

# Submission to the Senate Economics Committee

## Bank Funding Guarantees

Sam Wylie  
Melbourne Business School  
University of Melbourne  
July 2009

### Summary

The commercial banking sector (more broadly depository institutions) is the most important part of the financial system for two reasons:

- i. Banks have a pivotal role in monetary policy, converting liquidity supplied by the RBA into credit for firms and households.
- ii. Banks are the conduit for liquidity to flow from the RBA to firms and households in a liquidity crisis.

Turning short term liquidity (deposits) into long term credit (loans) leaves banks critically exposed to 'runs' on the bank.

Deposit insurance solves two problems:

- i. It prevents bank 'runs' and stabilises the banking system.
- ii. It solves the adverse selection problem of depositors not knowing how to choose a safe bank.

However, deposit insurance creates a moral hazard problem: banks have an incentive to increase the riskiness of their assets and decrease their level of capital.

There are two solutions to the moral hazard problem created by deposit insurance:

- i. Monitor the bank's asset quality and risk taking carefully.
- ii. Insist that bank shareholders hold an adequate amount of capital (capital adequacy rules) to give the shareholders enough 'skin in the game'.

There is a fundamental deal between governments/central banks and commercial banks in every developed country. Banks get deposit insurance and access to unlimited central bank liquidity in a crisis. In return banks submit to detailed and intrusive examination of their assets and practices, and banks hold a minimum amount of capital which depends on the volume and riskiness of their assets. Deposit insurance is a central component of this fundamental deal.

Deposit insurance is a natural, optimal and permanent part of the financial system architecture in every country in the OECD for very good theoretical and practical reasons. It builds a firewall into the financial system that prevents large shocks to the banking system propagating to the household and business sectors.

Australia's rejection of deposit insurance, particularly after the Wallis Inquiry, was an extreme and unfounded position that was undone the first time it was seriously tested, in October 2008.

The Federal Government should guarantee all deposits raised in Australia by depository institutions that have APRA as their primary regulator. There is no need to charge for deposit insurance; the cost to banks of deposit insurance should be high levels of capital adequacy.

Much of the criticism of the introduction of deposit insurance in Australia simply exhibits a mis-understanding about the role of deposit insurance in the fundamental deal between governments/central banks and commercial banks. Cash management trusts and mortgage trusts do not have a central role in monetary policy or financial crisis management. They don't pay the price of heavy regulation and capital adequacy and they do not receive the benefits of deposit insurance and access to central bank liquidity. A guarantee of those assets would be completely unjustified.

Bank bond guarantees are neither a natural or a permanent part of the financial system. Banks issuing bonds to fund the making of loans has nothing to do with monetary policy; it is simply the turning of credit into credit.

The introduction of the bank bond guarantee in Australia in the period following the collapse of Lehman Brothers was an essential short term move that was mirrored around the world. It was especially important for Australia since our current account deficit is largely funded by bank bond issuance overseas. The US, UK, Germany and others have set a date of 31 December 2009, or earlier, for an end to bank bond guarantees and Australia should do the same.

Bank bond guarantees were introduced to ensure that the supply of credit did not fall during the GFC. There is nothing special about banks issuing bonds to fund lending. Finance companies and securitisation organisers do the same. If bank bonds are to be guaranteed there is no reason why the same protection should not be extended to AAA residential mortgage backed securities (RMBS). In fact, since the guarantee of RMBS does not create the same moral hazard problem that guaranteeing bank bonds creates, there is a case for guaranteeing RMBS, for an appropriate fee, even after the bank bond guarantee is ended.

## **Recommendations:**

1. All deposits in all authorised depository institutions (ADIs) that have APRA as their primary regulator should be guaranteed by the Federal Government. Deposit insurance should be a permanent component of Australia's financial system architecture.
2. No guarantee limit or fee should apply to deposit insurance. The cost of deposit insurance should be in terms of APRA limitations on risk taking activities and higher capital adequacy requirements.
3. An end date of 31 December 2009 or shortly thereafter should be set for the bank bond guarantee. The fee for the guarantee of new bonds should be steadily raised until the end date for the program.

4. The bond guarantee should be extended to AAA rated RMBS at least until the end of the bank bond guarantee.
5. Strengthen disclosure rules of cash management trusts, mortgage trusts and other investments in relation to redemption rules of the investment.
6. Create a symbol analogous to the FDIC symbol in the US that clearly shows whether an institution and/or product is guaranteed by the Federal Government.

## Discussion

The discussion of the terms of reference is given here in a Q&A format for ease of exposition.

### 1. Why do banks receive special support such as deposit insurance?

The commercial banking sector is more important to the proper functioning of the economy than any other part of the financial system. Banks have several special functions, including the running of the payments system, but two roles in particular justify the special treatment of banks.

- i. *Monetary policy* Banks play the pivotal role in monetary policy of converting liquidity (deposits) into credit (loans).
- ii. *Financial crises* Banks are the conduit through which liquidity flows from the central bank to households and firms in a financial crisis .

#### ***Banks' pivotal role in monetary policy***

##### *Liquidity to credit*

Banks convert liquidity into credit. They store liquidity for households, firms and others, in the form of liquid deposits, and then use those funds to make longer term loans. Banks have other crucial roles, but the liquidity-into-credit function is definitive. An organisation that funds loans without raising deposits is a “non-bank” or part of the shadow banking system.

Central banks would like to directly control the volume of credit in the economy. Unfortunately, they only control the volume of liquidity and must rely on banks to turn liquidity into credit. This reliance on banks is not a problem under normal circumstances. When the central bank wants to stimulate credit growth for increased consumption and investment it pumps liquidity into the banking system in the process of decreasing interest rates. In a well functioning banking system a central bank can inject liquidity into its banking system at will and see it reappear as credit.

##### *Liquidity to liquidity*

There are other institutions that store liquidity. Cash management trusts (CMTs), for instance, store payments liquidity for households, firms and governments and provide payments and transaction services that allow their customers to access and use that liquidity, just as banks do.

However, unlike banks CMTs do not make loans. Instead, they buy money market instruments and thereby transfer liquidity to Governments (treasury bills), to banks (bank bills), corporations (commercial paper), and securitisation vehicles (asset backed paper).

CMTs are channels for liquidity. They collect liquidity and pass it into the money market. They intermediate the supply and demand for liquidity, but they do not create credit. Only banks have one foot in the money markets and the other in the credit markets.

#### *Finance companies*

Likewise, there are other institutions that make loans. Finance companies, for instance, provide much of the riskiest credit in the economy in the form of high risk loans and leases to households and firms. Finance companies are channels for capital. They raise money by issuing bonds or equity, but they do not finance themselves by accessing the liquidity of deposits.

#### ***Distributing liquidity in a financial crisis***

As well as storing liquidity as deposits, banks are the main providers of payments liquidity in the form of credit lines for firms (loan facilities) and households (credit cards).

In a liquidity crisis the financial system is in danger of seizing up because many firms and households hoard liquidity. To ensure that there is sufficient liquidity in the system the central bank will pump liquidity into the commercial banks. The banks pass the liquidity on to firms and households by allowing them to draw down on loan facilities and credit cards.

The central bank needs to be sure that in a financial crisis of any magnitude the commercial banks remain sound so that liquidity can be passed through them to firms and households. The central bank is entirely dependent on the commercial banking system to carry liquidity to firms and households in a crisis.

## **2. Are bank deposits insured in other countries?**

Before the advent of the Global Financial Crisis (GFC) Australia and New Zealand were unique among the 30 countries in the OECD in not providing any explicit government guarantee of bank deposits. Australian households correctly assumed that the state and federal governments would bail-out depositors in failed depository institutions, especially large banks. Nonetheless, Australia was an outlier in its non provision of a deposit guarantee.

The establishment of the deposit guarantee in the turbulent period following the collapse of the Lehman Brothers investment bank in September 2008 brought Australia away from its extreme position of not providing a deposit guarantee to the internationally orthodox position of providing that insurance.

## **3. Are bank bonds guaranteed in other countries?**

Under normal circumstances there is no good reason for central governments to guarantee the bonds issued by the commercial banking sector. When banks issued bonds to finance loans they are simply doing what finance companies do -- converting credit into credit. This is not a pivotal function in monetary policy and poses no danger of a "run" on the bank.

Only in rare country specific financial crises have we seen OECD countries guarantee the bonds issued by their banking sector. However, between July 2007 and September 2008 securitisation markets shut down in many countries; especially the US, UK and Australia.

Credit from institutional investors, that had been flowing through the securitisation channel ceased to flow. Those economies became even more dependent than usual on the banking channel for the provision of credit.

After September 2008 even highly rated commercial banks could not access the credit markets at commercially viable rates. So, many OECD governments introduced temporary government guarantees of bank bonds.

#### *US Temporary Liquidity Guarantee (TLG) program*

In November 2008 the Federal US Deposit Insurance Commission (FDIC) introduced the TLG program for the issuance of bonds by any US bank that received deposit insurance. An expiry date of 31 October 2009 was set. The guarantee fee was set at 100 basis points (bp) for bonds of more than 1 year maturity. In April 2009 that rate was increased by 25 bp for all bonds and a further 25 bp for bonds of more than 3 years maturity with the intention of weaning US banks off government guaranteed debt. About \$US275 billion of bank bonds have been guaranteed which is much smaller as a proportion of GDP than the \$A100 billion of government guaranteed bonds issued by Australian banks.

#### *UK Credit Guarantee Scheme (CGS)*

The UK government introduced a similar scheme in late 2008. The UK credit guarantee scheme (CGS) charges a fee that varies across banks. The fee is 50 bp + 100% of the bank's average credit default swap spread from July 2007-July 2008. The CGS ends on 31 December 2009.

Governments around the world have set explicit end dates for their guarantees of bank bonds. Most schemes end on or before 31 December 2009. Unlike deposit insurance there is no intention to make the bond insurance plans permanent. They are an artefact of the GFC and will be wound up as the crisis passes.

#### **4. Are banks inherently unstable without deposit insurance?**

Banks store short term liquidity and provide long term credit. That means they make two inconsistent promises. They promise to return deposits at short notice but also promise not to demand the return of loans at short notice. If depositors lose confidence in the soundness of a bank, then they will demand the return of their deposits and without government assistance the bank will be unable to meet its promise to depositors.

Banks are inherently unstable as a natural consequence of performing the special role of creating credit from liquidity. Banks were not unstable in Australia before the introduction of deposit insurance because households assumed that bank deposits had an implicit government guarantee.

#### **5. What is demanded of banks in exchange for the special treatment they receive?**

Because banks are so central to the economy they are given a lot and a lot is asked of them, in every OECD country.

Banks are given:

- i. The protection against bank runs that is afforded by deposit insurance.
- ii. Access to unlimited central bank liquidity in a crisis.

Banks are required to:

- i. Submit to stringent examinations of their asset quality and risk management practices.
- ii. Hold a sufficient amount of capital (the Basel II capital adequacy requirements).

There is a fundamental bargain between governments/central banks and commercial banks. Governments solve the basic liquidity problem of banks by, firstly, insuring deposits to prevent runs on banks, and secondly being the lender of last resort when liquidity evaporates. Banks can then safely borrow short and lend long and earn the attendant spread between short rates and long rates. In return, banks maintain adequate buffers of capital to absorb credit shocks and make themselves an open book to the regulators.

## **6. What other types of investments are insured or guaranteed by central governments?**

Before the GFC began in July 2007 countries differed widely in their policy towards the provision of financial system guarantees. The difference in policy between the US and Australia was particularly stark. The US Congress and Administrations have for many years had a conscious policy of building ‘firewalls’ into the US economy to prevent large shocks to the economy from propagating through the financial system.

Three US government guarantees were particularly significant:

- i. The deposit guarantee provided by the Federal Deposit Insurance Commission (FDIC) to prevent shocks to the banking system from propagating through loss of deposits to firms and households.
- ii. The defined benefit pension guarantee provided by the Pension Benefits Guarantee Corporation (PBGC) to prevent shocks to the corporate sector propagating to households through the loss of corporate pension benefits.
- iii. The implicit guarantee provided to the mortgage pools of Fannie Mae and Freddie Mac to prevent shocks to the housing market propagating to the owners of mortgage backed securities.

Australia’s position is almost the opposite. The Wallis Inquiry report of 1997 took the position that financial system guarantees do more harm than good by making the beneficiaries of guarantees at best complacent.

## **7. What problems does deposit insurance solve?**

*Adverse selection*

The Federal Government provides deposit insurance for the following reasons.

- i. To eliminate the adverse selection problem of depositors

Without deposit insurance depositors would face an adverse selection problem in choosing a commercial bank. Most households and SMEs are incapable of discerning the risk of default by banks because they can’t easily observe or interpret the amount of capital held by banks or the riskiness of loan portfolios or risk management practices.

Without deposit insurance, when a household places deposits with a bank that offers the highest deposit interest rate, then the household has most likely chosen a bank that has the lowest amount of shareholder capital and riskiest loan portfolio (the bank that can afford the highest deposit rates). Being unable to differentiate the quality of banks the household is likely to make a *selection* from the competing banks that is *adverse* to the household. Deposits are essentially short term loans to banks, and lenders always face a degree of adverse selection.

Deposit insurance solves the adverse selection problem faced by the household but in turn creates a moral hazard problem for the Government as discussed below.

- ii. To stabilize deposits and prevent runs on banks.

Deposit insurance stabilises bank deposits by preventing panic driven runs on the banking system. The stability of bank deposits even in times of uncertainty allows banks to absorb the liquidity risk of others by providing lines of credit and loan guarantees.

## **8. What problems does deposit insurance create?**

- i. Moral hazard

The Government eliminates the adverse selection problem of depositors by insuring them against default by the bank. In doing so the Government creates a moral hazard problem for itself. The deposit insurance gives banks an incentive to make higher risk loans that have commensurately higher interest payments. Why?, because they are then betting with taxpayer's money. If the riskier loans are repaid the owners of the bank get the benefit. If not, and the banks assets cannot cover liabilities, then the Government must make up the shortfall.

Another way of looking at this is to recognize that deposit insurance is equivalent to the bank having an option to put the remaining assets of the bank to the Government in exchange for the funds to repay the depositors. The price of exercising this option is the assets of the bank. As with all options, the bank's put option is increasing in value with the volatility of the underlying asset. Increasing the riskiness of the bank's assets increases the value of the put option (the option to walk away from the liabilities and let the Government pick up the tab).

- ii. Distortions vis-a-vis savings products that are not covered by the guarantee scheme?

After the introduction of deposit insurance in Australia in October 2009 some investment funds froze redemption of their units. In particular, most mortgage trusts in Australia froze redemptions for periods of 3 months or more.

Apparently, investors in these mortgage trusts did not realise that they did not have an absolute right to liquidate (redeem) their units immediately. The unit holders thought that the mortgage trusts were like banks – taking short term, illiquid investments and making long term, illiquid loans. But mortgage trusts are not banks. They do not, and cannot, promise to meet withdrawals by all their investors at once because they hold illiquid assets. Moreover, unlike the banks they do not have access to unlimited liquidity from the central bank in a liquidity crisis.

A lack of disclosure is the main problem in the mortgage trust episode of late 2008. Many mortgage trust investors were not properly informed by their investment advisors or the mortgage trusts that redemptions could be frozen.

Mortgage trusts and the other investment vehicles that suffered redemption problems in the weeks following the collapse of Lehman Brothers are not part of the deal between the government and banks. They are not critical to the functioning of the economy. They are not subjected to capital adequacy requirements and they are not heavily examined by regulators. So, they do not receive a financial guarantee or access to RBA liquidity. If they wish to become part of the deal then they must become banks and accept the benefits and costs that go with that status.

## **9. How is the moral hazard problem of deposit insurance solved?**

Deposit insurance solves the adverse selection problem of depositors, but creates a moral hazard problem for the Government. Moral hazard exists where there is a conflict of interest between two parties and one party cannot observe the actions of the other party (there is information asymmetry). There are three approaches to solving any moral hazard problem, and all three approaches are used to mitigate moral hazard in banking.

### **i. Monitoring (reduce information asymmetry)**

This reduces the information asymmetry directly. In Australia banks are monitored by the Australian Prudential Regulation Authority. Regulatory compliance is a significant expense for banks of all sizes. Banks are rated by the regulators in terms of the quality of their loan portfolios and risk management practices.

### **ii. Risk sharing (align incentives of the parties)**

Risk sharing reduces the conflict of interest between the parties. The risk sharing between the government and banks comes in the form of bank equity. If bank loans start to go sour the shareholders of the firm must absorb the first losses through reduction in equity. Banks' decisions on the riskiness of their asset portfolio involves a trade off between the gains from exploiting the deposit-insurance put option and the potential loss of book equity and franchise value in the bank. The minimum amount of equity held by banks is set down by the Basel II capital adequacy accord.

### **iii. Carrot and stick**

In many countries the carrot-and-stick approach is taken in banking regulation. The carrot is that banking is highly profitable because entry to the industry is restricted by the regulator. The lack of competition ensures high returns on equity. The stick is that if the regulator finds that the bank has been acting against the interests of the national government, then the bank's licence is revoked. Australia has an open banking system which is not suitable for the carrot and stick approach to regulation.

## **10. Does the bank bond guarantee create any additional moral hazard problems?**

No, the moral hazard problems created by the guarantee of bank liabilities are the same whether they are deposit guarantees or bond guarantees.

Like deposit insurance the bank guarantee is helping to solve an adverse selection problem. Investors may refuse to buy bank bonds if the information asymmetry between banks and investors becomes too large – after the Lehman Brothers collapse investors could not determine which banks were safe. But bond buyers are sophisticated investors and hence the adverse selection problem in the bank bond market is a temporary one, specific to the crisis. In contrast the adverse selection problems solved by deposit insurance are permanent, and so deposit insurance should be permanent.

### **11. How much should be insured per account?**

There is a significant problem with charging large deposits for a government guarantee. If the deposit charge is significant then those funds will be held outside the banking system in normal times when the financial system is highly stable. They might be held in cash management trusts, for instance. As a crisis develops the funds will be transferred into the banking system. So, the mobile funds will be well protected but they will pay little for that protection since they are in the banking system for only a small part of the cycle. Funds that are permanently parked in the banking system will foot the bill for deposit insurance.

There is really no need to limit the size of deposits that are guaranteed, or to charge for a deposit guarantee. The cost of the guarantee should appear in higher capital adequacy requirements. If a bank raises an extra \$1 billion in deposits and makes risky loans with those extra funds, then the bank will have to hold a larger buffer of shareholder capital. The more the bank puts the government at risk, by making risky loans, the more shareholder capital the bank must hold. The cost of equity capital is high and so the bank bears the cost of increased insurance.

It is important that depositors believe that in the event of collapse of their bank, they will receive 100% of their deposits in a timely manner. A 90% guarantee can still lead to a bank run as demonstrated by the run on Northern Rock in 2007.

### **12. How will the deposit guarantee and bond guarantee affect interest rates?**

Australia has for many years run large current account deficits. In recent years those deficits have been largely funded by Australian banks issuing bonds overseas and bringing the funds raised back to Australia.

A key question in relation to the bond guarantees is whether Australia's largest banks can continue to rapidly increase their levels of off-shore liabilities without a bond guarantee. If the guarantee was ended (as it should be) and the cost of bond issuance to Australian banks rose significantly, then bank lending rates would increase.

However, it seems likely that as the GFC abates banks will be able to issue bonds at commercially viable yields without the Federal Government guarantee.

### **13. Should bond guarantees be extended to RMBS?**

The competitive position of the four major banks in Australian banking has improved substantially during the GFC. The provision of the bank bond guarantee is a part of that improvement. With the guarantee and their AA ratings in hand the large banks are able to

access the global bond markets in a way that the smaller ADIs and the securitisation organisers cannot.

The Federal Government has chosen to guarantee the bonds of banks but not the bonds of securitisation trusts. In terms of the stability of the financial system why is it better for banks to issue bonds to fund housing loans than for securitisation vehicles to issue bonds to fund housing loans?

Converting liquidity into credit is a special role of banks and banks have a special relationship with the government/central bank because of that. But there is nothing special about converting credit into credit. There is no good reason why the Federal Government should guarantee bonds issued by AA rated banks and not guarantee the AAA rated bonds issued by mortgage securitisation trusts.

The closure of the securitisation channel in the GFC has substantially reduced the level of competition in housing finance. The Government's asymmetric treatment of banks and securitisation organisers in the provision of funding guarantees has contributed to loss of competition in the market.

Dr Sam Wylie  
Senior Fellow  
Melbourne Business School

---