

Insights into the Financial Crisis: A Minskyian perspective drawing on interviews with Australian regulators and risk managers

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Abstract: Among divergent approaches to understanding the global financial crisis, Minsky's Financial Instability Hypothesis has gained increased attention. In part, the paper will draw upon Minsky's notion that the seeds of instability are sown when banks, households and firms move from hedge, to speculative, and then into Ponzi financial positions, which are seen as the last stage before markets collapse into a "black hole". In addition, the paper will discuss the findings arising from an analysis of interviews undertaken after the subprime crisis with practitioners who were closely involved in *regulation and risk-management*. The paper emphasizes the need for governments to promote full employment to enable the non-government sector to heal more rapidly from the damage arising from the financial crisis in Australia.

1. Introduction

Hyman Minsky's work has enjoyed unprecedented interest, during the recent financial crisis, which has subsequently been dubbed an exemplary "Minsky Moment" by some commentators (Magnus, 2007). According to Minsky's Financial Instability Hypothesis, a slow transformation occurs within financial markets as they move away from robust positions towards those characterised by increasing fragility, until this fragility issues into a systemic and global crisis. During this recent period of crisis, financial institutions changed both their appetite for risk and their risk-taking behaviour as perceived and actual safety margins began to evaporate.

As argued by David Harvey (2007), the hallmark of neoliberalism is a process of capital accumulation through dispossession, which that has resulted in low growth and poverty for many, due to the unprecedented redistribution of income towards the wealthy. While many developing nations have suffered from this redistribution, for the developed world the macroeconomic symptoms of this political regime can be characterised as real wage repression (the wage share of workers in the industrialized world has fallen due to a relative decline in wages growth relative to productivity) and fiscal withdrawal on the part of national governments. In the absence of direct East-Asian-style interventions into capital markets these two features of neoliberal capitalism have combined to render private sector expenditure unsustainable due largely to lending-fuelled consumption. Accordingly, neo-Mercantilist policies promoted by the New Regionalism, social entrepreneurship, and forms of micro-finance, in countries such as Ireland and the developing world, have floundered. In this context, recent attempts by post Keynesian economists to model the crisis miss a crucial aspect of the whole process when the role of government is ignored (e.g. Eatwell, Mouakil, and Taylor, 2009).

In the heartland of US capitalism, the unsustainable growth in consumption has spawned a mountain of "dodgy" IOU's. Once securitised by financial institutions, they have spread to the far corners of the globe. The compromised position of global ratings resulted in a dramatic underpricing of the risk associated with these securitised assets,

while the on-sale of insurance risk in the form of credit default swaps has led to an avalanche of highly leveraged speculative investments, most notably those dispensed by the London office of AIG. This process has been assisted by the fact that Banks have strayed far from their traditional role as intermediaries between short term household depositors and long term corporate borrowers to become brokers between hedge funds, investors, providers of securitised assets as collateral, ratings agencies, and erstwhile borrowers.

It was in this political context that Australian Banks began to implement the Basel II reforms to banking practice and prudential control. That Australia has suffered less than many other countries is partly a result of the two overly modest stimulus packages introduced by the Rudd government, though it is also due to both the lower level of low-doc loans issued by Australia's comfortable, if not lethargic, big banks, and the magnitude and duration of the global commodity boom.

This paper is grounded in Minsky's Financial Instability Hypothesis. It traces the endogenous development of financial fragility. The first section of the paper focuses on two determinants of the financial system fragility: the degree of liquidity in the financial system and the increasing reliance on external finance with which to support discretionary expenditure.

The second section of this paper discusses the findings arising from an analysis of interviews undertaken with risk experts from the banking sector and supervisors from relevant regulatory authorities. A representative sample of responses is examined that focus on the phenomenon of securitisation. In general, the responses of interviewees reflect a reasonable level of awareness about the "deceptive" nature of asset securitisation processes, the dubious quality of external ratings, together with potentially problematic nature of credit enhancement through such means as "buy-back" guarantees. The interview material also indicates awareness of the transformation that has occurred to financial systems in Australia due to the adoption of emerging innovations.

In that sense, in its concluding comments the paper advocates a re-evaluation of fiscal policy and recommends that policies to promote full employment will help to stabilise consumption and investment in the private sector, while enabling households, banks, and firms to restructure the balance-sheets.

2. Minsky's Financial Instability Hypothesis

Following Keynes, Minsky (1982, 1986) proposed his Financial Instability Hypothesis (FIH) to illustrate how financial crises can occur as an endogenous outcome of decision-making within economic units, that rely upon the sale, purchase, or creation of financial assets. He focused on the relationship between the banking system and investors, highlighting the possibility of financial fragility developing during upturns in the business cycle (also see Kindeberger, 1978). His approach postulated a cyclical process, relating continuing economic expansion to a decline in uncertainty, rising optimism, and an increasing preference for externally financed expenditure. He saw that over time, both an increasing reliance on external finance, a loss of diversification, and the increasing deferment of (present value) 'break-even' times, would transform what was a relatively "sound" financial structure into a more "fragile" one.

2.1 Hedge, Speculation, and Ponzi Positions

The financial instability hypothesis sets out two fundamental propositions. The first is that the economy has financing regimes under which it is stable and financing regimes under which it is unstable. The second proposition is that over periods of prolonged prosperity, the economy transits from financial relations that make for a stable system to financial relations that make for an unstable system.

The articulation between these expected cash inflows and the contractual payment commitments are termed “financial regimes”. Minsky classified financial regime into three financial positions: hedge, speculative and Ponzi, with each financing regime characterized by different relations between cash payment commitments on debt and expected cash inflows due to the quasi-rents earned by capital assets.

Hedge positions are the most financially prudent positions, because they are able to clear outstanding debt, in full, out of the current receipts. Hedge units expect the cash flow from operating assets to be more than sufficient to meet contractual payment commitments now and into the future, with expected cash flows always exceeding both financing costs and operating expenses (including dividend payments to shareholders), by a pre-determined, desired level.

Agents who adopt speculative positions, expect to experience occasional cash shortfalls in the short run, but in the long run they are presumed to be able to generate cash inflows that more than cover their outgoing cash commitments. A speculative financing unit may experience a period, typically near term, when its cash payment commitment is greater than the expected quasi-rents for these periods. This characteristic differs from a hedge-financial unit, which expects its quasi-rents to exceed its contractual commitments in each and every time period. The speculative unit will continually require re-financing. Accordingly, speculative units have lower margins of safety as they are more exposed to economic shocks.

Ponzi positions are the most fragile in the system. The cash flows from operations are not sufficient to fulfil either the repayment of principal or the interest due on outstanding debts, thus Ponzi agents always increase their outstanding debt in order to meet their financial commitments, cover their existing debt and generate profit (Darity, 1992, p. 75). During an economic boom, expectations about the expected future returns become increasingly optimistic. Firms undertake riskier investment projects and therefore increase their debts. Banks also participate in this expectation by supplying the loans required to undertake such investments. In fact, banks as profit-seeking institutions are willing to provide loans to more risky customers at a higher price. At this point, most of the firms, as well as banks, move from hedge financial positions to more speculative and Ponzi ones, as they overestimate their expected returns. Since Ponzi units have no margins of safety, any abnormal functioning of the financial system could result in an inability to meet contractual payment commitments so that the debt-equity ratio would have to increase at an accelerating rate.

Consequently, as the admixture of Ponzi and Speculative units increases relative to those that are hedge units, the economy will slowly become unstable. The system is inherently unstable because of the overly optimistic behaviour of financial units. While units that engage in hedge finance are vulnerable only to what happens in the market for their product, units that engage in speculative and Ponzi finance are also vulnerable to shocks originating in financial markets. This is because of the elimination of the margins of safety that are built-in to the hedge-financing regime.

According to Minsky, the fragility of the financial system depends upon the number of factors that can amplify initial disturbances. Hedge, speculative and Ponzi-financing units are all vulnerable to events that reduce the cash flows from assets. Not only are speculative and Ponzi units vulnerable to shocks originating in financial markets such as an unanticipated rise in interest rates etc. as they must continually refinance their positions, they are also vulnerable to financial market disruptions such as market stress or market breaks.

2.2 Liquidity and Reliance on Debt as other Determinants of Financial System Fragility

Apart from the relative weight of financial regimes, there are two other determinants of the fragility of the financial system: the degree of liquidity in the system; and the reliance on debt and other forms of external finance to support investment and other forms of discretionary expenditure.

The analysis of the endogenous process of increasing fragility usually begins during the aftermath of a recession. Even if they managed to avoid bankruptcy, many units would face significant difficulty in meeting their contractual commitments, thus being obliged to make the judgement that their margins of safety were too low. Accordingly, the units would endeavour to restore these margins to adequately reflect the current economic climate. Such a period is usually referred to as one of "balance sheet restructuring".

In taking some time to restore receipts to pre-recession levels, the stabilising effect of any economic recovery, heightens confidence about the sustainability of current levels of receipts. Cash flow is further enhanced by the return of consumer and investor confidence, boosting gross national expenditure. Firms may begin to see retained profits rising, increasing the equity of the units. More firms will become hedge-financing units as the quasi-rents earned come to exceed outgoing cash payment commitments.

If the sequence above is an accurate depiction of the financial structure of a majority of existing units, the recovery phase has brought about liability structures conducive to a stable economic system. The economy is heavily weighted towards hedge-financing arrangements that feature sufficient margins of safety. However, the imprint of the recession on the collective psyche of borrowers and lenders has a dampening effect on their willingness to undertake profitable investment projects, especially if they have long gestation periods. If the economy does not dip back into recession, the recovery gives way to a period of economic tranquillity. If the business cycle consists of nine stages (Mitchell, 1951, p.14): trough; early, mid, and late expansion; peak; early, mid, and late contraction; trough, then a period of economic tranquillity encompasses the stages: early, mid, and the early part of the late expansion.

During this period of economic tranquillity, the cash flow, capital value, and balance sheet characteristics of borrowers and lenders, continue to improve. As this period of economic tranquillity lengthens, investing units observe that realised quasi-rents on capital assets begin to exceed expectations. In hindsight, it appears that margins of safety incorporated into liability structures were too pessimistic. Effective demand for the goods and services of business exceed ex ante aggregate supply. For a time, firms may be able to accommodate the excess through higher capacity utilization rates. However, in the continuing presence of a revival in effective demand, units will have to increase the level of their investment expenditures.

As the period of tranquillity continues, the expectation of future cash flows, formed by extrapolations of current economic conditions, require increasing levels of investment expenditure for expected demand to be fulfilled. Internal finance is no longer sufficient,

external finance must be tapped. In the case of debt financing, the units must emit new liabilities. In order for units to emit liabilities, there must be willing lenders. The FIH asserts that bankers live in the same climate of expectation as the managers of capital assets. The extent to which layering, or leveraging of retained earnings, i.e. debt-financing, takes place in the financing of investment depends not only on the expectation of investing firms, but also on the willingness of bankers to go along with, if not to urge such layering.

Thus, not only are borrowers willing to assume liability structures that are less cautious, but so are lenders. Once a change in expectations occurs, borrowers, with liability structures that previously, from the point of view of the lender, would have carried the possibility of bringing them credit risk, now become quite acceptable. Financial intermediaries (particularly banks) also accept more risk in their own liability structures, that, in a more pessimistic expectation climate, they would have rejected. Therefore, as the period of economic tranquillity continues, investing units discover that their current liability structure is compatible with a previous state of confidence, which incorporated an unused margin of "borrowing power". Units are able to increase their debt levels as views about an "appropriate" liability structure have changed (Minsky, 1977).

What has been sketched out is a loop of positive feedback. The negative feedback of the recession period resulted in a reappraisal of borrowers and lenders positions in assets and liabilities. The revival of profits due to economic recovery operating through increased private sector confidence encourages more optimistic expectations about the future, manifesting in increased investment expenditure. The realisation of cash flows, that equal or exceed expenditures, transforms expectations about future cash flows, again resulting in a reappraisal of position. In the presence of economic tranquillity, this loop of positive feedback reinforces itself creating an investment boom, i.e. new investment leads to increases in income that stimulate further investment and further income increases (Minsky, 1986).

As the dynamic described above becomes more advanced, expectations about the future begin to incorporate views consistent with the prospect that the existing tranquil economic conditions will continue indefinitely. Success breeds a disregard for the possibility of failure. Rather than an extended period of economic tranquillity being regarded as an aberration, it becomes the norm. Thus, expectation of a normal business cycle is replaced by the expectation of steady economic growth—a "new era" has arrived. The "economics of euphoria" is a phrase that has been coined to describe an economy infected with such a change of state (Kindleberger, 1978). In other words, the reluctance to hold illiquid assets in a portfolio declines as a direct result of 'euphoria'; this is particularly the case for financial institutions. The shift to euphoria increases the willingness of financial institutions to acquire assets by engaging in liquidity-decreasing portfolio transformations. Thus, the increased incidence of positive feedback trading, and the emergence of 'bubbles' in the asset market, is a consequence of 'euphoria'.

Another feature of the euphoric economy is that the short-term financing of long positions becomes a way of life for many organisations such as the favour of securitisation. If the term structure of interest rates corresponds to a normal yield curve, the carrying costs of debt can be made less burdensome, by converting long-term debt into short-term debt. With the economy characterized by expensive long-lived capital assets, such a financing method seems irrational. In the realm of normal economic conditions, where the memory of past instability impinges on current behaviour, such a deduction would be correct (Kindleberger, 1978). However, the operation of euphoric

economic conditions means that the distant memories of instability results in the short-term financing of long-lived capital assets being perceived as rational. Borrowers and lenders discount the likelihood that difficulty will be encountered in the rolling over of maturing short-term debt. The future promises perpetual expansion and the smooth functioning of factor, product, and financial markets. This is one route whereby an economy experiencing a period of prolonged prosperity, endogenously progresses from one characterized by robust financial structures, to one dominated by fragile financial structures. The pyramiding of liquidity together with the increased use of debt leads to increasing leverage in the financial structure (Minsky, 1982). The three determinants of systemic fragility are in operation, and the economy is exposed to shocks. Thus, the successful normal functioning of the economy has endogenously generated a fragile financial structure.

Financial institutions and banks, in particular, play an important role in the transformation from a robust to a fragile financial structure, especially one in which banks increasingly act as brokers instead of intermediaries. The following findings, which focus on the issue of securitisation, arise from an analysis of interviews undertaken after the subprime crisis, foreshadow such a transformation and reflect the consequent evolution of instability in the financial market.

3. Findings arising from Interviews with Regulators and Risk Managers

3.1 Financial Innovations fuel Financial Market Boom and trigger Regulatory Arbitrage

The past few decades, have seen a considerable concentration of financial power due to the long term regulatory transition from more heavily regulated banking toward more “market-based” regulation. Under the new policy regime, regulators have eased controls over markets to let banks pursue higher profit returns associated with riskier activities (Wray 1994; Black 2005). During the profit-chasing process, there is increasing use of financial instruments whose value derives from underlying collateral assets, and these financial instruments have, it has been argued, contributed to conditions that have made the recent crisis possible.

Among “off-balance-sheet” types of financial innovations, securitisation has played a vital role in fuelling the prosperity of financial market, through dispersal of risk and the by enhancing the liquidity of underlying assets. As Minsky (1987) argued, securitisation has been important for the globalisation of finance, as it allows assets to escape from being embedded in national markets. Securitisation is also a response to efforts to reduce the cost structure of banks. In this role securitised assets operate as a form of collateral reducing capital requirements. Bank participation in securitisation is part of the drive to supplement fund income with fee income. Simultaneously it has spread bank risk more broadly to whoever presumes to handle it.

In serving the purpose of ‘optimising’ the management of capital, securitisation directly delivers ‘tangible’ benefit to banks—in the form of lower *regulatory capital-holdings*—principally by enabling them to arbitrage and, thus, evade regulatory capital burdens (*Regulatory arbitrage arises when a regulated institution takes advantage of the difference between its real or economic risk and the risk calculated in regard to regulatory requirements*). The following comments from bank risk managers confirm these functions of securitisation under both the previous and the current Basel International Capital Adequacy regulatory framework:

“It happened all the time. That’s what securitisation was, so it was pure regulatory arbitrage.” (Interview No. 13)

“Previously the arbitrage opportunities arose through the banks taking their assets off their balance sheet, as an example of these, there is ones that were securitised so we don’t have to hold capital for them.” (Interview No. 12)

For some aggressive market practitioners, the reduction of regulatory capital-holdings through securitisation during the upturn period, was of obvious benefit for capital management:

“You know, you securitize loans so that, obviously, you don’t pay as much in capital by passing the risk off to someone else.” (Interview No. 7)

As noted by one of the risk managers, securitisation satisfies the banks’ objectives of “moving” risks off their balance sheets through risk dispersion, but also exposes investors to new forms of risks when they lack sufficient understanding and knowledge about the resulting complex financial instruments:

“I mean securitisation serves a purpose, if a bank wants to move its risk, and there’s people out there who want to take the risk for a price, there’ll be a market for it.” (Interview No. 15)

For a business like banking, which, no less than other firms, is driven by ‘animal spirits’, securitisation serves a multiplicity of “desirable” functions as shown by following response:

“If they find it *easy to sell the loan*, they get the *better spreads* and *easier approval*, so that’s the impetus for banks to want to do that.” (Interview No. 7)

Due to a variety of positive feedbacks, and arcane forms of complexity, the securitisation market, while stimulating the growth of other markets, such as commercial paper and property, has helped to cover up the underlying fragility of the system until conditions for the subsequent crisis were firmly entrenched.

Thus, securitisation is actually a double-edged sword, when used effectively during an upturn, it can assist investors to enhance the liquidity of underlying assets. However, the problematic nature of the securitisation process, especially its complexity, along with the increased reliance on external ratings agencies, has put banks and other players in great danger, not least through the prospect of rapidly eroding balance sheets.

3.2 “Deceptive” Nature of Securitisation

In many cases, the complexity of underlying financial instruments and their derivatives made the whole securitisation process hard to understand both for top management within banks and their regulators. Furthermore, specialised risk experts in banks created and priced these new financial instruments using highly complex models, in part, kept secret to prevent competitors from copying the innovations in banking practice. As one interviewee observed—“*It gets more complicated, due to the sophistication of the models and so on*” (Interview No. 6).

As revealed by the following comment, the increasing complexity of securitisation arises not only from the adopted techniques of risk-management, but also from associated securitisation clauses:

“Some of the clauses under the securitisation are not clear...especially under a stress environment...it is an issue, because it is deceptive”. (Interview No. 14)

Due to the existence of a disconnection between banks acting as brokers, those offering securitised assets, the actual originators of the assets that are going to be securitised, and those providing hedging and insurance services in relation to the assets, therefore, not only the final buyers of securities could be ‘trapped’ by the underneath risks that either have been concealed by complicated quantitative risk techniques or hidden by unclear clauses which will be uncovered and become harmful during downturn, banks themselves as brokers in this process are exposed to threats.

“Securitisation is a *deceptive* thing...and it’s a *dynamic* thing as well, because you know, it could normal in the market, assuming nothing comes up, but when you are in the stress environment, it can *come back to bite you*, so everything is fine when you have low securitisation happening as in the last few years, but if things go bad, the banks, for reputation reasons, have to take the risks back.” (Interview No.14)

In above comment, the interviewee foreshadows another cause—*external risk ratings* which has been widely criticised after 2008 financial crisis, as the accomplice of securitisation with ‘deceptive’ nature.

Risk ratings produced by economic models serve a purpose of credit enhancement which gives securities the investment-grade rating required. Among various forms of credit enhancement, a buy-back guarantees which offers buyers a “warranty” in the case of capital losses due to unexpected high defaults, as exposed by above quotation, brings potential threats to banks because risks will come back to them once default occurs. Therefore, as one of those types of financial instruments whose value is driven by the underlying collateral assets, the quality of underlying assets as collateral is a vital issue for the players involved in securitisation process. The occurrence of 2008 crisis obviously gives a lesson to all market participants especially banks, and they are more alert about the quality of collaterals which is reflected by their attitudes towards this aspect in following comment:

“So, yeah, *most of the market was expecting the securitisation of low quality assets to potentially dry up, even to die, but it significantly increased when it came to high quality assets.*” (Interview No. 1)

However, although they realise the potential problems associated with over-valued collateral, there is still ignorance of a more profound issue relating to the disconnection between various players within the securitisation process, as pointed by a regulatory supervisor, :

“The independence principle in APS 120, will work (to solve some of the problems related to securitization), but the point is that it will create *problems* as well, for example, the problems derived from management of operational process, of ADIs are independent with securitization vehicle.” (Interview No. 4)

Apart from these, the assistance of external ratings to the problems arising from securitisation with over-valued collaterals, particularly after credit enhancement, has been also raised and discussed by bank risk managers and supervisors.

3.3 The Threat from Poor Quality External Ratings and “Favourable” Credit Enhancement in Securitising Process

The profit-driven nature of external rating agencies has been exposed heavily by 2008 financial crisis. As Minsky (1987) argued investment banks would pay ratings agencies to enhance the liquidity of securities, and at the meantime, economic models banks developed assist them to convince regulators and rating agencies that interest earned is able to cover or excess the compensate for risks. Hence, questions are raised in terms of the comment from one of regulatory supervisor:

“Well it’s more volatile. Now with the Sub-prime crisis, there are actually a lot of *question* marks about the rating agencies. *How effective* they are; *how far back with price corrections* they were...; *how lagging* they were in re-rating things they should have re-rated much earlier.” (Interview No. 15)

One instance noted by one of the bank managers, indicates that the profit that external rating agencies receive from offering “favourable” ratings to their customers, raises doubts about the quality of the ratings applied to business products:

“I think most of the benefit is in the investment grade corporates, where previously as an Australian bank, or ourselves lending to BHP Petroleum, or one of the BHP entities, we had to hold 100% of the risk weighted asset, (of course now we now are left with a lot of the underlying collateral), they can apply to get any loans they want, as well as a strong credit rating so with a risk weighted asset, for BHP, it is now likely to weigh in under 10%.” (Interview No. 2)

As the customers of those agencies, another bank risk manager also criticises the quality of external ratings they rely on (although at the meantime, they are too self-complacent about their internal modellings and underlying risk methodologies which has been proved as flawed, but this is not the concern of this paper), particular the situation indicated in the following comment uncover the ‘story’ behind the external ratings:

“We use external data for some modelling, but we assign our own credit rates to companies. So companies that might have high credit ratings we might not necessarily want to lend money to.” (Interview No. 12)

It has been witnessed through subprime that banks hold almost worst securities especially with “buy-back” guarantee for credit enhancement purpose. But banks under prudential control guided by Basel accord are required by regulators to hold certain regulatory capital as buffer against risks, although that number is not risk-sensitive enough that the existence of regulatory arbitrage partially evident this. As criticised by an interviewee from the banking sector, comparably, other less regulated market players—Non-Bank Financial Institutions (NBFIs) are more vulnerable to the shocks related to securitisation. And the failure of those players will broadly impact on the entire financial market:

“When banks were holding it (securitised assets), there were regulatory rules applied to it in terms of how much capital you are holding, but if unrelated

private investors were going to hold it, they got their own views on essentially how leveraged they could be in their own position, what kind of risk premium that's required." (Interview No. 6)

The inconsistency of regulatory framework of financial market can be also visibly reflected by the lacking of regulation on external rating agencies. As one of being blamed and criticised components of financial market, rating agencies are still kept sway from prudential controls by regulators due to so-called "independence principle" which is acting as the guarantee to ensure the trustiness of their 'products' provided to customers that the quality of their ratings has been demonstrated as doubtful:

"The ratings agency just runs without the regulators at the moment."
(Interview No. 10)

"In general, against those same risks, it is a bit tricky, because there's no framework which extends to cover the banks, the insurers, and everybody under same methodology." (Interview No. 7)

In that sense, as advocated by bank risk managers, despite their 'independence principle', rating agencies should be covered under regulatory framework with other market participants, otherwise, external rating-related problems will not disappear and will soon come to affect the stability of the financial market again:

But I think that's (regulating external rating agencies) the only solution. As long as the issue of regulating the ratings agencies isn't solved, there's always this problem." (Interview No.10)

And,

"There is a lot of pressure especially in Europe, to bring in regulation under the ratings agencies." (Interview No.11)

However, when the actual regulatory requirements have been put on the table for regulators to deal with, things become quite difficult. Furthermore, as raised by bank risk managers themselves, there is a necessarily for regulators to put more efforts on prudential supervision with scrutiny which he emphasises on the modelling aspect, but I would argue to operate on the entire process of securitisation and include all major players under regulations:

"I think maybe the review and scrutiny of the models by APRA needs to be a lot heavier, because there are so many more inputs now that go into them. You can't just move the exposure around, and play regulatory capital games."
(Interview No. 7)

The above discussion of securitisation, issues of external ratings and credit enhancement drawn from the interview material reveal just the tip of the iceberg, in regard to how speculation, fuelled by financial innovations, has driven the transformation of financial positions, but the withdraw of government support for the real economy has contributed to making the recent crisis both more profound and more protracted. Needless to say, insights of this kind were not reflected in the responses of interviewees within either the banks or the regulatory authorities.

4. The Role of Fiscal Policy

To fully understand the drivers of modern financial crises, attention needs to be placed on interactions between the real and the financial sectors. According to Minsky, the exposure resulting from an increasing reliance of non-financial sectors on external sources of finance, which results in deteriorating debt to income ratios, can be eased through government spending-fuelled expansion. Government policies that boost wages for the lower income groups can also reduce their need to rely on borrowing for consumption purpose. In this light, policies to promote full employment serve both of these objectives.

Except for acting as strong regulators for “freed” financial market by neo-liberalism advocates which as argued in previous section, leaves problematic inconsistent regulatory framework or even no regulation for certain market players, beyond its regulatory agencies, the government should hold firm control over the entire economy as an employer and a spender. As criticised by Post Keynesian economists, complains on running budget deficit from treasury are weak and reflect their poor understanding of macroeconomics due to the fact that government has a currency issuing monopoly. The truth is that constantly budget surplus stimulates an increase in the net flow of credit to non-financial sector, thus trigger the reliance on external finance for consumption purpose, especially for those lower level classes of populations. So deficits finance desired net saving by the private sector, thereby countering the tendency to increased indebtedness to some degree, as the financial system starts becoming fragile as outlined by Minsky.

Therefore, the role of fiscal policy in real economy needs to be re-evaluated in terms of how it can meet the overall objective of achieving a sustainable rate of economic growth: i.e. one that does not rely on rising indebtedness on the part of agents in the private sector.

5. Conclusion

In general, with the help of credit enhancement and “favourable” external ratings, the growth of securitisation market led to a tremendous increase of leverage ratios. A virtuous cycle is consequently created: loose credit issue triggers the increasing of asset prices, which consequently encourages the development of financial innovations and also competitions to further increase leverage. Financial innovations such as securitisation enhanced the liquidity of bundled securities that, with hindsight, incorporated substantial portions of over-valued underlying assets. While this lead to an expanded supply of loans, this also fuelled further rounds of home buying driving up the value of real estate, and simultaneously increasing the size of loans required. This perverse cycle, was responsible for transforming the financial system into one that was more vulnerable to external shocks.

From the findings revealed in this paper, policy makers need to return to a financial structure which promotes stability rather than speculation. While enhanced supervision of financial institutions is a necessary elements of policy, an activist labour market policy, which focuses on maintaining real wages growth in line with increases in productivity, and an activist fiscal policy, which aims at restoring full employment must be seen as vital to the overall goal of controlling and ameliorating future periods of financial instability.

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