New equity issues in the United Kingdom

The International Stock Exchange has been reviewing new issue procedures in the United Kingdom under a committee chaired by Graham Ross Russell. That committee's report, which has now been published as a consultative document, recommends some changes to the procedures for making initial public offers (IPOs). This article describes the current arrangements in the United Kingdom, the pressures for change and the proposed new procedures. It also presents some research into the pricing of initial public offers over the past five years.[1] *The article extends an earlier study which was published in the* Bulletin *just after Big Bang.*[2]

Part I: The structure of the equity market and new issue techniques

Functions of a stock exchange

A stock exchange has two principal economic functions. These are to enable companies to raise capital and to facilitate the negotiation of a price at which ownership of a company is transferred between investors. The capital raising function is usually called the primary market and the subsequent trading of shares is called the secondary market. Activity in the secondary market is very much larger than that in the primary market and is an important buttress to the capital raising function. Turnover on the ISE domestic market totalled £250 billion in 1989; £20 billion capital was raised on the Exchange over the same period. The liquidity provided by an active secondary market makes investors more willing to hold shares and thereby reduces the cost of capital, both internal and external, to companies. Within the primary market it is customary to distinguish between initial and further offers of equity. Initial offers are made when a company raises capital from the market for the first time; if it subsequently raises funds, for example through a rights issue, this is called a further issue. This article covers only initial offers.

The motivation for raising funds on a stock exchange may vary from one issue to another. In some cases a company is brought to the market to enable it to raise funds for expansion which would not have been available from its private backers. This involves the creation of new shares. In other cases the existing owners may wish to realise part of their investment in the enterprise by selling existing shares. (Flotation is not always appropriate if existing owners wish to realise all their investment: that is normally best achieved by a trade sale.) In many cases an initial public offer has both objectives and the offer comprises some existing shares and some new shares.

A company may issue shares without a stock exchange listing: it must comply with the disclosure requirements laid down in the Companies Act (1985) but is not bound by ISE rules. For a company's securities to be listed on the ISE, the company must accept certain additional initial and continuing obligations. These are laid out in detail in the ISE's 'yellow book' but there are two principal requirements. The first is that the company must observe specified and reasonably strict standards in disclosing financial and business information to the market. This is to ensure that its shareholders and the market are properly informed and that particular groups of shareholders do not have preferential access to information. The second requirement is that a minimum proportion of a company's shares should be available to investors who are not otherwise directly associated with the company and who do not have a large stake. This is to ensure that there is a sufficiently active market in the company shares for them to be reasonably liquid. If a company is too closely held it could be difficult to buy or sell a holding of reasonable size without having an undue influence on the price. Thus the rules imposed by the Exchange are intended to provide a form of quality control over the securities being traded on the exchange.

Current market arrangements

These requirements are not identical for all the ISE's markets. To make it easier for smaller and growing companies to gain access to this form of finance, the Exchange created two junior markets with less onerous obligations. The junior markets have become an important stepping stone for many growing companies; they are able to transfer to the main market when they meet all its requirements.

The ISE currently has three tiers. The main market is the Official List, which comprises 2,000 domestic equity securities with a total market capitalisation of £500 billion.[3] The second tier is the Unlisted Securities Market (USM) which was established in 1980 to encourage

(1) The empirical study was carried out by T J Jenkinson of Keble College, Oxford University in association with R S Benzie, M J Dicks and other staff of the Bank's Economics Division. The first part of the article was written by J M Trundle of the Bank's Financial Markets and Institutions Division.

(2) 'New issue costs and methods in the UK equity market', in the December 1986 *Bulletin*, page 532.

(3) There are also about 5,000 other securities, mostly fixed interest, listed on the Exchange. They are not included in the figures quoted here.

growing enterprises to become public companies. There are now some 450 companies which are designated members of the USM and their total capitalisation amounts to £9 billion. In 1987 the Third Market was established to meet the needs of companies which wished to see their shares traded publicly but which did not have the three-year trading record necessary to join the USM; companies on the Third Market are regulated by their sponsors and not the Exchange. Of the 85 companies which have joined the Third Market since its establishment, 11 have moved onto the USM. There are currently some 70 companies traded on the market and their collective capitalisation amounts to £0.6 billion. In addition to these three markets, firms which are members of the ISE are able to trade in securities which are not part of these markets under rule 535.2. Investors in these securities do not have the reassurance of the vetting of companies required under the ISE rules for the other markets. Companies must, however, normally submit audited accounts to the ISE which should have an unqualified auditors' report. The rule allows ISE members to deal in these companies' shares for customers who understand the risks. Similarly the companies concerned do not have the benefit of enhanced liquidity that ISE approval is likely to bring but they do have limited access to the pool of investors on the basis of matched bargains.

This structure will change at the end of this year. The changes are in large part a response to the impact of various measures by the European Community to harmonise listing requirements in Europe. There have been several directives which affect securities markets and two of them precipitated the change in the structure of the ISE's markets. The box provides a summary of the main relevant directives. The most direct impact has come from the requirement that EC stock exchanges should be prepared to accept, in support of an application for listing on the main market, the listing prospectus approved by the EC home listing authority. As the European minimum requirements for listings are less onerous than those required until recently in London, the ISE could have found itself applying different standards to different securities. In particular the Mutual Recognition of Listing Particulars Directive specifies a minimum trading record of three years for companies whose securities are admitted to a country's main market. Until February, the ISE required a five-year trading record for securities in the Official List. The ISE has now moved into line with Europe and has also reduced the trading record required for a USM company from three years to two years to retain a material difference between the requirements of the two markets. The second important impact has come from the Public Offers or Prospectus Directive, which must be implemented by April 1991 and will set a minimum standard for all prospectuses. The tightening of the requirements for the Third Market would further blur the distinction between the Third Market and the USM. Together, the changes largely remove the need for a distinct Third Market and it is to close from the end of the year. Most existing Third Market companies are likely to

Major EC directives affecting securities markets

Number	Name and description	Proposed by commission	Compliance
79/279/EEC	*Admissions Directive* Sets out the conditions that a company must satisfy before its securities can be listed on a European exchange.	1975	June 1983
80/390/EEC	*Listing Particulars Directive* This directive requires a company to publish a document called 'Listing Particulars' prior to its admission to listing. It sets out the required contents of the document, which is intended to provide investors with reliable information on newly issued securities and on the company issuing them.	1972	August 1982
82/121/EEC	*Interim Reports Directive* Sets out the information to be published regularly by companies which have been admitted to listing on a European stock exchange.	1979	June 1983
87/345/EEC	*The Mutual Recognition of Listing Particulars Directive* Requires that once listing particulars have been approved by one Member State, they will be recognised by all Member States.	1987	January 1990
89/298/EEC	*Prospectus Directive* Requires a prospectus to be published when securities are offered to the public, whether or not a stock exchange listing is sought. An exception is made for wholesale issues.	1980	April 1991

Table A
Principal requirements for admission to formal ISE markets

	List		USM		Third Market (a)
	Former	New	Former	New	Former
Minimum market capitalisation (£000)	700	700	—	—	—
Minimum trading record(years)	5	3	3	2 (b)	1 (b)
Minimum proportion of shares held publicly(c) (per cent)	25	25	10	10	—

(a) No companies have been permitted to join the Third Market since January1990. The market itself is to close at the end of 1990.
(b) Waived for some greenfield projects.
(c) The public is defined as excluding directors, connected persons, and larger shareholders (ie those holding more than 5% of the company's equity).

be able to transfer to the USM; the few who do not should be able to use the facility of Rule 535.2. Table A shows the main requirements of each of the three tiers and how they will change under the new arrangements.

Initial offer methods

There are two main methods by which companies can raise initial equity finance in the United Kingdom: an offer for sale or a placing. Each method, however, has a number of variants. ISE rules currently require IPOs over £15 million to be by offer for sale in the case of a company joining the main market, or £5 million in the case of the USM. A company may also obtain a quotation for its existing shares without issuing new shares to the market. This is known as an introduction, and ISE rules require that such a company has at least 100 shareholders. Similarly, a company may transfer from a junior market to the senior market without issuing new equity, provided it satisfies the relevant requirements.

In an offer for sale, shares are usually offered to the public at a fixed price by an issuing house on behalf of the company. If the shares are to be listed, such offers are subject to ISE rules, which are intended to ensure that all investors have a reasonable chance of becoming aware of the issue and subscribing for it. The issuing house underwrites the whole issue—that is, it agrees to buy any shares remaining at the end of the offer period. Typically, most of this risk is passed on to sub-underwriters who are invited to participate by a broker acting for the issuing house. Major investing institutions act as sub-underwriters. The sub-underwriting is usually completed within one day of the issuing house accepting the risk.

In a placing the issuing house also technically underwrites the entire issue for a short period but its main economic function is not to bear risk but to act as a distributor. Normally, the issuing house buys the issue from the issuing company, subject to listing, and arranges to place the majority of the shares with investors. As in the case of sub-underwriting the issuing house may use a separate broker to find these investors. The placing agreement is signed on 'impact day' (typically about five business days before the shares start trading). Placing of the shares will normally be completed within the course of that day. Where a company is raising more than £2 million by this method, the issuing house also has to make one quarter of the issue available to the public either directly or by using a second distributor. (Before Big Bang this tranche had to be offered to the jobbers who would distribute it to other Stock Exchange member firms; the jobbers could only retain 10% of the tranche for market making.) Such rules are intended to give investors at least a limited ability to take part in any IPO.

In the early 1980s in particular a common variant of the offer for sale was an offer for sale by tender. In these issues the offer price was not fixed but investors tendered for the securities. A striking price was chosen with the objective of ensuring that all the issue was sold and that bids at the striking price or above were successful. (Bids precisely at the striking price might be scaled down.) The last major offer for sale by tender was a part of the British Airports Authority offer in 1987. As recently as 1983, however, 15 of the 24 offers for sale were on this basis.

Because many of the issues have been exceptionally large, procedures for privatisation offers have been slightly different and various innovations in issuing techniques have been used in the privatisation programme in recent years. Most privatisation offers have contained elements of both a placing and an offer for sale. Many have had more or less simultaneous offerings in several overseas financial centres and there have been special features such as the arrangement to claw back part of the placing if the offer for sale was substantially over-subscribed.

Experience since 1985

£24 billion of equity (some 14% of total identified external company finance) has been raised in initial public offers on the main market over the past five years.(1) £17 billion was raised in privatisations, £6 billion in private sector offers for sale, less than £400 million in tenders and less than £750 million in placings (Table B). By contrast, in terms of the number of issues, half of all IPOs were placings but they raised an average of £6 million as against ten times that in the case of offers for sale. A small

Table B
Total sums raised[(a)] via initial public offers

£ millions

Year	Offers for sale	Tenders	Placings	Privatisations	Total
1985	603	103	8	—	714
1986	2,375 (b)	258	70	5,434	8,138
1987	1,021	—	271	3,488	4,779
1988	643	—	296	2,500	3,439
1989	1,213 (c)	—	80	5,239	6,532
1985-89	5,855	361	725	16,661	23,603

(a) Includes sums raised for existing shareholders.
(b) Includes £1.5 billion flotation of TSB which had many of the characterisitics of a privatisation but was unique in that the funds raised were retained by the company not the Government.
(c) Includes the Abbey National flotation which raised £975 million.

(1) Figures quoted here are for IPOs as defined in Part II. See notes to Table D—Entry Methods to the ISE.

Table C
Initial public offerings 1985-89

£ millions; *percentages in italics*

Entry method	Number	Size of issue		Proportion of equity capital	
		Mean	Median	Mean	Median
Offers for sale	94	62.3	11.4	*35.6*	*33.5*
Tenders	11	32.8	12.2	*32.2*	*27.0*
Placings	120	6.0	5.3	*31.6*	*28.0*
Privatisations	15	1,110.7	848.8	*99.8*	*100.0*

number of very large offers for sale, however, influence that average greatly. The median offer for sale was only just over twice the median placing (Table C). The average privatisation raised over £1 billion.

The most striking trend in the methods of making IPOs has been the increasing use of placings (Table D). This change was facilitated by the increase in the ISE's limit on the size of placings at the time of Big Bang. Before October 1986 placings were normally limited to companies raising less than £3 million, although special permission could occasionally be obtained for larger issues. Over the past three years 80% of all private sector issues have been placings but these accounted for less than 20% of funds raised.

Table D
Entry methods to the ISE Official List

Year	Offers for sale	Tenders	Placings	Privatisations	Introduction	USM transfers	Total
1985	29	6	3	—	2	10	50
1986	37	5	17	1	5	27	92
1987	12	—	46	3	18	25	104
1988	11	—	39	1	11	19	81
1989	5	—	15	10	7	7	44
1985-89	94	11	120	15	43	88	371

Notes (applying also to Tables E to H in Part II):

(1) All investment trusts are excluded from the figures.
(2) Figures relate to full listings on the London Stock Exchange and exclude issues on the USM and Third Market.
(3) No secondary issues, relistings, reverse takeovers etc are included.
(4) Only initial public offerings of ordinary shares are included; debenture, bond or preference share issues are excluded.

Costs of issue

One of the most important determinants of the choice of method is the cost of raising funds. Companies may have additional motives such as attracting a particular type of shareholder but costs are always a significant factor. For small issues, placings are more economical than offers for sale (as well as faster) because of the large element of fixed costs in the latter (the costs of preparing the offer document, of advertising the offer widely and of processing the applications). Offers for sale also entail underwriting costs, typically 2% of the capital raised.

Since the raising of the limit on placings in 1986 there has been a very strong trend for small IPOs to be by placing. In fact by 1988 no offer of less than £10 million was by offer for sale (see Table E). This seems to reflect the fact that offers for sale are more expensive than placings in terms of direct costs, particularly for small issues. Over the past five years the average small offer for sale (of less than £5 million) cost nearly 14% of the proceeds as against 11½% for placings of the same size. For somewhat larger issues (£5 million–£10 million) the equivalent figures were 10% and 7½% (see Table F). For large issues the difference is smaller but placings have almost always been restricted to offers of less than £15 million so it is difficult to make appropriate comparisons. Not surprisingly, the proportionate cost of issues falls as the offer size increases.

In addition to the direct costs incurred, an issuer also bears a cost if the issue is sold for less than it might otherwise have raised. The accuracy of the pricing decision is therefore an important feature of the offer process. The study reported in Part II of this article examines the evidence on the accuracy of the pricing of issues using the methodology of the Bank's earlier study. In practice it is not possible to establish the hypothetically 'correct' price for an IPO but the study seeks to throw some light on this question. It attempts to measure 'underpricing' by examining the premia of newly issued shares over their issue price (after adjusting for movements in the price of all shares over the period between issue and trading). Most practitioners point out that subscribers to an IPO need to expect there to be some premium in the aftermarket in order to persuade them to subscribe during the primary issuing period. In that sense the IPO is discounted for risk. If this were not the case investors would avoid the risk of buying a flop by purchasing the shares in the secondary market. It is an empirical question what the appropriate risk discount should be. Part II shows that the average discount of an IPO relative to the price at which the issue subsequently trades is about 12%.(1) There are, however, substantial variations about this average and the study in Part II seeks to establish whether these variations are associated with particular characteristics of the issue.

The study shows that the discount is not systematically dependent upon either the offer method or the size of the offer but that there is a systematic tendency for the size of the discount to vary over time. Thus the size of the discount appears to be most influenced by when an issue takes place. The study identifies a 'hot issue period' during 1987 when the discount on IPOs averaged about 25%. If 1987 is excluded the average discount on IPOs in the other four years is only 8%. Such hot issue periods have been observed in studies of other markets, notably in the United States. The most plausible explanation of what happens during these periods is based on issuers' perceptions of the appropriate price for their shares. The planning process for an issue may start six months or so before the issue date. If the market rises strongly during this period, issuers' expectations of the price that could be achieved do not seem to reflect fully the rise in the market. The price contemplated at the early planning

(1) It should be noted that the size of the discount does not indicate that the issue could have been sold for an equivalent premium. The market price is the price at which subsequent transactions can be traded, while the offer price has to clear the whole issue.

stage seems to be influential despite the fact that the final pricing decision is made only a few weeks before trading commences. It is unclear why this should be the case, but one explanation may be that new companies are keen to ensure a good post-issue share price performance and may therefore be wary of setting too high an issue price.

The report of the IPO Review Committee

The trend towards greater use of placings raised the question of whether the limit of £15 million, and £5 million for the USM, established at the time of Big Bang, was appropriate. Moreover, the ISE thought it useful to review more generally its requirements for IPOs to ensure that its rules did not impose unnecessary costs on the issuers or their agents. The report emphasises the overriding importance of flexibility to enable issues to be marketed in a way that meets the particular needs of the issuer. Nevertheless the market objective of achieving fair distribution of shares and a liquid market after the issue was seen to require some rules.

The committee recommended that the ISE should adopt new limits on the size of particular types of offer. It was suggested that sponsors should be allowed to place small issues (defined as up to £10 million) with clients subject only to a tranche being reserved for market makers and the sponsor achieving a minimum spread of shareholders. (Issues by companies that are already listed on another exchange can of course be made entirely by placing because the need for an active after-market is already satisfied.) The current requirement to use a second distributor was not thought to work well because the second distributor often did not feel committed to making a market in the shares or actively following the company after the issue.

The committee proposed the introduction of an 'intermediaries' offer' to facilitate medium-sized issues (of £10 million–£20 million). They proposed that up to £10 million (or 75%, if less) of such issues could be placed, with the remainder either being offered for sale or sold through an intermediaries' offer. The latter was intended to be a quicker method of issue, which was one of the principal advantages of a placing over an offer for sale, but one still accessible to most investors. In this method sponsors would invite intermediaries (such as ISE members and possibly other authorised investment businesses) to subscribe for the issue on behalf of their customers. This would be particularly attractive to customers whose funds were managed on a discretionary basis by securities firms. The closest parallel is perhaps the American system of distribution of IPOs where retail securities firms buy new issues on behalf of customers. The committee hoped that the development of such channels of distribution in the United Kingdom would encourage retail interest in shareholding.

For large issues (over £20 million), the committee considered that the offer for sale procedure remained most appropriate. They suggested, however, that the sponsor should be able to place up to half of the offer. Such hybrid offers have been permitted in large privatisation issues.

Although the committee recommended the retention of offers for sale as the main technique for large issues, it suggested a number of cost-reducing changes in the rules governing offers for sale. The committee indicated that it thought it was unnecessary to require the full prospectuses to be published in national newspapers and that greater use of mini-prospectuses and box advertisements should be encouraged. The committee emphasised instead the principle that sponsors should ensure that potential investors had a reasonable chance of knowing when an offer was to be made and of participating in it. These proposals have been published in a consultative document(1) and the Primary Markets Division of the ISE would welcome comments on them.

Conclusions

The market for raising equity capital is becoming increasingly international and the London market needs to maintain its competitiveness to encourage companies to list in the United Kingdom. The rules must be flexible enough to accommodate the needs of issuers. Equally, borrowers and investors are attracted to the market because of its reputation for openness both in terms of access to the market and in revealing relevant information fairly to the market. The report of the Review Committee on Initial Public Offers seeks to strike that balance between keeping rules to a minimum and ensuring evenhandedness in issuers' treatment of potential investors. If it is successful in its search for the right balance then the primary market of the International Stock Exchange should remain attractive to issuers and investors from the United Kingdom and overseas.

(1) *Initial Public Offers. The Report of a Review Committee chaired by Graham Ross Russell*: available from The Stock Exchange, London EC2N 1HP

Part II: An analysis of market performance

This study examines the costs incurred by companies going public through an IPO on the main market in London over the period 1985–89. It considers both the direct costs of issuing new equity and the indirect cost implied by their being sold at a lower price than that at which they subsequently trade. The main findings are:

- *The proportionate costs of an offer for sale have changed very little since 1985 although the average cost of recorded issues has fallen, reflecting an increase in the average size of such offers.*
- *The proportionate costs of making a placing appear, on average, to have changed little over the period although the cost of making small issues has increased somewhat since 1986.*
- *There has been a shift away from offers for sale towards placings, following the raising of the limit on placings to £15 million in 1986.*
- *In normal market conditions the average initial public offering is sold for about 8% less than the price at which it subsequently trades.*
- *The year before the October 1987 stock market crash was a 'hot issue' period, during which the price of newly issued shares rose much more sharply than at other times.*

Direct costs of initial public offers

The main direct costs to a company of making an IPO are underwriting commissions, fees of the issuing house and broker, legal and accountancy fees and advertising costs. In addition the current owners of the company will bear the costs which relate to any parallel sale of existing shares in the business. These costs will fall into the same categories as those borne by the company but the vendors will also be liable to Stamp Duty Reserve Tax. The offer prospectus will reveal most of the costs. The company's costs will be revealed explicitly in the document and the vendor's underwriting costs will be shown in a separate section of the prospectus. Data on other fees charged to vendors are not readily available. The main cost to vendors, however, is usually the underwriting commission on the shares that they sell. The figures in Table F take account of the proportion of the equity that is being sold by the original owners by assuming that a standard underwriting commission of 2% (plus VAT in the case of existing shares) is charged on these shares. All fixed costs, such as advertising etc, are thus assumed to be borne by the company. Given that on average over 40% of the funds raised by private sector IPOs are retained by the initial shareholders, such corrections can make a significant difference to the costs figures as reported in the prospectus.[1]

The direct costs of making an IPO as a proportion of money raised are shown in Table F by year and size of issue (including vendors' proceeds). The offer for sale figures include tender offers as well as fixed-price offers, given the small number of the former in the five years analysed here. Some of the expenses of going public are to a considerable extent fixed, irrespective of the size of issue (for example, accountancy and legal fees), while other expenses are mainly a function of the issue method (for example advertising costs, which will tend to be large for offers for sale). While costs are higher for larger IPOs, the evidence presented in Table F indicates that there are significant 'economies of scale' in the costs of new issues: the percentage costs of both offers for sale and placings fall as the issue size increases.

The average direct cost of a private sector IPO fell steadily from 10% in 1985 to 8.2% in 1988 before rising to 9.5% in the rather subdued conditions of 1989. Within these overall figures, the direct costs of offers for sale seem to have fallen significantly, whereas the costs of placings have fluctuated much more. These trends need to be interpreted cautiously, however, as the size composition of IPOs changed considerably over the period.

For *small issues* (up to £5 million) firms have switched away from offers for sale in favour of placings since 1985. At the same time, the direct costs of placings for small issues have increased in recent years, from 10.9% in 1986 to 13.9% in 1989. (The 1985 figure is higher than the average for later years because all placings were very small—less than £3 million.)

(1) The work reported here drew on the 'London Listing Survey' produced by KPMG Peat Marwick McLintock and information provided by the ISE's Quality of Markets Unit. The authors are grateful for their assistance.

Table E
Sums raised by issue size

£ millions

	1985		1986		1987		1988		1989		1985-89	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Up to £3 m raised:												
Offers for sale	1	2.9	—	—	—	—	—	—	—	—	1	2.9
Tenders	—	—	—	—	—	—	—	—	—	—	—	—
Placings	3	8.3	9	23.9	10	19.6	3	6.3	3	5.7	28	63.8
£3m-£5m raised:												
Offers for sale	3	12.8	4	18.4	1	4.1	—	—	—	—	8	35.3
Tenders	3	12.8	1	4.3	—	—	—	—	—	—	4	16.9
Placings	—	—	3	13.2	14	56.0	10	38.9	5	20	32	128.1
£5m-£10m raised:												
Offers for sale	16	110.5	12	78.9	2	14.2	—	—	—	—	30	203.6
Tenders	1	9.7	1	7.2	—	—	—	—	—	—	2	16.9
Placings	—	—	4	21.6	16	116.9	16	115.7	6	42.1	42	296.3
£10m and more raised:												
Offers for sale	9	477.1	21	2.277.6	9	1,002.4	11	643.4	5	1,212.8	55	5,613.4
Tenders	2	80.4	3	246.5	—	—	—	—	—	—	5	326.9
Placings	—	—	1	11.7	6	78.4	10	314.8	1	12.1	18	237.0
Privatisations	—	—	1	5,434.4	3	3,487.8	1	2,500.0	10	5,239.2	15	16,661.4
Total by issue method:												
Offers for sale	29	603.3	37	2.375.0	12	1,020.7	11	643.4	5	1,212.8	94	5,855.2
Tenders	6	102.8	5	258.0	—	—	—	—	—	—	11	360.8
Placings	3	8.3	17	70.3	46	270.9	39	295.7	15	79.9	120	725.1
Privatisations	—	—	1	5,434.4	3	3,487.8	1	2,500.0	10	5,239.2	15	16,661.4
Total	**38**	**714.4**	**60**	**8,137.6**	**61**	**4,779.4**	**51**	**3,439.1**	**30**	**6,531.9**	**240**	**23,602.5**

Table F
Direct costs of initial public offerings[(a)]

£ millions

	1985		1986		1987		1988		1989		1985-89	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Up to £5 m raised:												
Offers for sale	7	14.3	5	13.4	1	12.8	—	—	—	—	13	13.8
Placings	3	12.7	12	10.9	24	10.9	13	11.0	8	13.9	60	11.4
£5m-£10m raised:												
Offers for sale	17	10.1	13	10.4	2	8.6	—	—	—	—	32	10.1
Placings	—	—	4	8.3	16	7.9	16	7.8	6	6.8	42	7.7
More than £10m raised:												
Offers for sale	9	6.8	24	6.8	9	7.5	10	6.9	4	5.7	56	6.9
Placings	—	—	1	9.2	6	4.3	10	6.6	1	5.5	18	5.9
Total by issue method:												
Offers for sale	33	10.1	42	8.7	12	8.1	10	6.9	4	5.7	101	8.8
Placings	3	12.7	17	10.2	46	9.0	39	8.5	15	10.5	120	9.3
Total	**36**	**10.3**	**59**	**9.1**	**58**	**8.8**	**49**	**8.2**	**19**	**9.5**	**221**	**9.1**

(a) Only private sector issues are included. Privatisations are not comparable. The costs borne by the privatised company, as recorded in the prospectus, are very small as a proportion of the issue.

For *medium-sized issues* (between £5 million and £10 million) there has been a similar shift away from offers for sale, following the increase in the limit on placings at the time of Big Bang. In contrast to small issues, however, the direct cost of making an IPO seems to have fallen somewhat for medium-sized issues, from 8.3% in 1986 to 6.8% in 1989.

Since 1987, offers for sale have been used for relatively *large issues* (more than £10 million). The cost of private sector large issues has changed very little over the last five years, averaging 7% for offers for sale and 6% for placings, although there have been minor variations in particular years.

In conclusion, although small sample sizes at times make it difficult to draw firm conclusions, the average costs of small issues seem to have risen somewhat since Big Bang, while the costs of making medium-sized and large IPOs have remained roughly constant.

The indirect costs of making IPOs

In addition to the direct costs of going public, there is an indirect cost either to the original owners of the firm or, where new finance is raised, to the company itself, if the shares are sold for less than investors would be willing to pay. There will always be a suspicion that this was the case where shares are sold for less than the price at which they subsequently trade. Such systematic discounting has been observed in the United States[(1)] and in the Bank's earlier study on the United Kingdom, with, on average, shares immediately trading at a considerable premium over the issue price. This study reports some research into measuring these discounts. In order to remove the impact of any general movement in share prices, the extent of any discount or premium was measured relative to the FT-Actuaries all-share index using the formula:

$$\text{Discounting} = (P_{t+s}/I_{t+s} - P_t/I_t)/P_t/I_t$$
$$= (P_{t+s} . I_t / P_t . I_{t+s}) - 1$$

(1) See, for example, 'The costs of going public', Jay R Ritter, *Journal of Finance*, Vol XIX, 1987.

where P_t = the issue price of the share

P_{t+s} = the share price s days after the listing date

I_t = the FT all-share index on the listing date

I_{t+s} = the FT all-share index s days after the listing date

This formula measures the extent to which the rate of return on a newly issued share exceeds the rate of return earned on the stock market as a whole. Of course any company-specific or industry-specific news which emerges after trading begins will reduce the accuracy of this correction for developments after the issue price is fixed, although over short periods such influences are likely to be small. In order to minimise such problems, while at the same time allowing the after-market to settle down following the often highly active initial trading, the measure of discounting used here compares the price prevailing at the end of the first trading week with the issue price. In fact, the choice of period does not seem to matter, as Table G shows. IPOs tend to jump in price on the first trading day, and thereafter move, on average, with the overall market.

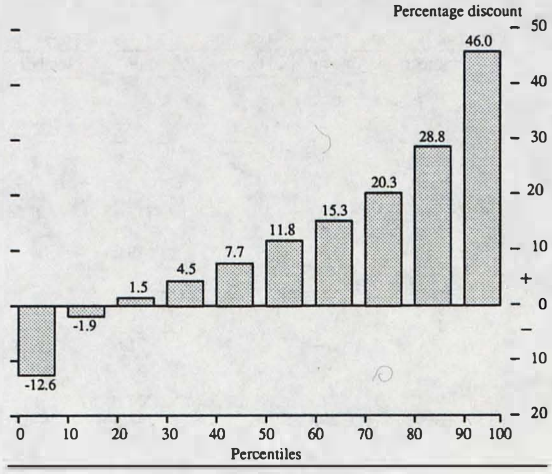
Table G
Analysis of returns on companies seeking a full listing, 1985-89

Per cent

	1985	1986	1987	1988	1989	1985-89
After:						
1 day	7.5	8.4	22.6	7.3	10.7	11.9
1 week	6.6	8.1	24.4	6.7	11.3	12.1
4 weeks	5.9	7.1	22.9	6.2	11.7	11.3
13 weeks	4.3	7.9	23.9	10.3	13.7	12.6
Number of firms	**36**	**57**	**57**	**47**	**30**	**227**

The average discounting of new issues was around 12% for the sample as a whole. The standard deviation of the first week discount is 16.4%, and the distribution is positively skewed. Chart 1 shows the distribution of discounts on IPOs by decile. While the 10% most overpriced issues fell in price, on average, by 12.6% by the end of the first week, the 10% most underpriced issues rose in the after-market by 46% on average over the same period. Almost half of all new share issues rose in price by more than 10% within the first week.

Chart 1
Distribution of discounts on all IPOs



The discounting of placings and offers for sale

As noted above, since 1986 many more IPOs have been conducted via a placing of the shares, with offers for sale being restricted, increasingly, to large issues. Estimates of discounting by type of issue are presented in Table H. Overall the discounting of placings in the sample was about 5.7 percentage points more than the discounting of offers for sale[1] but this result is partly attributable to the variation of the discounts over time. Around 40% of the placings in the five-year period were made in 1987, when discounts on both offers for sale and placings were

Table H
Discounting the initial public offerings

Percentages in italics

	1985		1986		1987		1988		1989		1985-89	
	Number	Discounts	Number	Discounts	Number	Discounts	Number	Discounts	Number	Discounts	Number	Discounts
Up to £5 m raised:												
Offers for sale	7	*7.0*	5	*8.2*	1	*23.4*	—	—	—	—	13	*8.7*
Placings	3	*-0.1*	11	*1.5*	22	*23.9*	10	*11.8*	8	*12.5*	54	*14.1*
£5m-£10m raised:												
Offers for sale	15	*3.1*	13	*9.3*	2	*33.0*	—	—	—	—	30	*7.8*
Placings	—	—	4	*9.7*	15	*29.0*	16	*5.8*	6	*7.4*	41	*14.9*
More than £10m raised:												
Offers for sale	11	*13.1*	22	*10.1*	8	*15.7*	11	*2.3*	5	*-1.9*	57	*8.8*
Placings	—	—	1	*12.9*	6	*22.0*	9	*8.9*	1	*4.1*	17	*13.4*
Privatisations	—	—	1	*8.8*	3	*28.1*	1	*1.3*	10	*19.9*	15	*19.6*
Total by issue method:												
Offers for sale	33	*7.2*	40	*9.6*	11	*19.5*	11	*2.3*	5	*-1.9*	100	*8.5*
Placings	3	*-0.1*	16	*4.2*	43	*25.4*	35	*8.3*	15	*9.9*	112	*14.3*
Privatisations	—	—	1	*8.8*	3	*28.1*	1	*1.3*	10	*19.9*	15	*19.6*
Total	**36**	***6.6***	**57**	***8.1***	**57**	***24.4***	**47**	***6.7***	**30**	***11.3***	**227**	***12.1***

Notes:
(1) The estimated discounts compare the trading price one week after issue to issue price, corrected for movements in the overall market index.
(2) The offers for sale figures include both fixed price offers and tender offers.

(1) The offer for sale figures in Table H include both fixed price offers and tender offers. The small number of the latter precluded a reliable separate analysis.

exceptionally large: 19.5% and 25.4% respectively after one week. This 'hot issue' period is discussed further below.

Separate distributions of discounts for placings and offers for sale are illustrated in Charts 2 and 3. The middle portions of the distributions are rather similar, although placings tend to be discounted to a slightly greater extent. However, the distributions diverge somewhat at each end. There was significantly less downside risk for investors who took up placings in this period: only 12% of all placings fell in price and even for these the average fall was only 5.4%. In contrast, 29% of offers for sale fell in price, by an average of 7.5%. Risk-adjusted returns to investors could, of course, be equal for placings and offers for sale if the distributions followed a similar pattern for the most underpriced issues. In fact the reverse is true: for example, the most discounted 10% of placings in the sample rose in price by the end of the first week by an average of over 52%, whereas the corresponding offers for sale rose by around 38% on average. There thus appears to be a large risk-adjusted return to investors in IPOs, especially those who can obtain placings.

Chart 2
Distribution of discounts on IPOs (offers for sale)

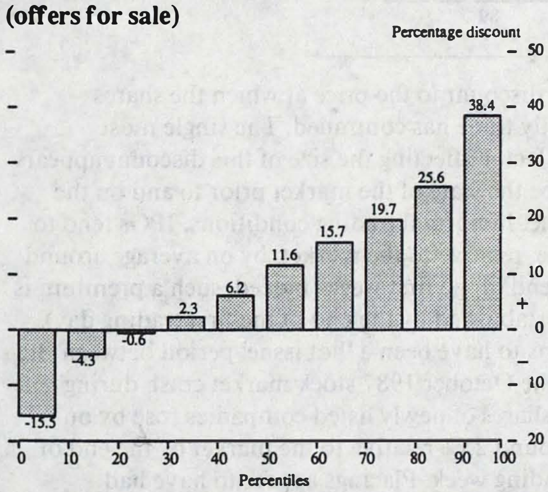
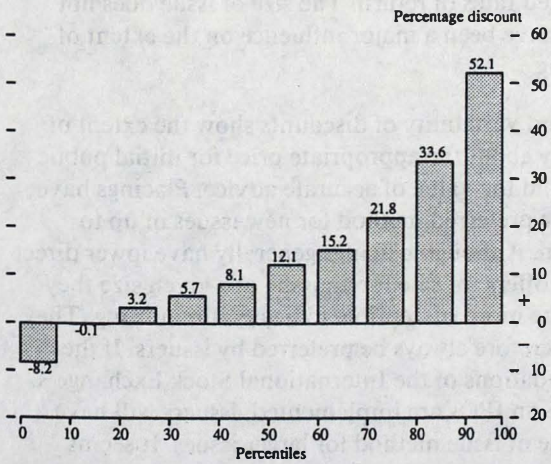


Chart 3
Distribution of discounts on IPOs (placings)



When the sample is broken down by issue size, there seem to be few systematic differences in the extent of discounting. Over the whole sample period, placings were discounted to a greater extent on average for both small issues and large issues alike, although again this seems to be partly attributable to the preponderance of placings in 1987. The overwhelming feature of the data is that the extent of discounting is only marginally influenced by size of issue but tends to be dominated by the timing of issue. Such serial dependence of new issue premia has also been reported in studies of new issues in the United States.(1)

1987: a 'hot issue' period

1987 stands out as a year with a substantially greater degree of discounting. Table H shows that the average discounting of IPOs coming to the market in 1987 was around three times that of companies going public over the remainder of the sample period. Such 'hot issue' periods have also been observed in the United States, and have been the subject of various Securities and Exchange Commission investigations.(2) In particular, during the periods 1959–61, 1968–69 and 1980–early 1981, IPOs in the United States seem to have traded at abnormally large premia over their issue prices, although in the latter period this was apparently associated almost exclusively with issues made by companies in the natural resources sector.(3)

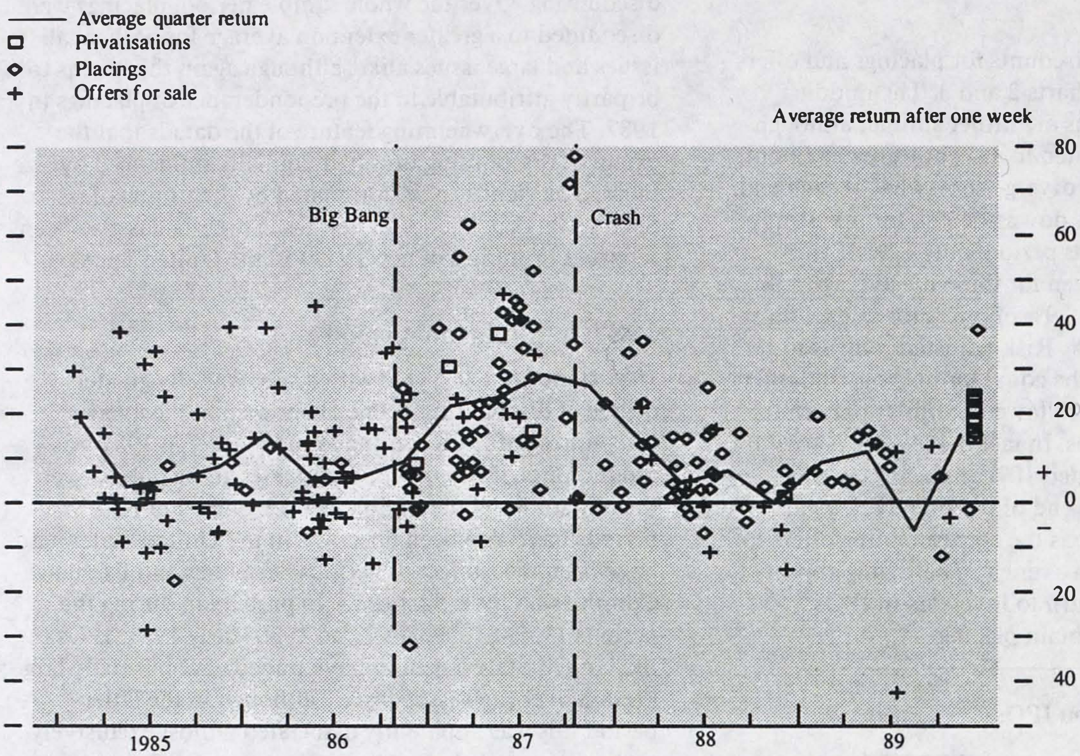
While it is not possible to identify the beginning of the 1987 hot issue period in the United Kingdom clearly (indeed by their very nature such phenomena tend to develop gradually) it might be reasonable to choose October 1986—the date of Big Bang—as a starting date. Chart 4 shows the distributions of new issues over the period together with their associated discounting. For each quarter, the average discounting of new issues is calculated and the chart shows clearly the development of the hot issue period. At its peak in the second quarter of 1987, IPOs were trading on average at 28.7% above their issue prices. As might have been expected, the October 1987 stock market crash seems to have signalled the end of such exceptional premia. The hot issue period in the UK market of 1987 was one in which equity prices rose rapidly: the FT-Actuaries all-share index rose by nearly 50% between December 1986 and July 1987. Pricing decisions may have been more difficult against a background of rapidly changing prices which might have encouraged conservative estimates of demand.

Conclusions

Since 1986 there have been a number of changes in the pattern of initial public offerings in the United Kingdom. In the five years 1985–89, the number of companies making IPOs via an offer for sale, either at a fixed price or through a tender, has fallen sharply. Indeed, no private sector tender offers have been made on the main market

(1) See, for example, '"Hot Issue" Markets', Roger G Ibbotson and Jeffrey F Jaffe, *Journal of Finance*, Vol XXX, No 4 September 1975.
(2) For example the 'Report of Special Study on Security Markets', US Securities and Exchange Commision, Washington DC, 1963.
(3) See 'The "Hot Issue" Market of 1980', Jay R Ritter, *Journal of Business*, Vol 57, No 5, 1984.

Chart 4
Performance of new issues - one week after issue



since 1986. In contrast the growth in the number of companies conducting an IPO through a placing has been marked, especially since the limit on placings was raised in 1986. In the subsequent three years, 1987–89, over 75% of all companies which joined the Official List through an IPO did so by a placing.

The number of companies obtaining a full listing in London rose sharply until the 1987 stock market crash. Since then the number of initial public offerings has fallen considerably, with only 20 private sector firms obtaining a full listing via an IPO in 1989. Over the period as a whole around £7 billion was raised by new private sector firms going public, and the various privatisations that occurred during the sample period raised over £16.6 billion for the government.

The direct costs of making an initial public offering do not appear to have changed significantly since 1985. For companies raising less than £10 million before 1988, an IPO via a placing normally involved lower costs than an offer for sale. By 1988 such comparisons were not possible, as placings accounted for all such small-to-medium offerings. There are significant economies of scale in conducting an IPO: expenses account for about 6%, on average, of the proceeds of IPOs raising over £10 million, whereas for small issues, raising less than £5 million, such expenses typically account for around 12% of the proceeds.

The indirect costs of making an initial public offering are more difficult to measure. The tendency for issues to be priced at a discount to the price at which the shares subsequently trade has continued. The single most important factor affecting the size of this discount appears simply to be the state of the market prior to and on the date of issue. In normal trading conditions, IPOs tend to rise in price, relative to the market, by on average around 8% by the end of the first week (indeed, such a premium is normally established by the end of the first trading day). There seems to have been a 'hot issue' period between Big Bang and the October 1987 stock market crash during which the shares of newly listed companies rose by on average around 25% relative to the market by the end of the first trading week. Placings appear to have had somewhat higher discounts than offers for sale, as shown in Table H, and seem to offer investors higher risk-adjusted rates of return. The size of issue does not appear to have been a major influence on the extent of discounting.

The size and variability of discounts show the extent of uncertainty about the appropriate price for initial public offerings and the value of accurate advice. Placings have become the preferred method for new issues of up to £10 million. Although placings generally have lower direct costs than offers for sale for an issue of a given size they appear to be more susceptible to heavy discounting. They will not therefore always be preferred by issuers. If the recommendations of the International Stock Exchange's committee on IPOs are implemented, issuers will have a freer choice of issue method for larger issues. It seems likely for the foreseeable future, however, that both offers for sale and placings will continue to be used.