## **10** The United Kingdom Gilt Repo Market

In this chapter we describe and examine the market in United Kingdom gilt repo, a recent development but an example of an efficient and liquid market. The introduction of repo was part of a range of structural changes and reform undertaken in the gilt market by the Bank of England during the 1990s to bring market practice up to date. These changes included changes in quotation convention to decimals in place of tick pricing, and the introduction of a market in zero-coupon gilts or strips. The repo market has been arguably the most successful element of these market reforms.

## 10.1 Introduction

The repo market in the United Kingdom is relatively new, dealing in gilt repo having begun only on 2 January 1996. It was introduced as a "big bang" with all institutions and structures in place before the start of trading, and implementation was smooth and trouble-free. Before the advent of an open market in repo, stock borrowing and lending in the gilt market was available only to *gilt-edged market makers* (GEMMs), dealing through approved intermediaries known as *Stock Exchange Money Brokers* (SEMBs). The introduction of an open gilt repo market allowed all market participants to borrow and lend gilts. Additional market reforms also liberalised gilt stock lending by removing the restrictions on who could borrow and lend stock, thus ensuring a "level playing field" between the two types of transaction. The *gilt-edged stock lending agreement* (GESLA) was also updated to ensure that it dovetailed with the new gilt repo legal agreement; the revised GESLA was issued in December 1995 and repo and stock lending are interlinked aspects of the new market.

In the run-up to the start of repo trading, market practitioners and regulators compiled a set of recommended market practices, set out in the Gilt Repo Code of Best Practice. The associated legal agreement is the PSA/ISMA Global Master Repurchase Agreement,<sup>1</sup> with an annexe describing special features of gilts such as the use of delivery-by-value (DBV) within the CREST settlement mechanism.

The market participants in gilt repo and include commercial and investment banks, fund managers and local authority and corporate treasurers.

The repo market grew to about £50 billion of repos and stock lending outstanding in the first two months of operation, and further growth took it to nearly £95 billion by February 1997, of which £70 billion was in repos. This figure fell to about £75 billion by November 1998, compared with £100 billion for sterling certificates of deposit (CDs). During 1999 the size of the market stabilised and grew by only a relatively small amount; the amount outstanding stood at £100 billion in November 1999. Following rapid initial growth, a Bank of England report suggested that further significant growth in the market would require "structural

<sup>&</sup>lt;sup>1</sup> Now known as the BMA/ISMA global repo agreement.

innovation".<sup>2</sup> These would include the introduction of repo *netting* and more widespread electronic trading mechanisms.

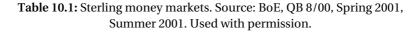
Table 10.1 shows the composition of the sterling money market during 2000 and 2001; gilt repo, interbank deposits and CDs make up by far the largest share of the market by amount outstanding. This is noteworthy given the relatively recent introduction of repo, while its introduction coincided with an increase in the size of the stock loan market. Table 10.2 shows that the average daily turnover in gilt repo approached £16 billion during 1999.

				Bank		Gilt	Sell/	Stock	Local Authority		
	Interbank	CDs	<b>T-bills</b>	bills	СР	repo	buy-backs		bills	Other <sup>(b)</sup>	Total
1990	89	53	9	23	5	-	-	-	2	6	187
1995	93	66	8	20	6	-	-	-	2	7	202
1998	150	122	1	17	10	95 <sup>(a)</sup>	2	35 <sup>(a)</sup>	1	6	309
1999	155	135	4	14	13	99 <sup>(a)</sup>	3	49 <sup>(a)</sup>	0	6	330
Feb 2000	155	127	2	14	13	100	2	51	0	7	471
May 2000	165	138	2	14	17	123	3	54	0	6	522
Q4 2000	151	130	3	11	18	127	6	57	0	9	512
Q1 2001	171	141	-	13	19	126	-	67	-	7	544
	(a)										

## Sterling Money Markets Amounts outstanding in £ bln (1990 and 1995 data are end-March; otherwise end-year)

<sup>(a)</sup> End-November data

<sup>(b)</sup> "Other" comprises T-bills, sell/buy-backs and local authority bills.



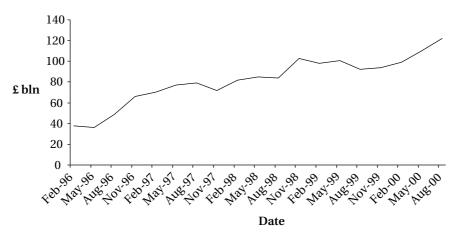
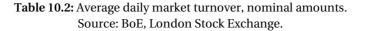
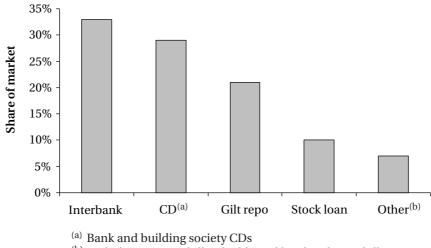


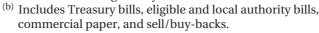
Figure 10.1: Gilt repo outstanding. Source: BoE. Used with permission.

<sup>2</sup> *Quaterly Bulletin*, February 2000.

£ billion	1998		19	99		2000				2001	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Gilts											
Conventional	7.0	7.0	6.0	6.0	5.0	6.0	6.0	4.0	4.5	4.8	5.2
Index-linked	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2
Money markets											
Gilt repo	14.8	11.4	16.8	14.7	15.5	12.6	13.5	15.8	12.4	15.7	17.9
Overnight interbank	6.1	7.7	7.8	7.1	7.4	8.2	8.3	7.8	7.6	11.1	9.3







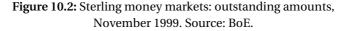


Table 10.1 and Figure 10.2 illustrate some interesting developments in sterling money markets since the advent of gilt repo. The Certificate of Deposit (CD) market has grown substantially, partly because the growth of the gilt repo and stock-lending market has contributed to demand for CDs for use as collateral in stock loans, and also because banks will use the CD market to enhance yields, as part of credit intermediation between the money market and gilt repo. The BoE suggested this growth occurred partly as a result of two factors:<sup>3</sup>

 the liquidity regime for sterling money markets, introduced by the Bank in 1996, increased the attractions of CD funding for banks, as their required liquidity holdings were allowed to be offset by holding of other banks' CDs;

<sup>&</sup>lt;sup>3</sup> See *Quarterly Bulletin*, February 2000 pp. 40–41.

 as we noted above, the use of CD as collateral in the stock loan market (making possible the stock loan/repo market intermediation trade we described in Chapter 8) increases the demand to hold these instruments.

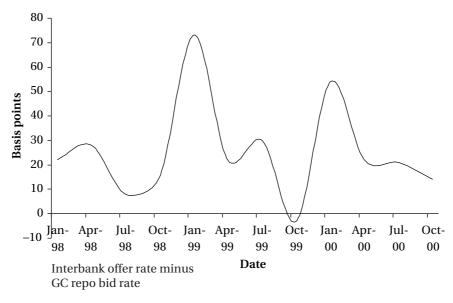


Figure 10.3: Spread between one-month repo and interbank rates. Source: Bank of England.

Similarly, the stock loan market grew from £35 billion to £49 billion in the year to November 1999. This growth resulted from the "complementary relationship" (BoE, *ibid*) between the stock loan and repo markets, and intermediation between them by participants who had access to both markets. The continuing popularity of stock lending reflects its popularity with institutional investors – many of the smaller institutions prefer to lend their portfolio hold-ings for a fee, rather than sell in repo. This obviates the need for them to monitor an interest-rate position or reinvest cash collateral.

So gilt repo has developed alongside growth in the existing unsecured money markets. There has been a visible shift in short-term money market trading patterns from unsecured to secured money. According to the Bank, market participants estimate that gilt repo now accounts for about half of all overnight transactions in the sterling money markets. The repo general collateral (GC) rate tends to trade below the interbank rate, on average about 10–15 basis points below, reflecting its status as government credit. The gap is less obvious at very short maturities, due to the lower value of such credit over the short term and also reflecting the higher demand for short-term funding through repo by securities houses that may not have access to unsecured money. Hence, it is common to observe very little spread between overnight interbank and GC repo rates. Even at longer maturities, supply and demand factors can reduce the spread, as shown by Figure 10.3. Figures 10.4 and 10.5 show the spread through interbank for three-month GC repo early on during the market, and for the two-week and one-month GC repo during 1999. Another effect of gilt repo on the money market is a possible association with a reduction in the volatility of overnight unsecured rates. Fluctuations in the overnight unsecured market have been reduced since the start of an open repo

market, although the evidence is not conclusive. This may be due to repo providing an alternative funding method for market participants, which may have reduced pressure on the unsecured market in overnight funds. It may also have enhanced the ability of financial intermediaries to distribute liquidity.

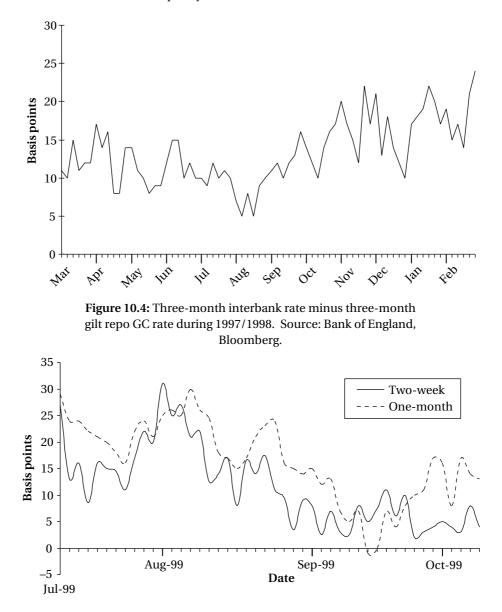


Figure 10.5: Two-week and one-month GC repo and interbank spreads during 1999. Source: BoE.

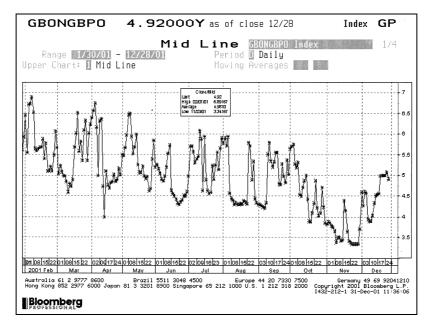


Figure 10.6: Gilt repo overnight rates during January–December 2001, as shown on Bloomberg screen GP. LIBOR rates during the same period are shown in Figure 10.7. © Bloomberg L.P.

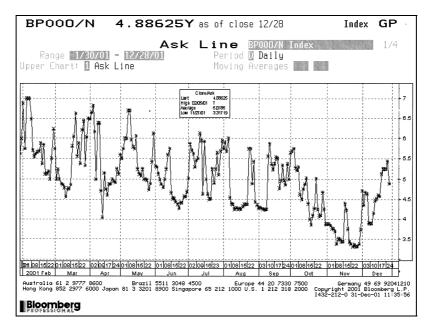


Figure 10.7: Overnight sterling LIBOR rates during January–December 2001, on Bloomberg screen GP (ticker BP00O/N). © Bloomberg L.P.