CONSULTATION PAPER

DEPOSIT PROTECTION SCHEME

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INTRODUCTION

1. In September 1991, Government undertook to issue a public consultation paper setting out the arguments for and against establishing a deposit protection scheme (DPS)[1] in Hong Kong. The purpose of this consultation exercise is to collect public views in principle on the question of whether or not a DPS should be introduced into Hong Kong.

2. Before considering the specific issue, however, it is important to identify a number of limitations of any DPS. These are:-

(a) that a DPS cannot prevent bank failures nor can it address problems arising from systemic failure or indeed the failure of any of the very largest banks in an economy;

(b) that a DPS should not be seen as a means of providing liquidity support to solvent banks[2];

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(1) Deposit protection schemes are commonly referred to as deposit insurance schemes; however, the latter term is misleading. None of the existing schemes in the world which have been surveyed involve a private underwriter or charge an "insurance premium" in the normal sense of the phrase.

(2) In the case of Hong Kong, the Government has made it clear that liquidity support for solvent banks would be forthcoming from the Exchange Fund but that there can be no assurance that an insolvent bank would necessarily be rescued. Each case would have to be considered on its merits in the light of the implications for the stability of the banking system as a whole.

(c) that a DPS, by its very nature, cannot prevent a bank from getting into serious difficulties. Overly-generous protection might even increase the incidence of such difficulties because of the "moral hazard" problems which are identified in para.4(a) below. Whether or not a bank will experience serious difficulties will depend on its own intrinsic strength, the quality of its management, the supervisory regime, and the business and economic environment in which it is operating, not on the presence, or absence, of a DPS; and

(d) that a DPS will not necessarily be able to prevent runs even on perfectly healthy banks, as unprotected depositors or partially protected depositors (including other banks) may well decide to withdraw their funds once they believe, rightly or wrongly, that a bank might be facing serious difficulties, rather than take the risk of losing all or part of their deposits in the event of its failure. Even fully protected depositors may choose to withdraw their funds because of the time needed to get compensation from the DPS.

3. Nevertheless, a carefully designed DPS could be expected to perform two valuable functions:

(a) compensate small depositors either fully or in part in the event of a non-systemic failure of any but the largest banks in a banking system; and

(b) enhance the stability of a banking system at times of unfounded rumours by preventing, or reducing the scale of, unnecessary and contagious runs on healthy banks. In other words, DPS might raise what might be termed the crisis of confidence threshold of the general public.

4. Against this, however, must be balanced the adverse factors associated with a DPS. The more important of these are:-

(a) The danger that the overall risk in a banking system could be increased as banks and depositors became less careful in their investment decisions. Knowing that there was a DPS, depositors might have little concern for the financial condition of particular banks and choose to place their funds with those offering the highest interest rates. Banks, too, might be more relaxed in taking risks to maximise short term profitability as their sense of moral responsibility to their depositors was undermined by the presence of a DPS. This is often referred to as the "moral hazard" issue and has been widely identified as one of the factors which has contributed to the problems currently being faced by the deposit insurance authorities in the USA;

(b) The inevitability that a large proportion of the costs of financing a DPS, which are likely to be substantial, will be borne by the largest banks in the system, and thus by these banks' depositors, despite the fact that a DPS might not be of significant benefit to depositors in such banks; and

(c) Depositors in healthy banks, in effect, find themselves paying to protect the depositors in less healthy banks.

5. It may be noted that this subject is not a new one for Hong Kong. The matter was last publicly debated in 1985 in the course of the then banking crisis. The conclusion at that time was that a DPS would not be practicable due to the characteristics of Hong Kong's banking system, in particular, the very skewed distribution of deposits. It was therefore determined that efforts to protect depositors would have to focus on improvements to the system of prudential supervision, and in the quality of bank management.

6. Subsequent efforts in this regard have proven to be very effective, given the way in which the banking system responded to the October 1987 stock market crash and the Beijing event in June 1989. It is significant, too, that locally incorporated banks were able to meet the Basle capital adequacy requirements by the end of 1989, a full three years ahead of target whereas many banks in other centres are still struggling to do so. Furthermore, the damage to confidence caused by the recent failure of Bank of Credit and Commerce Hong Kong Ltd. (BCCHK) was quickly contained, with the banks subsequently affected by groundless, but potentially damaging, rumours demonstrating their ability fully to meet their obligations. BCCHK was an isolated problem and its failure should not be seen as detracting from the overall health of Hong Kong's banking sector.

7. Given such improvements in banking supervision, the healthiness of the system, the limitations of DPS and its adverse factors, it would certainly be an option to continue without a DPS which is not necessarily the only way to afford protection to depositors. The main protection must continue to come from having a supervisory system up to international standards. This is already in place in Hong Kong. The Government will continue when necessary to improve the supervisory system even further in the light of developments both in Hong Kong and internationally. However, it must be recognised that no system of banking supervision can provide absolute assurance that banks will not fail or that the public will not respond to groundless rumours. In particular, as the BCCHK incident demonstrated, banks may be vulnerable to events entirely outside Hong Kong's control. Thus, irrespective of whether or not a DPS is to be introduced, it would seem sensible to explore other possibile means of providing some protection to small depositors. In this connection, the Government is therefore considering a proposal whereby priority might be afforded to small depositors in the event of bank liquidations.

PROS AND CONS OF HAVING A DPS IN HONG KONG

8. Hong Kong has had considerable experience of unexpected but severe runs on its banks; the latest occurred in spite of significant improvements to the supervisory control and general health of the banking system. Some of these runs had been justified by particular circumstances but others had been based upon

groundless rumours. This had added unhelpful volatility to the banking system. The general run of depositors in Hong Kong are not in a position to assess the financial position of individual banks. Yet, they commonly put a large proportion of the core part of their savings into bank deposits. Although some will merely be intent on maximising the return they can obtain, the majority seek security and ready accessibility, particularly in the case of those whose deposits are denominated solely in HK$. There must thus be the danger that, whenever events threaten such core savings, there will be an impact not only on these depositors' confidence in the financial system but also on their future willingness to save in productive forms. This is potentially damaging to the development of Hong Kong's economy.

9. Events in July and August 1991 demonstrated that even an isolated bank failure can have a very unsettling effect. The failure of BCCHK provided opportunities for rumour mongers who caused runs on several healthy banks. Were such disturbances to have been prolonged, they could have adversely affected not only the interests of depositors but also those of other bank customers through tighter credit, higher costs of borrowing etc. It would clearly seem to be in the public interest if such disturbances could be avoided or reduced in scope.

10. A further argument in favour of a DPS is that it could enhance the competitive efficiency of the banking system. In times of crises of confidence in the banking system there has tended to be a "flight to quality" but this has often manifested itself merely by a transfer of deposits from the smaller banks to the larger banks, irrespective of proper quality considerations. It would not be in the general interests of the community if such deposit shifting behaviour was to undermine the stability and competitiveness of well-run smaller banks.

11. There are thus valid arguments in favour of having a DPS in Hong Kong but these must be carefully weighed against the opposing arguments and the cost implications.

12. Hong Kong must be very careful not to introduce anything that undermines the strength and integrity of its banking sector. Although supervisory efforts can help reduce "moral hazard" problems, there can be no guarantee that these can be entirely eliminated, given the

difficulties which arise in accurately and promptly assessing the risks inherent in particular types of banking business. As this paper will reveal, "moral hazard" problems could be addressed to some extent by the manner in which a DPS was formulated but only at some expense to the overall effectiveness of the scheme in achieving its objectives.

13. The problem with regard to the disproportionate cost of a DPS to the largest banks, and thus to their depositors, is of particular relevance to Hong Kong where more than half the retail deposit base is held with two banking groups. In effect, the customers of these banks could, directly or indirectly, be paying a large part of the costs of a scheme from which they would derive little or no benefit. Furthermore, it could be argued, taking BCCHK as an analogy, that depositors with well-managed and supervised locally-owned banks might find themselves meeting much of the costs of protecting depositors of overseas-owned banks against events which occurred entirely outside Hong Kong (see para. 24 below).

14. It has been rightly pointed out that it would be difficult and impracticable to differentiate between banks for the purpose of charging a premium for a DPS. Although conceptually attractive, it has been convincingly argued that the implementation of a risk-based premium is impracticable, if not impossible. This is underpinned by the fact that <u>no</u> existing DPS in the world has yet adopted such an approach. Serious problems would be encountered in assessing objectively the quality of management and management systems and of a bank's assets in a sufficiently accurate and timely manner for the purposes of arriving at an appropriate premium. Furthermore, banks would not necessarily accept the outcome of the assessment and appeals procedures would add further complications.

15. Even if one were to assume that these difficulties could be overcome, the initial setting of a high risk rating, or the downgrading of the risk rating afforded to a particular bank, would send a very unhelpful message to the outside world. This could well result in overreaction by the public and in a substantial loss of deposits and business to the banks concerned. Such a result would be extremely destabilising and defeat one of the purposes of having a DPS. Whilst it can be argued that the risk ratings could be kept confidential, in practice this would be extremely difficult. It is also questionable whether it would be desirable to burden a bank already in financial

difficulties with a significant rise in premium, should its financial position, and thus credit rating, be deteriorating. In effect, the bank would be faced with an increased financial burden at a time when it was least able to bear it.

16. Therefore, it is likely that the same proportionate premium would have to apply to all if it were decided that a DPS should be established in Hong Kong.

17. Some of those opposed to the concept of a DPS also point out that it is the large depositors which are most likely to bring about the downfall of a bank and that a scheme that only protected small depositors would therefore be ineffective in preventing bank runs. Whilst this argument has some validity, experience in Hong Kong suggests that bank runs have often started with queues of small depositors and then spread to larger depositors. In such circumstances, a DPS might have been able to avoid some of the unnecessary runs on healthy banks.

IDENTIFICATION AND EVALUATION OF OPTIONS

18. To facilitate discussion on whether or not a DPS should be introduced, it is necessary to identify and evaluate various options so that the benefits of particular options can be compared meaningfully against their respective costs. This should not, however, be taken as an indication that the Government has decided whether or not to proceed with establishing a DPS.

19. Some preliminary conclusions have been reached on certain issues and several possible options identified, taking account of the characteristics of existing schemes elsewhere and of factors peculiar to Hong Kong[(1)]. There are however some aspects on which it has not been possible to reach any firm conclusions in the time available. These aspects will warrant further detailed study if, following this consultation exercise, Government were to decide to proceed with introducing a DPS.

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(1) Existing schemes in other centres are summarised in annexures to this paper.

20. In this section, different issues relating to a DPS are discussed in turn and possible options identified. The cost implications of the identified options are analysed in the later section on Estimated Costs.

(A) Scope of protection

21. As it is impossible to protect all deposits, the scope of any DPS must be limited. The scope of existing schemes elsewhere is summarised at Annex 1.

22. If a DPS were to be introduced in Hong Kong, it is suggested that the following categories of deposits should not be protected:

(a) deposits with Restricted Licence Banks (RLB) and Deposit-taking Companies (DTC)

RLBs are only allowed to take deposits of more than HK$500,000. DTCs can only take deposits of more than HK$100,000 with original terms to maturity of at least three months. These are not the retail deposits which a DPS would normally seek to protect.

(b) interbank deposits

Banks, RLBs and DTCs should be expected to know and manage their own risks. Such deposits are usually large deposits. Most existing schemes do not cover such deposits.

(c) deposits with foreign branches of domestic banks

These will not be deposits of local people for their transaction or savings needs. Most existing schemes do not cover them.

(d) deposits pledged as collateral against loans or subject to bankers' right of offset

It is a common phenomenon that a depositor may also be a borrower from the same bank. His deposits should be used to fulfil his obligations towards the failed bank before any net balance became eligible for compensation. Most existing schemes surveyed have some kind of offsetting provisions.

23. It is also suggested that, in line with most schemes elsewhere, deposits in domestic branches of foreign banks should be covered. Once established, foreign banks become part of the local banking system. This is especially true in Hong Kong, given the presence of a large number of foreign banks and their active participation in the local market. Any DPS which did not include them would not be effective.

24. As has already been noted, local branches or subsidiaries of foreign banks may be affected by events in their home country and thereby pose an external threat to the DPS. But this is a risk which cannot be avoided. It may be noted that, given the international character of banking business, even locally owned banks may be affected by events beyond Hong Kong's control.

25. Deposits held by non-residents should be covered as well. It is, in practical terms, very difficult to distinguish between the accounts of residents and those of non-residents, since Hong Kong does not distinguish between such accounts. All existing schemes surveyed cover such deposits.

26. A major question here is whether foreign currency deposits should be covered. Some countries do not cover them and it could be argued that such deposits are generally more investment orientated and therefore not the type of deposits which a DPS is intended to protect.

27. There are also those who have expressed concern that covering foreign currency deposits might have unintended side effects. It has been argued that the costs of covering these deposits might undermine the competitiveness of Hong Kong vis-a-vis other centres if they were passed on to such yield sensitive depositors. As a result, such costs might have to be passed on, at least in part, to HK$ depositors. On the other hand, a DPS might attract an influx of funds from other centres where no such protection existed. Thus it is difficult to assess the overall significance of such unintended side effects.

28. In the Hong Kong context, it would at first sight be attractive to confine a scheme to HK$ deposits subject to the Hong Kong Association of Banks' Interest Rate Agreement (HKAB deposits). Put simply, HKAB deposits comprise HK$ current and saving accounts of any size, and time deposits of up to HK$0.5m which have an original maturity of less than 15 months. The merits of such an approach would be twofold:

(a) HKAB deposits either have a common interest rate ceiling or no interest at all. Banks typically offer the ceiling rate. This effectively eliminates the argument that certain banks could attract more deposits by offering higher interest rates, since they cannot do so under the Interest Rate Rules; and

(b) small depositors would be afforded the choice of staying within the net of protection, or of putting their money in swap deposits or foreign currency deposits and enjoying a higher rate of return whilst recognizing that such deposits were unprotected.

29. However, protecting only HKAB deposits might render the DPS ineffective in preventing unnecessary bank runs, given the fact that more than half the deposits in Hong Kong are denominated in foreign currencies and a much higher proportion of the community than is the case elsewhere hold such accounts.

30. Thus this paper addresses both the option of covering HKAB deposits only and that of covering deposits in all currencies. These options are not necessarily mutually exclusive, e.g. if it was decided to introduce a DPS, one alternative might be to start the scheme by covering HKAB deposits only or a portion of them and gradually expand the coverage to other deposits as the protection fund grew in size and experience was gained in operating the scheme.

(B) Protection ceiling

31. The protection ceiling is the maximum amount of a deposit which would be eligible for the purpose of calculating compensation. The protection ceilings of existing schemes elsewhere are set out at Annex 2.

32. The setting of a protection ceiling is aimed at ensuring that the benefit principally goes to small depositors and at keeping the costs of a DPS within affordable limits. However, it must be recognised that setting a ceiling is not a perfect method of protecting those most in need. A depositor having HK$1,000 on deposit in Bank A may have HK$1 million on deposit in Bank B. Also, there can be no guarantee that a particular small depositor warrants more protection than a particular large depositor. The former might be much better able to afford the loss than the latter taking into account other assets which he owns.

33. A low ceiling would minimise "moral hazard" problems and reduce costs. A high ceiling would enable a larger number of depositors to enjoy greater protection, but with ensuing higher costs.

34. It would be very important that all deposits of a particular depositor within the same bank be aggregated for compensation purposes. This would make it difficult for large depositors to gain additional, and disproportionate, protection by breaking down their deposits into smaller sums within the same bank. It should however be noted that larger depositors could still gain extra protection by placing their deposits under different names or into a number of banks, if they considered it cost effective to do so.

35. For the purpose of identifying a suitable ceiling, the deposit profiles of several medium sized retail banks have been studied. It is estimated that, in an average medium sized retail bank, about 90% of deposit accounts have balances not exceeding HK$100,000, or its foreign currency equivalent. The number of accounts falling within the HK$100,000 - HK$200,000 range, or its foreign currency equivalent, seem to be relatively small, probably accounting for less than 5% of the total number of accounts. The number of accounts falling within the HK$200,000 - HK$300,000 range, or its foreign currency equivalent, decreases sharply, and is estimated to account for only around 2% of the total number of accounts. It is also noteworthy that, although small accounts constitute a large majority in terms of the number of accounts, they do not necessarily represent a large proportion in value terms.

36. If it were eventually decided that a DPS should be adopted, it would seem that a sensible protection ceiling would be HK$100,000; HK$200,000 might also be a possibility, depending on costs and other implications, including the fact that this might call into question the validity of excluding deposits with Deposit-taking Companies.

(C) Extent of protection

37. Most existing schemes provide full protection for deposits below a certain amount. Some adopt a proportional approach and some use a tiered approach (see Annex 2). The argument for protecting less than the full amount is that it encourages depositors to exercise some discretion in their choice of banks, and to take some responsibility for the risk in that connection. This helps address the "moral hazard" problem. Another important consideration is that limiting the extent of cover should reduce funding costs.

38. However, from a stability point of view, it is obviously preferable to provide 100% protection to particular deposits. Only this would have some likelihood of avoiding overreaction to groundless rumours by smaller depositors.

39. This paper considers the options of providing both full and 75% protection.

(D) Funding

40. Funding arrangements for DPS fall into two main categories, or combinations thereof (see Annex 2).

(a) unfunded, or a relatively small initial fund. Participating banks are required to pay on call in case of need; and

(b) regular contributions to a protection fund.

41. The latter method would seem the more suitable for Hong Kong. The visibility of a protection fund would give local depositors better psychological comfort and this is considered important in view of their readiness to react to psychological threats. It would also ensure that the burden of financing the scheme was evenly spread, instead of coming as a sudden shock at a time of instability. Furthermore, it would provide greater certainty as to the cost involved.

42. As already mentioned, a DPS should be intended only to cater for small depositors in the event of an isolated failure of a bank. A protection fund does not therefore have to be large enough to cater for the systemic failure of banks. In fact, no existing schemes are designed to do so. The fund should however be of sufficient size for protected depositors to feel confident

of the fund's ability to meet its likely commitments. This would seem to suggest that the fund would need to be large enough to be able to compensate depositors in the event of the isolated failure of a medium-sized bank. The scenarios involving the failure of a larger bank would then have to be addressed by contingency funding measures. (see next section).

(E) Contingency funding measures

43. It would be important to ensure, as far as possible, that the public at large remained confident that the DPS had sufficient resources to meet the claims that might be made upon it. It would not, however, be sensible to accumulate an unduly large protection fund merely to cater for every possible scenario. Contingency funding measures should therefore be seen as an integral part of a DPS for dealing with situations where the accumulated resources of the DPS are inadequate. The approaches adopted by other centres are summarised at Annex 2.

44. Clearly, seen from the point of view of the depositors of a failed bank, the most satisfactory solution would be for the Government to underwrite the resources of the DPS or extend a line of credit to it. However, the general public might not see this as an attractive option nor does the Government consider it as acceptable.

45. Some existing schemes limit cover to what is available by way of accumulated assets in the DPS, even though these schemes are said to guarantee deposits up to a specified amount. Some include the formal option of reducing the cover if assets are inadequate to meet the claims. Whilst such an option limits the extent of liabilities, public confidence could well be undermined and the DPS rendered ineffective in preventing unnecessary bank runs.

46. Another option would be to defer payment of claims until such time as there were adequate resources available. This might be considered a more attractive option by depositors, as they would be assured that sooner or later they would receive their deposits up to the protected amount. But there could be no certainty on timing and in this case, too, the public could well lose confidence in the efficacy of the scheme.

47. A more viable option could be to have an industry sponsored arrangement, e.g. the DPS might be able to make an advance call for a few years' contribution from banks which could then be offset against their or their depositors' later contributions. The fact that it was generally known that the industry would support the DPS should generate sufficient confidence in such an arrangement. The disadvantage of this option is that banks could be faced with an uncertain financial burden. This would have to be addressed by putting a cap on the amount of the call. If funds were still inadequate even with contingency funding measures, the DPS might have to resort to other measures such as deferral or limitation of claims.

48. Contingency funding measures might also be necessary in the transitional period during which the fund had yet to reach its target size, or had been depleted due to an earlier bank failure. In the latter case, the liquidation proceeds accruing to compensated depositors would also sooner or later be available to help replenish the fund.

(F) Membership

49. Examples of the membership scope in other centres are at Annex 3. It should be noted that, although some schemes are described as voluntary, it is a fact that all the important banks have joined the schemes in question. In Hong Kong, it is considered that participation would have to be compulsory. Due to the skewed distribution of deposits in favour of a few large banks, the very viability of a DPS would be in doubt if any one of those banks were not to join.

ESTIMATED COSTS

50. The estimated costs of providing the required fund under each option would depend on two main factors:

(a) the desired level of the required fund; and

(b) the time over which it was to be accumulated.

51. These two factors are interdependent in that the amount of deposits in the banking system will grow over time. In recent years, HK's overall deposit base has grown at a nominal compound rate of about 20% per year. Assuming that this growth were to continue at its present rate, the deposit base of an average bank would double in size in less than four years.

52. It must be recognised that only rough estimates can be made of the size of fund required and that the figures used in this paper can therefore be treated as only indicative. The actual requirement would clearly depend on the number and timing of any bank failures, the specific identity of the failing banks, their deposit distribution etc. The introduction of a DPS could itself materially affect the picture. The profile of deposits within the banking system might change. Depositors who had deposits in one bank which exceeded the protection ceiling might decide to split them between two or more banks.

53. Although it is impossible to estimate the required size of a DPS accurately, a hypothetical situation has been constructed, based on the deposit profile of several medium sized banks, involving a bank that currently had total deposits of some HK$10 billion (which would mean that it was rather larger than the average size for banks in Hong Kong)(1). It has been assumed that this bank were to fail five years after the establishment of a DPS, without its failure leading to the failure of any other bank. On this basis, an attempt has been made to estimate the sum which would be required to compensate protected depositors, taking into account deposit growth. The unknown factors such as deposit splitting and shifting have been catered for by applying an arbitrary safety factor of 50%. The isolated failure of a larger bank would have to be dealt with by contingency funding measures (see para. 43-48 above). If a contingency call of a maximum of, say, 0.3% of total deposits(2) was also provided, such a DPS should be able to cater for the isolated failure of all but a very few of the largest banks in Hong Kong. It would also have been able to deal with the biggest bank failure which has ever occurred in Hong Kong had that been an isolated instance. However, BCCHK apart, no recent bank failure in Hong Kong has been an isolated one.

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(1) As at end of August 1991, 27 of the then 165 banks in Hong Kong had total deposits of more than HK$10 billion.

(2) Total deposits in Hong Kong as at end of August 1991 was HK$1,227 billion.

54. As already noted even with contingency funding measures, no DPS could realistically be designed to cope with the systemic failure of banks or the failure of one or more of the very large banks. The main focus of attention must therefore continue to be on the prevention of such events.

55. On the basis outlined, the estimated size of a DPS which would be required for each of the options which have been identified in earlier sections are set out at Annex 4. The more feasible options are summarized in Table 1.

Table 1

Protection Ceiling	Extent of Protection	Scope of Protection	Estimated Size of DPS required HK$bn
HK$100,000	100%	HKAB deposits	4.78
		All deposits	9.94
HK$100,000	75%	HKAB deposits	3.58
		All deposits	7.46
HK$200,000	75%	HKAB deposits	4.60
		All deposits	10.86

56. It will be noted that the size of a DPS required for 100% protection with a ceiling of HK$100,000 is roughly comparable with that for 75% protection with a ceiling of HK$200,000. Providing 100% protection with a ceiling of HK$200,000 would require about a one-third larger DPS; this might not be considered justifiable. As mentioned at para. 35 above, deposit accounts falling within the HK$100,000 - HK$200,000 range are estimated to constitute less than 5% of the total number of accounts.

57. The size of the DPS required may appear high, given the modest target of providing for only one hypothetical failure. It should however be borne in mind that this sum will be built up over a five year period, that it allows for growth in the size of banks over that period and that it includes a safety factor of 50%. Whilst some might argue that the safety factor is unnecessarily high, there are good reasons for such an approach:

(a) it is better to have a DPS which is clearly seen as adequate for its purposes, particularly at times of instability, rather than one which might be considered inadequate; and

(b) the DPS might be able to cope with more than one failure if the failing banks were relatively small, without having to resort to contingency funding measures which would inevitably cause disturbance to the system.

58. The required sums would need to be accumulated by levying a sufficient premium to ensure that the protection fund reached its target size within the required time scale. Existing schemes elsewhere usually levy the premium on banks, leaving them to pass on the costs to their customers. Table 2 shows the estimated annual levy which would be required, as a percentage of three different kinds of total deposit base, for comparison with existing schemes elsewhere. More detailed calculations are at Annex 4.

Table 2

			Estimated annual levy required on the basis of		
Protection Ceiling	Extent of Protection	Scope of Protection	HKAB Deposits Only	All HK$ Deposits	All Deposits
HK$100,000	100%	HKAB	0.178%	0.110%	0.044%
		All	N.A.[1]	N.A.	0.091%
HK$100,000	75%	HKAB	0.134%	0.082%	0.033%
		All	N.A.	N.A.	0.068%
HK$200,000	75%	HKAB	0.172%	0.106%	0.042%
		All	N.A.	N.A.	0.099%

59. It should be noted that the figures in Table 2 do not necessarily represent the actual cost to depositors. Regardless of the basis on which the premium was levied, banks would probably pass on a high proportion of the costs to those depositors whose deposits were covered by the DPS[2], rather than to those whose deposits were not,

(1) "N.A." stands for not applicable. It would seem illogical to base premium on HKAB deposits or HK$ deposits if the DPS is to cover all deposits.

(2) "deposits covered by DPS" mean the whole amount of protected deposits for accounts with balances below the protection ceiling and the amount of the protection ceiling for accounts with balances above that ceiling.

because these depositors would be the ultimate major beneficiaries. This could be in the form of lower interest rates, higher bank charges etc. Therefore it may be illustrative also to consider the cost implications to covered depositors if they were to bear the whole cost.

60. Again, it is not possible to provide an accurate estimate because much would depend on the precise deposit distribution of individual banks and even this will change from day to day. The estimates in Table 3 are derived from a study of the deposit distribution of a small number of medium sized banks.

Table 3

Protection Ceiling	Extent of Protection	Scope of Protection	Estimated annual contribution from covered deposits if they were to bear the entire costs of a DPS
HK$100,000	100%	HKAB	0.35%
		All	0.38%
HK$100,000	75%	HKAB	0.26%
		All	0.29%
HK$200,000	75%	HKAB	0.26%
		All	0.28%

61. The figures in Table 3 are higher than those in Table 2 because the amount of covered deposits will always be smaller than that of total deposits in the protected categories. e.g. with 100% protection for HKAB deposits with a ceiling of HK$100,000, covered deposits would be the amount of deposits of HK$100,000 or less but only half of the amount of a deposit of HK$200,000 and so on (see footnote 2 at page 17 above).

62. This does not necessarily mean that a depositor would in effect be paying or forgoing the specified percentage of his deposit annually to the DPS. His bank might not pass on all the costs, in which case some of the costs would be absorbed by other customers of the bank or by the bank itself. It needs to be recognised though that, if a significant proportion of the costs were borne by the banks themselves, this could be counter-productive as it would reduce the banks' profitability and thus make them more vulnerable to potential problems. It is therefore reasonable to expect that a high proportion of the cost would directly or indirectly be passed on to covered depositors. Therefore, the figures in Table 3 are probably more illustrative of the actual cost to covered depositors rather than those in Table 2.

63. The following example, based on Table 3, illustrates what the cost of protection to a depositor with a saving deposit of HK$100,000 might be in actual dollar terms, using a ceiling of $100,000 with 100% protection on the HKAB basis:

Amount on deposit	$100,000
Annual interest rate	3.5%
Interest due at end of 12 months	$3,500
Annual contribution ($100,000 x 0.35% - by deduction from interest payable, or in some other form)	$350

Where the protected account bears no interest, e.g. a current account, the depositor might well have to pay the cost in the form of extra bank charges etc.

64. Apart from the direct costs identified above, there will be other costs associated with a DPS, in particular:

(a) Administrative costs

The magnitude of administrative costs would depend on how the administrative framework was established. They could be very substantial if, as is the case in some centres, a separate administration was established for collection, investment and management of the sums in the DPS and the administration of disbursements. However, it might be possible to offset some or all of the costs against income derived from investment of the monies in the DPS.

(b) Indirect costs

The most important potential indirect cost is the possible encouragement of risk taking. To the extent this were to occur, instability might be introduced into the banking system.

Outstanding issues

65. There are a number of outstanding issues on which in the time available no conclusive views have yet been reached. Such issues include, inter alia, the premium levying and contingency funding mechanisms and the detailed administrative framework. These issues would, however, need to be resolved before a DPS could be successfully implemented. If the Government were to decide after the public consultation to proceed with establishing a DPS, a more in depth study would therefore need to be conducted to establish a preferred option. Thus considerable work would need to be done before the Government could reach a conclusion as to precisely what type of DPS would be most practical and appropriate for Hong Kong.

PUBLIC COMMENTS

66. The question of a DPS is of major importance for the community and the banking system in Hong Kong and is worthy of wide public debate. Members of the public who wish to comment on the costs and benefits of a DPS, the various options identified in this paper or any variations thereof are invited to write to The Secretary for Monetary Affairs before 31 May 1992 at the following address:

Monetary Affairs Branch,
Room 1802, Admiralty Centre Tower I
18 Harcourt Road
Hong Kong.

Region/ Country	Interbank Deposits	Deposits held by non residents	Foreign Currency Deposits	Deposits in domestic branches of Foreign Banks	Deposits in foreign branches of Domestic Banks
ASIA					
India	Not covered	Covered	Covered	Covered	Not covered
Japan	Not covered	Covered	Not covered	Not covered	Covered
Philippines	Not covered	Covered	Covered	Covered	Not covered
EUROPE					
Austria	Not covered	Covered	Covered	Not covered	Not covered
Belgium	Not covered	Covered	Not covered	Not covered	Not covered
France	Not covered	Covered	Not covered	Covered	Not covered
Germany - Commercial Banks	Not covered	Covered	Covered	Covered	Covered
Ireland	Not covered	Covered	*Provision	Covered	Not covered
Italy	Not covered	Covered	Covered	Covered	Covered
Netherlands	Not covered	Covered	Covered	Covered	Not covered
Spain	Not covered	Covered	Covered	Covered	Not covered
Switzerland	Not covered	Covered	Not covered	Covered	Not covered
United Kingdom	Not covered	Covered	Not covered	Covered	Not covered
NORTH AMERICA					
Canada	Covered	Covered	Not covered	Covered	Not covered
U.S.A.	Covered	Covered	Covered	Covered	Not covered

*Deposits in denominations other than Irish pounds may be 'specified'.

Region/Country	Current Funding	Contingency Funding	Maximum Protection
ASIA			
India	0.040% p.a. of total deposits	Government backing through the Reserve Bank subject to Parliamentary approval.	Rs 30,000 (HK$9,600)
Japan	0.012% p.a. of protected classes of deposits	DIC permitted to borrow up to Y500 billion from Bank of Japan.	Y10 million (HK$600,000)
Philippines	0.083% p.a. of total deposits	Government backing subject to Senate approval.	P40,000 (HK$11,800)
EUROPE			
Austria	On demand	Max per bank is 1/3 of liability reserve. Govt. backed bonds may be issued.	200,000 shillings (HK$138,600)
Belgium	0.020% p.a. of protected classes of deposits	None. Insurance limited to assets in fund.	BF500,000 (HK$118,500)- subject to availability of funds.
France	On demand. Calls up to FF 200 Million p.a.	Extra calls up to FF 1,000 million can be made in regard to a five year period.	FF400,000 (HK$565,200)
Germany - Commercial Banks	0.030% p.a. of total deposits	Annual levy may be doubled.	Up to 30% of equity capital of bank.
Ireland	0.2% p.a. of total Irish Pounds deposits	Fund may be reconstituted once per year.	80% of 1st IP5,000 (HK$64,300); 70% of 2nd IP5,000; 50% of 3rd IP5,000; Max of IP10,000 (HK$128,600)

Italy	Max of 1% of total deposits. Amount not to exceed L4 Trillion	Two options - defer payment or diminish the compensation to be paid.	100% of 1st L200 Million (HK$1,276,000) 75% of next L800 Million (HK$5,104,000)
Netherlands	On demand. Max of 10% of total resources p.a.	Government backing subject to Parliamentary approval.	FL40,000 (HK$170,700)
Spain	Shared by Bank of Spain & member banks on an equal basis. Banks contribute 0.25% of total deposits p.a.	Government backing through the Bank of Spain, subject to approval by Royal Decree.	P1,500,000 (HK$114,600)
Switzerland	On demand. Flat & variable rates apply.	Underwritten by member banks.	SF30,000 (HK$163,000)
United Kingdom	Initial contribution plus calls subject to a max of 0.3% of sterling deposits.	Parliament may increase the maximum percentage payable.	75% of deposits up to UKP20,000 (HK$275,500)
NORTH AMERICA			
Canada	0.10% p.a. of protected classes of deposits	Government backing subject to Parliament's approval	C$60,000 (HK$409,400)
U.S.A.	0.23% p.a. of total domestic deposits	Government backing subject to Congressional approval	US$100,000 (HK$775,400)

Region/Country	Membership	Administration
ASIA		
India	Compulsory	Deposit Insurance and Credit Guarantee Corp.
Japan	Compulsory	Deposit Insurance Corporation
Philippines	Compulsory	Deposit Insurance Corporation
EUROPE		
Austria	Compulsory	Industry arrangement
Belgium	Voluntary	Rediscount & Guarantee Institute.
France	Compulsory	French Assoc. of Banks
Germany	Voluntary	Assoc. of German Commercial Banks.
Ireland	Compulsory	Central Bank
Italy	Voluntary	Interbank Deposit Protection Fund
Netherlands	Compulsory	Nederlandsche Bank
Spain	Voluntary	Deposit Guarantee Fund
Switzerland	Voluntary	Swiss Banking Assoc.
United Kingdom	Compulsory	Deposit Protection Board
NORTH AMERICA		
Canada	Compulsory	Deposit Insurance Corporation
U.S.A.	Compulsory for all FED member and national banks.	Deposit Insurance Corporation

CALCULATION OF COSTS

In order to estimate the likely cost of protecting deposits in a medium sized bank under current circumstances, two scenarios have been envisaged:

Scenario One: protection will only be extended to depositors who have deposits covered by the HKAB Interest Rate Agreement; and

Scenario Two: protection will be extended to all depositors.

Both scenarios are detailed in the following paragraphs. It has been assumed that the protection ceiling could be set at either \$100,000 or \$200,000, that either full or proportional coverage could be provided and that the premiums could be calculated in one of three ways:

1. by reference to the total HKAB deposits;
2. by reference to the total HK dollar deposits; or
3. by reference to the total of all deposits.

It has also been assumed that it will take 5 years to establish the protection fund and that during that time, both the total deposit amount and the funds needed to provide the necessary protection will grow at the rate of 20% per annum. This figure was determined by reference to the growth rate of all deposits in recent years. The actual average growth rates for the different classes of deposits were not used in the projections as these rates may be affected by the introduction of the DPS. Although the DPS may also affect the overall growth rate, it is unlikely to be affected to the same extent. It has also been assumed that the overall distribution of deposits will not change. No allowance has been made for any return on the funds accumulated in the protection fund during the establishment period as the administrative costs may be substantial.

Scenario One - Protection extended to HKAB depositors only

I. \$100,000 ceiling with full coverage and costs based on total HKAB deposits:

Total HKAB deposits as at 31/8/91:	\$300,334m
Funds estimated to be needed as at 31/8/91:(1)	\$1,919m

(1) The funds estimated to be needed as at 31/8/91 are based on the deposit profile of a hypothetical medium sized bank with current total deposits of some HK\$10 billion with a 50% safety factor added. To give a simple illustration, assuming a \$100,000 ceiling, imagine a bank with only 3 HKAB accounts:

	Deposit Amount	Protected Amount
Account No. 1	\$80,000	\$80,000
Account No. 2	\$120,000	\$100,000
Account No. 3	\$200,000	\$100,000
		\$280,000
Safety factor		x 1.5
Funds estimated to be needed		\$420,000

The target amount at the end of 5 years is thus: $4,775m

In order to achieve the target amount, it would be necessary to levy an annual charge of 0.178% on the total HKAB deposits. This calculation is shown below:

	End of Year figures (HK$m)				
	1	2	3	4	5
HKAB Deposits	360,401	432,481	518,977	622,773	747,327
Annual levy (0.178%)	642	770	924	1,109	1,330

The sum of the levy in years 1 to 5 inclusive is $4,775m

II. $100,000 ceiling with 75% coverage and costs based on total HKAB deposits:

Total HKAB deposits as at 31/8/91: $300,334m

Funds estimated to be needed as at 31/8/91: $1,439m

The target amount at the end of 5 years is thus: $3,581m

In order to achieve the target amount, it would be necessary to levy an annual charge of 0.134% on the total HKAB deposits. This calculation is shown below:

	End of Year figures (HK$m)				
	1	2	3	4	5
HKAB Deposits	360,401	432,481	518,977	622,773	747,327
Annual levy (0.134%)	483	580	695	835	1,001

The sum of the levy in years 1 to 5 inclusive is $3,594m which is marginally above the target amount.

III. $100,000 ceiling with full coverage and costs based on total HK dollar deposits:

Total HK dollar deposits as at 31/8/91: $489,548m

Funds estimated to be needed as at 31/8/91: $1,919m

The target amount at the end of 5 years is thus: $4,775m

In order to achieve the target amount, it would be necessary to levy an annual charge of 0.11% on the total HK dollar deposits. This calculation is shown below:

End of Year figures (HK$m)

	1	2	3	4	5
HK$ Deposits	587,458	704,949	845,939	1,015,127	1,218,152
Annual levy (0.11%)	646	775	931	1,117	1,340

The sum of the levy in years 1 to 5 inclusive is $4,809 which is marginally above the target amount.

IV. $100,000 ceiling with 75% coverage and costs based on total HK dollar deposits:

Total HK dollar deposits as at 31/8/91: $489,548m

Funds estimated to be needed as at 31/8/91: $1,439m

The target amount at the end of 5 years is thus: $3,581m

In order to achieve the target amount, it would be necessary to levy an annual charge of 0.082% on the total HK dollar deposits. This calculation is shown below:

End of Year figures (HK$m)

	1	2	3	4	5
HK$ Deposits	587,458	704,949	845,939	1,015,127	1,218,152
Annual levy (0.082%)	482	578	694	832	999

The sum of the levy in years 1 to 5 inclusive is $3,585 which is marginally above the target amount.

V. $100,000 ceiling with full coverage and costs based on the total of all deposits:

Total deposits as at 31/8/91: $1,226,645m

Funds estimated to be needed as at 31/8/91: $1,919m

The target amount at the end of 5 years is thus: $4,775m

In order to achieve the target amount, it would be necessary to levy an annual charge of 0.044% on the total deposits. This calculation is shown below:

	End of Year figures (HK$m)				
	1	2	3	4	5
All Deposits	1,471,974	1,766,369	2,119,643	2,543,571	3,052,285
Annual levy (0.044%)	648	777	933	1,119	1,343

The sum of the levy in years 1 to 5 inclusive is $4,820m which is marginally above the target amount.

VI. $100,000 ceiling with 75% coverage and costs based on the total of all deposits:

Total deposits as at 31/8/91: $1,226,645m

Funds estimated to be needed as at 31/8/91: $1,439m

The target amount at the end of 5 years is thus: $3,581m

In order to achieve the target amount, it would be necessary to levy an annual charge of 0.033% on the total deposits. This calculation is shown below:

	End of Year figures (HK$m)				
	1	2	3	4	5
All Deposits	1,471,974	1,766,369	2,119,643	2,543,571	3,052,285
Annual levy (0.033%)	486	583	699	839	1,007

The sum of the levy in years 1 to 5 inclusive is $3,614m which is marginally above the target amount.

VII. $200,000 ceiling with full coverage and costs based on total HKAB deposits:

Total HKAB deposits as at 31/8/91: $300,334m

Funds estimated to be needed as at 31/8/91: $2,462m

The target amount at the end of 5 years is thus: $6,126m

In order to achieve the target amount, it would be necessary to levy an annual charge of 0.229% on the total HKAB deposits. This calculation is shown below:

End of Year figures (HK$m)

	1	2	3	4	5
HKAB Deposits	360,401	432,481	518,977	622,773	747,327
Annual levy (0.229%)	825	990	1,188	1,426	1,711

The sum of the levy in years 1 to 5 inclusive is $6,140m which is marginally above the target amount.

VIII. $200,000 ceiling with 75% coverage and costs based on total HKAB deposits:

Total HKAB deposits as at 31/8/91: $300,334m

Funds estimated to be needed as at 31/8/91: $1,847m

The target amount at the end of 5 years is thus: $4,596m

In order to achieve the target amount, it would be necessary to levy an annual charge of 0.172% on the total HKAB deposits. This calculation is shown below:

End of Year figures (HK$m)

	1	2	3	4	5
HKAB Deposits	360,401	432,481	518,977	622,773	747,327
Annual levy (0.172%)	620	744	893	1,071	1,285

The sum of the levy in years 1 to 5 inclusive is $4,613m which is marginally above the target amount.

IX. $200,000 ceiling with full coverage and costs based on total HK dollar deposits:

Total HK dollar deposits as at 31/8/91: $489,548m

Funds estimated to be needed as at 31/8/91: $2,462m

The target amount at the end of 5 years is thus: $6,126m

In order to achieve the target amount, it would be necessary to levy an annual charge of 0.14% on the total HK dollar deposits. This calculation is shown below:

	End of Year figures (HK$m)				
	1	2	3	4	5
HK$ Deposits	587,458	704,949	845,939	1,015,127	1,218,152
Annual levy (0.14%)	822	987	1,184	1,421	1,705

The sum of the levy in years 1 to 5 inclusive is $6,119m which is marginally below the target amount.

X. $200,000 ceiling with 75% coverage and costs based on total HK dollar deposits:

Total HK dollar deposits as at 31/8/91: $489,548m

Funds estimated to be needed as at 31/8/91: $1,847m

The target amount at the end of 5 years is thus: $4,596m

In order to achieve the target amount, it would be necessary to levy an annual charge of 0.106% on the total HK dollar deposits. This calculation is shown below:

	End of Year figures (HK$m)				
	1	2	3	4	5
HK$ Deposits	587,458	704,949	845,939	1,015,127	1,218,152
Annual levy (0.106%)	623	747	897	1,076	1,291

The sum of the levy in years 1 to 5 inclusive is $4,634m which is marginally above the target amount.

XI. $200,000 ceiling with full coverage and costs based on the total of all deposits:

Total deposits as at 31/8/91: $1,226,645m

Funds estimated to be needed as at 31/8/91: $2,462m

The target amount at the end of 5 years is thus: $6,126m

In order to achieve the target amount, it would be necessary to levy an annual charge of 0.056% on the total deposits. This calculation is shown below:

	End of Year figures (HK$m)				
	1	2	3	4	5
All Deposits	1,471,974	1,766,369	2,119,643	2,543,571	3,052,285
Annual levy (0.056%)	824	989	1,187	1,424	1,709

The sum of the levy in years 1 to 5 inclusive is $6,133m which is marginally above the target amount.

XII. $200,000 ceiling with 75% coverage and costs based on the total of all deposits:

Total deposits as at 31/8/91: $1,226,645m

Funds estimated to be needed as at 31/8/91: $1,847m

The target amount at the end of 5 years is thus: $4,596m

In order to achieve the target amount, it would be necessary to levy an annual charge of 0.042% on the total deposits. This calculation is shown below:

	End of Year figures (HK$m)				
	1	2	3	4	5
All Deposits	1,471,974	1,766,369	2,119,643	2,543,571	3,052,285
Annual levy (0.042%)	618	742	890	1,068	1,282

The sum of the levy in years 1 to 5 inclusive is $4,600m which is marginally above the target amount.

Scenario Two - protection extended to all depositors

I. $100,000 ceiling with full coverage based on the total of all deposits.

Total deposits as at 31/8/91: $1,226,645m

Funds estimated to be needed as at 31/8/91: $3,995m

The target amount at the end of 5 years is thus: $9,941m

In order to achieve the target amount, it would be necessary to levy an annual charge of 0.091% on the total deposits. This calculation is shown below:

End of Year figures (HK$m)

	1	2	3	4	5
All Deposits	1,471,974	1,766,369	2,119,643	2,543,571	3,052,285
Annual levy (0.091%)	1,339	1,607	1,929	2,315	2,778

The sum of the levy in years 1 to 5 inclusive is $9,968m which is marginally above the target amount.

II. $100,000 ceiling with 75% coverage and costs based on the total of all deposits:

Total deposits as at 31/8/91: $1,226,645m

Funds estimated to be needed as at 31/8/91: $2,996m

The target amount at the end of 5 years is thus: $7,455m

In order to achieve the target amount, it would be necessary to levy an annual charge of 0.068% on the total deposits. This calculation is shown below:

End of Year figures (HK$m)

	1	2	3	4	5
All Deposits	1,471,974	1,766,369	2,119,643	2,543,571	3,052,285
Annual levy (0.068%)	1,001	1,201	1,441	1,730	2,076

The sum of the levy in years 1 to 5 inclusive is $7,449m which is marginally below the target amount.

III. $200,000 ceiling with full coverage and costs based on the total of all deposits:

Total deposits as at 31/8/91: $1,226,645m

Funds estimated to be needed as at 31/8/91: $5,817m

The target amount at the end of 5 years is thus: $14,475m

In order to achieve the target amount, it would be necessary to levy an annual charge of 0.132% on the total deposits. This calculation is shown below:

	End of Year figures (HK$m)				
	1	2	3	4	5
All Deposits	1,471,974	1,766,369	2,119,643	2,543,571	3,052,285
Annual levy (0.132%)	1,943	2,332	2,798	3,358	4,029

The sum of the levy in years 1 to 5 inclusive is $14,460m which is marginally below the target amount.

IV. $200,000 ceiling with 75% coverage and costs based on the total of all deposits:

Total deposits as at 31/8/91: $1,226,645m

Funds estimated to be needed as at 31/8/91: $4,363m

The target amount at the end of 5 years is thus: $10,857m

In order to achieve the target amount, it would be necessary to levy an annual charge of 0.099% on the total deposits. This calculation is shown below:

	End of Year figures (HK$m)				
	1	2	3	4	5
All Deposits	1,471,974	1,766,369	2,119,643	2,543,571	3,052,285
Annual levy (0.099%)	1,457	1,749	2,098	2,518	3,022

The sum of the levy in years 1 to 5 inclusive is $10,844m which is marginally below the target amount.