

The future structure of the gilt-edged market

The Bank of England's dealing and supervisory relationships with certain participants⁽¹⁾

1 The Stock Exchange's paper 'The Market in Gilt-Edged Securities' published on 8 August 1984 set out detailed proposals for the overall structure of the future gilt-edged market.⁽²⁾ This paper sets out the Bank of England's intentions for its own relationship, within that overall structure, with those with whom the Bank will transact business under the new arrangements, ie the gilt-edged market makers, as well as for the arrangements that will apply to those providing ancillary services to the market makers, ie Stock Exchange money brokers and inter-dealer brokers (IDBs). The arrangements described in this document have been developed with the help of comments received on the Bank's draft proposals published in November 1984. The arrangements will be subject to continuing review and modification in the light of experience.

2 The Bank now invites applications, as soon as possible and in any case by 3 May 1985, from firms wishing to be gilt-edged market makers in the future structure of the gilt-edged market. The timetable is described in Section VI, 'Next steps', below.

I Market makers

3 The essential liquidity of the new gilt-edged market will be provided by a number of market makers who undertake to make, on demand and in any trading conditions, continuous and effective two-way prices at which they stand committed to deal.

4 To assist those participants who are willing to take on this market-making obligation, who demonstrate the capacity—in terms of capital and of management and operational resources—to do so, and who are prepared to accept the Bank's prudential oversight, the following facilities will be offered:

- (a) a direct dealing relationship with the Bank in gilt-edged securities;
- (b) subject to the agreement of the Government, facilities to borrow stock and tax treatment comparable to that currently accorded to the present gilt-edged jobbers;
- (c) borrowing facilities at the Bank against approved security up to maximum amounts related to the market maker's capital and reserves; and
- (d) access to the inter-dealer broker mechanism.

(i) The obligations

(a) Market making

5 The basic obligation of market makers will be to make, on demand and in any trading conditions, continuous and effective two-way prices at which they stand committed to deal, in appropriate size as discussed in advance with the Bank, thereby providing continuous liquidity for the investing public. It is envisaged that there will be different types of market maker. Some may choose to operate through a presence on The Stock Exchange floor or in provincial centres, meeting their market-making obligation in that capacity by quoting two-way prices to other member firms of The Stock Exchange in much the same way as single-capacity jobbers under the present arrangements. Others may choose, as well as or instead of maintaining a floor presence, to meet their obligation operating 'upstairs' by quoting prices by telephone and/or screen. Such others will normally be expected to quote two-way prices on demand to all member firms of The Stock Exchange,⁽³⁾ and to outside investors known to them directly.

6 The essential purpose of this obligation—which will be mirrored in parallel obligations in The Stock Exchange's rules—and the reason for the relationship with the Bank, is to ensure that market makers make markets to users of the market generally, and do not provide a dealing service largely confined to a narrow group. Each market maker's performance against his undertaking, taking account of the role he plays in the market, will be closely monitored by the Bank; failure to live up to that undertaking would ultimately result in the ending of the relationship with the Bank and the termination of the other facilities. Over time the Bank will seek to develop performance criteria based upon share of turnover with the investing public, by value and volume of transactions, to supplement its direct observation of market-making activity. But in applying such criteria it would in any event take special account of the position of those market makers serving smaller investors and their brokers.

7 The Bank would like to encourage market making in as wide a range of listed sterling debt securities as possible. The market-making obligation described by the Bank will, however, apply specifically to gilt-edged. Some market makers may initially be permitted to confine their operations to the short market, but in

(1) This paper and the Annexes and Addenda that follow were published by the Bank on 12 April.

(2) Throughout these papers 'gilt-edged' means British government (and British government-guaranteed) stocks denominated in sterling.

(3) They need not quote to other gilt-edged market makers, Stock Exchange money brokers or inter-dealer brokers.

that case the facilities available to them will be appropriately restricted and the Bank will expect them over time to extend such operations to the full range of stocks. The range of sterling debt securities, including the range of gilt-edged, in which a market maker intends to make a market could become a criterion in choosing initially between prospective market makers if it should become necessary for the Bank to exercise such choice (see Section V below).

(b) Arrangements for prudential supervision of market makers

8 On the basis that the membership proposals set out by The Stock Exchange in its paper *Membership and the Constitution* published in March 1985 are adopted, the Bank intends to confine its dealings to market makers who are Stock Exchange member firms. This will ensure that the gilt-edged market as a whole is subject to Stock Exchange regulation as far as trading practices and professional standards are concerned. The Stock Exchange, for example, will monitor trades from the point of view of investor protection.

9 As far as the prudential supervision of participants in the gilt-edged market is concerned, the Bank intends to supervise the capital adequacy of the market makers, and of the providers of ancillary services to the market makers, ie the Stock Exchange money brokers and inter-dealer brokers. This, and the monitoring of the functional obligations described in paragraphs 6, 25 and 32 apart, The Stock Exchange will be responsible for all other aspects of market supervision, including the supervision of the capital adequacy of all other Stock Exchange members.

10 The main feature of the Bank's prudential supervision will be the monitoring of the adequacy of each market-making firm's capital resources in relation to its exposure to risks of various kinds. To facilitate this supervision, and to ensure as far as possible equal competition among the market makers, the Bank will require gilt-edged market makers to be separately established as companies or partnerships with dedicated sterling capital in this country. The Bank will also seek assurances from substantial shareholders in market-making entities that they accept ultimate responsibility for the liabilities of the entity. Separate capitalisation need not exclude elements of common management or staffing with related entities;⁽¹⁾ but the Bank would wish to review the organisation of each market-making entity individually. In any event the Bank would expect transactions with related entities normally to be carried out at arm's length, and will want them to be separately reported to the Bank. The Bank will be prepared to exempt from this reporting requirement transactions with a related entity which is acting purely as an agent, but will wish to discuss the

scope of this exemption in each case with the parties concerned. Gilt-edged market makers will be expected to deal only in sterling fixed-interest or floating-rate or indexed securities, and related instruments (e.g. gilt-edged futures and traded options), but excluding convertible preference shares and loan stock convertible into equity. They will be able also to deal in approved sterling money-market instruments, but not to have a dealing relationship with the Bank in such instruments, although a related entity could do so.

11 The form of the Bank's proposed prudential supervision of gilt-edged market makers, and the information that the Bank will need for that purpose, are described in detail in Annex 1. The Bank will discuss with potential market makers their intentions with regard to capital in the light of the role they plan to play in the market, but it will not lay down minimum or maximum capital requirements: instead it will regulate the ratio of risk exposure to capital that a market maker can undertake.

(ii) The facilities available to market makers

(a) The dealing relationship with the Bank

12 It is not possible fully to foresee how the present techniques for financing the government through the sale of gilt-edged might be affected by the change in market structure. One possibility which the Bank will wish to examine is whether some part at least of the funding programme might be put on a more regular footing, with greater reliance on the primary market. The Bank will in due course wish to discuss this possibility with the market makers, including in that context arrangements to ensure their appropriate support of the primary offerings. Such possible developments notwithstanding, the Bank expects to retain the flexibility provided by a substantial continuing presence in the secondary market through its dealing relationship with market makers.

13 The Bank will undertake such market operations as it sees fit, but specifically it will be prepared:

- (i) to receive directly from market makers—just before the official market opening or at any time during the normal business day—outright bids for stock, including particularly tap stocks, which it may have in its portfolio: the Bank will respond to such bids entirely at its discretion;
- (ii) at its discretion to undertake switches of stock proposed to it by market makers on such terms as it may agree;
- (iii) to bid a price of its own choosing for stock with three months or less to maturity offered to it by market makers;

(1) Related entities include any company with the same ultimate holding company as the market maker, any company or partnership controlled by partners in the market maker, and any associated company.

- (iv) to bid a price of its own choosing for index-linked stock offered to it by market makers; and
- (v) at its discretion to purchase outright, at prices of its own choosing, other stock that may be offered to it by market makers. The Bank expects to exercise this discretion more liberally for stocks with between three and twelve months to maturity than for other stocks.

14 Gilt-edged market makers (and Stock Exchange money brokers) will be able to bid at Treasury bill tenders.

(b) Technical arrangements

Borrowing stock

15 The Bank is not prepared at this stage—essentially for prudential reasons—to envisage the development of an unregulated market in repurchase agreements in government securities such as exists in the United States. The present arrangements for regulated stock borrowing and lending to facilitate market liquidity will therefore continue. In particular, the Inland Revenue will continue to treat the loan and recovery of stock as a disposal and acquisition for capital gains tax purposes unless:

- (i) the lender is an approved lender;
- (ii) the borrower is an approved borrower; and
- (iii) the loan is arranged by an approved Stock Exchange money broker (see Section II below).

Subject to the agreement of the Government, gilt-edged market makers under the new arrangements will be both approved borrowers and approved lenders. The Bank is examining means of increasing the amount of stock available for borrowing.

Taxation

16 Subject to the agreement of the Government, it is envisaged that the tax arrangements currently available to gilt-edged jobbers will in substance be made available to gilt-edged market-making entities, viz:

- (i) exemption from Section 472(1) of the Income and Corporation Taxes Act 1970, which enables them to claim relief against tax for the full trading loss made by buying stock cum-dividend and selling it ex-dividend in the ordinary course of business, regardless of the interval between the purchase and the sale; and
- (ii) 'bull and bear' dividend arrangements which allow the jobbers to offset, for tax purposes, dividends paid by them on stock they have sold against dividends received on stock they have purchased.

(c) Financing

17 It is envisaged that the present arrangements whereby banks whose bills are eligible for rediscount or acceptable as security at the Bank of England are

required to keep a certain proportion of their eligible liabilities in the form of secured money with discount houses, gilt-edged jobbers or Stock Exchange money brokers, will lapse before the new gilt-edged market structure comes into effect. Gilt-edged market makers (and Stock Exchange money brokers) should nevertheless be able to arrange financing for their activities on fine terms, since they will be borrowing on very high quality security and will be subject to close prudential supervision.

18 Money placed by monetary sector institutions at call or overnight with gilt-edged market makers or with Stock Exchange money brokers and secured by gilt-edged stocks⁽¹⁾ or by Treasury, local authority or eligible bank bills will continue to count as an offset in the calculation of those institutions' eligible liabilities. In addition, the Bank will be prepared to make available to the gilt-edged market makers (and Stock Exchange money brokers) secured borrowing facilities at the Bank which may be drawn upon at the market maker's initiative where normal market financing is not readily available, subject to maximum amounts related to the borrower's capital. The availability of such facilities in favour of this group of directly supervised institutions will mean that the Bank will regard secured lending at call to them by banks and licensed deposit takers as high quality liquidity, and will assign such lending a low risk weighting for capital adequacy purposes.

(d) Access to inter-dealer brokers (IDBs)

19 It is expected that a number of competing inter-dealer brokers will provide dealing facilities between the market makers (see Section III below). The essential purpose of these arrangements is to enable the market makers to unwind stock positions that arise from their market-making activities with investors or their agents, and IDBs are likely to make an important contribution to the overall liquidity of the market.

20 Many potential participants in the new arrangements have argued that access to IDBs should be confined to the market makers alone, for two reasons:

- (i) If the market makers are to be able to trade actively and in large amounts through the IDB networks on a 'blind' basis—that is, without knowing the identity of their ultimate counterparty—then they need to have confidence in the creditworthiness of all the other parties who can deal through the IDBs. This argues for confining access to the IDB networks to the market makers, who are subject to common supervision.
- (ii) Concern has also been expressed that wider access to the IDB networks could endanger the continuous liquidity of the market, to which the Bank attaches great importance. The concern is

(1) Defined more broadly than in footnote(2) on page 250.

that such wider access could enable broker dealers, who undertake no obligation to make continuous markets in all conditions, to attract business away from the market makers at times when there was a good two-way flow of business and so relatively little risk, which in turn would weaken the ability of the committed market makers to continue making effective two-way prices in more difficult times.

21 These concerns, which have been reiterated in comments on the Bank's draft proposals, may lessen in time as participants gain experience with the new market arrangements. But in the initial phase at least the Bank is anxious to encourage the liquidity provided by the market-making core of the new structure and so will want the IDB networks to be made available only to the market makers.

22 The Bank will, however, monitor the working of the IDB arrangements as the market develops and, once there has been time to gain practical experience of the new market in operation, the Bank will review with market participants whether it would be beneficial for the market as a whole to extend access to the IDB networks more widely.

23 Other market participants will of course have ready access to current prices both for dealing and for information:

- (i) through the competitive dealing quotations made to them by the market makers—whether on demand by telephone, or possibly, at the discretion of the market maker, continuously through screen technology, or additionally, in the case of members of The Stock Exchange, on demand on the floors of the Exchange; and
- (ii) through the indicative prices that the Stock Exchange authorities are expected to collect centrally and publish.

II Stock Exchange money brokers

24 As explained in paragraph 15 above, the present arrangements for regulated stock borrowing and lending to facilitate market liquidity will continue through the intermediation of Stock Exchange money brokers. Because of the natural inter-relationship with stock borrowing, the financing of market makers' bull positions and the placing of surplus funds arising from their bear positions are likely also in significant degree to be arranged through Stock Exchange money brokers.

25 Subject to the agreement of the Government, firms will be provided with technical facilities necessary to enable them to act, or to continue to act, as Stock Exchange money brokers, provided that such a firm can demonstrate to the Bank:

- (i) that it has the capacity—in terms of capital and

of management and operational resources—to perform this function; and

- (ii) that a broadly-based demand for its services exists among the gilt-edged market makers.

The purpose of providing such facilities will be to enable the money brokers to provide a service to the market makers as a whole (and to discount houses, which will continue to be approved borrowers of stock with 7 years or less to maturity), and not largely confined to a narrow group. The Bank will want to satisfy itself on a continuing basis that each Stock Exchange money broker is fulfilling that purpose.

26 Stock Exchange money brokers will be required to accept the Bank's prudential supervision, without which the Bank's supervision of the risks incurred by the market makers themselves would be incomplete. To facilitate this supervision, and to ensure as far as possible equal competition among the money brokers, the Bank will require Stock Exchange money brokers to be separately established as companies or partnerships with dedicated sterling capital in this country. The Bank will also seek assurances from substantial shareholders in such entities that they accept ultimate responsibility for the liabilities of the entity.

27 The activities of Stock Exchange money brokers, in addition to money broking in gilt-edged and other securities, may include either or both of:

- (i) dealing in money-market instruments; and
- (ii) inter-dealer broking among gilt-edged market makers in securities and instruments in which gilt-edged market makers may deal.

Because of the confidential indications of the market makers' positions which a money broker necessarily acquires, money brokers will not be allowed to take positions in securities or instruments in which they act as money brokers or inter-dealer brokers. Moreover, management and staffing of the money broking entity will need to be separated from that of other, position-taking, entities within a group.

28 The Bank notes that where a prospective Stock Exchange money broker has ownership links with a market maker or broker dealer, competitive pressures may make it difficult for him to demonstrate the necessary broadly-based demand for its services among the market makers as required under paragraph 25 (ii) above; but the Bank would not itself rule out such links. Money brokers would be expected to become members of The Stock Exchange if they are not already members.

29 The form of the Bank's proposed prudential supervision of Stock Exchange money brokers, and the

information that the Bank will need for that purpose, are described in detail in Annex 2.

30 Paragraphs 17 and 18 above concerning the financing of market makers apply equally, *mutatis mutandis*, to Stock Exchange money brokers.

III Inter-dealer brokers (IDBs)

31 As explained in paragraph 19 above, an important role in contributing to the liquidity of the market is envisaged for a number of competing inter-dealer brokers (IDBs).

32 The Bank will be prepared to provide firms with technical facilities necessary to enable them to act as IDBs, provided that such a firm can demonstrate:

- (i) that it has the capacity—in terms of capital and of management and operational resources—to perform this function; and
- (ii) that a broadly-based demand for its services exists among the gilt-edged market makers.

IDBs will be expected to provide a service to the market makers as a whole, and not largely confined to a narrow group. The Bank will want to satisfy itself on a continuing basis that each IDB is fulfilling that purpose.

33 IDBs will be required to accept the Bank's prudential supervision, and the considerations and requirements relating to Stock Exchange money brokers in paragraphs 26 and 28 above will also apply, *mutatis mutandis*, to IDBs.

34 The activities of IDBs, in addition to inter-dealer broking among gilt-edged market makers in securities and instruments in which gilt-edged market makers may deal, may include money broking in gilt-edged and other securities, which may be combined with dealing in money-market instruments. Because of the confidential indications of the market makers' positions which an IDB necessarily acquires, IDBs will not be allowed to take positions in securities or instruments in which they act as inter-dealer brokers or Stock Exchange money brokers. Moreover, management and staffing of the inter-dealer broking entity will need to be separated from that of other, position-taking, entities within a group.

35 The form of the Bank's proposed prudential supervision of the IDBs, and the information that the Bank will need for that purpose, are described in detail in Annex 3.

IV Settlement

36 The Central Gilts Office (CGO) has published a description of Phase I of the CGO service which involves replacing the current manual system for rapid

transfer of stock with an electronic system. It is intended that the service should be available at the inception of the new gilt-edged market structure to market makers, Stock Exchange money brokers, inter-dealer brokers, discount houses and approved lenders of gilt-edged stock. In addition, the Bank is urgently exploring the possibility of developing the system so that it may provide for irrevocable instructions for payment for stock to be generated simultaneously with the movement of stock between accounts in the system.

V General

37 An important objective of the proposed arrangements will be to promote competition among market makers, among Stock Exchange money brokers and among IDBs. To that end the Bank hopes that it will be able to accept as participants all those applicants able to demonstrate adequate capacity to perform the respective functions, and, in the case of Stock Exchange money brokers and IDBs, able to demonstrate a broadly-based demand for their services. In general, and having regard to European Community obligations, no distinction will be made between domestic and foreign firms, except that, in the case of firms with substantial foreign ownership, the Bank will have regard to the extent to which British-owned firms can in practice undertake the equivalent activity in the relevant foreign market.

38 If in the event the numbers of otherwise acceptable applicants are such as to suggest a serious risk of disorder during the process of transition, the Bank will exercise its discretion in choosing among them, and may have regard *inter alia*, in the case of prospective market makers, to the range of stocks in which the various applicants are prepared to make a market. After establishing an initial list of participants the Bank will not consider further applications from prospective participants before the new arrangements have come into effect, but will do so on an open-ended basis at any time after about a year's experience with the new market structure.

39 Gilt-edged market makers will not in the initial stages of the new structure of the gilt-edged market have a dealing relationship with the Bank in money-market instruments, although they may be in the same group as a discount house which does. They may, however, deal in money-market instruments, subject to the prudential ratios described in Annex 1, and, after having thus established a track record in such dealing during the initial stages of the new market structure, they may apply to the Bank for a dealing relationship in these instruments, on the same basis as discount houses. If successful in their application, gilt-edged market makers will be required to conduct their dealings in money-market instruments through separately capitalised entities.

40 Should a disagreement arise over questions of principle relating to the application of the arrangements described in this paper, the Bank will be prepared to seek the opinion of the Securities and Investments Board and would take full account of such opinion. Thereafter, if the matter remained unresolved, the Bank would be ready for it to be referred for adjudication to an appeal body.

41 Both in this latter connection and more generally, the Bank will need to be able to liaise with other regulatory authorities and to exchange with them information necessary to the carrying out of their respective regulatory responsibilities.

VI Next steps

42 As indicated in the introduction to this paper, the Bank now invites applications, as soon as possible and in any case by 3 May 1985, from firms wishing to be gilt-edged market makers in the future structure of the

gilt-edged market. Applications should be addressed to the Head of the Gilt-Edged Division at the Bank. The Bank will hold formal discussions with these firms, based on an annotated agenda which will be sent to all applicants. The Bank will complete these discussions before taking any decisions, and will at that stage announce the number of acceptable applicants with some indication of the types of firm concerned, the size in which they expect normally to quote and the aggregate intended capitalisation. Thereafter, firms will have two weeks in which to confirm their applications. The Bank hopes to be able to publish the initial list of market makers by mid-June.

43 Over the following four weeks the Bank will be ready to receive applications from firms wishing to be Stock Exchange money brokers or inter-dealer brokers, which will need to be supported by evidence of a broadly-based demand for their services in the form of letters from prospective market makers indicating a willingness in principle to use their services.

Annex 1

Prudential supervision of gilt-edged market makers

1 This paper describes the framework of prudential supervision that the Bank will want to apply to gilt-edged market makers. The framework will be subject to modification in the light of experience.

2 Risk taking is an essential part of a market maker's function, and the effective working of the market—in the interests both of the Government as borrower and of the investing public—requires that the market makers should be as free as possible to make their own judgements about the positions they wish to run. The aim of the Bank's supervision will be, within this framework, to ensure as far as possible that such judgements do not result in risks being taken which are disproportionate to the market maker's own funds, and which would endanger his ability to meet his obligations towards his counterparties. No supervisory arrangements can wholly exclude the risk of default, however, and it must remain the responsibility of the counterparties to satisfy themselves as to the integrity of a market maker with whom they deal.

3 As indicated in the main paper the Bank will require market makers to be separately capitalised in the UK and to trade only in sterling debt securities and related instruments, eg gilt-edged futures and traded options, and approved money-market instruments.⁽¹⁾ The Bank's prudential supervision will be based upon close familiarity with the management and business of each market maker, to be developed through regular quarterly bilateral discussions. It will be supported by continuous assessment of the market maker's risk exposure in relation to his capital resources freely available to meet losses, taking as a starting point the detailed guidelines set out in Sections B and C below. These guidelines have been drawn up on the basis of the Bank's discussions with prospective participants and of a volatility analysis of the different sectors of the gilt-edged market. The Bank's assessment of the market makers' financial performance and balance sheets will not, however, be based mechanically on these guidelines, which it regards as simply a starting point for such assessment.

4 The Bank's prudential supervision as described in this paper will take the place of capital adequacy supervision by The Stock Exchange for gilt-edged market makers. As part of the Stock Exchange membership requirements, however, market makers

will be required to send copies of the reports identified in paragraph 35(iii) and (iv) to The Stock Exchange. As indicated in the main paper, the Bank will liaise with The Stock Exchange and other regulatory authorities on regulatory matters, and may in this context exchange with them other information necessary to the carrying out of their respective regulatory responsibilities.

5 The remainder of this paper is arranged as follows. Section A sets out the Bank's requirements as regards the capital structure of gilt-edged market makers, and for measuring the market maker's capital base. Section B describes the guidelines for measuring risk exposure. Section C describes the Bank's guidelines for gearing, ie its approach to the relationship between risk exposure and capital base. And Section D gives details of the regular reports that the Bank will require from market makers.

A Measurement of capital base

6 The Bank will want a gilt-edged market-making entity to be insulated as far as possible from any adverse development in other parts of any group to which it may belong, and it will wish to discuss the intended group structure with prospective gilt-edged market makers from this point of view. It will require gilt-edged market makers to be separately established entities in the UK with their own dedicated capital as defined below; and assurances will be sought from substantial shareholders that they accept ultimate responsibility for the market makers' liabilities. A gilt-edged market maker may not, without the agreement of the Bank, have as a partly or wholly-owned subsidiary any other entity operating in financial markets. The Bank will wish to be informed individually of all transactions between a gilt-edged market maker and any related entity, which the Bank would expect normally to be on an arm's length basis. The Bank will be prepared to exempt from this reporting requirement transactions with a related entity which is acting purely as an agent, but will wish to discuss the scope of this exemption in each case with the parties concerned.

7 The capital base of a gilt-edged market maker which is a limited company will be defined as follows:

amount paid up on ordinary share capital
plus amount paid up on non-redeemable preference shares

(1) That is, Treasury, local authority and eligible bank bills and sterling deposits with and certificates of deposit issued by recognised banks, licensed deposit takers and building societies.

share premium account
 revaluation reserves
 other reserves (to be specified)
 profit and loss account as disclosed in last audited accounts
 profit/loss to date (net of tax payable, calculated at the current corporation tax rate) since date of previous audited accounts including unrealised appreciation/depreciation, less dividends proposed amount paid up on subordinated loan capital, in certain circumstances and subject to the Bank's agreement as to amount and as to terms

minus net book value of fixed assets (deducting only 20% of value of freehold and leasehold property)
 goodwill and other intangibles
 book value of securities other than sterling debt securities
 book value of interests in subsidiaries and associated companies (share capital and loans)
 non-marketable unsecured loans⁽¹⁾ other than holdings of sterling deposits with recognised banks, licensed deposit takers and building societies.

8 The capital base of a gilt-edged market maker which is in the form of a partnership will be defined as follows:

general partners' current and other accounts with the firm, net of tax due and accrued profits due to limited partners
plus general partners' capital accounts with the firm
 limited partners' capital accounts
minus net book value of fixed assets (deducting only 20% of value of freehold and leasehold property)
 goodwill and other intangibles
 book value of securities other than sterling debt securities
 book value of interests in subsidiaries and associated companies (share capital and loans)
 non-marketable unsecured loans⁽¹⁾ other than holdings of sterling deposits with recognised banks, licensed deposit takers and building societies.

The Bank will require gilt-edged market makers which are in the form of partnerships to have partnership deeds approved by the Bank.

9 The Bank will not lay down either a minimum or maximum capital requirement for gilt-edged market makers. It will wish to discuss with the market maker individually the role which it intends to play within the market, and to satisfy itself that the initial capital proposed is appropriate to that intended role. Thereafter the Bank will be concerned primarily with the extent to which, and form in which, the market maker 'gears up' on its capital base, ie with the relationship between the overall risk exposure and capital, taking as the starting point the guidelines in Sections B and C below. The Bank will, *inter alia*, be concerned to ensure that any reductions in the capital

base, as a result of losses or for any other reason, unless made good by the injection of additional capital, are reflected in an appropriate contraction in the market maker's risk exposure within a reasonable time.

B Measurement of risk exposure

10 Two general kinds of risk will be run by gilt-edged market makers:

- (i) *position risk* ie the risk of loss arising from the possibility of falls in the prices of assets in which the market maker has a net bull position, or of rises in the prices of assets in which he has a net bear position; and
- (ii) *credit risk* ie the risk of loss arising from the failure of another party to meet previously agreed obligations.

11 The methods by which the Bank proposes, as a first approximation, to evaluate these respective risks are as follows:

(a) Measurement of position risk

(i) Gilt-edged

12 The Bank proposes to look at a market maker's gilt-edged book by breaking it down into eight separate categories of stock, each of which will attract a different risk weighting intended to reflect the relative price volatility of the category. The objective is to obtain an initial, broad indication of the risk inherent in the market maker's gilt-edged position taken as a whole. Since the risk arising from positions in particular stocks or categories of stocks may be partly offset by opposite positions in other stocks or categories of stocks, the calculation makes allowance for such offsetting.

13 The position risk on the gilt-edged book as a whole will be the sum of three parts:

I *The overall net bull or bear position*, with the contribution of different categories of gilt-edged weighted by given risk weights: this measures the risk from changes in the price level of the market as a whole. In this part of the calculation a position in one category of conventional stock may be offset against an opposite position in another category of conventional stock (after the appropriate weighting). No offsetting will be allowed, however, between conventional and index-linked stocks because their prices are less closely correlated. The weighted positions in conventional and indexed stocks will then be added together (without regard to whether the positions are positive or negative), and added to the results of II and III to give the total gilt-edged position risk.

(1) Loans secured by gilt-edged, other sterling debt securities or approved money-market instruments (including such loans to Stock Exchange money brokers), and refunds of tax due from the Inland Revenue, will not be treated as deductions from the capital base, but as adding risk to the book—see Section B below. Loans secured other than by gilt-edged, other sterling debt securities or approved money-market instruments will be treated as deductions from the capital base.

- II** *The net bull or bear position in each category of gilt-edged*, weighted by given risk weights: this measures the risk from net open positions in different categories of conventional gilt-edged, ie the risk that prices of different categories of stock will move in opposite directions. The size (disregarding sign) of the net position in each category will be taken, with no offsetting among categories in this part of the calculation.
- III** *The offsetting positions within each category of gilt-edged* (ie the smaller of the gross long or short position), weighted by given risk weights: this measures the risk from movements in relative prices of individual stocks within each category, ie from offsetting positions within each category. For the purpose of the calculation, matched long and short positions in the same stock may be ignored.

Table 1 shows the risk weights under each of these headings that the Bank intends to use initially; and Table 2 gives an example of how the calculation works. The various weights are derived from an investigation of daily price movements over a period of some two years to June 1984: they have been somewhat modified in the light of comments on the Bank's earlier proposals and are subject to revision in the light of further experience.

14 The position on which the calculation is based will include the effect of deals which have been agreed but not yet settled.

15 In the simple form described above, the formula penalises offsetting positions in stocks close to but on

Table 1
Proposed weights for calculating position risk

	I Risk weights for calculating overall net position	II Risk weights for net open positions in individual maturity bands	III Risk weights for matched positions in individual maturity bands
Maturity band			
A Up to a month	0	0	2
B Over a month but no more than 3 months	1	1	1
C Over 3 months but no more than a year	1	1	1
Conventional stocks			
D Full coupon ⁽¹⁾ stocks with over a year but no more than 5 years to maturity	3	2	1
E Low coupon ⁽²⁾ stocks with over a year but no more than 5 years to maturity	3	3	1
F Stocks with over 5 years but no more than 10 years to maturity	5	1½	1
G Stocks with over 10 years to maturity ⁽³⁾	6½	2	1
Index-linked stocks			
H Stocks with over a year to maturity	6	—	2

(1) Stocks with a coupon of 5% or more.

(2) Stocks with a coupon of less than 5%.

(3) And stocks with no final redemption date.

opposite sides of the boundaries between adjacent categories. For example, a long position of 100 in 4¾ year full coupon gilts offset by a short position of 100 in 5¼ year gilts could add 350 to the overall risk measure (column II, sum of rows D and F), whereas if the positions were in each case in gilts of, say, 6 months' longer maturity, so that both parts of it fell into category F, the addition to the risk measure would be only 100 (column III, row F). In order to reduce the size of these effects the Bank will allow the column II weights applied to positions in stocks on either side of the borderlines between groups C and D, D and F, and F and G to be reduced to 1 if they are matched by offsetting positions in stocks on the other side of the borderline with a maturity less than a year different (3 months different in the case of the borderline between groups C and D). In some cases this offsetting can result in an increase in a market maker's calculated position risk; accordingly market makers need apply the provisions of this paragraph only to the extent that it is to their advantage to do so.

16 In principle, *convertible gilt-edged stocks* should be included in the calculation according to the maturity of the (longer-dated) conversion stock if the market values them in line with the value of that stock, and according to the value of the (shorter-dated) parent stock otherwise. The way in which the market values convertible stocks of course varies from time to time, and for practical reasons the Bank proposes to classify convertible stocks according to the maturity of the parent stock in its regular calculations of position risk. It will, however, monitor the position in convertibles to ensure that this convention is not causing the calculation to give a distorted impression of the market maker's risk exposure. The Bank proposes that *stocks with optional redemption dates* should be treated as maturing at the first optional date if, on the basis of their 'clean' price, they stand at or above par; otherwise they should be treated as maturing at the last possible date (or as perpetuities if they have no final redemption date).

17 The position risk calculations will be based on market values of stocks on a 'clean' price basis (i.e. not including accrued interest).⁽¹⁾ The treatment of partly-paid stocks will take account of the amount of future calls due. Gilt-edged financial futures will be included in the calculations as gilt-edged stocks of the relevant maturity. Financial futures are covered in the addendum to this Annex, which also contains the Bank's proposals for the treatment of traded options in gilt-edged in the position risk calculation.

(ii) Other sterling debt securities

18 Market makers in gilt-edged may deal in sterling fixed-interest or floating-rate stocks (including eurosterling issues) other than those issued or

(1) This is on the assumption that, by the time these arrangements come into effect, all gilt-edged stocks will be quoted on a 'clean' price basis.

Table 2
Example of working of risk calculation for gilt-edged position only

	Long	Short	Net position	Matched position	Risk calculation		
	1	2	3=(1)-(2)	4=smaller of (1) and (2)	I	II	III
Maturity band							
A Up to a month	10	0	+10	0	+10×0=0	10×0=0	0×2=0
B Over a month but no more than 3 months	70	50	+20	50	+20×1=+20	20×1=20	50×1=50
C Over 3 months but no more than a year	30	40	-10	30	-10×1=-10	10×1=10	30×1=30
Conventional stocks							
D Full coupon stocks with over a year but no more than 5 years to maturity	40	100	-60	40	-60×3=-180	60×2=120	40×1=40
E Low coupon stocks with over a year but no more than 5 years to maturity	20	10	+10	10	+10×3=+30	10×3=30	10×1=10
F Stocks with over 5 years but no more than 10 years to maturity	30	50	-20	30	-20×5=-100	20×1½=30	30×1=30
G Stocks with over 10 years to maturity	70	90	-20	70	-20×6½=-130	20×2=40	70×1=70
					Sub-total ⁽¹⁾	370	
Index-linked stocks							
H Stocks with over a year to maturity	40	20	+20	20	+20×6=+120	—	20×2=40
	<u>310</u>	<u>360</u>	<u>-50</u>		<u>490</u>	<u>250</u>	<u>270</u>
					Total position risk = 490+250+270 = 1,010		

(1) Which is given a 'plus' sign.

guaranteed by the British government. In the calculation of position risk they will simply be assimilated with gilts in the calculation explained above. (For this purpose, the maturity of floating-rate stocks will be taken as the period for which the interest rate is fixed.) In addition, the sum of the gross long position and the gross short position in these stocks will be added to the risk measure, in order to allow for their lower marketability and hence potentially greater price volatility. In order to avoid the need for unduly complicated reporting by market makers, offsetting of the kind described in paragraph 15 will not be allowed in respect of these stocks. The treatment of the credit risks arising from dealings in these stocks is described in paragraphs 29 and 30 below. Outstanding underwriting commitments will be treated as positions in the stock which has been underwritten.

(iii) Money-market dealings

19 The treatment of money-market assets and liabilities has three objectives:

- (i) to reflect the risks run by a market maker in borrowing the funds needed to finance a bull position in gilts, or in placing the funds generated by a bear position in gilts, at different maturities;
- (ii) to ensure that a gilt-edged market maker using part of his capital to run a money book, ie borrowing overnight or at short maturity to finance a holding of money-market instruments, does so on the basis of a smaller maximum risk: capital ratio than the discount houses, who are the committed market makers

in that field. This is the corollary to the more stringent capital requirements applying to discount houses in their gilt-edged dealings; and

- (iii) to provide a framework within which a gilt-edged market maker can establish a track record in dealing in money-market instruments as a preliminary to applying to the Bank for a dealing relationship in such instruments, as described in paragraph 39 of the main paper.

20 Against this background, the Bank will treat money-market assets and liabilities as follows.

21 Approved money-market assets, ie sterling deposits with recognised banks, licensed deposit takers and building societies, holdings of sterling CDs issued by such institutions and holdings of Treasury, local authority and eligible bank bills, will be treated in the same way as gilt-edged stocks in the calculation, except that gross holdings of such instruments having a residual maturity of more than one month will attract an additional weight of 1. A holding of over one-month money-market instruments financed by borrowing at less than one month's maturity would therefore attract a total weight of 3; a holding of under-one-month money-market instruments similarly financed would attract a weight of 2 by virtue of Table 1 (column III, row A). Holdings of other money-market assets will be treated as deductions from capital.

22 *Borrowings of money* will be treated in the same way as bear positions in gilt-edged in the calculation of position risk according to the period for which the interest rate on the borrowing is fixed.

(iv) Other

23 Loans to Stock Exchange money brokers secured by gilt-edged, other sterling debt securities or approved money-market instruments will be treated in the same way as approved money-market assets (see paragraph 21). Loans to other parties similarly secured will be treated in the same way, subject to consideration of credit risk as described in paragraphs 29 and 30 below. Loans otherwise secured will be treated as deductions from the capital base.

24 Refunds of tax due from the Inland Revenue will be treated as assets with a risk weight of 1.

25 The Bank will expect market makers to cover immediately any foreign currency exposure which they may incur.

26 Tables 3 and 4 give examples of the working of the calculation taking account not only of gilt-edged positions but also of positions in other sterling debt securities, positions in money-market assets and financing positions. The addendum to this Annex describes the Bank's proposals for the treatment of financial futures in the short sterling interest rate contract in the position risk calculation.

27 It would clearly be possible to add further refinements to this method of assessing position risk, with the objective of achieving greater precision, but to do so would be to add additional complexity. The proposed measure is already complex, and the Bank has considered whether it could be simplified. Even as it is, however, it reflects only the major elements of position risk identified by potential market makers in the Bank's bilateral discussions with them. It seems likely therefore that significant simplification could only be achieved by neglecting some important elements of risk.

28 The Bank recognises the danger that any formal measure of position risk exposure of the type described in this section could come to be regarded as sufficient in itself whether by the supervisor or by the supervised. It is therefore emphasised that the Bank itself will regard the calculation above only as a rough first indication of risk exposure and may in discussion with the market maker, in the light of the particular detail of the market maker's book, view the risk being run by the market maker as greater or less than the calculation suggests. Equally, the Bank would emphasise that the responsibility for risk assessment lies with the market maker himself, and that he should not regard the above calculation, *ipso facto*, as an adequate reflection of his total risk.

(b) Monitoring of credit risk

29 The payment arrangements which the Bank is exploring will be designed to protect market makers against payment default by counterparties where the deal is settled within the CGO system.⁽¹⁾ But for other dealings, market makers may still be exposed to that credit risk. Market makers will, in addition, be exposed to:

- (i) the risk that, on an adverse price movement, a counterparty will fail to complete a transaction which he had previously agreed;
- (ii) the risk that, on an adverse price movement, a counterparty to whom the market maker has lent, or pledged as security, either money or stock, will fail to repay; and
- (iii) the risk that the price of a non-gilt-edged security in which the market maker has a position will be affected by changing perceptions of the creditworthiness of the borrower or by his ultimate inability to service the debt.

The Bank does not propose to attempt to embody an assessment of credit risk in the guideline calculation, but will include consideration of credit risk in its monitoring of overall risk exposure. For this purpose the Bank will wish to satisfy itself that gilt-edged market makers have adequate methods of identifying and controlling their exposure to risks of this kind.

30 In addition, the Bank will require the following supplementary reports:

- (a) summary details of uncompleted transactions⁽²⁾ with individual counterparties which are to be settled by a means which provides assured payment against the transfer of securities,⁽¹⁾ and where either total uncompleted purchases of securities from the individual counterparty or total uncompleted sales of securities to the individual counterparty exceeds five times the market maker's capital base. Transactions to be reported under this heading include outstanding loans by the market maker and assets transferred as collateral against outstanding borrowings by the market maker. Uncompleted transactions with other gilt-edged market makers, Stock Exchange money brokers and inter-dealer brokers need not be reported under this heading;
- (b) summary details of uncompleted transactions⁽²⁾ with individual counterparties which are to be settled by means other than as described in (a) above, and where either total uncompleted purchases of securities from the individual counterparty or total uncompleted sales of securities to the individual counterparty exceeds

(1) See paragraph 36 of the main paper.

(2) Uncompleted transactions include deals done for next-day settlement.

the market maker's capital base. The classes of transaction which are to be reported under this heading are the same as in (a) above;

- (c) full details of any transactions with an individual counterparty exceeding in gross total 20% of the market maker's capital base which have remained uncompleted for a period of three working days after the agreed settlement date; and
- (d) summary details of a market maker's position (net long or short) in the non-gilt-edged liabilities of any individual issuer which exceeds 20% of the market maker's capital base. For this purpose all entities whose liabilities are directly or indirectly the responsibility of a central entity will be regarded as a single borrower.

Where the Bank is satisfied that payments for stock are made on a net basis, it may be prepared to modify the requirements in (b) and (c) above.

C The relationship between risk exposure and capital base

31 The Bank will in the normal course of events review the relationship between a market maker's risk exposure and his capital base, starting from the guideline calculation as described in the preceding section but also more generally, at the regular quarterly discussions. The Bank may at any time call for a special review with the market maker, and will in any case do so where the position risk exposure, on the basis of the calculation, reaches 100 times his capital base. In the light of such a review the Bank may set an absolute limit to the market maker's total risk exposure and/or require the market maker to reduce his risk exposure, or to increase his capital, over a period of time.

32 Market makers will be expected to monitor their risk: capital ratios continuously; and beyond the regular reporting requirements the Bank reserves the right to call for supplementary information at any time.

33 Tables 5 to 11 give some theoretical illustrations of alternative books that would be consistent with a risk exposure multiplier of 100 on a notional capital base of £10 million.

D Reporting

34 In some degree there is an inter-connection between the frequency of reporting and the acceptable relationship between risk exposure and capital, and the Bank's requirements below have been framed with this in mind. The Bank is making arrangements for computerised reporting; a separate technical note on this subject will be made available to applicants.

35 The Bank will require the following reports:

- (i) Daily reports
 - (a) A stock-by-stock list of long and short positions in gilt-edged and in gilt-edged futures and options.
 - (b) The information on credit risk identified in paragraph 30 above.
 - (c) Details of individual transactions with related companies and the outstanding balance at the end of the day. The Bank will be prepared to exempt from this reporting requirement transactions with a related entity which is acting purely as an agent. The Bank will, however, wish to discuss the scope of this exemption in each case with the parties concerned.
- (ii) Weekly reports
 - (a) Summary details, by the identified maturity/coupon categories, of long and short positions in other sterling debt securities.
 - (b) Summary details, again by the identified categories, of long and short positions in money-market instruments, and in interest rate futures.
 - (c) Summary details of sources and uses of finance.
 - (d) Gilt-edged turnover statistics (value and volume of purchases and sales separately) by maturity category and type of counterparty.
 - (e) Details of the capital base calculation as defined in Section A above.
- (iii) Quarterly reports
 - Full balance sheet and profit and loss accounts.
- (iv) Annual reports
 - Audited accounts.

Table 3
Working of position risk calculation—example 1

	(1) Long position				(2) Short position				(3) Total net position	(4) Matched position	Risk calculation			
	Gilts	Other £ fixed interest	Floating-rate instruments	Money-market instruments	Gilts	Other £ fixed interest	Floating-rate instruments	Money-market borrowings	(1)–(2)	smaller of (1) and (2)	I	II	III	
Maturity band														
Up to 1 month	0	0	0	40	0	0	0	0	+40	0	+40×0=0	40×0=0	0×2=0	
Over 1 month–3 months	70	0	5	10	50	0	0	0	+35	50	+35×1=+35	35×1=35	50×1=50	
Over 3 months–1 year	25	10	15	5	40	0	5	0	+10	45	+10×1=+10	10×1=10	45×1=45	
Conventional stocks														
Full coupon:														
over 1 year–5 years	40	15	—	—	100	0	—	—	–45	55	–45×3=–135	45×2=90	55×1=55	
Low coupon:														
over 1 year–5 years	20	0	—	—	10	0	—	—	+10	10	+10×3=+30	10×3=30	10×1=10	
Over 5 years–10 years	30	15	—	—	50	5	—	—	–10	45	–10×5=–50	10×1½=15	45×1=45	
Over 10 years	70	20	—	—	90	10	—	—	–10	90	–10×6½=–65	10×2=20	90×1=90	
											Sub-total ⁽¹⁾	–175		
Index-linked stocks														
Over 1 year	40	0	—	—	20	0	—	—	+20	20	+20×6=+120	—	20×2=40	
Total position	<u>295</u>	<u>60</u>	<u>20</u>	<u>55</u>	<u>360</u>	<u>15</u>	<u>5</u>	<u>0</u>	<u>+50</u>		<u>295</u>	<u>200</u>	<u>335</u>	
											Total of I, II, and III=830			

(1) Which is given a 'plus' sign.

Additions:		
Other fixed interest		+75
Floating-rate instruments		+25
Money-market instruments with maturity over 1 month		+15
		<u>+115</u>
Total position risk		<u>945</u>

Table 4
Working of position risk calculation—example 2

	(1) Long position				(2) Short position				(3) Total net position	(4) Matched position	Risk calculation			
	Gilts	Other £ fixed interest	Floating-rate instruments	Money-market instruments	Gilts	Other £ fixed interest	Floating-rate instruments	Money-market borrowings	(1)–(2)	smaller of (1) and (2)	I	II	III	
Maturity band														
Up to 1 month	0	0	0	0	0	0	0	80	- 80	0	-80×0=0	80×0=0	0×2=0	
Over 1 month–3 months	0	0	0	0	0	0	0	20	- 20	0	-20×1=-20	20×1=20	0×1=0	
Over 3 months–1 year	20	0	15	5	10	0	5	0	+ 25	15	+25×1=+25	25×1=25	15×1=15	
Conventional stocks														
Full coupon: over 1 year–5 years	70	5	—	—	30	5	—	—	+ 40	35	+40×3=+120	40×2=80	35×1=35	
Low coupon: over 1 year–5 years	20	0	—	—	30	0	—	—	- 10	20	-10×3=-30	10×3=30	20×1=20	
Over 5 years–10 years	100	20	—	—	40	10	—	—	+ 70	50	+70×5=+350	70×1½=105	50×1=50	
Over 10 years	80	10	—	—	20	10	—	—	+ 60	30	+60×6½=+390	60×2=120	30×1=30	
											Sub-total ⁽¹⁾	+835		
Index-linked stocks														
Over 1 year	30	0	—	—	10	0	—	—	+ 20	10	+20×6=+120	—	10×2=20	
Total position	<u>320</u>	<u>35</u>	<u>15</u>	<u>5</u>	<u>140</u>	<u>25</u>	<u>5</u>	<u>100</u>	<u>+105</u>		<u>955</u>	<u>380</u>	<u>170</u>	
											Total of I, II and III=1,505			

(1) Which is given a 'plus' sign.

Additions:		
Other fixed interest		+60
Floating-rate instruments		+20
Money-market instruments with maturity over 1 month		+ 5
		<u>+85</u>
Total position risk		<u>1,590</u>

Table 5
Long position in 1-5 year full-coupon gilt-edged stocks

	(1) Long position				(2) Short position				(3) Total net position	(4) Matched position	Risk calculation		
	Gilts	Other £ fixed interest	Floating- rate instruments	Money- market instruments	Gilts	Other £ fixed interest	Floating- rate instruments	Money- market borrowings	(1)-(2)	smaller of (1) and (2)	I	II	III
Maturity band													
Up to 1 month							190		-190		-190×0=0	190×0=0	
Over 1 month - 3 months													
Over 3 months - 1 year													
Conventional stocks													
Full coupon: over 1 year - 5 years	200								+200		+200×3=+600	200×2=400	
Low coupon: over 1 year - 5 years													
Over 5 years - 10 years													
Over 10 years													
											Sub total ⁽¹⁾	+600	
Index-linked stocks													
Over 1 year													
Total position	200						190		+10		600	400	0
											Total of I, II and III = 1,000		

(1) Which is given a 'plus' sign.

Additions:		
Other fixed interest		0
Floating-rate instruments		0
Money-market instruments with maturity over 1 month		0
		0
Total position risk		1,000
Capital base		10
Risk/capital base	=	100

Table 5A

Long position in 1–5 year full-coupon gilt-edged stocks with longer-term financing

	(1) Long position				(2) Short position				(3) Total net position	(4) Matched position	Risk calculation		
	Gilts	Other £ fixed interest	Floating-rate instruments	Money-market instruments	Gilts	Other £ fixed interest	Floating-rate instruments	Money-market borrowings	(1)–(2)	smaller of (1) and (2)	I	II	III
Maturity band													
Up to 1 month													
Over 1 month – 3 months							190		-190		-190×1=-190	190×1=190	
Over 3 months – 1 year													
Conventional stocks													
Full coupon: over 1 year – 5 years	200								+200		+200×3=+600	200×2=400	
Low coupon: over 1 year – 5 years													
Over 5 years – 10 years													
Over 10 years													
											Sub total ⁽¹⁾	+410	
Index-linked stocks													
Over 1 year													
Total position	200						190		+ 10		410	590	0
													Total of I, II and III=1,000

(1) Which is given a 'plus' sign.

Other fixed interest	0	
Floating-rate instruments	0	
Money-market instruments with maturity over 1 month	0	
		0
Total position risk		1,000
Capital base		10
Risk/capital base	=	100

Table 6
Long position in over 10 year gilt-edged stocks

	(1) Long position				(2) Short position				(3) Total net position	(4) Matched position	Risk calculation		
	Gilts	Other £ fixed interest	Floating-rate instruments	Money-market instruments	Gilts	Other £ fixed interest	Floating-rate instruments	Money-market borrowings	(1)-(2)	smaller of (1) and (2)	I	II	III
Maturity band													
Up to 1 month							107		-107		-107×0=0	107×0=0	
Over 1 month-3 months													
Over 3 months-1 year													
Conventional stocks													
Full coupon: over 1 year-5 years													
Low coupon: over 1 year-5 years													
Over 5 years-10 years													
Over 10 years	117								+117		+117×6½=+760½	117×2=234	
											Sub total ⁽¹⁾	+760½	
Index-linked stocks													
Over 1 year													
Total position	<u>117</u>						<u>107</u>		<u>+ 10</u>		<u>760½</u>	<u>234</u>	<u>0</u>
											Total of I, II and III=994½		

(1) Which is given a 'plus' sign.

Additions:

Other fixed interest		0	
Floating-rate instruments		0	
Money-market instruments with maturity over 1 month		0	
		<u>0</u>	
Total position risk			<u>994½</u>
Capital base			10
Risk/capital base	=		100

Table 7

Long position in over 10 year other £ fixed-interest stocks

	(1) Long position				(2) Short position				(3) Total net position	(4) Matched position	Risk calculation		
	Gilts	Other £ fixed interest	Floating-rate instruments	Money-market instruments	Gilts	Other £ fixed interest	Floating-rate instruments	Money-market borrowings	(1)-(2)	smaller of (1) and (2)	I	II	III
Maturity band													
Up to 1 month							95		-95		-95×0=0	95×0=0	
Over 1 month-3 months													
Over 3 months-1 year													
Conventional stocks													
Full coupon: over 1 year-5 years													
Low coupon: over 1 year-5 years													
Over 5 years-10 years													
Over 10 years		105							+105		+105×6½=+682½	105×2=210	
										Sub total ⁽¹⁾	+682½		
Index-linked stocks													
Over 1 year													
Total position		105					95		+10		682½	210	0
											Total of I, II and III=892½		

(1) Which is given a 'plus' sign.

Additions:		
Other fixed interest	+105	
Floating-rate instruments	0	
Money-market instruments with maturity over 1 month	0	
		+105
Total position risk		997½
Capital base	=	10
Risk/capital base		100

Table 8
Long position in index-linked gilt-edged stocks

	(1) Long position				(2) Short position				(3) Total net position	(4) Matched position	Risk calculation				
	Gilts	Other £ fixed interest	Floating- rate instruments	Money- market instruments	Gilts	Other £ fixed interest	Floating- rate instruments	Money- market borrowings	(1)-(2)	smaller of (1) and (2)	I	II	III		
Maturity band															
Up to 1 month							156		-156		-156×0=0	156×0=0			
Over 1 month - 3 months															
Over 3 months - 1 year															
Conventional stocks															
Full coupon:															
over 1 year -															
5 years															
Low coupon:															
over 1 year -															
5 years															
Over 5 years -															
10 years															
Over 10 years															
Index-linked stocks															
Over 1 year	166								+166		+166×6=+996				
Total position	166						156		+ 10		996	0	0		
											Total of I, II and III=996				
Additions:															
Other fixed interest													0		
Floating-rate instruments													0		
Money-market instruments with maturity over 1 month													0		
															0
Total position risk															996
Capital base															10
Risk/capital base													=		100

(1) Which is given a 'plus' sign.

Table 9

Cross book in gilt-edged stocks

	(1) Long position				(2) Short position				(3) Total net position (1)–(2)	(4) Matched position smaller of (1) and (2)	Risk calculation		
	Gilts	Other £ fixed interest	Floating- rate instruments	Money- market instruments	Gilts	Other £ fixed interest	Floating- rate instruments	Money- market borrowings			I	II	III
Maturity band													
Up to 1 month				10					+10	0	+10×0=0	10×0=0	
Over 1 month– 3 months													
Over 3 months– 1 year	50				50				0	50			50×1=50
Conventional stocks													
Full coupon: over 1 year– 5 years	200				200				0	200			200×1=200
Low coupon: over 1 year– 5 years	50				50				0	50			50×1=50
Over 5 years– 10 years	300				300				0	300			300×1=300
Over 10 years	300				300				0	300			300×1=300
											Sub total ⁽¹⁾	0	
Index-linked stocks													
Over 1 year	50				50				0	50			50×2=100
Total position	950			10	950				+10		0	0	1,000
													Total of I, II and III=1,000

(1) Which is given a 'plus' sign.

Additions:

Other fixed interest	0
Floating-rate instruments	0
Money-market instruments with maturity over 1 month	0
	<u>0</u>
Total position risk	1,000
Capital base	10
Risk/capital base	= 100

Table 10
Money book: under one month

	(1) Long position				(2) Short position				(3) Total net position	(4) Matched position	Risk calculation			
	Gilts	Other £ fixed interest	Floating-rate instruments	Money-market instruments	Gilts	Other £ fixed interest	Floating-rate instruments	Money-market borrowings	(1)-(2)	smaller of (1) and (2)	I	II	III	
Maturity band														
Up to 1 month				510				500	+10	500	+10×0=0	10×0=0	500×2=1,000	
Over 1 month – 3 months														
Over 3 months – 1 year														
Conventional stocks														
Full coupon: over 1 year – 5 years														
Low coupon: over 1 year – 5 years														
Over 5 years – 10 years														
Over 10 years														
Index-linked stocks														
Over 1 year														
Total position				<u>510</u>				<u>500</u>	<u>+10</u>			<u>0</u>	<u>0</u>	<u>1,000</u>
														Total of I, II and III=1,000

(1) Which is given a 'plus' sign.

Additions:

Other fixed interest	0	
Floating-rate instruments	0	
Money-market instruments with maturity over 1 month	0	
		<u>0</u>
Total position risk		<u>1,000</u>
Capital base		10
Risk/capital base	=	100

Table 11
Money book: 1-3 months

	(1) Long position				(2) Short position				(3) Total net position	(4) Matched position	Risk calculation		
	Gilts	Other £ fixed interest	Floating-rate instruments	Money-market instruments	Gilts	Other £ fixed interest	Floating-rate instruments	Money-market borrowings	(1)-(2)	smaller of (1) and (2)	I	II	III
Maturity band													
Up to 1 month							323		-323		-323×0=0	323×0=0	
Over 1 month - 3 months				333					+333		+333×1=+333	333×1=333	
Over 3 months - 1 year													
Conventional stocks													
Full coupon: over 1 year - 5 years													
Low coupon: over 1 year - 5 years													
Over 5 years - 10 years													
Over 10 years													
											Sub total ⁽¹⁾	+333	
Index-linked stocks													
Over 1 year													
Total position				333			323		+10		333	333	0

(1) Which is given a 'plus' sign.

Additions:		
Other fixed interest		0
Floating-rate instruments		0
Money-market instruments with maturity over 1 month		+333
		<u>+333</u>
Total position risk		<u>999</u>
Capital base		10
Risk/capital base	=	100

Addendum to Annex 1

Supervisory treatment of hedging devices for gilt-edged market makers

1 This addendum describes the Bank's proposed supervisory treatment of various devices other than outright purchases or sales of securities which gilt-edged market makers might use for hedging their portfolios, taking positions or providing services to their customers. The proposals cover financial futures, traded options and positions involving foreign currency securities.

Financial futures

2 Positions in gilt-edged futures will be treated for the purposes of the position risk calculation in the same way as positions in gilt-edged stocks of the relevant maturity. Thus, for example, positions in the LIFFE long gilt contract for delivery in a particular month will be treated as positions in a notional stock with a twenty-year maturity. Positions in futures contracts for delivery in different months will be treated as positions in separate stocks; this means, for example, that a long position in, say, the June LIFFE long gilt contract offset by an equivalent short position in the September contract will be treated in the same way as a matched position in stock group G (see Table 1 of Annex 1).

3 Taking positions in short-term interest rate futures involves agreeing in advance to buy or sell money-market instruments of a particular maturity at a particular interest rate. For example, buying the LIFFE short sterling interest rate contract in April for June delivery would mean agreeing in April to place funds at a particular interest rate in June to mature three months later, in September. In terms of interest rate exposure this is equivalent to the combination of borrowing for two months (from April to June) and placing a deposit for five months (from April to September). The treatment of positions in interest rate futures for the purposes of the position risk calculation will be based on this equivalence. Each long position in interest rate futures will thus be treated as a combination of a money-market borrowing maturing on the delivery date of the futures contract and a holding of a money-market instrument maturing on the maturity date of the instrument to which the futures contract relates. Similarly, each short position in interest rate futures will be treated as a combination of a holding of a money-market instrument maturing on the delivery date of the futures contract and a

money-market borrowing maturing on the maturity date of the instrument to which the futures contract relates.

Traded options

4 Traded options in gilt-edged—call or put—can be used as a means of limiting exposure to large price movements either upwards or downwards in the underlying stock. The difficulty of summarising position risk exposure in a single figure is particularly acute where options are involved and for that reason the Bank will look particularly closely at the detail of market makers' positions in traded options in gilt-edged and assess the extent of their exposure to price movements of different magnitudes in either direction.

5 Traded options will nevertheless be taken into account in the position risk calculation. For that purpose, positions in traded options in gilt-edged stocks will be treated as adding to or subtracting from the net long or short position in the stock underlying the option contract; the position risk weights will then be applied to the position thus modified. For each option position, the amount of the underlying stock that the option carries the right to buy or sell will be multiplied by an *option weight*, which will be between 0 and 1, before being incorporated in the stock position: the option weight will reflect the probability of the option being exercised. For example, an option expiring in a day's time to buy a stock at a price of 90 would almost certainly be exercised if the current price of the stock were 98; in that situation its option weight would be 1. If on the other hand the current price of the stock were 82, the option would almost certainly not be exercised and the option weight would be zero. More generally, the option weight for a given stock will depend on the following factors:

- (i) the relationship between the current price of the underlying stock and the exercise price of the option;
- (ii) the period remaining until the option expires; and
- (iii) whether the option is a call (ie an option to buy the stock) or a put (ie an option to sell the stock).

6 Long positions in call options and short positions in put options will, after being multiplied by the relevant option weights, be added to the market maker's long position in the underlying stock or subtracted from his short position. Short positions in call options and long positions in put options will, after being multiplied by the relevant option weights, be added to the market maker's short position in the underlying stock or subtracted from his long position.

7 The Stock Exchange has already begun trading in options on one gilt-edged stock—10% Exchequer Stock 1989. The options are continuous: this means that they can be exercised at any time before a given expiry date, rather than on a single date only. Tables 1 and 2 of this addendum give a set of option weights for continuous options on this stock: the Bank will produce similar tables for options on other stocks as and when trading in such options is introduced. The option weights as shown in the Tables depend on the percentage difference between the current price of the stock and the exercise price and the period till expiry of the

option; they apply to both long and short positions in options. Table 1 gives option weights for call options and Table 2 for put options. The Bank recognises that short positions in options—i.e. options written—can be inherently riskier than long positions—i.e. options bought—and will take this into account in its detailed assessment of market makers' position risk exposure.

Positions involving foreign currency securities

8 It is possible to create a 'synthetic' sterling bond by purchasing a dollar bond and simultaneously arranging forward foreign exchange contracts to sell the dollar coupons and the dollar redemption payment in exchange for fixed amounts of sterling. Although the Bank recognises that some market makers may wish to use this technique for position-taking and for hedging, it would unduly complicate the supervisory framework to extend it to cover positions in foreign currency securities. The Bank therefore proposes to deduct both holdings of foreign currency securities and short positions in foreign currency securities in calculating a market maker's capital base.

Table 1
Option weights for gilt-edged stocks in maturity band D: call options

	Period till expiry of option				
	Up to 14 days	Over 14 days but no more than a month	Over a month but no more than 3 months	Over 3 months but no more than 6 months	Over 6 months but no more than a year
Percentage difference between current market price of stock and exercise price of option⁽¹⁾					
Difference when current market price of stock exceeds exercise price of option:					
Over 9%	1.00	1.00	1.00	1.00	1.00
Over 7% but no more than 9%	1.00	1.00	1.00	1.00	1.00
Over 5% but no more than 7%	1.00	1.00	1.00	1.00	0.96
Over 3% but no more than 5%	1.00	1.00	0.98	0.91	0.82
Over 1% but no more than 3%	0.99	0.93	0.83	0.73	0.66
Difference between current market price of stock and exercise price of option no more than 1%	0.50	0.50	0.49	0.49	0.48
Difference when exercise price of option exceeds current market price of stock:					
Over 1% but no more than 3%	0.01	0.07	0.16	0.25	0.30
Over 3% but no more than 5%	0.00	0.00	0.03	0.09	0.16
Over 5% but no more than 7%	0.00	0.00	0.00	0.02	0.08
Over 7% but no more than 9%	0.00	0.00	0.00	0.00	0.03
Over 9%	0.00	0.00	0.00	0.00	0.00

⁽¹⁾ Expressed as a percentage of the exercise price.

Table 2
Option weights for gilt-edged stocks in maturity band D: put options

	Period till expiry of option				
	Up to 14 days	Over 14 days but no more than a month	Over a month but no more than 3 months	Over 3 months but no more than 6 months	Over 6 months but no more than a year
Percentage difference between current market price of stock and exercise price of option⁽¹⁾					
Difference when current market price of stock exceeds exercise price of option:					
Over 9%	0.00	0.00	0.00	0.00	0.00
Over 7% but no more than 9%	0.00	0.00	0.00	0.00	0.03
Over 5% but no more than 7%	0.00	0.00	0.00	0.02	0.08
Over 3% but no more than 5%	0.00	0.00	0.03	0.09	0.16
Over 1% but no more than 3%	0.01	0.07	0.16	0.25	0.30
Difference between current market price of stock and exercise price of option no more than 1%	0.50	0.50	0.49	0.49	0.48
Difference when exercise price of option exceeds current market price of stock:					
Over 1% but no more than 3%	0.99	0.93	0.83	0.73	0.66
Over 3% but no more than 5%	1.00	1.00	0.90	0.90	0.82
Over 5% but no more than 7%	1.00	1.00	1.00	1.00	0.96
Over 7% but no more than 9%	1.00	1.00	1.00	1.00	1.00
Over 9%	1.00	1.00	1.00	1.00	1.00

⁽¹⁾ Expressed as a percentage of the exercise price.

Annex 2 Prudential supervision of Stock Exchange money brokers

1 This paper describes the framework of prudential supervision that the Bank will want to apply to Stock Exchange money brokers. The framework will be subject to modification in the light of experience.

2 The main function of Stock Exchange money brokers will be, as now, to act as intermediaries in stock borrowing and lending, to lend funds to market makers running net long positions in stock and to take funds from market makers running net short positions in stock. These services are to be made available to the market makers as a whole (and to discount houses, which will be approved borrowers of stock with 7 years or less to maturity), and not largely confined to a narrow group. The aim of the Bank's supervision will be to ensure as far as possible that money brokers do not conduct business on a scale disproportionate to their own funds and thereby endanger their ability to meet their obligations to their counterparties. No supervisory arrangements can wholly exclude the risk of default, however, and it must remain the responsibility of the counterparties to satisfy themselves as to the integrity of a money broker with whom they deal.

3 The Bank's prudential supervision will be based upon close familiarity with the management and business of each money broker, to be developed through regular quarterly bilateral discussions. It will be supported by continuous assessment of the scale of the money broker's business and exposure to risk, in relation to his capital resources freely available to meet losses, taking as a starting point the detailed guidelines set out below. These guidelines have been drawn up in the light of the Bank's discussions with the present Stock Exchange money brokers and of the prudential arrangements currently applied to discount houses. The Bank's assessment of the money brokers' financial performance and balance sheets will not, however, be based mechanically on these guidelines, which it regards as simply a starting point for such assessment.

4 The Bank's prudential supervision as described in this paper will take the place of capital adequacy supervision by The Stock Exchange for Stock Exchange money brokers. As part of the Stock Exchange membership requirements, however, Stock Exchange money brokers will be required to send copies of the reports identified in paragraph 28 (iv) and (v) to The Stock Exchange. As indicated in the main paper, the

Bank will liaise with The Stock Exchange and other regulatory authorities on regulatory matters, and may in this context exchange with them other information necessary to the carrying out of their respective regulatory responsibilities.

5 The remainder of this paper is arranged as follows. Section A sets out the Bank's requirements as regards the capital structure of the money-broking operation. Section B describes the guidelines for measuring risk exposure. Section C describes the Bank's guidelines for gearing, ie its approach to the relationship between risk exposure and capital base. And Section D gives details of the regular reports that the Bank will require from money brokers.

A Capital structure and capital base

6 The Bank will want a money-broking entity to be insulated as far as possible from any adverse development in other parts of any group to which it may belong, and it will wish to discuss the intended group structure with prospective money brokers from this point of view. It will require money brokers to be separately established entities in the UK, with their own dedicated capital as defined (for market makers) in paragraphs 7 and 8 of Annex 1. Assurances will be sought from substantial shareholders that they accept ultimate responsibility for the money broker's liabilities. A money broker may not, without the agreement of the Bank, have as a partly or wholly-owned subsidiary any other entity operating in financial markets. The Bank will wish to be informed individually of all transactions between a money broker and any related entity, which the Bank would expect normally to be on an arm's length basis.

7 The activities of Stock Exchange money brokers, in addition to money broking in gilt-edged and other securities,⁽¹⁾ may include either or both of:

- (i) dealing in approved money-market instruments;⁽²⁾ and
- (ii) inter-dealer broking among gilt-edged market makers in securities and instruments in which gilt-edged market makers may deal.

Because of the confidential indications of the market makers' positions which a money broker necessarily acquires, money brokers will not be allowed to take

(1) The term money broking' is taken to include secured lending to market makers in the normal course of business.

(2) That is, Treasury, local authority and eligible bank bills and sterling deposits with and certificates of deposits issued by recognised banks, licensed deposit takers and building societies.

positions in securities or instruments in which they act as money brokers or inter-dealer brokers. Moreover, management and staffing of the money broking entity will need to be separated from that of other, position-taking, entities within a group.

B Measurement of risk exposure

8 Two general kinds of risk will be run by money brokers:

- (i) *position risk* is the risk of loss arising from changes in market prices of instruments which the money broker owns or in which he has a short position; and
- (ii) *credit risk* is the risk of loss arising from the failure of another party to meet previously agreed obligations.

9 The methods by which the Bank intends, as a first approximation, to evaluate these respective risks are as follows:

(a) Measurement of position risk

10 The business of a money broker includes taking funds from market makers for on-lending in the money market when the market makers have a net short position in stock, and borrowing funds in the money market for on-lending to the market makers when the latter have a net long position in stock. The Bank will measure the risks involved in dealing in approved money-market instruments in the same way as it measures those risks when they are run by discount houses:^{(1) (2)} this means that the risk measurement will be based mainly on the money broker's assets rather than his liabilities. As a result, the money brokers' measured risk exposures will tend to be greater when the market makers have short positions in stock than when they have long positions. This reflects the additional position risk that money brokers run when they use funds generated by the market makers' net short position in stocks to buy money-market assets with a fixed term to maturity. Current practice is that when the money brokers borrow to finance net long positions in stock held by the market makers, they generally borrow overnight; if this practice were to change and the money brokers were to borrow for longer terms, the Bank would wish to review this aspect of the prudential arrangements.

11 Holdings of approved money-market assets will be weighted according to their residual term to maturity, as shown in Table 1. The addendum to this Annex contains the Bank's guidelines for the treatment of financial futures in the short sterling interest rate contract.

12 The Bank recognises the danger that any formal measure of risk exposure of the type described in this section could come to be regarded as sufficient in itself whether by the supervisor or the supervised. It is therefore emphasised that the Bank itself will regard the calculation only as a rough first indication of risk exposure and may in discussion with the money broker, in the light of the particular detail of the money broker's book, view the risk being run by the money broker as greater or less than the calculation suggests. Equally, the Bank would emphasise that the responsibility for risk assessment lies with the money broker himself, and that he should not regard the above calculation, *ipso facto*, as an adequate reflection of his total risk.

(b) Measurement of credit risk

13 The business of a money broker includes borrowing stock on a secured basis from stock lenders and on-lending it, also on a secured basis, to market makers or discount houses. The money broker may lend back to the market maker cash previously taken from him as security for a loan of stock, taking other stocks as security for such loans of cash.

14 The extent of the credit risks involved depends on the legal position of the money broker. The guidelines in this paper are based on the assumptions that, under the terms of the contracts involved, the money broker will have the right to dispose of the security he has taken in the event of a counterparty's failure, and that he will have a right of set-off if he has entered into more than one transaction with a particular counterparty.

15 It is also assumed that the money brokers take security in adequate amounts, adjusted frequently to reflect changing market prices, and of adequate quality. The Bank will keep these matters under regular review.

16 Moreover, the Bank will wish to satisfy itself that money brokers have adequate methods of identifying and controlling their exposure to credit risk.

17 On this basis, and on the basis that the money brokers will be settling their gilt-edged transactions by a means which provides assured payment against the transfer of securities,⁽³⁾ the Bank intends to measure the money broker's credit risk, as a first approximation, by reference to the following weights:

- (i) a weight of one eighth to be applied to the total of gilt-edged stock borrowed from stock lenders;
- (ii) a weight of one eighth to be applied to whichever is the greater of the total of gilt-edged stock lent to, or the total of such stock taken as security from, each market maker or discount house;

(1) This is on the assumption that stock lending and borrowing continues on a matched maturity basis (current practice is that stock is borrowed and lent overnight). If this practice were to change, the method of measurement would be subject to amendment.

(2) The risk: capital ratio will, however, be different from that specified for discount houses: for details see Section C below.

(3) See paragraph 36 of the main paper.

- (iii) a weight of one eighth to be applied to overnight deposits with or loans to banks, discount houses, LDTs or building societies secured against gilt-edged stock (unless covered under (ii) above) or approved money-market instruments;
- (iv) a weight of one quarter to be applied to the total of equity or debt securities other than gilt-edged stock borrowed from stock lenders; and
- (v) a weight of one quarter to be applied to whichever is the greater of the total of equity or debt securities other than gilt-edged stock lent to, or the total of such stock taken as security from, each market maker.

The higher weights for money broking in securities other than gilt-edged reflect the fact that stock lending in such securities carries greater risks, because of the poorer liquidity and greater capital uncertainty of the securities involved.

18 Table 2 gives an example of the working of the risk calculations.

19 The measurement of risk derived using the weights described in paragraph 17 will give the Bank some information about the money broker's exposure to credit risk; but the Bank will require additional reports in order to enable it to assess the concentration of credit risk.

20 Specifically, the Bank will require daily reporting of summary details of outstanding loans of stock to the four largest counterparties, and monthly reporting of average stock borrowings over the previous month from the four stock lenders for whom this average is the largest. In addition, the Bank will require immediate reporting of any delay in completion of a previously-agreed transaction by a counterparty which had not been notified to and agreed in advance by the money broker.

C The relationship between risk exposure and capital base

21 The Bank will in the normal course of events review the relationship between a money broker's risk exposure and his capital base, starting from the guideline calculations as described in the preceding section but also more generally, at the regular quarterly discussions.

22 The Bank will expect that the ratio of the money broker's total risk exposure (taking credit risk and position risk together) to capital base will normally not exceed 33. This ratio is expected normally to be observed on a daily basis. The Bank however recognises that there may be occasional sharp peaks in the market demand to borrow stock or money and will at such times be prepared to accept a higher ratio,

provided that on each such day it is notified of the likely excess by the money broker concerned before the close of business on the day in question.

23 The Bank may at any time call for a special review with the money broker, and will in any case do so where the money broker's risk exposure exceeds 33 times his capital base other than in the occasional circumstances described in the preceding paragraph. In the light of such a review the Bank may set an absolute limit to the money broker's total risk exposure and/or require the money broker to reduce his risk exposure, or to increase his capital, over a period of time.

24 These provisions mean that a money broker using part of his capital to run a money book—that is, borrowing overnight or at a short maturity in order to finance a holding of money-market instruments—will do so on the basis of a smaller maximum risk: capital ratio than the discount houses, who are the committed market makers in that field.

25 Stock Exchange money brokers will be expected to monitor their risk : capital ratios continuously; and beyond the regular reporting requirements the Bank reserves the right to call for supplementary information at any time.

26 Tables 3 and 4 give theoretical illustrations of alternative books that would be consistent with a risk exposure multiplier of 33 on a notional capital base of £5 million.

D Reporting

27 The reporting requirements will be heavier than those in operation at present. The Bank is making arrangements for computerised reporting; a separate technical note on this subject will be made available to applicants.

28 The Bank will require the following reports:

- (i) Daily reports
 - (a) The daily information on credit risk and delays in completion identified in paragraph 20.
 - (b) Details of individual transactions with related entities and the outstanding balance at the end of the day.
- (ii) Weekly reports
 - (a) Summary details of stock borrowing and lending.
 - (b) Summary details of borrowings and holdings of money-market assets and of positions in interest rate futures.

- (c) Risk: capital ratio—the highest figure during the preceding week.
- (b) The monthly information on credit risk identified in paragraph 20.
- (iii) Monthly reports
- (iv) Quarterly reports
Full balance sheet and profit and loss accounts.
- (a) Details of the capital base calculation as defined in Section A of Annex 1. In addition, money brokers will be required to report to the Bank immediately if their capital base should fall by more than 10% from the last reported level.
- (v) Annual reports
Audited accounts.

Table 1
Proposed weights for calculating risk

(1) Risk Weight = 1/8	(2) Risk Weight = 1/4	(3) Risk Weight = 1/3	(4) Risk Weight = 2/3	(5) Risk Weight = 1	(6) Risk Weight = 2	(7) Risk Weight = 3	(8) Risk Weight = 5
Assets securing gilt-edged stock borrowed from stock lenders	Assets securing equity and non-gilt-edged debt securities borrowed from stock lenders	Deposits with Bank of England	Eligible bills: 7 days up to 1 month	Eligible bills: 1-3 months	Eligible bills: 3-6 months		
Secured loans of gilt-edged stock or cash to gilt-edged market makers or discount houses	Secured loans of equity, non-gilt-edged debt securities or cash to market makers in these securities	Eligible bills up to 7 days	£ CDs: 7 days up to 1 month	£ CDs: 1-3 months	£ CDs: 3-12 months	£ CDs: 1-3 years	£ CDs over 3 years
Overnight deposits with/loans to banks, discount houses, LDTs or building societies secured against gilt-edged stock or approved money-market instruments		£ CDs up to 7 days	Deposits with/loans to banks, discount houses, LDTs or building societies: 7 days up to 1 month	Deposits with/loans to banks, discount houses, LDTs or building societies: 1-3 months			
		Deposits with/loans to banks, discount houses, LDTs or building societies up to 7 days where not covered in column (1)					

Table 2
Example of working of risk calculation

			Total amount	Weight	Weighted total
£ millions					
(i)	Stock borrowed from stock lenders				
		Gilt-edged	160	$\frac{1}{8}$	20
		Other	20	$\frac{1}{4}$	5
(ii)	Gilt-edged stock lent to and taken as security from market makers (or discount houses)				
		Stock lent			
		£ millions			
	Market maker A	20	40(a)	$\frac{1}{8}$	5
	B	60	70(a)	$\frac{1}{8}$	8 $\frac{1}{2}$
	C	50	50(a)	$\frac{1}{8}$	6 $\frac{1}{4}$
	D	30	30(a)	$\frac{1}{8}$	3 $\frac{1}{4}$
		160	120		
		Stock taken as security			
		£ millions			
(iii)	Non-gilt-edged stock lent to and taken as security from market makers				
	Market maker A	0	5(a)	$\frac{1}{4}$	1 $\frac{1}{4}$
	B	5	10(a)	$\frac{1}{4}$	2 $\frac{1}{2}$
	C	10	10(a)	$\frac{1}{4}$	2 $\frac{1}{2}$
	D	5	5(a)	$\frac{1}{4}$	1 $\frac{1}{4}$
		20	30		
(iv)	Money book				
	Risk weight $\frac{1}{8}$		8	$\frac{1}{8}$	1
	Risk weight $\frac{1}{4}$		6	$\frac{1}{4}$	2
	Risk weight $\frac{1}{3}$		6	$\frac{1}{3}$	4
	Risk weight 1		9	1	9
	Risk weight 2		6	2	12
			Total risk exposure		84$\frac{1}{4}$
			Capital base		5
			Risk/capital base		=17
			(Normal maximum)		=33)

(a) Equals greater of stock lent and stock taken as security.

Table 3
Gilt-edged stock lending: no net lending or borrowing of money

		Total amount	Weight	Weighted total
		£ millions		
(i)	Stock borrowed from stock lenders			
	Gilt-edged	640	$\frac{1}{8}$	80
	Other			
(ii)	Gilt-edged stock lent to and taken as security from market makers (or discount houses)			
		Stock lent		Stock taken as security
		£ millions		£ millions
	Market maker A	280	$\frac{1}{8}$	35
	B	160	$\frac{1}{8}$	20
	C	120	$\frac{1}{8}$	15
	D	80	$\frac{1}{8}$	10
		640		
(iii)	Non-gilt-edged stock lent to and taken as security from market makers			
	Market maker A		NONE	
	B			
	C			
	D			
(iv)	Money book			
	Risk weight $\frac{1}{8}$			
	Risk weight $\frac{1}{4}$			
	Risk weight $\frac{2}{3}$			
	Risk weight 1	5	1	5
	Risk weight 2			
			Total risk exposure	165
			Capital base	5
			Risk/capital base	= 33

(a) Equals greater of stock lent and stock taken as security.

Table 4
Money book arising from market makers' short positions in gilt-edged

		Total amount	Weight	Weighted total
		£ millions		
(i)	Stock borrowed from stock lenders			
	Gilt-edged	520	$\frac{1}{8}$	65
	Other			
(ii)	Gilt-edged stock lent to and taken as security from market makers (or discount houses)			
		Stock lent		Stock taken as security
		£ millions		£ millions
	Market maker A	220	$\frac{1}{8}$	27 $\frac{1}{2}$
	B	180	$\frac{1}{8}$	22 $\frac{1}{2}$
	C	80	$\frac{1}{8}$	10
	D	40	$\frac{1}{8}$	5
		520		
(iii)	Non-gilt-edged stock lent to and taken as security from market makers			
	Market maker A		NONE	
	B			
	C			
	D			
(iv)	Money book			
	Risk weight $\frac{1}{8}$			
	Risk weight $\frac{1}{4}$	90	$\frac{1}{3}$	30
	Risk weight $\frac{2}{3}$			
	Risk weight 1	5	1	5
	Risk weight 2			
			Total risk exposure	165
			Capital base	5
			Risk/capital base	= 33

(a) Equals greater of stock lent and stock taken as security.

Addendum to Annex 2

Position risk for Stock Exchange money brokers arising from short sterling interest rate futures

1 The Bank proposes to apply to positions taken by Stock Exchange money brokers in short sterling interest rate futures the following arrangements which are already applied to such positions taken by discount houses.

2 Positions in short sterling interest rate futures can be of three types: hedges, straddles and straight open positions. A *hedge* is defined as a short position in the futures market offsetting a holding of a similar asset in the cash market, or a long position in the futures market offsetting a similar money-market liability. For example, short positions in the LIFFE short sterling interest rate futures contract for delivery in two months' time could be taken out as a hedge against a holding of CDs with five months to maturity. *Straddles* are defined as equal numbers of long and short positions in the same contract for different remote months—eg a long position in the December contract and a short position in the March contract. All other futures positions are *straight open positions*.

3 The treatment of positions of these kinds in the position risk calculation is as follows. The cash and futures positions which make up a *hedge* are to be taken together for the purposes of the calculation. To qualify as a hedge, the sum of the period to delivery of the futures contract and the maturity of the deliverable asset must be within a month of the maturity of the cash asset or liability. The risk weighting attached to the hedge will be the risk weighting that would attach to a position in a money-market instrument maturing on the delivery date of the futures contract.

4 For *straddles*, the shorter leg may be ignored; the longer leg is to be treated as if it were a straight open position (see next paragraph).

5 *Straight open positions* carry a weight equal to one less than the weight that would be attached to a holding of money-market instruments with a maturity equal to the duration of the total futures investment—ie the period to delivery plus the maturity of the asset deliverable under the futures contract.

Annex 3 Prudential supervision of inter-dealer brokers in the gilt-edged market

1 This paper describes the framework of prudential supervision that the Bank will want to apply to inter-dealer brokers (IDBs). The framework will be subject to modification in the light of experience.

2 The discussions which the Bank has been holding with various firms on the new structure of the gilt-edged market have indicated that there will be demand for IDBs to operate between the market makers, taking bids and offers for stock from market makers and disseminating them among the other market makers, as described in the main paper. The essential purpose of the IDBs will be to make it easier for the market makers to unwind stock positions that arise from their market-making activities with investors or their agents, and IDBs are likely thereby to make an important contribution to the overall liquidity of the market. These services are to be made available to the market as a whole, and not largely confined to a narrow group.

3 The aim of the Bank's supervision will be to ensure as far as possible that IDBs do not conduct business on a scale disproportionate to their own funds and thereby endanger their ability to meet their obligations to their counterparties. No supervisory arrangements can wholly exclude the risk of default, however, and it must remain the responsibility of the counterparties to satisfy themselves as to the integrity of an IDB with whom they deal.

4 The Bank's prudential supervision will be based upon close familiarity with the management and business of each IDB, to be developed through regular quarterly bilateral discussions. It will be supported by continuous assessment of the scale of the IDB's business in relation to its capital resources freely available to meet losses, taking as a starting point the detailed guidelines set out below. The Bank's assessment of the IDBs' financial performance and balance sheets will not, however, be based mechanically on these guidelines, which it regards as simply a starting point for such assessment.

5 The Bank's prudential supervision as described in this paper will take the place of capital adequacy supervision by The Stock Exchange for IDBs. As part of the Stock Exchange membership requirements, however, IDBs will be required to send copies of the reports identified in paragraph 17(iii) and (iv) to The Stock Exchange. As indicated in the main paper, the

Bank will liaise with The Stock Exchange and other regulatory authorities on regulatory matters, and may in this context exchange with them other information necessary to the carrying out of their respective regulatory responsibilities.

6 IDBs wishing to use closed-circuit screens as a means of communicating with the market makers may install their own equipment or they may use The Stock Exchange's Integrated Data Network (IDN) or a commercial service. In any of these cases, they will be required to allow the Stock Exchange authorities to have, for monitoring purposes, access to the prices and amounts they are quoting.

7 The remainder of this paper is arranged as follows. Section A sets out the Bank's requirements as regards the capital structure of the IDB. Section B describes the guidelines for measuring risk exposure. Section C describes the Bank's guidelines for gearing, ie its approach to the relationship between risk exposure and capital base. And Section D gives details of the regular reports that the Bank will require from IDBs.

A Capital structure and capital base

8 The Bank will want an IDB to be insulated as far as possible from any adverse development in other parts of any group to which it may belong, and it will wish to discuss the intended group structure with prospective IDBs from this point of view. It will require IDBs to be separately established entities in the UK, with their own dedicated capital as defined (for market makers) in paragraphs 7 and 8 of Annex 1. Assurances will be sought from substantial shareholders that they accept ultimate responsibility for the IDB's liabilities. An IDB may not, without the agreement of the Bank, have as a partly or wholly-owned subsidiary any other entity operating in financial markets. The Bank will wish to be informed individually of all transactions between an IDB and any related entity, which the Bank would expect normally to be on an arm's length basis.

9 The activities of IDBs, in addition to inter-dealer broking among gilt-edged market makers in securities and instruments in which gilt-edged market makers may deal, may include money broking in gilt-edged and other securities,⁽¹⁾ which may be combined with dealing in approved money-market instruments.⁽²⁾ Because of the confidential indications of the market

(1) The term 'money broking' is taken to include secured lending to market makers in the normal course of business.

(2) That is, Treasury, local authority and eligible bank bills and sterling deposits with and certificates of deposit issued by recognised banks, licensed deposit takers and building societies.

makers' positions which an IDB necessarily acquires, IDBs will not be allowed to take positions in securities or instruments in which they act as inter-dealer brokers or Stock Exchange money brokers. Moreover, management and staffing of the inter-dealer broking entity will need to be separated from that of other, position-taking, entities within a group.

10 On the assumption that the IDBs provide anonymity to inter-market maker transactions by not disclosing the name of either of the ultimate counterparties to the other, the Bank will expect them to accept the full responsibilities of a principal on both sides of each transaction. IDBs must operate on a matched basis at all times, and must immediately cover any exposure arising as a result of a misunderstanding or of non-delivery. IDBs will not be permitted to borrow stock. In the case of delayed delivery of stock purchased by an IDB, the IDB may delay delivery on his sale, though he will remain ultimately responsible for it.

B Measurement of risk exposure

11 On the basis that IDBs will be settling their gilt-edged transactions by a means which provides assured payment against the transfer of securities,⁽¹⁾ they will run two general kinds of risk:

- (i) The risk of being held responsible for losses arising from adverse price movements following a misunderstanding with a market maker. In the event of such a misunderstanding, as a result of which the IDB has an accidental exposure, the IDB must immediately on discovery buy or sell stock as appropriate to eliminate the exposure.
- (ii) The risk that, on an adverse price movement, a counterparty fails to complete a transaction which he had previously agreed. Again, the IDB must immediately on discovery buy or sell stock as appropriate to eliminate any exposure that may arise.

12 The risks described in paragraph 11, by their nature, cannot be readily quantified, but as a first approximation it is reasonable to suppose that the degree of risk being run by an IDB will be proportional to the total amount of his uncompleted transactions including deals done for next-day settlement. The Bank will wish to satisfy itself that IDBs have adequate methods of identifying and controlling these risks. In addition, the Bank will require immediate reporting of any differences arising as in paragraph 11(i) above where the loss to the IDB exceeded 10% of his capital, and of any delay in completion of a previously-agreed transaction by a counterparty which had not been notified to and agreed in advance by the IDB.

13 The Bank recognises the danger that any formal measure of risk exposure of the type described in this

section could come to be regarded as sufficient in itself whether by the supervisor or the supervised. It is therefore emphasised that the Bank itself will regard uncompleted transactions only as a rough first indication of risk exposure and may, in the light of the particular detail of the IDB's business, view the risk being run by the IDB as greater or less than this measure suggests. Equally, the Bank would emphasise that the responsibility for risk assessment lies with the IDB himself, and that he should not regard this measure, *ipso facto*, as an adequate reflection of risk.

C The relationship between risk exposure and capital base

14 The Bank will in the normal course of events review the relationship between the IDB's risk exposure and his capital base, and will hold regular quarterly discussions with each IDB.

15 The Bank may at any time call for a special review with the IDB, and will in any case do so if uncompleted transactions (counting both sides of each transaction separately) exceed a multiple of 200 times the IDB's capital. In the light of such a review the Bank may set an absolute limit to the IDB's daily turnover and/or require the IDB to increase his capital over a period of time. The Bank however recognises that there may be occasional sharp peaks in the market demand for the IDBs' services and may at such times dispense with a special review if it is notified of the likely excess by the IDB concerned before the close of business on the day in question.

16 IDBs will be expected to monitor their uncompleted transactions continuously; and beyond the regular reporting requirements the Bank reserves the right to call for supplementary information at any time.

D Reporting

17 The Bank will require the reports listed below. The Bank is making arrangements for computerised reporting; a separate technical note on this subject will be made available to applicants.

- (i) Daily reports
 - (a) Summary details of turnover and uncompleted transactions.

(1) See paragraph 36 of the main paper.

- (b) Details of differences and delays in completion as specified in paragraph 12.
- (c) Details of individual transactions with related entities.
- (ii) Monthly reports
Capital base and details of its composition. In addition, IDBs will be required to report to the Bank immediately if their capital base should fall by more than 10% from the last reported level.
- (iii) Quarterly reports
Full balance sheet and profit/loss accounts.
- (iv) Annual reports
Audited accounts.