 squares on a chess board. You will need 9,223,372,036,854,780,000 gold coins for the last (64th) square. It is safe to say that the entire stock of above ground gold will fall dismally short in completing this exercise. Change the gold coin to one US\$ of debt and suddenly this exponential curve becomes very possible. The CMDEBT series from the Board of Governors of the Federal Reserve System, (Household Sector Liabilities: Household Credit Market Debt Outstanding in Billions of Dollars) in Jan 1953 was \$98.12 billion reaching \$13009.85 billion by Jan 2007. Only 53 years compared to the 64 squares chess board example above.

Cardiac arrest on Wall Street in 1987 became a non event. A new "adrenaline into the heart" money creation technique was applied with immediate success. In the background another symbiotic relationship reached "miracle" proportions with characteristics reminding of the prelude to the 1929 crash. Japan had started taking over the role of manufacturer to the world and engaged extensively in financing trade deficits for its export partners. The Japanese economic miracle was the envy of the World. The Japanese (and Chinese) version of the export-on-credit scheme uses the \$ proceeds from exports to the USA to purchase vast quantities of mostly US\$ denominated debt. This very practice was a significant contributor to the advent of the 1929 crash with the USA in the role of manufacturing country while the UK and Europe combined to form the import country block.

The Japanese leg of the export-on-credit scheme collapsed in 1990 when the asset bubbles in the Nikkei and the Japanese real estate markets collapsed in spectacular fashion. I previously used this graph in my essay “Economic Puzzles” and it is still a very useful visual rendition of the Japanese experiment with hyperinflationary assets classes.



The official Japanese response was to drop interest rates to as low as zero and to provide literally unlimited liquidity to the banking sector. It did not prevent the crash or severe asset deflation outcome. The reality is that it did contain the systemic event within the Japanese banking sector and allowed the Japanese Banks to “carry” dysfunctional debt for as long as the Central Bank would follow this policy (a policy still followed though interest rates have risen slightly). The rest of the world hardly noticed that a banking “rescue-by-stealth” was introduced. The Japanese Banking sector would soon start to borrow Yen denominated money from the Bank of Japan and buy higher yielding assets denominated in US\$ and other currencies. The very next step was to start making Yen denominated loans available to multinational banking institutions, investment vehicles and corporate entities. The Yen carry trade was born. The “positive carry” only exist because the currency risk between the US\$ and the Yen is left naked. The 20% appreciation of the Yen against the US\$ during the Asian crisis was an aperitif of what’s to come. The Japanese Banks started the process of repairing their ravished balance

sheets by earning the “positive carry”. Much reporting has gone into the activities of secondary beneficiaries of the Yen positive carry yet the primary creator and originators of the Yen carry trade are never mentioned. History also shows a similar “USA/German carry trade” existed in the build-up to the 1929 systemic episode.

I would assert that the current malaise of loose Central Bank monetary policies are a direct consequence of the Japanese strategy to restore their banking sector by stealth on an unsuspecting world economy. A world economy that welcomed the unlimited liquidity at close to zero cost with open arms. A world economy that revelled in the liquidity abundance and a Bank of Japan guarantee to keep the value of the Yen from appreciating. A world economy that are only now waking up to the fact that the very activity of providing Yen loans had kept the Yen from appreciating. A world economy that is at a loss to explain how the repayment of the Yen loans will ever be effected to a Japan dependent on a weak currency and export economy, without causing a massive Yen appreciation. A one way bet has become a deadly trap for the world economy.

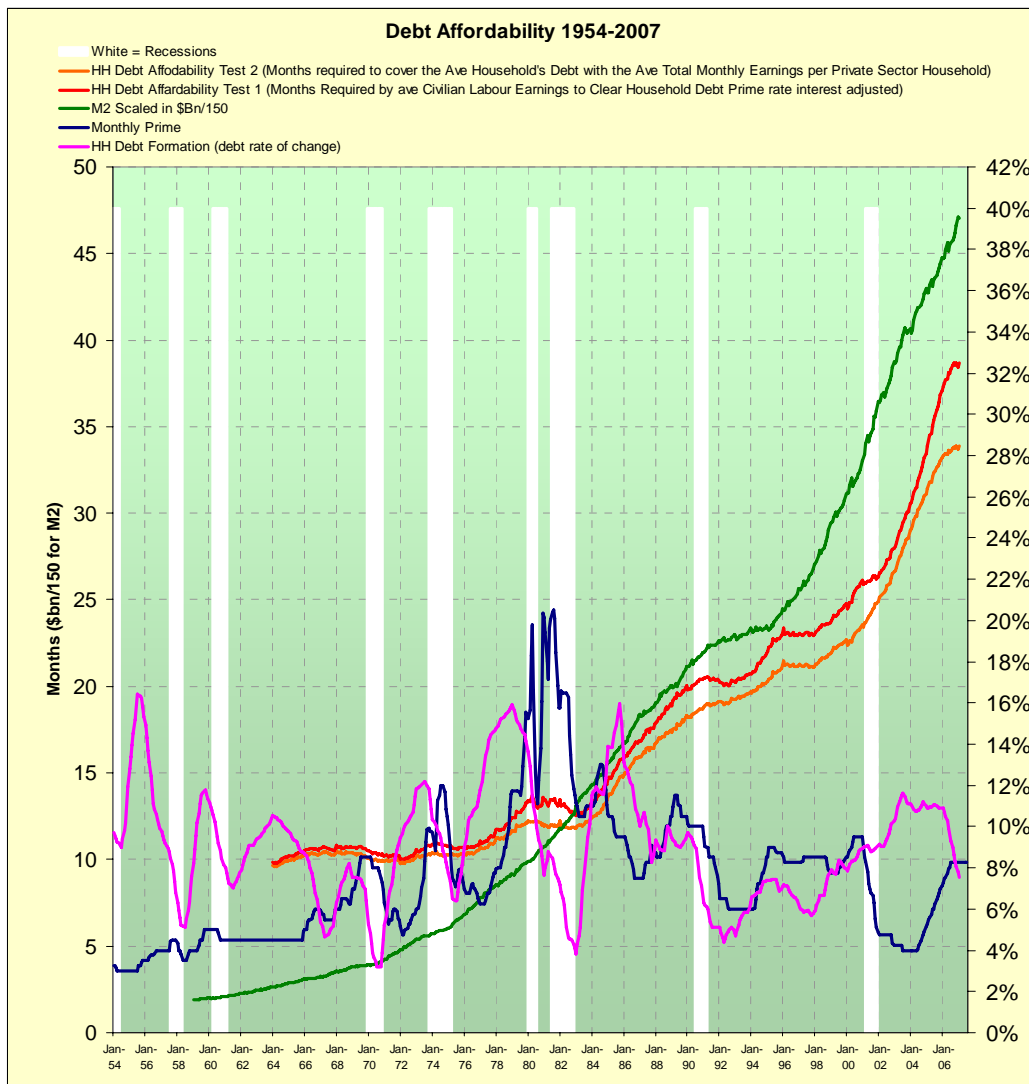
China perpetuated the Japanese export-on-credit model on a grandiose scale with the USA. China is now enjoying the up leg of the Japanese twin asset bubbles with strong internal inflation surges, a manic stock exchange and red hot real estate market. It will all unwind during the course of the now unfolding systemic event.

2007 – The Yen Carry trade, Sub-prime crisis and its aftermath.

Making sense of the menacing presence of export-on-credit policies is the first step in understanding the current economic environment. The next step is a realisation that a zero interest rate supported by unlimited liquidity supply makes a mockery of any kind of savings. Savings are no longer a prerequisite for credit expansion and demand for debt is seemingly infinite and matched with an infinite supply of debt (Central Bank liquidity). That is unfortunately not correct.

Debt must be repaid. Any banker of substance will tell you that credit assessment rests on two fundamental pillars. The cash flow ability to repay and the capital support for the loan (the security or collateral). Asset hyperinflation will suspend the “cash flow ability to repay” and bankers will rely almost entirely on the value of the underlying asset to liquidate the debt. Debtors who would previously never have qualified for debt are encouraged to speculate on asset hyperinflation and it is actually nothing other that banks speculating in asset hyperinflation by proxy (“liar loans” were acceptable). The level of debt absorption under these conditions is highly elevated and can be sustained up to the point where: (i) The risk category of new debtors available, overshadows even the loose lending practices typical of an asset hyperinflationary period; and (ii) New entrants to an asset class can simply not afford the capital portion of the purchase. This holds true for all asset classes

including houses, cars and shares. No amount of new liquidity even at zero interest rates can overcome the requirement to be able to repay the capital and the lower the interest rate the more irrelevant interest rates become in the equation, shifting the focus to the repayment of the hyperinflated capital portion. Debt saturation manifest in the economy when these two capital restraining conditions are present. Debt saturation is an absolute deterrent to the exponential nature of money creation flowing into debt creation. The rate of change in debt creation starts declining, the economy goes into a consolidation period and debt is rebalanced in the economy. See the chart below. The chart uses the official data from the Board of Governors of the Federal Reserve System as supplied by it and various other government agencies. Rates of change have been calculated monthly and annualised as the simple sum of the previous 12 months.



It is necessary to use all these series as it is the relationships between them that we are interested in. The white spaces in the background are the official "recessionary periods" as defined by the National Bureau of Economic Research (NBER). The dark blue line is the Bank Prime Rate. The dark green line is the exponential curve of the M2 money supply. Note that there is no visible relationship between the interest rate (the price of money) and the money supply (supply of money) as factors such as the population numbers, the economically active population, levels of productivity and numerous other variables interpose in the relationship between the price of money and the supply of money.

The red and orange lines are both calculated to arrive at the number of months it would take the household sector to repay its debt from a macro economic perspective. The relationship between these two measures and the recessionary periods (white) is very informative. Note how each recessionary period and a visible slow down in the growth rate of both series coincide. Observe also that both series have made decisive downward turns by Jan 2007. Note also the extreme expansive period from 2002 to 2006. The average household could repay its portion of the total household debt in 10 months in 1964 but needed 38 months by January 2007 to repay its debt if its total disposable income was allocated to the repayment thereof. The current negative savings rate tells us that the debt will never be repaid unless a period of enforced debt repayment takes place. Repayment of debt is savings-after-the-event in economic terms.

The purple line measures the rate of change in household debt or the household debt formation rate. Note how the rate of change has been falling since Aug 2004 even before interest rates have started rising and how household debt formation has continued to drop precipitously since interest rates started rising. These facts, combined with the decline in the debt affordability test (reducing debt), is a near absolute predictor of a recessionary period. More important, it indicates that debt saturation conditions are in play. Two periods of extreme debt formation from 1983 to 1990 and from 1998 to the end of 2006 are set to haunt us in the next market cycle of forced savings (debt repayment). A very interesting observation can be made in the mini recession of 2002. Debt repayment was prevented through a combination of unrestrained money creation and monetary stimulation and extremely low interest rates, reduced at a breathtaking pace. The failure to clear debt during this period is set to compound the problems facing us in the next systemic event that started with the sub-prime pricing mechanism breakdown. The return of the twin pillars of debt evaluation where asset hyperinflation can no longer be sustained will require a much more prolonged and severe debt clearing period. The very clear spike in debt formation could very well reverse in a severe debt liquidation leg with a commensurate recessionary period.

Monetary Policy responses may take one of four forms. High interest rates and high levels of money creation; high interest rates and contained money creation; lower interest rates and contained money creation; or low interest rates and high levels of money creation.

Economic logic dictates that rising interest rates will clear a debt built-up during a period of "market enforced saving". The next logic is that extreme demand for debt in absolute terms should result in an increase in the price of debt i.e. rising interest rates. The higher the money supply growth in the preceding period the higher interest rates must go to clear debt. Increasing money supply interferes with debt clearing. A policy response of accelerated money supply and rising interest rates will result in very elevated interest rate levels (see 1980-1983). Neutral money supply growth will clear debt at lower interest rates (see the years of 1990-1995). Lowering interest rates and accelerating money supply will prevent debt clearing (2001-2003).

Debt saturation occurs when even extreme money supply growth can no longer encourage a positive growth in debt formation. See how from mid 2003 to mid 2004 debt formation (purple line) actually declined in total contradiction to a fast falling interest rate. Debt formation simply collapsed from the moment that interest rates also started rising see mid 2004-2007 and this during a period of relatively low interest rates, factually negative real interest rates prevailing in the economy.

It brings us to a very significant observation. Debt clearing will take place at even low levels of nominal interest rates during an event of debt saturation. The most telling historic example is the Japanese experience. The debt and speculative excesses of the asset hyperinflation combined with the policy response of unlimited quantitative easing (unlimited money supply to the banking sector at near zero or zero interest rates) were directly responsible for the painful and prolonged stagnation of the Japanese economy. Here one has to contemplate the real interest rate applicable to an economy but calculated as the nominal interest rate less the inflation rate of all asset classes. Only then will the true extent of negative real interest rates be revealed before the systemic event and the extent of the positive real rates (the market imposed penalty rate) after the systemic event. Perhaps a very simple example would be housing where a nominal interest rate of 5% prevailed against an asset inflation of 20% with a real interest rate at -15%. Where is the incentive to save? Observe the reversal of the process. Housing at -15% price growth and 5% interest rates now imply a "real rate" of 20%. Allowing the rate to drop to zero will not change the mathematical truth of a 15% "carry cost" whether called "interest" or not.

The deliberate intervention to prevent debt clearing or market enforced savings episodes in an economy will eventually lead to debt saturation. Debt saturation will clear in a systemic event. The debt clearance can be short and brutal (1923 Weimar Germany) with contained money creation (and real interest rates). Debt clearance can be placed in stasis with an economy in recessionary stagnation (Japan 1995 to present) by providing unlimited money supply and lowering interest rates to unbankable levels.

Unbankable interest rates occur when the banking margins (lending rate less deposit rate) multiplied by the volume of lending is unprofitable and insufficient to cover bad debts. Banking stasis occurs when the sum of banking margins and banking fee income must be supplemented through

cheap or free central bank liquidity to prevent large scale debt default. Dysfunctional loans are ring fenced in the Banking and Investor Fund structures when a policy response of lower interest rates is implemented. The hyperinflated asset markets crash and stagnate under such policy conditions. History shows that the damage to previously inflated asset prices is less when sensible debt clearing policies are implemented. The speculative sector's call for a lowering of the interest rates in face of a systemic banking event is a death wish for the very markets that they desire to support. The sub-prime crisis is but the 1st overt sign of the unfolding systemic event. Money creation placed in the hands of the state to support asset inflation through direct purchases or acquisition of assets ("unconventional methods") does not differ from the money printing done by Weimar Germany and placed in the hands of the state for spending. Deployment of "unconventional methods" will take the first steps towards currency destruction in a hyperinflationary model. "Unconventional methods" of monetary policy must surely be a monetary version of nationalisation of assets. Government deposit guarantees will surely translate into massive fiscal deficits.

The world will have to deal with the debt; save or suffer the consequences. The world needs to deal with the export-on-credit policies or the distortions in the world economy will self destruct. Alternatives to the Yen carry trade and Japanese bank rescue-by-stealth must be found. For now, we are living a systemic episode with all the hallmarks of an epic event and the policy response will ultimately decide our economic fate. Early devaluations helped countries in the past to relocate some of the pain to lenders, it may become an attractive policy option again. The devaluation of the USD may well become the chosen path of least resistance for the current monetary and fiscal authorities of the USA.

No amount of monetary resuscitation will restore consumer spending or aggregate demand, the term used by the FED, when debt saturation prevails. Further ruthless debt stimulation via monetary policy will end in currency failure. Currency failure can manifest in hyperinflationary payment mechanism failure (Weimar Germany 1923); or deflationary payment mechanism failure (USA 1929); or in deflationary stagnation (Japan 1990-2007). That is the message from history.

Sarel Oberholster

References:

1. June 11, 2003 amended March 23, 2004. Finance and Development. ***The Realities of Modern Hyperinflation***. Despite falling inflation rates worldwide, hyperinflation could happen again. Carmen M. Reinhart & Miguela Savastano (both IMF senior personnel).
2. **April 2005. United States Government Accountability Office Report GAO-05-313**. Report to the Committee on the Judiciary, House of

- Representatives. **MUTUAL FUND TRADING ABUSES**. Lessons can be learned from SEC not having detected violations at an earlier stage.
3. March 2, 2004. The Federal Reserve Board. Remarks by Governor Ben S. Bernanke at the H. Parker Willis Lecture in Economic Policy, Washington and Lee University, Lexington, Virginia. **Money, Gold, and the Great Depression**.
 4. August 14, 2007. **An Introduction to Financial Crises** by Allen, Franklin and Gale, Douglas M. Wharton Financial Institutions Center Working Paper No. 07-20. Abstract: This essay was prepared for the volume on Financial Crises that we edited in THE INTERNATIONAL LIBRARY OF CRITICAL WRITINGS IN ECONOMICS – Series Editor: Mark Blaug published by Edward Elgar.
 5. November 21, 2003 JOUR 440. **Public markets and public's right to know**. David Bracken.
 6. March 27, 2007. CFO.com. **A Short History of Hedge Funds**. Alan Rappeport. From Aristotle to Amaranth, the funds have lured investors with dreams of heady profits and terrified them with nightmares of risk.
 7. **The German Hyperinflation, 1923**. Excerpt from *Paper Money* by "Adam Smith," (George J.W. Goodman), pp. 57-62.
 8. December 23, 1999. The Economist. Millennium Issue. **German Hyperinflation – Loads of Money**.
 9. MSc Dissertation 2003. **The Dollar and World Liquidity: A Reappraisal** - Simon Cox. Marjorie Deane Financial Journalism Foundation - The Economist Group.
 10. http://www.fdic.gov/bank/historical/history/211_234.pdf. Chapter6. **The Mutual Savings Bank Crisis**. History of the Eighties—Lessons for the Future.
 11. March 2, 1996 Investment Company Institute PERSPECTIVE, volume 2, number 2. **MUTUAL FUND SHAREHOLDER ACTIVITY DURING U.S. STOCK MARKET CYCLES, 1944-95**. John Rea and Richard Marcisand the Research Department, Investment Company Institute. Research assistance provided by Srinivas Pulavarti and Jianguo Shang.
 12. February 22, 2006. Bloomberg Columnists. **Japan's Boom May Explode Yen-Carry Trade**. William Pesek Jr.
 13. February 22, 2007. The Economist print edition. Economics focus: **Carry on speculating**.
 14. 1970. **The Nightmare German Inflation** by Scientific Market.
 15. August 31, 2007. Morgan Stanley - Weekly International Briefing. Global: **What chance of a really hard landing?** Gerard Minack (Sydney).
 16. January 03, 1969. Time Magazine. **Mates Checked**.
 17. Wikipedia. **The Vietnam War**.
 18. August 2001. Maastricht Economic Research Institute on Innovation and Technology, Maastricht University. **Economic Stagnation in Weimar Germany: A Structuralist Perspective**. Thorsten H Block.
 19. April 28, 1999. **World Real Interest Rates and Business Cycles in Open Economies: A Multiple Shock Approach**. William Blankenau , M. Ayhan Koseb, and Kei-Mu Yic.
 20. March 2007. Bank of Canada Working Paper 2007-16. **World Real Interest Rates: A Global Savings and Investment Perspective**. Brigitte Desroches and Michael Francis.
 21. February 2007 (Draft). **A real interest rate rule for monetary policy?** John Smithin. York University.
 22. Recession data. NBER. The NBER (National Bureau of Economic Research, Inc.) does not define a recession in terms of two consecutive quarters of decline in real GDP. Rather, a recession is a significant decline in economic activity spread across the economy, lasting more than a few months, normally

visible in real GDP, real income, employment, industrial production, and wholesale-retail sales. For more information, see the latest announcement on how the NBER's Business Cycle Dating Committee chooses turning points in the Economy and its latest memo, dated 07/17/03.

23. Board of Governors of the Federal Reserve System. Series ID: DFF, PRIME, AMBNS, BOPI, DEBTNS, M2OWN, MPRIME, CD1M, BUSLOANS, CONSUMER, LOANS, CLF16OV, FYGFD, GFDEBTN, MICH, AHETPI, DSPI, AWHNONAG, EXJPUS, CMDEBT, FYOINT, CNP16OV, PAYEMS, AUTONS, REALLN, GS10, DISCTD8, FHA30, PPIACO, M2NS, BOPBCA, CURRCIR, BOGAMBNS, ADJBORNS.