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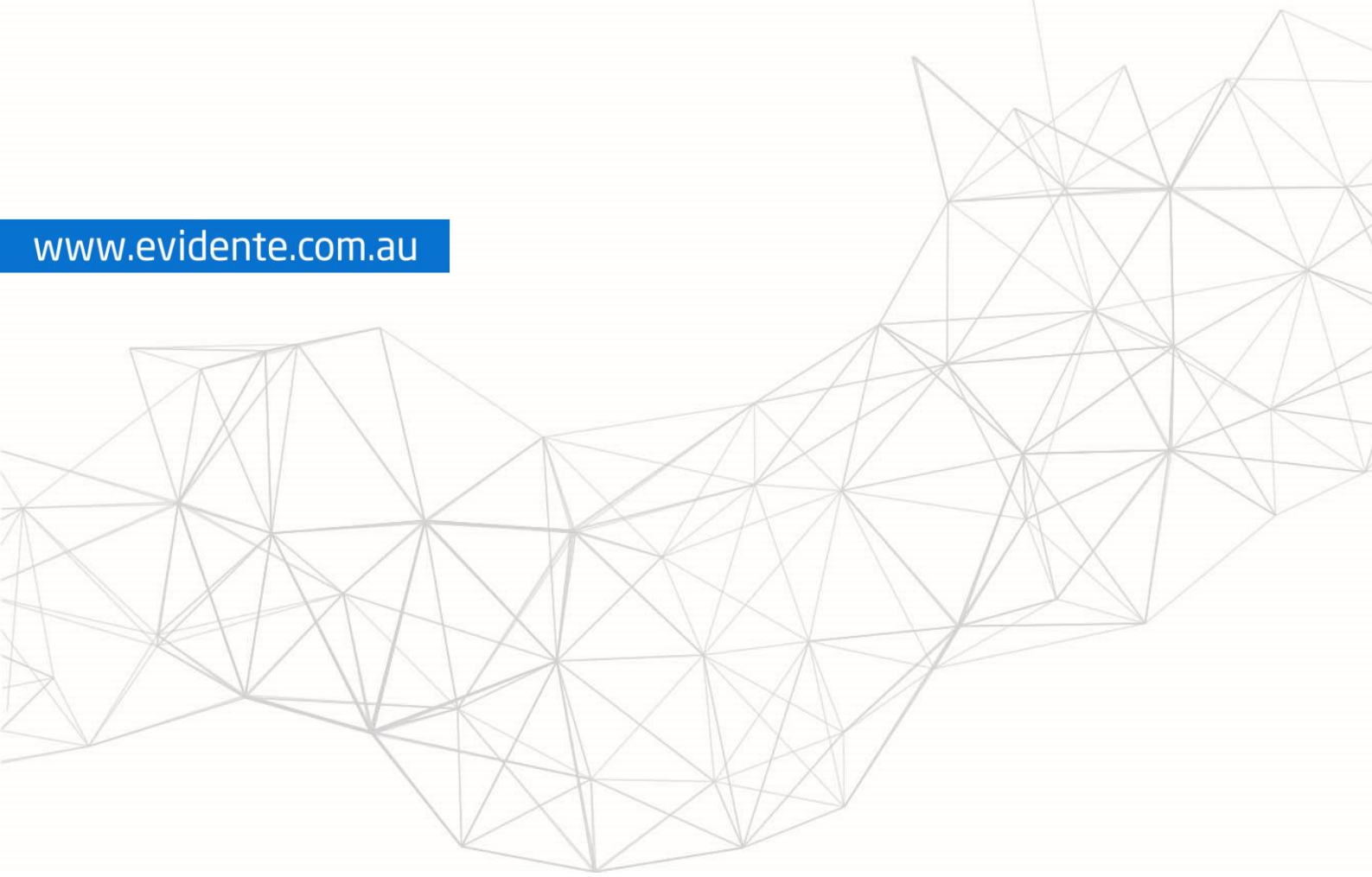

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The One That Got Away -
Still in Search of a Safe Financial System

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ılvatore Ferraro E: salvatore@evidente.com.au M: 0429 486 630 ABN: 917 012 88918Authorised Representative Number: 456976

The Financial System Inquiry (FSI) – headed by David Murray - is the third such inquiry in over three decades, following Campbell (1981) and Wallis (1998). A stocktake of the financial system is timely because of the growing complexity and size of Australia's financial sector relative to the broader economy. Further, the passage of over five years since the financial crisis provides an opportunity for policymakers to draw breath and better understand the key lessons from that episode.

The breadth and coverage of the FSI is far and wide and topics covered range from Australia's high superannuation fees, the rapid pace of technological advance and innovation in the provision of financial services, and the impact of population ageing on funding Australia's growth.

But the main area of interest to policymakers and market participants should be the chapter devoted to the stability of the financial system. Although Australia's financial system proved resilient during the financial crisis, the Reserve Bank (RBA) and Australian Prudential Regulatory Authority (APRA) would be cautious that the extended period of low interest rates in Australia and most developed countries does not encourage excessive financial risk taking as investors seek to juice up their returns by reaching for yield.

Moreover, the FSI acknowledges that introduction of an explicit deposit guarantee scheme during the crisis has exacerbated the too big to fail problem associated with moral hazard. This means that depositor protection encourages financial institutions to engage in excessively risky activities in the expectation that the government will bail out depositors in the event of another crisis.

Market participants should therefore welcome the news that the FSI has resisted calls for APRA to roll back its tougher capital requirements. In fact, the FSI highlights that the major banks' capital ratios are not excessively high by international standards. By various measures, their capital ratios rank either at or slightly below global peers and many other country prudential regulators – like APRA – are adopting the Basel 3 capital requirements ahead of schedule.

Nonetheless, the FSI has missed a rare opportunity to lay the foundation of increasing resilience of the financial system and reducing its future vulnerability by not proposing that the major banks hold significantly more capital. The debate on whether monetary policy or macro-prudential tools – such as the imposition of maximum loan to value ratios – represent the most effective means to promote financial stability, diminishes in importance if banks in Australia and around the world were forced to hold significantly more regulatory capital. The academic literature cited below shows that the welfare losses associated with managing a financial crisis are materially higher than if banks hold more capital, a point highlighted recently by RBA Governor, Glenn Stevens.

In addition to capital regulation and the depositor protection, this report examines some of the other key issues raised by the FSI, including vertical integration in wealth management, financial literacy, Australia's high level of superannuation fees and fund portability.

Rethinking capital regulation – Debunking the myth that equity is more expensive than debt

The research of banking and finance academics, Anat Admati and Peter Hellwig, suggests that bank capital ratios around the world remain too low. Thus, the key theme of their book, *The Bankers' New Clothes*, is that banks should be required to hold more equity. They conclude that the marginal benefits of raising regulatory capital or common equity that banks should hold in their liability mix – notably a safer financial system that is less vulnerable to crises of confidence - outweigh the marginal costs. In this section, I address the key questions below.

1. What is the key function of a bank?
2. What is capital regulation?
3. Why do banks hold dangerously low levels of capital?
4. Debunking the myth of expensive equity.

The key function of a bank: Maturity transformation

Consider the basic function of a bank as maturity transformation. A bank's liabilities include: common and preferred equity that it raises from shareholders, wholesale debt funding and customer deposits. A bank uses these funds to lend to businesses, households and governments. The loans that a bank writes are its assets.

There is a mismatch in maturity between a bank's assets and liabilities; its assets are typically long term and illiquid. There is no transparent price mechanism that reflects and conveys the market value of loans. In contrast, a bank's liabilities are shorter term and liquid; for instance, customer deposits are either at call or have a term of up to three years, while funds borrowed from wholesale debt markets have a similar short maturity.

The key function of a bank is to manage the mismatch in maturity between its assets and liabilities. It does so primarily by carefully evaluating prospective borrowers' ability to make their loan repayments. To this end, a bank might demand some form of collateral from the borrower. A mortgagee pays a minimum deposit or down-payment, while banks typically impose debt covenants on business borrowers that allow the bank to re-negotiate the terms of the loan if those covenants are breached.

Demystifying capital regulation

Capital regulation is concerned with a bank's mix of liabilities. In banking, capital refers to the amount of common equity raised from shareholders and used to fund a bank's lending activities. A bank's equity is its owners' stake in the bank's investments in the same way that when a person takes out a home loan, their down-payment represents their stake in the house.

Why would a prudential regulator wish to impose constraints on a bank's funding or liability mix? It gets back to the bank's delicate task of managing the maturity mismatch between its long dated illiquid assets (ie. loans) and short-term liquid liabilities. A bank that is heavily reliant on short-term funds borrowed from wholesale debt markets can easily become vulnerable to a crisis of confidence if a large enough

number of business and housing loans it has written have defaulted.

Capital regulation simply forces banks to have a minimum amount of common equity (relative to total assets or risk weighted assets) in their liability mix. A crisis of confidence is less likely if a bank has secured a larger share of its funding from equity or shareholder capital, which Admati and Hellwig describe as un-borrowed money or loss absorbing capital.

As residual claimants to a bank's cash flows, a bank can cease dividend payments to shareholders in the event that it gets into trouble. Common equity acts as a buffer or shock absorber in the same way that a large deposit or down-payment better shields a mortgagee in the event that the value of her house declines.

Bankers continue to propagate the myth that that capital regulation constrains a bank's ability to lend and make credit available. Capital requirements do not require banks to set aside capital to sit idly in their vaults; the need to have a minimum amount of common equity in their funding mix does not affect the asset side of a bank's balance sheet, notably its loans. A bank retains complete discretion as to whom it lends to, how much and on what terms.

Why banks hold so little capital

Why do banks hold dangerously low levels of capital? Even though five years have passed since the collapse of US investment bank, Lehman Brothers, banks' capital ratios remain woefully inadequate. Basel III has imposed more onerous capital requirements than its predecessors. Some national prudential regulators – including APRA - have imposed even higher capital ratios than recommended by Basel III.

Nonetheless, the leverage ratio (common equity to assets) for Australia's bank sector is less than 10%. That is, for every $100 worth of loans written by the sector, banks hold less than $10 of common equity. In contrast, the leverage ratio for non-financials sector listed on the ASX200 is around 50%, comparable to the resource sector.

It is puzzling that banks are only prepared to lend at significantly lower levels of gearing that they themselves enjoy. Banks that fund a greater share of their loans with common equity are safer and should be able to better withstand a run or a financial crisis.

There are two key reasons why banks hold so little equity relative to debt: deposit insurance, and fire sales of financial assets.

- Taxpayer funded guarantees on deposits for Authorised deposit taking institutions (ADIs) encourage these institutions to take on excessive risk. Such government guarantees allow banks to borrow funds from wholesale debt markets at cheaper rates. In the next section, I discuss that the strengthening and clarification of deposit insurance during the financial crisis has conditioned the community to expect continued strong future government support for depositors. This further weakens incentives for depositors to engage in monitoring banks' lending standards and exacerbates the moral

hazard problem of banks taking on too much risk when writing loans.

- The tendency to hold insufficient levels of common equity is not confined to financial institutions subject to depositor protection. Financial economists Andrei Shleifer and Robert Vishny, develop a model in which the fire sale of a financial asset associated with a bank shrinking its loans can impose negative externalities on other financial institutions that hold the same financial asset. The price of collateral can fall sharply in a fire sale, particularly if the asset in question or securities being dumped are illiquid. Fire sales can force other financial institutions to re-value their assets at artificially depressed prices, thus inflicting large aggregate losses and a potential crisis of confidence. The lure of illusory cheap debt funding is far too tempting for most bankers and trumps any systemic concerns that high leverage could undermine the stability of the financial system.

Is debt really cheaper than equity?

As noted above, bankers continue to propagate the view that higher capital ratios can only be met by shrinking assets or the loans they write. Bankers are loathe to raise equity to restore capital ratios because of the widely held view that equity is more expensive than debt.

A number of studies borrow from the Miller-Modigliani's irrelevance theorem - that under certain conditions financing does not matter for a firm's value – to debunk the view that debt is cheaper than equity. The key insight is that raising equity de-levers the firm, reducing the riskiness of the firm's slice of equity. Investors demand less compensation for holding the firm's equity and its cost of equity declines. Of course, the assumptions that underpin the result are not met in practice.

Specifically, the tax treatment for debt is more favourable than equity, leading to a lower after tax cost of debt; interest repayments are tax deductible while dividends are not. But various models show that the size of the tax benefit is not big enough to have a material effect; significantly higher capital requirements lead to only modest increases in lending rates. The FSI notes that Australia's dividend imputation system further reduces the tax advantage of debt.

If bankers are correct that equity is more expensive than debt because equity is more risky, then it is reasonable to expect a negative relationship between various measures of risk and a bank's leverage ratio; common equity/total assets. That is, as a bank is 'forced' to raise 'expensive' equity in its liability mix, its beta and volatility of stock returns should rise linearly. In contrast, the Miller-Modigliani theorem predicts a positive relationship; a higher capital ratio lowers a bank's leverage, the riskiness of its equity and the expected rate of return on equity.

The empirical evidence supports the implications of the MM theorem. There is a positive relationship between equity betas and leverage for the largest listed banks in the developed world, but the regression does not yield a statistically significant

coefficient on the leverage ratio. But the strongly positive relationship between the leverage ratio and absolute return volatilities provides stronger support for the MM theorem; the coefficient on the leverage ratio yields a t-statistic of 3.2, significant at the 1% level.

The FSI shows that based on various measures of capital, Australia's major banks at or slightly below the median of global peers in developed countries. Australia's banks get an assist from the (very) high share of mortgage lending in banks' assets. The Basel III framework assigns lower risk weightings to assets considered to be less risky, so mortgage lending attracts lower risk weights than business loans for instance.

From a macro-prudential perspective, the system of risk weightings encourages banks to favour writing housing over business loans. The high concentration of mortgage loans on the books of Australian banks might argue for an upward adjustment to those risk weights to better reflect the growing risk and size of negative externalities or flow on effects associated with a fire sale of mortgages if house prices decline or a bank is forced to shrink its mortgage book.

Depositor Protection

The model developed by Diamond and Dybvig (1983) in which a solvent but illiquid bank can fail, provides the rationale for why governments offer deposit insurance schemes.

A financial institution that has illiquid assets (ie. loans) funded from liquid liabilities (ie. customer deposits) is vulnerable to a deposit run in the event of a crisis of confidence, even when it is solvent. Panic amongst depositors causes them to rush to withdraw their funds to avoid being the last in the queue, even if they believe that the bank's assets are worth more than its liabilities.

By offering a credible pledge to insure customers' deposits, the government can help to reduce the likelihood of a self-fulfilling bank run. Of course, deposit insurance reduces depositors' incentives to engage in bank monitoring, in the knowledge that the government will bail out depositors in the event of a deposit run. And deposit insurance introduces moral hazard by encouraging banks to take on excessive risks.

In a global survey of deposit insurance schemes, Demigurc-Kunt and Kane (2002) show that the efficacy of such schemes is greatest when strong institutional, regulatory and supervisory settings are already in place. They argue that the evidence suggests that prudential regulation and supervision can help to mitigate any loss of market discipline associated with weaker private monitoring that stems from deposit insurance schemes. That is, deposit insurance shifts the burden of monitoring

the level of bank risk taking to the regulatory system.

The onus therefore falls to prudential regulators and supervisors to ensure that they have the systems, networks and processes in place to ensure that they can effectively carry out their monitoring activities on behalf of bank depositors and ultimately taxpayers.

Demigurc-Kunt and Kane (2002) warn that deposit insurance schemes that are introduced or strengthened during a bank crisis can further undermine market discipline and exacerbate the problem of moral hazard, and highlight the difficulty that governments face in scaling back public expectations of depositor protection following a crisis.

Against the backdrop of the 2008 financial crisis, the rationale for even stronger regulatory and supervisory function has become more compelling. Prior to the crisis, there already appeared to be widespread community support and confidence that the government would bail out depositors in the event of a bank failure or deposit run, even in the absence of an explicit deposit insurance scheme at the time (Davis, 2004).

It is reasonable to believe that public confidence in, and expectations surrounding depositor protection have further grown following the financial crisis. The Government introduced the Financial Claims Scheme in 2008, which represents explicit insurance for deposits up to $1 million per ADI. The cap was subsequently lowered to $250,000 in 2012, but the FSI notes that this level of protection remains high by international standards.

The international evidence suggests that when it comes to supervision of banks' risk taking activities, governments face two 'simple' choices. They can try to credibly offer no deposit insurance scheme and leave it to banks' creditors, shareholders and depositors to accept the burden and costs associated with monitoring banks' activities.

Or they can choose to have a system of deposit insurance, but give prudential regulators the authority to undertake credible monitoring and supervision of banks' risk taking activities, with a view to reducing the ability for banks to take on excessive levels of risk when it comes to writing loans and force banks to hold a minimum amount of equity capital.

Although the FSI discusses the high level of depositor protection in Australia and is seeking comment on whether to reduce the level of the threshold, I believe that the government cannot now credibly scale back depositor protection given the extent to which it was strengthened during the crisis.

There is good reason why APRA's focus has been on stability rather than competition. Indeed, in the wake of the financial crisis, there is a compelling rationale to further strengthen APRA's supervisory and monitoring powers.

Further, the performance, supervisory powers and benchmarking of APRA against other international regulators needs to take into account the cross sectional or country variation in deposit protection and the time variation in deposit protection during and since the crisis.

Vertical integration in wealth management

The FSI highlights the trend towards vertical integration in wealth management. The five largest platform providers account for 80% of primary planner relationships and financial planners have consolidated or moved in house to work directly for wealth management institutions.

The effect of vertical integration is to combine advice, distribution and funds management into a single business. The FSI argues that competition in wealth management remains focussed on securing distribution channels and improving product features, rather than reducing fees.

A number of factors have contributed to the vertical integration which are expected to continue. First, the investments in IT and regulatory costs associated with setting up distribution platforms are high. Second there are significant economies of scale associated with distribution platforms and the development of funds management products, which has encouraged consolidation. Third, a vertically integrated wealth management business is able to provide a holistic financial solution to retirees or those approaching retirement age with large superannuation balances.

Australia's high superannuation fees and fund portability

The issue of Australia's high superannuation fees clearly remains a top priority for policy makers. The RBA's submission to the FSI and the Grattan Institute's report, Super Sting, both draw attention to the fact although super fees have declined in recent years, they remain high by international standards.

The introduction of My Super in recent years to replace default super plans has been designed to stimulate competition in this space, by making available a vanilla, low cost, superannuation plan. The FSI acknowledges that it is too early to assess the efficacy of the My Super reforms in bringing down fees. My Super only replaced default super products for new accounts from 1 January 2014 and super funds have until 1 July 2017 to transfer members from existing default plans into a My Super account.

The FSI highlights a number of factors that have limited price competition in the provision of superannuation products, which has justified the 'nudge' approach to public policy implied by the My Super reforms. These include the fact that the industry remains highly fragmented (there are 300 large APRA regulated super funds), the growing level of vertical integration in wealth management, low financial literacy in the community which is associated with poor price awareness among consumers and the still high level of active investment management.

The high level of active investment management is to some extent associated

with the large allocation that Australians have to equities as an asset class. According to the OECD, the latest data available for 2012 shows that Australian pension funds have the second largest allocation to equities of over 45% (behind the United States only) among a sample of thirty countries. Active management tends to be more popular in equities than fixed interest, which would be contributing to Australia's high superannuation fees.

The FSI suggests that member portability might also help to explain high super fees. The introduction of Choice of Fund legislation in 2005 allows members to switch between funds and within a fund's own strategies. The FSI argues that portability has therefore increased the attractiveness of liquid asset classes (such as equities) and consequently pension funds' allocation to equities is probably too high. The FSI has sought comment on the prospect of reducing the flexibility that members have around fund portability.

Investment implications

The interim report of the FSI does little to change the favourable outlook for Australian banks. Although the tailwind of declining bad and doubtful debt charges is largely now past, the still low growth in nominal GDP and business credit, and strong asset quality for both businesses and households suggests that loan impairment charges are likely to lower for longer than many analysts project. While BDD charges for the majors remain well below the historical average (which spikes up during recessions), they are broadly in line with the historical median.

The RBA clearly remains reluctant to ease monetary policy further to boost animal spirits in the corporate sector. Consequently, the much awaited handover from mining capex to the non-mining sector continues to try the RBA's patience. With little prospect that the RBA will cut rates aggressively, the prospect of an investment cliff in mining in the next two years and persistently high Australian dollar suggests that nominal GDP growth will remain well below trend.

Trading conditions will remain difficult for many listed companies and subdued revenue growth will encourage firms to continue to trim costs aggressively to boost profitability, leading to a shortfall in aggregate demand, low wages growth and little inflationary pressure.

Against this backdrop, investors will continue to try to juice up their returns through the reach for yield; investing in stocks with large and sustainable dividend

yields, notably banks, large retailers and infrastructure stocks.

Although not new news, the interim report's proposals to stimulate fee competition in the provision of superannuation products suggests that policy makers are keen to see further reductions in fees. This represents a structural headwind for domestic asset managers, but they remain leveraged to the near term prospect of strong stock market returns reflecting solid EPS growth associated with the new cost and capital discipline embraced by the corporate sector.

Concluding remarks

The interim report of the FSI does not make recommendations and seeks comment on a large raft of options. Following what will be a six week period of engagement and consultation with stakeholders, the second round of public submissions are due in late August. The FSI is then set to deliver its final report and recommendations to the Government in November. Obviously, it is at the Government's discretion as to which recommendations it will take up.

It is welcome news that the FSI has resisted calls to lighten the regulatory regime that the banks and other ADIs are subject to, and highlights that the banks' capital ratios do not appear to be excessively high by international standards. Further, the FSI acknowledges (albeit briefly) that bank equity might not be more expensive than debt, to the extent holding more equity reduces the risk premium that banks pay on wholesale debt. And the FSI has sought comment on adopting a more conservative capital regime, by raising banks' capital requirements to be in line with the global median (which they're not far off from current levels).

Nonetheless, the FSI has missed a rare opportunity to promote financial stability and address the moral hazard associated with too big to fail by not proposing a significant hike in capital ratios for domestic banks considered to be systemically important.

The capital ratios of Australian banks – and most banks worldwide – remain too low. Forcing banks to hold significantly more loss absorbing capital would deliver a safer and more stable financial system, better protect taxpayers and make it easier for the RBA and APRA to manage systemic risk. While the evidence Anil Kashyap and others suggests that the costs of such action – notably higher lending rates – would be modest.

Given the risks associated with capital migrating to the shadow banking system if capital ratio requirements for ADIs are strengthened, Kashyap et al (2010) argue that financial institutions that do not benefit from deposit protection should be subject to greater oversight and supervision. The risk of a migration of capital to the shadow banking system is not a valid argument for a light handed regulatory approach to banks and other ADIs.

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Salvatore Ferraro ABN: 917 012 88918
E: salvatore@evidente.com.au M: +61 (0) 429 486 630
Authorised Representative Number: 456976