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Study of Financial System Guarantees C/- Department of the Treasury Langton Crescent PARKES ACT 2600 AUSTRALIA

Dear Sir/Madam,

Submission to the financial sector guarantees inquiry

I am currently studying in the doctoral program at the economics faculty with the University of Toulouse 1, France. I was an employee of the Australian Prudential Regulation Authority until 2002, when I left the organisation to pursue further studies in the economics of regulation. My specialisations here include the Economics of Information and Incentives as well as Industrial Organisation, and so I welcome this opportunity to contribute to policy debate on regulation in Australia.

One of the most significant factors in any introduction of an explicit guarantee over financial claims is the effect on the incentives of participants. I hope that by offering some perspectives from contemporary economic theory in this area, this submission can paint a clearer picture of the otherwise complicated incentive relationships present in this context

Sincerely,

Craig R Malam Toulouse, France

Introduction

The aim of this submission is to provide some brief observations on the policy questions relating to the potential introduction of a limited explicit guarantee scheme in Australia, as indicated in the Treasury's Government Discussion Paper, May 2004.

Financial Services may be considered as similar to any other "experience good" in an economy, which generally requires some form of monitoring and market discipline in order for the market to exist. One view of prudential regulation is that it is justified in addressing a market failure that is the result of certain liability holders' inability to provide adequate monitoring and market discipline to support a market of a certain size. When considered in this framework, the relative likelihood of benefits from the introduction of an explicit guarantee ("FSG") can be more clearly seen, since the conditions under which certain incentive effects from a guarantee may (or may not) exist can be critically appraised. The framework also provides an explanation for widespread perceptions of the existence of an implicit guarantee, as well as suggests a general design principle under which current incentives can remain unperturbed under a guarantee.

While this submission will be based largely on theory (but non-technical), I will attempt to draw out only the conclusions from this theory that could be applicable in this context. I will discuss the incentives thought to exist for each category of stakeholders who could be affected by the introduction of an explicit guarantee. The aim is only to support the policy conclusions provided here, and so is of course not intended to be a complete coverage of the theory.

The structure of this submission is as follows:

1. The Incentives of Participants – Moving to an Explicit Guarantee

Moral Hazard – The Economic Definition Managers Regulators Liability Holders

2. Alternative Policy Responses

Caveat Emptor
Case by Case
Limited Explicit Guarantee

- 3. Design of a Limited Explicit Guarantee
- 4. Governance Arrangements
- 5. Conclusions

1. The Incentives of Participants – Moving to an Explicit Guarantee

Moral Hazard – The Economic Definition

The term "Moral Hazard" as used by economists, has a broader interpretation than as used in the insurance profession, which is mainly the manner the term is used throughout the Davis report and the Treasury's discussion paper. The economic definition includes situations where even only the *potential* exists for adverse incentives, not only situations where these lead to adverse outcomes. While the economic definition is somewhat less precise, encompassing a larger number of situations, it allows a more careful analysis of the incentive effects in economic relationships where incentives matter. Crucially, the definition also allows one to understand the mechanism by which moral hazard, in the insurance sense, can occur.

To take an insurance example; a person may be encouraged to choose adverse behaviours when fully insured, such as taking additional risks or not taking proper care (parking an insured car in a dangerous place, not locking the doors). This would likely occur if the insured does not have to pay some portion of the damages himself, so an insurer usually requires a deductible, or excess. By not fully insuring the individual, the potential for moral hazard is ameliorated, and the act of insuring the person (hopefully) does not cause them to take additional risks (or reduce care). In contrast to this, the economic definition of moral hazard is just that there exist some actions that can be taken by one party in a relationship (the owner of the car), that cannot be seen or verified by the other party (the insurer), but which affect the welfare of the second party. Moral hazard is then said to exist on the actions of one of economic agents, because those actions are "hidden" from the party whose welfare is affected. This is irrespective of whether "bad" incentives have been provided to the first party, which is generally the sense in which the word is used in the insurance profession.

Another non-insurance example is an employment contract, where an employee's "effort" on the job can never be fully verified or monitored by the employer. The benefit from the relationship to the employer is clearly effected by the employee's choice of effort. Economists view some of the activities undertaken by agents in an economy as solutions to this "problem". Here, the employer will prefer to base the worker's remuneration on the results of the worker's effort, rather than the effort its self (which is harder to observe). In the previous example, the solution is for the insurer to not fully insure the individual, making them pay a deductible.

These solutions to the "hidden action" problem are more efficient; in the insurance example, the solution chosen reflects the value of trade between the insurance company and insured individual, which is not large enough to justify constant monitoring of where the person parks the car (indeed it may not be even legally possible). Without a way of getting around the information problem, this market does not exist. This and other goods where moral hazard exists are often called "experience goods" (and/or services). The buyer of such a good for example, is unable to perfectly monitor the actions to be undertaken by the seller under the

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¹ These solutions are called "second best" solutions in this literature to emphasise their relative difference to other economic goods where information is not a problem.

contract (for insurance it was the buyer who was not monitored). Some examples are medical services, the mechanical car repairs industry, or even the restaurant industry. Market based devices such as guarantees, certification by a third party, and repeat purchases, are solutions to the moral hazard problem in these markets.

The underlying problem is the same as in the insurance example where it was the buyer's actions that could not be seen. Monitoring is required, but other feasible solutions exist such as reducing the extent of the coverage (requiring the excess). When moral hazard exists over the actions of the sellers, monitoring is more often the solution observed, but mechanisms similar to the deductible also exist². Monitoring by third parties (government and non-government) is more often a solution in these markets when a deductible cannot be required, and especially when economies of scale exist in the monitoring technology, such as restaurant guides or ratings agencies.

The Incentives of Participants

When the market for financial services is considered among other experience goods, one economic justification for specific intervention in the form of prudential regulation may be that a form of market failure exists. This justification for prudential regulation is related to the incentives of buyers and sellers in this market, and so can also suggest likely incentive effects from implementing an FSG. This modelling also suggests some principles for defining appropriate limits to a scheme's coverage. I will consider the incentives of three simplified types of stakeholders in this framework; managers (of financial services firms), regulator and liability holders (depositors/policyholders).³

Managers

Moral hazard is generally accepted to be a central economic phenomenon in the financial services industry, where the day-to-day actions of managers of financial institutions can never be perfectly monitored by the buyers of those services. Indeed moral hazard is a concept employed by many economists to understand the more important economic functions banks perform in an economy⁴. Like many experience goods, the market discipline observed in the financial services industry corresponds to "repeated purchases", while self-regulating standards bodies or private ratings agencies obviously correspond to "certification" and "monitoring services" solutions⁵.

This approach to modelling financial intermediation, taken by Bryant (1980) and then Diamond and Dybvig (1983), spawned a considerable literature seeking to explain the existence and usefulness of financial intermediaries according to this underlying information asymmetry. The theory has become well known; if banking can be

² Requiring a deductible amounts to subjecting the Agent with hidden actions to some risk. Sellers of goods subject to moral hazard are essentially doing this when they offer a "money back guarantee."

³ The other important class of stakeholders is of course shareholders. However the main concern of this submission is with prudential regulation and the introduction of a financial sector guarantee, which does not alter the incentives of managers with respect to shareholders. Therefore, we can consider the effects for managers in relation to others, as also being with respect to shareholders.

⁴ An extensive treatment of this and other approaches to understanding financial intermediation is given in Freixas and Rochet, 1997.

⁵ Once designed, any incentive scheme is called a "second best" solution in this literature, to contrast with the (hypothetical) "first best" solution associated with perfect (symmetric) information or monitoring.

considered primarily as a liquidity transformation function, then when the actions of managers can not be monitored (there is moral hazard), fully insuring their liabilities and taking away any market discipline in the form of pricing will lead them to choose the riskier assets in which to invest. Many suggest that this was a major contributing factor in the so-called "savings and loans debacle", experienced in the US in the 1980's.

Whenever implicit or explicit guarantees exist over any commitments of a firm the managers become in some senses "insured". This is because, like in the insurance example one way create incentives for managers to act in the best interests of liability holders is not to fully insure their actions by charging them a deductible. However in a similar way to other experience goods, monitoring and market discipline are also required to overcome the moral hazard problem since the deductible alone does not always ameliorate the problem⁶. As long as it is in the interests of managers to do so, a lack of adequate market discipline or monitoring may provide incentives to choose actions that are not in the best interest of liability holders.⁷ Like in other markets for experience goods, the need for monitoring is because the actions of sellers can never be fully "uninsured" by charging a deductible, so that monitoring and market discipline are required.

The underlying moral hazard problem (in the economic sense) is unchanged, since it remains true under any guarantee over the liabilities that the managers' actions cannot be monitored. What causes the potentially adverse incentives is not the guarantee, but any accompanying decrease in necessary monitoring and market discipline. When monitoring and market discipline are maintained, such a guarantee only represents a transfer of liability from the original liability holder to the guarantee fund. For the incentives of the managers of financial institutions, it is only the absence (or decrease) in these activities with respect to any class of liabilities that matters.

The effect of an FSG on the incentives of managers of financial intermediaries therefore depends on the level of such activities presently conducted with respect to that class of liabilities, and any changes that are brought about by an FSG. The importance of the pricing of an explicit guarantee (representing market discipline for managers) is a point emphasised in the Davis report, and I do not offer anything further here. From the perspective of the modelling of incentives discussed here, all that matters for economic efficiency upon introduction of an explicit guarantee is that an efficient level of discipline and monitoring be conducted. The level of monitoring and market discipline required in order to support a given sized market should be determined by the characteristics of the market for what is essentially an experience good.

⁷ The ways in which this may occur obviously depend on how the managers' objective differs from that of liability holders (which of course can include shareholders). Some models assume that managers can enjoy private consumption of perquisites, for example easy loans to friends etc, while others assume that the managers' objectives differ from liability holders just in terms of risk appetite. It is enough to note here that managers' objectives would likely differ in at least *some* regards from those of liability holders, so that for all classes some form of monitoring/market discipline is always required.

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⁶ Profit linked performance payments are essentially the same as the deductible in the insurance example, however it should be clear that this does not completely ameliorate the moral hazard problem and some monitoring is required. Usually there is scope for some actions that may not affect profits noticeably, and so some monitoring is necessary.

Regulator

As mentioned above, theory that supports government intervention in the form of prudential regulation asserts that a type of market failure may exist for certain classes of liability holders. This theory suggests that in the end it may be more efficient for the prudential regulator to conduct monitoring and market discipline as "delegated monitor" on behalf of certain liability holders (see Dewatripont and Tirole (1994). This theory is linked to the incentive relationships among stakeholders, and therefore offers an important perspective on the likely incentive effects from introducing an explicit guarantee. In order to understand the possible incentive relationships present, it is necessary to see under what conditions a market failure may exist that gives rise to prudential regulation.

While the justification for prudential regulation in financial services remains an evolving subject, two reasons are generally identified in the literature: the presence of informational asymmetries (at least one of which is moral hazard), and for banking especially, the systemic importance of the sector. While the first factor is also a justification for other forms of regulation in other industries, the effect that moral hazard has specifically for financial intermediation is somewhat unique from other industries. The second factor perhaps "amplifies" the importance of prudential regulation to most developed economies, and together these factors have led to financial regulation being considered somewhat more "special" 8.

Leaving to one side the systemic importance of the sector, the way in which informational asymmetries affect this market has important implications for incentive relationships. The normal activities required in markets in experience goods, such as monitoring, certification, and market discipline, are made more complicated in the case of financial services because the majority of liability holders of financial firms are also their customers, who are generally widely dispersed and uninformed. This fact gives rise to additional specific problems in this sector, and is generally understood to be one of the main reasons governments have adopted some form of prudential regulation (noted in Chapter 4 of the Davis report). These characteristics of liability holders of most prudentially regulated firms can be seen to be the cause of two sources of market failure: the public good nature of monitoring, and coordination failures that occur in exerting effective discipline.

The perception of a higher "intensity of promise", first identified as a guiding principle in the Financial Sector Inquiry, can also be seen as reflecting the relatively higher information imbalance between buyer and seller in this and similar markets. The scale and scope of unobserved actions of sellers in these markets is relatively more than in other markets for experience goods, such as restaurant meals or mechanical repairs. In the case of medical services for example, the intensity of promise reflects a very real requirement for a higher degree of "faith" that the seller will carry out the tasks required. Such very high monitoring costs rule out individual monitoring as a potential solution to the moral hazard problem for these markets. Increasing returns to scale in monitoring technology makes third party certification viable, and such solutions are observed in many countries in the case of both financial intermediation and medical services. However, in most countries the public good nature of the certification provided by such bodies prevent private sector organisations emerging, since certain users of the monitoring services cannot be excluded (or is not

⁸ See for example Dewatripont and Tirole (1994), or for a specific analysis classifying a range of justifications in a general public regulation setting, see Freixas and Rochet 2nd Edn, forthcoming.

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politically feasible). The existence of government certification and monitoring bodies in markets where there is a high intensity of promise (like a prudential regulator) as opposed to private/market based solutions, therefore has more to do with the public good nature of such certification, rather than the public perception of a higher intensity of promise per se.

Prudential regulation is separated from other forms of intervention not only because of the higher intensity of promise attached to the product, but also because of the coordination failure that can occur among liability holders. The regulation of other services for which a higher intensity of promise is attached (such as medical services) does not specifically serve this additional need. The source of these potential coordination failures can most clearly seen in the banking models of Bryant (1980) and Diamond and Dybvig (1983). In those models, a coordination failure in exerting market discipline increases the instability in banking. Similar coordination failures can occur among liability holders in the market for financial services more generally, where collective action problems more often result in too little or insufficient monitoring. The associated instability in the markets for these financial services is usually the reason that has lead governments to introduce some forms of prudential regulation.⁹

Also specific to financial intermediation, is that the relatively large information imbalance and collective action problems do not exist for all buyers. This is because institutional and large investors often obtain sufficient economies of scope and or scale in monitoring, and therefore the "intensity of promise" is lower for these buyers (there is simply less of an information imbalance). In addition, the free rider problem is less likely to effect institutional or professional buyers in wholesale markets, since their size relative to other buyers is large. This explains why private sector solutions are often feasible for these buyers, and why this monitoring is not a public good.

Taken all together, this brief review of the theory suggests that the required monitoring and market discipline of managers cannot be effectively conducted by certain liability holders due to very high monitoring costs, and because coordination failures prevent effective market discipline. The public good aspect to effective monitoring also limits the potential for a private sector solution (monitors) for these liability holders, and coordination failures may mean that some market discipline activities are not effectively available to liability holders. The prudential regulator's role is then to act as "delegated monitor" on behalf of this class of liability holders, conducting more effective monitoring and market discipline.

Depositors/Policyholders

Under this modelling of prudential regulator as "delegated monitor" to widely dispersed and uninformed liability holders, it is also possible to consider the moral hazard that exists over the actions of these liability holders once their liability claims are explicitly or implicitly guaranteed. Liability holders may choose to undertake less or more monitoring and market discipline, actions that cannot be observed by the

explaining a wider range of effects from regulation is somewhat limited.

⁹ Another theory is that prudential regulation is introduced to ensure that a certain level of quality is maintained in the markets for these services, where the "natural" level of monitoring and market discipline from liability holders would lead to adverse selection. However, this modelling ignores the effect that prudential regulation can have on existing players, and instead assumes that regulation merely encourages entry and exit of different types. While this may also occur, the scope for

regulator, but which obviously affect the objectives of the regulator. This is one of the senses in which the Davis report (Ch 3) considers the potential for moral hazard if an explicit guarantee were to be introduced.

However under the framework described so far, the existence of prudential regulation is justified on the basis that monitoring costs may be either too high or market discipline ineffective for certain liability holders. The existence of an implicit guarantee in this modelling may reflect a necessary reality that due to ineffective market discipline, such a guarantee provides the only incentive *not* to attempt some forms of market discipline. Therefore a key factor in the potential incentive effects from an explicit guarantee, and in any design principles that ensure proper incentives are provided, is determining which liability holders may not have access to monitoring and to adequate market discipline.

An alternative view is that the costs of monitoring are in fact not too high for these liability holders, and that the level of monitoring and market discipline observed is actually the result of reduced incentives to perform these tasks - a result of the existence of prudential regulation. Under this scenario, it may be that the prudential regulator is "crowding out" such activities from consumers and consequentially supports the perception that an implicit guarantee exists. This view implies that without the regulator, a more efficient level of monitoring or market disciplining activities might be performed by these liability holders, and in a reasonably coordinated and effective way. However, given that it is likely economies of scale exist in at least some monitoring activities (that have public good characteristics), there must be some monitoring activities that are more efficiently undertaken by the regulator, and for which a larger market will be supported.

A distinction between the scenarios of "delegated monitoring" and "crowded out incentives" can therefore be drawn, in terms of the composition of relevant actions that are available to liability holders. If the situation is more like delegated monitoring, then for some liability holders the set of available actions is less than what is required, either because costs are too high or because these actions would be ineffective. If incentives are being crowded out, then there may be other actions available to liability holders that are not being chosen, so the set of available actions to choose from is larger. This distinction is important since the potential incentive effects from introducing an FSG may only work over a given set of available actions from which economic agents may feasibly choose.

If we do not observe certain activities being conducted then it is either because there are incentives not to choose them (if an implicit guarantee exists), or they are not available. In either case, the effect of introducing an explicit guarantee is neutral for incentives if the extent of the explicit guarantee is the same as that of the initial implicit guarantee¹⁰. A decrease in the extent of the guarantee only matters for incentives if the implicit guarantee is currently "crowding out" incentives to choose monitoring activities, causing such liability holders to undertake more monitoring. An increase in the guarantee only matters if it begins to crowd out monitoring activities that are presently conducted.

The other scenario of no implicit guarantee can likely be ruled out, given the level of monitoring and market conduct that is observed in the presence of a prudential regulator. If the level of monitoring currently conducted by liability holders targeted

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¹⁰ This could be quantified simply as a probability of default perceived by liability holders.

under the prudential regime is less than what would be effective without a regulator, it must be that either that an implicit guarantee exists, or that some monitoring and market discipline activities are not available to consumers¹¹. If the existence of a regulator is justified as more efficient, then the assertion that no implicit guarantee exists could simply be non-credible. This is supported simply if liability holders recognise that monitoring is conducted on their behalf. On the other hand, if that assertion were credible, then the current level of monitoring or market discipline must reflect the fact that some activities are not available to liability holders. It is simply more likely that the current level of monitoring and market discipline by these liability holders is either the result of an implicit guarantee providing incentives to choose less monitoring, or is the result of such actions not generally being available to these liability holders.

The existence of an implicit guarantee is also somewhat unavoidable when to be effective, liability holders must believe the regulator is conducting monitoring on their behalf. This is because such activities overtaken by the regulator include some that may otherwise cause instability, such as bank runs. The existence of an implicit guarantee in this respect can then be seen to act as an incentive *not* to choose monitoring and market conduct activities that can cause instability. It should be noted that a lower relative tolerance for failure in this sector, as pointed out in Chapter 3 of the Davis report, might therefore be consistent with the proper functioning of the prudential regulation "solution" in this market¹².

In the end the requirements of the implicit guarantee to be efficient are that liability holders do not refrain from choosing further monitoring activities, if they are available and effective, but for remaining liability holders the implicit guarantee must be such that they do refrain from some. This fact remains at the heart of any potential for an explicit guarantee to provide better incentives, since determining the extent of coverage to certain liability holders is obviously easier if made explicit.

2. Alternative Policy Responses

Caveat Emptor

The Caveat Emptor approach involves no guarantee being extended to liability holders, and effectively places all responsibility for the conduct of market discipline and monitoring with all liability holders.

As the Davis report points out, it may be questionable whether depositors and policyholders targeted by the prudential regime possess the sophistication or

¹¹ Unless closer monitoring and market discipline conducted by wholesale investors is higher than necessary, it would seem then that the level of monitoring and market discipline by retail customers is less than what is required (rather than the other way around).

Whether enhanced by past government interventions, or a deepening of Australians' involvement with the financial services sector, the perception of an implicit guarantee over deposits at prudentially supervised banks is arguably one reason for Australia's relatively stable banking history. The problems for smaller liability holders outlined above which serve to justify intervention, are also the sources of instability in the banking models such as Bryant (1980) and Diamond and Dybvig (1983), and are among the main justifications for deposit insurance in banking (see Freixas and Rochet 1997). This view asserts that a greater degree of certainty must be provided in order to provide the incentives for liability holders to reduce monitoring, since it is the uncoordinated and uninformed efforts at monitoring and market discipline that cause such instability.

information gathering capacity to perform these tasks. As additionally noted here, the coordination problems and public good quality of effective monitoring indicate this policy response may not support the current market. This is because without an implicit guarantee, if monitoring costs are too high for some liability holders only a smaller market could be supported. Ineffective coordination could also mean such a market could experience greater instability.

On the other hand, since this policy involves essentially removing the implicit guarantee, for liability holders who have additional monitoring available to them, such a policy may cause them to choose more (efficient) monitoring.

Case by Case

As pointed out in the Davis report, the benefits from this approach include additional flexibility in dealing with different kinds of financial failures, as well as avoiding the possibility that liability holders who would otherwise have conducted effective monitoring and market discipline, are not given incentives to reduce these activities.

As suggested above, the theory discussed here suggests this potential downside only applies if liability holders currently conduct adequate monitoring, and then only if the move to an explicit guarantee causes them to choose less monitoring activities. As noted above, this implication simply seems unlikely given what is generally observed among liability holders targeted by the prudential regime.

Limited Explicit Guarantee

As pointed out above and in the Davis report, a potential benefit from the introduction of explicit guarantees could be to sharpen the incentives of liability holders not currently conducting effective monitoring activities, but for whom such actions are available. The economies of scope and/or scale in monitoring technologies along with smaller free rider problems permit more sophisticated liability holders access to effective monitoring services. These liability holders can also better coordinate market discipline activities. The existence of an implicit guarantee makes it possible these liability holders may not be choosing an efficient level of monitoring and market discipline activities. If the move to an explicit guarantee removes these classes of liabilities from those thought covered by the guarantee, then it could serve to induce more monitoring by these liability holders. The classes of liabilities that should be included under the explicit guarantee should therefore only be those where the necessary monitoring activities (for the incentives of managers) are not feasible to the liability holders, either because they are too costly and such monitoring is a public good, or because monitoring and market discipline would be too uncoordinated and lead to instability.

As the Davis report makes clear, effective pricing under a limited explicit guarantee is essential to ameliorating the potential for additional risk taking on the part of managers of financial institutions (and reduce the implicit subsidy paid to institutions choosing higher risk). If the efficient solution to a lack of monitoring and market discipline on the part of certain classes of liability holders is for the regulator to assume the role of delegated monitor, then without adequate risk based pricing the accompanying market discipline associated with the transfer of liabilities (implicit or

explicit) is missing.¹³ The ability to improve the regulatory intervention in this way is clearly an additional benefit from adopting an explicit guarantee. As pointed out in the Davis report, remaining under an implicit guarantee may be causing both liability holders for whom monitoring and market discipline is feasible, as well as riskier institutions, to receive an economic subsidy from the current arrangements. As long as the pricing of such a guarantee is more successful than is presently the case, then the effect will be to decrease such subsidies.

3. Design of a Limited Explicit Guarantee

As already mentioned, this modelling of prudential regulator as delegated monitor suggest that one guiding principle in the type and degree of regulation in financial services might be the informational requirements of claims. Dewatripont and Tirole (1993) suggest that a "pyramid of delegated monitoring" may be traced out that indicates the levels of regulatory intervention required according to the degree of information asymmetry between buyers and sellers in the market. Under this modelling, disclosure and market conduct rules reflect a lesser need for intervention in wholesale markets, whereas actual monitoring and licensing in retail markets reflects a greater information imbalance there.

As outlined above, this modelling suggests that an important factor in designing an explicit guarantee should be the extent of available monitoring and disciplinary action available to the different classes of liability holders. In a similar way as Dewatripont and Tirole's pyramid, the extent of coverage across and within various classes of liabilities under such a scheme should generally reflect the underlying relationship between monitoring required on specific products, as well as the relative ability of claim holders to perform that monitoring. Such a design principal is both economically efficient and decreases the likelihood of introducing negative incentive effects.

4. Governance and Regulatory Arrangements

The Davis report notes some potential conflicts of interest associated with locating the administration of a guarantee scheme within the prudential regulator, which the report claims could distort the regulator's incentives to choose efficient foreclosure. The report notes that this may occur because systemic concerns may cause the regulator to take a different approach than cost minimisation with respect to failing institutions. Given this tension would also exist if the tasks of scheme administration and monitoring were separate, the source of incentives toward excessive forebearance specifically due to co-locating these functions seems unclear. While the regulator's ability to choose forebearance maybe encouraged by the existence of an insurance fund, these incentive effects would not seems altered specifically by separating the functions. The moral hazard existing over this action choice by the regulator may simply require more specific attention in the governance arrangements of such an insurance fund. Similarly, any potential conflict that could be created by a regulator having concerns for a broader range of liability holders than what a scheme may cover is also unclear. It would seem that any potential incentive effects from this fact are

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¹³ Of course it is not strictly necessary to actually provide an explicit guarantee in providing this market discipline, only that the supervisory levy become risk based.

more likely to depend on the relative rankings among these classes during crises or failure management.

In general, potentially negative incentive effects from co-locating the functions relies on demonstrating that the objectives of the prudential regulator, can not (or should not) be reconciled with those of an insurance fund by altering the regulator's charter or constituting Act, as has been achieved in the US. The efficiency benefits from co-locating such enforcement and monitoring activities should then be compared with the cost of making such changes. In particular, the benefits of co-locating within the single organisation the monitoring and market discipline (pricing) activities with respect to the liabilities "delegated".

One other incentive issue may be important in deciding the location of any scheme's administration, is the potential to create a situation of "Moral Hazard in Teams". This is a situation where multiple regulators that are required to pursue a similar objective, but whose "efforts" cannot be objectively verified. Such situations can allow for the possibility for either agency to blame the other following failure. This potential can then provide incentives to either agency to reduce coordination with the other when failure becomes imminent.

5. Conclusions

In addition to the Davis report's treatment of the incentives of stakeholders, I hope this submission can contribute some insight via the following main conclusions.

The incentive effects for liability holders depend on what monitoring capabilities they posses and their ability to exert effective market discipline, which are shaped by the costs of monitoring and the effectiveness of coordination. Under the justification for prudential regulation as attending to a market failure on behalf of some liability holders, it is likely that most targeted under the regime perceive an implicit guarantee. The introduction of an explicit scheme will remain neutral for the incentives of all liability holders as long as it does not alter their current perceptions. If an explicit guarantee can be designed to specifically exclude liability holders that possess efficient monitoring and market discipline choices, then the efficiency of prudential regulation as a market intervention should be improved. This is also true if an explicit guarantee can be priced more effectively than at present, so that the incentives of managers are improved.

The governance arrangements surrounding the location of the administration of such a scheme would not seem greatly influenced by significant incentive effects. The potential efficiency gains from co-location should be compared with the additional cost of preventing potential conflicts of interest.

Toulouse 15 October 2004

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