

Consultation Paper on  
Enhancing Deposit Protection  
in Hong Kong



**Hong Kong Monetary Authority**

October 2000



## Contents

	<i>Page</i>
I Introduction	1
II What should be the objectives of a deposit protection scheme?	4
III Are changes to the current system merited?	6
IV What are the options for change?	7
V Is it sufficient simply to enhance the current arrangements?	8
VI Is deposit insurance a more suitable form of protection?	9
VII Who should bear the costs and risks of deposit insurance?	11
VIII Who should control and administer the insurance scheme?	12
IX How much will an insurance scheme cost and how should it be funded?	14
X What should be the main design features of a deposit insurance scheme?	18
XI Request for comments	25

### **Annexes**

**Annex 1: Model DIS scheme proposed by the Consultant**

**Annex 2: Example of deposit aggregation**

**Annex 3: Example of netting**



# ENHANCING DEPOSIT PROTECTION IN HONG KONG

## PURPOSE

This paper sets out, for the purpose of public consultation, proposals on enhancing deposit protection in Hong Kong following the completion in July 2000 of an independent consultancy study on this subject.

## I: INTRODUCTION

### BACKGROUND TO THE STUDY

- 1.1 Deposit protection was last publicly debated in 1992 when a full public consultation was carried out following the failure of the Bank of Credit and Commerce Hong Kong Ltd. (“BCCHK”) and a number of bank runs in 1991. The proposal for establishing a deposit protection scheme was, however, rejected, mainly due to cost, fairness and moral hazard concerns.
- 1.2 Although the establishment of such a scheme did not take place, a number of measures to further protect depositors have been developed in subsequent years, including the following:
  - improved supervision of banks;
  - higher priority accorded to small depositors up to the first HK\$100,000 of aggregate deposits of eligible depositors in the event of liquidation of a licensed bank;
  - improved market discipline in terms of greater transparency of the financial position of banks; and
  - confirmation of the role of the HKMA as Lender of Last Resort for authorised institutions and clarification of the detailed arrangements.
- 1.3 These efforts have proven effective, given the way in which the banking system in Hong Kong fared through the financial crisis in 1997 and 1998. Although banks’ profitability was adversely affected, the banking sector remained sound and healthy, no banks were forced to close and no depositors lost their money.
- 1.4 However, the Asian financial turmoil did highlight the fact that external shocks and rumours may adversely affect confidence in individual banks and the system as a whole. The short and temporary run on a local bank in 1997 demonstrated the reaction that depositors can have to rumours even though these may be entirely unfounded. Such events are not conducive to financial stability particularly in times of crisis. In the Banking Sector Consultancy Study undertaken by KPMG and Barents in 1998, the consultants considered that the existing protection arrangements did not appear to have sufficiently raised the crisis of confidence threshold to avoid bank runs and that there was a strong case for enhancements to be made.



- 1.5 In the international context there is also a growing trend in favour of explicit forms of deposit protection. For example, deposit protection arrangements have been harmonised throughout the countries of the European Union. More recently, the G22 Working Party on Strengthening Financial Systems has recommended that each country should put in place explicit deposit protection arrangements, with a clear specification of the nature of protection provided and the means of defraying the costs. The IMF has advised that a properly designed system of deposit insurance can help to underpin the stability of the financial system in a country that meets certain necessary preconditions. In addition, the Financial Stability Forum (“FSF”), a forum formed by the G7 countries to promote international financial stability, has created a Working Group to develop international guidance on deposit insurance in recognition of the crucial role of deposit insurance in contributing to confidence in the financial system.
- 1.6 In response to all these developments, the HKMA commissioned a consultancy study (“Study”) on enhancing deposit protection in Hong Kong in April 2000. Arthur Andersen was appointed as the consultant (“Consultant”) to carry out the Study.

#### AN OPPORTUNE TIME FOR THE STUDY

- 1.7 It is widely acknowledged that deposit protection schemes<sup>1</sup> (“DPS”) are not without pitfalls and risks. For a DPS to operate smoothly and effectively, a number of preconditions should be met. The FSF Working Group has pointed out that ideally the following preconditions should be present before a DPS is introduced:
- a sound legal regime;
  - a stable macroeconomic environment and policies consistent with maintaining a safe and sound banking system;
  - a financial system characterised by appropriate regulation and effective supervision;
  - compliance with recognised accounting, auditing, and regulatory standards; and
  - an effective disclosure regime.
- 1.8 The HKMA considers that Hong Kong meets all the above preconditions and therefore has the potential ability to benefit from a DPS if one is introduced while containing its risks. Moreover, the HKMA shares the view of the Consultant that, with the effects of the Asian crisis having diminished and with the recovery of the economy, Hong Kong can consider the pros and cons of the introduction of a DPS from a position of strength. This would continue the evolutionary process of enhancing depositor protection described in paragraph 1.2 above and would further develop the financial infrastructure of Hong Kong. It would also be in keeping with the view of the IMF that the time to introduce deposit protection is when the banking system is sound.

<sup>1</sup> Deposit protection scheme is a general term used to describe a formalised system of deposit protection regardless of its structure or conceptual approach. Deposit insurance is one form of deposit protection. Deposit insurance is protection offered to depositors by a third party that would bear the risks and costs of guaranteeing the covered deposits.



## THE SCOPE OF THE STUDY AND THE ISSUES TO BE ADDRESSED

- 1.9 The Study was aimed at making a fair and objective assessment of deposit protection in Hong Kong based on independent evaluation with due regard to relevant international practices and consultation with the banking industry and regulatory authorities. Specifically, the Consultant was asked to consider the relative costs and benefits of three broad alternatives centring on:
- maintaining the current level of priority claims protection (i.e. maintenance of the status quo);
  - enhancing the current system of priority claims protection; and/or
  - introduction of deposit insurance.
- 1.10 The Consultant completed the Study and submitted a final report to the HKMA in July. A model deposit insurance scheme proposed by the Consultant is attached at **Annex 1** of this consultation paper. The full report containing details of the Consultant's findings and recommendations can be accessed through the HKMA's website (<http://www.hkma.gov.hk>).
- 1.11 The Consultant has examined a wide range of options for dealing with the policy issues under discussion, which are summarised in this paper. The HKMA considers that the Consultant has put forward a coherent set of proposals for enhancing deposit protection in Hong Kong, which should provide a good basis for public discussion of this subject. While the HKMA is generally supportive of moves to enhance deposit protection, neither the HKMA nor the Government has so far formally endorsed the proposals of the Consultant. The HKMA wishes to invite public comments on this important matter, before considering the implementation of any specific proposals.
- 1.12 As deposit protection raises complicated issues of both a technical and policy nature, the HKMA intends to hold detailed discussions with individual banks, consumer group representatives and other relevant experts during the consultation period. This will be in addition to inviting written submissions from such persons. The HKMA will carefully review all comments received and take them into account in deciding whether to recommend to the Government that measures to enhance deposit protection should be implemented. If the decision to go ahead is taken, further analytical work will be necessary to develop a detailed set of recommendations on how the DPS should be structured. Further consultation would be undertaken as necessary on the detailed proposals.



1.13 The key issues on which the HKMA is seeking views can be summarised as follows (see also the decision tree on page 25 of the Consultant's report):

- are changes to the current system merited?
- if so, what are the options for change?
- is it sufficient simply to enhance the current arrangements?; or
- is deposit insurance a more suitable form of protection?
- if so, who should bear the costs and risks of underwriting the insurance?
- who should control and administer the insurance scheme?
- how much will an insurance scheme cost and how should it be funded?
- what should be the main design features of an insurance scheme?

1.14 In order to provide answers to these issues and to reach decisions on the appropriate design features of any DPS, it is first necessary to address the basic question of what should be the objectives of a DPS.

## **II: WHAT SHOULD BE THE OBJECTIVES OF A DEPOSIT PROTECTION SCHEME?**

2.1 For the purposes of the Study, the HKMA agreed with the Consultant that the primary objectives of a DPS should be:

- to provide a measure of protection to small depositors; and
- to contribute to the stability of the financial system.

2.2 These objectives are consistent with the objectives for banking supervision laid down in the Banking Ordinance and with the recommendations of the FSF Working Group on Deposit Insurance. The two objectives are linked to the extent that the stability of the banking system is influenced by the degree of confidence depositors have in the system and their willingness to keep funds on deposit. Small depositors' sudden loss of confidence and hence withdrawal of funds from a bank, irrespective of whether the bank is healthy or not, can exert pressure on the bank's liquidity and may have a contagious effect on other financial institutions and implications for the wider economy.



- 2.3 The objective of a DPS is not to prevent all bank failures or to eliminate all bank runs. Bank runs and bank failures can occur with or without a DPS. However an appropriately designed DPS should reduce the likelihood of bank failure caused by rumour driven runs by small depositors, and contain the impact of such failure by preventing a bank run from spreading across the system. As such, a DPS can add to financial stability and benefit both large and small banks, although it is usually designed to provide a measure of protection to small depositors in the event of a non-systemic bank failure. In other words, an effective DPS should help to prevent a non-systemic failure from degenerating into a systemic crisis. A DPS should be distinguished from the Lender of Last Resort (“LOLR”) role fulfilled by the HKMA. The purpose of the LOLR is to provide liquidity support to solvent, but illiquid, banks with a view to preventing the unnecessary failure of such banks.
- 2.4 A DPS should also seek to achieve a secondary objective - defining more clearly the role and extent of Government support in protecting depositors. This will provide a more consistent mechanism for resolving problem banks, and enable a rapid and confident response in times of stress.
- 2.5 In deciding which of the possible options for a DPS are most appropriate, there are a number of key guiding principles that should be taken into account. These are set out in Table 1 of the Consultant’s report and are summarised below:
- the DPS should be transparent, credible and engender confidence in the people it protects (which means, among other things, that it must be clearly and adequately funded);
  - the terms of coverage must be precise and clear;
  - moral hazard on banks and distortions in general should be minimised;
  - there should be equitable treatment of banks;
  - adverse selection<sup>2</sup> should be avoided; and
  - the DPS should have a clear line of accountability for its operation and management.
- 2.6 Drawing on these principles and the benchmarking work carried out during the course of the Study, the Consultant believes that the key requirements for generating small depositor confidence in any DPS are its **liquidity and credibility**. The extent to which any variant of DPS possesses these attributes has a major bearing on which system should be adopted.

<sup>2</sup> Adverse selection arises where the parties most likely to produce an undesirable outcome are selected. In the context of deposit insurance, for example, this would apply if only riskier banks were to choose to join the scheme.



### III: ARE CHANGES TO THE CURRENT SYSTEM MERITED?

#### CURRENT DEPOSIT PROTECTION ARRANGEMENTS

3.1 Section 265 of the Companies Ordinance (CAP 32) introduced in 1995 offers some protection to small depositors in the event of liquidation of a licensed bank. Under this provision, a depositor is entitled to receive priority in the repayment of his aggregate deposits, up to a maximum of HK\$100,000, in the winding up of a licensed bank. Preferential payments to small depositors rank after secured claims on the bank, and a number of other preferential claims including wages and employee compensation, and statutory debts due to the Government. However, depositors rank prior to unsecured claims of ordinary creditors, including unsecured interbank advances and depositors' claims in excess of the HK\$100,000 per depositor cap.

#### LIMITATIONS OF THE CURRENT DEPOSIT PROTECTION ARRANGEMENTS

3.2 Although eligible depositors enjoy a significant benefit of payment priority over other unsecured creditors in the event of bank liquidation, the Consultant believes that the current arrangement has certain limitations:

(i) *Uncertainty of coverage*

The priority payment available to depositors is dependent on the availability of assets which the liquidators can realise in the process of liquidation after meeting claims which rank higher than those of the eligible depositors. There is therefore no certainty that depositors will receive all of their entitlement under the preferential payment cap. This limitation is further compounded by the significant presence of foreign banks operating in Hong Kong. The assets of these branches of foreign banks may reside in an overseas country and might not be available to Hong Kong creditors until the claims of creditors in that country have been settled under the relevant insolvency laws.

(ii) *Delays and uncertainty in timing of payment*

Because of the complexity of the liquidation process, in the absence of any special arrangements to ensure a quick payout, depositors have no clear indication of the speed of repayment of their priority claims. The entitlement to repayment only arises when the bank in question is formally wound up, which can result in substantial delays in payment. Given the potential for such delays, this also means that the current arrangements are not transparent to the ordinary depositor. That is, it is not clear when he will get his money back and how much.

3.3 The above limitations mean that the small depositor is vulnerable to shortfall risk<sup>3</sup> and loss of liquidity.

<sup>3</sup> Shortfall risk is the risk that the assets realised in a liquidation may be insufficient to meet depositors' claims.



- 3.4 The Consultant also points out that the reliance on the liquidation process under the current arrangements, albeit with a priority for small depositors, means that the involvement of the Government in any bank failure has to be determined by the individual circumstances of each case. The lack of a clear protection policy to refer to at a time of bank distress introduces an element of uncertainty for depositors and the broader market. The introduction of a more explicit form of depositor protection would provide the basis for a predetermined contingency plan that would define more clearly the role and extent of Government support in the resolution of failed banks.
- 3.5 **In view of the above limitations the Consultant considers that the current arrangements do not meet the objectives of a DPS outlined in paragraphs 2.1 and 2.4 above. This is because they do not provide an assurance to depositors of recovery and may be slow in providing compensation. Because the arrangements lack the necessary attributes of liquidity and credibility, this may undermine depositor confidence in the protection offered and thus not be an effective deterrent to bank runs<sup>4</sup>.**

#### IV: WHAT ARE THE OPTIONS FOR CHANGE?

- 4.1 If it is accepted that a change to the status quo is merited, there is a need to examine how the existing form of protection afforded to depositors can be enhanced. Any such enhancement should be assessed in accordance with the guiding principles set out in paragraph 2.5 above and in terms of its effectiveness in meeting the primary objectives which the HKMA has chosen for the DPS.
- 4.2 The Consultant has identified five broad options for enhancing depositor protection in Hong Kong:
- (i) status quo with basic enhancement;
  - (ii) claims advance scheme;
  - (iii) government guarantee scheme;
  - (iv) privately administered and funded deposit insurance scheme; and
  - (v) publicly administered, privately funded deposit insurance scheme.
- 4.3 Of these, the first two options are non-insurance based schemes and would simply involve an enhancement of the current arrangements. Options (iii) to (v) are insurance-based in the sense that they involve a third party which would bear the risks and costs of guaranteeing the covered deposits.

<sup>4</sup> As noted earlier, this was also the view of KPMG/Barents in the 1998 Banking Sector Consultancy Study.



4.4 It should be noted that there is a key assumption underlying the various options. This is that the party paying out to depositors in a DPS would have the ability to “step into the shoes” of each depositor it pays out and receive an equivalent preferential claim in each instance. This could be achieved by each depositor assigning his preferential claim to the DPS which would then receive a “subrogated” preferential claim. It would be essential that the preferential claim of the DPS should extend to the entire amount it paid out to individual depositors.<sup>5</sup> The relevant provision in section 265 of the Companies Ordinance is uncertain on this point and it would be necessary to clarify this by means of legislative amendment in order to protect the interests of the DPS<sup>6</sup>. For the purposes of the Study and of this paper, it has been assumed that the DPS will have preferential claim status for the total value of its payments to depositors.

## V: IS IT SUFFICIENT SIMPLY TO ENHANCE THE CURRENT ARRANGEMENTS?

5.1 As noted above, the Consultant has considered two options under this category.

### STATUS QUO WITH BASIC ENHANCEMENTS

5.2 This is a least change attempt to introduce better clarity to the existing arrangements. In response to some of the limitations highlighted above and to increase the chances of recovery from a troubled bank, the following enhancements might be made:

- measures to improve the level of cover provided to depositors, increase the clarity of the current arrangements and improve legal drafting (this would include dealing with the point about subrogation of preferential claims mentioned in paragraph 4.4 above);
- a system to monitor and, if necessary, ring fence the level of readily realisable assets held by banks in Hong Kong, especially branches of foreign banks, to cover their obligations in respect of priority deposits.

5.3 This option should help to improve depositors’ recoveries in a liquidation. But the main drawbacks are that small depositors are still exposed to shortfall risk and loss of liquidity<sup>7</sup>. As such, it does not meet in full the primary objectives of a DPS. **The Consultant therefore considers that these enhancements would be better pursued as complements to a more formal deposit protection system.**

<sup>5</sup> In other words, the DPS should not itself be regarded as a single depositor eligible to obtain preference only in respect of the first HK\$100,000 of the aggregate amount it paid out to individual depositors.

<sup>6</sup> One option would be to amend the legislation to confer separate priority status on the funds actually advanced by the DPS to depositors in respect of their preferential claims.

<sup>7</sup> To the extent that a third party is not available to facilitate an early payout.



## CLAIMS ADVANCE SCHEME

- 5.4 This option proposes that Government funding would be used to advance payments to depositors against their priority claims in a liquidation. The amount advanced might be expressed as a fixed proportion of eligible deposits subject to the priority claim limit. Together with the enhancements in the first option, this option would assist further in meeting the objectives of a DPS by enabling depositors to access more quickly the deposits which would otherwise be locked up in the liquidation process. By providing liquidity to depositors, it would contribute in part to the primary objectives of the DPS.
- 5.5 However, like the first option, small depositors would still be exposed to risk of shortfall between their priority claim entitlements and the eventual dividends from the liquidators. This risk would only be eliminated if the Government were to advance the whole of the depositors' priority claims and were not to seek a refund from depositors in the event of a shortfall. In this case, the scheme would effectively become a government guarantee scheme – see section VII below. The Government would therefore bear the shortfall risk, although this could be mitigated by means of it obtaining a subrogated preferential claim<sup>8</sup>.
- 5.6 Even if the Government does not pay out 100% of depositors' priority claims in advance and does not therefore incur all the shortfall risk, it would still have to absorb the financing costs on the funds that were advanced.
- 5.7 **The Consultant considers that a claims advance scheme would be an improvement on the current arrangements as regards the degree of depositor protection and confidence. But it does not entirely eliminate the risk of payment shortfall to depositors and would involve some costs to the Government.** This leads to the question of whether an insurance-based approach is necessary in order to provide the necessary degree of depositor protection and to ensure an appropriate allocation of costs.

## VI: IS DEPOSIT INSURANCE A MORE SUITABLE FORM OF PROTECTION?

- 6.1 The Consultant considers that the best protection for the small depositor would be achieved with an insurance-based system. This would involve a third party guaranteeing the covered deposit, taking on an assignment of the depositor's preferential claim to mitigate the risks in doing so.

<sup>8</sup> As pointed out by KPMG/Barents in the 1998 Banking Sector Consultancy Study, the risk to the Government in a claims advance scheme could also be reduced by requiring the banks to keep a certain percentage of their priority claim deposits under an asset maintenance requirement (e.g. all banks would keep a reserve with the HKMA in the form of Exchange Fund Bills). However, it can be argued that this would interfere with banks' current liquidity arrangements by imposing a reserve requirement and would entail an opportunity cost for the banks. If the banks are going to contribute to a DPS, it may be more transparent and simpler for this to be done via an explicit insurance premium.



- 6.2 It is recognised however that insurance-based systems are not without their drawbacks. In particular, insurance can promote moral hazard by encouraging banks to take on more risk without the threat that depositors will withdraw their funds. At the same time, it can lead to “commoditization” of covered deposits because depositors have less reason to discriminate between banks on grounds of risk. This can distort competition between banks as well as increase the level of systemic risk. Finally, it can be argued that prudent banks are subsidising the riskier banks in the sense that the prudent are helping to pay for a system which they themselves do not need and are unlikely to use.
- 6.3 These are powerful arguments which cannot be lightly dismissed. Indeed, they were part of the reasons why the decision was taken not to proceed with deposit insurance in 1992. In particular, the risk of moral hazard is one that needs to be taken seriously. Otherwise, there is a possibility that deposit insurance could increase instability in the system<sup>9</sup>. This is why both the Consultant and international bodies such as the IMF and the FSF Working Group have stressed the crucial importance of proper design of a deposit insurance scheme (“DIS”). In other words, while a well-designed DIS can contribute to stability, a poorly designed system can detract from it. This means that the preconditions mentioned in paragraph 1.7 above should be in place; and any scheme should avoid design features, such as an over-generous level of protection, that might erode the discipline on banks and their depositors to take care.
- 6.4 Deposit insurance should not be viewed in isolation. In particular, as the Consultant points out, the primary defence against moral hazard is strong supervision and regulatory intervention. In this connection, the HKMA is already in the process of enhancing its supervisory regime to make it more risk-based. Financial disclosure should also help to reduce moral hazard by increasing the market discipline on banks and penalising risky behaviour. With such safeguards, deposit insurance should, as acknowledged by the FSF Working Group, be able to contribute to financial stability while maintaining sufficient discipline.
- 6.5 As regards the arguments about cross-subsidisation and distortion in competition, it can be argued that an element of subsidy is inherent in any form of insurance. Moreover, insofar as deposit insurance contributes to system stability, it is a public good from which all banks in the system benefit. The Consultant also suggests that, without an explicit scheme of deposit insurance, there is a possible distortion in favour of those banks which are viewed as being “too big to fail”. This is because such banks may benefit from a perception that the authorities will be obliged to intervene to support them if they get into difficulties. From this point of view, deposit insurance would help to level the playing field. In addition, if the costs of deposit insurance can be kept relatively low, (see paragraphs 9.3 to 9.9 below), this would reduce the extent of any cross-subsidisation.

<sup>9</sup> Some recent research has claimed to identify an historical association between the existence of a DIS and increased risk of banking crisis in a sample of countries. However, such a correlation is disputed by other studies. The results of any such research are highly dependent on how the regression models are specified. It is noteworthy that the research which claims to detect a link between deposit insurance and instability also suggests that this may not be the case in countries with a very good institutional environment, perhaps because in these countries effective supervision and regulation can help to offset moral hazard.



- 6.6 **The conclusion of the Consultant is that if the over-riding criterion is the degree to which the DPS successfully addresses the primary and secondary objectives described in paragraphs 2.1 and 2.4 above, deposit insurance should be the preferred option.** This is because:
- it represents an explicit undertaking between insurer and depositor;
  - it tends to be a more efficient and consistent mechanism for providing payments to small depositors; and
  - it is readily understandable by the small depositor.
- 6.7 If this view is accepted, the questions arise as to what the structure of the DIS should be and how it should be funded and administered.

## **VII: WHO SHOULD BEAR THE COSTS AND RISKS OF DEPOSIT INSURANCE?**

### **GOVERNMENT GUARANTEE SCHEME**

- 7.1 This is the third option for enhancement identified by the Consultant (see paragraph 4.2 above). Deposits would be insured by the Government up to a specific level. In the event of a bank failure, the Government would make the payment to depositors and would incur the shortfall risk.
- 7.2 This is a credible option from the depositors' point of view as their deposits would be guaranteed by the Government (up to a certain level) and public funds would be made readily available at time of stress. Moreover, compared with other insurance-based schemes, this option would require the least effort to start up and administer since there would not be a need to assess and collect premia and to formulate policies on the investment of funds.
- 7.3 However, it does not seem reasonable as a matter of principle to expect the Government to provide what would amount to free insurance for the banks and their depositors. There is no reason why the main beneficiaries of the scheme should not be required to pay for the costs.
- 7.4 International practice is also against this option. Most major financial centres have opted for privately funded schemes with legislative support.
- 7.5 **This option, therefore, does not seem to be justified on policy grounds. The alternative is that the private sector should bear the costs of a DIS, although these costs might be subject to a cap in order to limit the contingent liability on the banks (see paragraph 9.11 below).**



## VIII: WHO SHOULD CONTROL AND ADMINISTER THE INSURANCE SCHEME?

8.1 The next question to be addressed is the form of administrative control over a privately funded DIS. In this connection, the Consultant has considered the relative merits of a privately administered and funded scheme vis-a-vis a publicly administered, privately funded scheme (the last two options for enhancement referred to in paragraph 4.2).

### PRIVATELY ADMINISTERED AND FUNDED SCHEME

8.2 Under this option, the banking sector itself would take up the responsibilities of administering and also funding the scheme. This is a purely private sector solution which would have the benefit of preserving a high level of market discipline in the system. The private sector DIS would assess and set the premium for individual banks. In theory it could also exclude banks which were considered to be too costly to insure.

8.3 However, there are a number of difficulties associated with the creation and credibility of a private scheme which raise doubts about its practicality. First, such a system would require the collaboration of banks within the scheme. In the context of Hong Kong, the Consultant points out that the diverse views of market participants on deposit insurance would make it very difficult for banks to organise a comprehensive scheme without Government involvement. Even if a scheme could be established by market participants, the public may perceive deposit insurance without Government participation as a less credible form of insurance (for example, because of the lack of a credible source of back-up finance). Moreover, there would be confidentiality issues as to the disclosure of information by the supervisory authorities to the DIS to enable the latter to police its risk and set premia, if the administrative control over the DIS rests with the private sector.

### PUBLICLY ADMINISTERED, PRIVATELY FUNDED SCHEME

8.4 For the above reasons, the Consultant advocates a publicly administered, privately funded DIS. This is the structure of most DISs in operation today. Under this option, the management and administration of the scheme would rest with the public sector in some form, and the Government would commit to use the Exchange Fund to provide back-up funding for immediate payout should the funds in the scheme prove to be insufficient<sup>10</sup>. The banks would be responsible for funding the scheme, including any shortfall risk in payout, the borrowing costs of any back-up finance provided by the Government through the Exchange Fund and the scheme's administration costs.

8.5 A scheme of this type would combine the synergy and strengths of a close relationship between the supervisory authorities and the public DIS with funding provided by the beneficiaries of the insurance.

<sup>10</sup> As noted in paragraph 9.2 below, this funding would be similar to short-term bridging finance and would be repayable by the DIS.



- 8.6 In view of the relatively small size of the Hong Kong market and the comparative rarity of bank failures, the Consultant recommends that the public DIS should confine its role largely to that of a “paybox”. It would assess and collect premia, and supervise the settlement of depositors’ claims under the scheme. But it would rely on the HKMA to carry out the regulatory, supervisory and intervention functions associated with minimising the costs and risk to the DIS, and protecting depositors’ interests. The Consultant also suggests that the management of funds held by the DIS might be delegated to the Exchange Fund which already fulfils a treasury function for a range of public monies, and has checks and balances in place to insulate the conduct of those activities from the regulatory functions of the HKMA. This would remove any requirement for the DIS to have a separate infrastructure to handle funds under its supervision. In any case, the Consultant estimates that the funds that would need to be managed would be relatively modest (see footnote 18).
- 8.7 The DIS could either be a division of the HKMA or it could be established as a separate legal entity (e.g. as a publicly owned corporation or a statutory body of some kind). In either case, the day-to-day administration of the scheme could be delegated to the HKMA staff<sup>11</sup>. In the event of the need to cope with a payout associated with bank failure, the Consultant considers that much of the work could be passed onto the staff of the liquidator or Manager appointed to supervise the failed bank. It would also be possible to draft in additional staff from the HKMA to help to deal with the situation. It is not envisaged therefore that a substantial infrastructure of management and staff would be required.
- 8.8 The choice between a divisional or separate legal entity structure for the DIS would appear to revolve mainly around the issue of corporate governance. The Consultant considers that a separate legal entity offers some accountability and transparency advantages over the use of a division within the HKMA. As noted in paragraph 2.5 above, it is important that a DIS (or other form of deposit protection) should have a clear line of accountability for its operation and management. International best practice also seems to be in favour of a degree of separation in terms of governance between the DIS and the supervisory authority in order to avoid potential conflicts of interest. If a separate legal entity were to be the chosen route, its board could comprise ex officio members from the HKMA and Government as well as representatives from the banking sector and other independent persons.
- 8.9 **When pitched against the objectives set, the Consultant considers that the publicly administered, privately funded scheme offers the best match overall. The role of the Government is well defined and commitment is made up front. The Consultant therefore recommends this as the preferred option for enhancing deposit protection in Hong Kong.** The following sections consider the cost and funding implications and the main design features of a possible scheme.

<sup>11</sup> Such an arrangement would be similar to the Deposit Protection Scheme in the UK which is managed by the Deposit Protection Board. The Board is a distinct statutory body, but it is chaired by the Chairman of the Financial Services Authority (“FSA”) and the day-to-day administration is carried out by FSA staff.



## IX: HOW MUCH WILL AN INSURANCE SCHEME COST AND HOW SHOULD IT BE FUNDED?

### INDICATIVE COST FOR DIS

9.1 The costs of a DIS, as reflected in the insurance premium that would be charged, are a vital factor in considering the costs and benefits of insurance. Related to this issue is the amount of funding a DIS would require and the source and structure of that funding.

### BASIC ASSUMPTIONS

9.2 In considering these issues, the Consultant has made a number of basic assumptions which are set out below:

- The DIS would not be required to hold sufficient liquidity (as represented by the size of the insurance fund) to meet *all* conceivable funding requirements.
- Rather, to the extent that the DIS holds a fund, it should be set at a level that would aim to cover possible insurance losses and the funding costs associated with the payout of depositors.
- The back-up funding to make the payout to depositors would be provided by a credible source. The Financial Secretary has indicated that, in principle, he would be prepared to allow the Exchange Fund to be used for this purpose in keeping with the objective of maintaining the stability of the financial system.
- The funding by the Exchange Fund would represent a loan which would be repaid by the DIS within a relatively short period<sup>12</sup> and would carry a market rate of interest.
- The DIS would obtain an assignment of the preferential claims of the depositors to whom it paid out.

### INDICATIVE DIS COSTS AND PREMIA

9.3 Based on these assumptions, the Consultant has carried out a statistical modelling exercise<sup>13</sup> of the indicative costs (and therefore premia) of a DIS arising from insurance losses and the need to obtain back-up funding. The estimation of costs is based upon three variables.

- **Risk of failure** – the frequency of bank failures assumed to occur within a stated period (in this case, one year);

<sup>12</sup> For the purpose of the analysis of indicative funding costs and premium, the Consultant assumed that the DIS would repay the Exchange Fund within 12 months out of the proceeds of the realisation of assets of the failed bank.

<sup>13</sup> The model involved the application of “Monte Carlo” simulation techniques as described in the Consultant’s report.

- **Expected shortfall loss** – the difference between the amount expected to be paid out by the DIS if a bank were to fail and the amount expected to be recovered from bank assets in a liquidation;
- **Financing cost** – the interest cost of borrowing the funds required to finance payout to depositors from the date of payment to the date the DIS receives cash recoveries from a liquidation<sup>14</sup>.

9.4 Use of the model allowed the Consultant to simulate the failure of one or more banks in a very wide range of possible combinations. The results were then used to calculate the range of expected annual losses that the DIS might suffer from the various outcomes and the premia that would be required to cover such losses. **It should be stressed that the model does not predict that any bank will fail. Rather, it estimates the consequences of such a failure for the DIS based on statistical assumptions of failure which the Consultant regards as very conservative given the history of actual bank failures in Hong Kong.**

9.5 Calculations of DIS costs (i.e. losses) and premia were made under two risk scenarios (A and B)<sup>15</sup> and on the basis of insurance coverage on deposits up to HK\$100,000 and HK\$200,000. The figures set out below show both the average expected loss to the DIS in any one year (the “mean value”) as well as the upper end of the range of possible losses that would correspond to a 95% confidence interval. This is intended to give an indication of the premia that the DIS would have to charge to cover the significant majority of all possible outcomes generated by the simulation exercise<sup>16</sup>.

	Risk Scenario A		Risk Scenario B	
	Mean Value	95% Confidence Interval	Mean Value	95% Confidence Interval
<b>COVERAGE CAP @ HK\$100,000</b>				
Required Premium (% of Covered Deposits)	0.036%	0.104%	0.115%	0.300%
Expected DIS Cost (HK\$000's)	223,347	639,906	713,219	1,856,028
<b>COVERAGE CAP @ HK\$200,000</b>				
Required Premium (% of Covered Deposits)	0.045%	0.115%	0.133%	0.349%
Expected DIS Cost (HK\$000's)	401,452	1,023,205	1,184,386	3,114,173

<sup>14</sup> In general, unless the recovery rate from the assets of a failed bank is very low, the bulk of the costs of the DIS should arise from financing costs rather than from the expected shortfall loss.

<sup>15</sup> Both scenarios are conservative, but B is more so than A in terms of the assumed risk of failure and the pace of recoveries in a liquidation (which affects the financing costs of the DIS).

<sup>16</sup> In other words, the indicative premia shown under the 95% confidence interval should not be exceeded in more than 5% of cases generated by simulation exercise.



- 9.6 The above results indicate that for a coverage cap of HK\$100,000, annual premia of about 4 basis points and 12 basis points would be required to meet the average expected losses of the DIS in any one year under scenarios A and B respectively. For a cap of HK\$200,000, the equivalent figures are about 5 basis points and 13 basis points respectively<sup>17</sup>.
- 9.7 However, the actual costs of the DIS cannot be estimated with precision because of the lack of historical experience of failures and the variability of possible future outcomes. It is therefore difficult to price deposit insurance at a level that will ensure that the DIS breaks even over a reasonable period. This is why the Consultant has suggested that the mean values in the above table may not be sufficient by themselves as a guide to pricing; and that reference should also be made, in the initial years at least, to the wider range of outcomes represented by the 95% confidence interval. The objective would be to try to ensure that there was a sufficient cushion of reserves in the DIS to cope with most eventualities. At the same time, a balance needs to be struck in order to minimise the costs to the banks.
- 9.8 **Although further work would need to be done on the numbers before finalising the premium to be charged, the above considerations suggest that around 10 basis points per annum would be a suitable basis for planning.** This would be at the upper end of the range of average expected losses under both scenarios and for both coverage caps. It would be largely consistent with the vast majority of possible outcomes for scenario A, as indicated by the 95% confidence interval. It would also allow for a build-up of reserves over a period of about three years that would be adequate to cover the majority of outcomes indicated by the 95% confidence interval for the more conservative scenario B. This assumes, of course, that no actual losses materialised during this period.
- 9.9 The premium of 10 basis points of covered deposits would appear to be quite low if viewed in relation to the banks' net interest income. With a coverage cap of HK\$100,000, it would have an adverse impact on the net interest margin of less than 2 basis points for most of the retail banks in Hong Kong. Even with a coverage cap of HK\$200,000, the impact would be less than 3 basis points in most cases.

## THE COLLECTION OF THE PREMIUM

- 9.10 The premium would be subject to annual review to check that it remained appropriate. The Consultant has also suggested that the annual premium could be reduced or even temporarily suspended once an appropriate target level of reserves had been built up<sup>18</sup>. Further analysis would be required to determine this level.

<sup>17</sup> Although the premia for the two coverage caps would be similar as a percentage of covered deposits, the absolute DIS cost for the cap of HK\$200,000 would be significantly higher because in this case the value of covered deposits is much larger - see paragraph 10.7 below.

<sup>18</sup> The suggestion made in the Consultant's report is that the payment of premia might possibly be reduced or suspended after 3 years. Based on a premium of 10 basis points, this would allow for the build up of a reserve fund of about HK\$2-3 billion, depending on whether a coverage cap of HK\$100,000 or HK\$200,000 were to be used.



- 9.11 Under this approach, it would be necessary to replenish the fund if losses reduced it below the chosen target level or if it were thought necessary to increase the size of the fund. The Consultant envisages that this would be done by the DIS requiring banks to resume the payment of premia (if these had previously been suspended) or to pay higher premia. In order to avoid too heavy a financial burden on the banks in any one year, the Consultant has suggested that consideration should be given to placing a limit on the size of the annual premium that the DIS could charge the banks. The Consultant has pointed out that, even with such a safeguard, the ability of the banking system to meet higher premia over a prolonged period would need to be carefully considered. In defining measures to cap the costs of the banks, a distinction might need to be drawn between those costs which it was reasonable for the banking system to meet in full through higher premia and “systemic” costs where the Government might need to make some contribution.
- 9.12 The above option would imply some volatility in the level of the premium, albeit possibly constrained within limits. This would not provide the banks with certainty of cost in any single year. Another option therefore would be to limit the banks’ contribution to their annual premium (which would be paid indefinitely). This approach would focus on the stability of the annual premium paid by the banks rather than on stability in the target level of the fund<sup>19</sup>. It would however require very careful assessment of the annual premium in order to ensure, so far as possible, that the DIS fund had sufficient resources to meet expected losses<sup>20</sup>. As noted above, this may be difficult to achieve in Hong Kong given the lack of any consistent experience of bank failures. The stable premium option would also entail an indefinite financial commitment for the banks and might therefore be unattractive from that point of view.

## EX ANTE VERSUS EX POST FUNDING

- 9.13 Either option described above would be a variant of the “ex ante” funding approach applied by the majority of DISs around the world. It was favoured by the majority of banks surveyed by the Consultant compared with the alternative of ex post funding.
- 9.14 Under an “ex post” approach the DIS would not collect premia upfront or at least would do so on a very limited scale. Instead, the cost of insurance would be levied from the banks purely or very largely on an “as-needed” basis if a bank were to fail and the DIS had to pay out after the scale of losses became apparent. This is similar to the approach used in the UK. It avoids the need to assess and collect premia in advance or to administer a fund and therefore reduces the administration burden of the DIS. But it also means that the banks would be required to meet all or most of the cost of depositor protection after the event, at a time when they might be least able to do so. There is also the objection that the bank that fails will not have paid for the cost of protection.

<sup>19</sup> The FDIC is currently consulting the US banking industry on such an option as one of a number of possible changes to its current scheme which sets premia in order to achieve a target level for the insurance fund.

<sup>20</sup> If the scope to increase the annual premium was limited, there would be an implication that the Government would have to step in if DIS losses were to exceed the resources available.



9.15 The Consultant has noted that there are variants to both the ex ante and ex post approaches. Two possible options are set out on page 40 of the Consultant's report and summarised below:

- **ex ante funding with minimal cash flow impact on banks** – under this approach, the banks would accrue for the expense of the insurance premium by charging it to their profit and loss account, but the actual payments to the DIS would be deferred until they were called following a bank failure. This would leave the ongoing investment of cash funds corresponding to DIS premium in the hands of the banks in recognition that they might be able to earn a higher return on these funds than the DIS.
- **ex post funding with collateral** – each bank would place a sum on deposit with the DIS as a partial surety for its obligations to contribute to the cost of deposit insurance. The bank would hold the collateral on its balance sheet, and would receive interest on it from the DIS, until such time as it was charged as a premium by the DIS. The merit of this approach is that a failed bank would contribute to the cost of the scheme (since the DIS could exercise its rights of set-off for premia against the collateral pledged to the DIS by the failed bank).

9.16 **The funding of a DIS and the assessment of the insurance premium raise a number of complex issues. The HKMA would welcome views on the indicative level of premium and the possible approaches to funding described in this section. Further technical and analytical work would need to be done on these aspects if a decision is taken to introduce a DIS in Hong Kong.**

## **X: WHAT SHOULD BE THE MAIN DESIGN FEATURES OF A DEPOSIT INSURANCE SCHEME?**

10.1 There are a number of other design variables which need to be considered for a DIS, if one is introduced:

- Type of institution covered
- Form of participation
- Coverage cap
- Basis of coverage
- Netting and exclusions
- Method of premium assessments

These are discussed and summarised in Table 4 of the Consultant's report.



## TYPE OF INSTITUTION COVERED

10.2 The Consultant proposes that only licensed banks should be covered by the DIS while restricted licence banks (RLBs) and deposit-taking companies (DTCs) should be excluded. **This proposal is consistent with the existing priority payment arrangement whereby preferential claim status only extends to deposits with licensed banks.** Also under the current three-tier structure of authorization, only licensed banks are allowed to take small deposits. Since it is those that a DIS is intended to protect, a DIS is less relevant to RLBs and DTCs<sup>21</sup>.

10.3 In some jurisdictions, only domestic banks are covered by the DIS. **However in the case of Hong Kong, given the significant presence of foreign banks and their active participation in the local retail deposit market, the DIS would only be effective if these institutions are included.**

## FORM OF PARTICIPATION

10.4 Compulsory participation in a DIS is the practice usually adopted internationally. This is because a voluntary system will not universally protect small depositors and may give rise to adverse selection whereby only riskier banks choose to join the system. It can also give rise to instability in the banking system as depositors of uninsured banks transfer their funds to insured banks during impending crisis. Compulsory membership has been cited as an important requirement for credibility by the FSF Working Group as well as the European Union Directive of 1994. **Mandatory participation by banks is therefore recommended by the Consultant for a DIS in Hong Kong.**

## COVERAGE CAP

10.5 This refers to the limit at which a depositor's claims under a DIS would be capped. The decision on coverage cap involves consideration of the balance between the desire to instil greater financial stability in times of stress on the one hand, and the need to minimise funding costs and moral hazard on the other.

10.6 Drawing from international practice, the coverage cap should extend to the vast majority of depositors. In this regard, the Consultant has advised that a benchmark for coverage of up to 90% by the number of depositors and at least 20% by the value of customer deposits is generally applied.

<sup>21</sup> If the coverage cap were to be set above HK\$100,000, the minimum size of deposits that can be taken by DTCs might need to be adjusted accordingly. This issue will be considered in the forthcoming review of the three-tier structure of authorization.



- 10.7 A recent survey of the profile of depositors in Hong Kong shows the coverage under caps of HK\$100,000 and HK\$200,000 as follows:

Coverage cap	Percentage of depositors fully covered	Percentage of value of deposits covered	Total value of deposits covered in billions of HK\$
HK\$100,000	84	20	619
HK\$200,000	91	28	893

- 10.8 A coverage cap of HK\$100,000 would be consistent with the current priority claim limit contained in the Companies Ordinance. The real value of that amount has remained largely unchanged since the priority for small depositors was introduced in 1995. A cap of HK\$100,000 would also come close to meeting the international benchmark quoted by the Consultant of up to 90% of depositors by number and at least 20% of deposits by value.
- 10.9 It is acknowledged however that a cap of HK\$100,000 would be quite low by international standards in relation to per capita GDP. A cap of HK\$200,000, which is the other main option addressed by the Consultant, would bring Hong Kong within a comparable range of many major countries in terms of the GDP benchmark<sup>22</sup>. It would also add a further 7% in terms of the number of depositors covered (i.e. from 84% to 91%) and would also increase the coverage of deposits by value to nearly 30%. This would assist in meeting the primary objectives of the DIS, but at the expense of a higher cost. As shown in the above table, the value of deposits covered would be 44% higher with a coverage cap of HK\$200,000, which would translate into a significant increase in the absolute cost of the annual premium paid by the banks under an ex ante scheme<sup>23</sup>. It would also increase the amount of back-up financing that would need to be provided by the Exchange Fund.
- 10.10 Higher amounts for the coverage cap (i.e. beyond HK\$200,000) could also be considered. But these would further increase the costs to the banks and the possible demands on the Exchange Fund for liquidity, without bringing significant additional numbers of depositors within the scope of protection. Moreover, as the coverage cap increased, so would the risk of moral hazard.
- 10.11 **The Consultant has recommended a cap of HK\$100,000, while noting that the argument is finely balanced and that good arguments could be made for a cap of HK\$200,000. While an even higher cap is a possible option, the extra costs involved and the funding required, along with the increased risk of moral hazard, would make this more difficult to justify. The HKMA would welcome views on the appropriate level of the coverage cap.**

<sup>22</sup> A multiple of one-to-two times per capita GDP has become a common benchmark for a desirable target. HK\$200,000 would be equivalent to about one times per capita GDP in Hong Kong.

<sup>23</sup> With a premium of 10 basis points of covered deposits, the cost would be HK\$619 million and HK\$893 million for coverage caps of HK\$100,000 and HK\$200,000 respectively. This assumes that the premium would not have to vary in line with the amount of covered deposits.



## CO-INSURANCE

10.12 Co-insurance means that a depositor partially bears the risk of loss, e.g. where the DIS payout is only a proportion of his covered deposit. While co-insurance has merit in preserving market discipline in the system, it is contrary to the primary objective of protecting small depositors. Given the relatively low coverage cap that is proposed, there seems little point in paying small deposits less than 100% of the protected amount. There should in any case be sufficient depositors with deposits above the insured amount to exert market discipline on the banks. This is an area where international practice varies, depending on local market conditions. **In the case of Hong Kong, the Consultant proposes that 100% of deposits up to the chosen cap should be covered.**

## BASIS OF COVERAGE

10.13 Whether deposits should be protected on an account or depositor basis is a key consideration in the design of a DIS. The local banking practice is such that it is not uncommon for members of the public to have a number of bank accounts. While account-based protection would be simpler to administer, it would encourage depositors to split their accounts within the same bank. This would increase the administrative costs of the DIS and erode the benefits of having a coverage cap. From the funding cost point of view, an account-based approach is not an effective proposition.

10.14 **Coverage on a depositor basis is generally considered a fairer arrangement.** However, there is a need to consider how limitations on cover should apply to multi-beneficiary accounts such as joint accounts, trusts etc. In this regard, the Consultant recommends that joint account balances should be split equally between account holders which would then be added to their other deposits. The aggregate claim would then be capped at the overall claim limit. For active trusts, the trustees should be treated as a separate individual who is entitled to a claim up to the coverage cap. Payments by the DIS would be made to the trustees for distribution under the terms of the trust. As for bare trusts and client accounts, each beneficiary would be able to demonstrate entitlement to the account, but such a claim would be aggregated with his other account balances in determining whether the total cap has been reached. An illustrative example to show deposit aggregation in line with the above principles is given at **Annex 2**.

## NETTING AND EXCLUSION

10.15 It is generally recognized that certain balances should be excluded from cover protection. Protection of these balances is excluded because providing coverage would either be incompatible with the objectives of the DIS or because the class of depositors is in some sense less eligible to receive protection.

10.16 The categories of deposits that are proposed by the Consultant to be excluded and the reasons for their exclusion are set out in the following table. It should be noted that many of these categories are already excluded under the current priority payment scheme.



Deposit category	Reasons for exclusion from coverage
Held by any group company or affiliate	<ul style="list-style-type: none"> <li>• Moral principle – avoiding priority for inter company debt.</li> <li>• Consistent with current priority payment scheme.</li> </ul>
Held by another Authorised Institution	<ul style="list-style-type: none"> <li>• Runs contrary to the principle of small depositor protection.</li> <li>• Consistent with current priority payment scheme.</li> </ul>
Term deposits maturing in more than 5 years	<ul style="list-style-type: none"> <li>• Rapid payment inconsistent with nature of asset - arguments for preserving depositors' liquidity do not apply.</li> <li>• Consistent with current priority payment scheme.</li> </ul>
Booked with foreign branches of Hong Kong banks	<ul style="list-style-type: none"> <li>• Funds are outside the Hong Kong payment system and thus have little impact on financial stability.</li> <li>• Could lead to the DIS covering overseas obligations with Hong Kong-based assets.</li> <li>• Potentially covered by overseas deposit protection scheme but probably without reciprocal rights.</li> <li>• Supervision difficulties, making it difficult to police risks.</li> </ul>
Secured as collateral	<ul style="list-style-type: none"> <li>• Not a readily liquid asset for depositor in any case.</li> <li>• Depositor has already secured a benefit in exchange for granting the security.</li> <li>• Increases risk by reducing ease of recovery of the matching loan.</li> </ul>
Directors, controllers and managers	<ul style="list-style-type: none"> <li>• Consistent with current priority payment scheme.</li> </ul>
Held by the Exchange Fund or a multilateral development bank	<ul style="list-style-type: none"> <li>• No significant impact on depositor behaviour to justify change.</li> <li>• Consistent with current priority payment scheme.</li> </ul>

10.17 Foreign currency deposits are excluded from coverage in some countries on the basis that they do not form part of the domestic money supply, or the balance of foreign currency holdings is small, or the foreign currency reserve position of the country is weak. In the Hong Kong context, over 40% of total customer deposits are held in foreign currencies and, therefore, excluding them could render the DIS ineffective. **The Consultant therefore proposes that foreign currency deposits should be included in the coverage.**



- 10.18 The decision whether to net off a depositor's liabilities to a failed bank in calculating his DIS entitlement is an important consideration which affects the payout to depositors and ultimately the cost of funding of the DIS. The rationale behind netting rests on two important arguments. First, in final settlement in a commercial relationship, the amounts paid should reflect the overall position rather than taking account of only one side of the contractual relationship. Failure to do so opens up the opportunity for an individual to maximise recovery to the prejudice of other creditors. Second, netting would eliminate possibilities of potential mismatch between payouts and amounts to be recovered by the DIS from the bank liquidation under its subrogated claim. In the liquidation process, amounts due to or owed by the same creditors are netted against each other. If the same set of payout rules is not replicated in the DIS payout, it would increase the risk of shortfall faced by the DIS.
- 10.19 However, the above arguments for netting must be weighed against the impact that netting could have on the speed of payout, which is one of the key success factors for an effective DIS.
- 10.20 **In line with the above considerations, the Consultant proposes that netting by the DIS should only include overdrafts, arrears on personal loans<sup>24</sup>, currently due obligations under guarantees given by depositors and all contractually past-due sums.** The principle of netting deposits against current and past due obligations is sound. However, future obligations of depositors would not be accelerated<sup>25</sup>. Depositors' mortgage repayment obligations which are not yet due are typical examples of items which fall into this category. Acceleration of such obligations would not be desirable as it would undermine depositor confidence in the protection offered. An illustrative example of how netting would work is shown at **Annex 3**.

## METHOD OF PREMIUM ASSESSMENT

- 10.21 If an ex ante approach to funding is adopted, it will be necessary to decide how the premium should be assessed. The two most commonly used bases for making assessment calculations are total customer deposits and insured or covered deposits. The advantage of using total deposits is the relative ease of determining the deposit base on which the premium can then be assessed. The main disadvantage of this approach is that banks do not pay for protection in proportion to the amount of coverage they receive. This creates inequality, as certain banks have a lower proportion of insured deposits relative to others due to their business focus. These banks will be assessed on a disproportionately higher base relative to the insurance cover they receive.

<sup>24</sup> It would however be for consideration whether it should be specified that the whole amount of a loan in arrears should be netted off. Alternatively, such an approach might be decided on a case by case basis where the contract in question allowed for the full sum of the loan to be contractually due where the loan was in arrears.

<sup>25</sup> Although the strict legal position should require liquidators to discount future obligations back to the present value and apply set off, it appears that in practice it may vary on a case-by-case basis and acceleration of future cash flows may not be the best means of realising such assets such as residential mortgages.



- 10.22 The feedback from the Consultant's interviews with banks indicates widespread support for assessment based on insured deposits. Banks also confirmed that reporting insured deposits net of the intended excluded accounts should not be overly problematic. **On balance, assessment on the basis of insured deposits is preferred by the Consultant.**
- 10.23 Another issue associated with the method of assessment is whether fixed or risk-based assessment should be adopted. The principal advantage of the risk-based method is that it imposes costs on banks for taking greater risks, thereby giving them incentives to curtail risks. The method serves to offset some of the market discipline weakening effects of a DIS. Moreover, using a flat rate premium assessment basis would increase the concern about prudent banks subsidising riskier ones.
- 10.24 However, the Consultant considers that risk pricing is difficult to do in practice. The presence of foreign banks with operations in other parts of the world adds to this difficulty. Publicly administered schemes are generally considered not well equipped to risk price deposit insurance. Relying on historical supervisory risk assessment without reasonable forward projection of risk would be contrary to the principles of insurance, which is forward looking in nature.
- 10.25 For these reasons, risk-based premia are still at an experimental stage even in those countries where differential premia are paid by banks<sup>26</sup>. According to the benchmarking study of the Consultant, two-thirds of the DISs in the world still use fixed rate assessment. **The Consultant therefore recommends that it would be more appropriate to introduce a flat rate assessment system at least for the early stages of the DIS. Moving towards a risk-based assessment method could take place at a later stage once the system has fully bedded down and if considered necessary.**

<sup>26</sup> Even the FDIC has encountered difficulties with the relatively crude method currently in use and is presently consulting the market on a more refined approach.



## XI: REQUEST FOR COMMENTS

11.1 In conclusion, the Study suggests that a carefully designed DIS would better achieve the stated objectives of protecting small depositors and promoting financial stability. It also appears that a DIS could be established in Hong Kong at potentially modest cost. However, before any decision is taken on the introduction of a DIS in Hong Kong, it is necessary to seek the views of all interested parties on this important issue and in particular on the questions posed in Sections II to X of this paper. Members of the public are invited to submit their comments to the Hong Kong Monetary Authority before 17 January 2001 in the following ways:

By mail: Banking Policy Department  
Hong Kong Monetary Authority  
30th Floor, 3 Garden Road  
Central  
Hong Kong  
(Reference: DIS)

By fax: 2878 2473

By email: [dis@hkma.gov.hk](mailto:dis@hkma.gov.hk)

11.2 The HKMA will carefully consider comments received before any final decision is made on whether it should recommend to the Government that changes to the current arrangements should be implemented and the form that these changes should take. As noted previously, if a decision is taken to proceed with a DIS, there would be a need for more detailed work to devise a scheme that is appropriately balanced and workable. Further consultation on the detailed arrangements might then be necessary. Once these had been agreed, it is likely that legislation would be necessary to put the scheme into effect.

Hong Kong Monetary Authority  
October 2000



## Annex 1

### Model DIS Scheme Proposed by the Consultant

Design features	Model structure
Institutions covered	Fully licensed banks.
	Covers both locally and overseas incorporated banks.
Membership	Compulsory
Coverage	Cap at HK\$100,000 or HK\$200,000 per depositor. The balances in all the depositor's deposit accounts with a bank would be aggregated in considering whether the coverage cap is reached.
	Joint accounts to be divided equally between holders. The allocated amount would then be aggregated with the account holder's other claims in considering whether the coverage cap is reached.
	Active trusts to be treated as a separate depositor, which would then distribute the payment received to beneficiaries according to the terms of the trust.
	For bare trusts and client accounts, each beneficiary would be allowed to claim according to his entitlement to the account but such claim would be aggregated with the balances in his other accounts with the bank in considering whether the coverage cap is reached.
	Both HK\$ and foreign currency deposits would be covered.
	No restriction on residency of depositors.
Netting basis	Debit balances to be netted off against depositor's eligible claims would include:
	<ul style="list-style-type: none"> <li>– overdrafts,</li> <li>– arrears on personal loans,</li> <li>– currently due obligations under guarantees given by the depositor, and</li> <li>– contractually past due sums</li> </ul>



Design features	Model structure
<p>Exclusion from coverage</p>	<p>Future obligations of depositors would not be accelerated.</p> <p>DIS might have the discretion to waive netting of some or all of the items listed above to prevent undue delay in payments.</p> <p>Balances held by members of group companies or affiliates.</p> <p>Balances held by another authorized institution including RLBs and DTCs.</p> <p>Deposits booked at foreign branches of locally incorporated banks.</p> <p>Term deposits with original maturity exceeding 5 years.</p> <p>Amounts held as security for credit facilities.</p> <p>Directors, controllers and managers of the failed bank.</p> <p>Balances held by the Exchange Fund or multilateral development banks.</p>
<p>Trigger conditions</p>	<p>Mandatory - Winding up of a bank.</p> <p>Discretionary -Where a Manager has been appointed to manage the affairs of the bank under section 52 of the Banking Ordinance or a petition for the winding up of the bank has been presented; and one of the following two conditions applies:</p> <ul style="list-style-type: none"> <li>- the MA believes the bank is either likely to become unable to meet its obligations, or that it is insolvent or about to suspend payments to depositors; or</li> <li>- the MA believes it necessary to protect depositors, or to promote the general stability and effective working of the banking system.</li> </ul>



Design features	Model structure
Premium	10 basis points per annum (possibly to be reduced or suspended after a period of, say, three years).
Funding	Back-up facility to fund payouts to depositors to be provided by the Exchange Fund  Ex ante funding with provision for top-up assessment.
Structure and administration of DIS	Separate legal entity operating as a paybox.  Board members could comprise representatives from the banking sector, ex officio members from the Government and other relevant parties.  Functions to include: <ul style="list-style-type: none"><li>– assessment and collection of premia;</li><li>– administration of funds;</li><li>– organisation of payouts.</li></ul>



## Annex 2

### Example of Deposit Aggregation

The following example illustrates how deposits of individuals might be aggregated to determine the amount of deposits with a failed Bank XYZ that would be protected by the deposit insurance scheme.

Account Holder	Account Details	HK\$ or HK\$ Equivalents	Depositor A Protected Deposits (HK\$)	Depositor B Protected Deposits (HK\$)	Trustee Protected Deposits (HK\$)
Depositor A	Current Account	1,000	1,000		
	US\$ Time Deposit	5,000	5,000		
Depositor B	Current Account	5,000		5,000	
	Savings Account #1	8,000		8,000	
	Savings Account #2	25,000		25,000	
	Time Deposit	45,000		45,000	
Depositor A and Depositor B jointly	Time Deposit	60,000	30,000	30,000	
Held for A (in a bare trust)	Time Deposit	20,000	20,000		
Held for B in stockbroker's client account	Current Account	30,000		30,000	
Held on trust for A	Time Deposit	280,000			280,000
			56,000	143,000	280,000
<b>Protected amount</b>					
• Assuming a coverage cap of HK\$100,000			<u>56,000</u>	<u>100,000</u>	<u>100,000<sup>1</sup></u>
• Assuming a coverage cap of HK\$200,000			<u>56,000</u>	<u>143,000</u>	<u>200,000<sup>1</sup></u>

<sup>1</sup> This payment would be made by the DIS to the trustee for distribution to Depositor A in accordance with the terms of the trust.



## Annex 3

### Example of netting

The following example shows how the proposed netting would apply to a depositor's deposits with, and borrowings from, the failed Bank XYZ.

Account Holder	Details of depositor's deposits/borrowings	Deposits With Bank XYZ HK\$	Borrowings from Bank XYZ HK\$	Netting Calculation HK\$
Mr. C	Share of joint account with Mrs. C	42,000		
	Term deposit 3 years' maturity	<u>180,000</u>		
	Sub-total	222,000		222,000
	Deduct:			
	i) Overdraft in current account		6,000	(6,000)
	ii) Personal loan -outstanding balance <sup>2</sup> of \$64,000 which includes 2 monthly instalments of \$2,000 in arrears <sup>3</sup>		64,000	(4,000)
	iii) Tax loan of \$100,000 with no amounts in overdue status		100,000	0
	iv) Mortgage – outstanding balance <sup>2</sup> of \$3,075,000 which includes 3 monthly instalments of \$25,000 in arrears		<u>3,075,000</u>	<u>(75,000)</u>
	Sub-total		3,245,000	137,000
	<b>Net amount payable to depositor C by the DIS assuming a coverage cap of HK\$100,000</b>			<b><u>100,000</u></b>
	<b>Net amount payable to depositor C by the DIS assuming a coverage cap of HK\$200,000</b>			<b><u>137,000</u></b>

<sup>2</sup> Outstanding balance includes principal, accrued interest and amounts in arrears

<sup>3</sup> In this example, it has been assumed that only the instalments actually overdue (and not the whole principal of the loan) would be netted.

**HONG KONG MONETARY AUTHORITY**

30/F, 3 Garden Road, Hong Kong

Telephone : (852) 2878 8222

Facsimile : (852) 2878 2473

E-mail : [dis@hkma.gov.hk](mailto:dis@hkma.gov.hk)

Website : <http://www.hkma.gov.hk>