London
30 November 1994

J.P. Morgan Securities Ltd.
European Fixed Income Research
Julian Wiseman (44 71) 325 5823.

J.P. Morgan Sterling Securities Ltd.
Gilt Sales
David Boal (44 71) 779 3099.

JPMorgan

European Fixed Income Research: Sterling

Anomalies V: Gilt Repo Announced

- **Bank of England consultative document on repo announced in Budget and published after.**
- **'Commencement of gilt repo activity could not be before July 1995' — BoE.**
- **Disinversion of post-9-year curve and reduction of single stock anomalies to follow.**
- **Possibility that the Treasury's review of issuance procedures will lead to STRIPs.**

The Regulatory Changes

In the UK Budget on 29 Nov 94 the Chancellor of the Exchequer announced that the finance bill would contain provision for a gilt repo market. The Bank of England has followed with a consultative paper. The details of the repo market have not been finalised — indeed, the BoE invites comments on the paper. The paper says that

- ' "borrowing" stocks via repo would be freely permitted', not restricted to market-makers and discount houses.

- 'It would no longer be a requirement that stock be lent / borrowed only through a Stock Exchange Money Broker'.

- 'Commencement of gilt repo activity could not be before July 1995. In the meantime the Bank wishes to underline that it does not wish gilt repo activity to develop ahead of any date set for implementation'

The Bank clearly anticipates a full opening of the gilt repo market in Q3 '95 or soon thereafter. This repo market should be similar to that existing elsewhere.

However, the taxation changes required have not yet been made public:

- 'Currently some investors receive dividends on their gilt holdings on a gross basis and others only after the deduction of withholding tax. Repo transactions over an ex-dividend date might be inhibited if a gross recipient could receive only a net manufactured dividend, or if a net recipient was liable to pay a gross manufactured dividend. Changes to the taxation arrangements for gilts might therefore be required to facilitate the efficient functioning of a repo market.'

- 'The Bank has discussed this and other questions with the Inland Revenue and the Treasury. It has been decided that the Inland Revenue will engage in a separate consultation with market participants about whether there is a need for any changes, and, if so, the form which they might take. The Revenue will shortly issue a Press Release outlining some possible options and inviting comments.'

When this press release appears it might be possible to judge whether the authorities intend to switch to gross paying. If they do then this would be very supportive of non-FOTRA stocks.

Effect of a repo on the gilt curve

The chart overleaf shows the British, American, German and French government yield curves. The gilt curve differs from the other three in two respects:
- Beyond 8-years the gilt curve is inverted;
- The gilt curve is spread out, with individual stocks having yields far from those of stocks of similar duration (or maturity).

We believe that a repo market will disinvert the curve and significantly reduce the single-stock anomalies. We also expect that, to some extent, the market will anticipate these developments before activity in repo commences.

Why will the curve disinvert? Let us consider the choices available to a investor with a fixed amount of money. Currently, without a repo, the investor is primarily making a choice about how much duration is wanted. This choice of duration then determines which part of the curve to invest in. So, for example, if the investor is very bullish the purchase can only be of ultra-longs (or a perpetual).

This situation changes radically when there is a repo. A bullish investor can choose duration separately from the sector of the curve. For example, an investor with £100 can buy £200 worth of the highest yielding bullet stock (the 10% Sep 03), the extra cash being borrowed by lending the gilt using a repo. The duration of this geared position is slightly **greater** than the duration of an ungeared investment in the 8·75% Aug 17.

This borrow-to-invest strategy is frequently used in markets which permit a repo. Indeed, a non-sterling-denominated investor not desiring currency risk may well fund the whole gilt purchase with a repo.

Although it is possible to fund gilt purchases using the existing bond lending facility, international investors have tended to view this as clumsy and non-standard. Funded investment will be greatly faciltated by a repo.

So where in the curve will investors choose to put their cash? The peak in the gilt yield curve is at ≈2003, and the peak in the implied forward rate curve is in early 1998. The highest returns are therefore in the maturity sector between 3 and 9-years. It is likely that international investors will duration-weight their investments into this sector.

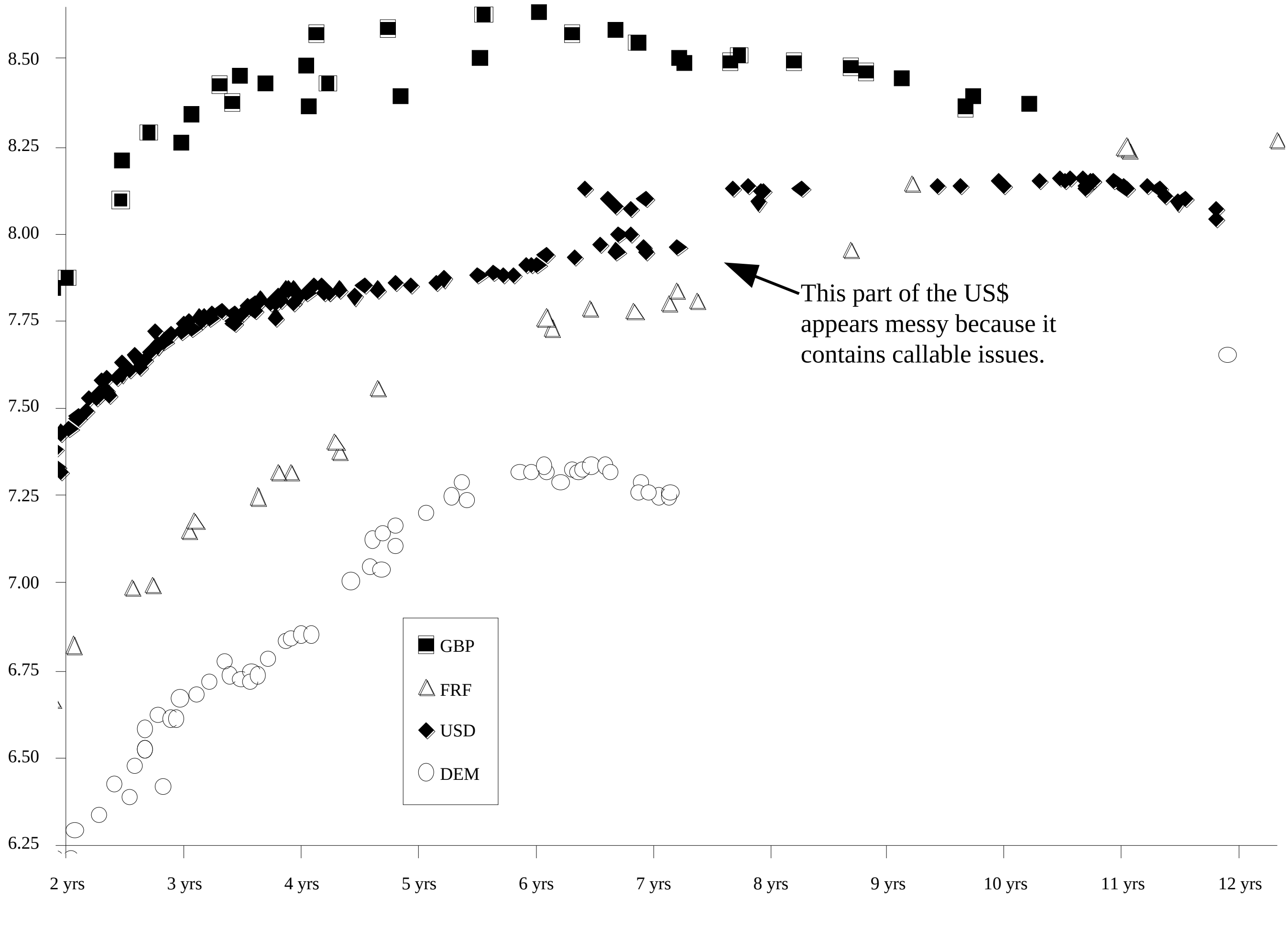
Further, the curve disinversion does not require that investors are bullish. In any market there is a natural turnover of gilts as funds withdraw and other invest. If sales are from across the curve (some short and some long) yet the majority of purchases are of bonds with ≤9 years to maturity then this will assist the curve's disinversion.

Finally, one should consider the rôle of arbitrageurs. These investors are likely to anticipate this disinversion before July '95 with synthetic curve trades built using options. Should the curve have not disinverted by July '95 these trades will be rolled into repo-based trades, quite possibly hedged with the reverse trade in either France or Belgium.

The inversion of the curve is not solely caused by a lack of ultra-long supply, and fresh supply is not a pre-condition to

Chart. **The gilt curve in an international context.** The chart shows government yield curves for GBP (gilts), UST (Treasuries), DEM (Bunds, Bobls & Treuhands) and FRF (OATs and BTANs). Yield are quoted semi-annual, and are shown against Macauley duration. The data is as of the close of 29 Nov 94.

Note the inversion of the gilt curve after ≈7 years duration, and also the untidiness of the gilt curve.



disinversion. If lack of supply were the primary cause of the inversion then the curve would be positive in the 2004 to 2010 area, where there has been supply. Further, in most other European markets post-10-year supply is rare or almost non-existent, yet the 10 to 30-year spread is positive. However, disinversion would be hastened by fresh supply.

Why will single stock anomalies reduce? Single stock anomalies will reduce as foreign non-taxed money is invested into the highest yielding stocks, and not into worse-value lower-yielding stocks. This will 'dilute' the market presence of the taxed domestic institutions, and make the gilt market more like 'an other European government debt market'. Again, this process will be anticipated by arbitrageurs.

In summary, a repo will allow the curve to be better arbitraged, both within sectors (reducing individual stock anomalies) and between sectors (post-9-year disinversion).

STRIPs. Investors should also be aware that the Bank has recently announced that it is actively considering a STRIP market for gilts. Most gilts have non-matching coupon dates, so it is probable that only a few issues would be STRIPpable. We strongly suspect that the two most recent issues, the 8% 07 Dec 2000 and the 8·5% 07 Dec 2005 (both FOTRA) are likely candidates to be STRIPped, along with any other (yet to be issued) 07 Jun or 07 Dec gilts.

Conclusions

- Sell ultra-long holdings into shorter stock, and control duration separately using futures, swaps or options.

- Owners of both long and short stocks should barbell into the cheap stocks at the peak of the curve. In particular, own the 10% Sep 03, 9·75% Aug 02, 10% Feb 01 and 9·5% Oct 04. Investors requiring FOTRA stocks should buy the 8% Jun 03.

- Switch from 94's 5-year benchmark into the high coupon '99 stocks, the 9% Mar 00 or the 10% Feb 01.

- As a forthcoming benchmark the 8·5% Dec 05 seems unusually cheap. Given that this gilt is potentially STRIPpable we advise switching into it from the 6·75% Nov 04, buying it outright, or participating in the auction of £2bn of this on 07 Dec.

  The other issue maturing on 07 Dec, the 8% 00, is trading very rich to the curve. However its potential STRIPpability makes us reluctant to be short.

For more details of individual gilt anomalies see *Gilt Anomalies II: Repo Anticipation*, 18 Aug 94; *Gilt Anomalies III: FOTRA Switches*, 31 Aug 94; and *Anomalies IV: 6%99, 8%00 & STRIPs*, 19 Oct 94.