SALE AND REPURCHASE

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The alternative to either a retention of title or lease is to include a repurchase provision. This involves the sale of an asset subject to a right to subsequently purchase under a single agreement. This includes simple sale and repurchase agreements (possibly involvement a separate third party finance house or other credit provider), security sale and repurchases (repos) and stock lending. Under a simple arrangement, the buyer purchases goods with payment being made by instalment subject to the right of the seller to repurchase and set-off the unpaid balance on the original purchase price against the repurchase price. This will not constitute a security as the buyer has no right of redemption and the goods are recovered by repurchase and not through enforcement¹. The transaction may be treated as a security where there is an obligation to repurchase². The first party may sell assets to a finance house subject to an agreement to resell them to the debtor after a period with the resell price including an interest margin³.

Securities Repos

A repo generally involves a spot sale of specific securities with a simultaneous forward repurchase on a subsequent date at a pre-determined price. Repos are principally used in the money market especially by central banks although they can be used in connection with all other types of bonds and securities. Repos are used by central banks in converting open market operations, global money markets and by market makers in specific securities as well as other counter parties⁴.

The first repo was by the US Federal Reserve in 1918⁵. The modern market nevertheless developed in the 1990s including with the UK gilt repo market opening in January 1996⁶. The US domestic market is now in excess of US\$1 trillion with international repo transactions approaching £500bn⁷. Repos are most commonly used for central bank purposes, providing liquidity in other markets, reducing counter party risk, hedging and generating additional returns⁸.

A standard repo (classic or "repo trade") involves the immediate sale of an asset subject to an undertaking to repurchase the asset (or an equivalent asset) at the maturity date for a price including repo interest⁹. This contract is entered into on a trade date with the sale to take place on a value or settlement date. The settlement price is calculated having regard to the trade rather than value or settlement date. The collateral may either be specific (identified) or general (referred to as a general collateral (or GC) trade). The settlement price for government securities is sometimes referred to as the "dirty price" which is the specific value of the security above its nominal issue price on the trade date. (The clean price is the market value.) A margin or haircut may be required (which ranges between 2% to 50% of the collateral value). If coupons are paid on the security, this is referred to as the manufactured dividend which is paid on the coupon value date. [In addition to classic repos, repo transactions include reverse repo¹⁰, a sell/buy-back¹¹, a tri-party repo¹², hold in custody repo¹³, safekeeping repo¹⁴, borrow/loan

¹ Goode (n) 414.

² Curtain Dreams Plc v Churchill Merchanting Ltd [1990] BCC 341.

Wood explains this in terms of the original seller's call option and the original buyer's put option. In the event of the debtor's insolvency, the buyer will exercise the call option and resell as owner claiming any short Title finance between the resell price and the option re-purchase price as damages. Wood (n) para.1.5.

[[]On reservation of title, Gerard McCormack, *Reservation of Title* (2 ed 1995); and Sally Wheeler, *Retention of Title Clauses* (1992).]

The repo market includes central banks, investment banks, securities houses, retail and commercial banks and building societies. Investors include fund managers, insurance companies and pension funds, investment funds, hedge funds, local authorities and corporate treasuries within large companies. The market also includes various inter-dealer brokers and money brokers. These include Cantor Fitzgerald, Prebon Yamane, Garban Icap, Tullett & Tokyo and Tradition.

Moorad Choudhry, An Introduction to Repo Markets (Securities and Investment Institute 3 ed 2006) 2.

^{6 (}n).

Daily outstanding volume in international repos was between £440bn and £450bn in 2006. Choudhry (n) 2. 50% of daily settlement activity in non-US government bonds worldwide is in repos. Choudhry refers to the repo as the most important financial instrument in the world after the basic cash equity and bond products. (n)5.

The main advantages of repos are: (a) providing a flexible and secure instrument for increasing or reducing the total amount of funds in the financial system through open market operations; (b) providing liquidity in bond, equity and derivatives markets; (c) managing positions including, in particular, covering short positions (contracting to sell securities that the seller does not own); (d) reduce counter party risk through provision of collateral security; (e) provision of funds at lower interest rates with collateral cover; (f) generate additional funds for securities holders through repo trading; (g) create additional investment vehicle for investors with surplus funds.

⁹ Repo interest is commonly calculated on the basis of the relevant 30-day repo rate with a 365-day calendar year. Repo interest is then the cash price multiplied by the repo rate and the term divided by 365.

A reverse repo simply involves the purchase and subsequent resale of the security. All repos include a reverse repo depending upon from which counter party's perspective the transaction is considered.

Sale and Repurchase (Repos)

versus cash repo¹⁵, bonds borrowed/collateral pledged repo¹⁶, cross-currency repo¹⁷ or other more innovative new products such as a four-party repo, floating-rate repo, flex repo or collateral swap¹⁸

Standard repo contracts are governed by the Global Master Repurchase Agreement (GMRA) produced by the Bond Market Association (BMA)¹⁹ and the International Capital Markets Association (ICMA)²⁰. The UK government gilt market also uses the GMRA with a special addendum²¹. The GMRA was revised in 1995 and then reissued in 2000. The GMRA applies with regard to repos, buy/sell-backs and agency trades. The GMRA is governed by English Law although the BMA has also issued a separate 1996 Master Repurchase Agreement (MRA) governed by New York Law. Other forms are used in particular domestic markets although these include the same general provisions. The GMRA generally operates on the basis of establishing a master agreement²² structure including provisions with regard to title transfer²³, netting²⁴, margin payment²⁵, withholding²⁶, set-off²⁷ and termination²⁸.

- A sell/buy-back involves an outright sale on the value date with at-the-spot price and a repurchase of the bond for a value at the forward price. The repo rate is not expressly used but implied in the difference between spot and forward prices. These will also be adjusted to incorporate any coupons paid during term.
- Tri-party repos use a third party custodian (such as Euroclear or Clearstream as well as J P Morgan Chase or Bank of New York) to hold the collateral in a separate tri-party account. The dealing bank can adjust the composition of the collateral on a continuous basis subject only to the custodian confirming that the underlying trades are fully collateralised. Tri-parties are used for non-government instruments including eurobonds, structured finance or other more innovative products.
- A "hold in custody" (or "trust me") repo is used in the US to allow the dealing bank to hold the collateral in its own segregated account on behalf of the investor. The purpose is to allow collateral substitutions without actual transfers and settlement costs. The difficult is that the investor has to rely on the goodwill and credit-standing of the dealer.
- A safekeeping repo is similar to a hold in custody repo with the repo seller holding the collateral in safekeeping on behalf of the cash lender.
- This is a standard delivery versus payment (DVP) repo although legal title does not pass with only a security interest being created.
- This involves the exchange of securities against specific collateral with no cash transfer but incorporating a transaction fee. This is a form of stock lending (n).
- Repos may involve cash or securities in different currencies although additional care has to be taken with regard to daylight exposure, marking to market and contract validity and enforceability.
- A four-party repo uses two custodians. Floating rather than fixed interest calculation can be provided for especially where the value of the underlying collateral floats. The cash advanced can be adjusted under a flexible or flex repo with the interest payment being adjusted according. A flex repo using mortgage-backed securities (MBS) or other asset-backed securities (ABS) is referred to as a structured repo. A collateral swap involves an exchange of securities with the repo rate being lower where the quality of collateral provided is higher. This is similar to a bond borrowed/collateral pledged structure or other stock lending transaction. Choudhry (n) 14-19.
- Standard repo documentation was introduced in the US in February 1986. Standard non-US dollar documentation was introduced in November 1992 with the GMRA which was agreed with the ICMA. The BMA was originally set up in [] as the Public Securities Association (PSA) [].
- The two main trade associations in the international bond market were the International Primary Markets Association (IPMA) and the International Secondary Markets Association (ISMA). These were subsequently merged with the creation of the International Capital Markets Association (ICMA) in October 2005. [].
- This includes delivery by value (DBV) within the Central Gilts Office (CGO) settlement managed within CREST (n).
- The GMRA works in the same manner as ISDA master agreements with the provision of standard terms unless adjusted (in Annex I) with other elections also being required. The master agreement will apply to all repos entered into between the parties subject only to specific confirmation being entered into. The obligations imposed apply equally on both sides in light of the parallel nature of the repo transaction. Additional counter party or product specific annexes may also be used. These include the Netherlands Annex and the South African Annex or the (UK) Gilts Annex or the Equities Annex and Italian Annex. Daniel Franks, "The Global Master Repurchase Agreement" in Choudhry (n) ch.8.
- The seller maintains an economic interest in the securities although full transfer of legal title is provided for under the GMRA. The purpose is to secure a true sale rather than create a secured loan. The GMRA includes clauses designed to ensure that a true sale takes place and that any re-characterisation by the courts is avoided. All title and interest passes, the seller has no continuing proprietary or legal interest and the buyer may deal with the securities in the ordinary course of its business. Equivalent rather than identical securities may be exchanged on the repurchase although this does not undermine the original transfer of title and only reflects the fungible nature of the asset. As with ISDA master agreements, the TBMA and ICMA have obtained a number of legal opinions from the main financial jurisdictions confirming the validity of the repo transaction provided for under the GMRA in the host country. The EU Financial Collateral Directive 2002/47/EC also specifically requires that Member States ensure that repurchase and other title transfer agreements are specifically recognised.
- The GMRA takes effect as a master netting agreement with all cash payment and securities delivery obligations in all confirmations carried out under the repo structure being netted out. This applies both with regard to settlement netting and close-out netting. Settlement netting applies with regard to daily currency payments and security exchanges with net rather than gross settlement being provided for. Close-out netting applies in the event of a default with all obligations being accelerated and final payment and delivery obligations netted at that stage. Close-out netting is important in a pre-solvency and post-solvency situation (in particular to avoid cherry-picking by liquidators) as well as for ongoing capital adequacy purposes. Early termination and close-out netting is provided for under the EU Financial Collateral Directive and is supported by specific financial laws in many countries including in the US.
- The GMRA provides for net margin maintenance payments or alternatively for specific transactions to be margined on a gross basis, re-pricing (following a change in value) or novation. Margin obligations arise where the value of the securities or

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The UK gilt repo market was set up on 2 January 1996 by the Bank of England. Gilt repos use a separate side agreement based on the GMRA²⁹. Dealing in gilts had previously to be carried out through stock exchange money brokers (SEMBs) with stock borrowing and lending through gilt-edged market-makers (GEMMs) using the earlier gilt-edged stock lending agreement (GESLA). The UK gilt repo market was set up with a "Big Bang" in January 1996 following market consultation. All market counter parties can now borrow and lend gilts using the adjusted GMRA and updated GESLA which had been amended in December 1995. A Gilt Repo Code of Best Practice was also produced in anticipation of the new market coming into effect. The market expanded from £50bn in repos and stock lending to £90bn by 2005 with a daily turnover of £22bn. The secured gilt repos now account for over half of all overnight transactions in the sterling money markets. The new market has also increased liquidity and reduced transaction costs³⁰.

The UK repo market now includes market makers, brokers and end-users. Two-way repo rates are quoted by around 20 firms. These provides rates for GC, specifics and specials for anything up to three months with some longer quotes being available³¹. A number of sterling broking houses also specialise in particular types of repo or maturity bands³². These operate under a brokerage agreement (with both sides paying one basis point on GCs and two basis points on specific and special repo contracts). End-users principally include other financial institutions such as banks, building societies and securities houses as well as fund managers, hedge funds and insurance companies as well as overseas central banks and some corporate market participants. Settlement is now effected through CREST following the merger of CREST with the Bank of England Central Gilts Office in 2002. Gilt repo settlement has been available since 2003³³. A CREST reference price is also produced using GEMM data³⁴. UK trading is conducted in accordance with the terms of the Gilt Repo Code of Best Practice issued by the Bank of England in November 1995³⁵.

Regulation, Accountancy and Taxation

Repo transactions are subject to market risk capital charges as they are held in the bank or security houses' trading books. Repos using approved standard documentation such as the GMRA receive favourable treatment.

collateral fluctuates on a daily (or even intra-daily) basis. Payment obligations may vary even where the securities are subject to a "haircut" or discount to reflect their volatility. The margin can be covered by cash or separate collateral.

- One of the elections in the GMRA allows parties to withhold payment or delivery in the event of default by the other party. This is referred to as a "flawed asset" provision in practice and was added to the 2000 GMRA. The right is optional in light of the possibility that some countries may re-characterise the repurchase as a form of secured lending. Franks (n) 145.
- The GMRA also includes an optional set-off provision which allows parties to attempt to net out obligations under separate transactions in addition to under the repo master agreement.

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- Automatic early termination is provided for in the event of insolvency of either party. The purpose is to pre-empt formal insolvency proceedings. This may nevertheless cause difficulties in practice with the non-defaulting party not wishing to lose control over the action taken. The use and value of automatic early termination has to be considered with regard to the particular parties and laws applicable in a specific transaction. Franks (n) 146.
- The Gilt Repo Legal Agreement is based on a revised version of the 1995 GMRA. This includes specific additional terms and conditions in Part 2 to Annex I. The Bank of England has issued a separate Gilt Repo Code of Best Practice () for use in the UK repo market.
- Choudhry (n) 70, 72
- The main market makers now include Royal Bank of Scotland, Barclays Capital, HSBC, Deutschebank and CIBC. Earlier separate SEMBs such as Gerrard & National and Lazards, Rowe & Pitman have now been absorbed within larger operations.
- These include Tullett & Tokyo and ICAP.
- Settlement was originally carried out under the DBV (delivery by value) system with a basket of securities being delivered to the cash lender with settlement at end of day. [DBV allows members to borrow or lend money on an overnight basis against gilt collateral.] Term repo settlement was then introduced in September 2003 using a new RPO facility which avoids the need for large intra-day cash or stock movements. Banks can select a basket of securities including up to 10 separate bonds with further substitution being possible. Repurchase is carried out automatically although specific lines can be closed or current trade rolled-over.
- This is based on the clean mid-market closing prices (16.15pm) provided by GEMM Association members adjusted to include accrued interest and quoted to five decimal places using £100 nominal stock. Separate reference prices are made available for gilt strips on a yield basis.
- This requires that market participants ensure that they have adequate systems and controls including necessary internal controls, credit risk control systems, written procedures and accounting and taxation systems. Market professionals are required to confirm that clients are aware of the Code before transacting. Parties are expected to deal under an appropriate legal agreement such as the Gilt Repo Legal Agreement based on the GMRA (). Initial margin is based on counter party creditworthiness and associated market risks with net exposures being monitored on a daily basis subsequently. Stock loan and repo transactions are to be identified according to the relevant custodian. Special provisions apply with regard to default and close-out with the non-defaulting party, in particular, being required to do everything possible to ensure that default market values are fair. Bank of England, *Gilt Repo Code of Best Practice* (1995). See also M Choudhry, *The Gilt-Edged Market* (Wiley London 2003).

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Documented repos can use the risk weight of the counter party (such as an OECD bank) with the charge being based on the mark-to-market value of the positions held. Lower charges may be available under the revised rules to come into effect under Basel II³⁶.

[Specific types of sale and repurchase agreements are used in the money and securities markets. These are generally referred to as "repos". Repo trades allow securities to be sold on a spot basis subject to a legal enforceable obligation to repurchase the same (or an equivalent) asset as a later date at a predetermined price. The repurchase price will include accrued interest (referred to as the repo return). Repo markets are treated as part of the money markets as they are essentially used for short borrowing purposes although they operate using securities and capital market instruments as collateral. Repo markets are used by central banks for open market money operations and by other financial institutions for funding or hedging purposes³⁷.]

Repos are treated as secured loans for accountancy and taxation purposes. Repos are treated as on-balance sheet transactions. Securities are held on the balance sheet of the seller with initial transfers not being treated as a disposal. Cash payments are treated as interest and charged as income. Repo interests constitutes loan interest and is charged on an accruals or time of transaction basis. Different rules apply in other jurisdictions.

(j) Stock Lending

Stock loans or stock or securities lending is used to allow financial institutions to hold and use securities on a short-term basis in return for a fee. This may be used to cover short sales³⁸ or to permit delivery or settlement on an underlying transaction. The security is lent for an agreed period (or possibly on overnight roll) with the borrower providing collateral in the form of cash or possibly a separate security or basket of securities³⁹. Under a stock loan, the security holder retains all right and interest which would otherwise be transferred under a repo. Repos are also principally used for borrowing with the security providing collateral, whereas stock lending is used for security coverage purposes with cash being provided as collateral.

Stock lending is most commonly carried out by pension funds and insurance companies which allow them to generate additional income on their securities portfolios. Investment banks or securities houses will then enter into stock loans to borrow the securities on an open (rolling) or fixed (term) basis. The specific securities to be used are identified generically (such as UK 4% gilt due 2010). The parties will agree the duration, the initial margin (collateral)⁴⁰ and the rebate (interest on the cash provided)⁴¹. The stock borrower will also pay a stock loan fee calculated on the market value of the securities involved⁴².

Standard documentation is provided for by the International Stock Lenders Association (OSLA). A separate gilt-edged stock lending agreement (GESLA) was revised in December 1995 with the new UK gilt repo market coming into effect on 2 January 1996⁴³. This contains various standard provisions which parallel those set out in the TMA (ICMA GMRA and adjusted GMRA for the UK gilts market).

Repo trading and stock lending may be carried out by the same firm or one firm may specialise in either activity. Historically, some firms have continued only to provide stock lending facilities as the cost of introducing necessary systems to allow them to carry out new repo trading would be considered to be prohibitively expensive. Firms may also consider that they lack the expertise in specific repo related activities including cash reinvestment or managing interest rate risks. Separate taxation and accountancy issues may also be relevant. Other firms may have the ability to stock lend, repo the security obtained and invest the cash separately in the sterling CD market⁴⁴.

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³⁷ Section

Short selling involves the sale of an asset which a party does not own on the general expectation of being able to purchase it back at a lower price on a subsequent date. Many jurisdictions apply strict rules on short selling such as margin and the US "short sale rule" under Rule 10a-1. Rule 10a-1 requires that the last transaction must be made a price higher than the previous one (uptake) or the last price must have been the same as the previous price and the last price change before that was an increase. A short squeeze (or bear squeeze) refers to the need to close-out a short position due to the inability to continue to borrow the supporting securities with the collateral being returned to the lender.

The stock lender generally pays interest on the collateral which is received by the other party in the form of a rebate.

This may, for example, be 102% which would cover the full value of the securities to be lent.

The rebate is paid by the collateral holder (securities lender).

Ten basis points (0.1%) is typical.

⁴³ Section

⁴⁴ Choudhry (n) 73.