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Fiscal policy and financial fragility: why macroeconomic policy is failing

William Mitchell and Luke Reedman¹

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Centre of Full Employment and Equity The University of Newcastle, Callaghan NSW 2308, Australia

Home Page: http://el.newcastle.edu.au/coffee
Email: coffee@newcastle.edu.au

1. Introduction

In recent years, several high profile companies in Australia such as HIH, Pasminco, One.Tel and Harris Scarfe have failed. Similar large collapses occurred overseas and a common trend of poor corporate governance and unsustainable corporate debt levels is apparent. A leading Australian insolvency expert recently said "Tough economic conditions could spark a fresh round of corporate collapses among the top 500 publicly listed companies ... [the financially stretched companies are typically] ... conglomerates that ... expanded into industries which might not have been their core businesses ... [and] ...have significant overheads and significant debt" ('Corporates walking on a tightrope', The Age, 31/10/2002). Further, the Reserve Bank notes that Australian households now face serious risks because their debt levels had grown well above their income levels that a "continuation of this trend clearly carries the risk of households, at some point, becoming overstretched" (RBA, 2002a: 2).

In this paper, we this susceptibility to financial crises in relation to the growth performance of the economy and the pursuit of fiscal surpluses by the federal government over the last decade in the context of the Financial Fragility hypothesis (FFH) outlined by Minsky (1977a, 1986). The FFH comprises two fundamental propositions. First, the capitalist economy has financing regimes under which it is stable and financing regimes under which it is unstable. Second, capitalist expansions, especially those driven by private spending, are typified by agents taking increasingly fragile investment positions. The relaxation of financial restraint fuels and extends the expansion and rising asset prices increase the tolerance of risk among investors (Minsky, 1992: 7-8).

Financial fragility usually refers to a state where an economic unit (household or firm) is vulnerable to financial default in a wide variety of circumstances. Extending this micro concept to the financial system as a whole, suggests that the system is fragile when its ability to withstand economic shocks is weak. A fragile system is liable to episodes of financial instability, defined as a sequence of events entailing heightened risk of a financial crisis. A financial crisis is "a major and contagious collapse of the financial system, entailing inability to provide payment services or to allocate funds for investment; realisation of systemic risk" (Davis, 1999: 1). This sequence of events entails drastic measures such as asset 'fire sales', increased rates of debt delinquencies (increased impaired banking assets); increased risk aversion in financial markets reflected in widening spreads; increased volatility of prices of traded instruments; and a scramble for liquidity. It is difficult to identify *ex ante* the

thresholds where a fragile financial system transits to an unstable system because of the infrequency of crisis episodes.

We argue that by failing to understand the crucial role that public deficits should play in maintaining full employment, the Government has not only consigned thousands to unemployment and/or underemployment, but has also underpinned an unsustainable growth path for the Australian economy. We argue that the obsessive pursuit of budget surpluses has exacerbated the tendency towards financial fragility and will ultimately create future deficits as private sector balance sheets unwind. But these deficits will be associated with a much weaker economy than would have been the case if appropriate levels of net government spending had have been maintained.

When private spending wanes the economic outcome depends entirely on the policy response by government. If demand for private production falls but people still desire to work then there is no valid reason not to switch them to public goods production until private demand recovers. Unemployment results when the policy response inhibits this switch. Surprisingly, most commentators and public officials fail to realise that the unemployed, supported by welfare measures, are already 'in the public sector'. A sensible policy response would utilise this capacity to produce socially beneficial outputs. In this regard, we argue that a Job Guarantee (JG) policy can attenuate any tendency towards financial instability and provide the 'switch' between private and public sector employment over the business cycle (see Mitchell, 1998). A JG should be integral to a fiscal policy that allows the public deficit to be endogenously determined by the private spending.

Section 2 analyses the recent growth phase, while Section 3 shows how public surpluses lead to increased private indebtedness. Section 4 introduces Minsky's FFH in this context and Section 5 provides some empirical support for the notion that the build up of private debt levels, particularly among households, is increasingly untenable. Policy options to avoid these problems and deliver full employment are discussed and concluding remarks follow.

2. The growth cycle of the 1990s

The economic recovery in Australia in the 1990s has been touted as being a sign that the economy is robust and more able to withstand world economic fluctuations. Treasurer Costello (Press Release, April 25, 2000), said "The benefits of labour and product market reforms are evident in Australia's economic performance through the global economic downturn of 2001". The Prime Minister noted that "... the economy is going gangbusters ... I

think the economy is performing beautifully" (quoted in Sydney Morning Herald, April 12, 2002). The data in Table 1 summarises Australia's growth experience over four decades. Notable is the increasing role for private consumption and the relative recovery in private investment and stark fall in public expenditure, particularly public capital formation over the 1990s. Average public spending growth declined over the period shown and GDP growth in the 1990s was driven by a private spending recovery, particularly after 1995.

However, the labour market is hardly going 'gangbusters'. Despite one of the stronger growth rates in the 1990s among OECD economies, the Australian economy did not remotely approach full employment and the unemployment trend remains positive. The low point unemployment has steadily ratcheted upwards over successive cycles - 4.6 per cent in June 1976; 5.5 per cent in June 1981; 5.6 per cent in November 1989 and 6.0 percent in September 2000 (see Mitchell, 2001). Mitchell and Carlson (2002) show that while the official unemployment rate averaged 8.4 per cent between December 1991 and June 2002, the average total labour wastage is around 15.4 per cent once hidden unemployment and underemployment estimates are included. Clearly, economic growth has not been strong enough to produce enough jobs and hours of work to meet the preferences of the labour force.

Table 1 Growth rates and contributions to real GDP growth of expenditure components

	СНН	IP	CG	IG	G	X	M	GDP	
Percentage share of change in GDP									
1960-70	54.7	16.9	19.7	7.5	27.3	13.4	-12.2		
1970-80	59.3	16.8	22.0	2.4	24.4	12.4	-13.0		
1980-90	62.4	15.5	22.0	3.8	25.8	22.8	-26.5		
1990-05	57.2	19.3	15.9	-1.1	14.8	46.0	-37.4		
1995-01	60.0	20.2	16.9	2.6	19.5	30.8	-30.6		
Average annual compound growth rate									
1960-70	4.6	5.4	6.2	5.7	6.0	8.0	5.7	5.1	
1970-80	3.4	3.5	4.2	1.3	3.4	4.2	3.8	3.1	
1980-90	3.1	2.9	3.5	2.1	3.2	5.7	5.9	3.3	
1990-01	3.2	3.9	2.9	1.0	2.5	7.1	6.0	3.4	
1995-01	3.8	4.5	3.4	2.3	3.2	6.2	6.0	3.9	

Source: ABS National Accounts, 5206.0. CHH is private consumption expenditure, IP is private investment, CG is government consumption, IG is government investment, G is total government spending, X is export spending, M is import spending, and GDP is Gross Domestic Product.

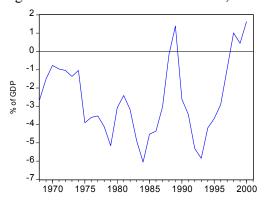
Government rhetoric notwithstanding, the resilience of the economy in the current downturn is largely due to the government abandoning its pursuit of surpluses in 2001 for electoral reasons. Three major (temporary) policy shifts revitalised private spending which was waning in the June quarter: (a) six interest cuts after February 2001; (b) the Federal Government,

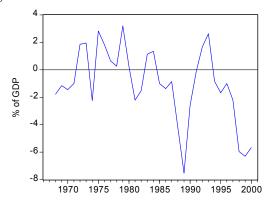
facing electoral defeat, injected over \$2 billion into an ailing construction industry after recognising the GST had devastated home building; and (c) increased defense spending after East Timor and September 11. Put together, the economy received an old-fashioned Keynesian boost to say the least! Yet there is little recognition of the central role that the return to public deficit (2001-2) has played in promoting Australia's quick return to growth.

The federal government clearly continues to misunderstand the essential role that net government spending plays in restoring and sustaining full employment (Mitchell and Mosler, 2002). We argue that the 1990s growth strategy based on government surpluses, which necessarily relied on ever increasing levels of private sector indebtedness, not only failed to generate sufficient employment but also cannot be sustained. Unfortunately, this strategy is seen as 'good economic policy' by the government and most financial commentators. We examine this issue next.

3. Why budget surpluses destroy private wealth and create unemployment?

Figure 1 Public and Private Balances, Australia, 1966 to 2001





(a) Public sector balance as a % of GDP

(b) Private sector balance as a % of GDP

Source: Table 1. The public sector balance is the consolidated sector deficit/surplus (-/+). The private sector balance is computed from the sectoral balances as the sum of the public balance and the current account balance. It is computed as a residual contains the statistical discrepancy associated with expenditure.

The pursuit of public surpluses is now the hallmark of government policy in Australia (see Figure 1a). The Australian Treasurer, at the time when the Asian crisis was threatening private spending levels, said "we are aiming to get the ... Budget back into the black ... the OECD says, at a time when you've got instability and turbulence in the region, you've got to fire proof and protect your own economy and fire proofing our economy means getting back into the black ... Now is not the time to depart from good economic policy" (Costello, 1998). Allegedly, "the Government should be building savings in a situation where you have a

current account deficit and that's why I believe it's very important for Australia to continue to run surpluses ... to keep Australia in a strong position" (Costello, 2000).

What parades now as macroeconomic policy is a mishmash of half-truths and fallacy. With persistent public surpluses, the maintenance of growth relies on the private sector going increasingly into debt. This strategy is unsustainable because private agents eventually increase saving to restore their balance sheets. Economic growth then falters, unemployment rises and the automatic stabilisers generate a public deficit.

To elaborate, we define involuntary unemployment as labour unable to find a buyer at the current money wage. In the absence of government spending, unemployment arises when the private sector, in aggregate, desires to spend less of the monetary unit of account than it earns. Nominal (or real) wage cuts *per* se do not clear the labour market, unless they somehow eliminate the private sector desire to net save and increase spending. The non-government sector depends on government to provide funds for both its desired net savings and its tax obligations. The private sector cannot by itself 'net save' because saving is a signal to lend and so savers are always in an accounting sense matched by a borrower (Tobin, 1963; Palley, 2001; Mitchell and Mosler, 2002). To obtain these funds, non-government agents offer real goods and services for sale in exchange for the needed currency units. This includes, of-course, offers of labor by the unemployed. Thus, unemployment occurs when net government spending is too low to accommodate the need to pay taxes and the desire to net save (Mitchell and Mosler, 2002). Wray (1998: 81) says, "Normally, taxes in aggregate will have to be less than total government spending due to preferences of the public to hold some reserves of fiat money." Thus, in general, deficit spending is necessary to ensure high levels of employment.

Persistent budget surpluses also force the private sector into increasing indebtedness. The sectoral balances (private, public and external) in the national accounts are:

(1)
$$(S-I) = (G-T) + (X-M)$$

Equation (1) says that total private savings (S) is equal to private investment (I) plus the public deficit (spending, G minus taxes, T) plus net exports (exports (X) minus imports (M)), where net exports represent the net savings of non-residents. Thus, when an external deficit (X - M < 0) and public surplus (G - T < 0) coincide, there must be a private deficit (see Figure 1b). While private spending can persist for a time under these conditions using the net savings of the external sector, the private sector becomes increasingly indebted in the process.

What happens to the public surplus? It is often argued that 'public saving' can be used to fund future public expenditure. For example, an Access Economics spokesperson said recently that we needed bigger surpluses and hoped that "the Government will be able to get the message across that that surplus and more will be chewed up by, initially, the retirement of Australia's baby boomers and then the growing healthcare costs for them as they age further" (ABC AM transcript, May 9, 2002). In rejecting the notion that public surpluses create a cache of money that can be spent later, Mitchell and Mosler (2002: 255) note that "Government spends by crediting a reserve account. That balance doesn't 'come from anywhere', as, for example, gold coins would have had to come from somewhere. It is accounted for but that is a different issue. Likewise, payments to government reduce reserve balances. Those payments do not 'go anywhere' but are merely accounted for. In the USA situation, we find that when tax payments are made to the government in actual cash, the Federal Reserve generally burns the 'money'. If it really needed the money *per se* surely it would not destroy it. A budget surplus exists only because private income or wealth is reduced."

The following accounting relation, often erroneously called the government budget constraint can be used to show the impact of budget surpluses on spending and private wealth:

(2)
$$G + iB = \Delta M + T + \Delta B$$
$$\lceil (G + iB) - T \rceil = \Delta M + \Delta B$$

where G is government spending net of interest payments on debt, i is the nominal bond rate, B is the stock of outstanding bonds, M is base money balances, and T is tax revenue. In an accounting sense, when there is a budget surplus then $\Delta M < 0$ (destruction of base money) and/or $\Delta B < 0$ (destruction of private wealth).

The budget surplus may be applied to running down debt (that is, forcing the private sector to liquidate its wealth to get cash) but this strategy is finite. The current Treasury Debt review is considering the implications of the disappearing bond market. It has been suggested that Treasury might compete in the private equity market but there are several problems with that option including "backdoor nationalization ... distortion of the market's allocation of capital ... [and risk of] ... triggering an asset-price inflation" (Palley, 2001: 19). The alternative is to destroy liquidity (debiting reserve accounts) which is deflationary. The weaker demand conditions would force producers to reduce output and layoff workers with rapid increases in joblessness (Mitchell, 2002). Investment irreversibilities driven by uncertainty of future

demand conditions then retard capacity growth and prolong the downturn (Mitchell and Muysken, 2002).

In closing, we emphasise that the pursuit of public surpluses has necessitated an increase in the net flow of credit to the private sector and increasing private debt to income ratios. Is a threshold reached where the private sector, by circumstance or choice, becomes unwilling to maintain these deficits? If so, then the reliance on rising indebtednesses to underwrite private spending is ultimately, an unsustainable growth strategy. The private sector (and the spending the debt has supported) becomes increasingly vulnerable to interest rate increases, declining asset values and lost incomes. We examine the dynamics of this trend to fragility next.

4. Aggregate demand composition and systemic financial fragility

Two questions are raised by the aggregate demand structure outlined in Section 3. First, what motivates and enables the private sector to run deficits over extended periods? Second, how long can this process continue? Minsky's (1977a, 1986) FFH provides insight into these two questions. The type of economic system envisaged by Minsky is a modern capitalist system consisting of long-lived, expensive, and privately owned capital assets with sophisticated financial arrangements (debt contracts) designed to fund the acquisition of such assets. For Minsky, it is the processes and consequences of the investment in such capital assets in a modern capitalist system that forms the theoretical crux of the FFH.

The FFH has two fundamental propositions noted in the introduction. First, the economy has financing regimes under which it is stable and financing regimes under which it is unstable. Second, expansions driven by private spending are typified by agents taking increasingly fragile investment positions (Minsky, 1992: 7-8).

Debt-holders, meet their repayment obligations using cash flow derived from the investor's operations and/or fulfillment of owned contracts (both income cash flows); the sale of capital or financial assets (portfolio cash flows); and/or the issuance of debt (balance sheet cash flows) (Minsky, 1977b: 19). The articulation between expected income cash flows and contractual obligations are what Minsky terms 'financial relations' with three categories being identified: (a) an investor is hedge financing if realised and expected income cash flows are sufficient to meet all their payment commitments; (b) and investor is engaged in speculative financing if their balance sheet cash flows exceed expected income receipts and they roll-over existing debt; and (c) Ponzi financial units increase debt to meet the gap between their balance

sheet cash flows and expected income receipts. So unlike hedge units, speculative and Ponzi financing units must engage in portfolio transactions to fulfill their payment commitments.

While the FFH focuses on business enterprises, similar 'financial relations' apply to households. The debt financing of owner-occupied or investment housing also requires households to meet contractual payments from income, portfolio, and balance sheet cash flows. It is the relative weight of income, balance sheet, and portfolio payments in an economy that determines the vulnerability of the financial system to disruption. An economy in which income cash flows are dominant in meeting payment commitments is relatively immune to financial crises whereas an economy is potentially financially fragile and crisis-prone if portfolio transactions are relied on for meeting payments (Minsky, 1986: 203-4).

Over a period of prolonged prosperity, the economy endogenously transits from stable financial relations (an aggregate liability structure dominated by hedge finance) to unstable financial relations (an aggregate liability structure dominated by speculative and Ponzi finance). This dialectic is exacerbated by the pursuit of public surpluses.

To understand the hypothesised dynamics, we begin in the aftermath of a recession where all investing units (hedge, speculative and Ponzi) re-evaluate their safety margins. Units that encountered stress in meeting debt obligations inflate their safety margins, even though they remained solvent during the downturn. This process is referred to as 'balance sheet restructuring' (Mills, et al., 1993) or 'reliquification' (Eckstein and Sinai, 1986). A typical expansion begins with a public deficit providing a floor under income cash flows and loose monetary policy allowing investors to validate the pre-existing debt structure. Simultaneously, government debt is fed into the portfolios of banks and other financial institutions, decreasing the exposure of the banking and financial systems to default. This combined with the balance sheet restructuring allows the economy to emerge from crisis with a more 'robust' financial structure than it had when the crisis took place (Minsky, 1986: 210). If the economy does not dip back into recession, the recovery gives way to a period of economic tranquility (Minsky, 1982) where the cash flow, capital value and balance sheet characteristics of borrowers and lenders continue to improve. As this period endures, investing units observe that realised quasi-rents on capital assets begin to exceed expectations. In hindsight, it appears that safety margins incorporated into liability structures were too pessimistic as the effective demand for the goods and services of businesses exceeds ex ante aggregate supply. In the short run, firms accommodate the excess through higher capacity utilisation rates. But eventually investment rises and begins to draw on external debt and equity funds (see Mitchell and Muysken, 2002).

For a unit to increase its liabilities there must be corresponding lender. The FFH asserts that bankers live in the same climate of expectation as the managers of capital assets. The increase in debt-financed investment depends not only on the expectations of investors, but also on the willingness of bankers to ratify, if not drive the leveraging (Minsky, 1975: 118). Borrowers previously considered too risky now become acceptable risks. The same pattern emerges in the liability structures of financial intermediaries (Minsky, 1982: 121). Debt levels rise as views about an 'appropriate' liability structure change. The heightened expectations breed a disregard for the possibility of failure the expectations of a normal business cycle are replaced by the expectation of steady economic growth (Minsky, 1982: 121; Minsky, 1986: 213).

This change of state, called the *economics of euphoria* by Minsky (1977a), is characterised by the development of significant imbalances in credit and asset markets. The strong economic growth is driven by large private deficits generated by excessive investment in capital assets and household items based on unrealistic expectations of income cash flows and freely available credit. Such periods are also accompanied by growing public surpluses through the operation of the automatic stabilisers and/or explicit spending cutbacks.

Through phases of recession, recovery, tranquility, and euphoria, the economy endogenously moves from robust to fragile financial structures. The fragile structure characterised by high levels of speculative and Ponzi finance becomes vulnerable to a multitude of shocks, any of which, in isolation or concert, can alter perceptions of future income flows needed to validate the debt structure and drive the economy into crisis.

5. Has the Australian economy become more fragile?

Godley (2000) and Godley and Wray (1999) have demonstrated the relevance of the FFH to the 1990s US expansion, which was driven by a dramatic decline in private saving and rising private indebtedness, exacerbated by fiscal surpluses. They predicted that private agents in the US would eventually reverse their deteriorating balance sheets and push the economy into recession unless a major fiscal shift (towards deficit) occurred. The sluggish US economy and corporate collapses since 2000 provides some support for their analysis.

Is the FFH relevant to Australia? Over the 1990s, financial engineers have empowered consumers with innovative forms of credit, enabling them to sustain spending far in excess of income. Financial engineering has also empowered businesses to increase their debt to finance increased investment and output. The upshot is that private deficit spending drove the 1990s growth phase. Wray (2002) says "Empirically, we could look at overall debt service ratios, at

the ratio of private sector deficit spending to income, and at aggregate debt-to-disposable income ratios to obtain an idea of the fragility ..." Several indicators of financial fragility along these lines are shown in Figures 2 and 3 for both the corporate and household sectors.

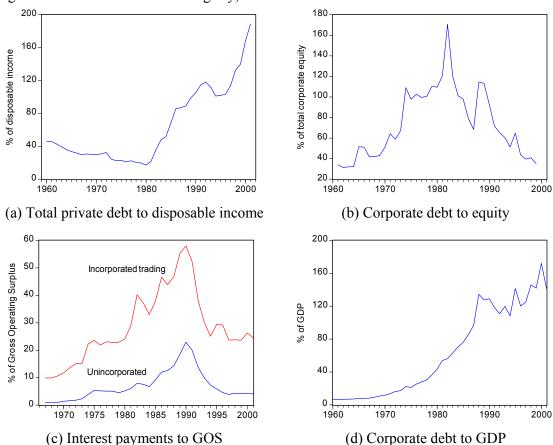


Figure 2 Indicators of financial fragility, Australia

Source: ABS TRYM and NIF database. Business bankruptcy is where the default is directly related to a proprietary interesting business. Non-business bankruptcy is where the bankrupt's occupation and cause of bankruptcy is not related to any proprietary interest in a business. GOS refers to Gross Operating Surplus.

Increased fragility overall is suggested by the sharp growth in the ratio of total private sector debt to private disposable income over the 1990s (Figure 2a). By 2001 it had reached 188 per cent. The (net) external component as a percentage of GDP grew from 34.1 per cent to 47.3 per cent while net external liabilities to GDP (which adds net equity) grew from 44.8 per cent to 58.5 per cent between 1990 and 2001. Financial (in particular depositary) institutions have driven this growth. While the interest paid and net income paid as a percentage of exports has fallen, this may not be a relevant indicator of capacity to pay of financial (non-trading) private firms. The trends in Figures 2b and 2c indicate that the corporate sector was more 'fragile' in the 1980s than it appears to be in the 1990s, although Figure 2d shows that corporate debt is accelerating relative to GDP (and implicitly to corporate gross operating surplus).

The bankruptcy data in Figure 3b indicates that non-business failures dominate and have accelerated in the 1990s. Unemployment (39 per cent) and excessive use of credit (21 per cent) were the dominant causes (ITSA, 2002). Combined with the previous discussion, the fragility shown in Figure 2a may be concentrated among Australian households, whose debt more than doubled from \$267 billion to \$591 billion between 1995 and June 2002 (ABS, 5206.0). Around 70 per cent of this debt is owed to banks, usually for dwelling mortgages, with the growth "facilitated on the supply side by financial innovations" (ABS, 2002: 14) in the form of securitisation. The pursuit of budget surpluses has given the banks an incentive to innovate because the "supply of high quality fixed interest securities" (ABS, 2002: 15) (public debt) has decreased and asset-backed bonds are now the best fixed interest security available.

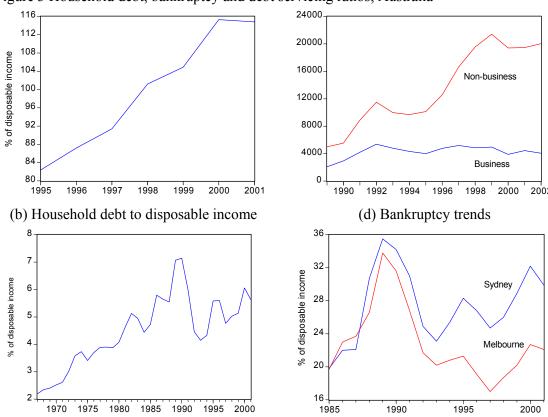


Figure 3 Household debt, bankruptcy and debt servicing ratios, Australia

(c) Interest payments to disposable income (d) Mortgage payments to disposable income Source: ABS, TRYM database; Insolvency and Trustee Service Australia for (d).

Some claim that the household debt growth reflects spending based on increasing wealth (ABS, 2002). Household assets have grown more slowly than household debt (Table 2). The ABS (2002: 15) argues that "although all assets are available for sale to reduce debt in a crisis, some are more liquid than others". In fact, while an average household owns more than

five times as much in assets as it owes, 80 per cent of these assets cannot be drawn on in times of crisis, as they are in real estate and superannuation. The major liquid assets comprise cash and equities. The debt to liquid asset ratio (Table 2) approached 94 per cent in 2001. In literal terms, households facing a major crisis could clear all their debt obligations by liquidating. However, in the event of a crisis, some of these liquid assets would lose value significantly. Column (3) in Table 2 computes the debt to total liquid assets minus equities (the latter being most vulnerable to an asset price collapse). The picture is then less attractive.

On a per household basis, the problem of realisation is also demonstrated by the falling equity in real estate assets (from 81.2 per cent in 1995 to 74.2 per cent in 2001) as a result of debt outstripping the value of the real estate owned (ABS, 2002). Thus the portion that can be liquidated is steadily being eroded. However, it is problematic to seek security by examining what might be possible in a 'fire sale'.

Table 2 Household debt to total asset ratios, Australia, 1995 to 2001

	Debt/Total Assets	Debt/Liquid Assets	Debt/Liquid Assets (less equity)	ABS debt/income ratio at 30 June
	%	%	%	%
	(1)	(2)	(3)	(4)
1995	15.3	84.9	124.6	82.4
1996	16.4	91.2	130.1	87.2
1997	16.4	86.3	133.2	91.4
1998	17.6	90.8	143.6	101.2
1999	17.7	89.1	153.4	104.9
2000	18.8	97.3	171.3	115.3
2001	19.0	93.7	174.6	114.8

Source: ABS (2002).

What has been the trend in debt servicing capacity over the last 6 years? The debt to income ratio (using the ABS measure based on gross disposable income and gross debt for the broad household sector which includes unincorporated businesses and non-profit institutions serving households) is shown in Figure 3a (and Column 4 in Table 2). There is a deteriorating debt servicing capacity for Australian households. This trend is reinforced by the rising interest paid as a percentage of household disposable income (Figure 3c) and the rising mortgage repayments as a percentage of disposable income for the population centres of Sydney and Melbourne (Figure 3d).

There has also been a resurgence of investor activity in the housing market since 2000 and it is likely to have speculative or Ponzi aspects in comparison to owner-occupied borrowing. The RBA (2002b) reports that in the last 18 months the value of investor loan approvals has risen 113 per cent, compared to 48 per cent for owner-occupation. The increase in investor

activity coincides with higher rental vacancy rates and lower rental yields. At the very least, this places strain on income cash flows in meeting contractual payment commitments on investment property. Continuation of such trends implies greater fragility, particularly if the property market collapses.

Overall, it appears that it is the household sector in Australia that has moved into debt to income positions that are consistent with the FFH.

5. Policy implications

The primary goal of macroeconomic policy should be to restore and sustain full employment with price stability. The current reliance on inflation targetting as the primary stabilisation option with passive fiscal policy promoting public surpluses is damaging and has demonstrably failed to achieve this goal. The low inflation environment attained has come at a huge cost in the form of persistent unemployment and underemployment. The aim of Treasurer Costello (1998) to "fire proof" the economy by "getting back into the black" is an inappropriate benchmark policy position. The decreasing levels of private net savings 'financing' the government surplus increasingly leverage the private sector. Increasing financial fragility accompanies the deteriorating debt to income ratios and the system finally succumbs to the ongoing demand-draining fiscal drag through a slow-down in real activity (Mitchell and Mosler, 2002).

We argue that a major shift in monetary and fiscal policy is required and must begin with an acceptance that public deficits are typically required to maintain stable growth rates in spending and sustainable levels of private sector debt. The government can clearly run surpluses for a time by exploiting the willingness of the private sector to increase its debt levels. But this strategy becomes highly deflationary once private agents seek to restore their balance sheets. The resulting output corrections force the public sector into deficit with accompanying private wealth losses and rising unemployment. In this context, the argument that budget surpluses are needed to 'fire-proof' the economy is nonsensical.

The rising private indebtedness also poses problems for inflation targetting. The increased fragility of private balance sheets increases the 'effectiveness' of monetary policy but at the expense of widespread bankruptcy and lost worker entitlements instead of slow adjustments in interest-sensitive spending.

The discussion of the FFH provides insights for the redesign of both monetary and fiscal policy and the way in which they should interact. Minsky (1986) presented a "Big Bank-Big

Government" model to describe how economies could avoid episodes of financial fragility and sustain high employment levels. He noted (1986: 304) that "Monetary policy to constrain undue expansion and inflation operates by way of disrupting financing markets and asset values. Monetary policy to induce expansion operates by interest rates and the availability of credit, which do not yield increased investment if current and anticipated profits are low. A Big Government where the budget moves to surplus with high income levels and inflation and to deficit with low investment and incomes is the primary effective stabilizer of the economy."

The 'Big Bank' model would require several changes to the present conduct of monetary policy. Minksy (1986: 322-328) favours using the discount window over open-market operations as the appropriate instrument for controlling reserves because the RBA could dictate what bank assets it will discount. For example, if the growth of 'ineligible paper' was excessive, the RBA would trigger a review of the availability of credit (for example, pricing terms) at the discount window for a bank. The holdings of eligible paper may decrease due to a decline in the borrowing needs of business, expected in a contraction. As private debt decreases, banks can keep fully invested by acquiring government debt. When this occurs, and the central bank desires reserves to grow rapidly, it can augment the reserve base by purchasing Treasury bonds from the open market.

The 'Big Government' model is built on the assumption that only government spending is responsive enough and of a sufficient size to put a floor under income flows and enhance the ability of borrowers to meet their commitments. For government spending to be effective in stabilising profits, the public deficit must automatically respond to the flux in private sector spending. Tobin (1999:1) notes that Minsky favoured automatic stabilisers to create a "self-regulated system, one that does not depend on frequent discretionary policy moves, whether by central banks, finance ministries, regulators, or legislatures ... his self-regulating capitalist economy depends for its stability on Big Government, the source of macroeconomic built-in counter-cyclical variations of aggregate demand and thus of profits."

In the context of automatic stabilisation, Mitchell (1998) has argued that a sustainable means of attaining full employment and price stability is to implement a JG, which is a permanent offer of employment from the federal government at the minimum award wage to anyone who is unable to find work in the private sector (see Mitchell, 1998 for a full explanation). The JG maintains full employment and the endogenous public budget, driven by the flux in private spending provides the profits insurance that Minsky considered essential if financial

instability was to be minimised. Tobin (1999: 1) notes that Minsky "rejects the current practice of monetary policy, guessing at the 'NAIRU' and trying to get there and stay there by variation of money-market interest rates. Instead, he wants the government to be the employer of last resort at a fixed minimal money wage rate ... By this device, the built-in stability effects of fiscal policy are enhanced by the variations of applicants for the guaranteed jobs, and the nominal wage and price level are stabilised. There are a good many practical difficulties in this proposal, but they are probably surmountable."

6. Conclusion

In this paper we have argued that the current macroeconomic policy strategy has failed to generate full employment and price stability. Economic growth in Australia since 1992, while insufficient to restore full employment has been driven by increasing private deficits, necessitated by the obsessive pursuit of fiscal surpluses. We used Minsky's FFH to explore the dynamics of this debt cycle and concluded that the trends in debt and service capacity in the household sector are consistent with the major predictions of the FFH.

By failing to understand the crucial role that budget deficits should play in maintaining full employment, the Government has not only consigned thousands to unemployment and/or underemployment, but has also underpinned an unsustainable growth path. In this context, the deflationary nature of persistent budget surpluses will ultimately deliver stagnant activity and rising unemployment and the private sector seek to improve their deteriorating balance sheet positions, by choice or by market fiat. A return to full employment requires a federally-funded Job Guarantee and thus an endogenous budget outcome determined by private spending.

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¹ Bill Mitchell is the Professor of Economics and Director of the Centre of Full Employment and Equity (CofFEE) at the University of Newcastle; Luke Reedman is a doctoral student in the Centre of Full Employment and Equity. All errors are our own.