THE UNIVERSITY OF
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The Perfect Storm

How Australia Managed to Weather the Global Financial Crisis

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Honours Thesis

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Declaration of Originality

This work contains no material which has been accepted for the award of another degree or diploma in any university, and to the best of my knowledge and belief, this thesis contains no material previously published or written by another person except where due references is made in the text of the thesis.

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Abbreviations

ABC – Australian Broadcasting Corporation

ABS – Australian Bureau of Statistics

ADI – Authorised Deposit-taking Institution

ALP – Australian Labor Party

APRA – Australian Prudential Regulation Authority

CDO – Collateralised Debt Obligation

CGS – Commonwealth Government Securities

COAG – Council Of Australian Governments

ES Funds/Balances – Exchange Settlement Funds/Balances

GDP – Gross Domestic Product

GFC – Global Financial Crisis

IMF – International Monetary Fund

MPC – Marginal Propensity to Consume

OECD – Organisation for Economic Cooperation and Development

RBA – Reserve Bank of Australia

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Chapter I

Introduction

1.1 Introduction

The purpose of this thesis is to analyse the Australian experience of the Global Financial Crisis (hereafter, GFC) and the contrasting approaches taken by the New and Post-Keynesian economic schools of thought in explaining and understanding how Australia managed to circumvent a technical recession. It is the broader objective of this thesis to justify and promote pluralism in economics by using this analysis of the Australian economy to demonstrate the viability of a synthesis between New and Post-Keynesian economic thought in the sphere of policy analysis.

Such a resynthesis of contemporary Keynesian economics can contribute to bridging the gap between orthodox and heterodox traditions, and would be significant in harmonising two of the more prominent schools in the sphere of economic analysis. Moreover, such steps towards pluralism and objectivity in economic analysis are essential in the progression of economic discourse, and it is believed that these necessary steps can be taken through a resynthesis of these contemporary Keynesian traditions. Thus, through demonstrating the possibility of a synthesis between the New and Post-Keynesian economic schools, this thesis seeks to advance the cause of pluralism in economics.

This first chapter will provide an overview of the contextual factors necessary in developing a comprehensive understanding of the Australian experience of the GFC. It will begin by briefly discussing the nature of the crisis and the manner in which it spread across the world. Following this, the key factors identified as being significant in assisting Australia's circumvention will be discussed, as will the perspectives held by New and Post-Keynesians on the relevance of these factors to Australia's resilience. Finally, this chapter will explore the key differences between the two schools in their explanations of the Australian experience, concluding with an overview of the thesis structure and its objectives.

1.2 The Global Financial Crisis

Nearly a decade after the first tremors of the GFC began to emerge, global economic recovery is still underway. The growth rate of global Gross Domestic Product (hereafter, GDP) remains below its early 2000s peak, and advanced economies are struggling to reach an annual GDP growth rate of 2 per cent, as observed by the International Monetary Fund (hereafter, IMF) (IMF, 2017a). The hangover from the crisis is all too apparent in the balance sheets of governments in advanced economies, where government debt has ballooned from 71.9 per cent of GDP in 2007 to 106.5 per cent in 2016 (IMF, 2017a). The contrasting experiences of the crisis in advanced economies and emerging market and developing economies is closely linked to the origins of the crisis itself and the discrepant regulatory approaches taken by governments in the two regions. The decades of financial deregulation in the United States prior to the turn of the century laid the foundations for the increased financial interconnectedness and excessive leverage that precipitated the GFC and exacerbated its severity, as major financial institutions collapsed due to the excessive systemic risk and financial interconnectedness that characterised the crisis (Williams, 2010: 209). From 2001 to 2007, credit growth rose dramatically in the United States, as total liabilities more than doubled, growing from $9.5 trillion to nearly $22 trillion (IMF, 2017b). This expansion of credit was paralleled in many of the advanced economies, as total liabilities more than tripled in the United Kingdom from USD $4.9 trillion in 2001 to $16.2 trillion in 2007 and in Australia, from USD $448 billion to $1.6 trillion over the same period (IMF, 2017b).

In stark contrast to the advanced economies referred to above, credit growth in developing economies in Asia was considerably low in the lead up to the crisis. The decade since the 1997 Asian Financial Crisis had seen widespread deployment of instruments such as “restrictions on loan-to-value, debt-to-income and credit growth, limits on currency and maturity mismatches, and adjustments in reserve requirements and risk weights to contain excessive financial imbalances”, which left the region far less vulnerable than the increasingly over-leveraged advanced economies (Jeasakul, Lim & Lundback, 2014: 10). Consequently, the contagion from the GFC had a comparatively marginal impact on developing countries in the Asian region, primarily due to the preceding decade of low credit growth and current account surpluses, which left economies in the region far less vulnerable to the financial crisis that unfolded.

1.3 The Australian Anomaly

Unlike its Asian counterparts, Australia did not reflect the same low rate of credit growth in the lead up to the GFC. Rather, credit in Australia's private sector exploded in the years immediately preceding the crisis, as Australia recorded the fourth highest rate of credit growth in the region between 2001 and 2007, with credit jumping from 88 per cent of GDP in 2001 to 120 per cent of GDP in 2007 (World Bank Data, 2017; author's own calculations). However, unlike many of the developed economies, Australia remained largely resilient throughout the crisis, recording only one quarter with a contraction in GDP between 2007 and 2010 (OECD Quarterly National Accounts, 2017a). The reasons for Australia's relative stability during the crisis have been the subject of fierce debate amongst economists, as the role of the stimulus policies, trade, and the preceding period of economic stability have all been contended by various economists to be the primary reason for this resilience.

Australia's economic stability and strong budget position immediately preceding the crisis contributed significantly in shielding the economy from much of the crisis and provided the Government with a much larger scope for the implementation of effective stimulus policies. In 2007-2008, the Federal Government's underlying cash balance stood at $19.75 billion, 1.7 per cent of GDP, the largest nominal cash balance surplus in the nation's history (Australian Government, 2015). As a result of this strong budgetary position, the short-term component of the fiscal stimulus package – the cash transfers and tax bonuses for low and middle-income families – were able to be implemented almost immediately, ensuring the necessary boosts to consumption and demand were made early enough to be effective in offsetting much of the initial shock of the crisis. This first stage of the Government's stimulus package, the Economic Security Strategy, was valued at $10.4 billion, and the efficiency with which it was implemented is in large part due to the cash reserves held by the Government leading up to the crisis (Swan and Tanner, 2009: 10).

By providing an immediate boost to consumption, the Government gave themselves enough time to devise and implement long-term stimulus and infrastructure policies, whilst also securing the funding for such policies through the sale of treasury notes and other Government securities, which totalled an additional $45.7 billion and $46 billion of funding in the 2008-09

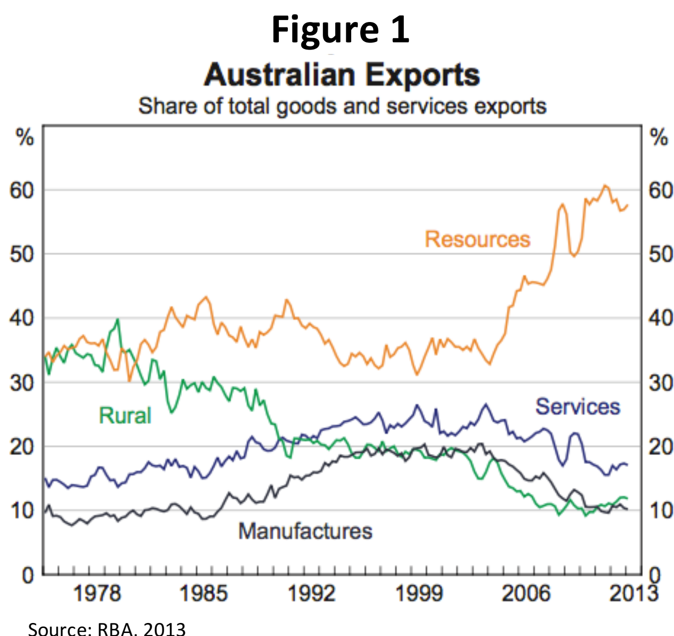
and 2009-10 financial years respectively (Australian Office of Financial Management, 2011). Thus, the strong budgetary position in the lead-up to the crisis provided the Government with a far larger scope of effectiveness for the implementation of fiscal policies, and ensured that the Government was well equipped to implement short-term boosts to consumption in a timely manner, thereby preventing the delay of implementing longer-term policies from leaving the economy vulnerable to the initial shocks from the crisis.

In addition to the budgetary surplus, Australia entered the GFC with interest rates at 7.25 per cent, the highest level in over a decade (Reserve Bank of Australia, 2017). Indeed, for the six months preceding the collapse of Lehman Brothers in September 2008, the only other countries in the Organisation for Economic Cooperation and Development (hereafter, OECD) with interest rates higher than Australia were New Zealand, Hungary and Iceland, as Australia's interest rates were consistently almost twice the average level in the Eurozone (OECD, 2017b). With such a large scope for the reduction of interest rates, the Reserve Bank of Australia (hereafter, RBA) swiftly decreased the official cash rate from 7.25 per cent in August 2008 to 3 per cent by April 2009 (RBA, 2017). Thus, while many OECD economies entered the GFC with relatively little room for the reduction of interest rates, Australia's high interest rates provided the RBA with ample scope for effective monetary policy to be enacted without taking interest rates to zero or being forced to resort to the highly unconventional policies seen in countries such as Japan and the United States (Stevens, 2009: 3).

Like the public sector, Australia's strong economic position leading into the crisis owes much to the resources boom that boosted Australian exports from the end of 2002 through to the end of the crisis. The stability and resilience of Australia's key export markets prevented the resources boom from coming to a sudden halt, eluding a significant blow to confidence and stability. Australia's resources, particularly iron ore and coal, did much to buoy national output throughout the crisis, as Australia was the world's largest exporter of both iron ore and coal in 2008, commanding a global market share of 35 per cent and 28 per cent respectively (Jorgenson, 2010: 39.5; Australian Coal Association, 2011).

In addition to providing a considerable boost to national output in the years leading up to and including 2008 (Figure 1), the explosion of Australia's resources exports leading up to the crisis "significantly fortified Australia's budget position, providing extra scope for stimulus spending when it was needed", as noted by AMP Capital chief economist Shane Oliver (ABC, 2017).

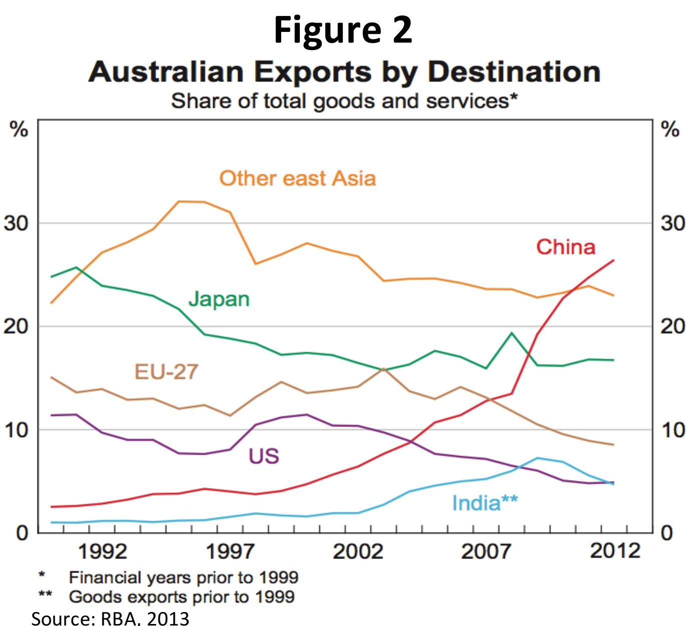
Figure 1



Source: RBA, 2013

Much of the growth in Australia's resources exports in the years leading up to the GFC and from 2009 onwards can be credited to the stability of the Chinese economy throughout the crisis, which helped buoy Australia's exports after 2008 (Figure 2). Like Australia, the Chinese Government responded to the crisis with expansive stimulus measures, which flowed to the Australian economy through the channel opened by China's demand for Australia's resources exports, as noted by economist Chris Richardson (ABC, 2017). The role played by China's demand ultimately proved vital in preventing Australia's GDP from contracting in the critical March 2009 quarter, which would have been the economy's second consecutive quarter of negative growth and therefore a technical recession. This is discussed by Tony Makin in a 2016 Treasury external paper, in which he reveals net exports as effectively being the sole factor preventing the expenditure measure of GDP from experiencing a second contraction in March 2009 (Figure 3) (Makin, 2016: 11).

Figure 2

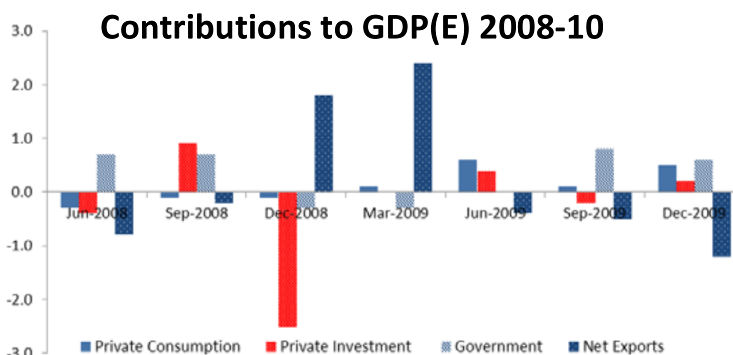


Source: RBA, 2013

The final key to Australia's circumvention of a technical recession during the GFC is the impact of the monetary and fiscal stimulus measures on national output throughout the crisis. As previously mentioned, the high interest rates in the lead up to the crisis provided the RBA with ample scope for effective monetary policy without the risk of reaching the zero lower bound. This opportunity was seized by Australia's monetary authority, which immediately cut interest rates from 7.25 per cent in August 2008 to 3 per cent by April 2009 (RBA, 2017). Additionally, as the 'lender of last resort', the RBA took action to confront the liquidity issues arising from the unwillingness of banks to lend money to one another. In managing these frictions within Australia's interbank market, the RBA increased the supply of exchange settlement funds from an average of under $1 billion to a peak of over $10 billion in October of 2008 (Figure 4) (RBA, 2009a).

Figure 3

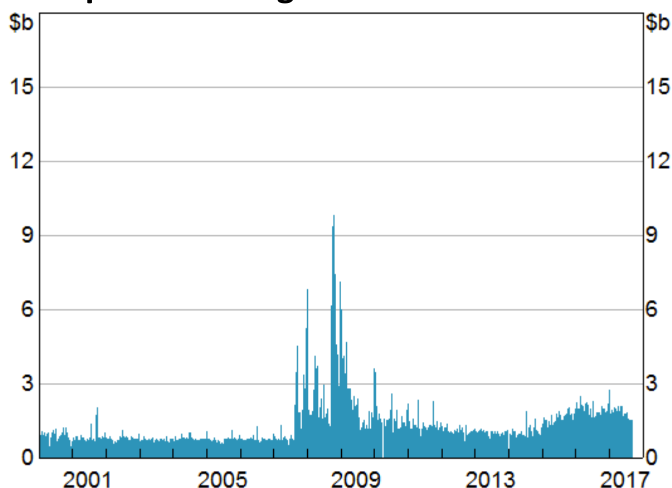
Contributions to GDP(E) 2008-10



Source: The Australian Treasury, 2016

Figure 4

'Surplus' Exchange Settlement Balances*



* Net of account holders' 'late' direct entry receipts and open positions in RBA Repos contracted at the cash rate target

Source: RBA, 2017

Thus, the decisive monetary policy responses enacted by the RBA ensured that the inevitable liquidity issues arising from the crisis were mitigated within the context of Australia's financial system, as both the considerable reductions in interest rates and the measures taken to further stimulate the country's interbank cash market proved effective in preventing a severe liquidity crisis from arising. Such interest rate reductions and additional accommodative monetary policies were thus vital in sustaining Australia's financial system through ensuring the impediments to the banks' fundraising and activities were minimised, preventing a financial collapse and the need for radical monetary policy to combat what may have otherwise become a liquidity trap.

While monetary policy is typically the favoured means through which to stabilise the economy, the severity of the GFC necessitated the implementation of sweeping expansionary fiscal stimulus policies to further mitigate the effects of the crisis. Described by Nobel Prize laureate Joseph Stiglitz as "the best designed stimulus package of any of the countries, advanced industrial countries, both in size and in design, timing and how it was spent", the Australian Government's fiscal policy response to the crisis constituted the third largest stimulus package of the OECD economies, amounting to 4.6 per cent of the country's GDP (Stiglitz cited in Metherell, 2010; OECD, 2009: 109).

Delivered in two main parts, the stimulus was comprised of a $10.4 billion 'Economic Security Strategy' and a second $42 billion 'Nation Building and Jobs Plan', with the former delivered in the wake of the crisis and the latter introduced in early 2009 and spread across to June 2010, at which point the stimulus was gradually withdrawn (Swan and Tanner, 2009: 11). Intentionally Keynesian in nature, the stimulus was split to provide an immediate boost to consumption through the Economic Security Strategy, while the longer-term Nation Building and Jobs Plan stimulus package aimed at boosting employment and economic activity through investing in infrastructure and forms of human capital. Viewed by many economic institutions, such as the OECD (2008; 2009) and the IMF (2008), and Keynesians (Stiglitz, 2008; 2010) as a success, the stimulus package is estimated to have added 1 per cent to GDP growth in 2008-2009 and 1.6 per cent in 2009-2010, whilst also providing social benefits such as additional public infrastructure and higher investments in education and training (Senate Economics References Committee, 2009: 33).

While the stimulus undoubtedly played a key role in supporting the Australian economy throughout the crisis, the size and scope of the policies have been subject to much derision, typically from those on the conservative end of the economic spectrum. Tony Makin in particular has been an outspoken critic of the Government's stimulus policies, arguing that further reduction of interest rates and less expansive fiscal policy would have been more effective and left the Government and country in a better economic position after the crisis had passed (Senate Economics References Committee, 2009: 89). However, as the efficient implementation of economic policy requires equating the marginal cost of distribution with the marginal benefits delivered, and because monetary policy loses effectiveness as it approaches

the zero lower bound, such objections regarding the 'waste' contained in the stimulus packages are contended by Keynesians to be largely unfounded (Stiglitz, 2010). As will be discussed in further detail in Chapter IV, a pragmatic approach to analysing the fiscal stimulus package passed by the Government necessitates contextual considerations such as the implications that failing to take proactive measures pose for the effectiveness of fiscal policy, and the waste that the inadequate utilisation of available resources may cause.

1.4 The Theoretical Context

Ultimately, the divergence of opinions regarding the relative importance of the aforementioned factors in preventing Australia from experiencing a technical recession can be largely attributed to the growing trend of dogmatism and sectarian rigidity in modern economic discourse. Frequently ground in the theoretical paradigms of their economic schools of thought, economists are rarely willing to concede any points that are not fundamentally in line with the credos espoused by their economic tradition. The consequence of this is a lack of objectivity in economic analysis, which leads to conclusions that are skewed by inherent ideological biases and normative assumptions. While this sectarian rigidity comes at the cost of analytical objectivity, this is a problem that can be remedied by the use of pluralism in economic analysis, which offers a more impartial approach to explaining economic phenomena.

As such, there is a need for an increased element of pluralism in economic analysis. Ideological biases act as an impediment to the attainment of objective conclusions and progress in economic discourse and analysis. A resynthesis of Keynesian economics would contribute significantly in attaining such a sense of pluralism, and would do much to bridge the gap between the orthodox and heterodox economic camps. Such a synthesis can be achieved through the adoption of a pluralist method that incorporates elements of both New and Post-Keynesian analysis whilst reconciling the key divergences between the schools. This involves making use of the fundamental Keynesian tenets shared by both schools, including the emphasis on the role of aggregate demand in determining economic growth, the use of countercyclical policies in maintaining economic stability and the implementation of expansionary monetary and fiscal stimulus policies to counter economic downturns. Moreover,

the key points of conflict between the two schools regarding fiscal policy can be reconciled through the promotion of workable alternatives that are compatible with the theoretical paradigms of both traditions. One such example is promoting the use of money-financed fiscal policy – a method of financing viewed favourably by both schools – to circumvent any issues arising from the divergent perspectives on bond-financed fiscal policy held by the schools.

As the repeated attempts to synthesise the Keynesian and Neoclassical schools – such as the Neoclassical synthesis and New Neoclassical synthesis – have struggled to gain much traction with either side of the spectrum, there is a relative dearth of literature and effort made on advancing the topic of yet another Keynesian synthesis. However, the irreconcilable differences between Monetarism and Keynesianism need not prevent a resynthesis of the New and Post-Keynesian branches themselves. While the theory of exogenous/endogenous money supply may be an impediment to this proposed resynthesis, the considerable amount of common ground and reconcilable divergences that do exist between the two schools are indicative of the potential for a synthesis of New and Post-Keynesian economics.

Such a resynthesis is not only possible, but also a necessary step forward in promoting the use of pluralism in economic discourse and analysis. In conducting an objective economic analysis, it is imperative to remove oneself from ideological biases that stem from affiliations with traditions that espouse particular methodologies to the exclusion of all others. No economic approach or tradition can, on its own, offer a perfect explanation of the plethora of economic phenomena that exists. A comprehensive approach to conducting economic analyses thus necessitates the use of a pluralistic methodology that forsakes ideological biases in favour of pragmatic objectivity. As such, a pluralist approach that incorporates elements of both New and Post-Keynesian analysis, irrespective of the ideological biases held by one contrary to the other, is a considerable step in the direction of a pluralistic future for economic analysis, as this would not only unite two of the more prominent contemporary economic traditions, but would also advance pluralism between orthodox and heterodox economics in a broader context. Accordingly, the theoretical frameworks and concepts used in this thesis will be such that the possibility of this resynthesis is made clear, as the common ground and reconcilable differences between the two schools will be evaluated in the context of a pluralistic analysis of the Australian experience of the GFC using elements of both New and Post-Keynesian economics.

In the case of the Monetarist and Neoclassical traditions, those such as Makin refuse to give any credit for Australia's performance during the crisis to the fiscal stimulus initiatives, instead giving primacy to the impacts of monetary policy and the stability of Australia's trade, as Makin makes clear his unwavering belief that what "prevented Australia from experiencing a technical recession at the critical juncture in 2008-09 was a combination of lower interest rates, a major exchange rate depreciation, strong foreign demand for mining exports, especially from China" (Makin, 2016: 3). For Makin, the view that fiscal policy was – and generally is – ineffective in stimulating demand stems, in part, from an adherence to the arguments contained in the Ricardian Equivalence Theorem; that "the prospect of increased income taxation to repay future public debt stemming from stimulus-induced budget deficits crowds out private consumption as households save more to meet future tax liabilities" (Makin, 2016: 8). However, due to its strong assumptions of forward-looking consumers with perfectly rational expectations, and the lack of conclusive empirical observations regarding the existence and size of the Ricardian offset, the practical application of the Ricardian Equivalence, particularly in its perfect form is problematic, and is thus rejected by Post-Keynesians and the vast majority of New Keynesian economists (Hemming et al., 2002: 7-29).

Though New Keynesian economists reject the notion of Ricardian Equivalence, they too place more emphasis on the importance of Government budgets and the means for fiscal policy financing than their Post-Keynesian contemporaries, as Thomas Palley notes, "the New Keynesian model sees the economy as returning to full employment once prices can reset so that fiscal policy is only temporarily effective and only if it is conditioned on unexpected demand shocks. That partially explains why new Keynesians want to close the budget deficit relatively quickly compared to Keynesians" (Palley, 2012: 35). Consequently, as New Keynesians place more importance on budget balances and the methods of financing fiscal policy than those in the Post-Keynesian tradition, Australia's budget surplus leading into the GFC constitutes a key point of divergence between the two schools in this analysis.

A point of commonality between New and Post-Keynesians regarding Australia's performance during the crisis is reached on the issue of the country's net exports, as both schools share an understanding of its importance in contributing to the level of national output. In accordance

with the fundamental Keynesian expression for national output – $Y = C + I + G + NX$ – the level of Australian exports during the crisis is naturally relevant in the context of its contribution to the country's circumvention of a technical recession. In particular, Australia's trade with China in 2009 proved to be vital in buoying national output, as export volumes to China increased by 55.85 per cent in the crucial March 2009 quarter, and then 20.72 per cent and 7.56 per cent in the June and September quarters respectively, as noted by Keynesian economist Creina Day (Day, 2011: 30). Therefore, the nature of Australia's exports to China and the extent to which these were significant in preventing Australia from recording a technical recession is an area of common ground for the New and Post-Keynesian schools, as neither departs from the classical Keynesian postulation regarding the significance of the contribution of net exports to national output.

However, their divergence on the aforementioned issues surrounding domestic policy inevitably leads to a discrepancy in perspectives regarding the stimulus packages implemented by the Government to counteract the crisis. Though both schools maintain the view that both fiscal and monetary policies are necessary in correcting market imperfections and mediating crises, the appropriate size and scope of such stimulus policies is often a point of disagreement. For their part, Post-Keynesians are largely of the view that the multiplier effect generated by additional units of government spending makes secondary the question of waste, as the primary goal is to stimulate activity within the economy. This point was echoed by Richard Denniss at the Economic References Committee on the Government's stimulus initiatives, in which he maintained that an analysis of the "efficiency of how the money is being spent needs to be undertaken from the perspective that the primary objective was to spend money quickly. The purpose of the stimulus package was to stimulate the economy. That must be the primary criteria against which it is judged" (Denniss, 2009: 28).

Though the New Keynesian tradition shares this belief in the use of stimulus policies to circumvent crises, its apprehensions regarding budget deficits translate into concerns over potential waste in such stimulus policies. Initiatives such as the expenditures on school halls and 'pink batts' came under considerable scrutiny, as many perceived these initiatives as spending money just for the sake of it, which was argued to have raised the prices of non-tradable goods, consequently drawing resources away from the tradable sector and crowding

out net exports (Makin, 2016: 8). Additionally, New Keynesians depart from the Post-Keynesian arguments regarding the consequences surrounding the means of securing funds for these stimulus packages, which were sourced via the issuance of Commonwealth Government Securities (hereafter, CGS) (Swan and Tanner, 2009: 45). For New and Post-Keynesians, the issue of bond-financed fiscal policy is again centred on their treatment of the importance of government budgets and the rationality of consumers, in addition to their contrasting views on money supply. While both schools tend to reject Ricardian Equivalence, the effect of government deficits in partially offsetting the multipliers from fiscal policy is viewed more relevant and significant in the view of New Keynesians than that of Post-Keynesians (Palley, 2012: 34-35). In contrast to the New Keynesian view that money-financed fiscal policy is invariably more efficient and effective than bond-financed policy, the Post-Keynesian perspective makes little distinction between the two, and proposes a mixture of both, which turns on the degree to which banking system activity increases, which reflects the Post-Keynesian belief in endogenous money (Palley, 2012: 16-17).

Thus, perceptions of the Australian experience of the GFC differ considerably between New and Post-Keynesians. While both traditions accept the significant contribution of Australia's net exports during the crisis, the former also argues for the importance of the country's preceding budget surplus, which is largely rejected by Post-Keynesians in favour of advocating for the role of the stimulus packages. This divide between these two branches represents a disjuncture in modern Keynesian economic analysis, which is driven by ideological rigidities and theoretical biases that ultimately hinder the process of constructive debate and objective conclusions regarding fiscal and monetary policy.

1.5 Thesis Overview and Objectives

The overarching objective of this thesis is to explore the chasm between the New and Post-Keynesian schools of economic thought regarding public policy, and to examine the possibility for a synthesis between the two. In advocating the need for pluralism in economics, this thesis will use the Australian experience of the GFC as a model through which the postulations of these two schools will be analysed and evaluated for their accuracy in explaining how the

country weathered the crisis, and in particular, how Australia managed to avoid a technical recession. It is the broader objective of this paper to justify and promote pluralism in economic analysis by demonstrating the viability of a synthesis between New and Post-Keynesian economic thought in the sphere of policy analysis.

In analysing Australia's circumvention of a technical recession, three key elements have been identified as playing pivotal roles in this experience; *(1) the state of the economy prior to the crisis, (2) the nature of Australia's exports and the stability of Asia during the crisis, and (3) the use of expansionary fiscal and monetary stimulus policies*. As such, this thesis will allow for sufficient exploration and evaluation of these three elements and their significance as perceived by New and Post-Keynesian economics. Chapter II will discuss the state of the Australian economy prior to the crisis, including the budgetary surplus and high level of interest rates, and how these provided both a buffer for the economy and considerable resources for the implementation of expansionary fiscal and monetary policy. The subject of this chapter represents the key argument made by New Keynesians which has been identified as accurately explaining part of the Australian experience of the crisis.

Chapter III will then explore the nature and performance of Australia's exports and trading partners, and the contribution of these to the country's circumvention of a recession. This chapter presents the key area of commonality between the New and Post-Keynesian schools regarding the Australian economy during the crisis, and will thus be presented as a stepping stone towards further consensus on macroeconomic analysis between the schools. Chapter IV will then discuss the fiscal and monetary stimulus policies enacted by the Government and Reserve Bank in response to the crisis, and will evaluate the efficacy of these measures in buoying economic growth during this period. Though slightly more Post-Keynesian in nature, these stimulus policies are also largely in line with New Keynesian policy prescriptions, and will therefore be used to further advocate and justify the need for a synthesis between the schools. Finally, Chapter V will extend on the preceding analysis to demonstrate the need for pluralism in economics, concluding by discussing how and why a synthesis between New and Post-Keynesian macroeconomic policy analysis is needed, and what implications this may have for the future of Keynesian economics.

Chapter II

The Australian Economy Before the GFC

2.1 The Budgetary Surplus

In the six years following the beginning of the resources boom in 2002, the Australian economy was thriving, with national GDP more than doubling from USD$395 billion in 2002 to USD$1.055 trillion in 2008, reaching $1 trillion for the first time in the nation's history (World Bank, 2017). The Australian Government was enjoying similar prosperity, holding an underlying cash balance in 2007-2008 of $19.75 billion, worth 1.7 per cent of GDP, the largest nominal cash balance surplus in the nation's history (Australian Government, 2015). This budgetary surplus presents as one of the reasons Australia entered the GFC in a unique position of strength, as the average advanced economy was running a government budget deficit of -1.3 per cent of GDP in 2007 (IMF, 2015: 65).

This is not to say, however, that the Howard-Costello Government is owed a debt of gratitude for delivering the following Rudd-Swan Government with this surplus. In fact, a 2013 quantitative analysis of the budgets and spending habits of governments in 55 countries, the IMF identified three periods in Post-War Australia that constituted "fiscal profligacy"; 1960, 2003, and 2005-2007 (Mauro et al., 2013: 37). Notwithstanding the at times frivolous spending habits of the Howard-Costello Government, the government debt of $96 billion they inherited in 1996 was entirely paid down by 2007, with the succeeding Rudd-Swan Government also the beneficiaries of a cash balance surplus of nearly $20 billion (Australian Government, 2007). This budgetary surplus is of little surprise given the state of the Australian economy during the Howard-Costello era. From 1998-99 to 2007-08, the nation experienced a 75 per cent increase in the terms of trade, much of this due to the resources boom that began in 2002, which saw Australia's export prices grow by 86 per cent over the period (ABS, 2010a). Through the increased economic activity generated by the resources boom, and the surge in tax receipts collected by the Government from the mining industry, the Howard-Costello Government had the good fortune of presiding over a remarkably prosperous period, and in managing to avoid

serious economic mismanagement, produced a record surplus that ultimately played a pivotal role in sustaining Australia's economic stability throughout the crisis.

Irrespective of how much the preceding Howard-Costello Government can be credited for the budgetary surplus inherited by the Rudd-Swan Government, the fact that they did inherit a considerable surplus proved to be a blessing when the effects of the GFC reached Australian shores. By 2009-10, the Government's underlying cash balance was running at a -$55 billion deficit, or -4.2 per cent of GDP, the largest budget deficit in over four decades (Australian Government, 2015). Had it not been for this surplus, it is highly unlikely the Government would have been able to raise the same amount of funds for the enactment of fiscal stimulus, which, if they had managed to do, would have left the budget deficit at an unprecedented -$75 billion, or -5.8 per cent of the nation's GDP, which would have severed business confidence and left Australia vulnerable to the possibility of a recession when the shock generated by the simultaneous occurrence of the stimulus withdrawals, interest payments and tax burdens took effect.

Moreover, the higher the budget surplus leading into a crisis, the less governments are required to fund their deficits through the issuance of government debt instruments, which can have the effect of crowding out in the private sector. This method of bond-financed fiscal policy was in fact adopted by the Australian Government, which issued a series of CGS, primarily Treasury Bonds and Treasury Notes, to raise an additional $45.7 billion and $46 billion of funding in the 2008-09 and 2009-10 financial years respectively (Swan and Tanner, 2009: 45; Australian Office of Financial Management, 2011). Thus, in entering the crisis with a record high budget surplus, the Government was far less reliant on the use of government debt instruments to fund the fiscal stimulus, which mitigated the effects of crowding out caused by the issuance of CGS.

This method of bond-financed fiscal policy is seen by many economists, particularly those from the New Keynesian tradition, as presenting significant challenges for the prospects of recovery that already weakened financial sectors and security markets may have. In an analysis of the effects that bond-financed fiscal policies have on financial markets and the government spending multiplier, Robert Solow and Alan Blinder note that the issuance of government debt

instruments, if unaccompanied by an increase in the money supply, competes with private debt instruments in financial markets, consequently putting upward pressure on interest rates. This has the effect of reducing interest-elastic private expenditures such as spending on consumer durables, residential construction and business fixed investment, which partially offsets the expansionary effect from the original increases in government spending (Blinder and Solow, 1973: 320).

Due to the impacts upon private investment that bond-financed fiscal policy imposes, the state of government balance sheets in the wake of an economic crisis is of objective significance. For risk-averse consumers and investors during a crisis, the increased security of investments in government bonds relative to that of stock market securities will naturally draw investment away from the securities markets. Moreover, if the money supply does not rise in line with the increased demand for liquidity that results from the issuance of government debt instruments, the size and effects of upward pressure on interest rates and subsequent declines in private investment are dependent on the amount of capital that must be raised by the government through these debt issues, which in turn depends on the balance sheet of the state at the time of funding.

Thus, the $19.75 billion budget surplus inherited by the Rudd-Swan Government presents as a crucial factor in explaining the Australian experience of the GFC. Had Australia been running the same budget deficit of -1.3 per cent of GDP as the average advanced economy had in 2007, the country would have entered the crisis with a balance sheet of -$15.1 billion, with the $35 billion difference in available funding inevitably reducing the scale and scope of the fiscal stimulus and likely forcing the Government to issue a significantly higher amount of CGS, which would have placed more upward pressure on interest rates and further crowded out private investment (IMF, 2015: 65; author's own calculations). Thus, due to the lower amount of CGS that were issued as a result of the resources provided by the surplus, the effects of directly crowding out securities markets and indirectly crowding out private investment were comparatively marginal, as the Government was able to rely considerably on the capital reserves they inherited from the previous administration.

2.2 Higher Interest Rates

Like the Government's underlying cash balance, Australia's interest rates had been buoyed by the nation's economic prosperity in the six years preceding the crisis, in addition to growing concerns about inflation, which were cited by the RBA in their decisions to consistently raise the interest rate throughout the latter half of 2007 up until the crisis struck (Stevens, 2008). The extended expansions of growth experienced by the Australian economy from 2002 to 2008 placed upward pressure on prices and inflation, forcing the RBA to make twelve consecutive interest rate rises from April 2002 to March 2008, increasing by 300 basis points over this period to eventually reach 7.25 per cent immediately before the crisis struck, the highest level in over a decade (RBA, 2017).

Australia's interest rates pre-GFC were not just high by national standards – in the six months before the collapse of Lehman Brothers in September 2008, the only OECD countries with higher interest rates than Australia were New Zealand, Hungary and Iceland, as Australia's interest rates were consistently almost twice that of the average level in the Eurozone (OECD, 2017b). As a result, the scope of effectiveness for monetary stimulus policies was far greater in Australia than in the majority of advanced economies. Despite cutting the nominal interest rate by 425 basis points over six months to an unprecedented low of 3 per cent in April 2009, the RBA was still left with ample scope for the consideration of further interest rate reductions if necessary (RBA, 2017).

Consequently, the issue of nominal interest rates reaching the zero lower bound, a problem that confronted a number of advanced economies, was of no concern in Australia. Indeed, expansionary monetary policy in the United States prior to the crisis left the Federal Reserve unable to maintain desired control over the monetary aspects of the economy, as Alan Blinder notes, "The Fed set the federal funds rate to approximately zero in December 2008, and it has been stuck there ever since. From then until the time of this conference (October 2010), the core inflation rate (measured by the 12-month trailing CPI) fell by 120 basis points. So there was an automatic 120-basis-point *tightening*, despite the Fed's strong desire to stimulate the economy" (Blinder, 2012: 142). Further, the liquidity trap that may arise from monetary policy failing to stimulate the economy becomes increasingly likely as interest rates draw nearer to

the zero lower bound. As a result, the countries that entered the crisis with interest rates already near this zero lower bound, such as the United States and Japan, were forced to implement radical quantitative easing policies in an attempt to generate economic activity through monetary policy.

Thus, because monetary policy becomes less effective the closer interest rates get to the zero lower bound, entering a global crisis with substantial scope for expansionary monetary policy is of fundamental importance. Despite being reduced by 59 per cent in three months, the lowest Australia's interest rates reached was 3 per cent, which stands in stark contrast to economies in the Euro area, where July 2009 saw the average interest rate fall below 1 per cent, remaining there until October in 2010, while Australia's had already begun increasing again by October 2009, the first of the G20 nations to do so (OECD 2017b; Hill, 2012: 35-36). Thus, while countries like the United States and Japan had to resort to extreme and unconventional measures to try and enact monetary stimulus policies, the high level of Australia's interest rates leading into the crisis enabled monetary policy to be eased significantly without having to resort to such measures (Stevens, 2009: 3).

2.3 The Financial System and Regulatory Framework

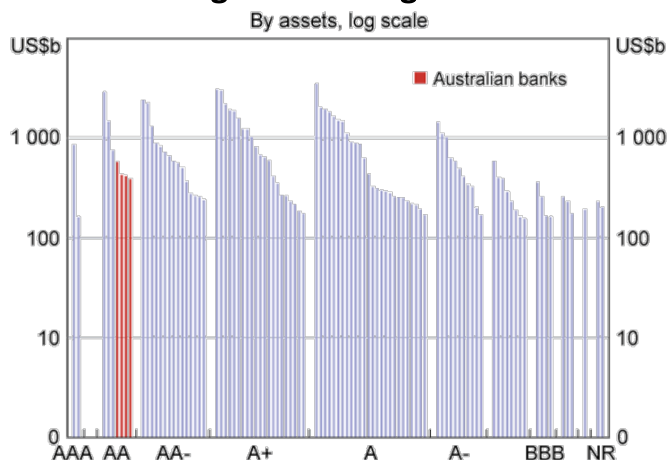
In the years preceding the GFC, the Australian regulatory framework underwent a series of changes to streamline oversight and overhaul the Australian Prudential Regulation Authority (hereafter, APRA). As a result of the collapse of HIH Insurance, Australia's second largest insurance company, in 1998, the HIH Royal Commission proposed a series of recommendations regarding the operational structure and approach to prudential supervision that APRA was to adopt (Hill, 2012: 41). In particular, the regulatory nature of APRA was addressed by Recommendations 26 to 28, which stipulated that APRA was to develop "a more sceptical, questioning and, where necessary, aggressive" approach to its prudential supervision, and implement systems that encouraged regulators to continuously question and ensure the solvency and viability of regulated entities (Hill, 2012: 42; Owen, 2003: 220-221).

As a result of the Royal Commission and increased scrutiny regarding the effectiveness of APRA, the regulatory body became more active in enforcing regulatory mandates, particularly with regards to ensuring sustainable liquidity positions and degrees of leverage in Australia's major banks. Such examples include APRA's 2004 requirement that National Australia Bank increase its internal capital adequacy ratio by 10 per cent until the bank had rectified material weakness to a satisfactory degree, and their move in 2008 to pressure Commonwealth Bank into raising their Tier 1 capital above 7.5 per cent in order to cushion the bank against losses (Hill, 2012: 43-44). Ultimately, such moves by APRA provided Australia's financial sector with considerable additional protections from risk, which proved to be significant in mitigating the contagion from the GFC.

Though APRA did much to mitigate risk in the nation's financial sector, Australia's financial institutions themselves can also be credited with the resilience and stability shown during the crisis. By September 2009, Australia's 'Big Four' banks represented four of only nine among the world's largest 100 banks to still have a credit rating of AA or over, as shown in Figure 5 (RBA, 2009a). The resilience of Australia's financial sector is in large part a continuation of the legacy of stability that has become a hallmark of the nation's major financial institutions, reflected in the fact that since the introduction of modern banking legislation in 1945, no depositor has lost funds in an authorised financial institution (Hill, 2012: 45-48).

Figure 5

Credit Ratings of the Largest 100 Banks*



* Holding company ratings; predominantly Standard & Poor's local currency ratings, unless unrated, then Moody's senior unsecured

Source: RBA, 2009

While banks in countries such as the United States were heavily involved in complex and highly leveraged debt instruments like collateralised debt obligations (hereafter, CDOs), Australia's financial institutions were far more invested in securing funds internationally for lending within Australia (Brown and Davis, 2010: 540). Further, the introduction of the Basel II prudential framework at the beginning of 2008 saw Australian banks, at great expense,

improve their risk management systems in order to qualify for Advanced IRB (advanced internal ratings-based approach) status under the new framework, which naturally led to a heightened consideration of risk management and monitoring at what turned out to be a critical moment, only eight months out from the beginning of the GFC in September later that year (Brown and Davis, 2010: 540).

As a result of the increased responsibility and duties performed by APRA, the heightened consideration given to risk management and identification processes by Australia's financial institutions, and the legacy of stability that characterised the nation's financial sector, the contagion that affected banks worldwide had a considerably diminished impact on the Australian financial sector. Though the Federal Government provided guarantees for deposits and wholesale debt securities and took other measures to ensure the continued stability of Australia's financial sector, the fact that no major financial institution was at risk of collapsing meant that, unlike governments in countries like the United States and the United Kingdom, the Australian Government did not have to direct significant amounts of capital to bailing out financial institutions, which would have diverted money away from the stimulus packages and dealt considerable blows to business and consumer confidence.

2.4 The New Keynesian View

In understanding Australia's circumvention of a technical recession during the Global Financial Crisis, contextual consideration of the state of the Australian economy in the lead-up to the crisis is of particular interest to economists from the New Keynesian tradition. The Australian Government's budgetary surplus in the wake of the crisis presents as the key point of focus in this case, as the larger the deficit required to finance fiscal stimulus policies, the smaller the expansionary effects of these policies are. This is particularly the case for bond-financed fiscal policies, which require the creation of new debt instruments by the government, the interest payments on which subsequently exacerbate the budget deficit, presenting further complications for economic recovery. Furthermore, in competing with private debt instruments in financial markets, these government securities have the effect of crowding out private investment, as wary investors look to purchase securities with an effectively guaranteed return.

This crowding out effect also occurs down the line with business investment generally, as the inevitable increase in liquidity demand – when unaccompanied by higher issues of currency – places upward pressure on interest rates, which subsequently reduces interest-elastic private expenditures such as business fixed investment and private spending on consumer durables, and partially offsets the expansionary effect generated by the original increase in public spending (Blinder and Solow, 1973: 320-321).

In the case of the fiscal policies implemented by the Australian Government, the issue of bond-financed stimulus makes the preceding budgetary surplus a prominent factor in the New Keynesian understanding of how the nation circumvented the GFC. As previously noted, the method of financing the fiscal stimulus policies used by the Australian Government comprised of the issuance of government debt instruments in the form of CGS, totalling $45.7 billion and $46 billion of funding in the 2008-09 and 2009-10 financial years respectively (Swan and Tanner, 2009: 45; Australian Office of Financial Management, 2011). Notwithstanding the unavailability of a conclusive counterfactual, the context of an economic recession and the sheer size of the additional funds raised indicates significant potential for the crowding out effect to have occurred. For perspective, these amounts were worth more than twice the total market capitalisation of Wesfarmers (ASX: WES) in both of their respective years (Australian Office of Financial Management, 2011; YCharts, 2017; author's own calculations). Thus, the New Keynesian perspective holds that the macroeconomic impact of the Government's stimulus measures would have been considerably higher had the stimulus been financed by the issuance of additional units of currency. Though Post-Keynesian approaches share this view of the superiority of money-financed fiscal policy relative to bond-financed policy, the divergence between the schools on the macroeconomic consequences of the latter presents as a sharp distinction between the two in the context of explaining the Australian experience of the GFC. However, this discrepancy is remedied through the promotion of money-financed fiscal policy in future analyses, and therefore does not pose as a problematic impediment to a synthesis of the two, as will be discussed in further detail in Chapter IV.

Unaccompanied by corresponding increases in the money supply, this sudden injection of financial instruments into the Australian economy placed upward pressure on interest rates, which rose 175 basis points to 4.75 per cent by November 2010 (RBA, 2017). While this was

said by the RBA to be due to indications of economic recovery, a New Keynesian perspective would contend that the issuance of CGS also played a role. It is thus due to the secondary effects of crowding out upon private investment, and the primary effects upon securities markets, that the New Keynesian argument stipulates fiscal policy must rely as little on government debt instruments as possible.

It is this approach towards financing fiscal policy that indicates the importance of Australia's budgetary surplus to a New Keynesian analysis of Australia's stability during the GFC. As the Government entered the crisis with an operating balance of nearly $20 billion, the effect of crowding out was significantly less than it would have been, had Australia entered the crisis with the same budget deficit of -1.3 per cent of GDP as the average advanced economy had in 2007 (IMF, 2015: 65). If this were the case, the Australian Government would have been forced to devise the fiscal stimulus via a balance sheet of -$15.1 billion, with the $35 billion difference in available funding leading to a reduction in the scale and scope of the fiscal stimulus and likely forcing the Government to issue a significantly higher amount of CGS, thus exerting more upward pressure on interest rates and further crowding out private investment down the line (IMF, 2015: 65; author's own calculations). Thus, for New Keynesians, the state of the Australian Government's balance sheet in the lead-up to the GFC is a critical factor in explaining Australia's resilience and stability throughout the crisis. Without this budgetary surplus, the fiscal stimulus policies are unlikely to have had similarly expansionary effects, due to the reduced funding available for the policies and the increased effects of crowding out generated by the issuance of additional CGS, which would have further offset the expansionary effects of public spending.

2.5 Conclusion

Ultimately, the state in which the Australian economy entered the GFC presents as a significant factor in understanding how the nation circumvented a technical recession. Australia had been enjoying consistent growth since the recession of the early 1990s, with real gross domestic income growing by 68.4 percent between 1995 and 2007 (Hill, 2012: 32). In particular, the resources boom that began around the end of 2002 ensured both the private and public sectors

entered the crisis in a sound financial position, with net exports providing boosts to national GDP and generating economic activity that buoyed the Government's tax receipts. The budgetary surplus with which the Government entered the crisis proved to be a critical factor in Australia's stability and resilience throughout the GFC, as this provided the Government with a 'war chest' of resources, which were fully deployed in battling the effects of the crisis. As a result, the Government was able to implement expansionary stimulus measures, the size and scale of which were uninhibited by budgetary concerns. Moreover, this surplus meant the Government was not forced to rely as much upon fundraising through CGS as it otherwise would have, which mitigated the effects of bond-financed fiscal policy on crowding out investment and exerting upward pressure on interest rates.

Additionally, the sound condition and legacy of stability of Australia's financial sector proved to be vital in enabling the country to circumvent the credit crises and collapses of financial institutions that were experienced by many of the advanced economies. Relatively unexposed to the immense credit risk emanating from the collapse of the financial sector in the United States, Australia's major banks avoided the risk of bankruptcy, thus preventing the inevitable shock to investor confidence that would have occurred, and ensuring the Government was not forced to detract from the fiscal stimulus in order to provide a bailout. Finally, the improved oversight and effectiveness of Australia's financial regulatory bodies, in particular APRA, and the effects of the Basel II prudential framework upon the risk management systems and revenue raising methods of Australia's banking institutions prevented the nation's financial sector from being as adversely affected as those in many of the advanced economies, and ensured the major banks maintained a AA credit rating, which did much to maintain economic stability and confidence throughout the crisis.

Chapter III

China and the Resources Boom

3.1 Stability in China Throughout the Crisis

The stability and resilience displayed by Australia's key export markets throughout the crisis presents as another key factor in explaining Australia's ability to circumvent a recession. China in particular accounts for much of the consistent growth of Australia's exports, and played a vital role in helping Australia avoid recording a second consecutive quarter of negative GDP growth in the critical March 2009 quarter (Makin, 2016: 11-12). China's fiscal stimulus of $647.6 billion contributed significantly to Australia's export stability, helping to fund China's infrastructure projects, subsequently making heavy use of Australia's resource exports (Makin, 2010b: 13; Senate Economics References Committee, 2009: 72). By providing a channel through which funds from China's fiscal stimulus could flow to Australia, the Chinese Government helped maintain demand for Australia's resources exports, which proved influential in sustaining Australia's GDP through the latter stage of the crisis in 2009.

Australia was thus in a uniquely fortunate trading position in the wake of the crisis and throughout, due to its proximity to China, the availability of resource exports that suited Chinese demand, and the resilience and stability of the Chinese economy during the GFC. While investment in most of Asia collapsed during the crisis, Chinese investment increased considerably, with investment as a percentage of GDP growing from 39.7 per cent at the end of 2007 to 44.1 per cent in 2008 and increasing again to 48.2 by 2009 (Huang and Wang, 2011: 15). Though China's GDP growth began to slow in 2008, the sudden depreciation of the Australian Dollar over this period mitigated the effects of this slowdown. Indeed, 2008 saw Australia's exchange rate drop by 35 per cent in four months, as the Australian Dollar fell from USD $0.98 in July to USD $0.63 by November, which had a profound impact on Australia's exports to China, as shown in Figure 2 (RBA, 2009b).

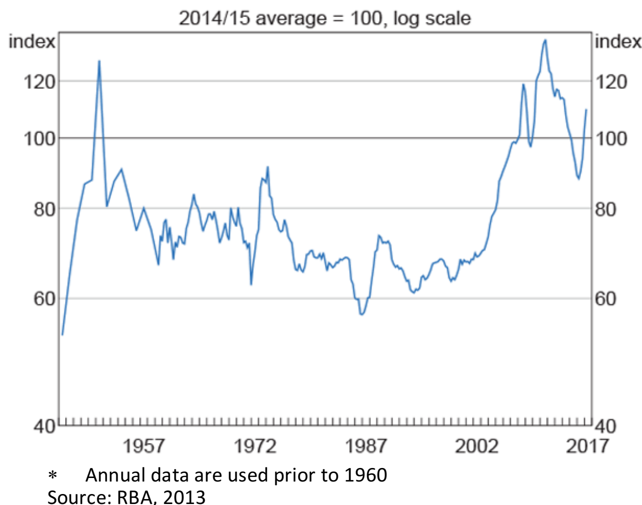
This exchange rate depreciation persisted through the first quarter of 2009, staying below USD $0.67 for the entire quarter (RBA, 2009b). The timing of this could not have been more beneficial for Australia's economic prospects, as the preceding quarter had yielded a contraction in GDP, and China's growth continued to slow. However, notwithstanding the preceding quarter of negative GDP growth and signs of an economic slowdown in its primary export market, Australia managed to record positive GDP growth of 0.4 per cent for the quarter, thus escaping a technical recession (ABS, 2009). Despite China's status as a global leader in the production of iron ore – by far their largest import from Australia – the lack of quality and comparatively high cost of domestic production, coupled with Australia's considerable exchange rate depreciation led to an increase in Australia's exports to China for the quarter, as the declining spot price of iron ore in China in late 2008 and early 2009 had the effect of making Australia's exports more competitive (Laurenceson and Ki Tang, 2009: 11). Consequently, Australia's net exports were by far the main factor in lifting the nation's expenditure measure of GDP growth out of the red in the March quarter, preventing the economy from recording a second consecutive quarter of contraction in growth, and thus a technical recession, as shown in Figure 3.

3.2 Australia's Resources Boom

Beginning around the end of 2002, Australia's resources boom has delivered considerable boosts to national income and economic stability, and played a significant role in enabling the country to maintain economic growth throughout the crisis. The boom can be analysed as being comprised of three overlapping phases; the price increases and appreciation of the nation's terms of trade that began in 2003 and peaked in 2011, the investment phase that grew strongly from 2006 and peaked around 2013; and the growth of resources production and exports, which endured beyond the GFC and is expected to continue dominating Australia's exports for a number of years (Minifie et al., 2013: 5). By 2013, the mining boom was estimated to have been responsible for an increase in real per capita household disposable income of 13 per cent, a 6 per cent rise of real wages, and a reduction of 1.25 percentage points from the unemployment rate (Downes, Hanslow and Tulip, 2014: 1).

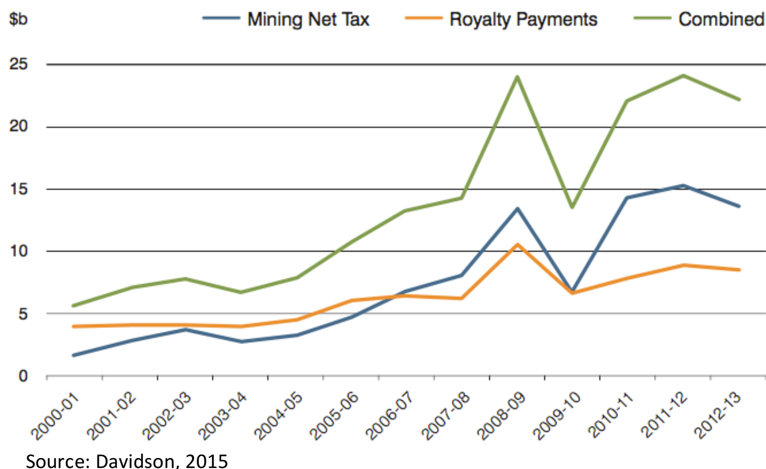
As demand for natural resources quickly outpaced global supply, the price of commodities experienced sharp increases, which led to a surge in Australia's terms of trade, rising by 82 per cent from 2003 to reach their highest level on record in 2011, as shown in Figure 6 (Bishop et al., 2013: 40). This led to a rapid increase in government revenue through mining tax receipts, which more than quadrupled in the lead-up to the GFC, jumping from around $3 billion 2003-04 to over $13 billion in 2008-09 (Davidson, 2015: 4).

Figure 6
Terms of Trade*



* Annual data are used prior to 1960
Source: RBA, 2013

Figure 7
Natural Resource Royalties and Mining Net Tax



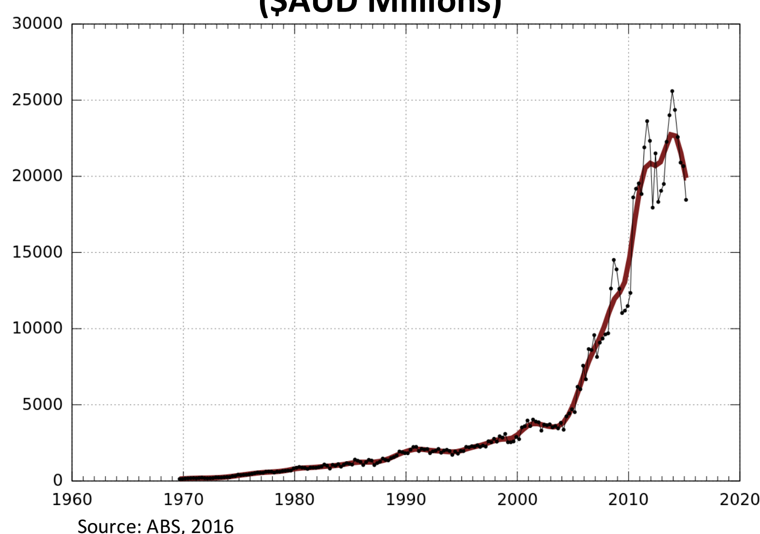
Source: Davidson, 2015

Further, the royalty payments paid by the mining industry provided considerable boosts to tax revenue during this period, generating almost $30 billion of revenue for the Government between 2006 and 2008 alone, as shown in Figure 7. Moreover, as can also be seen in Figure 7, in the financial year encompassing the critical March quarter in 2009, the revenue generated by the mining industry for the Government totalled just under $25 billion, which provided the Government with a significant boost in income at a point in the crisis that proved pivotal in Australia's circumvention of a recession. The considerable benefits delivered to the Government through both the macroeconomic activity and increased tax receipts by the mining boom thus left the Government in a strong position in the wake of the crisis, contributing significantly to the reserves of capital that were deployed in the Government's fiscal stimulus.

The timing of Australia's resources boom proved to be critical, as it placed the economy in a strong position in the lead-up to the GFC, with the flow on effects from the boom ensuring high economic activity and improved living standards which, to some extent, served as a buffer from the initial shock of the crisis. A research discussion paper commissioned by the RBA found that by 2013, the resources boom was responsible for an increase in real per capita household disposable income by 13 per cent, a 6 per cent rise of real wages, and a reduction of 1.25 percentage points from the unemployment rate (Downes, Hanslow and Tulip, 2014: 1). As mining export prices are highly pro-cyclical, the surge in the production of resources exports – compounded with the 75 per cent increase in Australia's terms of trade from 1998-99 to 2007-08 – generated significant value for the mining industry, the flow on effects of which provided boosts to output in a number of other sectors, in particular construction and property and business services (Grant, Hawkins & Shaw, 2005: 8; ABS, 2010a; Tulip, 2014: 21). Thus, as a result of this sound financial position, the Australian economy entered the crisis with activity at a level that allowed for the inevitable declines in consumption and demand to take place without dragging the entire economy into the red.

Figure 8

Metal Ore and Minerals Quarterly Exports ($AUD Millions)



Source: ABS, 2016

As a result of the increased economic activity and boosts to the Government's tax receipts generated by the resources boom in the years preceding the GFC, the mining boom contributed strongly to Australia's performance during the crisis, as it was significant in fortifying the economy and providing the Government with a "magnificent war chest" of budgetary surpluses that were subsequently used in the Government's fiscal stimulus packages (Richardson cited in ABC, 2017). As shown in Figure 8, the substantial increase in the value of Australia's two dominant resource exports – coal and especially iron ore – from 2003 through to the end of the crisis was significant in boosting overall economic activity, consumption and investment (Figure 9), effectively cushioning the Australian economy from the initial shock of the GFC.

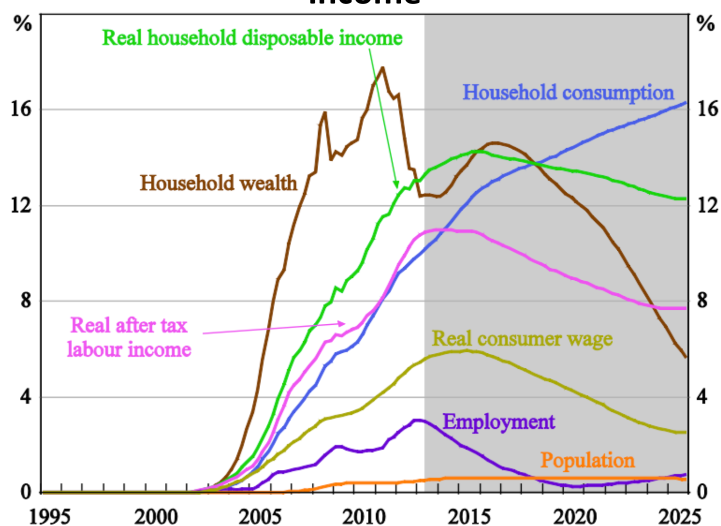
Thus, the composition of Australia's exports and timing of the nation's resources boom proved critical in fortifying the Australian economy in the lead-up to the GFC. By increasing real and national income, employment and economic activity, the boom provided the economy with a buffer from the impact of the GFC. Further, by significantly increasing the Government's tax receipts, Australia's mining sector provided the Government with the resources necessary to implement the expansionary fiscal policies that constituted the fiscal stimulus, as was noted by then Chief Executive of Linfox, Michael Byrne, "If we didn't have mining, Australia would be like Portugal, Spain, maybe Greece and Ireland," (Byrne cited in Smith, 2011).

3.3 Keynesians and Trade

For New and Post-Keynesian explanations of the Australian experience of the GFC, the role of net exports presents as a point of commonality, with both traditions subscribing to the traditional Keynesian expression for national output – $Y = C + I + G + NX$ – and therefore to the importance of the role of net exports in sustaining national income and GDP growth. Because net exports are the only component of GDP that cannot effectively be directly influenced by fiscal policy, the state of net exports is critical to the overall stability and growth of an economy. This is particularly the case for a country with a large sectoral concentration of exports such as Australia, as natural resources account for over 50 per cent of the nation's exports, and thus play a pivotal role in determining the level of Australia's net exports, and consequently, of GDP.

Figure 9

Effects of the Mining Boom on Household Income*

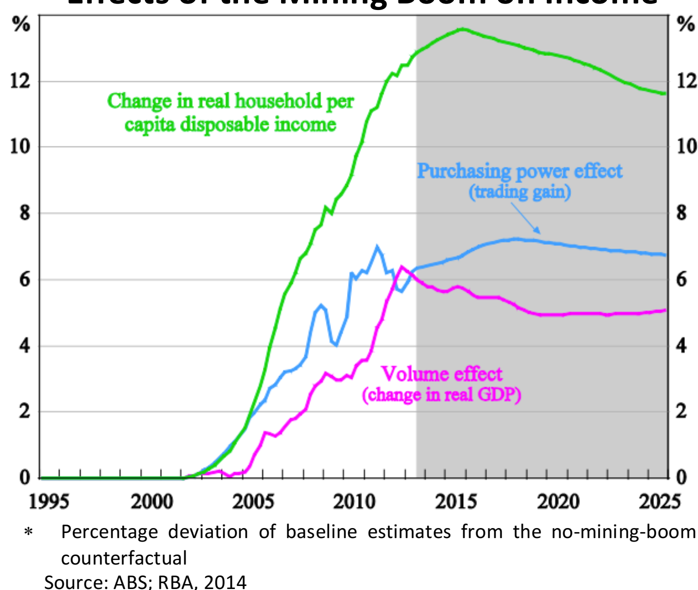


* Percentage deviation of baseline estimates from the no-mining-boom counterfactual; real incomes are deflated by the national accounts consumption deflator; real household disposable income is as defined in the ABS quarterly national accounts' household income and outlay accounts

Source: ABS; RBA, 2014

Given the significance placed by both New and Post-Keynesian economists on the role of aggregate demand in determining the rate of growth in an economy, the considerable increase in consumption generated by the resources boom (Figure 9) is a significant factor in explaining Australia’s circumvention of a recession. The positive impact of the mining boom upon every metric of household income is of clear significance in a Keynesian analysis of the role played by the boom in stimulating the Australian economy, as the clear implications for increases in aggregate demand, as indicated in Figure 9, are demonstrative of the vitality with which Keynesians view the mining boom in the context of Australia’s economic condition in the lead-up to the GFC. It therefore follows from this that both a New and Post-Keynesian analysis of the key factors underpinning Australia’s economic performance during the crisis place shared emphases on the significance of the nation’s resources sector and the mining boom in enabling the country to sustain economic growth throughout the GFC.

Figure 10
Effects of the Mining Boom on Income



* Percentage deviation of baseline estimates from the no-mining-boom counterfactual
Source: ABS; RBA, 2014

Moreover, the multiplier effect generated by the resources boom extends this sphere of influence to the business component of the economy. Represented by the pink line in Figure 10, the significant increase in the volume of goods and services produced in the Australian economy as a result of the resources boom indicates a considerable multiplier effect, as higher mining investment naturally contributes directly to rises in aggregate demand and the national capital stock, while the increase in national income driven by the resources boom provides boosts to the various spending components of the economy, thus stimulating economic activity (Downes, Hanslow and Tulip: 2014: 10-11). The implied multiplier effect that the increase of 8 per cent – by the beginning of the crisis – in real household per capita disposable income that was generated by the mining boom therefore represents another key element of the influential role played by the boom in both preparing and sustaining the Australian economy before and during the crisis. Quantitative studies of the aggregate marginal propensity to consume (hereafter, MPC) in Australia yield a result of 0.41-0.42, which translates into an increase of roughly 3.36

per cent in household consumption generated by the mining boom in 2008 alone (Leigh, 2009: 1). Thus, the notional impact of the resources boom upon macroeconomic activity and aggregate demand is demonstrative of the key role played by this boom in preparing the Australian economy for the crisis. Consequently, this considerable increase in household consumption generated by the multiplier effect of the impact from the mining boom upon household disposable income presents as a significant factor in both a New and Post-Keynesian explanation of Australia's economic stability during the crisis.

Thus, for both New and Post-Keynesian analyses of the Australian economy during the GFC, the net export component of GDP presents as a critical factor in explaining the nation's ability to circumvent a technical recession. This was especially the case in the March quarter of 2009, in which net exports were the only factor that contributed significantly to lifting the nation's expenditure measure of GDP above zero (Figure 3), ensuring the country dodged a second consecutive quarter of GDP contraction. Moreover, the emphasis that both traditions place upon the role of consumption and demand in determining economic growth leads to a shared conclusion that the impact of the resources boom upon household income, and subsequently household consumption, is significant in understanding how this boom fortified the Australian economy and left it well placed in the lead-up to the GFC.

It is therefore evident through both a New and Post-Keynesian interpretation of the significance of these factors that the nature of Australia's exports, the effects of the mining boom and the stability of the Chinese economy are all objectively significant factors that are realised as such through a synthesis of the two traditions in forming a pluralistic analysis. From this, it can be concluded that the viability of a synthesis of the New and Post-Keynesian approaches is supported by an observation of the significant roles played by these aforementioned factors in enabling the Australian economy to maintain stability throughout the crisis and circumvent a technical recession.

3.4 Conclusion

Ultimately, Australia's resources boom and the stability of the Chinese economy proved pivotal in enabling the country to escape the GFC without recording a technical recession. Australia's status as the global leader in reserves and the production/export of gold, coal, iron ore, nickel, lithium, lead and several other key natural resources is emblematic of the vitality of the country's resources sector to its trade and macroeconomic stability and growth (Geoscience Australia, 2016: 7). Without the considerable boosts to government revenue provided by the resources boom, the fiscal stimulus packages that were implemented are unlikely to have been of the same magnitude and effectiveness, as lower tax receipts in the counterfactual, coupled with a reduction in economic activity and consumption, would have left the Government with a far smaller budgetary surplus, if any.

Moreover, the macroeconomic boosts to private sector investment, production and consumption contributed strongly to fortifying the national economy leading into the crisis. By 2008, the resources boom is estimated to have increased real household disposable income by 8 per cent and real GDP by 3 per cent, providing a clear indication of the macroeconomic boosts delivered by the boom to Australia's private sector, in addition to the public sector via the subsequent increases in tax receipts generated by growing economic activity (Downes, Hanslow and Tulip, 2014: 9-11). Additionally, the boosts to national income delivered by the mining boom, and the subsequent increases in household consumption and expenditure did much to fortify the Australian economy, as the increased levels of economic activity in the lead-up to and wake of the crisis acted as a buffer from the initial shocks caused by the GFC.

In addition to being well endowed with profitable natural resources, Australia's export related success in the lead-up to and during the GFC owes much to the stability of the Chinese economy and the fiscal stimulus implemented by the Chinese Government, which saw demand for iron ore and coal grow considerably in response to new infrastructure projects and expenditures being undertaken by Australia's largest export market (ABC, 2017). The importance of China's continued stability for Australia's economic prospects was clear even before the global recession began, as the OECD noted in the June 2008 *Economic Outlook*, "…the weakening economic situation in the OECD area should be cushioned in Australia's

case by the persisting strength of the Chinese economy" (OECD, 2008: 125). Moreover, the fiscal stimulus implemented by the Chinese Government created a channel through which Chinese investment and demand for Australian exports could continue supporting the Australian economy, a point consistent with the Keynesian view that a nation's fiscal expansion delivers financial benefits to its key trading partners through the increase in imports generated by higher government spending (Day, 2011: 26). Finally, in the crucial March quarter of 2009, the role of net exports in preventing the economy from experiencing a second consecutive quarter of contraction in GDP is beyond question, as shown in Figure 3.

Thus, in both a New and Post-Keynesian analysis of Australia's circumvention of a recession during the GFC, the stability of the Chinese economy and the nature of Australia's net exports present as key factors for a number of reasons. Firstly, the increased government revenue generated by the stimulatory effect of the resources boom on economic activity and the increase in tax receipts from the mining industry provided the Government with a considerable amount of resources, which enabled the implementation of effective expansionary fiscal policy when it was needed. Secondly, the macroeconomic activity created by the multiplier effect induced by the resources boom contributed to fortifying the Australian economy in the lead-up to the GFC, which provided the economy with a buffer from the initial shock of the crisis, as economic activity and growth were at levels sufficient to absorb some of the initial effects upon consumption and investment. Thirdly, the timing of both the 75 per cent increase in the terms of trade from 1998-99 to 2007-08, and subsequent exchange rate depreciation in the latter half of 2008, proved highly beneficial to the nation's exports, as the former saw Australian exports deliver exponentially increasing returns, while the 2008 exchange rate depreciation took effect as China's economic growth and export demand began to slow, which mitigated the effects this had on Australian exports (ABS, 2010a). It can therefore be stated categorically that, with respect to Australian GDP growth in the March quarter of 2009, Australia's net exports and trade relationship with China are the primary reasons for the country's circumvention of a technical recession. With respect to Australia's stability during the rest of the crisis, the effects of the mining boom on the nation's levels of income, consumption and government tax receipts, in addition to the aforementioned factors, are key explanatory features in both a New and Post-Keynesian analysis.

Chapter IV

The Fiscal and Monetary Stimulus Policies

4.1 The Political Context

For a new Government that had finally seized power from the Liberal Party after a decade in opposition, the GFC represented a trial by fire through which the economic competence of the Rudd-Swan Government was to be judged. The political context was eerily similar to that of 1929; a new Labor Government taking the reins after a decade in opposition, faced immediately with a global economic crisis and the urgent need for radical policy responses. While the 1929 Scullin Government failed to enact expansionary stimulus policies, resulting in an economic collapse and a loss of power, the Rudd Government responded immediately, intent on being seen as proactive in the face of a global economic meltdown (Taylor and Uren, 2010: 2-5).

Campaigning on a platform of fiscal conservatism, Kevin Rudd's pitch to the nation centred on the Liberal Party's alleged mismanagement of the resources boom and its failure to invest in infrastructure and education, which he argued had left the economy 'bursting at the seams' and placed upward pressure on interest rates, which by the election were 6.75 per cent, having experienced their tenth consecutive rise since April 2002 (Taylor and Uren, 2010: 9-11, RBA, 2017). Compounding this was one of the key election promises that underpinned John Howard's 2004 re-election campaign; that interest rates would be lower under the Liberal Party than the Labor Party (hereafter, ALP), which was followed by six consecutive increases in the interest rate, as the RBA lifted the official cash rate by 150 basis points in the three years following this campaign (Sydney Morning Herald, 2004; RBA, 2017). However, despite campaigning on a platform of fiscal conservatism, the newly elected Rudd Government immediately changed course once faced with the GFC, implementing the third largest stimulus package of the OECD economies, amounting to 4.6 per cent of the country's GDP (OECD, 2009: 109).

This chapter will proceed by outlining the Keynesian policy prescriptions for governments faced by economic crises, and will examine the New and Post-Keynesian approaches to implementing fiscal and monetary stimulus policies to mediate economic turmoil. In following, this chapter will discuss in detail the monetary and fiscal stimulus policy responses implemented by the RBA and the Federal Government in easing the effects of the GFC on the Australian economy. This will include an overview of the theoretical approaches and perspectives of these policies held by the New and Post-Keynesian economic traditions. Finally, this chapter will conclude with an assessment of the degree of influence these policies had in Australia's circumvention of a recession, and their roles in shaping the nation's experience of the GFC.

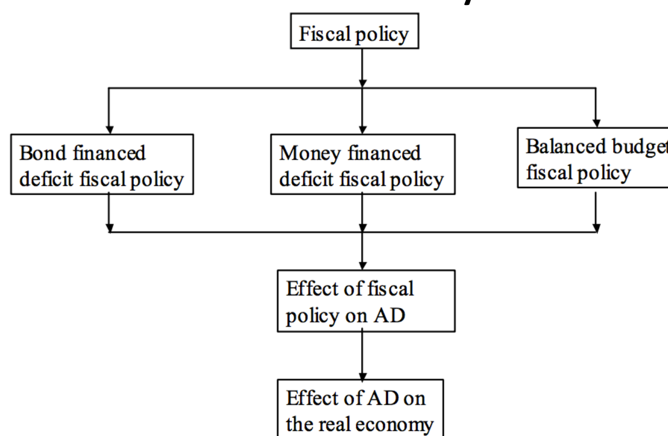
4.2 The Keynesian Remedy

Writing at the time of the Great Depression, the father of modern economic theory, John Maynard Keynes, expressed the need for government intervention and expansive monetary policy to mediate the effects of a global economic crisis. Contained in his 1936 magnum opus, *The General Theory of Employment, Interest and Money*, Keynes' policy prescriptions emphasise the role of fiscal and monetary stimulus policies in stimulating aggregate demand through the multiplier effect generated by additional units of government expenditure and through wealth redistribution policies aimed at inducing consumption from those with the highest marginal propensity to consume (Keynes, 1936: 93-97).

Both the causes and policy solutions to the GFC were seen as heralding the end of the dominance of Neoclassical economic theory and the resurgence of Keynesian economic policy, as Joseph Stiglitz fittingly resurrected the famous phrase "we are all Keynesians now" (Stiglitz, 2008). The activist fiscal policy and countercyclical macroeconomic management advocated by Keynes was enthusiastically promoted by the IMF, which encouraged the swift implementation of expansionary monetary and fiscal stimulus policies, as then Managing Director of the IMF, Dominique Strauss-Kahn stated, "I welcome the emphasis on fiscal stimulus, which I believe is now essential to restore global growth… Each country's fiscal stimulus can be twice as effective in raising domestic output growth if its major trading partners also have a stimulus package" (Strauss-Kahn cited in IMF, 2008).

The expansionary policies adopted by countries across the world indeed reflected a broad adherence to Keynesian policy prescriptions for stimulating economic activity and increasing effective demand. Generally speaking, these policies for stimulating aggregate demand fall under four categories; *(1) increasing the supply of money to drive up the quantity of real output, (2) decreasing interest rates to encourage investment, (3) increasing public investment and government expenditure to generate activity through the fiscal multiplier, and (4) redistributing income to increase the propensity to consume by providing additional liquidity to lower-income households* (Argyrous, 2011: 171). It is through this combination of monetary and fiscal expansionary policies that governments can mediate the effects of a downturn and guide the economy towards full employment.

Figure 11
The Debate Over Fiscal Policy Effectiveness



Source: Palley, 2012

Though New and Post-Keynesian economists largely adhere to the notion that activist government fiscal policy and expansionary monetary policy are necessary in easing economic contractions and returning the economy to positive growth in the event of a global recession, the two traditions diverge on the methods through which such policies should be financed and the efficacy of certain policies themselves. The issue of the effectiveness of fiscal policy in stimulating demand and economic growth can be analysed as containing two steps; *(1) the effect of fiscal policy on aggregate demand, and (2) the effect of aggregate demand on the real economy*, as demonstrated in Figure 11 (Palley, 2012: 2-3). Concerning the first step, opponents of Keynesian economics, largely hailing from the Neoclassical tradition, contend the effectiveness of fiscal policy in stimulating aggregate demand by citing the Ricardian Equivalence as offsetting the effects of expansionary fiscal policy. This was cited by Tony Makin in a paper commissioned by the Treasury to analyse the effectiveness of the Government's fiscal policies, in which he argues against the use of deficit spending due to the prospects of increased income taxation to repay public debt, which crowds out private consumption as households increase their saving in order to meet implied future tax liabilities

(Makin, 2016: 8). The viability of the theory of Ricardian Equivalence and its practical influence upon the effectiveness of fiscal policy is questioned by both New and Post-Keynesian economists, and is largely rejected by the academic and economic community, with a key economic figure in Australia's public service, Dr David Gruen, having conducted an empirical survey of students at the Australian National University to contrast their level of knowledge regarding the Government's budget with that of the knowledge that economic academics at the university assumed the students had, which it was revealed was a far higher amount of knowledge than what the students actually had, ultimately arriving at the conclusion that the theory was "an economists' fantasy" (Taylor and Uren, 2010: 74).

However, despite sharing a rejection of the existence and practical relevance of the Ricardian Equivalence, the New Keynesian perspectives on the efficacy of various forms of fiscal policy financing differ in some respects from those held by their Post-Keynesian counterparts. This is particularly the case with bond- and money-financed fiscal policy, which divides the two on the basis of their contrasting perspectives regarding the effect of crowding out upon private investment that bond-financed fiscal policy is alleged by New Keynesians to have. In the immediate case, New Keynesians argue that bond-financed fiscal policy can have the effect of crowding out real capital on a dollar-for-dollar basis by channelling private savings into public debt instruments rather than private capital, which crowds out private securities markets, especially during times of recession when investors are far more willing to invest in bonds with guaranteed security (Buiter, 1983: 24).

New Keynesians also argue of the existence of a second level of crowding out, which is alleged to occur when bond-financed fiscal policy is unaccompanied by respective increases in the quantity of money. If deficits are funded purely by the issuance of government bonds – as they were in the case of the Australian fiscal stimulus, which was financed by the sale of CGS – the increased demand for money and supply of bonds places upward pressure on interest rates and subsequently reduces interest-elastic private expenditures such as business fixed investment and private spending on consumer durables (Blinder and Solow, 1973: 320-321). It is thus the New Keynesian view that the government spending multiplier is significantly lower for bond-financed policies than for money-financed policies, as the expansionary effects of the former are partially offset by the impact of crowding out upon investment.

Arguing that this is a departure from traditional Keynesian economic analysis, Post-Keynesian economists are less inclined to distinguish between the efficacy of money- and bond-financed fiscal policy as sharply their New Keynesian counterparts. This is in large part due to the Post-Keynesian adherence to the theory of endogenous money, which leads to the conclusion that fiscal policy purely financed by increases in the supply of money will place downward pressure on interest rates, forcing the central bank to conduct defensive open market operations to drain the excess reserves and maintain the target interest rate, which subsequently leads to increased banking activity and forces the central bank to provide additional reserves through open market operations in order to provide solvency for an increasingly active banking sector and to once again maintain the target interest rate. Consequently, the Post-Keynesian method of fiscal policy financing involves a mix of both money- and bond-financing, as the increase in the money supply turns on how much activity has been generated in the banking sector by fiscal policy, reflecting the Post-Keynesian adherence to the theory of endogenous money – that the supply of money in the economy is ultimately determined by the banking system (Palley, 2012: 15-17).

Though New and Post-Keynesians differ considerably in their arguments pertaining to the efficacy of different methods of financing the deficit created by expansionary fiscal policy, their perceptions regarding the impact of aggregate demand on real economic output are largely in-line with traditional Keynesian analysis. However, these views regarding the second stage of fiscal policy effectiveness, as shown in Figure 11, are dependent on their approaches to the first stage identified in the flow chart, as Palley explains "short run effectiveness of fiscal policy turns on the theoretical model of the macro economy that is adopted. That is because fiscal policy works through AD, and the impact of AD on the real economy depends on macroeconomic perspective. The implication is the fiscal policy debate is ultimately a debate over macroeconomic theory" (Palley, 2012: 3). Thus, although both New and Post-Keynesians share the view that a combination of monetary and fiscal stimulus policies is the necessary response to counter the effects of a global economic downturn, the effectiveness of these policies upon real economic growth is contingent on the degree to which they perceive the method of financing to have offset the expansionary effects of these policies through crowding out private investment and consumption.

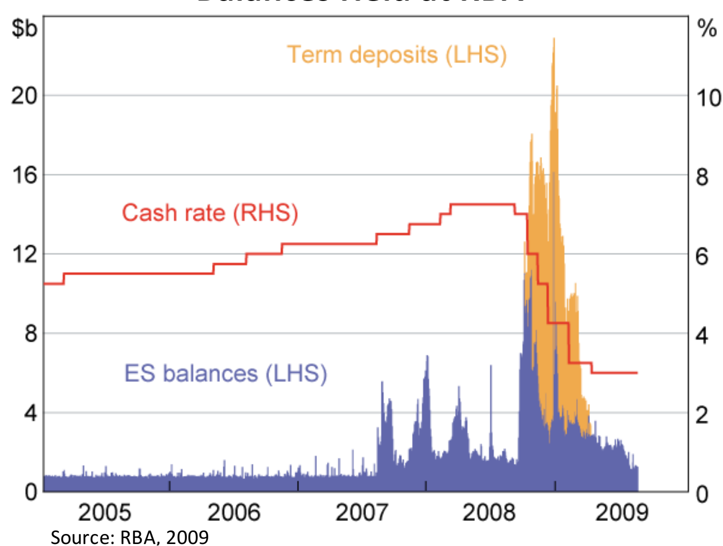
4.3 Monetary Stimulus Policies

As global economic conditions began to deteriorate following the US subprime mortgage crisis towards the end of 2007, Australia's RBA began to consider the need for proactive monetary expansionary policies to counter the effects of the crisis on private consumption and investment in the country. Beginning with a cash rate reduction of 25 basis points on the 3rd of September 2008, two weeks out from the collapse of Lehman Brothers, the RBA pursued aggressive monetary policy, having reduced the cash rate by 425 basis points to 3 per cent seven months later (RBA, 2017). This pre-emptive monetary stimulus was flagged by the OECD as a key factor that contributed to Australia's resilience during the initial shock from the GFC, praising the proactive measures taken by the country's monetary authority and the foresight with which it operated (OECD, 2010: 4-5). Thus, by entering the crisis with interest rates at their highest level in a decade, the RBA had ample scope for the implementation of effective monetary stimulus. Moreover, by taking action before the GFC was in full effect, and by aggressively reducing interest rates once the crisis was fully realised, the policy actions taken by the RBA regarding interest rates proved significant in bolstering private investment in the wake of the crisis and sustaining it throughout, with the Chief Economist at the Commonwealth Bank, Michael Blythe, describing these interest rate reductions as the most "aggressive easing cycle" since the early 1990s (Blythe cited in Smith, 2008).

In fulfilling its role as the 'lender of last resort', the RBA also took action to counter the liquidity issues arising from the unwillingness of banks to lend money to one another, through significantly increasing aggregate exchange settlement (hereafter, ES) funds, with the number of ES balances reaching a peak of $11 billion in October 2008, contrasted to a historical average of around $750 million (Figure 4) (RBA, 2009a). This enabled the Bank to meet the significant increase in demand by private institutions for risk-free liquid assets, thereby preventing this liquidity shortage from placing upward pressure on interest rates. This proved effective in managing the frictions within the country's interbank market, and helped prevent a financial collapse through removing the key obstructions to the fundraising and credit activities of Australia's financial institutions.

In order to undertake further market operations and create a higher number of term repurchase agreements without excessively increasing the ES balances and placing downward pressure on interest rates, the RBA created a term deposit facility in October 2008, which allowed institutions to bid to hold short-term deposits at the Bank. By the end of December, the value of the Bank's outstanding overnight ES balances and term deposits was over $20 billion, reflecting the efficiency and scale of the Bank's accommodative monetary policy, as seen in Figure 12 (RBA, 2009a). As shown in Figure 12, the response of the RBA to the deteriorating global economic conditions was swift and comprehensive, as the range of policies implemented to ease monetary conditions in the wake of the crisis in September 2008 demonstrates the proactive nature with which the Bank operated in stabilising the Australian economy.

Figure 12
Balances Held at RBA



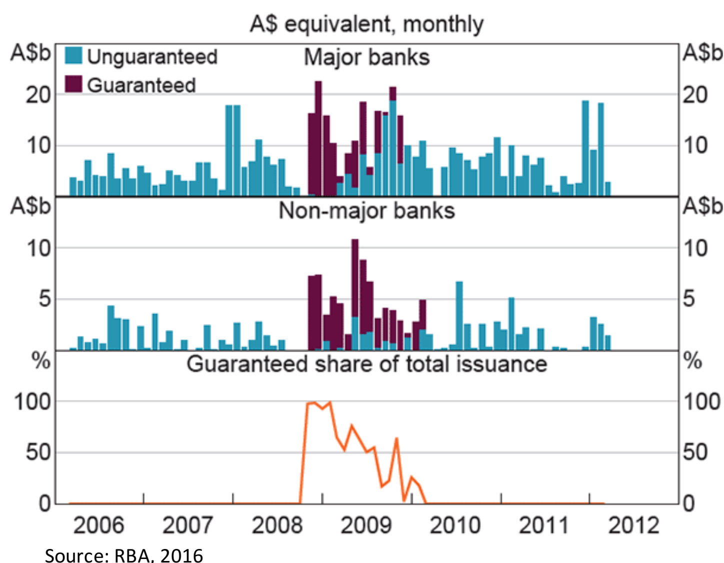
Source: RBA, 2009

In addition, the purchasing of government securities by the RBA, particularly the CGS used to fund the Government's fiscal stimulus, was vital in ensuring the Federal Government had the funds necessary to implement the expansionary fiscal policies designed to counter the impacts of the crisis upon consumption and investment. Further to this, the Bank significantly increased its holdings of longer-dated semi-government securities, which countered the effects of a decrease of liquidity in the market for semi-government debt that arose from a surplus of government-guaranteed debt, as governments across the world sought to finance their fiscal policies through the use of government debt instruments (RBA, 2009a). This also provided aid to the Queensland Government, which experienced a credit rating downgrade in 2009, adversely affecting its ability to fund state fiscal policies through the issuance of such debt instruments.

Finally, with investment and consumer sentiment experiencing heavy declines following the collapse of Lehman Brothers and the economic turmoil that arose, financial institutions found themselves under considerable funding pressure, as Australia's banks struggled to gain access

to global long-term wholesale markets. In response to this, the Federal Government introduced the Australian Government Guarantee Scheme for Large Deposits and Wholesale Funding (hereafter, the Guarantee Scheme) to provide authorised deposit-taking institutions (hereafter, ADIs) with the ability to pay a monthly fee to secure a government guarantee for certain liabilities, thereby also bestowing the Government's AAA credit rating upon these guaranteed liabilities (Schwartz and Tan, 2016: 39-40). Introduced in late 2008, the Guarantee Scheme had an immediate and intense impact on the ability of Australia's financial institutions to maintain adequate levels of funding, as the level of bonds issued by ADIs spiked from $2 billion in the three months preceding the introduction of the Guarantee Scheme to over $73 billion over the next three months, as seen in Figure 13 (Schwartz and Tan, 2016: 41-42).

Figure 13
Australian Banks' Bond Issuance



Source: RBA, 2016

Moreover, despite the large contingent liability contained in this initiative, no claims were made against the scheme, which incurred no losses, while raising fees of $4.5 billion from ADIs for the support provided through the Guarantee Scheme (Schwartz and Tan, 2016: 45-46). Thus, through providing ADIs with the ability to secure a government guarantee on their liabilities, the Guarantee Scheme introduced by the Australian Government and administered by the RBA was crucial in ensuring the viability of Australia's financial sector throughout the crisis, as risk averse investors responded immediately to the renewed security of private sector debt instruments, which enabled Australia's financial institutions to maintain an adequate level of funding. The vitality of the Guarantee Scheme is further highlighted in the percentage of Australia's banking system's assets that guaranteed bonds accounted for in 2010, which stood at 6 per cent, the highest of the high-income OECD nations, whilst also accounting for 54 per cent of the nation's public sector revenue, second only to Ireland, in large part due to the extreme measures that the Irish Government were forced to take as their economy crashed in the aftermath of the GFC and public debt rose to 84 per cent of GDP by 2010 (Schwartz and Tan, 2016: 45; OECD, 2017c).

Thus, the swift action taken by the RBA in response to deteriorating global economic conditions was significant in ensuring the effects of expansive monetary policy occurred early enough to ensure monetary conditions were solid in the lead-up to the crisis. Moreover, the high level of interest rates preceding the crisis provided the RBA with ample scope for implementing comprehensive monetary policy to accommodate demand for liquidity and low-risk credit options. As seen in Figure 12, the comprehensive and timely nature of the approach adopted by the RBA proved sufficient in meeting this demand, which was vital in maintaining an adequate level of supply of risk-free liquidity for institutions. Moreover, in order to confront the funding pressures experienced by Australia's financial institutions in the wake of the crisis, the Guarantee Scheme administered by the RBA ensured the continued viability of the country's ADIs by preventing the credit restrictions arising from the GFC from causing a collapse in Australia's financial sector.

4.4 Fiscal Stimulus Policies

After a year of increasing uncertainty and volatility in the global economy following the 2007 subprime mortgage crisis in the United States, the collapse of American investment bank Lehman Brothers on the 15th of September 2008 triggered a global financial crisis that wiped more than USD $3.3 trillion from global wealth (World Bank, 2017). As governments across the world scrambled to fund and implement expansionary fiscal policy to counteract the effects of the crisis upon consumption, investment and growth, Australia's fiscal stimulus package stood out as the ultimate Keynesian policy response.

Less than a year into their first term in power and determined to be seen as sufficiently proactive in protecting the Australian economy, the Rudd-Swan Labor Government implemented a substantial fiscal stimulus package valued at 4.6 per cent of the national GDP, constituting the third largest fiscal stimulus of the OECD economies (OECD, 2009: 109). The stimulus package was comprised of a number of policy measures targeted at inducing consumption and investment, with the bulk of stimulus initiatives split into two packages; the Economic Security Strategy and the Nation Building and Jobs Plan. Designed to deliver an immediate boost to consumption and allow for the longer-term stimulus measures to take effect, the Economic

Security Strategy consisted primarily of cash transfers to low- and middle-income families in October 2008, and was valued at $10.4 billion (Senate Economics References Committee, 2009: 6). To compliment this short-term stimulus measure, the Nation Building and Jobs Plan was aimed at generating economic activity via the government expenditure multiplier, and involved increased spending on education and national infrastructure projects, with the package amounting to $41.5 billion (Senate Economics References Committee, 2009: 6). In addition to these two packages, the stimulus included a $15.2 billion funding package for the Council of Australian Governments (hereafter, COAG), a $4.7 billion December Nation Building Package and $22.5 billion in additional infrastructure projects contained within the Federal Government's budget, with the total cost of the fiscal stimulus measures amounting to $94.3 billion (Senate Economics References Committee, 2009: 2-6).

The design of Australia's fiscal stimulus package was intentionally Keynesian in nature, as then Treasurer Wayne Swan reflected in a 2011 paper for the Australian Fabian Society, "Keynesianism had given the ALP four valuable assets with which to confront economic crises: a practical, progressive economic policy; a psychology that recessions were no time for surrender and could be tackled by policy; an openness to ideas based on practical utility; and the makings of a short and long-term plan for recovery. Each of these four assets were to prove invaluable during the global recession" (Swan, 2011: 4). Ultimately, the Australian economy managed to record growth of 0.6 per cent in the financial year to June 2009, in contrast to the 1.6 per cent contraction that the Department of the Treasury stated would have occurred had it not been for the stimulus, which was estimated to have added 1 per cent to GDP growth in 2008-2009 and 1.6 per cent in 2009-2010, whilst also providing social benefits such as additional public infrastructure and higher investments in education and training (Taylor and Uren, 2014: 5; Senate Economics References Committee, 2009: 33).

The design of the stimulus package was distinct from those implemented by other advanced nations in the primacy given to increased government expenditure as opposed to tax cuts, which were viewed by the Government as less effective in stimulating activity than a mixture of policies such as targeted cash transfers and increased government expenditure (Senate Economics References Committee, 2009: 55-56). This is due to the disproportionate benefits that tax cuts give to higher-income families, and the upward pressure that these cuts exert upon

interest rates, which leads to the crowding out of private investment (Elmendorf and Furman, 2008: 19-21). Instead, in line with Keynesian fiscal policy prescriptions, the Federal Government incorporated both short- and long-term stimulus measures, with the former designed to generate immediate boosts to consumption which would then be sustained by the longer-term projects. Immediate policy responses such as the targeted cash transfers to low- and middle-income households reflect the fundamental Keynesian principle of stimulating consumption and aggregate demand by "redistributing incomes or otherwise, to stimulate the propensity to consume" (Keynes, 1964 [1936]: 321-324).

Ultimately, the impact of the targeted cash transfers was estimated to have been a 3 per cent increase in household consumption over the year to June 2009, as the Department of the Treasury estimated the consumption growth of 1.7 per cent would have been replaced by a 1.3 per cent contraction if not for these transfers (Department of the Treasury, 2009: 6). These findings were corroborated by two separate independent analyses conducted by the Westpac-Melbourne and the Australian National University, with the former estimating that 70 per cent of the total cash payments had been spent, and the latter concluding that 40 per cent of the transfers had been spent within the first quarter following the receipt (Department of the Treasury, 2009: 6).

To compliment the immediate stimulus delivered to the economy via the targeted cash transfers, the Government's significant investments in public works and infrastructure sought to maintain the government expenditure multiplier for the duration of the crisis. Through this multiplier, these public expenditures stimulated various parts of the economy in a number of ways, notably through the creation of 210,000 new jobs, as the peak unemployment rate was estimated to be 1.5 per cent lower as a result of the stimulus (Department of the Treasury, 2009: 5). Thus, through increasing investment in training programs and education, the stimulus was effective in producing a more productive workforce, which resulted in a considerable decrease in the nation's unemployment rate. Moreover, substantial government spending on construction programs and infrastructure initiatives generated significant activity within the construction industry, as total employment in construction rose from 964,800 in 2007-2008 to over one million by 2009-2010 (ABS, 2010b; ABS, 2012).

However, for economists and politicians alike, the key indication of the success of the stimulus package has been the degree to which it was responsible for enabling Australia to circumvent a technical recession throughout the duration of the GFC. According to analyses conducted by the Treasury, in the absence of these fiscal stimulus measures, the Australian economy would have recorded three consecutive quarters of contraction in GDP – in the December quarter of 2008 and the March and June quarters of 2009 – declining by 1.3 per cent over the year to June (Senate Economics References Committee, 2009: 56). Instead of this 1.3 per cent contraction in the first half of 2009, the economy experienced growth of 0.6 per cent, making Australia the only advanced economy to record a positive GDP growth rate in the year to June (Senate Economics References Committee, 2009: 56).

Consistent with Keynesian government policy, the key point of analysis of fluctuations in economic activity throughout this period is the expenditure measure of GDP (hereafter, GDP(E)). Thus, the changes in aggregate expenditure present as the metric by which the effectiveness of the Government's stimulus policies are to be judged, as the purpose of fiscal stimulus is naturally to generate increased private spending on consumption and investment, as well as the activity created by public expenditures. However, the extent to which this provides a reliable indication of economic health becomes contentious when compared with other measurements of GDP growth, as shown in Table 1.

Table 1
Conventional Measures of Gross Domestic Product*

	Real GDP-Expenditure	Real GDP-Income	Real GDP -Production	Real GDP-Average	Real GDP per capita	Nominal GDP
Jun-2008	0.3	0.3	0.7	0.4	0.1	2.8
Sep-2008	0.1	**-0.2**	0.2	0.0	**-0.5**	2.1
Dec-2008	0.4	**-0.2**	**-0.2**	0.0	**-0.5**	0.6
Mar-2009	0.7	0.2	**-0.2**	0.2	**-0.3**	**-0.8**
Jun-2009	0.9	0.5	0.1	0.5	0.0	**-0.7**
Sep-2009	0.9	0.5	0.6	0.6	0.2	0.7
Dec-2009	0.8	0.6	0.9	0.8	0.3	2.2

* Percentage growth per quarter, trend basis
Source: Makin, 2010

When contrasted with other economic indicators such as the country's real GDP per capita and nominal GDP, the growth experienced by GDP(E) presents as a unique example of stability and growth. However, although this fact is used by economists such as Tony Makin (2010a) to argue against the use of the GDP(E) measure as evidence of the effectiveness of the stimulus policies, the impact of GDP(E) upon Australia's averaged real GDP – the official measure of economic output – actually demonstrates the efficacy of the stimulus measures in sustaining positive GDP growth (Makin, 2010a: 8-9). This is because real GDP, which is the average of the expenditure, income and production measures of GDP, remained positive in the critical March 2009 quarter as a direct result of the considerable growth of GDP(E) during this period, as shown in Table 1.

Thus, the role of the fiscal stimulus passed by the Federal Government in preventing the economy from experiencing contractions in consecutive quarters is apparent from an analysis of the various measures of GDP growth. Although GDP(E) alone is not a reliable indication of economic conditions, the demonstrable impact that this component had upon the official measure of GDP is indicative of the significant influence that the stimulus had upon Australia's circumvention of a technical recession. It is therefore evident that the stimulus measures passed by the Government were indeed a crucial factor in enabling the country to record positive growth throughout the crisis, as the absence of the stimulus would have naturally resulted in a significant decrease in GDP(E), which would have tipped the scales of the averaged measure of GDP and resulted in a contraction in economic growth in three consecutive quarters, as was also observed by the Department of the Treasury (Senate Economics References Committee, 2009: 56).

Though there are of course limits to the extent of which the level of national GDP is an accurate reflection of the condition of the economy, it remains the case that the primary metric used to indicate economic turmoil is the presence of a technical recession – two consecutive quarters of a contraction in GDP. As a result, it follows from this that the effectiveness of the Government's stimulus measures in preventing the country from recording two consecutive quarters of negative GDP growth is in itself indicative of the macroeconomic benefits delivered by the fiscal stimulus package.

4.5 Conclusion

Ultimately, Australia's monetary and fiscal stimulus policies and the effects that these had upon consumption, investment and overall economic activity were demonstrably influential in enabling the country to circumvent a technical recession. Accommodative monetary policy enacted by the RBA was clearly vital in meeting the liquidity demands of Australian investors and financial institutions, as the impact of the GFC upon the availability of credit within Australia's financial system was effectively countered by such initiatives as the Guarantee Scheme, the impact of which is emphatically clear in the growth of Australia's private bond market, as the level of bonds issued by ADIs spiked from $2 billion in the three months preceding the introduction of the Guarantee Scheme to over $73 billion over the next three months, as seen in Figure 13 (Schwartz and Tan, 2016: 41-42). In addition to ensuring the vitality of Australia's financial system and institutions, the proactive and subsequently aggressive reduction of interest rates further eased monetary conditions, as the cash rate reduction of 25 basis points on the 3rd of September 2008 – two weeks out from the collapse of Lehman Brothers – and subsequent reductions amounting to a further 400 basis points over the next seven months did much to further ease the availability and use of credit within the economy (RBA, 2017).

Finally, the substantial stimulus package implemented by the Government provided considerable boosts to economic growth through the short-term activity generated by targeted cash transfers and the longer-term boosts driven by higher employment rates and increased public investment and infrastructure. As was noted by then Chief Economist at the IMF, Olivier Blanchard, "Australia's aggressive fiscal response was ahead of the game", and was described by a number of other prominent economists as "the best designed stimulus package of any of the countries… both in size and in design, timing and how it was spent" (Taylor and Uren, 2010: 45; Stiglitz cited in Metherell, 2010). The combination of temporary policies aimed at stimulating consumption in the short-term and large public works and investment in infrastructure provided the economy with both a buffer from the initial impact of the GFC and a sustained boost to GDP throughout the remainder of the crisis.

Though the efficacy of the stimulus measures has been criticised by a number of commentators for the inefficiencies of programs such as the home insulation scheme and the blow-out in the costs incurred in the construction of school classrooms and halls, the overall impact of the stimulus upon the nation's GDP growth is undeniable (Taylor and Uren, 2010: 5). By equating the marginal cost associated with distribution with the marginal benefits delivered by such policies, the speed, scale and scope of the Government's stimulus overshadows the economic costs of potential waste incurred, as Joseph Stiglitz explained in an article written for the Sydney Morning Herald, "while the focus for the moment is on public-sector waste, that waste pales in comparison to the waste of resources resulting from a malfunctioning private financial sector… Likewise, the waste from not fully utilising society's resources – the inevitable consequence of not having had such a quick and strong stimulus – exceeds that of the public sector by an order of magnitude" (Stiglitz, 2010).

Finally, the substantial impact upon Australia's real GDP exerted by the GDP(E) component as a result of increased private and public expenditure within the economy is further indicative of the vitality of the stimulus package to the country's circumvention of a technical recession. As the primary goal of fiscal stimulus is to generated increased aggregate expenditure (demand) in the economy, the considerable growth in Australia's GDP(E) vis-à-vis the income and production measures in the December 2008 and March 2009 quarters are not surprising (Table 1). However, the fact that GDP(E) alone was enough to lift Australia's real GDP above zero in the critical March 2009 quarter is itself a testament to the impact that the Government's stimulus measures had on Australia's official economic record during the crisis. It is thus clear that without the expansionary monetary and fiscal stimulus policies implemented by both the RBA and the Federal Government, the Australian economy would have struggled to maintain growth throughout the year 2009 to June, almost certainly recording two, and potentially three, as identified by the Treasury, consecutive quarters of negative GDP growth.

Chapter V

Pluralism: The Way Forward for Keynesianism

5.1 Resynthesising Keynesian Economics

As has been demonstrated in this thesis, there are a number of factors that were each critical in enabling Australia to avoid recording a recession during the GFC. The factors identified in this thesis as being pivotal to Australia's economic stability were similarly identified in the Senate Inquiry into the Economic Stimulus Package, as the Senate Economics References Committee concluded, "There was a consensus view that a range of factors have contributed to Australia's exemplary economic performance. These include the continuing strong growth of China and demand for Australia's exports; the legacy of rapid growth, strong budget position and sound prudential regulation of the financial system that was left by the previous Coalition government; the rapid move to strongly accommodative monetary policy; the fall in the A$ in the second half of 2008; and the fiscal stimulus" (Senate Economics References Committee, 2009: 46).

Despite the empirical evidence demonstrating the vitality of the contribution of these factors to the stability of the Australian economy throughout the crisis, the perceived impact of each is dependent upon the theoretical paradigm of the observer. Thus, the divergence of opinions regarding the relative importance of the aforementioned factors in preventing Australia from experiencing a technical recession can be largely attributed to the growing trend of dogmatism and sectarian rigidity in modern economic discourse. Frequently ground in the theoretical paradigms of their economic schools of thought, economists are rarely willing to concede any points that are not fundamentally in line with the credos espoused by their economic tradition. This highlights a critical flaw in how economic discourse and analysis is conducted, as Palley explains, "The implication is the fiscal policy debate is ultimately a debate over macroeconomic theory. No theoretical paradigm is completely satisfying… This speaks to the need for pluralism in economics and ideas should only be rejected once they are convincingly disproved" (Palley, 2012: 3-4).

It has therefore been the purpose of this thesis to identify the possibility for a resynthesis of Keynesian economics by demonstrating the validity of elements found in both New and Post-Keynesian explanations of the Australian experience of the GFC. In doing so, this thesis has identified three broad categories that incorporate the key factors underpinning Australia's resilience throughout the crisis; *(1) the state of the economy prior to the crisis, (2) the nature of Australia's exports and the stability of Asia during the crisis, and (3) the use of expansionary fiscal and monetary stimulus policies*. Through an empirical and theoretical analysis of the roles played by these factors in protecting the economy from experiencing a technical recession, this thesis has sought to explain why an acceptance of the significance of each of these factors, based on a comprehensive quantitative and theoretical analysis, is not only necessary, but speaks to the need for a renewed sense of pluralism in contemporary Keynesian analysis. Thus, this thesis has sought to incorporate elements of both the New and Post-Keynesian traditions in undertaking an analysis of the key factors underpinning Australia's resilience throughout the GFC, with the broader objective of demonstrating the need for a new pluralistic Keynesian approach which synthesises the two schools in adopting key elements from both.

In the case of Australia's preceding legacy of strong economic growth, sound prudential regulatory oversight and considerable budget surplus, the New Keynesian perception of these factors treats them as far more relevant than that of their Post-Keynesian contemporaries. As has been demonstrated in this thesis, the role of the budgetary surplus in supplying the Government with considerable resources for the enactment of expansionary fiscal policy contributed significantly to Australia's resilience. The increase in the scale and therefore scope of the fiscal stimulus that was made possible by the budgetary surplus caused the stimulus to be much more effective than it would have been in the absence of the surplus. Though a Post-Keynesian argument would posit that the Government could have simply issued a higher number of government securities in order to secure the necessary additional funds, the implications this would pose for crowding out securities markets and private investment, as well as the longer-term prospects of recovery negate the argument that the budgetary surplus was not a key factor underpinning the effectiveness of the fiscal policies and thus the resilience of the Australian economy.

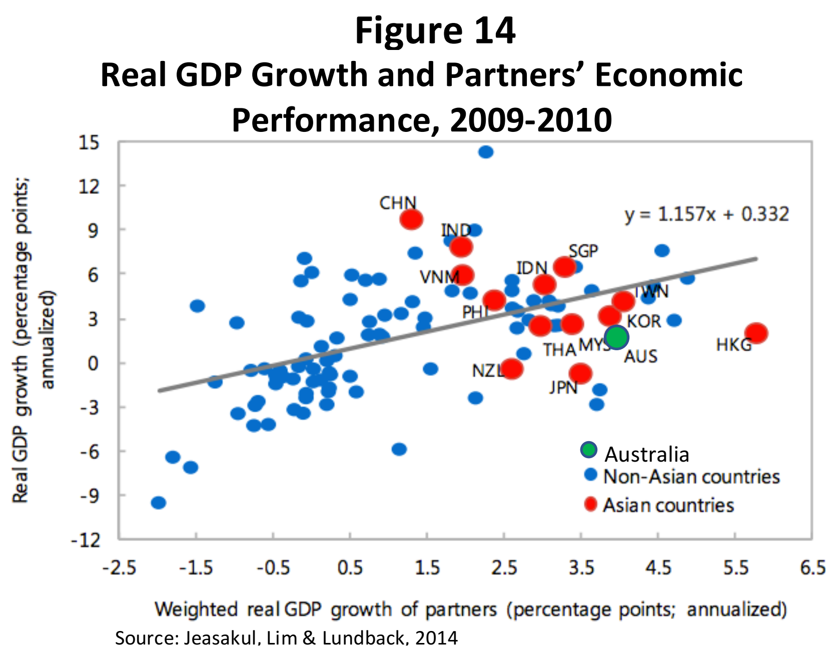
A point of commonality for New and Post-Keynesians in this area however, is the influence that the nation's interest rate level leading into the crisis had upon the effectiveness of monetary policy. As Australia entered the GFC with interest rates at their highest level in over a decade, the scope of effectiveness for expansionary monetary policy was far higher than Australia's OECD counterparts. As monetary policy becomes less effective as interest rates get closer to the zero lower bound, entering a global crisis with substantial scope for expansionary monetary policy is critical. This view is shared by both New and Post-Keynesians, as both traditions view effective policy responses to economic crises as necessitating the use of monetary and fiscal stimulus policies that operate such that their expansionary effects complement one another.

Regarding the nature of Australia's exports and the stability of the Chinese economy throughout much of the crisis, New and Post-Keynesians again find common ground in determining the influence of these factors upon Australia's economic strength during the GFC. In line with the fundamental Keynesian analysis of economic growth, both traditions accept the significance of net exports in determining the state of the national economy. Consequently, through both a New and Post-Keynesian analysis of the factors underpinning the resilience of the Australian economy throughout the crisis, Australia's net exports and the stability of the Chinese economy present as significant. This is particularly the case in the crucial March 2009 quarter (Figure 3), in which the net export component of GDP was the sole factor preventing national growth from experiencing a second consecutive quarter of economic contraction. Moreover, the fiscal stimulus implemented by the Chinese Government created a channel through which Chinese investment and demand for Australian exports could continue supporting the Australian economy, a point consistent with the Keynesian view that a nation's fiscal expansion delivers financial benefits to its key trading partners through the increase in imports generated by higher government spending (Day, 2011: 26). As shown in Figure 14, Australia's growth increased by roughly 4 per cent for each additional percentage point increase in the growth of its partners, further demonstrating the vitality of China's stability to the strength of the Australian economy during the GFC (Jeasakul, Lim & Lundback, 2014: 12).

Thus, the role of net exports, the resilience of the Chinese economy and the effects of the stimulus package passed by the Chinese Government on demand for resources exports present as critical factors underpinning the stability of Australia's economy and ability to circumvent a recession throughout the crisis. In addition to the significance of the factors themselves, the acceptance of their importance by both New and Post-Keynesians indicates the possibility for a macroeconomic analysis that incorporates elements of both theoretical paradigms, as the discrepancies between the two schools – primarily related to notions regarding endogenous and exogenous theories of money – need not prevent the development of a pluralistic approach to economic analysis that adopts elements from both traditions.

Figure 14

Real GDP Growth and Partners' Economic Performance, 2009-2010



Source: Jeasakul, Lim & Lundback, 2014

Finally, an analysis of the effectiveness of the monetary and fiscal stimulus policies enacted by the RBA and Federal Government further demonstrates the viability of a Keynesian resynthesis by revealing the convergence of both New and Post-Keynesian arguments regarding another key area in the Australian experience of the GFC. As both schools promote the use of accommodative monetary policy and fiscal stimulus in conjunction with one another to counter a recession, the initiatives put in place by the RBA and the Federal Government present as the ideal policy amalgamation as prescribed by both the New and Post-Keynesian traditions. Though the schools diverge in their treatment of the bond-financing method that was used by the Government to fund the stimulus, with New Keynesians arguing this has the effect of crowding out private investment and exerting upward pressure on interest rates, a money-financed fiscal stimulus is wholly compatible with both schools, and perceived by both to be more effective in stimulating demand than bond-financed fiscal policy (Palley, 2012: 12). As such, through promoting the use of money-financed policy, this proposed Keynesian resynthesis avoids being impeded by the conflicting stances taken by the two traditions regarding the efficacy of bond-financing government debt.

Thus, although the fiscal stimulus passed by the Federal Government reflects more elements of Post-Keynesian theory than that of the New Keynesian paradigm, an analysis of the approaches adopted by both traditions in examining the effectiveness of Australia's monetary and fiscal policies still yields the possibility of a pluralistic approach that incorporates and harmonises elements of both. This is evident firstly in the accommodative monetary policy enacted by the RBA, which presents as another factor key to Australia's economic stability that is viewed as such by both New and Post-Keynesian analyses. Moreover, though New Keynesians object to the method of bond-financing used by the Government to fund the fiscal stimulus, an analysis of the perspectives of both traditions on the comparative effectiveness of money-financed fiscal policy reveals the shared perception held by both that the multiplier and thus impact of fiscal stimulus upon aggregate demand is larger in the case of money-financed fiscal policy.

Thus, the compatibility of money-financed fiscal policy with both New and Post-Keynesian analyses negates the issue of their divergent perceptions regarding bond-financed policy in conducting a pluralistic approach that adopts elements of both traditions. When contextualised within the broader scope of how New and Post-Keynesian analyses explain the Australian experience of the GFC, it is evident that a money-financed fiscal policy is the final key in reconciling divergences between the two traditions and allowing for a pluralistic analysis that incorporates aspects of both New and Post-Keynesian analysis.

5.2 Conclusion

The objective of this thesis has been to conduct an analysis of the key factors underpinning Australia's economic stability during the GFC for the purpose of developing a pluralistic approach that adopts elements of both the New and Post-Keynesian traditions and subsequently demonstrates the possibility of a resynthesis of Keynesian economics. As has been shown through an overview of the objective factors that were critical in enabling Australia to circumvent a technical recession, both New and Post-Keynesian approaches offer valid insights that can be incorporated in a resynthesis of the two schools.

The factors identified as being significant in explaining Australia's resilience during the crisis have been categorised as follows; *(1) the state of the economy prior to the crisis, (2) the nature of Australia's exports and the stability of Asia during the crisis, and (3) the use of expansionary fiscal and monetary stimulus policies*. Each case yields the possibility for the proposed resynthesis, as many of these factors represent either areas of common ground or the possibility for reconciling the divergent perspectives held by the two traditions regarding these factors. As a result, there is a clear case for the Keynesian resynthesis proposed in this thesis. In conducting this analysis, there have been no identifiable factors that present as insurmountable obstacles to such a resynthesis, leading to the conclusion that the path to pluralism in Keynesian economics is both necessary and demonstrably viable.

In the first instance, New Keynesian arguments pertaining to the significance of the budgetary condition preceding the crisis have been demonstrated in the analysis undertaken in this thesis as being accurate. The impact that the nation's budgetary surplus had upon the effectiveness of the fiscal policies enacted by the Government are clear, as it provided the Government with ample resources with which to implement a fiscal stimulus of considerable scale and scope. Moreover, the demonstrated impact that the increased issuance of CGS would have upon securities markets, and the implications of crowding out private investment through exerting upward pressure on interest rates further indicate the validity of New Keynesian arguments pertaining to the role played by the budgetary surplus leading into the crisis.

In the second instance, acceptance of the significance of Australia's exports and the stability of the Chinese economy throughout the crisis by both the New and Post-Keynesian schools is further demonstrative of the viability of a synthesis between the two schools in conducting an analysis such as this. Moreover, the impact of the Chinese fiscal stimulus package upon Australia's economy is a factor understood and viewed by both schools as significant in the strength of Australian exports, as both traditions maintain the Keynesian perspective that foreign fiscal stimulus can deliver key benefits to a nation's chief trading partners. This therefore informs the view held by both traditions that the ability for China's fiscal stimulus to flow through to the Australian economy through increased demand for exports is a key factor in explaining the stability of Australia's economy and export levels during the crisis.

Finally, as has been discussed, the viability of a New and Post-Keynesian synthesis is further demonstrated by the acceptance of both schools that money-financed fiscal policy is inherently more effective than bond-financed stimulus. Though they depart from one another regarding the merits and implications of bond-financed fiscal policy, their shared view of the superiority of money-financed fiscal policy is thus indicative of the possibility for reconciliation between the schools' key divergence regarding Australia's fiscal stimulus package.

Ultimately, there is a need for an increased sense of pluralism in economic analysis. Ideological biases act as an impediment to the attainment of objective conclusions and progress in economic discourse and analysis. Consequently, it has been the objective of this thesis to use the Australian experience of the GFC as a model through which to demonstrate the possibility for a resynthesis of Keynesian economics, as the objective factors identified in this thesis as having contributed significantly to Australia's resilience can be best understood through a refreshed pluralistic analysis that adopts elements of both the New and Post-Keynesian theoretical paradigms and approaches. Through the research and analysis undertaken in constructing this thesis, it is believed that the case for a harmonious application of both New and Post-Keynesian analytical approaches has been proven. Thus, the viability for the development of a pluralistic Keynesian method that incorporates elements of both New and Post-Keynesian analysis is clear. Further research is needed to extend this particular pluralistic method to other macroeconomic domains such as global finance and additional elements of the monetary economy. It is hoped, however, that this thesis acts as a step in the direction of an increasingly pluralistic method of conducting macroeconomic analysis.

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