2. ROMANIA IN A POST-CREDIT CRUNCH WORLD? A CAUTIONARY TALE FROM AUSTRALIA AND AMERICA

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Abstract

We present data on debt accumulation in Australia and the United States, and tentative data on Romania, to pose the question of whether Romania might experience a credit crunch as a result of the US subprime financial crisis. We develop a model of a credit crunch in a pure credit economy with endogenous money creation to show how changes in bank lending practices and borrower repayment behaviour can bring about an economic decline.
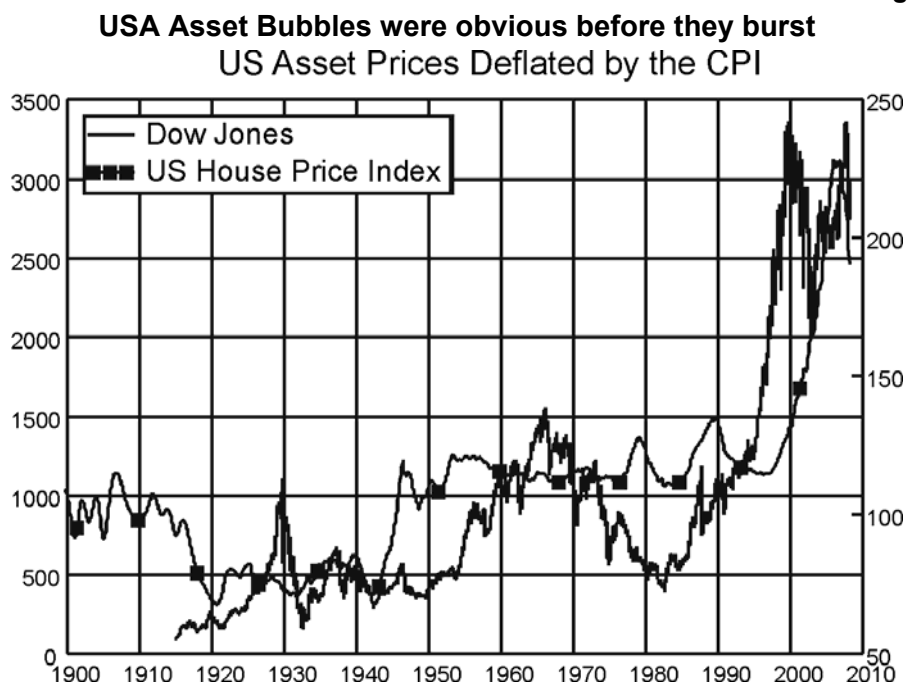
Quo Vadis, Economics?

At the beginning of the last decade, the global economy faced a relative growth, prolonged by the increasing magic of capital flows and inadequate appreciation of risks and future activities in the markets. The lack of vision in deciding standards and the approach of a risky behaviour in the market are now, more and more, perceived as misunderstandings of economic storms signals. In some developed countries the policy-developers and strategy experts did not comprehend, in due time, and at right standards, neither the risks of the moment - insufficiently matched and inter-coordinated within the macroeconomic policies, nor the consequences of building up in volatile financial markets.

Thus, sophisticated financial innovations managed to excessive leverage in creating vulnerabilities bringing together inadequate structural reforms, unsustainable interna-tional macroeconomic outcomes and severe market disruption.

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Figure 1

USA Asset Bubbles were obvious before they burst

US Asset Prices Deflated by the CPI

One good example illustrating these aspects is given by the housing industry of which 70% increase in prices during the first years of this last decade was followed by a major decline until nowadays. It was an illusory policy that cruelly hit the reality and destroyed the magic of a continue increasing of investors and homebuyers number, in a sort of housing perpetuum-mobile, beyond any idea of risk in future credits; this approach was also sustained by those policy makers thinking that subsidized credit could permanently achieve success based on permanent increase of houses size, prices ownerships number.

When we started to prepare this paper, America's Dow Jones stock market index had officially taken a "correction" position - defined as a fall of more than ten percent fall from a previous peak. More ominously, American house prices are more than eight percent below their peak, and are currently falling at a rate that exceeds one percent per month - an unprecedented rate of decline.

By 1998, Australian house prices exceeded the peak set in 1989, and in late 2000 the bubble clearly accelerated (the impact of the decisions to double the First Home Buyers Grant and halve the rate of capital gains tax in 2004 also stick out like the proverbial sore thumb). Though our bubbles appear less extreme than those in the USA; this is true of shares - even though by 2005 they exceeded the levels of overvaluation that applied in 1987 - but not of housing, where our bubble is in fact substantially bigger than the USA's (see Nigel Stapledon's research into long term housing prices in Australia).

Australia's Asset Bubbles

Australian Asset Prices Deflated by the CPI
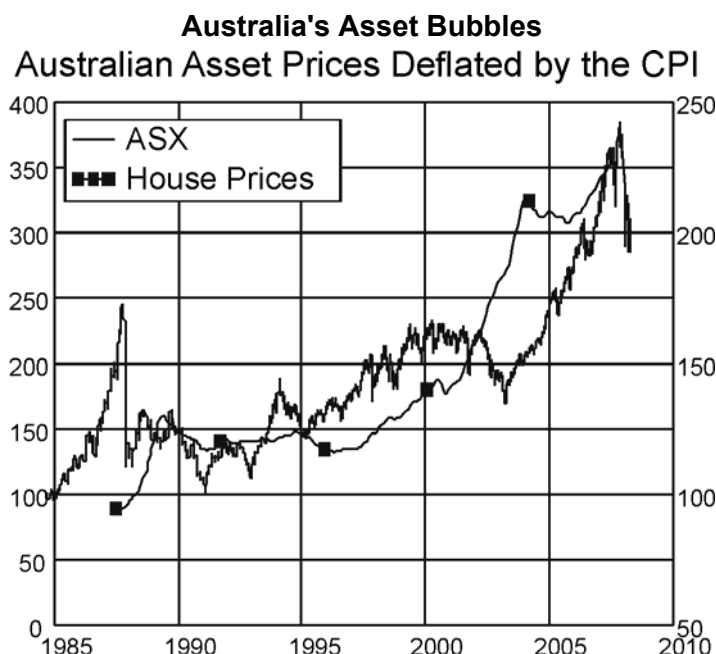
The proximate cause of this shakeout in American asset markets is the so-called "subprime lending crisis". Professional opinions differ on how long this crisis will last and how serious its consequences will be, but the minimum expectation is that a recession as colloquially defined (two quarters or more of negative growth) will result.

Two different indicators warning the trouble are CPI-deflated value of asset prices, and the ratio of private debt to GDP. The debt to GDP ratio has reached a level that far exceeds anything ever seen before in Australia's economic history - including during the booms that preceded the Great Depressions of the 1890s and 1930s.
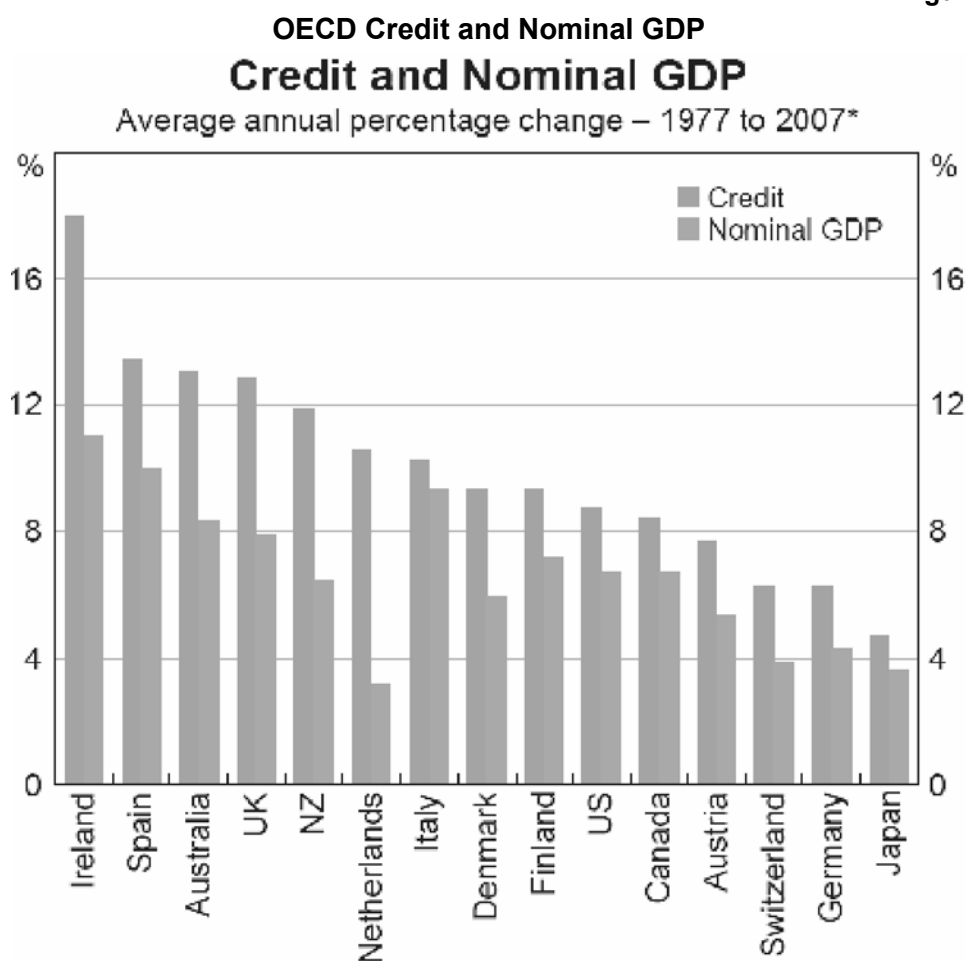
In this paper we suggest that the consequences could be much more severe. The basis of our pessimism is a closer look at the broader phenomenon of which the subprime crisis is merely the latest instalment: a multi-decade trend for private debt to rise faster than income.

Research by Australia's central bank, the Reserve Bank of Australia (Battellino 2007), indicates that over the three decades from 1977 to 2007, private debt (the sum of business and household debt) has risen faster than nominal GDP in 15 of the major OECD nations (the only significant exception is France).

On this gauge, the US debt phenomenon no longer appears especially remarkable. Though the USA's ratio of private debt to GDP more than doubled over those three decades, this increase was at the low end of the international scale, which ranged from a maximum of an elevenfold increase for the Netherlands to a doubling for Germany (Japan is a special case, which we discuss later). The median experience has been that of Australia, whose private debt to GDP ratio has raised threefold in the last 30

years - and sixfold since the mid-1960s. The rise in private indebtedness is therefore a global phenomenon - which we argue is unsustainable, and must at some point reverse. When it does, the economic circumstances will be very different to those that have applied for the past three decades. We will pass from a debt-driven economy to one dominated by a "credit crunch".

Figure 3

OECD Credit and Nominal GDP

Credit and Nominal GDP
Average annual percentage change – 1977 to 2007*


From the mid-60s till 2008: the debt-driven economy

The growth in debt illustrated by the above charts has a profound impact upon economic performance that is neglected by conventional economic analysis, which ignores the role of monetary factors in economics.

Aggregate demand in an economy for everything from commodities to assets - technically, Gross National Expenditure - is the sum of income and the change in debt.

Figure 4

USA and Australian Debt to GDP Ratios
Private Debt to GDP Ratios
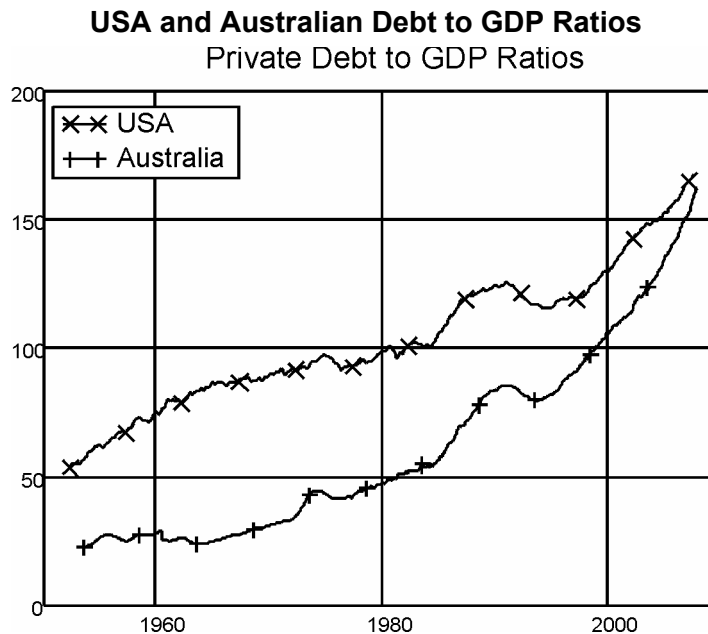
When debt levels are low compared to GDP, the contribution from change in debt is negligible, and this monetary side of the economy can comfortably be ignored. But when debt levels become large compared to GDP, much of the effective demand - and the majority of the volatility in economic performance - is driven by changes in debt. Monetary factors are no longer economically irrelevant. Australia's recent economic history clearly illustrates this shift from an economy where monetary factors can be ignored, to one where they are dominant.

As noted above, Australia's debt to GDP history is closer to the mean for all OECD countries than that of the USA. Also, even though Australia's economy is currently performing well, while America's is now feared to be in recession after the collapse of the subprime market, Australia's economic history also provides a clearer example than America of a speculation-dominated economy.

In the 1950s and early 1960s, when Australia's private debt was less than 25% of GDP, annual changes in debt contributed less than 5 percent to Gross National Expenditure. That changed markedly in 1973, when the first and smallest of three recent "super-bubbles" in debt occurred (see Figure 3). Briefly, the change in debt that year accounted for 10 percent of nominal GNE (see Figure 4) simultaneously, the great 1970s inflationary surge began, and unemployment in Australia exploded from its previous historic level of below two percent, to over six percent. Most economists blamed the downturn on poor government economic policy and inflation, but the real cause was the collapse in speculative bubble that the growth in debt had financed. With the bubble over, speculators shifted from willingly taking on debt, to trying desperately to reduce it. The rate of growth of debt fell well below the rate of inflation,

and the change in debt went from boosting real aggregate demand to subtracting from it. The Australian economy went into its first post-WWII recession - caused by a decrease in the rate of growth of private debt.

Australia's Economic Dependence on Expanding Debt

Change in Debt, Demand and Inflation
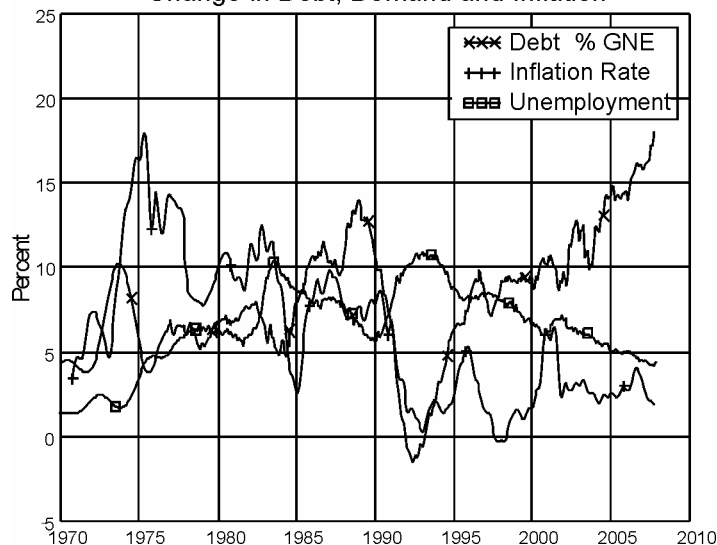
The dependence on debt became even more extreme as debt rose from 44% of GDP in 1973 to 85% in 1990, during the next debt super-bubble. At the peak of that bubble, increases in private debt accounted for almost 14% of aggregate demand. This was a huge credit-driven boost to the economy while it lasted, but when it went into reverse the change in debt turned negative and reductions in debt reduced nominal GNE by almost 1.5 percent. Real GNE fell by substantially more, since inflation dropped along with the fall in debt. The economy entered into its deepest post-WWII recession yet, with unemployment exceeding 11 percent.

We face the dilemma that with high debt levels, economic performance becomes dependent on the further accumulation of debt. When debt is small or changing by only small amounts, most variation in economic performance is due to real productive factors. But when debt is much larger than output, changes in debt contribute disproportionately to changes in apparent economic performance. Ironically, superficially good economic performance - such as falling unemployment--becomes dependent on ultimately unsustainable further increases in debt.

This is apparent in the correlation between unemployment and change in debt in the Australian data. In the 1950s and 1960s, when debt was under 25% of GDP, changes in debt made a comparatively small contribution to changes in effective demand, and hence the correlation between changes in debt and changes in unemployment was small (and positive).
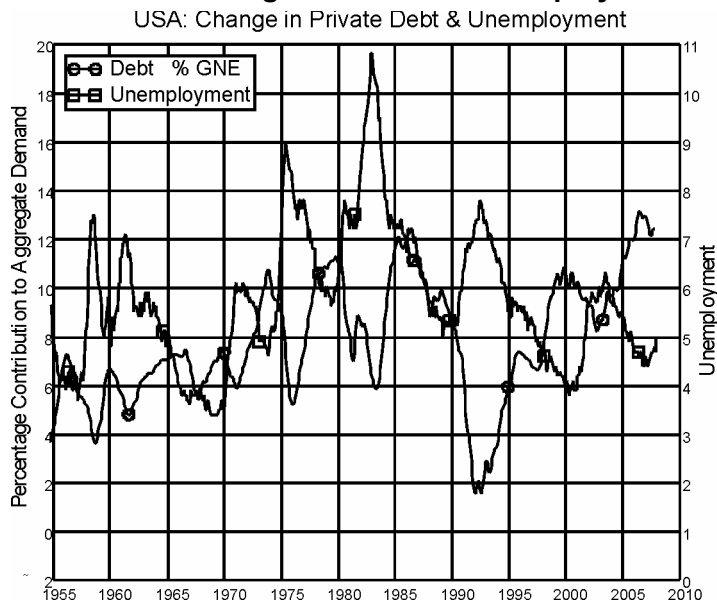
Figure 6

Australian Change in Debt and Unemployment

Australia: Change in Private Debt & Unemployment

However, as debt rose relative to GDP, changes in debt made a much larger contribution to changes in effective demand, and hence to changes in unemployment. The correlation between changes in debt and changes in unemployment consequently increased in magnitude as debt accumulated over time. Now, that

Figure 7

American Change in Debt and Unemployment

USA: Change in Private Debt & Unemployment

correlation has stabilized at more than 90 percent - which means that a decline in the rate of growth of debt is highly likely to be correlated with an increase in the level of unemployment (see Figures 5-6).

A similar observation applies to the American economy (see Figures 7-8). The correlation of changes in private debt with unemployment is more volatile than in the Australian case - in part because of the comparatively massive contributions from changes in government and financial sector debt to American demand. But clearly the Australian and American economies, in concert with 13 other major OECD nations, have become "addicted to debt".

Figure 8

Growing Correlation of Change in Debt and Unemployment as Debt Rises

Correlation of Unemployment & Debt% GNE
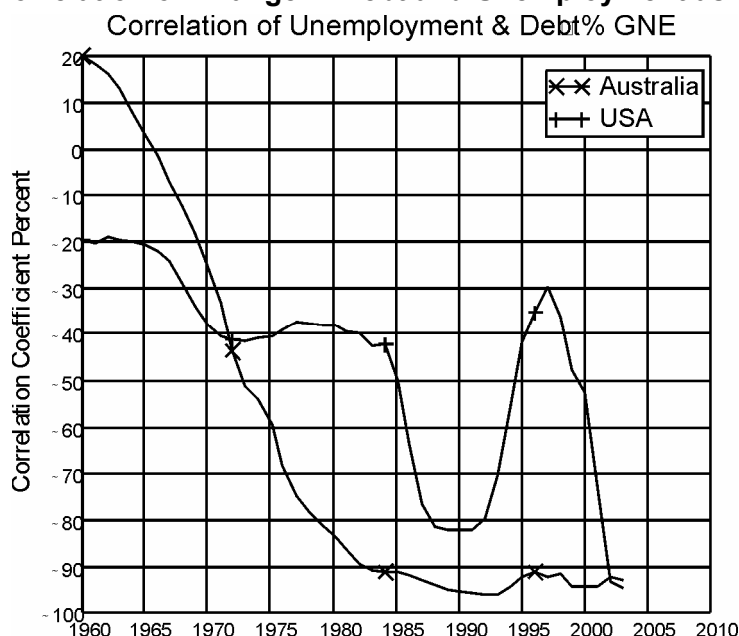
This is the most conventionally economic danger facing the world economy as the US subprime crisis spreads. As households go from willingly taking on more debt to trying to reduce their indebtedness, the change in debt will go from boosting aggregate demand to subtracting from it. The 1990s collapse in debt levels caused unemployment in Australia to rise from six to eleven percent - yet in 1990, the change in debt was responsible for "only" 14 percent of GNE. Today, it accounts for over 18 percent of GNE.

Similarly in the USA, when the debt-driven component of nominal GNE dropped from 10 to 2 percent across the 1990s recession, unemployment rose from 5 to almost 8 percent. Today, increasing debt accounts for 14 percent of US GNE - and the subprime crisis clearly marks the end of this latest and biggest debt bubble. The macroeconomic impact of the switch from expanding to contracting debt levels is likely to result in the deepest recession in the USA's post-WWII economic history.

Since so much of the OECD is in a similar debt-driven state to America, the turnaround in debt that is occurring there is likely to be replicated across much of the OECD. It is therefore highly likely that at least an OECD-wide recession will occur, if not a global recession. If so, this will be the first time in Romania's post-Revolution economic history that external economic conditions have been contractionary rather than expansionary. What are the implications of this for Romania itself?

Obviously this depends to some extent on the level of indebtedness in Romania. According to OECD database (http://stats.oecd.org/wbos/Default.aspx?usercontext =sourceoecd), where annual data to 2006 implies that Romania's aggregate debt to GDP ratio is even worse than that for the USA, both in terms of magnitude and its rate of increase. This suggests that Romania could face a debt-driven downturn in aggregate demand when the rate of change of debt falls, in addition to a diminution in export demand. According to the central bank 2007 report the composition of the external debt by debtor illustrates, in a year by year comparison, on both medium and long term, the prevalence of non-guaranteed public debt (64.3 percent), followed with 29.2% by direct public debt (guaranteed public debt - 8.2 %), and deposits - 8.5 % representing a wider nonguaranteed public debt by 6.2 %, whereas the weights of direct public debt and guaranteed public debt narrowed by 6.4 percentage points and 4.9 percentage points respectively. As regarding the aggregate monetary balance of credit institutions data, in 2007, non-government credit increased at a faster step compared to the previous year (nominal 60.2 % versus real 50.3 % compared to 54.5 % and 47.3 %).

Figure 9

**Australia's Long Term Debt to GDP History: Three Debt Bubbles**
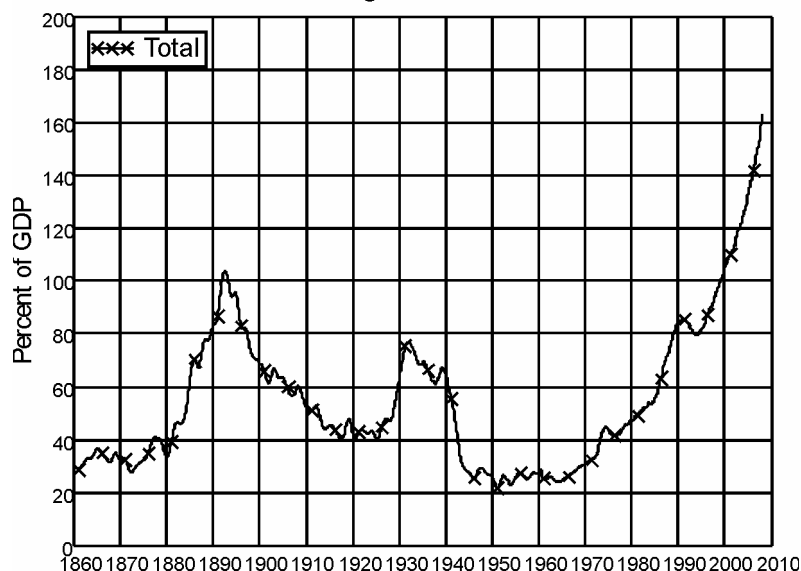
Structural analysis indicates that the rise in loans to households was the driver of credit expansion. The share of loans to households increased to 48.1 percent at end-2007

from 42.5 percent a year earlier, thereby pushing non-government credit up by around 62.5 percent, posting a much faster growth rate (82.1 percent in nominal terms; 70.9 percent in real terms) than loans to NFIs (46.8 percent in nominal terms; 37,7 percent in real terms). As expected, in absolute terms, consumer loans held the largest share in 2007.

Long-term Australian economic data implies that this will be no ordinary recession. Australia's Reserve Bank assembled a long term data series on the debt to GDP ratio, which shows that Australia's economic performance since 1965 has been driven by a debt bubble which is the third and by far the biggest in its economic history.

Figure 10

Debt in Romania and the USA
Debt to GDP Ratios
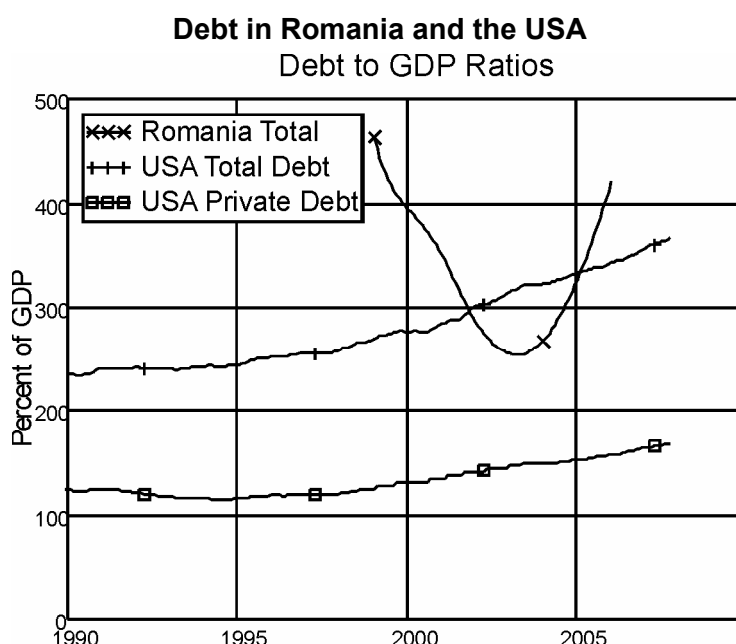
It is likely that the same applies to the USA: that today's private debt levels are the largest in the history of capitalism, and that what we are experiencing now is a repeat of the processes that gave rise to earlier financial panics.

As Mark Twain famously remarked, "History doesn't repeat, but it sure does rhyme", and Australia's economic history gives strong reason to expect something far more severe than a mere recession. The bursting of Australia's two previous historic debt bubbles - in 1892 and 1931 -ushered in not merely recessions, but Depressions (long-term data on real GDP growth, money supply change and inflation implies that the USA also experienced a Depression in the 1890s - see Keen 2008A). Yet the debt levels then were substantially less than today's. It appears that the existence of Central Banks that, as in the case of the US's Federal Reserve, respond to financial crises by trying to "save the private sector from itself", may actually have contributed to a "moral hazard" dilemma that has allowed debt levels to exceed previous bounds.

If history is any guide, then without Central Bank activism - such as the rescue of Long-Term Capital Management, and the aggressive cutting of reserve rates during the 1990s recession - it is likely that the 1990s bubble would have marked the peak of private debt accumulation (at 125 percent of GDP for the USA, and 85 percent for Australia). That in itself would have been bad enough, given the historical record - given the aftermaths of the previous two bubbles. But with today's debt levels, we truly are in unprecedented territory.

We are not saying that a global Depression is inevitable, because there are other aspect of the modern economic and social system that differs substantially to that of 1930 and 1890. Bank collapses and the destruction of depositors' savings, which were a feature of the 1890s in Australia (and the 1930s in America), will not recur; and government social security payments during a downturn will provide households with cash flows that can be used to service debt, something that did not happen in 1930.

Given this philosophy, sound economic management has come to be seen as requiring a reduction in government interference in market processes, and the enhancement of competition, while Central Banks have interpreted their monetary policy responsibility as being limited to controlling the rate of inflation via movements in the short term rate of interest.

But there will inevitably be an extended period of reduced vitality to aggregate demand, as income is channelled to pay debt levels down from today's unprecedented levels to something closer to the 20-60 percent of GDP level that appears sustainable in the long run. In Australia and America's cases, such a reduction in private debt would require more than an entire year's GDP to be directed simply at debt reduction. Since that cannot be done in one hit, this implies a long period where demand will grow more slowly than capacity to produce output rises.

The Ponzi Credit Dynamic

The Australian long-term data indicate that there is something systemic in Western economies that lead to periodic debt explosions, and subsequent serious debt-driven downturns. The most cogent theory to explain this phenomenon is the "Financial Instability Hypothesis", which was developed by the American economist Hyman Minsky in the late 1950s and early 1960s (see Keen 1995, 2008B). A key aspect of Minsky's model was the existence of "Ponzi financing", in which individual speculators use borrowed money to buy assets, and then attempt to profit by selling them to other speculators for a higher price.[1]

This behavior is dependent on asset prices rising faster than commodity prices, and requires that debt rise faster still—and this has clearly been the case in most OECD economies in the last 3 decades. This in turn requires a financial system that willingly generates debt, up to a point at which the debt burden causes a crisis that suddenly stems the flow of credit - a "credit crunch".

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1 *With very little irony, subprime lending can be summarized as a scheme to make money by lending money to people who couldn't afford to repay it. It is thus a classic "Ponzi Scheme", and the wonder is not that it collapsed, but that anyone could take the Scheme seriously when it was first mooted.*

Conventional models of money creation - which argue that the banking system does no more than amplify the monetary creation processes of the Central Bank - cannot explain this process, and in any case fail to account for the empirical data which show that credit money creation actually precedes the creation of Central Bank money by up to one year (Kydland and Prescott, 1990). A far more cogent explanation is given by the Circuitist School model of endogenous money creation (Graziani 1989, 2004). Recently one of us (Keen, 2007) has developed a mathematical model of this process in a pure credit economy.

The model explains how money is endogenously created, why banks are motivated to extend credit indefinitely, and what happens to aggregate demand when a credit crunch occurs. It is easily developed from a "double-entry book-keeping" table of the flows between accounts that are initiated by a loan from a bank to a firm to finance production.

The model is developed in more detail in Keen, 2008C (see also Chapman & Keen, 2006). Here we will stick with a simpler presentation for the sake of exposition. A bank loan to a firm creates two accounts: a record of debt F_L, and a deposit account for the firm F_D. An initial loan thus instantly creates a matching deposit, and also sets up interest payment obligations between the bank and the firm: the firm is obliged to pay interest on the outstanding debt, while the bank is obliged to pay interest on the current level of the firm's deposit account (the rates differ of course, with the rate of interest on loans r_L exceeding that on deposits r_D.). The funds flow between the firm's and the bank's deposit accounts, as shown in the first row of Table One.

Table 1

A model of endogenous money creation

Account Type	Assets			Liabilities			Sum
	Loans	Reserves	Sum	Deposits			
Name	F_L	B_R	☺	F_D	B_D	W_D	☺
Interest				$r_D \cdot F_D$ $-r_L \cdot F_L$	$r_L \cdot F_L$ $-r_D \cdot F_D$		0
Wages				$-w \cdot F_D$		$w \cdot F_D$	0
Interest					$-r_D \cdot W_D$	$r_D \cdot W_D$	0
Consumption				$\beta \cdot B_D$ $+\omega \cdot W_D$	$-\beta \cdot B_D$	$-\omega \cdot W_D$	0
New Loans	$n_M \cdot F_D$		$n_M \cdot F_D$	$n_M \cdot F_D$			$n_M \cdot F_D$
Repayment	$-R_L \cdot F_D$	$R_L \cdot F_D$	0	$-R_L \cdot F_D$			$-R_L \cdot F_D$
Relending	$L_R \cdot B_R$	$-L_R \cdot B_R$	0	$L_R \cdot B_R$			$L_R \cdot B_R$

Once the firm has money it its deposit account, it can hire workers to produce output. The flow of wages from firms to workers goes into the workers deposit account W_D; this is the second row in the table.

Workers therefore have positive bank balances, and they too receive interest on these balances from the bank; this is the third row in the table.

Workers and bankers then buy commodities from the firm, resulting in expenditure flows from the B_D and W_D accounts to the firm's deposit account F_D: this is the fourth row in the table. The arguments β and ω represent the rates of flow per annum out of each account, relative to the balances at any time.

The next row in the table explains how money is endogenously created. In the real world, firms negotiate lines of credit with banks, which enable them to undertake expenditures - and thus effectively create money in the accounts of other firms - which the banks record as a matching increase in their outstanding debt levels. In the aggregate, this result in a simultaneous increase in Firms' deposits and firms' recorded debt levels. Unlike the previous rows in the table, this results in a net increase in both bank liabilities - the sum of outstanding bank deposits - and bank assets. The argument n_M represents the rate at which the money supply expands each year.

The next two rows record loan repayment flows from firms to banks, and the flow of bank reserves from banks to firms - effectively, the "recycling" of loans that have previously been repaid. Both these transaction flows involve transfers from the liability to the asset side of the bank's ledger, but on the asset side itself they simply result in the form of assets changing: from loans (which generate an income flow to the bank) to reserves (which, being inactive, do not generate an income flow to the bank). The arguments R_L and L_R represent the annual rate of loan repayment and the annual rate of reserve recycling per annum, respectively.

We can now derive a dynamic model of endogenous money creation simply by adding up the columns in the above table. Each column represents the flows into and out of a given account. We thus have the following set of coupled differential equations describing the basic dynamics of money creation in a pure credit economy:

Equation 1: A Coupled Differential Equation Model of Endogenous Money

$$\frac{d}{dt}F_L = n_M \cdot F_D - R_L \cdot F_D + L_R \cdot B_R$$

$$\frac{d}{dt}B_R = R_L \cdot F_D - L_R \cdot B_R$$

$$\frac{d}{dt}F_D = r_D \cdot F_D - r_L \cdot F_L - w \cdot F_D + \beta \cdot B_D + \omega \cdot W_D + n_M \cdot F_D - R_L \cdot F_D + L_R \cdot B_R$$

$$\frac{d}{dt}B_D = r_L \cdot F_L - r_D \cdot F_D - r_D \cdot W_D - \beta \cdot B_D$$

$$\frac{d}{dt}W_D = w \cdot F_D + r_D \cdot W_D - \omega \cdot W_D$$

The model can now be used to explain why banks are predisposed to generate as much credit as borrowers are willing to absorb up until a debt crisis occurs, and also to show what happens when the system shifts from expanding credit to a credit crunch.

On the first issue, bank income rises if the rate of money creation n_M and the rate of loan recycling L_R rise, while it falls if the rate of loan repayment R_L rises. Banks therefore have a vested interest in increasing the rate of money creation, increasing the rate of recirculation of their reserves, and discouraging borrowers from repaying loans.

Of course, as current economic conditions are now reminding us, this state of affairs does not persist when loan defaults grow, and banks become concerned that lending more money will lead not to more profits, but to capital losses. The shift in sentiment we can now see in the USA, from profligate lending to a credit crunch, involves a reversal in the above three key parameters: banks reduce the rate at which they create new money, the recirculation of existing reserves slows, and borrowers try to reduce their indebtedness.

Figure 11

Deposits Before & After a Credit Crunch

Deposit Accounts before & after credit crunch

Crunch at t=10 years
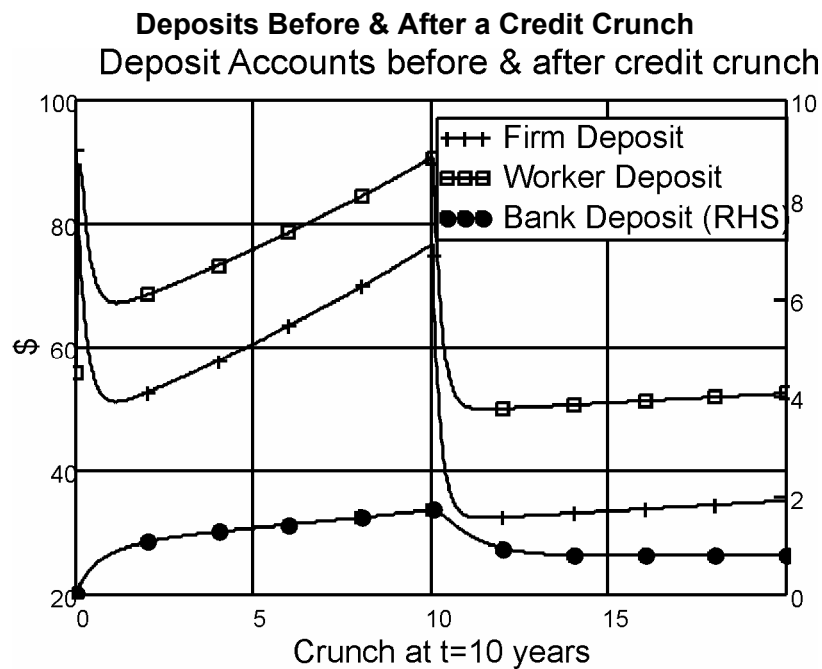
Figures 10 and 11 show this process with a doubling of the rate at which borrowers attempt to repay loans, and a halving of both the rate of recirculation of existing loans and of the rate of creation of new money.[2] The effect is a precipitous drop in money in circulation - which necessarily reduces the rate of economic activity.

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2 *The initial loan value is $100, and parameter values before the credit crunch are: r_L=5%; r_D=3%; β=1; ω=26; n_M=10% R_L=2; and L_R=2.*

Bank assets, nonetheless, continue to grow (though extending the model to include bankruptcy would change this detail), but there is a dramatic shift from active assets (loans) to inactive ones (reserves).

The system does stabilize and return to growth after a relatively short period, but this is at a dramatically lower level of both active money and economic activity.

Figure 12

Bank Assets Before and After a Credit Crunch

Bank Assets before & after credit crunch

Crunch at t=10 years
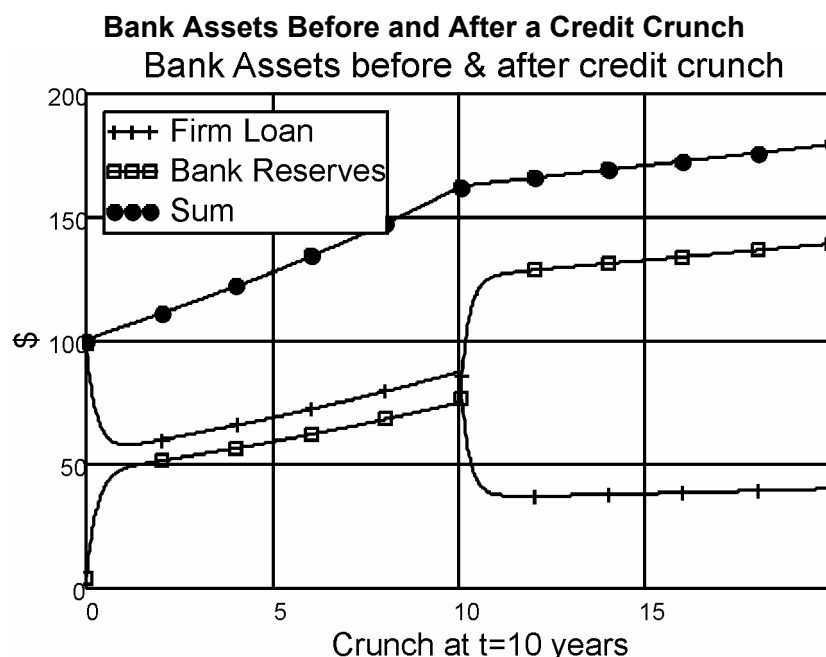
Clearly, a process like this is currently underway in the USA, and given the interconnectedness of the world financial system and the extent to which the rest of the OECD is also debt-encumbered, it is only a matter of time before the same process manifests itself worldwide. There will be attenuating effects from countries which are net global creditors - such as China and Japan - or which have not indulged in the orgy of Ponzi financing (such as France), but these are unlikely to be sufficient to counter the negative impact of both the credit crunch, and the macroeconomic impact of debt reduction on aggregate demand.

Romania, having only just completed the transition from a socialist to a market economy, may therefore have to prepare itself for yet another economic shock as the global capitalist system becomes mired in a debt trap. We can have some modern guidance as to what this might mean for the economy from the experience of Japan, which as noted earlier, is an important exception to the general debt to GDP rule indicated in Figure Two.

This is because though, from the graph, Japan has the lowest rate of growth of debt relative to GDP, this is only because Japan entered a debt-deflation seventeen years ago, when its Bubble Economy collapsed at the end of the 1980s. Japan's private debt to GDP ratio has fallen substantially since 1990 - though the OECD Stat figures are not

directly comparable to the Australian and US data used above, they still imply a more than 20 percent fall in the ratio since its peak. But this has been bought at the cost of a seriously depressed economy, as shown by the OECD's Composite Leading Indicators (CLI), which indicate current living standards and allow cross-country comparisons to be made.

Whereas Japan was far ahead of the USA on the CLI scale in 1990, when the Bubble Economy collapsed, Japan's economic performance stalled - and by 2004, American living standards had moved ahead of Japan's. Japanese living standards today are no better than they were a decade earlier - whereas previously, living standards improved by up to 50 percent every decade. There are doubtless other factors that have contributed to this stagnation, but the debt crisis of the early 1990s and its long-running aftermath are key to understanding why, in 1990, the sun stopped rising in the land of the rising sun.

When Japan's crisis occurred, many Western economists blamed it on the lack of transparency of the Western (and in particular, American) financial system, and argued that Japan's crisis simply couldn't occur in the West, because of its higher financial standards and superior financial innovation. Today's crisis may show that this was simply American hubris: Japan's 1990s crisis was caused by a speculative bubble focused on real estate, and America has clearly followed suit in the subsequent decades.

No way to run an economy

Though a market economy is clearly preferable to a centrally planned one from Romania's own experience, there is something somewhat insane in a system that allows itself to be periodically despoiled by pointless speculation on housing, and excessive debt accumulation. Is this phenomenon something that one must accept as inevitably a part of a capitalist system, or is there something that could be done to stop, or at least attenuate, this process in the future?

There are ways in which some financial instability in capitalism is inevitable. As Minsky once remarked, "stability is destabilizing", because a period of tranquil growth leads investors to revise their risk expectations, thus leading to accelerating growth and the accumulation of debt.

However, much of the long-term run-up in debt has nothing to do with actual investment, but instead involves pure speculation on asset prices. This, in turn, is possible because, when an asset bubble takes hold, when a disconnection develops between asset prices and the income flows those assets generate: share prices rise much faster than corporate earnings, while house prices rise faster than the rents. We need some means to attenuate the willingness of banks to fund speculation on shares and houses when such bubbles arise.

One possible means with housing would be to limit the security that a lender can get over a house to the income that the house itself can be expected to generate.

Figure 13

Before and After Japan's Bubble Economy
Japan's 1990s Depression
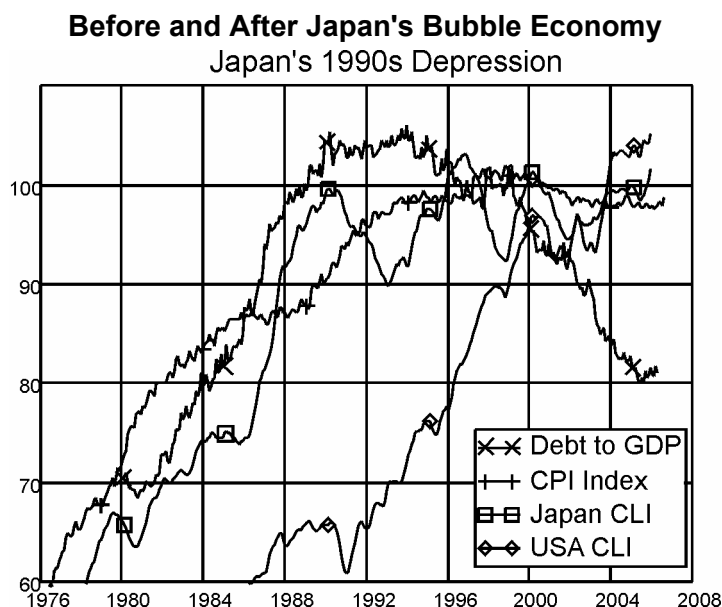
At present, if a borrower defaults on a mortgage, then the lender gets ownership of the house, and can sell it for whatever it can fetch on the market. However, it would be possible to reform lending laws so that the financial limit of the security the lender received was some sensible multiple of the (actual or imputed) rental income from the property. Lenders would still be able to lend as much as they wished to a borrower, but would share some of the risk if he overextended himself. It is feasible that this sharing of risk could reduce the "moral hazard" that the current system generates, and thereby reduce the supply of credit to fund real estate speculation.

Central Banks around the world have largely taken the position that asset price bubbles are not their concern, or that they can't do anything to control them in any event. But the link between asset price bubbles and financial crises should be obvious to all now. Ignoring asset bubbles is clearly not good monetary policy. Because they did not consider indicators like the ones shown above, Central Banks, the supposed watchdogs of our financial system, were caught unawares when the current crisis began.

While this is not as radical a change as the move from a socialist to a capitalist economy that Romania has already undertaken, such changes tend to be very hard to achieve in a capitalist economy because of the political power of lenders, and the many vested interests in real estate. However surely such a change is worth contemplating if the alternative is a fiasco like the USA's current subprime crisis, and an extended Depression like that which still dominates Japan today.

Essentially, the idea of "a new financial order that includes new monetary units that (will help) wipe clean the world's debt ledgers." At best, it will be a tough sell given that the US, by far, is the world's largest debtor and the one most in need of help. The

urgency for all others is that if America sinks, it'll drag down all world economies with it, so it's possible some kind of solution will be arranged. But it's not assured, nor can it be ruled out that the summit will be stalemated as every nation has its own concerns and its own constituency to serve.

More and more people have started to take into account suggestions as Edelson's that world economy will finally manage an "universal currency devaluation" without confiscating gold. They don't have to and instead can "raise the current official central bank price from its booked ($42.22) value an ounce - to a price that monetizes a large enough portion of the world's outstanding debts."

If this happens, debts will be reduced to a fraction of re-inflated asset prices "led higher by the gold price." Edelson also believes that in place of the dollar as a reserve currency, "three new monetary units of exchange (will emerge) with equal reserve status" - a new dollar, euro and "a new pan-Asian currency" with the Chinese yuan likely surviving and linked to a basket of the other three.

With devaluation, the new currencies, under new names, will be worth less than the old ones. New "regulations and programs would be designed and implemented to ease the transition to a new monetary system" - if it happens and it's by no means assured.

Different points of view: Experts and Politicians

There is little evidence that politicians would have done any better in preventing the speculative bubbles in Australia, the USA, or the European countries. However, the great difference between having politicians and independent Central Banks setting monetary policy is that former group is at least accountable for its mistakes via the political process, whereas the latter is not. Given that future economic policy may be dominated by trying to clean up the mess left by this bubble, now is not the time to be making the policy makers even less accountable to the public.

The non-monetary factors may become the main drivers of inflation. Had these truly Millennial factors not been present, the Australian and global economies would now be on the verge not of stagflation, but of deflation. This could still yet occur, if the economic downturn caused by the Subprime Crisis and the ensuing Credit Crunch turns out to be very severe. In that eventuality, the last thing we need is a monetary policy that has a deflationary bias. A glance at the record of the 1930s in the USA shows why. When the "Great Crash" occurred in October 1929, America's inflation ratio was barely positive, and the debt to GDP ratio was 150 percent. The debt ratio then exploded to 215 percent by 1932, driven not by further borrowing, but by a collapse in both real output and prices. Deflation, with prices falling by as much as ten percent per annum for four years, played a major role in making that Depression the worst in recorded history. Therefore it is strongly recommended to take firm act and stimulate economies by providing liquidity, strengthening the capital flow in a sound management, protecting savings and deposits, act against any deficiencies, all at one to keep the credit market warm and flexible. The international financial institutions have to provide the right and accurate support where required. This will help in sustaining the financial stability and allowing the economies grow. Some of the emerging economies like Romania are still experiencing official growth but increasingly are being

adversely impacted by the worldwide slowdown. To avoid misinterpretation of data and situations it is also recommended to strengthening financial transparency that ensures the accountability accuracy and avoids excessive risk-taking. Only promoting prudential oversight, integrity in assuming the risk management, is possible to protect the integrity of the world's financial markets, to avoid conflicts of interest, to prevent illegal activities and market manipulation transformed into abuses. Identifying, in real time, the market vulnerabilities is the single way to anticipate the potential stress and play the right role for a sound economic development.

References

Ric Battellino, (2007), "Some Observations on Financial Trends", Address to Finsia-Melbourne Centre for Financial Studies 12th Banking and Finance Conference, Melbourne - 25 September 2007, http://www.rba.gov.au/PublicationsAndResearch/Bulletin/bu_oct07/Pdf/bu_1007_3.pdf.

Brian Chapman & Steve Keen, (2006), "Hic Rhodus, Hic Salta! Profit in a Dynamic Model of the Monetary Circuit", *Storia del Pensiero Economico,* 2: 139-156.

William A. Darity, Jr., (2008), "International Encyclopedia of the Social Sciences", 2nd edition. 9 vols. Detroit: Macmillan Reference USA.

Chay Fisher and Christopher Kent, (1999), "Two Depressions, One Banking Collapse", RBA Research Discussion Paper.

1999-06, http://www.rba.gov.au/PublicationsAndResearch/RDP/RDP1999-06.html.

Augusto Graziani, (1989), "The Theory of the Monetary Circuit", Thames Papers in *Political Economy*, Spring, pp. 1-26. Reprinted in Musella, M. & Panico, C., (eds.), (1995), *The Money Supply in the Economic Process*, Edward Elgar, Aldershot.

Augusto Graziani, (2003), "The Monetary Theory of Production", Cambridge University Press, Cambridge.

Steve Keen, (1995). "Finance and economic breakdown: Modeling Minsky's Financial Instability Hypothesis", *Journal of Post-Keynesian Economics*, 17: 607-635.

Steve Keen, (2008A), "Depression, Economic". In: William A. Darity, Jr. (ed.), pp. 302-306.

Steve Keen, (2008B), "Financial Instability Hypothesis". In: William A. Darity, Jr. (ed.), pp. 145-146.

Steve Keen, (2008C), "Keynes's 'revolving fund of finance' and transactions in the Circuit". In: Wray (ed.).

Finn Kydland & Edward Prescott, (1990), "Business cycles: real facts and a monetary myth", *Federal Reserve Bank of Minneapolis Quarterly Review*, Spring 1990: 1-17

Hyman Minsky (1982). *Inflation, Recession and Economic Policy*, Wheatsheaf Books, Sussex.

Randall Wray, (ed.) (2008), *The 60th Anniversary of Keynes's General Theory*, Edward Elgar, Aldershot (forthcoming).

Data Sources

Australian Data, Reserve Bank of Australia
http://www.rba.gov.au/Statistics/Bulletin/index.html
Case-Schiiler Index,
http://www2.standardandpoors.com/portal/site/sp/en/us/page.topic/indices_csmahp/0,0
,0,0,0,0,0,0,0,3,1,0,0,0,0,0.html
Dow Jones Industrial Average, http://finance.yahoo.com
Japanese data, http://www.stat.go.jp/english/data/getujidb/index.htm;
http://www.stat.go.jp/english/data/chouki/index.htm
Romanian National Bank: www.bnr.ro
OECD Composite Leading Indicators,
http://stats.oecd.org/wbos/Default.aspx?usercontext=sourceoecd
US Debt Data, Federal Reserve Board,
http://www.federalreserve.gov/releases/z1/Current/data.htm