Recent developments in the gilt-edged market

The Head of the Banks' Gilt-edged and Money Markets Division, Mr John Townend, reviews[1] the changes that have occurred in the gilt market over the last six years. He describes the new market structure that accompanied Big Bang in 1986; the introduction of a variety of new issuing techniques, including auctions and reverse auctions; and explains the Bank's use of tap sales. Mr Townend also discusses a number of further innovations which have been mooted, such as a fixed auction calendar, the establishment of a repo market, and facilities for offshore settlement for foreign investors, explaining some of the difficulties involved. Finally he examines some of the issues surrounding innovations in the derivative markets and current tax arrangements.

I am very pleased that the Society of Investment Analysts has, with my encouragement and support, agreed to host this evening's meeting, in order to promote an open and I am sure constructive exchange of views on the gilt market. As many of you already know, and others will I hope come to realise by the end of this evening, the Bank of England does not stand aloof from the market or its major players. We are constantly taking soundings of the market makers through our dealing room, and of end-investors through a whole range of informal contacts. We are very interested in your views—on any aspect of the market—and will always listen, but may not necessarily be able to give an immediate response.

There are a number of speakers this evening representing different players in the market. My aim is to set out the very many and in some cases very major changes that have occurred in our market over the last five or six years, and to refer to some of the areas that are said to be of particular interest to you. I hope this will encourage you to express your own views.

Funding objectives

It is probably as well to be clear at the outset about exactly what the Bank, on behalf of government, is aiming to achieve. The Government's declared funding policy is to fund the net total of maturing debt, the public sector borrowing requirement (PSBR) and any underlying increase in the foreign exchange reserves, by sales of public sector debt outside the banking and building society sectors (the so-called 'full fund' rule). It applies over each financial year as a whole and does not mean that we match the pattern of PSBR or maturing debt continuously on a month-by-month basis. I should remind you here that this funding is undertaken entirely in sterling. Although we do from time to time make issues in other currencies (and have recently announced an intention to launch a 3-year Ecu note programme to complement the government's Ecu bond and Treasury bill programme) the foreign currency raised from these issues is held entirely in the foreign exchange reserves, and is not swapped into domestic currency, as is the practice in some other countries. Although national savings and other forms of public sector debt make a contribution to the sterling funding required, the vast bulk of the funding is thus raised through the gilt-edged market.

The Bank's aim, quite simply, is to fund the Government's borrowing requirement in the most cost-effective way. Among other things, this means keeping open as many options as possible and appealing to a wide range of investors, with potentially very different interests and objectives. Moreover, since the Government is likely to have a continuing need to borrow—certainly in the foreseeable future—it means maintaining a healthy, vigorous and liquid secondary market.

Structure of government debt markets

Much is made of the differences between government debt markets, particularly in Europe. From my perspective, however, I am rather more struck by the similarities, particularly when the very different starting points of the major countries are taken into account.

The UK market of course had its 'Big Bang' in 1986. The catalyst then was the Government's desire to see changes in some of the Stock Exchange's trading rules and the Stock Exchange's own desire to modernise the structure of its markets. It was clear that in order to maintain the gilt market's international competitiveness, major structural change was required. I know that many of you lived through Big Bang. You will have seen the market structure adjust and adapt, settling down into a highly competitive system. It is easy now to forget the major upheaval involved in changing our market structure and I think it would be helpful therefore to remind ourselves briefly of the key changes—not least because many of them have been, and continue to be, adopted in other overseas government debt markets. Big Bang meant the following:

(1) In a speech to the Society of Investment Analysts on 28 November 1991.

- the market structure changed from single to dual capacity;
- the number of firms making prices to investors increased from 8 to 27 making the market place much more competitive;
- a new breed of market player emerged—the inter-dealer broker;
- more secure settlement arrangements were introduced offering electronic book entry transfer of government securities against assured payment and sophisticated stocklending and collateral handling facilities, again against assured payments;
- supervisory arrangements were put in place involving both close monitoring of the business, through strict trade reporting requirements, and detailed prudential supervision of the main market participants through daily position reports.

These changes brought obvious benefits both to the Government as issuer and to investors. Dealing not only became easier and quicker, but commissions for institutional investors fell to zero, dealing spreads narrowed and the normal size of deal for which quoted spreads were firm increased. Market turnover increased too, not just in the cash market but also in the futures market. And last year the market makers as a group, also for the first time, became profitable—although by no stretch of the imagination could their profits be said to be excessive; they are consistent with what one would expect in an open and highly competitive market.

The world did not of course stand still with Big Bang: there have been many changes since. It was always probable that 27 market makers, collectively aiming to secure 175% of the market, would prove to be too many. Some countries have sought to limit the number of market makers, but we prefer to let market forces take their course, and following 11 departures and the establishment of 2 new market makers we now have a total of 18 market makers of which 10 are foreign-owned. A further two foreign-owned houses have announced that they hope to join the market some time early next year.

Once the market structure had begun to settle down, we were able to turn our attention to new issuing techniques. Following discussions with the market, we introduced auctions of gilt-edged stock, holding a series of four auctions between May 1987 and August 1988. However, we had barely got this (for us) new issuing technique off the ground, when we were faced with the relatively unusual situation of a sizable government surplus, which required us to reduce the level of debt outstanding by letting maturities run off without replacement and then buying in stock in the secondary market, in order to meet the full fund policy. Six months after the last conventional 'selling' auction we thus found ourselves using the auction technique in rather a different way—to buy in stock through the novel 'reverse auctions'.

This buying-in period provided us with two challenges and one big worry. The first challenge was how to manage the buying in programme. In practice, we achieved this in a similar way to our selling operations, by means of a combination of set-piece primary market operations (the reverse auctions) and regular buying-in through the secondary market. The second challenge was how to maintain liquidity in a shrinking market. We addressed this by introducing a series of conversion offers, in which holders of relatively illiquid stock were invited to convert into a stock with broadly similar characteristics on neutral terms. Over 90% of the outstanding stock targetted was converted in each of the nine conversions held between November 1989 and January 1991. Since then, a number of other countries have also adopted conversion programmes—although not always on neutral terms and not always with such a high take-up rate.

I mentioned two challenges and a worry. The worry I hasten to add was not, as some would have had us believe, that the gilt market was threatened with extinction: it was I believe due to disappear off the face of the London map by early next century, but we were always a little sceptical of such predictions. The worry was more how the new market structure would cope with a shrinking gilt market—the (nominal) total of gilt-edged stock outstanding fell from £141 billion in March 1988 to £115 billion at end-1990. It was unfortunate that the new market structure should have been faced with this contraction in its infancy, but a combination of careful strategic management and close attention to costs saw the market-makers through, and the doom-mongers were proved wrong on almost all counts—liquidity was maintained by the conversion programme and the market structure showed itself to be remarkably robust.

Since the United Kingdom's Big Bang in 1986, there have been 'Bangs' of various degrees of resonance throughout Europe, and many other markets have adopted structures with distinctly similar features to our own—although, given the different histories and institutional backgrounds, they inevitably look somewhat different. There has, for example, been a notable move towards the primary dealer model, whereby specialists take on market-making obligations designed to enhance secondary market liquidity in return for access to certain facilities; in some countries inter-dealer brokers have been set up to service these specialist market-makers, very much on the UK model (which was in turn borrowed from the United States); and several countries have moved to emulate the type of settlement facilities available in the Central Gilts Office. I will say a little more on this later. Finally a number of European countries—including most recently the Dutch— have been showing a greater interest in secondary market operations, often involving a tap system or something similar.

Issuing techniques

It is in the area of issuing techniques where I believe the United Kingdom is said to stand apart. I hear it said on occasion that investors---even dare I say it very occasionally market-makers— do not understand our techniques; but perhaps more frequently it is said that we are not predictable enough, although I will leave to you to judge what motivation there could be for such thoughts. This school is characterised by afficionados of the fixed or pre-announced auction calendar. It is sometimes suggested that fixed issue calendars are the norm, but this is certainly not the case: over half of the major government debt markets in Europe do not have them. There are good reasons for this. One is that any approach to issuing new stock must take into account the institutional and political framework of the issuer it is designed to serve. The United Kingdom's political and economic calendar has virtually no fixed points: not the date of the budget, nor the autumn statement, nor even the date of the general election are known very long in advance. Even if these events were predictable, there are other world events totally beyond the control of any one country. With a pre-announced auction calendar auction dates can, and inevitably do, fall on inauspicious dates.

But even if we were able to predict domestic and world events with absolute certainty, the constraint which sole reliance on an auction calendar would place on the timing of issues would provide a limitation on our operations which in our view would damage the interests of both the investor and the issuer. It is not simply that we would be obliged to bring an issue on a particular date, perhaps forcing stock on an unreceptive market, but we would be constrained from bringing stock at other times of clear investor demand. These are real difficulties which have manifested themselves in other European government debt markets relatively recently. The Netherlands, for example, has decided to move away from a pure auction system to one in which tap issues will play an increasingly prominent role, in order, the authorities say, to reduce price volatility.

I imagine that underlying the affection of some for auction calendars is a perfectly natural desire for a consistent pattern of behaviour on the part of the issuing authorities—a clear set of ground rules within which the authorities conduct their operations. This desire for consistency is entirely understandable and I am fully in sympathy with it. Clearly if the market is to function effectively, and maintain breadth and liquidity in the longer term, investors must be confident that the issuer will not act in an arbitrary or destabilising manner. In a system only of auctions, this may well mean self-imposed constraints on their timing—in other words at a minimum, pre-announcement of the timing far enough ahead to give the market time to prepare, whether or not there is a pre-announced monthly or quarterly schedule. For those employing tap techniques, the constraint translates into behaving in a consistent manner in relation to the prices at which the authorities are prepared to sell stock. And it also means in a system like ours, where we combine both techniques, adopting self-denying 'purdah' arrangements in the period before and after an auction.

I find it hard to believe that the majority of market participants—those who are active in the market on a continuous basis—want an auction calendar, in the sense of a rigid pre-set timetable which can take no account of market conditions. It is of interest that in response to the wishes of the GEMMs as a group we have recently reduced, not increased, the notice period for auctions—and I am not aware of any persuasive evidence that it would be in the government's interest to move to an auction calendar.

But I am only arguing against a predetermined calendar, not against the auction technique itself. Auctions certainly do have their rightful place in the range of issuing techniques. From the issuer's point of view auctions provide certainty, so long as they are fully covered, that a specific amount of stock will be sold on a given day. Because of the virtual certainty of selling a large amount of stock, they are also a good way of bringing, or adding to, benchmark stocks. At the beginning of the financial year, we thus announced that we would hold auctions of between £1 billion and £2 billion of stock at intervals throughout the year. We also explained that we proposed to spread the auctions through the maturity spectrum. That we have done. Yesterday's very successful auction, of £1½ billion of 20-year stock, brings the total so far this year to four, for a total of £5¾ billion of stock—the previous three being the 5-year benchmark in April, the 10-year benchmark in June, and a 13-year issue in September. You will no doubt have noted the steady lengthening of the maturities involved and be wondering what the next auction will bring. All I would caution is that, while predictability is a virtue, do not get carried away!

Our mixed range of issue techniques, including not just auctions but also minimum price tenders, and the use of tap sales in the secondary market, makes it possible for us to respond flexibly to investor demand as it arises. It has provided us with the necessary flexibility to move easily and smoothly around the corner from the period of buying in stock to once again making new issues. And it has served us well so far. Published statistics show that by the end of September we had sold £8 billion of gilts—if you add to that the calls on September's auction and yesterday's successful auction, you will see that we have already achieved gross sales of over £10.5 billion during this financial year—and that does not of course include our tap sales in October and to date in November.

Returning to our issue techniques, it is perhaps our use of the tap system which has given rise to some misunderstandings so I should like to spend a little time explaining it. Our guiding principle when selling any tap stock is that we do not sell stock into a falling market but only when it is stable or rising, typically selling successive blocks of stock at progressively higher prices. For the most part we hope to sell a tap stock into demand at or above the minimum tender price or the certified price at which the Bank brought the stock; but inevitably, there will be occasions when extraneous factors beyond our control bring about a fall in the market. In this situation, we will refrain from further sales and will not resume selling until either the market recovers to its initial level or the downward price adjustment appears to have been completed and the market shows evidence of having stabilised. In these circumstances, we will need to cut the price of the tap stock from the level at which sales had previously been made to a price in line with the prevailing market.

Deciding when the downward price adjustment has been completed and the market is beginning to rally inevitably involves difficult judgements. We have no hard and fast rules, but common sense suggests that if the market has not fallen far in total and that fall has been interrupted by short-lived rallies, the market may be as likely to regain its former price level as consolidate at the new level. So the extent and pattern of price adjustment is one element entering into the decision. Investor interest is another. Investors may not know whether we are likely to cut the price of a tap stock to prevailing market levels in order to resume sales, but they can assess whether, if we did, they would find it an attractive investment. Yet another factor will be how far advanced we are with our funding programme. A good market-maker will be able from his experience, taking these various factors into account, to offer investors a view on whether the price adjustment observed is likely to lead us to consider re-entering the market as supplier but he will also know that we would not want to sell stock into an unreceptive market. Communication between all the various parties involved is thus very important in these circumstances.

I have dwelt at some length on the process of cutting the price of a tap stock because I think that is the aspect of our operations which is least clear to the investment community. Since we do not cut the price very often it is hardly surprising that it is perhaps not fully understood.

So far I have dealt with our range of issuing techniques and discussed how we cut the price of a tap stock. Let me turn now to liquidity in the gilt market and the range of stocks available.

Liquidity and variety of stocks

I mentioned earlier our belief that a healthy and vigorous market requires liquidity and variety. When the PSBR was in surplus, we sought to maintain liquidity in a shrinking market by means of a series of conversion offers, as I have already explained. Now that we have returned to funding again it is possible instead to add to liquidity via new issues. I have heard it said that we do not have benchmark issues in the United Kingdom. This is of course complete nonsense. So far this year, as I have already noted, we have added to the 5, 10 and 20-year benchmark issues—in some cases more than once—producing in each case large, liquid stocks of around £3 billion. We have increased the outstanding size of other stocks to nearly £4 billion; and, looking ahead, I see no persuasive reason why even larger issues should not be possible, if that would be regarded as helpful by the market. However, although we are keen to promote liquidity in benchmark issues, we also recognise that the investor community is not entirely homogenous and that there will be demand, perhaps in smaller size, for issues of particular coupons and maturities, outside the heavily traded benchmark issues. I do not need to tell you that there are currently over 70 conventional stocks trading in the market, ranging in coupon from 2½% to 15½% and extending out to maturities of over 20 years; as well as just short of a dozen index-linked stocks with maturities out to over 30 years. For our part, we see benefit in maintaining a wide variety of issues, conventional and index-linked, in order to appeal to the broadest investor base.

The gilt market offers not only variety, but also liquidity and depth. To put into perspective the total size of the gilt market, the stock outstanding, at £122 billion, is roughly the same as the combined total of BTANs and OATs in France. Average daily turnover is currently around £4.5 billion, which I believe compares favourably with any other European market, as does the size in which one can trade here without widening the very fine dealing spreads—typically £5 million to £10 million in one to two ticks for popular stocks, depending on the maturity. And you can deal in at least £30 million or £50 million size, even if at wider spreads. Although one always has to be careful not to misuse or abuse statistics, the comparative figures available suggest that the UK gilt market stands comparison with any other European market in terms of its liquidity and low dealing costs. The liquidity of all gilts, not just benchmark issues, is underpinned by the market-making system whereby market makers stand ready to make prices in all stocks, even those that are not heavily traded, in any market conditions; and the high degree of competition between market makers ensures that costs are kept to a minimum.

A repo market?

Let me turn now to some other areas where we occasionally hear dissatisfaction expressed. From time to time it is observed that the United Kingdom has no repo market in gilts. It is worth stopping for a moment to examine the needs of market makers and investors and whether they can and are being met by other means. Given the structure of markets we have in London—a quote driven system in which liquidity derives from committed market makers ready to make continuous and firm two-way prices in all market conditions—the liquidity of the market is supported by the ability of market makers to run positions in both directions—bull and bear. Market makers with bull positions in gilts need to borrow money to finance those positions; market makers with bear positions need to be able to borrow stocks to complete their sales. Investors too have an interest in stock borrowing and lending, not only in terms of the beneficial effect on market liquidity, but also because of the opportunity it provides to enhance the returns on their portfolio through the fees they can earn from lending gilts.

We have well-established institutional arrangements for borrowing and lending gilt-edged stock in the United Kingdom. They reflect the history and structure of our market, as well as the need for rigorous prudential standards in an area which is crucial to the market-maker system's ability to underpin liquidity—and which can, as we have seen in other markets outside the United Kingdom, give rise to very significant problems if the activity is not properly regulated. Borrowing and lending of stock is conducted by Stock Exchange Money Brokers, who may borrow only from approved lenders. SEMBs are tightly regulated, both as to their own financial strength and through strict conduct of business rules. This ensures a well-secured and reliable system which observes prudent standards and safeguards, and where the rights and obligations of all parties are clearly understood. The gilts are lent to those in the market who take on the often onerous obligation of underpinning its liquidity. The ability to go short is an advantage—some say the main advantage for a GEMM, in compensation for taking on its obligations to make firm two-way prices in all market conditions. The GEMMs need the facility to borrow stock in order to be able to provide the assured liquidity which ultimately benefits all in the market.

The present market arrangements represent a carefully constructed package in which obligations are balanced by certain privileges. Any change would need to be very carefully considered to ensure that it did not fundamentally damage the market-maker system, nor indeed give rise to any unsafe or unsound practices which could undermine the prudential soundness of the market. But it is in any case not clear what additional benefits a repo market would bring. In some countries, repo markets have developed effectively to provide a secured deposit market but, as you will know this already exists in the United Kingdom as one part of our liquid, deep money markets.

Central Gilts Office

Let me turn now to gilts settlement. The process of gilt lending has of course been significantly enhanced by the Central Gilts Office's electronic book entry settlement system, offering assured payments and sophisticated stocklending and collateral handling facilities. I know you will all be very familiar with the CGO, and probably take it entirely for granted, but it is worth reminding you that it is, so far as I am aware, the only major settlement system for government debt in Europe offering real time stock transfer and that the speed of settlement, the day after dealing, is equalled by very few and surpassed by none. The system has been so successful that there are now over 100 direct members, with many more indirect participants holding their stocks via nominee accounts; and over 70% of gilts are now held within the system.

I have nevertheless heard it said that some foreign investors would prefer to hold their gilts offshore. There is of course nothing to prevent investors from keeping their stock wherever they choose, although most foreign investors probably hold their gilts in the CGO via a custodian. I suspect that when people talk about holding gilts offshore, what they really mean is that they would like to settle transactions offshore. Given the excellent service provided by the CGO, it is not immediately clear to me that there would be any overall advantage to offshore settlement, which would almost certainly prove to be slower, more expensive and perhaps even less secure. I am of course aware that many other countries' settlement systems for government debt are linked to Euroclear and Cedel. We are already in discussion with them about the settlement of ECU instruments, and we would certainly be prepared to consider broadening these discussions to embrace gilts if we were persuaded that the lack of facilities for gilts in these systems was acting as a deterrent to European investment in gilts. But we would, I think, have to consider whether there would be any benefits to the UK market as a whole. My reference to the UK market as a whole is both deliberate and important. Our current market arrangements, including the structure of the market, stock borrowing facilities and settlement arrangements are a cohesive whole designed to maximise the liquidity, efficiency and stability of the gilt market. While we remain happy to consider changes, we would need to be sure they were of general benefit and not likely, either by design or accident, to damage wider market interests.

So far I have spoken about features of the market over which the Bank of England has some influence. However, there are two other areas of particular interest to investors where we have no locus, these are the derivative markets and, of course, taxation, and I might spend a minute or two on them.

Derivative markets

Let me take the easier of the two first. The derivative markets continue to flourish and we are happy to encourage innovations which contribute to the vigour of the market—although their viability depends of course on the verdict of the market place. Some ventures have clearly been more successful than others, notably the long gilt future on LIFFE, and the LIFFE option on the long gilt future; others such as the short and medium gilt futures contracts have fallen by the wayside. This is all part of the process of competition and innovation. The gilt market boasts a wide range of traded and over-the-counter instruments in futures, options and combinations thereof. The over-the-counter options market has proved a very attractive addition to the LIFFE contracts, offering as it does complete flexibility and the ability to effect trading strategies without incurring basis, spread or yield curve risk. There has however been little evident demand for coupon stripping to create zero-coupon bonds—a technique long established in the US Treasury Bond Market and which has recently spread to the OATS market in France. The United Kingdom has no rules or laws which prevent coupon stripping in the gilt market, but since the experiments in the mid-1980s with STAGs and ZEBRAS, no further wildlife has been sighted. This may in part be due to the number and variety of existing gilt issues which perhaps makes it relatively easy for investors to construct liability-matching asset portfolios without such a facility. The tax position has also been cited as a major impediment, although much will depend on the tax status of the investors buying the product. We remain open to any suggestions in this area and indeed any derivative or repackaging innovations based on gilts. Judging by the regular conversations we have with market players, there is clearly no shortage of ideas out there, waiting for the right marketable opportunity to be brought forward.

Taxation

Taxation is a rather more contentious area, particularly where a tax regime is thought to be unduly harsh or confusing, perhaps to the point of reducing the competitiveness of a market. However, it has to be recognised that the tax authorities have a responsibility to ensure that necessary taxes are paid, and without undue delay. Most countries have adopted a system of withholding tax for domestic residents—indeed the German authorities recently announced plans to reintroduce domestic withholding tax, following pressure from their Constitutional Court. So far as non-residents are concerned, it is common practice for them not to be charged tax by the issuer's tax authorities, provided that there is a double taxation treaty in place and provided that the tax authorities are satisfied that the investor is genuinely non-resident and not simply trying to evade domestic taxation arrangements. However, the rigour with which individual tax authorities seek to determine the authenticity of investors' status, and the administrative arrangements involved, undoubtedly vary between countries.

Foreign investors are very important to us in the United Kingdom, as is clear from our special 'FOTRA' class of stock. Over one third of conventional gilts currently outstanding are 'FOTRA'. Provided investors can prove they are non-resident, that they are the beneficial owners of the stock, and that they are genuine long-term holders, they may receive their dividends without any deduction of tax. This applies even to holders of stock resident in countries which do not have double taxation agreements with the United Kingdom. For other, non-FOTRA stocks, non-residents may reclaim withholding tax provided there is a double taxation treaty in place and they can prove non-resident status and beneficial ownership. Where investors are also able to demonstrate that they are long-term holders of the stock, they may apply for gross payment of dividends, as with FOTRA stocks. The detail of the arrangements, both for gross payments and repayment of tax withheld, will depend on the terms of the particular double taxation treaty involved.

The aim of these arrangements is to ensure that genuine non-residents do not pay UK tax on their gilt dividends. Nonetheless, we are aware that there are a number of irritations, which may make it difficult, cumbersome, or slow either to reclaim tax or to establish non-resident status. We are also aware that some other countries have recently taken measures to streamline their arrangements for foreign investors. I would be very interested to hear your views, particularly if you think there are any ways in which current arrangements in the United Kingdom could be further improved. However, I must stress again that this is a feature of the market which is not within our control, and where there may be other policy considerations which override the immediate concerns we have in relation to the gilt market.

Conclusion

I am aware that I have covered considerable ground tonight. I know that much of what I have said will be familiar to many of you, but I do think it worth standing back and taking stock of the very major changes that have taken place in the gilt market. They demonstrate very clearly I think that we are not afraid of change but nor are we prepared to change for change's sake. Our techniques and market structure are not so very different from other European markets as has sometimes been suggested in the past. This is due both to major changes on our part, including for example the introduction of auctions, but also to the many changes that have taken and are still taking, place in other markets, some no doubt modelled on the UK arrangements.

So far this year the market has absorbed gilt sales of over £10.5 billion without difficulty. I think this demonstrates a level of maturity and adaptability which secures the gilt market an important place in the increasingly globalised government debt markets.

I have talked almost entirely about structural issues, and I fear I may have disappointed some who may have hoped I would say something about our plans for further gilt issuance in the near future. I am afraid I will have to keep you in suspense; but I think I can say that we will have some need to issue a little further stock before the end of this financial year and a little more again next! Against this background we believe we have created a market structure which will continue to serve well the interests of both government and market partcipants. But we will not stand still if there are good reasons for further evolution. I look forward very much to hearing your views.