

Funding Australia's Future:

Improving Australia's Financial Infrastructure



Dr Daniel Mulino

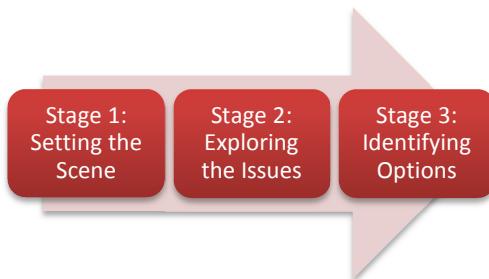
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Funding Australia's Future

The Australian Centre for Financial Studies (ACFS) instigated the project *Funding Australia's Future* in late 2012 to undertake a stocktake of the Australian financial system, and its role in facilitating economic growth within the wider economy.

In an economy which has enjoyed 21 years of consecutive economic growth and shown a resilience through the Global Financial Crisis (GFC) which is the envy of many nations, the financial sector has played a strong and pivotal role. The past decade, however, has been one of significant change. The impact of the GFC and the subsequent wave of global re-regulation have had a profound effect on patterns of financing, financial sector structure, and attitudes towards financial sector regulation. Identifying the extent to which these changes are transitory or likely to be more permanent is crucial to understanding how financing patterns and the financial sector will develop over the next decade or so.

The *Funding Australia's Future* project is in three stages, the first of which analyses the interaction between suppliers of funds, financial sector participants, and end users throughout the economy and assesses future demand for and supply of finance in Australia.



In undertaking this analysis, ACFS has worked with a group of financial sector stakeholders, including the Australian Bankers Association (ABA), Abacus, the Australian Finance Conference (AFC), the Australian Financial Markets Association (AFMA), the Association of Superannuation Funds of Australia (ASFA), the Australian Securitisation Forum (ASF), the Australian Stock Exchange (ASX), the Future Fund, the Financial Services Council (FSC), the Insurance Council of Australia (ICA), and National Australia Bank (NAB), as well as Treasury and the Reserve Bank of Australia (RBA).

This paper is one of three in Stage One, which include:

- “Financing Australia’s Future: from where do we begin?” – authored by Professor Kevin Davis, Australian Centre for Financial Studies, University of Melbourne;
- “The Future Demand and Supply of Finance” – authored by Professor Rod Maddock, Monash University; and
- “Improving Australia’s Financial Infrastructure” – authored by Dr Daniel Mulino, Pottinger.

Issues identified in Stage One of the project will be examined in some detail in Stage Two, with policy options being addressed in Stage Three.

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* The Australian Centre for Financial Studies (ACFS) is a not-for-profit consortium of Monash, RMIT, Deakin, Griffith and Melbourne Universities, and Finsia (Financial Services Institute of Australasia). ACFS facilitates industry-relevant and rigorous research and consulting, thought leadership and independent commentary. Drawing on expertise from academia, industry and government, the Centre promotes excellence in financial services.

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1. Executive Summary

The productivity of Australia's financial system is one of the key determinants of Australia's overall economic performance and the wellbeing of its population. Throughout the economy, the finance sector underpins the efficient allocation of existing resources, the accumulation of resources for future use and the management of risk. It affects the performance of every aspect of the economy either directly or indirectly. This paper identifies six key functions for a financial services sector:

- Clearing and settling payments
- Pooling resources and subdividing shares in firms and investment vehicles
- Transferring resources across space and time
- Managing risk
- Disseminating information
- Governance – managing incentive issues and information asymmetries

These six functions are chosen as the prism through which Australia's financial architecture will be assessed as they are comprehensive, broadly agreed upon in policy and academic circles and relatively stable over time (compared to institutional forms and regulatory practices).

The word "assessed" is used loosely here. It does not mean that every element of Australia's financial architecture will be individually examined and rated. Space restrictions will not permit either the development of rigorous, evidence-based performance measures or a detailed examination of the pros and cons of all serious policy proposals. Rather, a three step process will be completed.

First, the key elements of Australia's financial architecture will be mapped against the six key functions. Given the size, scope, dynamism and heterogeneity of the financial services sector, even this task is significant.

Second, existing measures of performance will be collated, where available. These will be a mixture of objective and relative metrics. Where the performance of an element of the financial architecture is notably strong or weak (either in absolute terms or relative to other advanced economies), this will be taken to suggest, *prima facie*, that the element either does or doesn't warrant further examination.

Finally, where there is a *prima facie* case that an element of the architecture is performing less effectively than it might, a brief analysis of possible options will be outlined. Where possible, this will draw on recent industry, academic or regulatory reviews.

For each of the six functions, the following summarises the findings of the paper:

Clearing and settling payments

- Australia's clearing and payments system currently works well, both in terms of cash payments and clearing and settlement on financial markets.
- There are several areas where Australia's cash payments system could be improved in order to approach world's best practice, such as the time taken to clear some payments. The RBA has laid out a plan to address many of these issues following its recent review of innovation in the payments system.

Pooling resources and subdividing shares in firms and investment vehicles

- The vast majority of Australia's financial system assets are held by banks and superannuation funds.
- The share of resources controlled by superannuation funds relative to banks is increasing – a trend that is likely to continue given recent regulatory changes.

Transferring resources across space and time

- There do not appear to be any significant barriers to the overall efficiency of the allocation of capital within the Australian economy. The trend towards greater financial liberalisation over recent decades has probably increased the overall allocative efficiency of the economy.
- Despite this, there appear to be barriers to efficient levels of investment in some specific areas, including greenfield public sector infrastructure and funding the high-risk commercialisation of innovation. These are challenges faced by many, if not all, advanced economies. The solutions are likely to involve a mixture of regulatory change and evolutionary market responses.
- While the superannuation industry has been subjected to considerable reform over recent years, two key areas are likely to require regulatory review in the medium term: the availability and take-up of appropriate post-retirement products, including annuities; and the sufficiency of the regulatory arrangements for SMSFs.
- Despite the sophistication of Australia's financial services sector and the interconnectedness of the economy as a whole with the global economy (eg high proportional trade and investment flows) – the level of exports and imports of

financial services is low relative to comparable economies. A higher level of trade in financial services could boost the productivity of the financial services sector and the economy as a whole. Unlocking these benefits will require a mixture of regulatory and behavioural change.

Managing risk

- The financial services sector provides individual investors and firms with many opportunities to manage risk both through insurance and financial markets. The transparency of some newer products is an issue for less sophisticated investors.
- Australia's regulatory management of systemic risk appears to be robust as does the resilience of key financial market institutions (including banks and financial markets).

Providing information:

- Financial liberalisation has tended to improve the efficiency of price signals within the economy, including: a highly liquid, floating exchange rate; an independently set interest rate; and well regulated, transparent and efficient financial markets.

Governance – managing incentive issues and information asymmetries

- The regulation of incentive issues and information asymmetries within Australia's financial sector is broadly similar to most other advanced economies.
- The GFC highlighted the importance of governance issues, including the regulation of systemically important institutions such as ADIs.
- Given the recent pace of change in the sector, including the growing number and complexity of new products and services, the protection of consumers is as important as ever.

The degree of competitive tension within Australia's financial sector affects how quickly the system evolves so as to improve its performance in undertaking all six of the functions outlined above. One of the key benefits of financial liberalisation over the past two decades has been the increased potential for competition, both from domestic and international sources. This has been supplemented by a number of technological innovations that have impacted the sector. The evidence as to the degree of competition across the sector is somewhat mixed, which suggests that it would be worthwhile examining the extent to which any existing regulations may be unnecessarily hampering competition.

The financial services sector is also affected by the overall business environment which is generally favourable in Australia, particularly in relative terms.

Access to highly skilled human capital will probably become increasingly important for the sector if it is to maintain productivity growth and compete in the most innovative and high value-add services. For the financial services sector to respond quickly to changing market conditions in the face of specialisation and innovation, it will probably be necessary to import skilled labour in specific areas given the limits of domestic labour supply.

2. Introduction – scope of the report

- The elements of Australia’s “financial infrastructure” defined.
- The functions of a financial system described and an explanation of why the report will be structured around these key functions.

2.1 The Project

This report is one of three that will form the first tranche of research for the project *Funding Australia's Future*. It will assess Australia's financial infrastructure and identify key areas of regulatory reform worthy of further analysis.

Given the breadth and heterogeneity of Australia's financial infrastructure, it will not be possible to analyse each element in detail. Rather, this report will:

- Map the elements of Australia's financial architecture against the six key functions that a financial services system should perform.
- Collate measures of performance for each of the six functions. These will be a mixture of absolute and relative metrics. Where the performance of an element of the financial architecture is notably strong or weak, this will be taken to suggest, *prima facie*, that the element either does or doesn't warrant further examination.
- Where there is evidence that an element of the financial architecture is performing less effectively than it might, a brief analysis of possible options will be outlined. Where possible, this will draw on recent industry, academic or regulatory reviews.

2.2 Defining “Financial Infrastructure”

The term “financial infrastructure” is commonly used to refer to the combination of formal regulatory arrangements, informal practices, technological capabilities and institutional linkages within a country's financial system. While there is no universally agreed definition, references to the term “financial infrastructure” usually include most or all of the following elements:

- The payments system;
- Capital and credit allocation mechanisms;
- Regulation of the financial services system, including: licensing arrangements; prudential standards; governance/accountability; accounting/audit; incentive structures; business resolution/insolvency; and disclosure obligations;

- Financial markets including exchanges, clearing houses and settlement facilities;
- Regulation providing for consumer protection and public and private sector initiatives encouraging financial literacy; and
- The general business environment, including: the legal environment and protection of property rights; corruption (freedom from); and human capital.

Other elements of society might be thought of as being part of a broader conception of a country's financial infrastructure – or at least closely related to it. The tax system is closely related to the financial system in that it involves large financial transfers and significant risk management (eg the progressive nature of income taxation is arguably a risk management tool for individuals against uncertain income outcomes in addition to being a response to inequality). Some public insurance institutions such as motor vehicle and workers compensation schemes have many characteristics of what fall within a narrowly defined financial system. Similarly, the National Disability Insurance Scheme (NDIS) will involve both substantial financial transfers and risk management and will most likely be organised along similar lines to a private sector insurance firm.

While this paper will not explicitly deal with the tax system or broader “social insurance” arrangements, it is important to note that they have similar characteristics to elements of the financial system and are often interdependent with it.

2.3 Functions of a financial system

Merton adopts a “functional” prism through which to evaluate financial systems. He argues that the functions of a financial system vary less both across countries and over time than do institutional arrangements. This is an approach adopted by others, including Levine and, more recently, Glenn Stevens (Merton, 1995; Levine 2005, Stevens 2010).

A functional approach provides a holistic approach to an economy's financial architecture, starting with the question of what the architecture is seeking to achieve. The identification of areas of underperformance in the achievement of core goals can be undertaken by mapping the financial architecture onto the functions of a financial system.

In contrast, an approach that is built around institutions does not point as clearly to gaps since the institutional structure is somewhat idiosyncratic in each country and is also constantly evolving. A functional gap can be difficult to identify amongst the sector's complex network of regulatory responsibilities and private sector capabilities.

Merton identifies six key functions of a financial system. Other frameworks have been proposed (e.g. Levine 2005, Stevens 2010, among many). Merton's structure has been adopted in this paper due to its canonic status and since it encompasses the functions contained in most other frameworks. Appendix 1 maps the functions listed by Merton and several other prominent analysts to show how Merton's list broadly covers the field.

The key functions are:

1. Clearing and settling payments

The payments system is the set of relationships between financial institutions and their clients that allows for the transfer of money. The effective transfer of money underpins almost all transactions in a modern economy, including: the purchase of goods and services; the hiring of labour (and the payment of compensation); the distribution of benefits by the government; and the allocation of funds to investment vehicles.

The transfer of money occurs through a wide range of mechanisms, including traditional means such as cheques and other negotiable instruments through to more recent innovations such as credit and debit cards, electronic funds transfers, ATMs, direct debits and credits, internet banking and e-commerce. The options for making transfers continue to proliferate at a rapid pace.

The payments system in Australia is constituted by a set of protocols and connections between ADIs and other financial intermediaries on the one hand and individual consumers and businesses on the other. The system is largely managed by financial institutions but is overseen by the Reserve Bank of Australia (RBA) and the Payments System Board (PSB).

For the purposes of this paper, the clearing and settlement of payments will be defined broadly to include clearing and settlement (CS) functions on financial markets, including markets for cash securities, derivatives, futures and foreign exchange transactions.

2. Pooling resources and subdividing shares in firms and investment vehicles

Large scale enterprises have contributed significantly to productivity growth over the past century. The financial system enables the creation of such enterprises by providing mechanisms through which individuals and firms with funds can pool their resources. This is beneficial both for firms seeking access to funds (whether via equity or debt) and also to investors.

Pooling by households occurs through financial intermediaries such as Authorised Deposit-taking Institutions (ADIs), investment funds and financial markets. Access to financial intermediaries provides individuals with a safe vehicle through which to save. Financial

markets, by breaking large enterprises into shares, enable individuals to diversify their investments by investing in a large number of different enterprises.

Securitisation is another means by which the owners of assets can be matched with investors. It enables the removal of non-traded assets from an intermediary's balance sheet by packaging them in a convenient form for outside investors. This is beneficial for the owner of the asset and also for investors, who gain access to an income stream that suits their portfolio of investments.

3. Transferring resources across space and time

Transferring resources across space is taken to mean the efficient allocation of capital to its most productive use in the economy. This is a core function of the financial system. The allocation of capital will be determined by the investment choices made by individual investors and fund managers. The efficiency of these decisions will be affected by enablers (such as the efficiency of price signals in the economy) and constraints (such as prudential and other limits on investment choices).

The financial system also allows for the allocation of resources across time. For example, in the case of individuals, the financial system facilitates the management of life-cycle allocations of household consumption. This can include: borrowing while younger (in anticipation of high future income); borrowing in order to invest in assets (e.g. a home) or family expenses; saving during working years to supplement retirement income; and investing while in retirement to manage longevity risk.

It is not easy to disentangle the transfer of resources (function 3) from the management of risk (function 4) since almost all investments are risky. Therefore, the allocation of funds between competing demands and the allocation of resources across time will almost always involve risk management.

4. Managing risk (hedging, insuring, diversifying)

Many diversifiable individual and firm-level risks can be managed by private insurance firms. In Australia, there are well-developed insurance markets for: (i) human capital (e.g. death and disability, income); (ii) physical property (e.g. home and contents, and theft); and (iii) financial assets (e.g. bond-default insurance).

As noted in the description of function 3, the allocation of resources across time to manage life cycle consumption also involves the management of risks, such as: longevity risk; risks associated with the level and sequencing of investment returns; and post-retirement inflation risk. A well-functioning financial system will allow the simultaneous management of the allocation and risk management challenges.

Similarly, investment decisions will almost always involve both resource allocation and risk management. Mutual funds and other collective investment vehicles enable investors to manage risk through diversification.

Derivatives also allow for risk management but, as can be seen from the GFC, they can have systemic impacts if transactions are not sufficiently transparent.

This paper will treat risk management broadly to include systemic risks. In Australia, systemic risks are managed by the members of the Council of Financial Regulators (CFR), being: the Treasury, the RBA, APRA and ASIC.

5. Providing information

The financial system disseminates information through the economy in many ways. Information is provided to consumers, governments and investors through well-functioning markets.

For example:

- Efficiency in securities prices facilitates efficient asset allocation;
- A floating exchange rate allows optimal capital and trade flows and can send signals in relation to the efficient allocation of capital between firms and industries; and
- Independently set interest rates send signals that affect the inter-temporal allocation of resources and investment decisions.

The financial system also provides information to consumers of financial products through a wide range of product disclosure mechanisms. Information is also provided to investors through Prospectuses, Information Memoranda and disclosure obligations surrounding events such as capital raisings and mergers and takeovers.

6. Governance

Two main types of governance issues arise in the regulation of financial services. The first are incentive problems, including principal-agent issues arising from the different interests of the owners and managers of businesses, moral hazard and adverse selection. The second broad category covers situations involving information asymmetry. Information asymmetry typically arises when markets are not transparent or in transactions in which one or more of the parties lack the capacity or resources to undertake the due diligence and analysis necessary to protect their interests (typically retail investors/consumers).

In addition, there are numerous governance arrangements that arise in the provision of financial services, which are undertaken both within and by financial organisations. Governance undertaken within financial organisations includes compliance with the Corporations Act and various legislative and regulatory instruments covering trustee obligations. Governance undertaken by financial organisations includes ex-post monitoring of loans by bank and other lending institutions. Appendix 2 maps the elements of Australia's financial infrastructure to the functions outlined by Merton. Some elements of the infrastructure appear against more than one function. This table reflects the structure of the report.

2.4 Scope and structure of the report

Section 3 outlines the elements of Australia's financial architecture. This includes both the key institutions and the main regulatory arrangements. Section 4 provides a summary of reforms that have been implemented over recent decades and the motivation for this reform agenda.

Section 5 outlines the motivation for the use of the six functions identified by Merton, examining in more detail the role that the financial sector should ideally play in the economy and broader society.

The subsequent sections address each of Merton's six functions in turn. Each section contains the following three elements:

- Identify the elements of Australia's financial infrastructure that seek to achieve the function – both institutional and regulatory.
- Assess the performance of Australia's financial infrastructure in achieving the function.
- Identify key live and emerging issues.

Given the breadth of subject matter covered, this review will necessarily be high level. It intentionally casts a wide net in order to be comprehensive. The trade-off is that it necessarily scratches the surface of some issues.

Where weaknesses in Australia's financial infrastructure or potential beneficial regulatory changes are identified, this will not be accompanied by a detailed assessment of the merits of any particular way forward. That work is left for Phase 2 of the project.

3. Defining Australia's financial infrastructure – key institutions and regulatory arrangements

Executive Summary

- This section sets out the key elements of Australia's financial infrastructure. The first sub-section identifies the key institutions. The second sub-section provides an overview of regulatory arrangements.

Before assessing Australia's financial infrastructure against the six core functions, it is important to define the elements of the system. The financial system is a combination of private institutions and the regulatory arrangements within which they operate. While the regulatory arrangements within which the sector operates are critical to its performance, many aspects of the financial system have evolved largely organically and are a reflection of technological and financial innovation more than regulation.

3.1 Key Financial institutions

Banking system: Australia's banking system is dominated by four major banks: Westpac Banking Corporation (WBC), the Commonwealth Bank of Australia (CBA); the National Australia Bank (NAB) and the Australia New Zealand Banking Group Ltd (ANZ). Banks manage over 60 per cent of the assets in Australia's financial system (ABS, APRA 2013). As at April 2013, Australia's big four banks all ranked in the world's top 20 by market capitalisation.

The Australian banking system exhibits high levels of concentration and has done so for decades. On most key measures such as deposits, earnings and total assets, the largest four banks combined have over 80 per cent market share (APRA, 2013). Given their size and the role that they play in the economy, all four banks are systemically important domestically. However, none of these banks is systemically important globally (IMF, 2012c, p5).¹

Australia's big four banks have broadly similar business models. This includes a similar reliance on wholesale funding, significant recent investment in IT and a diversification over recent decades into non-core banking areas such as financial advice. This potentially exacerbates concentration risks (IMF, 2012c). However, despite these similarities, there are some important differences between the strategies across the big four, such as a variation in the emphasis on sourcing revenue from foreign markets.²

¹ This was tested using an indicator methodology that includes size, interconnectedness, substitutability/infrastructure, complexity and cross-jurisdictional activity.

² For example, ANZ set a target of sourcing 25 per cent of revenue from outside of Australia and New Zealand by 2017.

Insurance Sector: Australia has a sophisticated and stable insurance industry. The general insurance industry is well funded and has coped well with several successive years of intense natural disasters. Claims management and dispute resolution following natural disasters are well managed on the whole, but are likely to be the subject of ongoing regulatory review over the coming decade. By market value, both QBE and IAG rank amongst the world's top ten pure general insurers. Australia's largest general insurers are critically dependent on the availability of reinsurance from offshore, in order to protect against the impact of major perils including cyclones, hailstorms, bush fires and flooding.

Australia's key general insurance firms have adopted different strategies in terms of engagement with foreign markets. For example, QBE has concentrated on commercial lines and has made over 100 acquisitions over the last twenty years, the large majority of them in overseas markets and relatively small in size. In contrast, both Suncorp and IAG have focused on securing a top two position in personal lines products in Australia and New Zealand and have each undertaken major acquisitions to achieve this.

The life insurance industry offers a wide range of products, although the next two decades will be challenging for the sector as retirees seek products that provide them with protection against longevity and inflation risk.

Like the banking sector, Australia's life and general insurance sectors are highly concentrated. In both life and general insurance, the largest three firms have at least 60 per cent market share on most industry measures. Market concentration appears to have increased over the past two decades (KPMG, 2011, p5). A high proportion of life insurance is currently sold through group policies offered via superannuation accounts.

Funds Management: Australia's funds management industry is very large relative to the economy. Australia has the fourth largest pool of funds under management in the world largely due to the size of the superannuation sector. The size of this sector is expected to continue grow, both in absolute terms and relative to the economy, due to a range of factors including demographic change and the rise in the superannuation guarantee (SG) from 9 to 12 per cent.

The superannuation sector currently manages approximately \$1.6 trillion. Of this, around 61 per cent is in retail and industry funds, with most of the remainder (around 30 per cent of the total) in self-managed superannuation funds (SMSFs). The share of total funds managed by SMSFs has grown over recent years, a trend that is expected to continue. Around 40 per cent of the money invested in industry funds and 10 per cent of the money invested in retail funds is allocated to "default" strategies, which are generally weighted

towards domestic and foreign equities. The investment strategies of SMSFs are more heterogeneous and more weighted towards cash and domestic equities.

Industry and retail funds are regulated by APRA, which has indicated that it will be imposing stricter controls on asset management and risk control. In contrast, SMSFs are subjected to much less onerous oversight, with the ATO playing the key regulatory role.

Financial Markets: Australia has very sophisticated, highly liquid financial markets. In 2011-12, the total volume of trades on exchange traded markets was \$48.5 trillion, of which \$1.19 trillion was on ASX equities, \$0.82 trillion was on ASX derivatives and \$46.1 trillion was on ASX futures (AFMA, 2012). Over the counter (OTC) markets were very actively traded, with a total volume of \$76.6 trillion in 2011/12. Of this, the largest individual components were foreign exchange (\$39.9 trillion), overnight index swaps (\$8.7 trillion) and repurchase agreements (\$7.5 trillion). (AFMA, 2012)

Financial Advice: Financial planning, stockbroking and related advisory services employ approximately 100,000 people, approximately one out of every four people working across the finance and insurance sector (ABS, 6202.0). This includes approximately 16,000 to 18,000 financial planning practitioners with around \$650bn in funds under advice. These practitioners work in bodies ranging from large banks through to independent advisory practices.

Private equity and venture capital: The private equity and venture capital sectors in Australia include approximately 86 firms managing around \$29 billion (AVCAL, 2012). Based on funds raised in the last 10 years, Australia has the third largest PE/VC market in the Asia-Pacific region and the 9th largest globally (Thomson ONE, 2013). As of June 2012, Australian superannuation funds accounted for 54.2 per cent of total funds committed to Australian PE and VC (ABS, 2012). To put this in context, this constituted less than 1 per cent of total superannuation funds. By comparison, the average target allocation of US pension funds to PE alone was 8.3 per cent in January 2013 (Bain and Company, 2013, p52).

3.2 Key regulatory arrangements

The principal regulators with responsibility for the Australian financial services sector are:

- **The Treasury:** financial regulation and policy advice to Government
- **The Reserve Bank of Australia (RBA):** payments system and financial stability
- **The Australian Prudential Regulatory Authority (APRA):** prudential regulation of ADIs, insurance and superannuation and financial stability

- **The Australian Securities and Investments Commission (ASIC):** market conduct and consumer protection
- **Council of Financial Regulators (CFR):** responsible for co-ordinating the activities of the Treasury, the RBA, ASIC and APRA, particularly in times of financial crisis
- **The Australian Competition and Consumer Commission (ACCC):** competition policy
- **AUSTRAC:** anti-money laundering and combating financial terrorism

Ministers:

- **Treasurer:** oversight of CFR, broad responsibility for fiscal and monetary policy; directions power over ASIC/APRA (albeit rarely used)
- **Assistant Treasurer:** delegated some day-to-day powers with respect to tax policy, oversight of ACCC and partial oversight of ASIC
- **Minister for Financial Services:** regulation of financial markets, insurance, superannuation (usually)

4. Regulatory reform of the financial sector over recent decades

Executive Summary

- This section examines the rationale for regulating the financial services sector. This sets a useful benchmark against which to assess current regulatory arrangements.
- The section then identifies the major policy reviews that have been conducted over recent decades and the reforms that have arisen from these reviews. This establishes a context for current arrangements and (hopefully) avoids reinventing the wheel.

Some, but not all, of the “gaps” that will be identified in this paper will relate to regulatory arrangements. Before assessing Australia’s regulatory arrangement, it is important to set out the fundamental rationale underpinning regulation of the sector. This section will also set out the reform agenda of the past several decades as this is useful context for current live and emerging issues, many of which are a continuation of long-lasting reform agendas.

4.1 The rationale for regulation of the financial services system

Regulation can be justified on a number of grounds, including addressing market failures, promoting financial stability and achieving distributional goals. Following is a non-exhaustive list of the high level goals of regulating the financial services sector:

1. Enhance efficiency of the allocation of capital and the payments system. The financial system is critical in “deploying” capital – i.e. allowing national savings to accumulate to an appropriate level given the inter-temporal preferences of individuals and firms and attracting foreign capital. It also underpins long-run economic growth by transferring and then allocating capital to its best use in the face of uncertainty.

The efficiency of the financial system in doing this relies in part upon market forces. However, the effectiveness of market forces relies upon information flowing to decision-makers, which in turn relies upon regulation in relation to transparency and disclosure. In addition, the efficiency of much of the financial system, including the payments system and financial markets, relies upon consumers and investors being confident that appropriate standards of behavior and disclosure are being enforced.

2. Monitor and (ideally) manage systemic risk. Systemic risks arise from the interdependencies between entities in a system. In most economies, the banking system poses the greatest risk of systemic financial crises. Banks often have a difference in liquidity between their assets (which are often illiquid, long-term assets) and their liabilities (e.g.

deposits, which are “on-call”). When there is a crisis in confidence, this can create “runs” which, in turn, can spread to other banks/financial institutions and cause a general lack of liquidity across the economy as a whole. Regulation can be beneficial both as a preventive measure and in managing crises once they arise.

There are also avenues through which insurance companies and larger super funds can create systemic risks – e.g. through corporate conglomerates which include banks and ADIs and/or knock-on impacts to banks through direct relationships.

3. Consumer protection. This is a very broad area of regulatory intervention and there is a range of justifications that covers many different areas of the industry:

- Information asymmetries.
- Unequal bargaining power.
- Bounded rationality (i.e. difficulty in dealing with complexity).
- Decision making biases (e.g. myopia in relation to savings decisions or loss aversion).

4. Distributional goals. The financial system is an avenue through which the government can pursue distributional goals. For example, distributional goals will inform policies such as the taxation of savings and income streams in the superannuation system and who bears the burden of funding government expenditure on ex-post bailouts.

5. Specific public policy goals. The four rationales outlined above are generally agreed to provide the key rationale for regulating the financial services sector. There are additional specific public policy goals that often complement such regulation and affect the way in which regulation is implemented.

- Retirement saving – the retirement savings system has mandatory elements largely in response to perceived limitations in individuals’ decision-making.
- Insurance – a number of regulatory interventions aim to deal with widespread non- and under-insurance, for example in relation to natural disasters.
- Money laundering and organised crime – ensuring that financial institutions and transactions are transparent enough to minimize the extent to which Australia’s financial system can be used as a conduit or home to the proceeds of crime.

Regulatory trade-offs: There can be a trade-off in regulating the financial services sector between promoting stability across the economy and allowing for or even supporting innovation. Stability in the financial system is critical for the economy as a whole given the importance of capital accumulation and access to credit in all sectors. However, placing too tight a set of regulatory constraints on the financial services sector can limit productivity

enhancing innovation, both in terms of new financial products and the way in which existing products and services are delivered.

The relationship between innovation and regulation is complex. In areas of systemic importance, there can be direct trade-offs between stability and innovation or flexibility (eg capital controls arising from prudential regulation). In other areas, such as new product offerings (eg internet banking, new types of accounts such as offset accounts) regulators can safely adopt a more light touch approach. Finally, as will be noted in section 10, in some areas, regulation can enhance competition and innovation (eg regulation that improves consumers' access to information and choice).

At a deeper level, following the GFC, some commentators both from within and outside the financial services sector have queried the benefits of much innovation in the sector. Some argue that innovation, particularly in recent years, has too often resulted in unnecessary complexity and less transparency. Financial derivatives were a significant innovation of the 1980s – a development later derided by Warren Buffett as “financial weapons of mass destruction.”

The Times reported that, in 2009, Paul Volcker responded to the long-run increase in the financial sectors’ share of the economy from 2 per cent to 6.5 per cent with the question “Is that a reflection of your financial innovation, or just a reflection of what you’re paid?” (Hosking and Jagger, 2009) He also claimed that the biggest innovation in the financial sector in the past 20 years was the ATM. Volcker’s broader concerns are shared by many.

In contrast, Robert Shiller (and others) see significant potential for financial innovation to benefit society (Shiller, 2012). Shiller argues that, rather than stifling the sector, the key is to promote the right kind of innovation – even if it involves growing complexity. He cites a number of examples of emerging financial tools such as: GDP indexed bonds and warrants³; social impact bonds⁴; crowd funding⁵; and benefit corporations.⁶

There can also be trade-offs between different regulatory goals. In some instances, there could be multiple rationales that act at cross purposes. For example, a fit and proper test to determine eligibility to be a market operator might be motivated by consumer protection

³ These were used by Argentina in 2005 following the 2002 crisis. They were also used in early 2012 by Greece to secure funding.

⁴ For example, Social Finance, which in the UK raised funds to improve the operation of the Peterborough prison and bonds issued by New York City in August 2012 for an initiative at Rikers Island Prison. In Australia, social bonds have been issued in NSW (the Newpin SBB and Benevolent Society SBB) and several other state governments have expressed an interest. See “Forging Bonds” in *the Australian Financial Review*, Capital, June 2013 and also NSW Treasury:

http://www.treasury.nsw.gov.au/site_plan/social_benefit_bonds/social_benefit_bonds_trial_in_nsw_FAQs#faq11

⁵ Such as Kiva.

⁶ It is a mixture between a for-profit corporation and a not-for-profit organisation. It is a corporate form designed for organisations that aim to both make profit and consider social or environmental goals. Maryland was the first state to pass legislation enabling benefit corporations in April 2010. By February 2013, thirteen states had legal frameworks for establishing benefit corporations.

and market stability. However, such a measure could also create barriers to entry that act counter to the goal of efficiency enhancement.

Regulatory goals and financial system functions: There is overlap between the rationales for regulation and the core functions of a financial system outlined above. However, they are not identical – which is why in most advanced economies, many aspects of financial infrastructure are regulated lightly and left to develop and evolve organically.

4.2 Major regulatory reforms over recent decades

4.2.1 Campbell Inquiry (1981)

Following the Great Depression, the Commonwealth Government established the Napier Royal Commission which recommended increased regulation of the financial services sector. Over the subsequent decade, the key recommendations of the Royal Commission were implemented, including licensing requirements for banks, the vesting of central banking powers with the Commonwealth Bank and direct control on interest rates and credit volume. The Commonwealth Bank's saving bank and central bank functions were separated in 1960.

Tight regulation of the banking sector over the three decades immediately following WWII was partly responsible for the growth of other types of financial institutions. The share of total assets of financial assets held by banks fell from 66.4 per cent in 1929 to 57.4 per cent in 1948, 46.7 per cent in 1960 and then to 42.3 per cent in 1970 (Committee of Inquiry into the Australian Financial System, Ch 14, p578, 1981). This took a number of forms including increased mortgage lending by life insurance companies and specialist finance companies offering "hire purchase" arrangements for household durables.

Interest rate controls were particularly onerous for banks. The share of assets held by building societies rose from 1.2 per cent in 1948 in 4.6 per cent in 1970 in part due to their capacity to charge and pay higher rates of interest relative to banks. The difficulties associated with nominal interest rate caps were exacerbated by the high inflation of the 1970s. The Campbell Committee was formed in 1979 in the context of the declining market share of banks and other challenges to the effectiveness of regulation including technological change and the collapse of the Bretton Woods system.

The Campbell Report, which was handed down in 1981, contained approximately 260 recommendations covering the entire financial services system. The recommendations were a mixture of deregulation (such as floating the dollar, removing barriers to entry and abolishing interest rate caps) and strengthening the existing regulatory framework (such as

stronger prudential standards). Over the coming two decades, most of the Campbell Report's recommendations were implemented.

Two of the key themes addressed in the Campbell Report – competitive neutrality and the efficiency (or productivity) of the sector remain very topical today. Also relevant was the Committee's desire to achieve these goals while maintaining the overall stability of the financial system.

4.2.2 Financial System Inquiry (1997)

The Financial System Inquiry (the “Wallis Report”) was the most recent overarching review of Australia’s financial services sector. The Wallis Report undertook a stock-take of the financial services sector in the period following the deregulation implemented during the 1980s. The Wallis Report made recommendations in three key areas.

First, the inquiry recommended the establishment of two new regulators (which were ultimately named APRA and ASIC), with the Reserve Bank remaining responsible for monetary policy and the payments system. Under the “twin peaks” model, APRA would be responsible for prudential regulation and ASIC for the regulation of business conduct and compliance with the Corporations Act.

The inquiry also recommended new regulatory arrangements for mergers and acquisitions and electronic commerce. The latter was a reflection of the already significant impact on financial services of information technology.

This report was broadly accepted by the Government and was followed by the establishment of APRA and ASIC.

One of the key notions underpinning the Wallis Report was that investors and consumers of financial products should be able to have faith in “promises”. In particular, the intensity of the promise made by financial institutions should be a key determinant of the regulation of the entity making the undertaking. Two key factors were raised in the report as relevant to deciding whether an entity should be subjected to prudential regulation. The first was whether there is a reasonable expectation that the promise will be satisfied in full. The second was whether there are inherent difficulties in the consumer undertaking due diligence as to the capacity of the entity to fulfill the promise.

According to these criteria, there has been broad agreement that banks and insurance firms fall within the umbrella of institutions that should be subjected to prudential regulation. Prudential regulation of these sectors in Australia and most other advanced economies has

become more onerous since the GFC as regulators try to cope with the difficulty of quantifying and managing systemic risk.

In practice, the delineation of which institutions should be subject to prudential regulation can be difficult. Industry and retail superannuation funds are subjected to a lighter touch form of prudential regulation than banks and insurance firms, although recent regulatory reforms have strengthened APRA's oversight role, and further strengthening has been foreshadowed. While not subjected to prudential regulation, some financial advisers are required to hold funds as "reserves" in order to increase their capacity to repay investors. While this may be justifiable, it is important to note the trade-off between consumer protection and the cost of advice.

Over the coming decade, the boundary of activities covered by prudential regulation and the stringency of prudential regulation for different sectors will undoubtedly be the subject of ongoing examination.

4.2.3 Policy reviews held within the last five years

Over the last five years, almost every aspect of the financial system has been subjected to a review dealing either with regulatory arrangements or institutional capacity. These reviews have taken a number of forms, including Parliamentary inquiries, reviews led by independent panels and reviews led by regulators or government departments.

Most, if not all, of these reviews have allowed for input from industry, consumer advocates and other stakeholders. Appendix 3 outlines the key regulatory reviews undertaken over the past five years. Any future review of the financial services sector should take account of the extensive body of work already completed.

5. A vision for the financial services sector

This paper will assess Australia's financial infrastructure against the six core functions of a financial services system. As stated, this set of functions provides a holistic and at least somewhat stable framework.

At this stage, it is worth making the obvious point that the functions outlined above are not ends in themselves. (Most) individuals do not open bank accounts or invest in sub-divisions of large assets or seek up-to-date financial data for their own sake. This begs the question of what the ultimate outcomes are that individuals and society are seeking.

5.1.1 Ends not means

Individual ends: The ultimate objectives for most people are to maximise their lifetime opportunity set and to smooth lifetime consumption. The more effectively are the six functions performed, the greater will be extent to which participation in the financial system allows individuals to satisfy these objectives.

A person's lifetime opportunity set is a combination of that person's lifetime income and what it can be traded for. People gain from a wide range of material and non-material goods ends. The financial system assists people in achieving these ends by allowing them to boost their lifetime income: primarily through earning remuneration and investment income (the latter requiring the pooling and allocation of resources). The opportunity set is then expanded to the extent that the trading of goods, services and financial products is facilitated by an efficient payments system and low-cost, transparent financial markets.

At a concrete level, for most people this involves two key inter-temporal transactions. First, borrowing while young to buy a house and second, saving for retirement while in middle age. The financial system is critical in facilitating both of these transactions which, fundamentally, are motivated by a desire to smooth consumption.

Smoothing lifetime consumption doesn't mean that consumption should be constant – but rather that it should smoothed taking account all of a person's circumstances, including: a person's dependents at each point in time, the disutility experienced from other factors (such as work); and the need to make provision for uncertainty surrounding health, longevity and other factors. The financial system assists in income smoothing in many ways, including: the lifetime allocation of resources through superannuation and other savings mechanisms; credit markets; and insurance against catastrophic loss.

Societal ends: While the economy as a whole is made up of individuals – it is also worth separately identifying high level macroeconomic outcomes.

First, is the capacity of the financial system to underpin investment in the most productive asset classes. This drives long run economic growth and higher living standards. This is worth identifying separately from the greater lifetime income of the individuals investing directly in the assets for two reasons:

- Some of the benefits of long run economic growth accrue to the government and can be distributed according to social objectives. For example, the pension incomes of some people will be determined exclusively by the returns on their investments. For other people, who are supported by income supplements or in-kind benefits provided by the State in retirement, higher long run economic growth produces indirect benefits.
- The efficient allocation of resources will boost investment returns (i.e. the returns to individual investing via the financial system) – but it will also assist in addressing externalities such as congestion, pollution and innovation, thereby benefiting society as a whole.

The second macroeconomic impact worth noting is that the effective management of systemic risk helps to smooth the business cycle. This has beneficial impacts that are broader than those that are felt directly through participation in the financial system.

These high level “final outcomes” are a simplification, but they capture the core benefits of an effective financial system. Figure 1 links the six functions of a financial system with these four high level outcomes (two associated with individuals participating in the financial system and two broader societal outcomes).

5.1.2 Intermediate outcomes

Figure 1 also refers to “intermediate outcomes” as a way of linking the six functions with the four final outcomes. Decomposing the relationship between functions and outcomes makes it easier to identify specific issues that warrant further examination.

It is worth noting that the effectiveness of almost all of the functions is linked to transaction costs. In turn, transaction costs will be a key determinant of the lifetime opportunity set of individuals. The reduction of transaction costs often appears to be of minor importance on a case-by-case basis, but the cumulative effect is significant.

The dissemination of information affects all of the intermediate outcomes. Accurate and timely information flows underpin every aspect of the sector. The arrows linking this function to all intermediate outcomes are not shown for the sake of the diagram's clarity.

5.1.3 Enablers

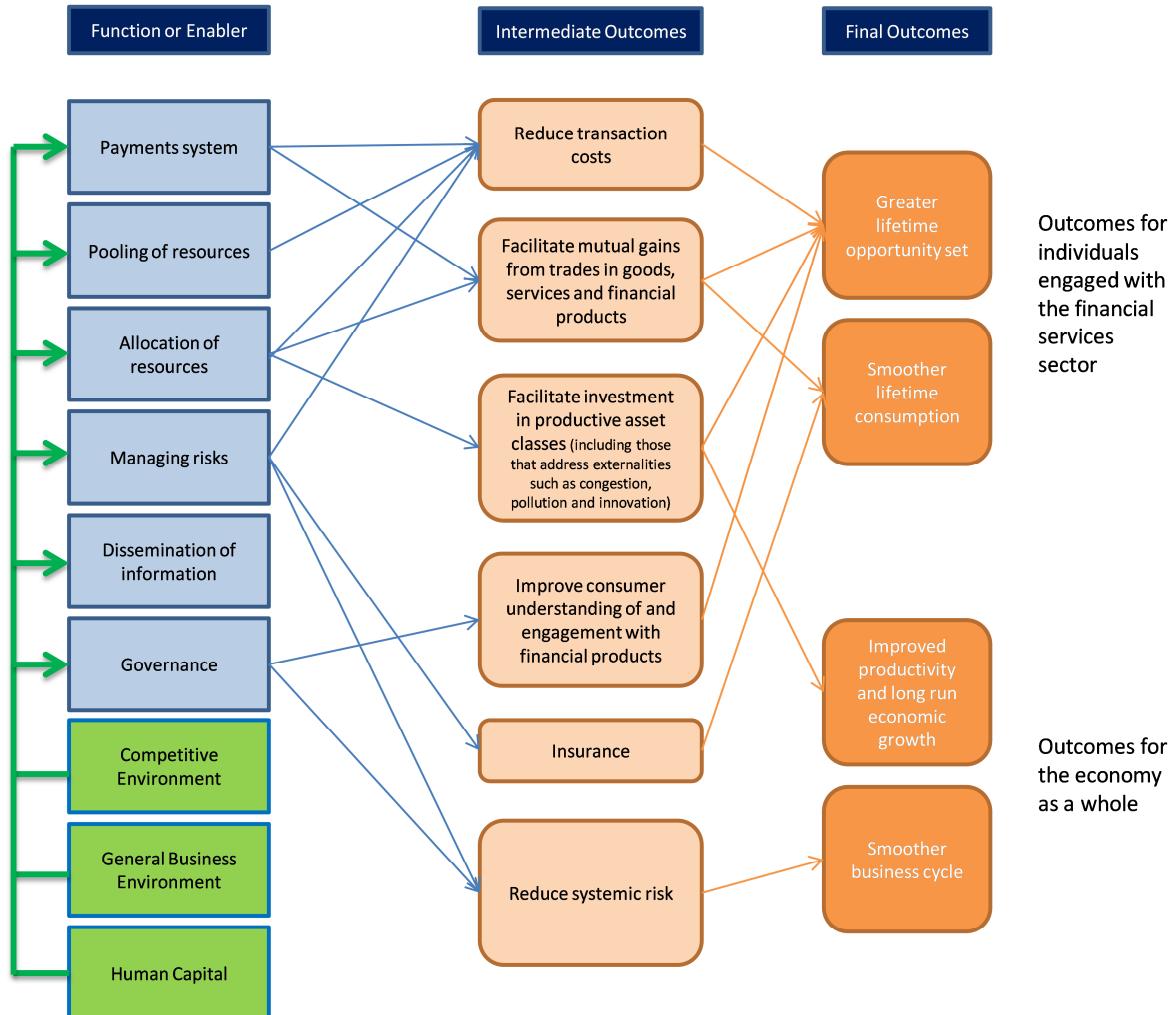
In addition to final and intermediate outcomes, Figure 1 identifies “enablers”. Each of these enablers affects the financial services sector as a whole:

- **Competition.** The market structure of the financial sector will affect the level of competition. Merton (and others) argues that the greater is the degree of competition, the greater will be the tendency for the sector to improve in the performance of all six functions.
- **General business environment.** The general business environment will also affect the performance of all functions. It will impact on the scope and scale of activities that can be undertaken, the efficiency of transactions (and transaction costs) and the certainty with which contracts can be entered into and enforced.
- **Human capital.** Human capital is often thought of as a component of the general business environment. It is separately identified in this paper as it is increasingly being seen as particularly critical in the financial services sector. Internationally mobile firms and capital will increasingly search for pools of highly skilled workers.

These enablers drive the effectiveness of all six functions. Regulatory changes or capacity enhancements that improve the enablers will drive change throughout the sector.

The Funding Australia's Future Project

Figure 1: Connecting the functions and desired outcomes of the financial system



5.1.4 Macro trends affecting the finance sector

There are a number of broad changes affecting Australia that are relevant to the finance sector. While the precise evolution of these issues is difficult to predict, they have a long-term momentum that is so irresistible that it is almost certain that they will have a significant impact on the economy and society more generally over the coming decades.

Technological innovation: Technological change in IT and communications is a driving force behind productivity growth across the economy – and in the finance sector in particular. As noted earlier, the finance sector stands out over recent years in terms of capital deepening and multi-factor productivity (MFP) growth. This is reflected in billions of dollars of investment across the sector over recent years. The finance sector's share of total IT spend rose sharply between 1960 and the 1980s. In 1960, the financial and insurance services sector contributed around 2 per cent of the economy's computer and electronic equipment spend (including software). This rose to around 10 per cent in 1980 and has remained at that level since (rising slightly before the GFC to 11 per cent and falling back to 10 per cent since then). (ABS, CAT 5204.0) This change has already produced a number of positive impacts, including: empowering consumers (e.g. via internet comparison sites and new mobile device accessibility); reducing transaction costs; and increasing the range of financial products. Notwithstanding recent strong MFP growth, an emphasis on promoting greater competition – both domestically and through greater international engagement – is likely to result in higher levels of innovation.

The ageing of society: Demographic projections indicate that Australia's population will age considerably over the coming decades. The proportion of the population over the age of 65 was 8.3 per cent in 1970, a figure expected to almost treble to 22.7 per cent in 2050. The increase in the proportion of the population over 85 will be even sharper, from 0.5 per cent of the population in 1970 to over ten times that share (5.1 per cent) in 2050 (Australian Government, 2010, p5). The latter group is critical as health care and nursing home costs are much higher, on average, for those over the age of 85 than for younger retirees. In addition to increasing as a share of the population, the number of older Australians will grow significantly in absolute numbers, with a projected 8.1 million people over the age of 65 in 2050, of which 1.8 million will be over the age of 85. Providing lifetime savings and post-retirement income products for these people will be both an opportunity and a challenge for the financial services sector.

Environmental challenges: Financial markets play an increasingly important role in the efficient delivery of utilities, including energy and water.⁷ This will increase as governments

⁷ For example, the National Electricity Market and markets for water rights.

and the private sector resort to markets to deal with scarcity and promote the efficient allocation of capital. The establishment of new markets is also likely to occur where policy makers attempt to deal with externalities. A good example is greenhouse gas abatement. Most (although not all) countries that are taking action in relation to this issue accept that a market-based solution or a carbon tax are likely to be the most efficient approaches. For Australia, if a market-based mechanism is adopted, one challenge will be to design a mechanism that allocates abatement efficiently but that also interacts effectively with trading schemes established overseas. The finance sector will be integral to establishing markets that work effectively. Environmental challenges also raise risk management issues, including uncertainty in relation to the long-term impacts of climate change (eg increased storm activity, sea inundation). The insurance and reinsurance industries are already facing the challenge of pricing these risks on the basis of imperfect information.

The rise of Asia: The economic rise of Asia represents a once in a lifetime opportunity for Australia's financial services sector. Over the past 20 years, China and India have tripled their share of world GDP and their absolute economic size almost six times (AG, 2012, p6). In just a little over a decade, four of the largest ten economies in the world will be in Asia.⁸ By that time, Asia will be the engine of world economic growth, constituting over 60 per cent of world output growth in PPP terms (AG, 2012, p51). According to the Brookings Institution, by 2030, there will be over 3 billion middle class people living in the Asia Pacific. Moreover, the proportion of the world's middle class living in that region will have increased from 28 per cent in 2009 to 66 per cent in 2030. (Kharas, 2010) In addition to experiencing rapid growth, both in total and per capita GDP, much of Asia will experience pronounced population ageing (including large economies such as China and Japan). In addition to geographic proximity and a shared (or close) time zone, Australia has many advantages in providing the financial services that will be highly sought after by these increasingly wealthy and, in some cases, old societies including funds management and retirement income products. The dramatic rise in Australia's terms of trade over the past decade has largely been driven by the rise of China. When the demand for resources slows, there is no reason why Australia should not be in a position to continue to benefit from regional growth, but with a greater emphasis on tradable financial services.

5.1.5 Key issues for the coming decade

The remainder of the paper will examine Australia's financial architecture in light of the six functions and three enablers. In doing so, it will place key live and emerging issues into the broader context of how progressing the issues could improve outcomes for individuals, firms and the economy as a whole.

⁸ Adjusted for PPP: "Australia in the Asian Century: White Paper", Australian Government, October 2012, p52.

6. The payments system

Executive Summary

- This section covers the key elements of Australia's payments system, including banking and credit union payments and clearing and settlement on securities markets.
- Australia's payments system is broadly effective, although there are some areas that have been identified as being below world's best practice.

6.1 Australia's payments system for cash transfers

In its recent strategic review, the Reserve Bank defined the payments system architecture as “the set of physical and logical structures that allow institutions to exchange payment instructions, initiate settlement and perform any additional functions associated with a payment.” (RBA, 2012, p14)

The payments system in Australia has a number of interconnected elements that cover cash payments. These include the key elements of the retail payments system: Direct Entry (a combination of bulk payments such as salaries and one-off payments), the processing of negotiable instruments, credit/debit cards, internet banking and e-commerce, ATMs and EFTPOS.

The payments system is also comprised of high value payment infrastructure, including the Reserve Bank Information and Transfer System (RITS). This is used by banks and other approved institutions to settle payments on a real-time gross settlement basis.

This paper will define the payments system broadly, to also include the clearing and settlement of transactions relating to securities, derivatives, debt instruments and foreign exchange on financial markets. Given the complexity of the payments system and the breadth of technological innovation currently impacting on the system, this section focuses on key issues rather than attempting to be comprehensive.

6.1.1 Current Governance Arrangements

Payments Systems Board: At present, the payments system is largely operated by industry with the RBA playing an oversight role. This role is conducted through the Payments Systems Board (PSB) which has responsibility under four separate Acts.⁹ The PSB must

⁹ Reserve Bank Act 1959, Payments Systems (Regulation) Act 1988, Payment Systems and Netting Act 1998 and the Cheques Act 1986.

exercise its authority so as to promote the efficiency of the payments system and competition in the market for payments services. In doing so, it must have regard to the overall stability of the financial system.

Key Attributes of a well-functioning payments system: The key attributes of a well-functioning payments system as valued by end users are (RBA, 2011, pp3-4):

- Timeliness – either as availability of funds to the recipient or, in the case of point-of-sale or online purchases, confirmation by merchant that payment has been authorised and funds will be received.
- Accessibility – ability to access payments system when required and to make payments to whomever required. This has improved over recent years with telephone and internet banking – and now mobile banking and payments.
- Ease of use – this can include: the number of steps in a payments process; the amount and type of information to be provided (e.g. account and BSB numbers); and the process by which information is provided.
- Ease of integration with other processes – this could include integration of a payments system process with accounting and business systems.
- Safety and reliability.

For any given set of characteristics, the payments system should provide services at the lowest cost to the system as a whole.

6.1.2 Assessment of performance

Accessibility: Australia has a highly accessible banking system both in terms of physical points of presence and consumer access to financial products.

Physical access: As of June 2012, banks provided 7,918 face-to-face points of contact across Australia, of which 5,783 provided branch level service. (APRA, 2012) This represented a 3 per cent and 4 per cent rise from the year before respectively. (APRA, 2012)¹⁰ The number of points of presence at June 2012 was approximately the same as at June 2003 (7,918 vs 7,873 respectively) – so a decade of rapid technological change, including a dramatic increase in internet banking, has not led to an erosion in branch numbers. The number of points of presence has oscillated over the past decade, increasing after 2003 to a maximum of 8,413 in 2006, then falling each of the following three years and increasing each year since 2009. Similar trends have occurred within each category of remoteness, with the

¹⁰ Part of this rise is attributable to some building societies and credit unions becoming banks. APRA, "ADI Points of Presence: June 2012", issued 29 August 2012, p6.

number of points of presence in “Remote” and “Very Remote” locations only slightly down on 2003. (APRA, 2012, p7) As with most aspects of the banking system, the Big Four banks have significant market share with around 66 per cent of points of presence.¹¹

The number of points of presence in Australia is high relative to other banking systems, both in terms of bank branches and ATMs. Australia ranks fifth highest globally in terms of ATMs per 100,000 population (IMF, 2011)¹² and 13th highest globally in terms of commercial bank branches per 100,000 population. (IMF, 2011)¹³

Social access: Physical access is one dimension of access – but it is also important to assess whether people are able to access services in practice. The Global Financial Inclusion (Global Findex) database has been compiled by the World Bank to measure how people in 148 economies interact with the financial services sector. (Demirguc-Kunt and Klapper, 2012). The first round of information contained in the database is based on survey data from 150,000 nationally representative, randomly selected individuals across the 148 economies during the 2011 calendar year. Australia ranks highly on the key levels of engagement. This includes: 3rd highest in terms of market penetration of bank accounts¹⁴; 11th highest in terms of debit card penetration¹⁵; and 11th highest in terms of having a loan from a financial institution.¹⁶ Mobile payments systems are emerging, such as Paypal, which have the potential to operate in parallel with the traditional banking system, thereby introduction significant new competition to this sector globally.

Reserve Bank strategic review: The Reserve Bank completed a strategic review of Australia’s payment system in 2012. (RBA, 2012) The review identified two key problems with the current approach. First, how to deal with public interest objectives when decision-making rests largely in the hands of for-profit commercial entities. Second, how to overcome coordination issues that might hamper socially optimal outcomes (e.g. through discouraging new entry, through failure to account for externalities).

The Board’s strategic review recommended three initiatives to improve governance of the payments system (RBA, 2012, pp18-20). First, that the Board set high level strategic objectives for the industry. Second, the creation of an industry coordination body to interact with the Payment Systems Board. Finally, that a framework be developed for more direct interaction between the industry coordination body and the Board itself.

¹¹ Westpac 1,270; CBA 1,026; ANZ 794 and NAB 748 out of total of 5,783. Other notables include: Bendigo and Adelaide Bank Ltd 594; Rural Bank Ltd, 464; and BoQ Ltd 263.

¹² Accessed from <http://fas.imf.org/> June 2013. See also World Economic Forum (2012), pp64-67.

¹³ Accessed from <http://fas.imf.org/> June 2013. See also World Economic Forum (2012), pp64-67.

¹⁴ Defined as the percentage of the population older than 15 with an account at a formal financial institution in 2011.

¹⁵ Defined as the percentage of the population older than 15 with a debit card in 2011.

¹⁶ Defined as percentage of respondents who have borrowed from a financial institution in the past year.

6.1.3 Opportunities to enhance regulation or institutional capacity

Potential gaps highlighted in the RBA strategic review:

- **Real-time payments.** Speeding up payments processing includes the timing of clearing, the timing of funds' availability in the banks' system and the timing of settlement. An option proposed by the RBA was real time settlement of DE files, which could result in same day settlement. The Faster Payments Service in the UK, which is a combination of real-time clearing, several intraday settlements and the provision of credit between receiving institutions between settlement periods, could form the basis for such a reform.
- **Payments out of hours.** This has already increased substantially with the growth of ATMs and card payments in the 70s and 80s, BPAY in 1997 and the increasingly widespread use of internet and mobile phones in recent years. One of the gaps at present is the receipt of low value payments via a transfer or cheque. The RBA proposed consideration of a low-value payment system out of hours, particularly on weekends and public holidays. This could include recipient of a DE payment on a Friday after the current cutoff who may otherwise have to wait until the following Tuesday to access their payment. Some financial institutions have already begun to implement seven day a week settlement for eftpos. This will be positive for merchants.
- **Transmission of data with payments.** One way to improve the ease of integration with accounting and business systems would be to adopt message standards that allow additional data to be incorporated.
- **Addressing payments.** Currently, payee's BSB and account number must be provided with all payments. This can result in administrative waste, errors and security concerns. The RBA proposed consideration of an identifier such as a phone number, as has been adopted in the UK (VocaLink) and US (clearXchange).
- **Cheques.** The current emphasis is making cheque processing more efficient even as volumes fall (rather than removing cheques by mandate, as was unsuccessfully attempted in the UK between 2009 and 2011). APCA recommended no major structural changes to the current system. Rather, it recommended allowing market forces to address the needs of cheque users as usage declines. (APCA, 2012, pp13-14)

6.2 Clearing and settlement on financial markets

6.2.1 Current Governance Arrangements

CS facilities for financial markets clear and settle trades conducted on those markets, but are typically (and in Australia, in all cases) distinct legal entities subject to licensing regimes separate to the markets they serve.

Both the RBA and ASIC have an oversight role for the clearing and settlement of transactions undertaken in financial markets. Financial markets are defined broadly in the paper to include any facility through which offers to buy and sell financial products are regularly made. (CFR, 2011, p8) Under the *Corporations Act 2001* (the Corporations Act), the RBA assesses facilities in relation to Financial Stability Standards (FSS). The FSS deal with the robustness of each FMI and seek to ensure that all reasonable actions have been taken to reduce systemic risk. Under the *Reserve Bank Act 1959*, the Payments System Board has a statutory responsibility to ensure that the RBA exercises its powers under the Corporations Act.

ASIC assesses each facility against market licence obligations and has powers to make directions to licensed operators. Together, ASIC and the RBA regulate clearing and settlement (CS) facilities under the Corporations Act. Part of their role is to provide advice to the Minister for Financial Services, who has responsibility for granting CS facility licences.

Central counterparties (CCP) in clearing add confidence in markets by reducing the risks associated with counterparty creditworthiness. However, CCPs also create systemic risks given the potential for market disruption if they fail. CCPs mitigate credit and liquidity risk in two ways: (i) requiring margin from market participants; and (ii) holding resources in reserve. Other risks, such as operational and legal risks, are mitigated in a variety of other ways. The management of systemic risk will be dealt with in Section 4. In short, the level of robustness required of a CCP is set out in the FSS. In Australia, the CCP for cash equities (and options and derivatives related to equities) is ASX Clear Pty Ltd and for derivatives and futures, the CCP is ASX Clear (Futures) Pty Ltd.

In Australia, ASX Settlement Pty Ltd provides settlement services for cash equities and Austraclear Limited provides settlement services for government and corporate bond services. The ASX operates both markets and the CS facilities which serve them, but the CS facilities are distinct from the markets.

Over the past 18 months, the Minister has authorised numerous financial markets in addition to the two ASX group companies listed above, including Chi-X Australia Pty Ltd

which provides trading in ASX listed equities. CS services for Chi-X are provided through the facilities listed above. Besides Chi-X, the trades conducted on the other markets authorised by the Minister are not cleared by a CCP.

6.2.2 Assessment of performance

Overarching regulatory compliance: The RBA and ASIC undertake an annual review of CS facilities for Australian cash equities. CS facilities have been found to be compliant with both agencies' requirements.

Competition in clearing and settlement on cash equities markets: In June 2012, the CFR issued a discussion paper in relation to competition in the settlement and clearing of the Australian cash equity market. (CFR, 2012b) A final report was released in December 2012 (CFR 2012c). The CFR review was undertaken in collaboration with the ACCC.

The review determined that there were mixed views about the net benefits that clearing competition would bring to Australia's financial markets. Some stakeholders thought that competition would deliver lower fees, innovation and user responsiveness. Others were less convinced it would deliver a net benefit. While they were supportive of competition in principle, they raised the scale of the Australian market and that clearing competition was almost exclusively a European phenomenon driven by greater integration, operational costs and costs of regulation.

Ultimately, the CFR recommended that:

- a decision on any license application from a CCP seeking to compete in the Australian cash equity market be deferred for two years;
- the ASX be required to develop a *Code of Practice for Clearing and Settlement of Cash Equities in Australia* within six months. The ASX has committed to do this; and
- at the end of two years the CFR should carry out a public review of the Code's implementation and effectiveness, and ASX's adherence to it, while at the same time it reviewed the prospect of granting a license to a competitor or pursuing other regulatory outcomes.

The Government accepted the CFR's recommendations.

Clearing and Settlement on OTC derivatives markets: The regulation of OTC derivatives raises a number of complex operational and risk management issues.

Central clearing: There is a growing tendency towards the central clearing of OTC derivatives transactions in the world's largest markets. This is due to a combination of regulatory incentives (eg Dodd-Frank and margin requirements for non-centrally cleared transactions under Basel III) and market forces. To date, Australian regulators have not considered it necessary to mandate either central or domestic clearing.

Competition in clearing: In its review of financial market infrastructure (CFR, 2011 and CFR, 2012a), the CFR was open to competition in the clearing of OTC derivatives. Indeed, at the time of writing this report, the ASX is preparing to clear OTC derivatives and an application by LCH was under active consideration by the government based on the application of location requirements in a graduated manner taking into account the "systemic importance of the underlying market and the composition of the FMI's participants." (RBA, 2012) The ASX will have its OTC derivatives clearing service operational by July 2013 for dealer to dealer and expects to have client clearing operational by the end of the year.

Global OTC markets are evolving rapidly. The regulatory response to these changes is still developing in some of the larger markets and it is not clear that a uniform approach will ultimately be adopted. To date, Australian regulators have recommended a measured approach according to which more interventionist reforms are delayed until a clear case has been made and the reform can be shown to interact effectively with the regulatory arrangements emerging in major markets.

6.3 Priority issues warranting further analysis: The Payments System

Key Issues

- Continue to pursue the forward work program of issues arising from the RBA's strategic review of the payments system, including:
 - real-time payments
 - payments out of hours
 - enhanced transmission of data with payments;
 - improved addressing of payments.
- Continue working towards a sustainable model for cheques.
- Monitor international developments in relation to the clearing and settlement of OTC derivatives.

7. Pooling resources

Executive Summary

- ADIs, superannuation funds, insurance firms and investment trusts enable the pooling of resources. ADIs and superannuation funds together constitute over 90 per cent of the funds managed by the financial services system. ADIs currently manage around twice the quantum of funds as superannuation funds – but the proportion managed by superannuation funds has increased steadily over the past decade. Demographic change and the shift from 9 to 12 per cent in the SG will probably result in a continuation of this trend.
- Most medium and large businesses in Australia are corporations. Other vehicles, such as partnerships and sole trader businesses tend to be used for microbusinesses or in providing professional services.

7.1 Vehicles to pool resources

The key vehicles used to pool resources in the Australian economy are ADIs, superannuation funds (mostly retail, industry and SMSFs), insurance firms and investment trusts.

7.1.1 Current pooling arrangements

ADIs and superannuation funds: Banks are by far the largest pool of resources in the Australian economy. As of June 2012, authorised deposit-taking institutions (ADIs) held \$3.53 trillion in assets, approximately two thirds of the assets in the entire financial system. (APRA, 2013c, see also RBA¹⁷) Of total resident assets held by ADIs, 79 per cent was held by the largest four banks.

Superannuation funds are also a key source of funding for the Australian economy. As of the December 2012 quarter, estimated superannuation assets stood at \$1.51 trillion. (APRA, 2013b, p6) This ranks as the fourth largest pension fund system in the world. (Towers Watson, 2013, p7) Together, banks and superannuation funds manage over 85% of the financial system's assets. (RBA, statistical table b2)

The majority of the superannuation sector is held by three types of funds: retail; not-for-profit; and SMSFs. Retail funds and not-for-profit funds manage just under two thirds of

¹⁷ The APRA figures include consolidated operations. Many of these assets are more meaningfully considered to be part of foreign financial systems rather than the Australian financial system. According to RBA figures which exclude consolidated operations (Table B1, <http://www.rba.gov.au/statistics/tables/>), total ADI assets are around \$3 trillion. While around \$500 bn less than the APRA figures, ADIs are still by far the largest part of the financial system even on the RBA figures.

total funds under management (28 per cent and 35 per cent respectively). These funds are managed by APRA. Under the *Superannuation Industry (Supervision) Act 1993* (the “SIS Act”), a trustee is required to ensure that the fund is managed for the core purpose of providing benefits after a member’s retirement.¹⁸ This is often referred to as the Sole Purpose Test. Trustees are also obliged to ensure that the fund’s investments are appropriately diversified and that the fund has an investment strategy which takes into account the fund’s overall circumstances.

SMSFs manage just over \$400 billion in funds (or approximately 30 per cent of funds under management). The share of funds managed by SMSFs has grown over recent years. These funds are not regulated by APRA, with light-touch regulatory oversight being provided by the Australian Taxation Office (ATO).

Collective investment vehicles: Collective investments vehicles (CIVs)¹⁹ take a number of forms in Australia. The key investment vehicles are managed funds and hedge funds, with a significantly higher proportion of funds invested in the former. The key types of managed funds are:

- **Registered Managed Investment Schemes (MISs):** these schemes are registered by ASIC and operated by a responsible entity. They can be invested in by any class of investor and are often targeted at retail investors.
- **Unregistered Managed Investment Schemes:** Unregistered MISs can seek investments from wholesale investors. The managers of these schemes must be registered with ASIC.
- **Managed Investment Trusts (MITs):** MITs are a sub-class of unregistered MISs. They are aimed at wholesale investors, often based offshore. MITs include property trusts, which are often referred to as REITs. These vehicles are governed by the *Corporations Act 2001* and the *Income Tax Assessment Act 1936*.
- **Listed Investment Companies (LICs):** a closed-end CIV similar to an investment trust in the UK.
- **Limited Partnerships (LPs):** similar to a general partnership, except that one or more partners are “limited” – ie that they have limited liability, similar to that enjoyed by shareholders of a corporation.

¹⁸ See section 62 of the Superannuation Industry (Supervision) Act 1993.

¹⁹ This can be defined in a number of ways. In a recent review of tax arrangements applying to CIVs, the Board of Taxation limited its review to CIVs that were widely held and that undertake primarily passive investment activities.

Investment trusts are very widely used in Australia with over \$1.4 trillion being managed in trusts, mostly in widely held unit trusts. Unlike in overseas markets, much of this total is in superannuation rather than in unregulated investment funds.

7.1.2 Assessment of pooling mechanisms

ADIs and superannuation funds: Australia's financial sector includes a wide range of institutions through which investors can store their savings. The two key mechanisms for individuals at present are deposits in accounts with ADIs and superannuation accounts.

Both ADIs and superannuation funds offer a wide range of products. Most retail superannuation funds have dozens of investment options. Industry funds currently offer 12 options per fund on average, which is considerably less than for-profit funds. However, the trend is towards greater member choice. For example, Australia Super is now offering members the option of allocating funds to particular ASX listed equities.

Collective investment vehicles: The regulatory environment for collective investment vehicles (CIVs) in Australia is complex, in particular, the taxation arrangements. Reforms to the taxation treatment of Managed Investment Trusts (MITs) enacted in 2010 represented a major effort on the part of government and industry to simplify taxation arrangements and make them more comprehensible to foreign investors. A second tranche of reforms has since stalled and been delayed several times.

7.1.3 Opportunities to enhance regulation or institutional capacity

Collective investment vehicles: The Board of Taxation has recently reviewed taxation arrangements relating to CIVs. This is an important area in which there is considerable uncertainty at present (eg the treatment of "unders and overs" in respect of MITs, what constitutes an arms' length transaction, the definition of "clearly defined rights" and other issues). The Government is currently reviewing this report and is likely to deal with any issues arising as part of its response to the review of the tax treatment of trusts more broadly (Division 6 of the ITAA). There is also a broader set of issues relating to the types of CIVs that are legally recognised in Australia. Many of the trust arrangement are not well understood by investors outside countries with legal systems based on the UK.

An additional issue is whether the regulatory provisions providing for a single "responsible entity" are functioning well.²⁰ Current arrangements are administratively simpler than the previous requirement for certain CIVs to engage both a trustee and manager. However, the

²⁰ The new regulatory arrangements were introduced through passage of the *Managed Investment Scheme Act 1998*.

potential for responsible entities to become involved in transactions, particularly where the some or all of the assets require ongoing management – and the potential for this to create conflicts of interest – is worth examining.

7.2 Corporations law

7.2.1 Current arrangements

The formation, governance and supervision of corporations in Australia is governed by the *Corporations Act 2001* and the *ASIC Act 2001*. These laws are a combination of federal powers granted under the Constitution and powers referred to the Australian Government by the States. Together, the laws govern corporations and some provisions also relate to partnerships and managed investment schemes.

7.2.2 Assessment of current arrangements

Australia's corporations laws are largely based on the UK's corporations laws. As such, they are based on principles that are well established and that many international investors are familiar with.

One criticism of Australia's corporations laws is that they are too complex. The Australian laws are thousands of pages long. This can be contrasted with Sweden's legislation which is around 200 pages in length. Sir Anthony Mason attributed the complexity of Australia's corporations law to a number of factors. The first was a response to a number of corporate collapses and the need to "put our corporate house in order" at least in part to retain the interest of foreign investors (although of course complexity runs counter to the latter objective). A second factor was a greater emphasis on covering off on all relevant details in drafting the legislation – an emphasis motivated in part by the growing complexity of the commercial world. (Mason, 1992)

Mason contrasts the Australian legislation with US legislation, which provides "broad outlines ... leaving the courts to fill in the large interstices ..." He argues that there are elements of the US approach that are worth adopting but that a "happy medium" between the two approaches is probably ideal.

Jordan acknowledges the strengths of Australia's corporate law. It is a one-stop shop, obviating the need for multiple jurisdiction filings. It has benefited from the work of the Corporations Law Simplification Task Force. It has also incorporated innovations that reflect Australia's particular circumstances (although perhaps in some core areas, there is too much exceptionalism). But there are serious shortcomings. Australia's corporations law is based

on the “chassis of old UK companies law” with many disparate elements bolted on. (Jordan, 2008) This has compromised the coherence of the law and its comprehensibility for many foreign investors. Ultimately, Jordan finds it to be “complex, ungainly, badly drafted, internally inconsistent, conceptually troubled” – and certainly weaker than laws implemented in comparable jurisdictions such as New Zealand, Canada, the US and Hong Kong. (Jordan, 2008)

7.2.3 Opportunities to enhance regulation or institutional capacity

Simplification of Australia’s corporations law has been on the agenda for decades. While a worthwhile aspiration, it is unlikely that anything other than a wholesale rewriting of the legislation would make a material difference to its complexity. This would probably not be warranted given the resources that it would consume and the uncertainty that it would generate both amongst both domestic and foreign investors.

7.3 Priority issues warranting further analysis: Pooling Resources

Key Issues

- Greater regulatory certainty for widely held CIVs, including taxation treatment for both domestic and foreign investors.
- Introducing regulatory arrangements for a new “corporate CIV” that is better aligned with CIVs used in major economies that trade with and invest in Australia.

8. Allocating resources across time and space

Executive Summary

- Transferring resources between geographic regions and industries is largely undertaken by ADIs, superannuation funds, insurance firms and investment trusts.
- The allocation process often involves financial markets. Australia's financial markets are large and highly liquid, both in regional and global terms.
- Australia's financial infrastructure also facilitates the allocation of resources through time at the individual level (life cycle savings, including through superannuation accounts) and via financial instruments such as derivatives.

8.1 Allocating resources across geography and industries

8.1.1 Current institutional and regulatory arrangements

APRA has broad responsibility for the prudential regulation of the financial sector. This includes the prudential regulation of ADIs²¹, insurers²² and superannuation funds²³.

ADIs: On 13 December 2012, APRA released the final package of measures to implement Basel III capital regulation measures for ADIs.²⁴ (APRA, 2012c) The new package will raise the quality, consistency and transparency of the capital base of ADIs and establish minimum requirements in relation to counterparty credit risk.

The Basel III requirements relating to minimum common capital ratios came into operation on 1 January 2013. Australia was one of only six countries that implemented these standards without a transition period. The new standard will require a common capital ratio of 4.5 per cent. A higher minimum ratio (7 per cent) will be implemented on 1 January 2016. Preliminary data indicates that the big four banks already satisfy the higher standard.

Superannuation: The key regulatory issues affecting asset allocation for superannuation funds are choice of fund requirements, the sole purpose test and prudential regulation.

Choice of fund: choice of fund legislation allows members to elect which fund their contributions are to be made to and to move funds between investment options within a fund. The portability rules allow most employees to transfer balances from one fund to

²¹ Including banks, credit unions, building societies and friendly societies.

²² Including general insurance and reinsurance companies and life insurance.

²³ All funds other than SMSFs.

²⁴ See the full suite of papers at <http://www.apra.gov.au/adi/PrudentialFramework/Pages/Basel-III-CCR-Final-November-2012.aspx>

another within 30 days. Given that retail and industry funds offer a range of products with widely varying asset allocations, choice of fund provisions mean that funds need to hold assets in reserve to deal with the possibility of a shift of members across products.

Sole Purpose Test: The superannuation framework does not prescribe the asset classes or types of investments that funds must choose. The principal regulatory guidance in relation to asset allocation is provided in the *Superannuation Industry (Supervision) Act 1993* (SIS Act) which states that trustees must formulate an investment strategy according to the Sole Purpose Test. This applies to trustees of both APRA regulated funds and also SMSFs. The Sole Purpose Test provides that trustees must manage the fund for the core purpose of providing members with income in retirement.

APRA Prudential Regulation: APRA's powers to regulate superannuation funds were strengthened following the GFC. APRA's Investment Governance Prudential Standards SPS530 require that superannuation funds develop and implement a liquidity management plan and undertake rigorous stress testing. APRA's Prudential Standard SPS 510 sets out the minimum requirements for good governance for superannuation funds. These include that boards must have procedures for assessing board performance and that an Audit Committee must be established. APRA Prudential Practice Guide (SPG 520), which was issued in August 2010, states that there is an expectation that each trustee board should have a governance policy that identifies the skills and competencies that a trustee board is expected to collectively possess in order to effectively carry out its duties. APRA has indicated that many of the requirements proposed within the new prudential standards are already current practice for most superannuation fund trustees. Smaller funds may have the greatest difficulty in complying with the new obligations.

General and life insurance: APRA is responsible for the prudential regulation of the life and general insurance sectors in Australia. In May 2010, APRA commenced a review of capital standards for life and general insurance companies (LAGIC). The key goals of the review were to improve the risk-sensitivity of insurance firms and the appropriateness of their capital holdings and to improve the alignment of capital standards across industries (for example between insurance and ADIs). (APRA, 2012b) The new capital framework has been effective since 1 January 2013, although there will be transition periods for some elements of the new arrangements.

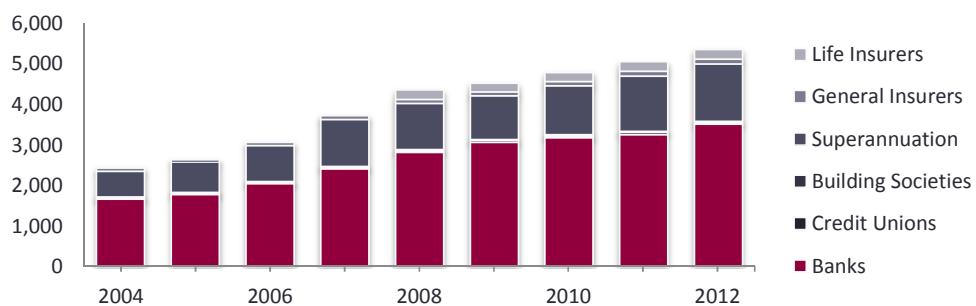
8.1.2 Assessment of asset allocation

Description of current patterns of asset allocation: This paper will not examine the performance of asset allocation against measures such as risk adjusted returns or the performance of investments when matched to institutional or member interests. This is a

matter of considerable complexity and is beyond the scope of a paper of this nature. Rather, it will describe asset allocation by institutional category in order to determine the relative size of institutional groupings as managers of financial assets and to compare and contrast how different institutional categories allocate funds.

Asset allocation across the finance sector: Asset allocation across the sector is dominated by banks and superannuation funds which together hold over 90 per cent of the sector's assets. The proportion held in superannuation funds has grown over the past decade. This trend is likely to continue, particularly with the move from 9 to 12 per cent in the SG.

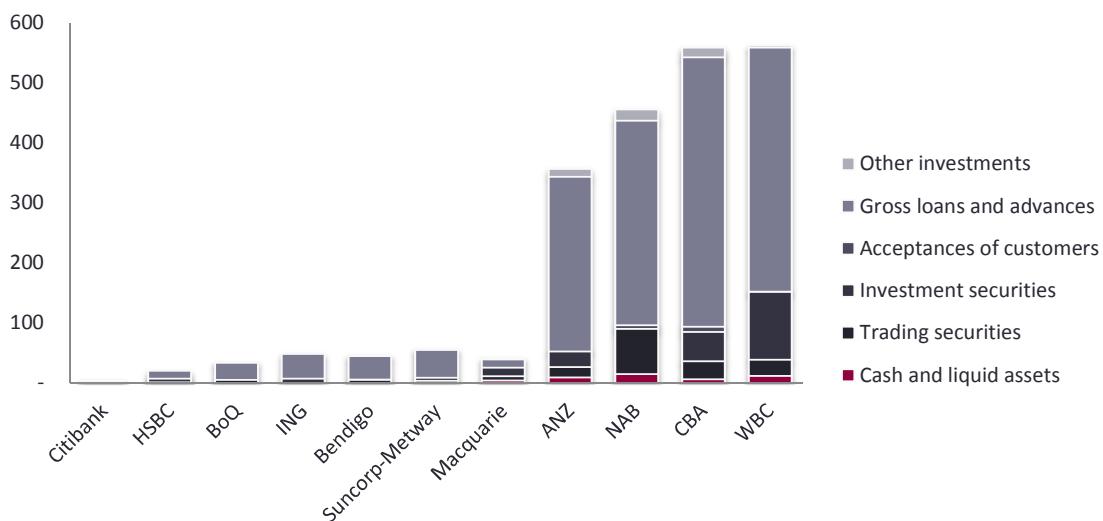
Figure 2 Total Assets by Sector, \$ billion



Source: APRA, statistics 2012

Banking sector: The banking sector holds more assets than any other part of the financial services sector. Figure 3 decomposes the total resident assets held by the largest 10 banks as of December 2012.

Figure 3 Total Resident Assets of Top 10 Banks: December 2012, \$ billion



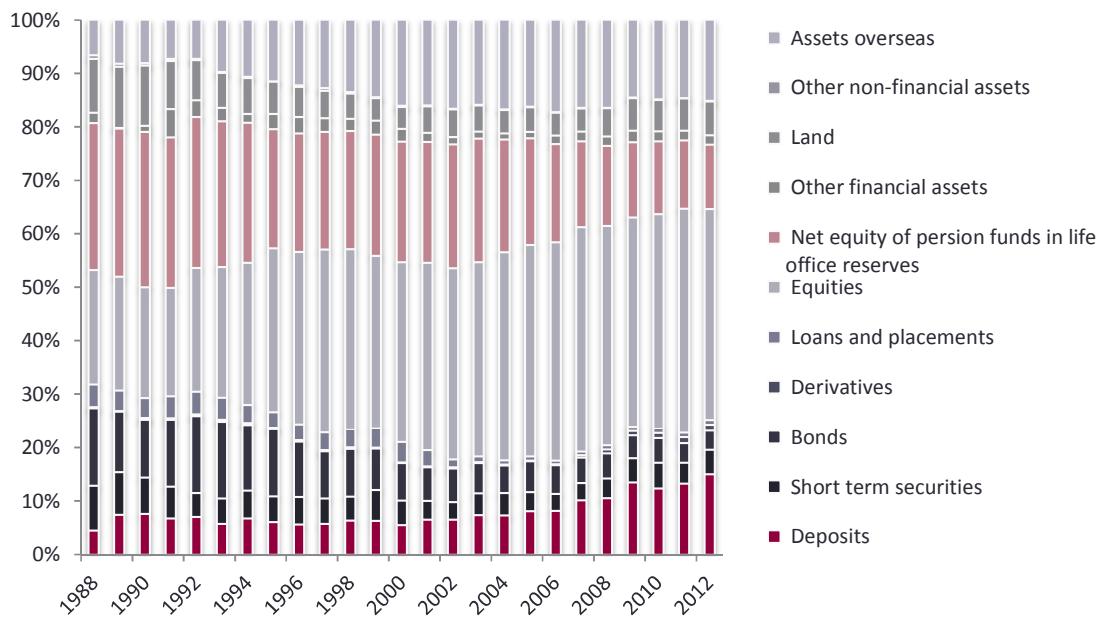
Source: APRA, monthly banking statistics, December 2012

Superannuation sector: Total funds under management by superannuation funds has grown substantially over the last ten years – from \$634 billion in 2004 to \$1.4 trillion in 2012.

Figure 4 contains a breakdown of the asset classes held by superannuation funds. (ABS, CAT 5655.0)

Superannuation funds invest heavily in numerous asset classes. As at December 2011, superannuation funds had \$435 billion invested in the ASX 200. (ASFA, 2012a, p3) Superannuation funds are also a significant source of funding for infrastructure investments. For example, superannuation funds have been consortium partners in many successful PPP bids over recent years. Research from Rice-Warner indicates that APRA-regulated superannuation funds in Australia allocate approximately five per cent of their total asset allocation to infrastructure. (ASFA, 2012b, p8) The key trends in asset allocation over the past twenty five years have been: (i) that the proportional weighting to equity has grown; (ii) that the share of assets held overseas has grown; and (iii) that the proportion of assets held in bonds, short term securities and deposits combined is approximately the same in 2012 as it was in 1988. While the share of funds in this group of assets has remained relatively constant, the proportion held in bonds has fallen from around 15 per cent to under five per cent.

Figure 4 Australian Pension Fund Asset Holdings: 1988-2012

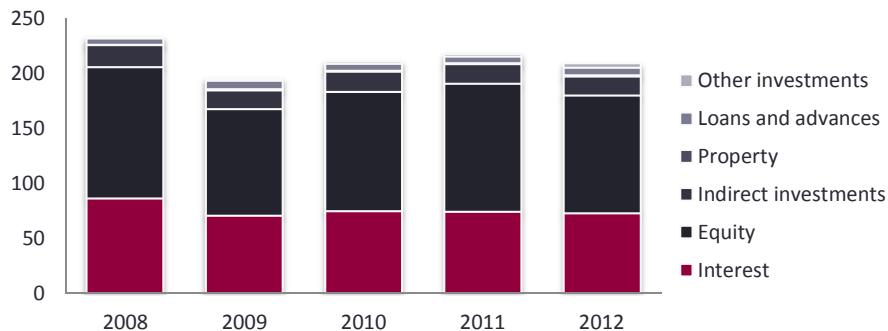


Source: ABS, CAT 5655.0

Insurance: Figure 5 and Figure 6 set out the asset allocation for the life insurance and general insurance sectors. In 2012, the life insurance industry held around double the assets compared to general insurance (\$238 billion vs \$118 billion in 2012, ABS). The life

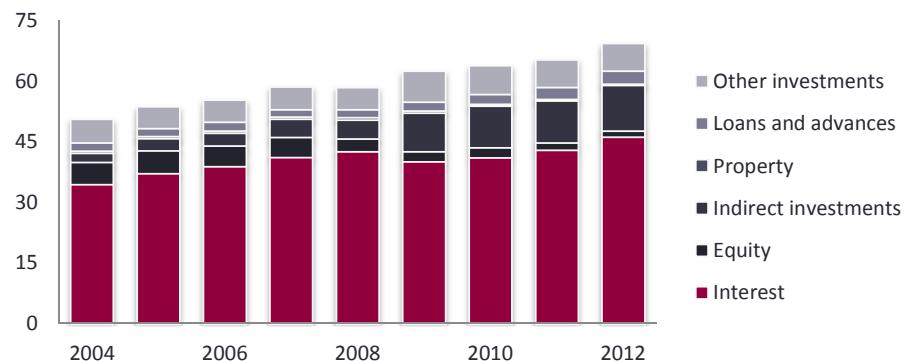
insurance industry is much more heavily weighted towards equities compared to general insurance (which reflects the longer term nature of its asset holding and capacity to invest for growth). The general insurance industry holds a greater proportion in “indirect investments”.

Figure 5 Asset Holdings: Life Insurance, \$ billion



Source: APRA, *Quarterly Life Insurance Performance Statistics*, September 2012

Figure 6 Asset Holdings: General Insurance (\$ billion)



Source: APRA, *Quarterly General Insurance Performance*, September 2012

Private Equity and Venture Capital: As of 30 June 2012, venture capital (VC) and private equity (PE) funds were responsible for managing \$29.4 billion which was invested across 539 companies. (AVCAL, 2012) Total commitments raised by VC and PE funds in Australia in FY2012 totalled approximately \$3.3 billion, the largest annual total since the GFC. Of this total, around \$250m was raised by VC funds and just under \$3.1 billion by PE funds.

8.1.3 Key live and emerging issues

Issues relating to prudential regulation: The Wallis inquiry set out the broad policy rationale for the scope of prudential regulation. At the core of this is the “twin peaks” arrangement in which APRA has sole responsibility for prudential regulation. In theory there is a clearly defined boundary between institutions that are subject to prudential regulation

and those that are not. In practice, prudential regulation is more complex. Regulators are faced with a number of complex issues.

Is too much of the financial services sector prudentially regulated? On some measures, such as assets under management, the vast majority of the financial services sector is prudentially regulated. This is an example of the trade-off between the competing goals of increasing systemic stability on the one hand and leaving financial institutions freedom to compete on the other. While prudential regulation probably doesn't directly hamper innovation, it creates barriers to entry which may reduce competitive tension.

Should SMSFs be prudentially regulated? Even though a very high proportion of assets under management are prudentially regulated, SMSFs, the largest and fastest growing segment of the super industry, remain subjected to very light touch regulation by the ATO. While there are good reasons to apply a different regulatory regime to SMSFs than is applied to ADIs and large funds, current arrangements may be too laissez faire given the difficulties that many SMSF trustees face in making informed investment allocations, detecting fraud and dealing with other challenges. If for no other reason than consumer protection, SMSFs may need to be subjected to some form of appropriately tailored prudential regulation.

Is prudential regulation applied with sufficient differentiation? Another issue is whether prudential regulation is applied in a manner that reflects the different levels of systemic risk across sectors. The IMF cites three factors as being particularly important in assessing the systemic importance of financial institutions: (i) size (the volume of transactions that the institution is involved with as a proportion of the financial sector); (ii) substitutability (the extent to which other parts of the financial system can perform the functions of an institution should it fail); and (iii) interconnectedness (the extent to which it is linked with other institutions). (IMF, 2009, pp2-3) Importantly, the IMF notes that systemic importance is not a binary variable: institutions have varying degrees of systemic importance.

Banks are generally seen as the most systemically important financial institutions due to: (i) their role in providing credit and the link between the availability of credit and the capacity of firms to invest, to hire and to trade; (ii) their role in money creation via loaning deposits; and (iii) their relatively large size and, therefore, role as counterparty to a high proportion of transactions. These reflect all three characteristics identified by the IMF.

Asset categories where investment flows might be constrained

1) Infrastructure: Australia has experienced very high rates of investment in infrastructure over the past twenty years, primarily in the resources sector.²⁵ The finance sector has played a key role in the funding of infrastructure. For example, superannuation funds have invested directly in a wide range of infrastructure projects, including transport infrastructure²⁶, desalination plants, public hospitals, energy networks and the resources sector. Overall, superannuation fund allocations in infrastructure typically range from two to ten per cent. (ASFA, 2012c, p5) The ISN recently examined the allocation by industry funds and found that most funds allocated between 10-16 per cent to infrastructure. (ISN, 2013, p4)

Despite this, it is widely agreed that Australia is experiencing a number of infrastructure bottlenecks and that significant investment in infrastructure over the next several decades will be important to underpin continued economic growth. The OECD found that Australia “suffers from an infrastructure deficit” and that transport infrastructure ranked 34th overall and 46th in relation to the quality of port infrastructure. (OECD, 2011, p99) This is reflected in a growing backlog of priority projects such as major rail projects (Melbourne Metro, North West Rail, Cross River Rail, High Speed Rail); major road projects (WestConnex, East-West in Melbourne); the expansion of ports; and much needed investment in power, water and telecommunications networks.

There appear to be two key barriers to attracting funds to public sector greenfield infrastructure projects. First, fiscal constraints on both Federal and State governments have limited their capacity to invest in major projects directly. Second, it is becoming increasingly difficult to generate market interest in the traditional PPP model in a post GFC world, particularly for greenfield projects.

There are a number of factors that are tending to reduce market interest in greenfield infrastructure projects. First, are the liquidity constraints on Australian superannuation funds arising from legislated choice of fund provisions and APRA’s recent prudential guidance (similar constraints apply to some overseas pension funds). Infrastructure investments are generally considered to be less liquid than equities or most fixed income assets, particularly if they are unlisted. The ISN has argued that industry funds are generally better placed than other managed funds (particularly SMSFs) to benefit from the advantages of unlisted assets. (ISN, 2013, p13) These benefits include the illiquidity

²⁵ Mining investment increased from under 2% of GDP in 2004, to around 4% by 2010/11 and over 8% in 2012/13. This represents over \$100 billion per annum in investment. – ABS.

²⁶ Recent Australian transport projects include CityLink, Peninsula Link, EastLink (Vic), CLEM7 (Qld), Lane Cove Tunnel (NSW) and Cross City Tunnel (NSW): ASFA, 2012c, p4.

premium and the opportunity to exercise greater control over the management of assets. The scope for funds to benefit from the illiquidity premium was supported by recent APRA research. (APRA, 2011) Funds will generally be in a better position to invest in unlisted assets if they have the following characteristics: scale; net cash inflows; younger member demographics.

A second factor is the difficulty faced by small and medium funds in undertaking due diligence and maintaining diversification when faced with large, lumpy investments. These problems are particularly pronounced for SMSFs, which will probably require new types of products (eg retail infrastructure bonds) if they are to participate in funding infrastructure.

Risk allocation is an additional, critically important issue for government funded greenfield projects. Australian and international funds are willing to pay a reasonable price for long-run income streams – but do not want to assume project risk. In particular, investors are reluctant to assume construction risk and usually want limited exposure to greenfield patronage risk. Project financing structures will need to be developed that match investment returns with the risk allocation preferences of investors. Investor concerns in relation to risk have been exacerbated by the post-GFC retreat of global monoline insurers from the Australian market and significant losses on some high profile projects due to errors in forecasting patronage.

The Infrastructure Finance Working Group (IFWG) made a series of recommendations in its final report in April 2012. (IFWG, 2012) These included recommendations relating to risk allocation, regulatory barriers to corporate bond issuance and the regulation and taxation of post-retirement income products. Infrastructure Australia issued a consultation paper in January 2013 which picked up on many of these points. The following issues are worth considering further:

- **Credit enhancement.** The Australian Government (or, to a lesser degree, State governments) could provide credit enhancement through: (i) provision of long-term subordinated debt for significant projects; (ii) Government reducing construction risk by providing construction guarantees from credit worthy counterparties such as banks; and (iii) a bespoke project risk guarantee scheme for specified projects.
- **A liquidity facility.** The Government could provide backstop liquidity for certain infrastructure debt instruments. This could be similar to the RBA's current arrangements with banks in relation to Commonwealth bonds.²⁷

²⁷ See discussion in (Deloitte, 2013a, p44)

- **Enhanced project assessments and the development of a national pipeline.** This will increase the likelihood of funds and constructors maintaining teams of dedicated experts.²⁸
- **Innovative financing arrangements.** One proposal developed by Pottinger is Converting Infrastructure Bonds. (Lake et al, 2013) Under this arrangement, the constructor and government would share construction risk (as mutually agreed). Pension funds and infrastructure funds would receive bonds that provide defined payments until construction completion after which they would convert to equity.
- **Post-retirement products.** The structure, regulation and taxation of pension income products. (IFWG, 2012 – recommendation 12)
- **Linking income streams from infrastructure to investor returns.** If governments credibly dedicate a portion of the income from new infrastructure (eg user charges such as tolls and public transport tickets, or alternative income sources such as land tax uplift or congestion levies) – this would provide investors with greater confidence of being repaid in inflation-hedged payments.
- **Improved bidding arrangements.** Improvements to bidding arrangements could include measures such as full or partial bid cost reimbursement for some or all bidders and shared consultancies across the bidding consortia, possibly paid for by the government (eg traffic modeling).²⁹ The ISN recently proposed separating the tendering of the operation of the asset from the construction and financing of the asset. (ISN, 2013, pp15-16)

2) Innovation/ Venture Capital: Australia does not have a well-established venture capital market. This is reflected in the asset allocations outlined above. It is telling that FY2012 was the third year in a row that the majority of VC commitments were sourced from Government-backed programs.³⁰ The lack of depth in Australia's VC market is due to many factors. Potential explanations include: the relatively small size of economy, which means that many viable projects migrate to the US when moving closer to commercialisation and a business culture that does not embrace risk in the same way that other centres of VC/commercialization do (such as Silicon Valley or Israel's IT sector).

Pension funds were the largest single source of investment in VC and PE in FY2012, accounting for 36 per cent or around \$1.2 bn in investments. However, of this share, only

²⁸ One way of increasing the credibility of a national pipeline is for State Governments to commit to "capital recycling", ie to the sale of mature assets to fund greenfield projects. This would reduce the likelihood of infrastructure funding being impaired by the fiscal impacts of the business cycle.

²⁹ These reforms should be considered for all public sector infrastructure projects, including privatising brownfield infrastructure assets.

³⁰ Innovation Investment Fund (IIF), Renewable Energy Venture Capital Fund (REVCF) and the Innovation Investment Follow-on Fund (IIFF). (ACVAL, 2012, p9)

19 per cent was provided by Australian industry and retail funds, with 17 per cent sourced from overseas pension funds. The share of total pension fund investments in PE/VC sourced from Australian funds has fallen from 87% in FY2010 to 69% in FY2011 and 53% in FY2012. (AVCAL, 2012, p10) Liquidity constraints (such as choice of fund) have been cited as a barrier to Australian superannuation funds investing more in PE and VC.

3. Private Equity: PE contributes to the efficiency of capital markets in three ways: (i) better aligning the interests of business owners and management; (ii) providing another dimension to capital liquidity by buying and selling equity in both private and public companies; and (iii) as with some other alternative asset classes, providing opportunities to lock in investments for the medium to long-term, which often matches the needs of investors such as superannuation funds.

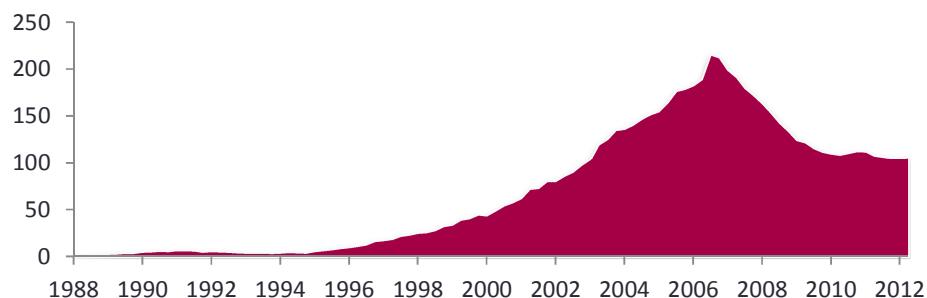
In a recent report on the economic contribution of PE to the Australian economy, Deloitte Access Economics found that PE investee firms contributed around \$58 billion in total value add and employed 512,000 FTE jobs. The study also found that PE management affected change and that new management was introduced in 90 per cent of firms and additional capital was injected in 70 per cent of firms. (Deloitte Access Economics, 2013b)

As noted above, the share of Australian retail/industry fund investment out of total pension fund investments in PE/VC has fallen over the past three years. In addition, the number of PE companies and investments has fallen each year since the GFC.

4. Fixed income assets: the market for fixed income (FI) assets in Australia is relatively undeveloped compared to the overall sophistication of the financial services sector.³¹ The weakness of the corporate bond market is one example (discussed below). Another example is the market for residential mortgage backed securities (RMBS). The RMBS market grew strongly in the lead-up to the GFC from a very low base. It has suffered a significant decline following the GFC. That decline has proved to be difficult to arrest, notwithstanding the intervention of the Australian government via the Australian Office of Financial Management (AOFM) to support liquidity. The fragility of the market in the face of the GFC, despite government intervention, is worth further examination. Figure 7 shows the level of RMBS outstanding over the past 15 years. (RBA, Table B19)

³¹ See, for example, the allocation of assets by pension funds. Australian superannuation funds allocation to FI is 9%, which is well below the average of 52.3% for pension funds across the OECD. Source: OECD Global Pension Statistics 2012.

Figure 7 Australian RMBS Outstanding (\$ billion)

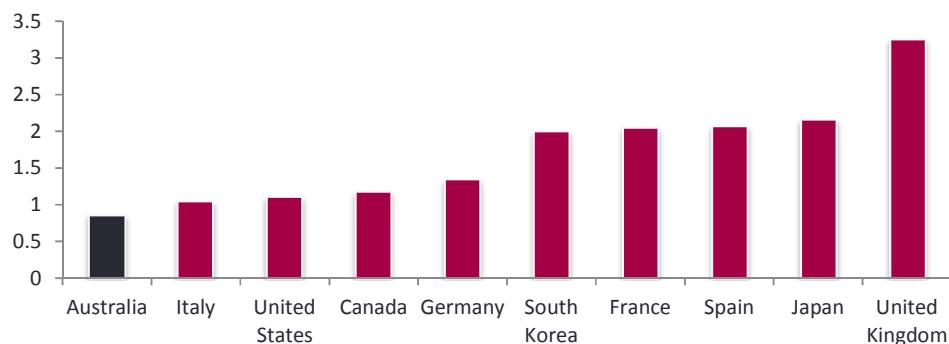


Source: RBA, Table B19: Securitisation Vehicles

5. Corporate Bonds: The absence of a broad, liquid corporate bond market in Australia is seen by most financial sector stakeholders as a significant barrier to the efficient allocation of domestic savings. Australian businesses rely heavily on bank loans for financing. At present, large Australian companies have access to international bond markets. In contrast, small and medium companies can find themselves caught in a market gap. Many are too small to borrow directly from international bond markets. That means that, should they have difficulty in accessing credit from domestic banks, it can be difficult for them to take advantage of commercial opportunities. The limitations on Australia's corporate bond market are reflected in the fact that, as of 2012, more than 70 per cent of the top 200 companies on the ASX were unrated according to analysis undertaken by *The Australian Financial Review*. (AFR, 2013, p44)

Figure 8 shows corporate debt outstanding as a proportion of GDP for ten selected advanced economies. (ASF, 2012, p5) In Australia, non-financial corporations rely more heavily on bank debt and equity raisings than on the corporate bond market than in many otherwise comparable economies. For example, in the US, non-intermediated debt accounts for approximately 80-90 per cent of corporate finance. (ASF, 2012, p6)

Figure 8 Corporate debt outstanding/GDP



Source: RBA, Global Finance Magazine

The weakness of the corporate bond market in Australia is long-standing and is due to many factors, including: regulatory barriers; the size of the economy (which could affect the liquidity of secondary markets); the ability of large Australian corporations to borrow from overseas markets (which might remove the most liquid corporate bonds from having to trade in the local market); taxation arrangements (ie the favourable treatment of equity through franking credits) and cultural inertia.

In both the papers by Professor Maddock & Mr Munckton and by Professor Davis, a number of trends are identified that could facilitate a medium-term rebalancing from intermediation to market-based funding mechanisms. One of the key potential drivers identified is the possibility of the cost of funds rising for banks, creating pressure to remove some long-lived assets from their balance sheets. This could create opportunities for securitisation.

Recent regulatory reforms are a significant step forward in facilitating the supply of corporate bonds, including changes to prospectus requirements and limiting civil penalties for directors. Further reforms aimed at the demand side could include: education campaigns aimed at retail investors (eg SMSFs) and improved access to bond market participation through platforms such as mobile devices and tablets.

8.2 Allocating resources through financial markets

8.2.1 Current institutional and regulatory arrangements

Regulation of financial markets: Financial markets in Australia are primarily regulated by ASIC and the RBA. ASIC has primary responsibility for the day-to-day regulation of markets, including monitoring real-time trading on financial markets and developing market integrity rules (MIRs)³² and regulatory guidance material. ASIC is also responsible for supervising holders of Australian Financial Services Licence (AFSL) holders and enforcing the laws proscribing misconduct on Australia's financial markets. As noted in section 4, the RBA is responsible for oversight of clearing and settlement on Australia's financial markets. The granting of Australian Financial Markets Licenses (AFMLs) is the responsibility of the Minister for Financial Services on the advice of ASIC and the Treasury.

Financial market competition: In March 2010, the Australian Government committed to the introduction of competition in financial markets trading in listed shares.³³ In the lead-up to market competition, market supervision responsibilities were transferred from the ASX to ASIC, which will have primary responsibility for the day-to-day regulation of financial

³² The power to produce MIRs is granted by the *Corporations Amendment (Financial Market Supervision) Act 2010*. MIRs for ASX, ASX24, APX, IMB, NSXA and SIM VSE were released on 1 August 2010. MIRs for Chi-X were released on 29 April 2011.

³³ Media Release by the Hon. Chris Bowen, Minister for Financial Services:

<http://mfssl.treasury.gov.au/DisplayDocs.aspx?doc=pressreleases/2010/032.htm&pageID=003&min=ceba&Year>

markets. In 2011, ASIC issued MIRs dealing specifically with competition (in addition to the MIRs in place for each exchange).³⁴ ASIC has also issued regulatory guidance in relation to the application of these MIRs.³⁵

On 4 May 2011, a licence was granted to Chi-X to operate a financial market trading in equity products listed on the ASX.³⁶ On 11 April 2013, FEX was granted a licence to operate a derivatives market in Australia.³⁷

8.2.2 Assessment of performance

ASX size and liquidity: ASX is one the largest, most liquid markets in the region (and the world). The ASX is a multi-asset class, vertically integrated exchange. This means it facilitates the trading of equities and derivatives as well as the listing of companies, and clearing and settlement of trades. This type of exchange model is similar to others in Asia including Hong Kong and Singapore. As at January 2013, the market capitalisation of stocks listed on the ASX was US\$1.442 trillion (for cash equities). This was ranked 10th largest in the world and fourth largest in the East Asian region (see Figure 9³⁸).

Figure 9 Market Capitalisation of Stocks Listed on International Stock Exchanges (\$ billion)



Source: World Federation of Exchanges

The ASX's interest rate futures market had a turnover last year of \$44 trillion, making it the largest in Asia and fourth largest in the world, and Australia's OTC interest rate swap market is the largest in Asia at \$15 trillion, with 44 per cent of all Asian turnover and the fifth largest in the world. (ASX, 2013)

³⁴ ASIC Market Integrity Rules (Competition in Exchange Markets) 2011.

³⁵ RG223, ASIC, 2011.

³⁶ <http://www.asic.gov.au/asic/asic.nsf/byheadline/11-89AD+ASIC+publishes+Chi-X+licence?openDocument>

³⁷ http://www.thetradenews.com/news/Regions/Asia/FEX,_LCH_Clearnet_receive_approval_for_Australian_operations.aspx

³⁸ Regional exchanges in grey. Source: www.world-exchanges.org. Accessed April 2013.

Liquidity on the ASX, when measured as turnover divided by market capitalisation, increased fairly consistently from around 35 per cent in 1998 to over 100 per cent in 2008. Since the GFC, it has fallen to around 85 per cent – although even after this decline, it remains very high compared to the average of the last two decades. (ASX, 2013)

Other measures of financial market performance: Australia's financial markets are ranked highly in the latest World Economic Forum Financial Development Report. Australia ranks 8th overall for financial markets (out of 62) and similarly highly for foreign exchange markets (7th), derivatives markets (8th) and equity market development (4th). (WEF, 2012) Australia also ranks in the top ten globally according to the latest BIS Triennial Central Bank Survey in each of the following categories: spot foreign exchange turnover, foreign exchange swap turnover, interest rate derivatives turnover (forward rate agreements and swaps), foreign exchange derivatives turnover (currency swaps. (WEF, 2012, p67 and BIS, 2012a)

Financial market competition: Chi-X's market share is currently about 8 to 9 per cent based on the sub-set of stocks that are being traded on it. Its market share has risen steadily since it began operating on October 31, 2011. After Chi-X expanded to trading on all ASX listed stocks, its market share may have fallen slightly.

While the impact of Chi-X on competitive tension within the industry is difficult to estimate precisely, it is likely that the introduction of competition has placed downward pressure on fees and increased incentives towards innovation. The Australian Financial Centre Forum stated that: "Evidence from other countries where traditional exchanges are now competing with new trading platforms suggests that competition has resulted in innovation and generally lower transaction costs." (ACFC, 2009, pp93-94)

In Australia, the granting of a licence to Chi-X appears to have put downward pressure on transaction fees, both in the lead-up to competition and after its introduction. In evidence to the House of Representatives Standing Committee on Economics, ASIC noted that ASX fees had reduced by around \$23 million in 2010-11 and \$21 million in 2011-12. At least some of this reduction is likely to have been due to the potential introduction of competition. (HoR SC on Economics, 2011, p7)

These benefits have to be balanced against costs. Some regulatory costs have increased, at least in part as a result of the transition to competition. For example, ASIC's market supervision costs, which are being recovered from industry, are estimated to be around \$21m per year from 2012/13 through to 2014/15 and then around \$20m per year for the following five years. (ASIC, 2013c) This is significantly more than the costs of market supervision under the ASX when it performed that role. This additional cost is partly

attributable to the added complexity of competition. It is also partly attributable to the government's desire to separate the roles of market operator and market supervisor, which is widely accepted as the preferred regulatory model. (ACFC, 2009, p92) In response to industry concerns in relation cost recovery, the government established the Market Supervision Cost Recovery Stakeholder Panel. Competition will also mean additional IT and other costs for market participants which may be substantial.

Other potential downsides to competition are market fragmentation and, arguably, greater incentives to high frequency trading and dark venue trading. In its 2012 Annual Report, the ASX says that: "The experience of a new equity market structure raises an important question about whether market structures that are appropriate for large jurisdictions, such as the US or Europe, are relevant for markets the size of Australia? ASX is of the view that Australia, and other similarly sized markets, should generally tread carefully in copying structures and regulations from markets that have fundamentally different economics. There is increasing academic research that supports this view. Smaller markets tend to benefit from maximum liquidity being channeled to a single central limit order book."

The academic literature is inconclusive as to the overall impact of recent market changes. Some recent academic studies have pointed to potential problems with market quality arising from fragmentation and dark venue trading. (Comerton-Forde et al, 2012 and Frino, 2012) In contrast, a recent study assessing the impact of competition taking into account the impacts on transaction costs, the potential impacts of fragmentation, increased IT costs and market supervision costs found net welfare benefits. (Aitken et al, 2013)

On balance, the HoR SC on Economics expressed bipartisan support for the introduction of competition and the broad cost recovery principles being proposed. While competition appears to have generated lower fees and increased incentives for innovation, concerns remain in relation to cost recovery for market supervision and market quality. ASIC and Federal Treasury have released several discussion papers on these issues and related matters including levies on messages, on trades or a combination, high frequency trading and dark pools. Further examination of the impact of competition is warranted.

8.3 International connectedness

8.3.1 Current arrangements for capital and trade flows

Capital flows: Australia has been deeply integrated with the global economy throughout most of the past two centuries, with only minor interruptions. Capital inflows are one of the key benefits of this interconnectedness. Australia has generally relied on foreign capital due

to the high per capita infrastructure requirements of a small, dispersed population and a reliance on capital intensive industries. As Professor Maddock and Mr Munckton show, even with saving levels at around the OECD average, Australia has relied on capital inflows over the past decade to fund our high investment requirements. This has been particularly evident in resources booms throughout Australia's history. They also show that, over the past 30 years, households, business and government have all oscillated between periods of being net savers and net borrowers. Of the major sources of savings for the Australian economy, only foreign sources have remained consistently net savers.

Foreign direct investment into Australia is largely regulated on the basis that transactions will be permitted unless they are not in the national interest. Decisions relating to proposals by foreign interests to invest in Australia are made by the Treasurer or the Assistant Treasurer. These ministers act on advice provided by FIRB.

Trade in goods and services: The financial services sector facilitates the trade in goods and services by the economy as a whole. In addition, the sector is directly engaged with the export and import of services. One of the key services exports directly engaged in by the financial services sector is the management of foreign funds. The Johnson Report concluded that the taxation system created barriers to the cross-border flow of funds either into or through Australia. The principal barriers were the scope of the tax system on internationally sourced passive investments and uncertainty in the operation of the tax system. The Report recommended the introduction of an Investment Manager Regime (IMR) to provide greater clarity and certainty in relation to cross-border transactions undertaken in Australia. The implementation of an IMR would bring Australia into line with other major financial centres, such as the US, the UK, Singapore and Hong Kong.

The Government accepted the Report's recommendation to adopt an IMR and committed to implementing an IMR in three phases. Legislation was passed to implement IMR Elements 1 and 2 in 2011. This resolves the "FIN 48" issue that had affected many US funds investing passively in Australia. Legislation dealing with IMR Element 3 is currently under consideration.

8.3.2 Assessment of performance

Connectedness of Australia's markets: Australia's financial services sector plays a similar role to that in many other advanced economies such as the US, the UK and Canada – and contributes a similar share of GDP value add.³⁹ However, the Australian financial services

³⁹ Professor Maddock and Mr Munckton show that while Australia's financial sector has a similar share of GDP to other largely deregulated economies, it is noticeably higher than in more regulated economies such as Japan and the EU. The share is around 7-9 per cent for the

sector is less exposed to international trade than other comparable financial sectors. The Johnson Report found that both imports and exports constituted less than five per cent of the sector's value add. This is lower than France, around half the level of the US and significantly lower than Canada, Hong Kong, Singapore and the UK. (AFCF, 2009, p22)

Openness to foreign capital flows: According to the latest financial sector assessment by the World Economic Forum, Australia ranks moderately in terms of some measures of capital account openness. Australia ranks 28th (out of 62 countries) in terms of capital account liberalisation.⁴⁰

In contrast, Australia ranks very highly in terms of domestic sector liberalisation.⁴¹ The WEF, based on its own calculations and the work of Schmukler and Kaminsky ranks Australia in the top category of countries in terms of domestic liberalization (which takes into account factors such as whether there are floors or controls on interest rates and whether deposits in foreign currency are allowed).

Foreign Direct Investment: A high proportion of applications for FDI are accepted. Of thousands of applications over the past decade, only a handful has been rejected. In addition, a small minority of approvals are given subject to conditions. Despite the high rate of acceptance, many foreign investors claim that Australia's processes are not transparent, largely due to the lack of clarity in relation to the "national interest" test.

8.3.3 Key live and emerging issues

Technology and interdependency: Increased international engagement is being facilitated by technological change that is increasing the scope and reducing the cost of financial transactions. In the context of a world that is being made ever more interconnected by technological change, Australia already has one of the most traded currencies in the world and is very open to international capital flows and skilled migration.

Regulatory harmonization: Australia, like all other advanced economies, is faces pressure to comply with new multilateral regulatory standards such as Basel III. While many of these multilateral regulatory reforms will undoubtedly create benefits, it is worth noting that the pressure to adopt international standards can result in some loss of regulatory autonomy.

Anglosphere countries vs around 5 per cent for Japan and the EU. In addition, there has been less growth in the share of GDP in the more regulated economies over the past three decades (around three percentage points increase in Australia, Canada and the US vs almost no change in Japan and the EU).

⁴⁰ This ranking is based in part on the Chinn-Ito Index, a measure of financial openness. (Chinn and Ito, 2008) See http://web.pdx.edu/~ito/Readme_kaopen2010.pdf for 2010 update. Australia ranks 74th for capital account openness in 2010.

⁴¹ This is based on WEF calculations and (Kaminsky and Schmukler, 2003).

Trading in Renminbi: In April 2013, Australia and China agreed to trade each other's currency directly. This will lower costs for investors by avoiding the need for them to trade via a third currency such as the US dollar. This makes Australia only the third country after the US and Japan to have such an arrangement with China. (Austrade, 2013)⁴²

Asian Passport: This reform would facilitate the export of Australian investment products to Asian investors and improve Australian access to investment products in Asia. The next steps in the development of the Asian Passport involve detailed work in relation to policy and implementation issues, particularly with the governments of Hong Kong and Singapore.

Islamic Finance: The global market for Islamic finance services has grown significantly over recent decades as high oil prices have resulted in capital accumulation by oil exporting countries. The key elements of Islamic finance are Sharia compliant investments offered by banks and *sukuk* (the Islamic alternative to conventional bonds). (ACFC, 2009, p70) The UK has already implemented a number of changes to accommodate Islamic financial services including changes to the regulation of mortgages and banking. (Ainley, 2007; IFSL, 2009)

Interest withholding tax: In general terms, an interest withholding tax (IWT) is levied on interest paid by Australian borrowers to non-resident lenders. The Johnson Report argued that withholding tax on foreign borrowings should be removed as it: raises the cost of capital for Australian banks borrowing offshore; results in significant distortions due to uneven application; and limits access by borrowers to foreign funds. The report also found that the imposition of an IWT is not consistent with current practice in most leading financial centres. (ACFC, 2009, pp64-67)

Other tax issues: Other tax issues also affect international interconnectedness including: the LIBOR cap on tax deductibility; the fact that non-resident taxpayers do not benefit from imputation credits; and the tax treatment of offshore banking units.

8.4 Allocating resources across time

8.4.1 Current institutional and regulatory arrangements

The superannuation system is one of the key mechanisms for allocating resources across time in the Australian economy. Through superannuation, individuals accrue savings via a combination of compulsory and voluntary contributions. The system allocates resources across time by two key mechanisms. First, the system limits access to superannuation

⁴² China is already Australia's largest trading partner and Australia is the most significant recipient of Chinese outbound investment since 2006, with cumulative investment flows into Australia totaling more than US\$50 billion in 2012.

accounts before a set age other than in exceptional circumstances. Second, the system provides tax concessions on income from investments received after retirement.

In addition to superannuation investments, Australia individuals and firms can invest savings in wide range of other investment vehicles as noted above including ADIs (eg deposits), managed funds and trusts (including REITs).

8.4.2 Assessment of performance

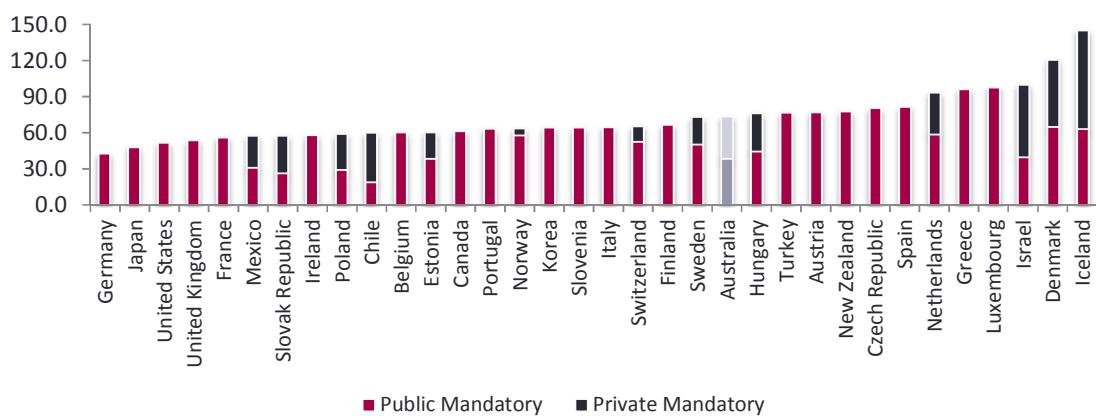
Australia's pension system

In its most recent review, Mercer found that Australia's pension system ranked 3rd (out of 18 countries). (Mercer, 2012) Mercer ranked national pension systems by developing an index based on three measures: adequacy (40%); sustainability (35%); and integrity (25%).

Australia's superannuation system provides a gross pension replacement rate that is above the OECD average. As can be seen in Figure 10, for people earning half the median wage, the gross pension replacement rate of mandatory savings from both public and private sources is 73 per cent in Australia compared to an OECD average of 57 per cent.⁴³

In addition to having a high mandatory gross replacement rate, the sources of post-retirement income for retirees in Australia are more evenly balanced between public and private sources compared to many other countries. This is critical as fully publicly funded schemes are likely to come under severe pressure as populations age. In addition, Australia is ageing at a more modest pace than most other OECD countries, which means that its public pension system will be more sustainable all other things equal.

Figure 10 Gross Pension Replacement Rate 0.5 Median Wage

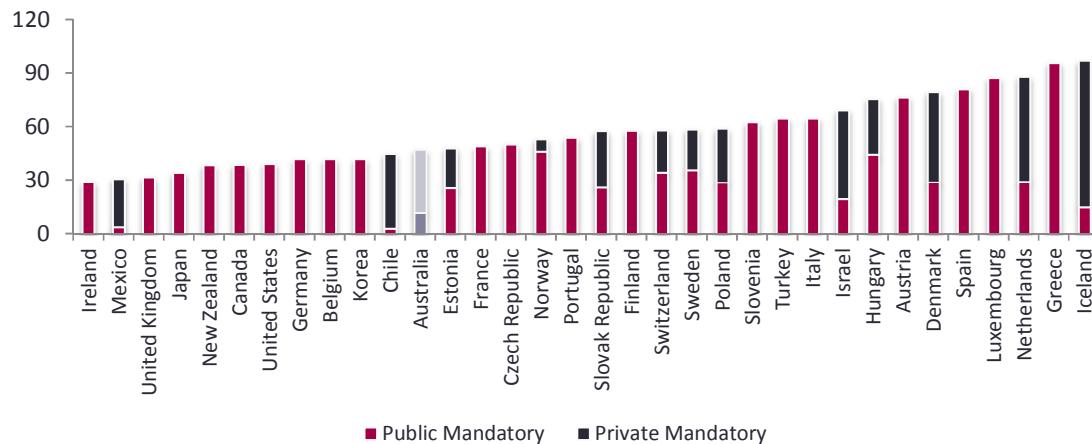


Source: OECD, *OECD Pension Indicators*, March 2011

⁴³ Voluntary contributions add to this total in some countries (eg over 30 additional percentage points in Canada, the UK and the US). Figure 10 only shows mandatory contributions for simplicity and because they are a firmer basis on which to assess sustainability.

Figure 11 shows Australia's gross pension replacement rate from mandatory sources for the median wage. In this case, Australia is closer to the OECD average. However, Figure 11 tells a similar story in that Australia has a higher rate of replacement than the OECD average (47 per cent vs 42 per cent) and is less reliant on public funding.

Figure 11 Gross Pension Replacement Rate 100% Median Wage



Source: OECD, OECD Pension Indicators, March 2011

For future generations of workers that enjoy the benefits of superannuation over their entire working lives, replacement rates will probably be higher.

8.4.3 Key live and emerging issues

Australia's pension system is performing well by global standards. Nonetheless, there are a number of emerging issues.

Sufficiency of savings. Between 2000 and 2011, the proportion of retirees receiving the full age pension decreased for all age cohorts above 65. In 2000, over 40 per cent of 65 year old retirees were on the full pension. This fell to around 27 per cent by 2011. In contrast, the proportion of self-funded 65 year old retirees rose from just over 20 per cent to just over 30 per cent. Similar changes were observed for 85 year olds. The proportion of 85 year olds on the full pension fell from around 65 per cent in 2000 to around 55 per cent in 2011 and the proportion of self-funded retirees rose by around five percentage points, from 10 per cent to 15 per cent. (Rice Warner, 2012, p6) This partly reflects the fact that recently retired cohorts have benefited from the SG for a longer period of time. The trend towards greater self-sufficiency will probably continue.

Recent Treasury modeling suggests that an individual earning median wages in 2012 (or 75 per cent of average weekly ordinary time earnings), who is aged 65 and retiring in 2017

would have a projected replacement rate of around 65 per cent. In contrast, Treasury's projections indicate that a 30 year old, entering the workforce in 2012, earning median wages and contributing over a working life of 37 years would enjoy a replacement rate of 90 per cent. (Parkinson, 2012) This suggests that the increase in the SG and other regulatory measures should together contribute towards a reasonable replacement rate for a person earning the median wage.

This would allow for the age pension to be targeted to those with low lifetime savings (e.g. due to low lifetime average earnings, low or negative investment returns or an interrupted working life). Targeting the age pension would reduce pressure on taxpayers and be justifiable on equity grounds.

Even though there is a trend towards higher replacement rates on average, it is important that policy reflects the fact that the elderly remain at higher risk of poverty than average. ACOSS found that more than one third of people over the age of 64 have an income of less than 60 per cent of median income. (ACOSS, 2012)

The regulation of SMSFs. As noted in section 8.1, SMSFs are currently subjected to light touch regulation by the ATO. The appropriateness of this approach warrants examination given that superannuation is the second largest asset for most people (after the family home).

Annuities and other products to provide longevity and inflation protection: It may not be sufficient to ensure that mandatory savings levels for most people are high enough to generate a reasonable income replacement rate in retirement. A key emerging issue is the extent to which accumulated savings are effectively deployed in providing people with a secure stream of post-retirement income. In particular, it appears that many people are not effectively managing longevity risk and inflation risk. Retirees in Australia have been reluctant to purchase annuities. While recent growth rates of investment in annuities have been high, this is off a low base.⁴⁴ According to DEXX&R research, \$2.8 billion flowed into annuities in the year to September 30 2011.⁴⁵

The low level of voluntary annuitisation beyond social security payments and defined benefit retirement schemes poses a challenge to the long-term sustainability of the pension system. There are many theories as to why people are reluctant to invest in annuities including: (i) a fear of illiquidity (Society of Actuaries, 2004); (ii) intra-family mortality risk

⁴⁴ Commisnure General Manager Greg Ballard reports a 50 per cent increase in annuities products between 2011 and 2012 to InvestorDaily, August 20, 2012: <http://www.investordaily.com.au/cps/rde/xchg/id/style/15015.htm?rdeCOQ=SID-0A3D9633-B77116C5>

⁴⁵ An increase of 66 per cent on the previous year – but still a very small proportion of post-retirement investment flows. Sydney Morning Herald, February 15, 2012. <http://www.smh.com.au/money/super-and-funds/annuities-pros-and-cons-20120214-1t2ma.html>

sharing; (iii) bequest motives; (iv) a lack of comprehension of products; (v) a tendency to mistakenly view annuities as a gamble (Kahnemann and Tversky, 1979); and (iv) a tendency to overestimate the likelihood of dying shortly after retirement. (Hu and Scott, 2007)

The low average rate of investment in annuities and similar products raises a number of issues.

- **Access to lump sums:** Should limits be placed on the proportion of funds people access as a lump sum? Or, to reverse the onus, should there be a regulated minimum that must be invested in products that provide protection against longevity risk? At the very least, incentives could be offered that encourage the post-retirement take-up of products offering secure income streams. (Deloitte, 2013a)
- **Improved financial literacy:** While less likely to result in short-term behavioural changes, this approach improve peoples' capacity to match their post-retirement investments to their individual circumstances in an informed manner.

8.5 Priority issues warranting further analysis: Allocation of resources

Key Issues

- **Prudential regulation.** What institutions should be subject to prudential regulation? Of those institutions subject to prudential regulation, should there be varying regulatory approaches based on the degree of systemic risk?
- **Infrastructure.** Reducing barriers to investment in greenfield public sector infrastructure, including the development of new funding models and greater participation by the Australian Government in supporting credit arrangements for large, complex projects.
- **Innovation.** Reducing barriers to the commercialisation of high-risk innovation, possibly by addressing barriers arising from the illiquidity of such investments.
- **PE/VC.** Facilitating investment/removing barriers to investment in certain asset classes – e.g. illiquid assets such as VC/PE/commercialisation.
- **Corporate bond market.** What measures should be adopted to promote a deeper, more liquid corporate bond market? The next phase of reforms should focus on the demand side, building understanding amongst and accessibility for retail investors.
- **International fund flows.** Reducing barriers to the flow of investment funds to and through Australia (IMR, Asian Passport, IWT).

9. Managing risk

Executive Summary

- The general and life insurance industry in Australia provides a wide range of products for individuals and firms to invest risks relating to property, human capital and financial risk.
- Investment risks are insurable through the diversification that is possible on local and international markets and also through financial derivatives.
- Systemic risk is managed through the Council of Financial Regulators, with each agency taking primary responsibility for a distinct area of the sector.

9.1 Insurable risks of individuals and firms

9.1.1 Current institutional and regulatory arrangements

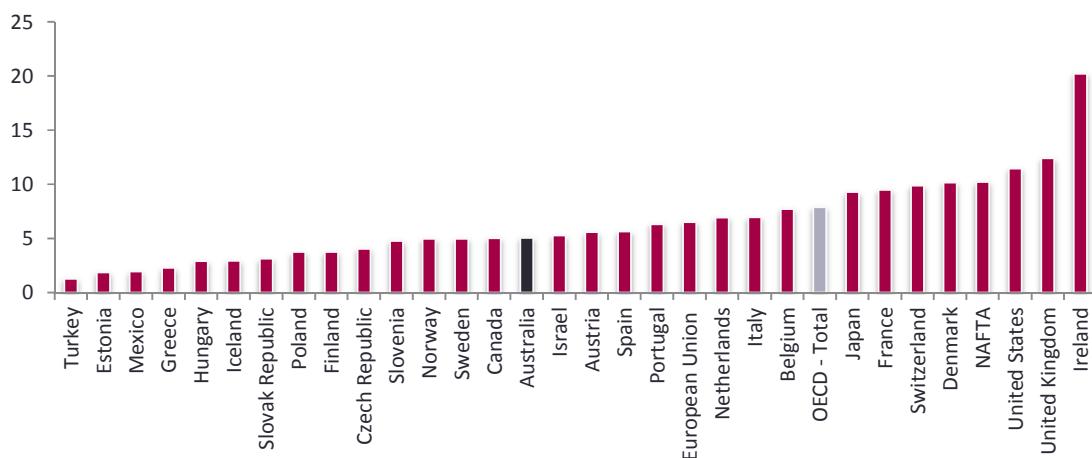
The insurance industry is largely governed by the *Insurance Contracts Act* and the General Insurance Code of Practice. The latter is a form of self-regulation that provides guidance in relation to consumer rights, dispute resolution and claims processing. The Code of Practice is reviewed every three years. (General Insurance Code of Practice, Clause 1.14) Ian Enright is currently undertaking a review of the Code that is expected to report by mid-2013. Some stakeholders have recommended that the Code be given more regulatory status – for example, that ASIC be given the power to formally review the Code. As is outlined above, the insurance industry is also subjected to prudential regulation by APRA (see section 8) and to conduct regulation by ASIC.

9.1.2 Assessment of performance

Insurance penetration: Insurance penetration is defined as the ratio of total premiums to GDP. It is a widely accepted measure of insurance activity relative to the size of the economy. Risk can be borne by the state (eg some elements of natural disaster risk, some motor vehicle and accident compensation schemes), private insurance firms (for an actuarially fair premium) or by individuals and firms (self-insurance). Insurance penetration is an indicator of how much risk is covered by insurance firms and how much is borne by the state or individuals and firms. Figure 12 shows the insurance penetration rate in Australia compared to other OECD countries in 2011. In 2011, Australia's penetration rate was approximately two-thirds of the OECD average.⁴⁶

⁴⁶ Source: OECD Stat Data Base: <http://stats.oecd.org/Index.aspx?DatasetCode=INSIND#>

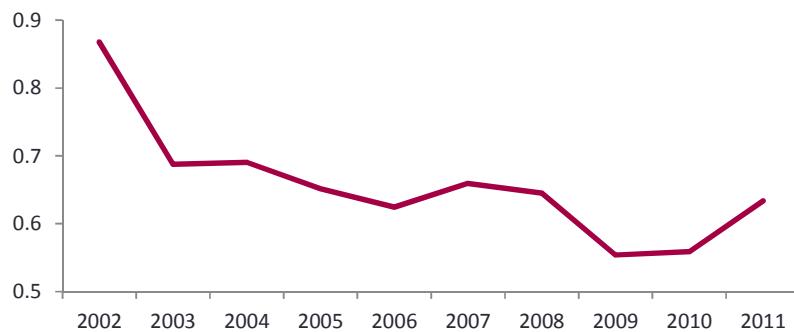
Figure 12 Insurance Penetration OECD 2011 (%)



Source: OECD Statistics, 2013

Figure 13 shows the trend in the penetration rate in Australia compared to the OECD average over the past decade. The trend has been downward, albeit with a slight increase over the past two years.

Figure 13 Australian Insurance Penetration/OECD Average Penetration: 2002-2011



Source: OECD Statistics, 2013

It is important to interpret insurance penetration figures with care. A higher price of insurance does not necessarily mean a higher level of insurance consumption. These figures are supported by recent analysis undertaken by the World Economic Forum, which ranked Australia 21st (out of 62 countries) in terms of life insurance penetration and 14th (out of 62 countries) in terms of general insurance penetration.⁴⁷ (WEF, 2012) Notwithstanding the difficulties of making international comparisons, Australia's ranking suggests that the availability and take-up of insurance is around the average for advanced economies.

Insurance density is defined as the ratio of total premiums to total population. This is a measure of insurance take-up that is closely related to insurance penetration. It provides a

⁴⁷ Source for life insurance penetration: Swiss Re, "World Insurance in 2011: Non-life Ready to Take Off", 2012; GDP data from IMF; World Economic Database; WEF calculations, source for general insurance: WEF, 2012 Report.

per capita rather than a share-of-GDP measure. In terms of insurance density, Australia is currently just below the OECD average.⁴⁸ The ratio of Australia's insurance density relative to the OECD average has been fairly stable over the past decade, largely oscillating between 0.8 and 0.9 of the OECD average.⁴⁹ This is supported by recent analysis by the World Economic Forum, which ranked Australia 22nd (out of 62 countries) in terms of life insurance density and 28th (out of 62 countries) in terms of general insurance density. (WEF, 2012)

Natural disasters: Australia's insurance sector has generally coped well with a large number of natural disasters since 2010. This includes the Melbourne and Perth storms of 2010, the major floods in Queensland, NSW and Victoria of 2010/11, Cyclone Yasi (2011), the Perth bushfire of 2011, the Christmas Day storms in Melbourne of 2011, and further flooding in Queensland, NSW and Victoria in 2012. In addition, the domestic insurance industry was significantly exposed to the Christchurch earthquake of 2011.

Despite being subjected to a large number of significant events in a short period of time, the general insurance industry was able to process a large volume of claims quickly (sometimes numbering in the tens of thousands) and, in addition, to cope financially with the high value of claims that were paid.

In general the vast majority of customers received payments quickly even when whole communities were affected by natural disasters. Despite this, there are still areas in which claims handling can be improved, particularly in the case of flood insurance. A not insignificant number of claims were left unresolved for more than 6 months after each major flood incident during the past several years. These delays often arose from definitional issues. Claims handling issues were considered by the NDIR and also by parliamentary inquiries into claims processing.⁵⁰ All of these reviews recommended changes to the Code of Practice. Some of the recommended changes have been implemented, while others are being reviewed by Ian Enright as part of the overall review of the Code.

9.2 Liquidity

9.2.1 Current institutional and regulatory arrangements

Liquidity is critical for the efficient functioning of markets. Liquidity reduces transaction costs (such as the bid-ask spread in financial markets) and also costs associated with risk (such as the risk of not being able to sell an asset in a timely manner).

⁴⁸ Source: OECD Stat Data Base: <http://stats.oecd.org/Index.aspx?DatasetCode=INSIND#>

⁴⁹ Source: OECD Stat Data Base: <http://stats.oecd.org/Index.aspx?DatasetCode=INSIND#>

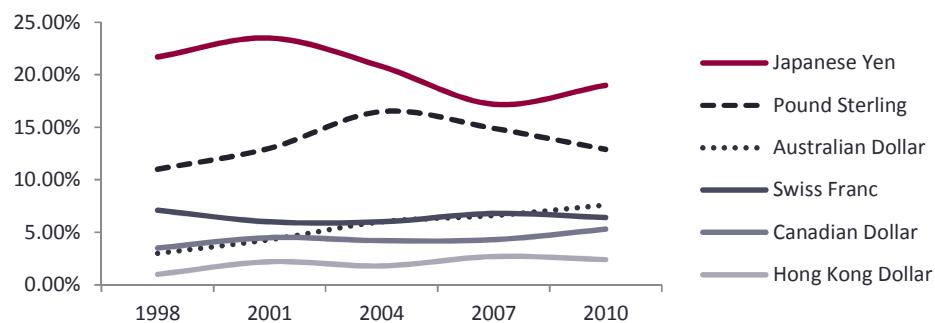
⁵⁰ See the Natural Disaster Insurance Review and "In the Wake of Disasters", Part 1 and Part 2, House of Representatives Standing Committee on Social Policy and Legal Affairs.

9.2.2 Assessment of performance

Financial Markets: as noted in section 8.2, liquidity has been steadily increasing on the ASX over the past two decades, with only a slight reduction following the GFC.

Currency markets: Australia has the fifth most traded currency in the world. As can be seen in Figure 14, which shows the percentage of world currency trading of the top six currencies (excluding the US dollar and Euro), Australia's market share has increased significantly over the last 15 years from 3.0 per cent in 1998 to 7.6 per cent in 2010⁵¹ (overtaking the Swiss Franc).

Figure 14 Percentage of World Currency Trading of Various Currencies



Source: Bank of International Settlements, 2010

OTC derivatives: The trading of non-exchange traded securities represents over 70 per cent of turnover on Australian markets. (AFMA, 2012) While a considerable amount of trading exists in OTC derivatives, it is difficult to assess liquidity in relation to these transactions.

9.2.3 Key live and emerging issues

OTC derivatives: As noted in section 6.2, APRA, ASIC and the RBA have been considering the functioning of Australia's over-the-counter (OTC) derivatives markets. In addition to the clearing and settlement issues outlined in section 6, other recommendations worth noting were that (APRA, ASIC, RBA, 2012):

- the government consider a broad-based mandatory trade reporting obligation for OTC derivatives.
- a mandatory clearing obligation for Australian dollar-denominated interest rate derivatives is not necessary at this time. However, should substantial industry progress towards central clearing in this class of derivatives not be evident in the near future, the regulators would revisit this recommendation.

⁵¹ The shares total to 200% because there are two currencies in each transaction.

- participants should ensure that adequate credit support arrangements are in place for all OTC derivatives transactions.
- for large and more active market participants, daily collateralisation of exposures should be adopted as best practice in the market where possible. It was recognised that this needs to be balanced against the operational costs and liquidity risks that this may create for some types of counterparties.

9.3 Investment risks

9.3.1 Current institutional and regulatory arrangements

The two principal means of protection against investment risks are diversification and the use of derivatives or hedging.

Capacity to diversify: Diversification is possible in the Australian financial system for both large and small investors. This can be achieved directly by investing in a range of financial instruments with low or negative correlation, or indirectly by investing in a fund or index that reflects the returns of a basket of instruments with this characteristic. The latter approach is particularly well suited to smaller investors as a means of reducing transaction costs and overcoming difficulties associated with due diligence.

Derivatives trading and hedging: Today's financial markets offer a huge array of derivatives, with new products being created at an ever increasing rate. Derivatives can offer investors protection against movements in: the price of equities (either individually or in groups); currencies; interest rates; resource prices; and, increasingly, macroeconomic variables.

9.3.2 Assessment of performance

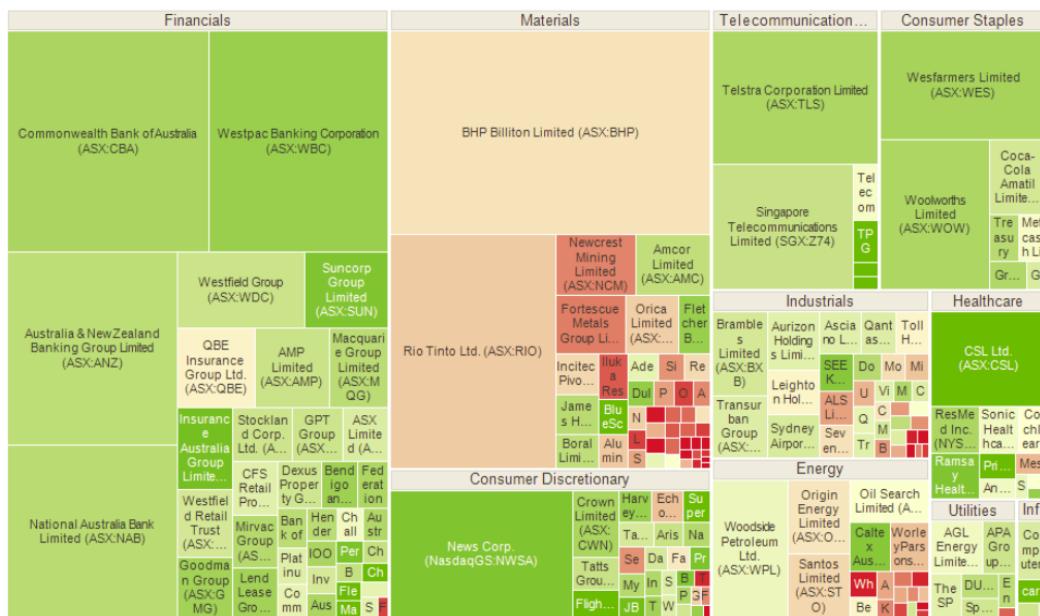
Investment opportunities: The Australian financial system has a wide range of well-developed equities, derivatives, currency and property markets. There is also an increasing range of ETFs and index-linked investments that offer investors some protection against volatility in individual assets or asset classes. In addition, the openness and interconnectedness of the Australian financial system gives investors additional channels for diversification via overseas investments. This opportunity has been widely taken up, including by superannuation funds and banks (e.g. for wholesale funding).

Capacity to diversify in equities: For a large stock exchange, the ASX is relatively undiversified. Over the past 25 years, materials (which includes resources) and financial stocks have together constituted between 50 and 70 per cent of the ASX. Over the past

decade, materials has been the larger of these two sectors, constituting over 30 per cent of the overall market on its own. Clearly, this reflects the impact of the resources boom.

Compared to other large equities markets, the ASX is overweight in materials and financials and underweight in health care, information technology and industrials. This affects the capacity of large funds to diversify through domestic equities and also limits the depth of some domestic markets, such as health care and IT. This is important given the potential of these markets to be future drivers of growth. Figure 15 shows the current composition of the ASX by market capitalisation. Financials and materials stand out in terms of their overall share of market capitalisation. So does the relatively concentrated nature of each of sector. Australia tends to be an oligopolistic economy across many sectors. It is not surprising that the financial services sector exhibits similar tendencies.

Figure 15: Market capitalisation of major Australian listed companies



Source: IRESS Australia

9.4 Systemic risk

9.4.1 Current institutional and regulatory arrangements

Overarching crisis management arrangements: Crisis management is the joint responsibility of the key financial regulatory bodies through the CFR. There is a Memorandum of Understanding (MoU) between members of CFR in relation to financial distress management that “sets out the objectives, principles and processes for dealing with stresses

in the Australian financial system.”⁵² In addition, there are specific MOUs between the RBA and APRA and ASIC. While the regulators cooperate in arriving at a response to financial distress, each regulator has its own area of primary responsibility. Since the GFC, some additional measures have been taken to strengthen the resilience of the financial system including the Financial Claims Scheme (FCS), improved access to covered bonds and stronger prudential arrangements.

9.4.2 Assessment of performance

Overarching crisis management arrangements: The IMF conducted a Financial Sector Assessment Program (FSAP) review of Australia in 2012.⁵³ It found that Australia’s “financial system is sound, resilient and well-managed. Major banks are conservatively run, well capitalized and profitable, and they are likely to withstand severe shocks.” The IMF also found that the “financial regulatory and supervisory framework exhibits a high degree of compliance with international standards.” (Vinals and Anoop, 2012, p1)

Systemic risk and financial markets: In its 2011 issues paper, the CFR noted that the “current regulatory system for FMs reflects the findings of the *Wallis Inquiry* 1997 in respect of the need to balance competing economic objectives. The Wallis Inquiry sought an appropriate balance between achieving competitive outcomes and ensuring financial safety and market integrity.”⁵⁴ (CFR, 2011, p5)

The CFR found that the “... overarching framework continues to be appropriate and that the regulatory regime for financial stability promotes sound risk management with a view to minimising the probability of financial distress or dysfunction.” (CFR, 2011, p6) However, the CFR also noted that, while “... the risks of systemic disruption are arguably at least as great as those arising from the failure of an ADI, existing powers to issue directions to, impose conditions on, licencees of CS facilities and markets, as well as the sanctions for breaches of the same, are considerably less powerful than similar provisions applying to ADIs.”(CFR, 2011, p15 – see p16 for list of APRA powers in relation to ADIs)

The CFR proposed:

- Strengthened directions powers and sanctions for ASIC and the RBA, along the lines of those currently provided for in the Banking Act. This could include step-in powers.

⁵² Memorandum of Understanding on Financial Distress Management, RBA, APRA, ASIC, the Treasury.

⁵³ Two missions were held from April 23 – May 15 and July 9 – July 24.

⁵⁴ This is reflected in the Explanatory Memorandum to the Financial Services Reform Bill 2001, para 2.5.

- Location requirements: that all systemically important FMIs be subject to a location requirement. This could apply to default resources and margin funds, staff and certain operations (such as IT).
- Portability and segregation. The problems were highlighted with MF Global. There are three main options: (i) full pooling; (ii) omnibus; and (iii) full separation.

WEF assessment: WEF ranked Australia 9th (out of 62 countries) in terms of overall financial stability. This included high rankings in relation to stability of the banking system (9/62) and the risk of a sovereign debt crisis (6/62). (WEF, 2012) The low risk of a sovereign debt crisis is reflected in the Australia being one of very few countries to simultaneously hold AAA ratings across all three major credit rating agencies.

9.4.3 Key live and emerging issues

IMF FSAP recommendations around crisis management: Following its 2012 review of Australia's financial sector, FSAP made a number of recommendations. Its high priority recommendations include that (IMF, 2012a, p7):

- stress testing by APRA and the RBA be strengthened;
- ASIC improve conduct supervision of insurance companies and on-site supervision of bank liquidity;
- Australian regulators examine the benefits of ex-ante funding for the FCS;
- Introduce higher loss absorbency for systemic ADIs; and
- Extend risk based capital requirements, large exposure rules and reporting requirements to ensure that AFSL holders are appropriately covered.

These recommendations were broadly agreed to by the CFR and implementation of outstanding matters is currently under review.

Systemic risk and financial markets: Systemic risk and crisis management was a key concern raised in the CFR's Review of Financial Market Infrastructure: "... the increasing interconnectedness of global markets means that the Australian regulatory framework must keep pace with developments offshore. In that regard, if Australia's FMIs are to link with an offshore FMI, or offshore-owned FMIs are to operate in domestic markets, there is a need to maintain robust oversight and appropriate control of such infrastructures. These regulatory concerns extend to crisis management." (CFR, 2011, p3) These issues have been considered in many advanced economies following the GFC and have resulted in reforms that include: the *Wall Street Reform and Consumer Protection Act* (2010) (Dodd-Frank); the

proposed European Market Infrastructure Regulation (EMIR); and the UK Treasury's White Paper on Financial Markets. (CFR, 2011, p4)

Systemic risk and OTC derivatives transactions: In light of the growing systemic importance of OTC transactions, the 2012 review of OTC derivatives transactions recommended that the government consider broad-based mandatory trade reporting. (APRA et al, 2012) As is noted in section 6.2, another way to increase transparency would be to mandate or at least encourage central clearing. To date, regulators have not considered this necessary.

Exposure of Australia to foreign markets: At the 2012 ASFA conference, Ken Henry argued that: "We are a relatively small economy with a large and growing exposure to international financial markets in respect of both assets – principally foreign equities held by our super funds – and liabilities – principally the offshore wholesale borrowings of our banks." (Henry, 2012)

Dominic Stevens, the former CEO of Challenger reinforced the point: "We borrow overseas to fund our current account deficit and in addition we further borrow in offshore markets to fund purchases of offshore equities and, to a lesser extent, offshore fixed income. ... The purpose of this offshore investment is the valid attempt to diversify our holdings of investment assets. However, with a significant current account deficit and challenging global financing markets, this may reduce overall efficiency and add to instability." (Henry, 2012)

Openness to the international economy is critical for the efficiency of Australia's financial services sector and the economy more broadly. However, exposure to foreign markets (through debt or investments) can create systemic risks. It is important that the CFR and its members monitor international capital flows to ensure that imbalances and macroeconomic risks are identified early enough to manage any risks appropriately.

9.5 Key live and emerging issues: Risk Management

Key Issues

- Investment risks: greater listing diversity on the ASX.
- Systemic risk: IMF FSAP recommendations in relation to crisis management and continued monitoring of macroeconomic exposure.

10. The dissemination of information

Executive Summary

- Australia's financial markets work efficiently in providing price signals through: independently set interest rates; a freely floating exchange rate; and efficient securities and derivatives prices.
- Australia's financial markets are highly transparent with continuous disclosure ...

10.1 Price signals

10.1.1 Current institutional and regulatory arrangements

The Australian financial system is characterized by a high degree of transparency and efficient information flows.

Financial markets: Australia's financial markets (including equity, bond, foreign exchange and derivative markets) are liquid and transparent. This has been enhanced through recent moves that increase competitive tension.

Floating exchange rate: Australia has had a freely floating exchange rate since 1984. The level of the exchange rate sends signals throughout the economy. It affects almost all aspects of the economy, including: the pattern of investment across industries; inbound and outbound capital and trade flows; and the trade-off between consumption and saving.

Independently set interest rates: Interest rates are one of the key price signals in the economy. In Australia, the cash rate is set by a central bank that has become increasingly independent over recent decades. This has been a gradual process involving both formal changes to regulatory arrangements and an evolving culture. Changes in the cash rate impact on the entire term structure. The RBA sets interest rates to achieve three main objectives: (i) stability of the currency; (ii) maintenance of full employment; and (iii) economic prosperity and welfare of the people of Australia. The interest rates set by the RBA affect, among other things: the inter-temporal allocation of resources; business and consumer confidence; and the exchange rate.

10.1.2 Assessment of performance

Efficiency in security markets: As noted earlier, Australia's financial markets are highly liquid and transparent markets.

Floating exchange rate: Australia's floating exchange rate has provided an effective buffer against external shocks over the past two decades. A floating (versus fixed) exchange rate regime has helped Australia to reduce volatility in GDP, consumer price levels and wages.⁵⁵ (Gruen, 2011) The major external shocks affecting Australia over recent years have often (although not always) involved large, unexpected changes in resource prices. The floating exchange rate has, to some degree, directly offset the impact of the shocks (eg by making exports more competitive during a fall in the terms of trade). In addition, a floating exchange rate has arguably given more scope for monetary policy to be set so as to offset the shock. (Cockerell et al, 2012)

The direct impact of a floating exchange rate arises through price signals sent to almost all parts of the economy. These price signals affect investment decisions (both between industries and over time), decisions relating to the purchases of goods and services (both imports and exports) and international capital flows. For example, in response to the Asian financial crisis in 1997 and the bursting of the tech bubble in 2000/2001, the Australian dollar depreciated significantly. One of the key impacts was that the contribution of net exports to growth was higher than it would have been with a fixed exchange rate. In addition, nominal and real interest rates fell, further increasing growth. This would not have been possible if the central bank was forced to defend the currency. (Cockerell et al, ref, pp434-436) The post-GFC response also saw an initial, sharp decline in the dollar – and a corresponding increase in net exports compared to a fixed exchange rate. In contrast to the earlier two crises however, the dollar rose over the following years given the terms of trade boom that Australia experienced.

Independent central bank: During major economic shocks, the RBA has tended to manage interest rates in a manner that promotes stable inflation and moderates economic cycles. In the examples analysed by Cockerell et al, the RBA reduced interest rates in response to the Asian Crisis and the tech crisis and increased interest rates as the terms of trade boom of the 2008/09 began to gather steam. (Gruen, 2011 and Cockerell, ref) This was largely effective in reducing the volatility in GDP and price levels.

10.1.3 Key live and emerging issues

The key information dissemination mechanisms in the Australian economy are broadly functioning well. The priority is to continue to implement reforms that improve the efficiency of financial markets and that preserve the independence of monetary policy.

⁵⁵ See (Gruen, 2011) for a comparison of the impacts of the 1970s and 2000s terms of trade booms on the economy. The impact of the 1970s boom, under a fixed exchange rate regime, resulted in far more volatility in both GDP growth and price levels. In the 2000s, the floating exchange rate provided an effective buffer.

10.2 Transparency in financial markets

10.2.1 Current institutional and regulatory arrangements

Disclosure obligations: Continuous disclosure is a core principle of Australia's financial markets. It is governed by market integrity rules established by ASIC and managed on a day-to-day basis by market operators with ASIC providing oversight. In 2012, the ASX, following consultation with ASIC, released rewritten draft Guidance Note 8 *Continuous disclosure: Listing Rules 3.1-3.1B* (GN8). This guidance note details the systems that companies should have in place to ensure timely disclosure and the scope of disclosure requirements. There are also specific disclosure requirements set out in the Corporations Act in relation to prospectuses and information memoranda. These provisions are enforced by ASIC.

Dark trading venues and high frequency trading: Dark pools and high frequency trading (HFT) are separate but related issues. They have created concerns in relation to transparency, market quality and fairness. They also impact on liquidity (section 9)

Dark trading refers to trading on electronic markets in which trades occur that are not known on the "lit" markets until the orders have been matched. These trades can occur where market participants (usually large brokers) fill an order from their own inventory or match orders between clients. The advantages for clients include greater privacy, reduced transaction costs and less likelihood of market movements while completing large transactions.

The risks of dark trading relate to concerns about reduced liquidity on lit markets (a particular concern for some given the relatively small size of the Australian market) and potentially a lack of transparency for investors (particularly small investors).

HFT is difficult to define, potentially encompassing a wide range of trading activity. The International Organization of Securities Commissions (IOSCO) describes HFT as a sub-set of algorithmic trading that typically exhibits a number of features, including:

- Sophisticated, quantitative tools for implementing a range of strategies, including market making, arbitrage, trend-following and breaking up larger transactions (also a reason for using dark pools);
- High daily turnover and order-to-trade ratio; and
- Flat or near flat positions at the end of each trading day. (IOSCO, 2011)

While technology is dramatically increasing the speed with which it possible to conduct trades, it is important to note that there are characteristics of both dark venue trading and

HFT that have long been in existence. For example, settling trades off lit markets between different clients of the same broker is a long-standing practice. This is analogous in many ways to what occurs on dark trading venues. Moreover, many of the trading strategies implemented by traders labeled as HFT are simply faster versions of strategies that have been used for decades, such as arbitrage or trend-following.

10.2.2 Assessment – Transparency of markets

Overall transparency of markets: While Australia's financial markets are generally considered to be relatively transparent and well regulated by international standards (see WEF, 2012), there are live or emerging concerns in some areas. For example, the growth of volume on OTC markets and dark trading venues are creating questions in relation to transparency for both regulators and investors. Moreover, information asymmetry issues arise in a number of contexts which raise questions of transparency for at least one side of some transactions. (this issue is dealt with in more detail in section 11)

Dark Trading Venues: In a recent review of dark trading, ASIC made a number of conclusions, including:

- While the volume of dark trading has remained around 25-30 per cent of total equity market share, there has been a change in its composition and a reduction in trading by fundamental investors on lit markets;
- Growth in dark trading has resulted in higher bid-offer spreads for some securities;
- While market participants and crossing system operators appear to be complying with their obligations, there are issues worth examining, including clients having limited visibility of the operation of crossing systems. (ASIC, 2013a)

High Frequency Trading: ASIC's recent examination of HFT made a number of conclusions, including (ASIC, 2013a):

- Some commonly held perceptions of HFT are not supported by ASIC's analysis – including high order-to-trade ratios and low holding times.
- There is some basis for concerns relating to HFT contributing to noise and predatory or gaming behaviour – but this is not exclusive to HFT trading.

10.2.3 Key live and emerging issues

A number of reforms are either being implemented or considered for dark trading venues including (ASIC, 2013b): the development of MIRs dealing with transparency and conflicts;

meaningful price improvement; and the development of a new licensing regime by the Treasury.

Reforms being considered for HFT (ASIC, 2013b) include: continued monitoring of order resting times and bid-ask spreads by ASIC; and consideration of amendments to the rules in relation to manipulative trading.

10.3 Key live and emerging issues: Dissemination of Information

Key Issues

- Overall, Australia's economy appears to have effective information dissemination and price signals.
- A range of policy responses are being implemented in relation to dark venue trading and HFT. These issues warrant continued monitoring by the government and regulators.

11. Governance

Executive Summary

- Information asymmetry is a widespread issue given the growing complexity of financial products and services and the fact that many retail consumers forego professional advice. The heterogeneous nature of transactions means that a uniform regulatory response is unlikely to be appropriate.
- Principal-agent issues in the Australian financial services sector are largely governed by the Corporations Law and State legislation governing trustees.

11.1 Asymmetric information

11.1.1 Current institutional and regulatory arrangements

Information asymmetry arises in a growing number of situations given the increasing complexity of many financial products and the desire of many retail investors to manage their own affairs. One of the key rationales for regulation to deal with asymmetric information is to ensure that sufficient information is disclosed to allow consumers and investors to make informed decisions.

The potential for information asymmetry to create problems arises in a wide range of situations, including:

- **The purchase of complex financial products:** This affects the financial services sector, ranging from banking and insurance to the products sold on financial market such as equities and derivatives. Possible regulatory responses include doing nothing, imposing disclosure obligations and, at the most extreme, a total ban on participation in some markets for small investors (eg a ban on purchasing some types of derivatives or opening accounts with foreign bank branches).
- **Default products and rules of thumb:** Arguably, this is a sub-category of the first set of issues. It has been dealt with separately as “default” arrangements are becoming increasingly prevalent as a factor in consumer choice. This occurs in many contexts, including: banking and insurance (eg take-it-or-leave-it contracts which provide standardised coverage⁵⁶); and superannuation (default asset allocation strategies⁵⁷). There are good reasons to believe that the high rate of acceptance of default

⁵⁶ One example that arose following the 2010 Queensland floods was whether or not the default home and contents insurance package included flood coverage. At the time, this varied across firms, causing considerable confusion. Whether justified or not, most consumers thought that they had coverage for flood damage. As it turned out, many had either partial coverage or no coverage for flood.

⁵⁷ There are many references on this point. As an example, see a discussion and brief literature review of the effect of framing and default choices for retirement products. (Mitchell and Utkus, 2003, p8)

products reflect a disengagement with the process that calls into question whether consumers fully understand what they are committing to.

- **Dealing with potentially conflicted advisers:** In many situations, an adviser to a client may have conflicts of interest that are not easily identifiable to the client. This can occur with small and large clients – but arguably regulatory intervention is more justifiable in the case of small investors due to the unevenness of the relationship and their lack of resources. One of the more prominent regulatory interventions in response to this type of problem in recent years is the Future of Financial Advice (FOFA) suite of reforms, which includes a ban on certain commissions.
- **Participation in dispute resolution processes:** Disputes can arise even when a consumer enters a transaction with eyes wide open (eg how to interpret a contractual clause). The risk of dispute is magnified if the consumer doesn't fully understand what is being bought or sold. The growing potential for disputes given the complexity of financial products means that it is worth examining whether current dispute resolution options (both formal and informal) are well suited to the needs of both consumers and product providers.

AFSL regime: One of the key underpinnings of consumer protection in Australia is the requirement for providers of financial advice to hold an AFSL. A business must apply to ASIC for an AFSL if it undertakes a financial services business, which includes: providing financial advice; dealing in a financial product; making a market for a financial product; or providing custodial or trustee services. The obligations of holding an AFSL are set out in the Corporations Act⁵⁸, and relate to matters including: conduct and disclosure; training; management of conflicts of interest; and dispute resolution.

ASIC is largely responsible for enforcing the obligations arising under the AFSL regime and from the regulation of financial service providers more broadly. This includes financial services disclosure and product disclosure. ASIC is also responsible for enforcing the ban on conflicted advice that was part of the FOFA reforms.

Stronger Super – MySuper accounts: A significant number of superannuation fund members opt for default products (45.6 per cent of accounts in retail funds and 10.1 per cent of accounts in retail funds – Cummings and Ellis, 2011). It is possible that a high proportion of people opting for default funds pay little attention to whether such accounts suit their circumstances. This is not a trivial matter since default funds are often invested in a diversified portfolio of assets with between 60 and 70 per cent invested in growth assets. The Cooper Review concluded that superannuation fund members were often paying for

⁵⁸ See Chapter 7 of the Corporations Act. Section 911A-D defines when an AFSL must be held and section 912A sets out the general obligations of holding an AFSL.

product features that were not being used. If true, this would result in cross-subsidisation between members. The Cooper Review recommended the mandating of low cost, simple default funds, called MySuper accounts. Legislation giving effect to this was passed in 2013.

Dispute resolution: The Financial Ombudsman Service (FOS) was established in 2008. It resulted from the merger of five existing dispute resolution services focused on specific sectors. The mission of the FOS is to provide an independent, fair, affordable and timely dispute resolution option to consumers of financial products. Importantly, the outcome of any FOS process, whether in favour of the applicant or not, in no way limits the applicant's rights to pursue further legal courses of action against the financial service provider.

The key rationales for creating such a service include: the imbalance in bargaining power between large financial institutions and most consumers; and the expense and delay involved with most formal court proceedings. FOS's jurisdiction extends to all key areas of the financial services sector, including banking, credit, general and life insurance, financial planning and superannuation. The majority of FOS' cases related to credit (50%), general insurance (28%), the payments system (7%), deposit taking (6%) and investments (5%). (FOS, 2012, pp 26-27) While FOS is funded by industry, it is independent. It has a Board that includes representatives of key consumer groups. This Board appoints the ombudsmen. In addition, FOS is regulated by ASIC and must report to ASIC on a quarterly basis. Finally, FOS must undertake an independent review every four years to ensure it is meeting its obligations under Regulatory Guide 139.

In addition to the increasingly prominent role being played by FOS, it also worth noting that litigation funding is also playing a greater role in dispute resolution.

11.1.2 Assessment of performance

Consumer protection: There are a range of consumer protection mechanisms currently in place ranging from outright prohibitions on retail investors participating in some transactions (eg opening foreign bank branch saving accounts) through to enhanced disclosure mechanisms (eg KFS for home loans and home and contents insurance, standard definition of flood). It is difficult to determine how effective these measures have been. Even though FOS is handling a growing number of disputes, the counterfactual – ie what would have occurred without such consumer protection measures – may well have been an even higher level of disputation, albeit with less access to resolution for many consumers.

Dispute resolution: In 2011-12, FOS accepted 36,099 disputes and settled 36,049 disputes that had already been accepted. (FOS, 2012, p1) This number of disputes resolved is more than twice as high as three years ago (17,007 in 2008-09) which partly reflects FOS'

commitment to reducing the backlog of outstanding cases. The overall caseload has been increasing at around 20 per cent a year over recent years, in part due to a string of serious natural disasters and the fallout from the GFC. FOS is handling a majority of cases within 4 months (74 per cent of cases resolved within 120 days). While this represents a faster average resolution time than the courts, 19 per cent of cases referred to FOS take longer than six months to resolve. (FOS, 2012, p22)

A high proportion of cases handled by FOS are settled by agreement between the applicant and the financial service provider. This probably reflects the fact that FOS cases are a form of alternative dispute resolution aimed at speedy and less adversarial handling of cases. Of the remaining cases, 4 per cent end in a decision in favour of the financial service provider, 3 per cent end in a decision in favour of the applicant, 7 per cent are discontinued and 11 per cent are deemed to be outside FOS's terms of reference. (FOS, 2012, pp23-24)

FOS has a high degree of transparency, publishing comparative tables each year which summarise the number and outcome of disputes by both category of service but also by financial service provider. They also publish a comprehensive Annual Review and Determinations (formal written records of FOS's decisions) are published on their website.

11.2 Principal agent problems

11.2.1 Current institutional and regulatory arrangements

The two key agency problems that arise in the financial services sector are managers acting as agents for shareholders and trustees acting as agents for fund members.

Managers as agents for shareholders: This is a difficult problem to regulate with very large, widely held companies. The ownership of large bundles of shares by pension funds does little to ameliorate the problem when pension funds behave in a very passive manner. Principal agent problems relating to corporate control are largely regulated in Australia's financial sector through the Corporations Law. These provisions are enforced by ASIC. The key measures include: general provisions in the Corporations Act relating to shareholder rights; provisions relating to the powers of the Board of Directors; the three strikes policy in relation to executive remuneration; and minority shareholder protection.

Trustees as agents for unit holders or superannuation fund members: Trustee obligations are governed in a variety of ways depending on the nature of the trust. For investment trusts (including unit trusts), trustee obligations are governed by Trustee Acts for each State and common law. For superannuation funds, the obligations of trustees are primarily governed by the SIS Act which requires that: the fund is managed for the core purpose of

providing benefits after a member's retirement; the fund's investments are appropriately diversified; and the fund has an investment strategy.

11.2.2 Key live and emerging issues

Protection of minority shareholders: The World Bank/IFC ranking of "ease of doing business" ranked Australia highly in both 2013 and 2012 (10th and 11th respectively). However, Australia was ranked poorly (70th) in relation to "protecting investors". This category is a measure of minority shareholder protection. It measures the strength of minority shareholder protections against directors' misuse of corporate assets for personal gain. The indicators used by the World Bank incorporate three dimensions of investor protections: transparency of related-party transactions (extent of disclosure index), liability for self-dealing (extent of director liability index) and shareholders' ability to sue officers and directors for misconduct (ease of shareholder suits index).⁵⁹

Independent Directors of superannuation funds: While the framework provided by the SIS Act is broadly supported, there has been considerable debate over recent years in relation to the practice of having half the board members nominated by employees and half by employers. Some commentators have argued that at least some members of the Board, and possibly a majority, should be independent directors.⁶⁰ Independent directors may be a way of improving the mix of skills required of ever larger, more complex funds operating in challenging markets. Opponents of such a change argue that the current system is balanced and has served the superannuation sector well over a long period of time.

11.3 Key live and emerging issues: Governance

Key Issues

- FOS capacity (i.e. resourcing) and scope (i.e. which cases can be brought)
- Independent directors for superannuation funds

⁵⁹ The data used to develop these indexes comes from a survey of corporate and securities lawyers and are based on securities regulations, company laws, civil procedure codes and court rules of evidence.

⁶⁰ See for example, "Raising the Bar", in which the Financial Services Council argues that the Chair and a majority of directors should be independent. <http://www.fsc.org.au/downloads/file/submissionsfile/fccsupercorporategovernancefinal.pdf>

12. Attributes of the economy affecting the performance of all six functions

Executive Summary

- This chapter examines features of the financial services sector and the broader economy that impact on the performance of all six core functions.
- Many elements of Australia's financial services sector are oligopolistic. Competitive forces are increasing in some segments through technological innovation and regulatory change. However, on at least some measures, Australia's financial services sector appears to be less competitive than in comparable economies.
- Australia's general business environment is ranked highly by international bodies such as the World Bank, the IMF and a wide range of independent agencies.
- Financial services firms in Australia have access to a large and growing pool of highly educated workers.

12.1 Competitive environment

Merton argues that the greater the degree of competition, the more will a financial services sector improve in the performance of all six functions. While this is true in general, more competition is not always a good thing. There can sometimes be a tension between competition and stability. For example, prudential regulation arguably raises barriers to entry in the banking and insurance sectors by increasing the level of capital that needs to be held. However, lowering prudential standards will not necessarily be a good thing, even if it increases competitive tension in the short run. In this instance, regulators need to make a judgment about the trade-off between the benefits of more competition and the danger of greater systemic risks. Notwithstanding the potential for such trade-offs, the presumption should be that more competition is in general a good thing and the onus should be on justifying regulatory interventions that inhibit competition.

12.1.1 Measuring competition

It is difficult to directly observe the degree of competition in most industries. There are a number of useful proxies, each of which can provide partial guidance:

- **Market share concentration.** A high degree of market concentration may be associated with market power, although empirical tests of the connection between concentration levels and competition have produced mixed results.⁶¹ There are

⁶¹ The relationship between concentration ratios and competition is complicated. In a review of the literature, (Davis, 2007, p271) finds that "The empirical literature has produced mixed results, partly reflecting the fact that there is relatively little correspondence between measures of bank concentration and competition or contestability."

many measures of market concentration. The two most commonly used are the concentration ratio (i.e., the market share of the n-largest firms) and the Herfindahl Index (a weighted measure of concentration). Most elements of the financial services sector in Australia have high levels of market concentration for the largest 3-5 firms. The evolution of market share concentration can be an indicator of whether competition is increasing or decreasing.

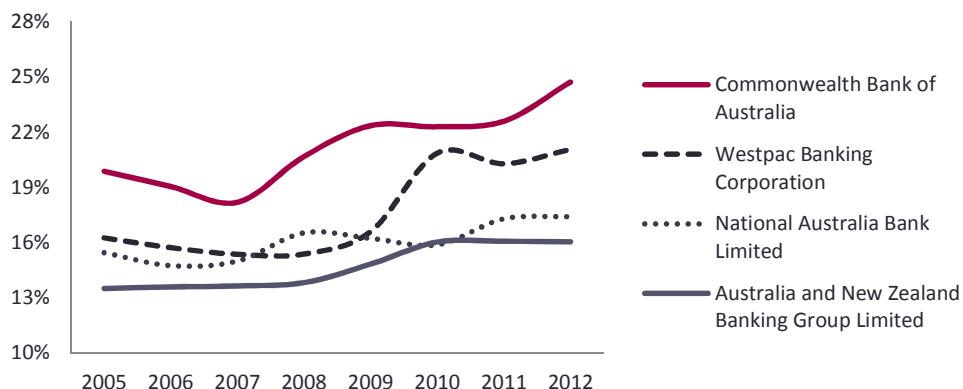
- **Market share composition.** If market share concentration of the largest n-firms is somewhat stable but the market share of individual firms changes materially over time, the changes in market composition might indicate competitive pressures. This is generally not the case in the Australian financial services sector, with both the concentration ratio and the composition within that ratio quite constant over time.
- **Customer churn.** Even if market share concentration and the firm level composition of market share are both stable over time, there might be significant levels of customer churn. Customer churn puts pressure on firms to attract new customers to replace those that are lost. The rate of customer churn is not publicly reported in most segments of the Australian finance sector.
- **Barriers to entry/contestability.** Another indicator of competition is whether new firms enter and leave the industry. An absence of entry does not mean that competition doesn't exist per se. There might still be contestability, or the threat of entry. However, an absence of entry over a prolonged period of time suggests that it is worth examining whether there are material barriers to entry. Barriers to entry can be overt (eg a regulatory ban on entry) or more difficult to identify (eg some non-tariff trade barriers or the costs associated with prudential regulation). Where barriers to entry are the result of regulatory intervention, that regulation should be justified as being in the public interest and monitored over time.
- **Technological innovation.** In some industries, the absence of competitive forces can result in high profit levels and rates of return that attract innovation. Potentially, the entry of comparison web-sites is an example of a new technology seeking to take advantage of low customer churn rates and high margins.

12.1.2 Assessing competition in Australia's finance sector

Market concentration

Banking sector: The Australian banking sector has a very high four-firm concentration ratio and has had for some time. As can be seen in Figure 16, the four firm ratio has been above 60 per cent for the last 8 years and has increased following the GFC. Moreover, the composition of the four-firm market share has been relatively stable.

Figure 16 Deposits: Market Share of Major Banks



Source: APRA, *Monthly Banking Statistics Back Series*

A high level of concentration is not unusual in banking sectors. Based on 2005 World Bank data, Davis finds that 85 countries had a three-firm concentration ratio above 50 per cent (out of 103 countries for which data was available), 53 above 75 per cent and 31 above 90 per cent. (Davis, 2007) Between 1995 and 2005, there was no tendency for increased concentration across the OECD, with economies fairly evenly distributed between increased concentration, reduced concentration or no change. (Davis, 2007, p259)

An additional dimension of concentration is the proportion of mortgages funded by banks compared to securitisation vehicles. The value of mortgages backed by securitisation fell from a peak of \$215.2 bn in June 2007 to \$106.3 bn in March 2013.⁶² While it is difficult to disentangle how much of this is due to the decline in securitization firms since securitisation is still undertaken by banks, the overall decline in this mechanism suggests that competition from non-bank mortgage originators has substantially declined following the GFC.⁶³

Insurance sector: The Australian general insurance market is dominated by three players: QBE, IAG and Suncorp. On most measures, these three companies have over 60 per cent market share. In the year to 31 December 2011, the level of gross written premiums for these three companies was \$13,629 bn (US\$), \$8.050 bn and \$7.280 bn respectively. This represented around 70 per cent market share. When the next three firms were included (Allianz, Wesfarmers Insurance Division and Zurich Australian Insurance), the market concentration rose to around 85 per cent. (KPMG, 2011, p5 and KPMG, 2012, p46)

The level of dispersion of general insurance firm size within the top ten appears to have increased substantially over the past 25 years. In 1985, the largest general insurance firm (by gross written premium) was around twice as large as the tenth firm - NRMA Insurance

⁶² RBA, Table B19.

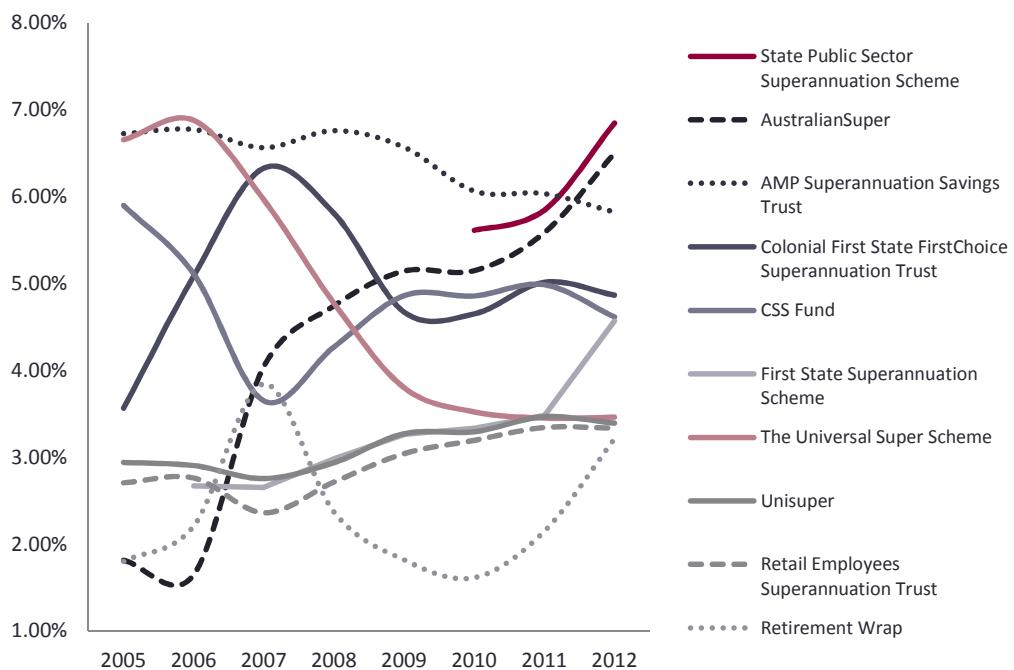
⁶³ One example is CBA's outright purchase of Aussie Home Loans in 2013 following the purchase of a 33% stake in 2008. After its founding in 1992, Aussie Home Loans was a source of innovation and competitive tension as its market share rose.

Ltd (\$345m) and NZ Insurance Company Ltd (\$140m) respectively. In 2011, the largest firm was over thirty times larger than the tenth largest firm. (KPMG, 2011, p5)

The life insurance market is also heavily concentrated. It is dominated by AMP, OnePath Australia, NAB/MLC and Challenger on most performance measures. Other key players include Comminsure, BT/Westpac and Suncorp. On most key metrics, AMP has by far the largest market share at over 30 per cent. The share of the top four firms is over 70 per cent based on most key measures: total inflows (77 per cent); total sales (87 per cent); new single premiums (91 per cent); and FUM (91 per cent). (Plan for Life, 2012 and FSC)

Superannuation sector: The superannuation sector is less concentrated than the banking or insurance sectors. In 2012, the market share (by total assets) of the largest ten funds was just over 45 per cent of the combined retail and industry fund sectors. This figure does not take account of smaller funds. The superannuation sector is even less concentrated when taking SMSFs and other smaller funds into account. (ABS) In addition to having a lower market concentration ratio, it is also worth noting that the fund-level composition of market share within the superannuation sector has changed markedly over the past ten years. Figure 17 shows the market share for new contributions of the largest ten funds, many of which have experienced large proportional changes. (ABS)

Figure 17 Market Share of Top 10 Superannuation Funds



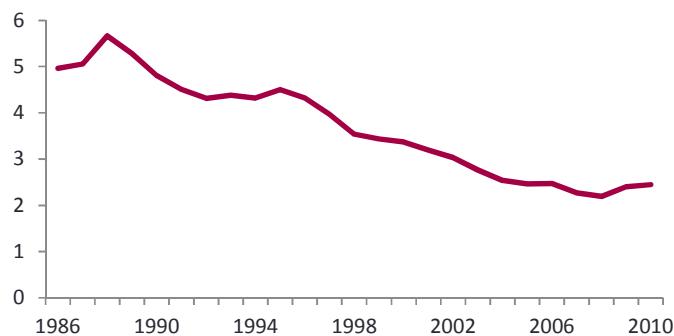
Source: APRA, *Quarterly Superannuation Performance Statistics, September 2012*

Profit margin

Banking sector: Net interest margins have been declining in the banking sector over the past 25 years. This decline seems to have stalled over the past decade (and even reversed somewhat). Figure 18 shows the fall in the net interest margin since the mid 1980s. In recent years, the decline in net interest margin has been attributed at least in part to increased funding costs which in turn can be attributed to factors such as the increased cost of wholesale funding and greater competition for deposits. Nonetheless, the credit rating of Australia's largest banks remains solid, with all four of Australia's big four banks amongst the top banks in the world.

This suggests that competitive pressures may have been increasing, notwithstanding little change in market concentration. Ken Henry argues that "the sustained downward pressure on the net interest margin is one of the clearest, long-term economy-wide benefits of the deregulation of the Australian financial system..." Henry argues that this includes the removal of the cap on home loan interest rates in 1986 and increased competition from non-prudentially regulated lenders and new bank entrants around 1995. (Henry, 2010)

Figure 18 Net Interest Margin: Major Banks



Source: RBA, Chart Pack, June 2013

Despite the downward trend in the net interest margin over the past 25 years, bank profitability in Australia remains high compared to other large economies. Figures 19 and 20 show the net interest margin and return on equity of the Australian banking sector compared to other major economies and the global average. The net interest margin of Australian banks is lower than for North American banks but higher than the global average and around half a percentage point higher than the Eurozone and Japan over the past decade. It is worth noting that the half a percentage point gap is small relative to the decline in the net interest margin over the past 25 years in Australia (around 4 percentage

points) and that international comparisons of net interest margins can be complicated by a number of factors.⁶⁴ Nonetheless, the persistent gap is warrants further analysis.

Return on equity (RoE) is another relevant measure. The RoE for Australian banks is relatively high. As figure 20 shows, even though it declines during the GFC – the RoE for Australian banks has been persistently higher than the global average over the past decade and higher than the RoE for banks in North America, the Eurozone and Japan during most of the period.

Figure 19 International Net Interest Margins: FY2003-FY2012

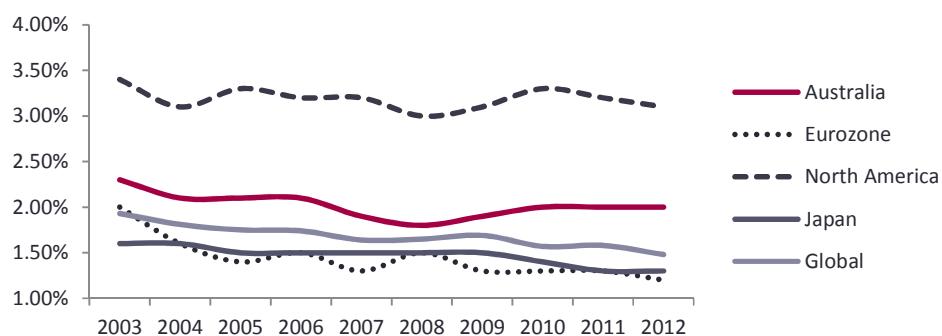
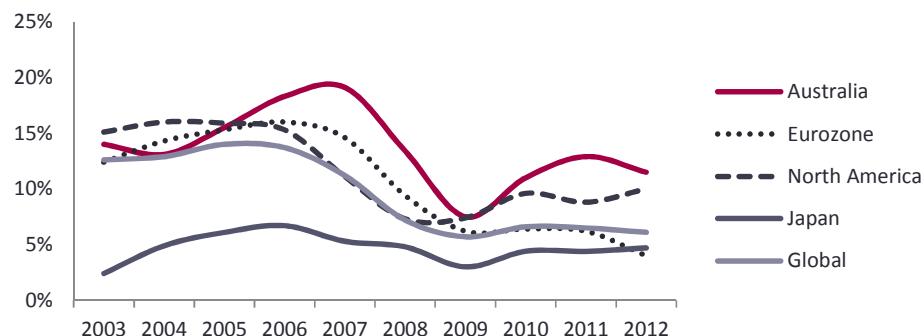


Figure 20 Bank ROE International Comparison: FY 2003-2013⁶⁵



Source: Pottinger analysis, Capital IQ for non-Australian firms

While not a direct measure of profitability, the H-statistic is relevant, as it reflects the responsiveness of firm revenue to changes in factor input prices. A value of one indicates perfect competition and zero (or less) perfect monopoly with values in between indicating the degree of competition.⁶⁶ The H-statistic has been found to bear little relationship to

⁶⁴ Net interest margins should be used with care in assessing competition, particularly where international comparisons are made. Differences in accounting treatment, business models and risks (e.g. housing versus business lending involves different spreads to compensate for losses), fees and other factors complicate any analysis.

⁶⁵ Figure 20 is broadly consistent with Graph 1.7 in (RBA, 2013) – although there are some differences, particularly around the GFC. This could be due to different data sources and time periods. Despite the differences, in both graphs, Australia's RoE is relatively high.

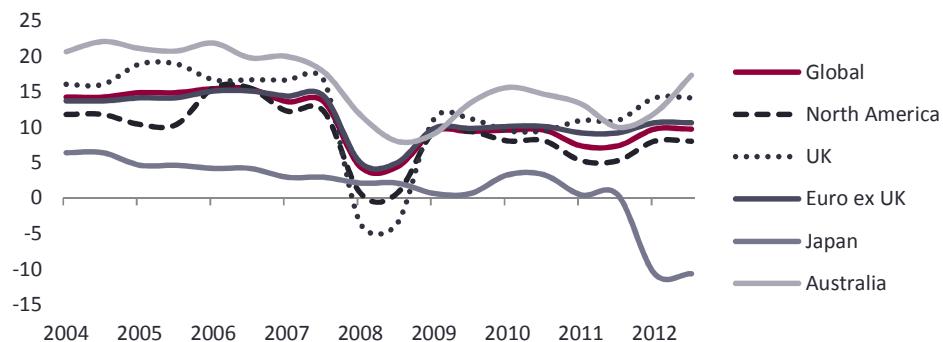
⁶⁶ Davis, p265.

concentration measures which indicates that competition may be present even where there is sustained concentration.⁶⁷ Claessens and Laeven calculate an H-statistic of 0.8 for Australia. This is supported by Bikker and Haaf who find H-statistics of 0.63 and 0.68 in 1991 and 1997 respectively. While these results should be treated with caution⁶⁸, they suggest that high concentration per se does not indicate a low level of competitive tension.

According to the World Economic Forum, Australia ranks 7th overall in terms of banking financial services. This includes ranking 3rd in terms of efficiency. (WEF, 2012)

Insurance: Figure 20 shows the RoE for insurance firms globally and in selected major economies. As can be seen, the RoE for Australian insurance firms has been consistently above the global average over the past decade. The gap narrowed immediately following the GFC and then again following the 2010 Queensland/NSW floods. But in general, the gap has been five percentage points or more. The RoE for North American insurance firms has generally been above the global average (although it fell more significantly than other major regions during the GFC). In contrast, the UK and Europe have experienced returns below the global average. The Japanese insurance industry has achieved persistently low returns since 2004, with returns of lower than five per cent during almost the entire period.

Figure 21 Insurance ROE International Comparison: 2004 - 2012



Source: Pottinger analysis, Capital IQ for non-Australian firms, APRA Quarterly General Insurance Performance Statistics for Australian firms.

Customer churn: Informal discussions by the author have indicated that customer churn rates are low in both the banking and insurance sectors. This could be due in part to high customer satisfaction – although inertia caused by the complexity of choice and high switching costs are other possible causes. One possible barrier to customer churn is the increasing number of products that individuals hold with each firm. In recent years, the government has enacted several reforms that have aimed to reduce the barriers to

⁶⁷ The H-statistic measures market power by the extent to which changes in factor input prices translate into equilibrium revenues earned by each bank i. In other words, "H is a measure of the sum of the elasticities of the reduced-form revenues with respect to factor prices." (Schaek and Cihak, 2007, pp6-7) This measure was created by Panzar and Rosse (1997).

⁶⁸ Issues include data quality and the fact that the H-statistic was developed for single-product markets.

customer churn. One example is the prohibition, introduced in 2011, on exit fees on home loan mortgages as part of the Government's banking package.

Productivity Growth: While not conclusive – high rates of productivity growth are circumstantial evidence in favour of either competitive tension or contestability (ie incumbents innovating to prevent entry). Multifactor productivity (MFP) growth has slowed significantly across the Australian economy since the 1990s. It fell from 2.5 per cent in the productivity cycle running from 1993/94 and 1998/99 to 1.2 per cent between 1998/99 and 2003/04. Since then it has fallen to zero between 2003/04 and 2007/08. (Parham, 2012, p1) This recent performance can be compared to a long run MFP growth rate for the economy of a bit under one per cent per annum. At an industry level, manufacturing and mining were the key contributors to the slowdown in MFP. The sharp economy-wide reversal in MFP during this period can be partly attributed to one-off factors such as the drought (low capital utilisation across the agriculture and utilities sectors) and the rapid rise in the terms of trade which resulted in a spike in investment (low initial capital utilisation and some inefficiency due to the speed of investment in the mining sector).

In contrast, the finance and insurance sector contributed by far the largest offsetting productivity improvement, accounting for a positive offsetting MFP gain of 0.44 percentage points. (Parham, 2012, p6) In the most recent full productivity cycle (2003/04 to 2007/08), the financial and insurance services sector experienced by far the highest industry level MFP growth rate of 4.4 per cent. As with all productivity growth rates, this result should be treated with caution due to measurement difficulties and volatility - and it is worth noting that the figures from the latest (incomplete) cycle from 2007/08 to 2010/11 show a slight reduction in MFP for the sector of 0.2 per cent. Nonetheless, over the past twenty years, the finance sector has experienced MFP growth at a higher rate than the economy as a whole. This finding is supported by analysis by the ABS which assessed productivity growth across twelve industries between 1994/95 and 2003/04. The research found that, across the twelve sectors, the financial services sector had the highest rate of labour productivity growth, the highest rate of IT capital deepening, the highest rate of labour quality growth and the greatest contribution to MFP growth. (Hui and Zhao, 2012⁶⁹)

Overarching assessment: The level of competition within an industry as complex and rapidly evolving as financial services is difficult to assess. The evidence in the public domain is mostly circumstantial. Moreover, it is somewhat mixed.

⁶⁹See slides 8, 10, 12 and 13. The twelve sectors covered: (i) Agriculture, Forestry and Fishing; (ii) Mining; (iii) Manufacturing; (iv) Electricity, Gas, Water and Waste; (v) Construction; (vi) Wholesale Trade; (vii) Retail Trade; (viii) Accommodation and Food Services; (ix) Transport, Postal and Wharehousing; (x) Information, Media and Telecommunication; (xi) Financial and Insurance Services; and (xii) Arts and Recreation Services.

On the one hand, the falling level of net interest margin over the past quarter century and the low H-index point to a plausible case that competition is increasing. This is supported by circumstantial evidence such as: (i) product innovation; (ii) a high level of service as measured by branch and ATM access (as noted in chapter 4, Australia ranks high by international standards on both).

On the other hand, there is a high level of concentration in banking and insurance. In addition, the market shares of the major banks does not seem to have changed materially over recent years and the level of customer churn appears to be low (compared to highly competitive industries). In insurance, the level of market concentration appears to have increased over the past 25 years. International comparisons seem to support the contention that there is limited competition. While net interest margins have fallen, they have been higher than the global average over the past decade, and the RoE for banks and insurers has been considerably higher than the global average.

In addition, there are a number of changes in market dynamics following the GFC that point to less competitive pressure. One is the slow recovery of the RMBS market, which has adversely impacted on the capacity of the smaller banks to raise funds at competitive prices. Second is the withdrawal of many foreign banks, a key potential source for competitive tension. Third is the fact that, in banking at least, the market shares of the largest firms has increased following the GFC.

Together, these observations suggest that the level of competition in key parts of the financial services sector warrants ongoing examination and, where appropriate, a regulatory response. This is consistent with the observation in section 8.2.2 that it would be beneficial to undertake further analysis into the impacts of competition in financial markets.

12.1.3 Opportunities to increase competition – Domestic

Market driven changes: An absence of competition will tend to raise profit levels and rates of return. This can be a spur to innovation.

Insurance: Arguably, one example in the financial services sector is the growth of comparison web-sites such as iSelect. The market share of comparison web-sites has grown significantly over recent years. For example, iSelect had approximately 7.8 million visits to its websites in the year ended 31 March 2013. iSelect's revenue has risen from \$43.5 million in FY10 to a forecast of \$121.6 million in FY13. (iSelect, 2013)

Banking: In the post-GFC environment, banks have competed for deposits as wholesale funding costs have risen. Part of the differentiation between banks is based on price – but

in a market in which there is limited scope to pay higher interest rates than competitors, improved service is critical. Examples of recent innovation in banking service include apps such as Kaching (CBA) and other similar products.

Regulatory change: Competition can sometimes be constrained due to unnecessary regulation. It can also, on occasion, be promoted by well-designed regulation. Examples of such regulation that are either under active consideration or that are emerging include:

EFTPOS. The entry of EFTPOS as a major player in the payments system required regulatory intervention. In particular, the new regime required the intervention of the Payments System Board (PSB) to reduce interchange fees in the Mastercard and Visa credit card system, the Visa debit system and domestic debit cards. The PSB made these changes because it had determined that the previous fees did not reflect the resource costs of each element of the payments system and, therefore, that they were not sending appropriate signals to consumers. By more accurately reflecting costs, the new pricing regime should result in lower transaction costs for consumers. (BIS, 2012a, p45)

One page Key Facts Sheets (KFSs). Focus group testing suggests that the introduction of one page KFSs will improve consumer understanding of a number of financial products including residential mortgages and home and contents insurance policies. These documents – and similar products - could also be used as a tool for improving competition. First, these sheets make it easier to compare products across firms. Second, it is possible to introduce elements into the KFS (eg a comparison of last year's price or premium with this year's price/premium) that make it easier for customers to detect rapid price escalation – something that arguably goes unnoticed at present and is a barrier to customer churn.

Prudential standards. The prudential regulation of ADIs, insurers and superannuation funds is widely accepted as necessary. However, while strong prudential standards improve the stability of the financial system and the economy, they can also act as a barrier to entry due to the high cost of meeting capital requirements. Balancing this trade-off is a constant challenge for regulators and there is often devil in the detail, as was experienced during the implementation of Basel III and LAGIC.

Financial Claims Scheme (FCS): the FSC provides an advantage to ADIs that benefit from it, arguably disadvantaging other financial entities seeking funds. Nicholas Gruen (among others) has argued that this provides a cost advantage to banks that creates a barrier to entry to potential competitors such as securitisation vehicles. (Gruen, N, 2013) This may be justified given systemic issues – but the nature of the guarantee (and, arguably, the implicit subsidy) to banks warrants ongoing examination and justification.

12.1.4 Opportunities to increase competition – International

Australia's connectedness with the international economy has already been discussed as an important avenue for the efficient allocation of resources. It is critical in a much more general sense. Engaging with economies in the Asia-Pacific region and beyond will create a financial services system that is more outward focused, more competitive and more innovative. It will increase the likelihood that our economy can attract globally competitive firms and more skilled human capital. All of this will increase the capacity of the financial services sector to achieve the outcomes discussed in Chapter 2.

International engagement as a way of enhancing competition: Australia's engagement with the international economy is a potential source of competition and productivity growth. One example is the entry of foreign banks. The entry of foreign banks into Australia was permitted in the early 1980s. As of September 2012, foreign subsidiary banks⁷⁰ held \$80.6 bn in deposits and foreign branch banks⁷¹ held \$102.3 bn in deposits. (APRA, 2013) Restrictions are still in place as to the deposit-taking activities of foreign branch banks. Even though these figures are not small in absolute terms, as of September 2012, foreign subsidiary banks represented 4 per cent of total deposits and foreign branch banks 5.1 per cent of total deposits.⁷² Further market entry by foreign banks, subject to appropriate prudential controls and consumer protection, could represent a possible source of additional competitive tension.

It should be noted that the trend in some jurisdictions is to tighten controls on foreign bank entry. For example, the UK is consulting on proposals that would limit foreign banks to subsidiary banks. New Zealand already has such measures in place. One challenge for regulators is to ensure that the foreign bank has a sufficient presence within the jurisdiction to enable the recovery of funds in the case of disputes.

12.2 General business environment

12.2.1 Current institutional and regulatory arrangements

Many elements of the broader business environment are important enablers for the financial services sector. They provide both domestic and foreign investors with the

⁷⁰ Those foreign banks authorised to carry on banking business in Australia through a locally incorporated subsidiary. Eight entities operating in Australia satisfied this definition as at September 2012.

⁷¹ Those foreign banks authorised to carry on banking business in Australia through branches. 39 entities operating in Australia satisfied this definition as at September 2012.

⁷² The latter figure represents wholesale customers and accounts in which the initial deposit is greater than \$250,000.

confidence to invest in or through the sector. The key elements of the broader business environment of relevance to the financial services sector are:

- a legal system that is reliable, transparent and well understood;
- low levels of corruption;
- highly transparent regulatory processes and transparent, reviewable administrative decision-making processes;
- low business taxes that are generally not changed without consultation;
- low levels of red tape compared to comparable economies; and
- low levels of sovereign risk.

12.2.2 Assessment of performance

Overarching assessments of Australia's business environment

Global Financial Centres Index (GFCI): This is a quantitative report produced annually by the Z/Yen Group. (Z/Yen, 2013) The ranking is compiled from 87 instrumental measures and responses to a questionnaire completed by financial services professionals.⁷³ The GFCI ranks both Sydney and Melbourne highly. In the most recent ranking, Sydney ranked 15th and Melbourne 18th globally. Over the past 10 years, Sydney has trended down slightly (it was ranked 7th in the initial GFCI ranking in 1998) and Melbourne has trended up.

World Bank (WB) / International Finance Corporation (IFC): the WB/IFC ranking of “Ease of doing business” ranked Australia highly in both 2013 and 2012 (10th and 11th globally respectively), particularly in relation to starting a business and credit. The categories in which Australia was ranked relatively poorly are highlighted in Table 1 below. (WB, 2013)

Table 22 World Bank/IFC Ease of Doing Business rankings (2012 and 2013)

MEASURE	RANK - 2013	RANK - 2012
Overall - Ease of doing business	10	11
Starting a business	2	2
Registering property	37	35
Getting credit	4	
Protecting investors	70	66
Paying taxes	48	50
Trading across borders	44	43
Enforcing contracts	15	17
Resolving insolvency	18	17

⁷³ 26,180 assessments from 1,890 professionals were submitted last year.

Bloomberg/Schumer Review: Michael Bloomberg (the Mayor, NY) and Charles Schumer (Senator, NY) commissioned research by McKinsey and the NY City Economic Development Corporation to examine the contribution of the finance sector to the US economy and how best to maintain or improve its competitive position. (McKinsey, 2007) Of a range of factors determining the competitiveness of global financial centres, the following were rated as very important: the availability of professional workers; government and regulators' responsiveness to business needs; and fair and predictable business environment.

World Economic Forum (WEF) Report: Australia ranked 5th globally in terms of financial development in both 2011 and 2012 according to the WEF. (WEF, 2012, p12) The financial development index comprised seven categories: (i) institutional environment; (ii) business environment; (iii) financial stability; (iv) banking financial services; (v) non-banking financial services; (vi) financial markets; and (vii) financial access. Australia was ranked highly by the WEF along all key dimensions reflecting the business environment. (WEF, 2012, pp13-14)

Specific issues

Corruption: Australia was ranked seventh globally (top ranking being least corrupt) on Transparency International's (TI) corruption perceptions index. (TI, 2011)

Transparency: The Milken Institute Opacity Index ranked Australia 3rd out of 48 countries in 2009 behind only Finland and Hong Kong. (Milken Institute, 2007) A ranking of corporate governance compiled by Governance Metrics International ranked Australia 4th globally (behind Ireland, the UK and Canada). (GMI, 2009)

Insolvency: Australia was ranked 17th (out of 62 countries) in relation to the cost of closing a business. This is in contrast to being in the top 10 in all other elements of the cost of doing a business. (WEF, 2012 and WB 2011) The cost is calculated on the basis of questionnaire responses and includes court fees and government levies; insolvency administrator fees and the costs of auctioneers, lawyers and other court fees and costs. Australia ranks higher (8/62 countries) in terms of the time to close a business. This is measured as the time from default until the payment of some or all money to the bank. (WEF, 2012, p66 and WB, 2012)

12.2.3 Key live and emerging issues

Overall, Australia ranks very highly in major international assessments of the general business environment. Despite this, there are some specific issues on which Australia occasionally performs relatively poorly, such as: minority shareholder protection; insolvency; and taxation certainty.

12.3 Human capital

12.3.1 Current institutional and regulatory arrangements

In surveys with financial sector executives, McKinsey found that a high-quality workforce was the most important factor (among 18 factors) in predicting the success of a financial centre. (McKinsey, 2007, p16 and p62 for a full ranking of factors) This was supported by the Bloomberg/Schumer report. One of its key recommendations was to ease restrictions on skilled non-US professionals working in the finance sector.

12.3.2 Assessment of performance

In 2012, WEF ranked Australia 13th globally in terms of human capital. (WEF, 2012, pp13-14) The WEF cited survey data in relation to measures of human capital. Australia ranks moderately highly on some measures developed from these survey results (eg quality of management schools 14th/62 countries and the quality of math/science education 11/62 countries). On other measures, Australia ranks around the middle of the countries assessed (eg the extent of staff training 22/62) and the “brain drain” 23/62). (WEF, 2012, pp64-67)

Australia ranks highly in terms of the objective measures of the pool of highly trained employees that the financial sector can draw from. For example, Australia has a high gross tertiary enrolment rate⁷⁴, ranking 8th in the world in 2010.⁷⁵ In addition to having high current rates of enrolment, a high proportion of the overall working age population has a tertiary qualification compared to the OECD average. (OECD, 2012b) Thirty four per cent of Australia’s labour force has a tertiary qualification, which ranks in the top 10 in the OECD.⁷⁶

12.3.3 Key live and emerging issues

Despite Australia’s existing strengths in relation to human capital, the local labour force may need to be supplemented if specialised skills requirements arise unexpectedly. This is a real possibility given the speed with which the sector is evolving. Should that occur, similar reforms to those suggested by the Bloomberg review would need to be considered.

⁷⁴ This is defined as the ratio of total tertiary enrolment, regardless of age, to the population of the age group that officially corresponds to the tertiary education level. Because people outside the age group corresponding to the tertiary education level may be enrolled in tertiary institutions, this ratio may be more than 100 per cent (eg it was 103 per cent for the Republic of Korea in 2010).

⁷⁵ See UNESCO Institute for Statistics, accessed April 2013. Australia was ranked 5th on the latest World Economic Forum list (2012), which was based on a combination of UNESCO data and data from national sources. See (WEF, 2012, p332)

⁷⁶ See UNESCO Institute for Statistics, accessed April 2013.

12.4 Key live and emerging issues: Enablers

Key Issues

- On at least some measures, Australia's finance sector appears to be less competitive than in comparable economies. The degree of competition should be monitored and, in addition, measures to improve competition should be explored including: reducing barriers to entry (subject to managing systemic risk); promoting consumer empowerment; and facilitating greater international engagement.
- Australia's general business environment is ranked highly. However, some aspects are ranked only moderately. Regulation of these issues should be reviewed.
- The evolution of the finance sector is likely to create increased demand for highly specialised skills that cannot be supplied entirely domestically. A skilled migration program should be developed that can plug gaps in local labour supply.

13. Conclusion

Australia's financial architecture underpins the productivity and growth potential of the entire economy. It is performing well by most absolute and relative measures. This is supported by the performance of the financial sector and the economy as a whole in the face of the GFC and recent natural disasters. In general, financial sector participants and the regulatory regime within which they operate performed well.

In addition, Australia's financial architecture effectively provides individuals with considerable capacity to manage their lifetime consumption patterns and to protect themselves against catastrophic risk.

Notwithstanding the successes, it is important to look to areas in which the sector can improve its performance. When assessed against the six functions that all financial systems aim to perform, it is possible to identify a range of reforms that warrant serious examination.

Australia's payments system, while efficient and accessible overall, is noticeably less efficient along several dimensions than the systems in the UK, the US and Europe. The reform process that is already underway should be continued.

The financial sector appears to be efficient in the allocation of capital. Despite this, there are some specific investment classes that appear to face barriers to efficient levels of investment. These include public sector greenfield infrastructure and high-risk commercialisation of innovation. A combination of regulatory change and market responses will be required.

With minor interruptions, Australia has been deeply engaged with the international economy since European settlement. This has, in part, been driven by Australia's high investment requirements per capita given a small, widely dispersed population and a reliance on capital intensive industries. International capital flows have been highly beneficial to the Australian economy and will remain so if allowed to be guided in large part by market forces and only restrained where clearly in the national interest.

The degree to which Australia's financial sector is engaged with the international economy has increased significantly since the financial liberalization process that commenced in the mid-1980s. However, Australia's finance sector is less outward looking than the finance sector of many otherwise comparable economies.

Opportunities for further integration should be explored. The entry of foreign banks has promoted greater innovation and competition. Whether more entry can be permitted will be a judgment based on a range of considerations including systemic stability and consumer protection. There is also the potential for far greater trade in financial services, with Australia becoming a more integrated regional financial services centre. This could include Australia becoming a regional (or global) leader in pension fund management, infrastructure and innovation funding or other high value-add financial services.

The regulation of Australia's financial sector is generally viewed to be effective – both in terms of crisis management and day-to-day prudential and conduct regulation. However, there are a number of longer term regulatory issues that require consideration including: the appropriate boundary of prudential regulation, particularly given increasingly stringent international standards; and the role for consumer protection, including the barrier between wholesale and retail investors and whether SMSFs require more stringent regulation.

Finally, in addition to improving the performance of specific functions, it is vital that the role of competition be examined. Greater competition has the potential to improve the performance of all six functions, unleashing improvements in dynamic efficiency that could drive higher productivity and innovation. The last twenty five years have seen significant improvements in competition in some areas. To some degree, technological innovation and the growing internationalisation of some aspects of financial services are adding to competitive pressures.

However, there is circumstantial evidence to suggest that further improvement is possible. As a starting point, any regulatory barriers to competition within the sector should be reviewed. The onus should be for the removal of regulatory barriers unless restrictions can be justified as being in the public interest.

14. Appendix

14.1 Different Frameworks for Assessing the Functions of a Financial System

Function	Merton (1995 et al)	Levine (2004)	Stevens (2010)
Payments system	Payments system for the exchange of goods and services	Ease the exchange of goods and services	Reliable way of making payments
Pooling resources	Mechanism for the pooling of funds to undertake large scale indivisible enterprise	Mobilize and pool saving	A way of transferring resources from savers to borrowers
Allocating capital	Transfer economic resources through time and across geographic regions and industries	... and allocate capital	
Risk management	A way to manage uncertainty and control risk	Facilitate the trading, diversification and management of risk	A means of pricing and pooling certain types of risks
(will be dealt with as part of risk management)			Liquidity
Price information	Price information that helps coordinate decentralised decision-making in various sectors of the economy	Produce information ex ante about possible investments and ...	
Governance of borrowers and managers	A way to deal with asymmetric information and incentive problems when one party to a financial transaction has information that another party does not	Monitor investments and exert corporate governance after providing finance	A way of transferring the returns back again, which requires that the savers' money is not lost and which, in turn, requires monitoring of borrowers and managers

14.2 Recent Policy Inquiries

Review Title	Topic of Inquiry	Responsible Agency	Date	Publication	Submissions
Campbell Inquiry	Broad – system wide inquiry	Campbell Committee	1981	Final Report	
Financial System Inquiry	Broad – system wide inquiry	Wallis Committee	November 1996	Discussion Paper	268
			March 1997	Final Report	
Inquiry into home loan lending practices and processes	Banking	HoR S.C. on Economics, Finance and Public Administration	September 2007	Final Report	26
Inquiry into competition in the banking and non-banking sectors	Banking	HoR S.C. on Economics, Finance and Public Administration	June 2008	Final Report	60
Inquiry into Aspects of Bank Mergers	Banking	Senate S.C. on Economics	September 2009	Final Report	21
Inquiry into Bank Funding Guarantees	Banking	Senate S.C. on Economics	September 2009	Final Report	27
Inquiry into the Banking Amendment (Keeping Banks Accountable) Bill 2009	Banking	Senate S.C. on Economics	September 2009	Final Report	7
Inquiry into Access of Small Business to Finance	Banking	Senate S.C. on Economics	June 2010	Final Report	52
Competition within the Australian banking sector	Banking	Senate S.C. on Economics	April 2011	Interim Report	137
			May 2011	Final Report	
Access for Small and Medium Business to Finance	Banking	Joint C'tee on Corporations and Financial Services	April 2011	Final Report	19
Inquiry into the post-GFC banking sector	Banking	Senate S.C. on Economics	November 2012	Final Report	158 (28 not public)

Review Title	Topic of Inquiry	Responsible Agency	Date	Publication	Submissions
Review into the Governance, Efficiency, Structure and Operation of Australia's Superannuation System	Superannuation	Cooper Committee	August 2009	Issues Paper – Operation and Efficiency	453
			December 2009	Issues Paper - Structure	
			April 2010	Preliminary Report	
			July 2010	Final Report (Vol 1 and 2)	
Inquiry into the collapse of Trio Capital and any other related matters	Superannuation	Joint C'tee on Corporations and Financial Services	Interim Report	November 2011	77
			Final Report	May 2012	
Australia as a Financial Centre: Building on our Strengths	International Engagement	Johnson Committee	November 2009	Final Report	
Reforming Flood Insurance – Clearing the Waters	Insurance	Treasury	May 2011	Consultation Paper	12
Natural Disaster Insurance Review: Inquiry into flood insurance and related matters	Insurance	Trowbridge Committee	June 2011	Issues Paper	121 (12 not public)
			November 2011	Final Report	
In the Wake of Disasters, Volume 1: Operation of the insurance industry during natural disasters	Insurance	HoR S.C. on Social Policy and Legal Affairs	February 2012	Final Report	79
In the Wake of Disasters, Volume 2: The affordability of residential strata title insurance	Insurance	HoR S.C. on Social Policy and Legal Affairs	May 2012	Final Report	429
Central Clearing of OTC Derivatives in Australia	OTC derivatives	CFR	June 2011	Issues Paper	37 (7 not public)

Review Title	Topic of Inquiry	Responsible Agency	Date	Publication	Submissions
Central Clearing of OTC Derivatives in Australia Review of Tax Arrangements for Collective Investment Vehicles	OTC derivatives	CFR Board of Taxation	December 2010	Discussion Paper	31
			March 2012	Final Report	
Review of Tax Arrangements for Collective Investment Vehicles Strategic Review of Innovation in the Payments System	CIVs	Board of Taxation	June 2011	Issues for Consultation	31 (15 not public)
			September 2011	IMR Report	
			December 2011	Final Report	
Strategic Review of Innovation in the Payments System Review of Financial Market Infrastructure Regulation	Payments system	RBA	October 2011	Consultation Paper	18
			February 2012	Summary of consultations	
			June 2012	Conclusions	
Review of Financial Market Infrastructure Regulation	Broad - system wide inquiry	CFR	October 2011	Issues Paper	22 (4 not public)
			February 2012	Letter to Deputy Prime Minister	
Competition in the Clearing and Settlement of the Australian cash equity market	Financial Markets	CFR	June 2012	Discussion Paper	16
			December 2012	Supplementary Paper	
Dark liquidity and HFT: Proposals: CP202 and REP331	Financial Markets	ASIC	March 2013	Consultation Paper and Report	

Review Title	Topic of Inquiry	Responsible Agency	Date	Publication	Submissions
Regulatory Capital in the Global Banking System	Prudential Regulation	Basel Committee	December 2010	Package of Basel III reforms	
Implementing Basel III Capital Reforms in Australia	Prudential Regulation	APRA	September 2011	Discussion Paper – Capital reforms	13
Life and General Insurance Capital Review	Prudential Regulation	APRA	November 2011	Discussion Paper – Liquidity Requirements	
			March 2012	Response to submissions – Capital reforms	
			September 2012	Final prudential and reporting standards	
			November 2012	Response Paper	
			May 2012	Consultation Paper	>140 written submissions
Life and General Insurance Capital Review Australia's Financial Market Licensing Regime: Addressing Market Evolution	Prudential Regulation	APRA Treasury	October 2012	Response to Submissions	
			October 2012	Release of new Prudential Standards	
			November 2012	Options Paper	21 (10 not public)
Infrastructure Finance and Funding Reform	Infrastructure Funding	Infrastructure Finance Working Group	April 2012	Final Report	
Infrastructure Debt Financing – Policy Options Consultation Paper	Infrastructure Funding	Infrastructure Australia	January 2013	Options Paper	

14.3 Recent Reforms Affecting the Financial Services Sector⁷⁷

Reform	Elements of reform	Date	Comment
Establishment of APRA and ASIC	<ul style="list-style-type: none"> • Act establishing ASIC and APRA • Changes to Banking Act 	1997(?)	
Superannuation	<ul style="list-style-type: none"> • Choice of Fund Legislation 	2005	
Liquidity assistance	<ul style="list-style-type: none"> • Increased use of long term Repos • Accept "self-securitisations" in repos • Term deposit auction facility 	October 2008	
Deposit guarantees	<ul style="list-style-type: none"> • Unlimited deposit guarantee 	12 Oct 2008	Response to GFC
	<ul style="list-style-type: none"> • Reduction of guarantee to \$1m cap uncharged, larger guarantee for a fee 	28 Nov 2008	
	<ul style="list-style-type: none"> • Commitment to permanent deposit guarantee up to \$1m 	2012(?)	
	<ul style="list-style-type: none"> • Guarantee Scheme for Large Deposits and Wholesale Funding 	Oct 2008 – 31/3/2010	
Residential Mortgage Backed Securities Market	<ul style="list-style-type: none"> • Government intervention via AOFM to support liquidity 	2010-12	
Superannuation	<ul style="list-style-type: none"> • MySuper • Stronger Super 	2012	Response to Cooper Review
Banking	<ul style="list-style-type: none"> • Banning exit fees • Covered bonds • Enhanced disclosure: inc one page KFS for mortgages • Price-signalling • Credit card reforms 	2010/11	Banking Package
Financial markets	<ul style="list-style-type: none"> • Introduction of competition in financial markets 	2011	Partly in response to Johnson Review
Insurance	<ul style="list-style-type: none"> • Standard definition of flood • Flood mapping initiative 	2012	Response to Qld Floods and Trowbridge Review
Credit Protection	<ul style="list-style-type: none"> • Phase 1 and 2 reforms 	2010-2013	
Tax treatment of foreign funds	<ul style="list-style-type: none"> • IMR elements 1, 2 and 3 • MIT withholding tax 	2011-12	Response to Johnson Review
Corporate Bonds	<ul style="list-style-type: none"> • Package of reforms 	2012-2013	

⁷⁷ Table based on compilation of reforms listed in (Brown et al, 2011)

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