



International Securities Market Association

European repo market survey
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This report has been commissioned by the International Securities Market Association (ISMA) in particular support of members of ISMA's European Repo Council (ERC) and in the interests of the international securities market as a whole.

Its purpose is to help participants in, and observers of, Europe's cross-border repo market to gauge the size of the market.

All statements, opinions and conclusions contained within this report are made in a personal capacity by the author, are his sole responsibility and do not represent the opinion of ISMA, which has neither taken an official position on the issues discussed, statements made and conclusions drawn herein nor sought to verify the information, statistics, opinions or conclusions provided.

ABOUT THE AUTHOR

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EXECUTIVE SUMMARY

In June 2002, the European Repo Council (ERC) of the International Securities Market Association (ISMA) conducted its third semi-annual survey of the repo market in Europe.

The latest survey asked a sample of financial institutions in Europe for the value of their repo contracts that were still outstanding at close of business on June 12, 2002. Replies were received from 86 offices of 77 financial entities, mainly banks.

The increase in the number of respondents, while obviously very welcome, means that caution is needed when comparing surveys. Some changes in reported shares may represent more of a gain in the accuracy of the survey rather than a shift in the direction of underlying business in the repo market.

Total repo business

The total value of repo contracts outstanding on the books of the 86 respondents who participated in the latest survey was EUR 3,305 billion, compared to revised figures of EUR 2,400 billion in December 2001 and EUR 2,157 billion in June 2001. In addition, some members of the group also had repo contracts with the European Central Bank (ECB) at the close of business on June 12, 2002, to the total outstanding value of almost EUR 68 billion.

Year-on-year growth in the European repo market was proxied by comparing the returns from the 42 respondents who have participated in all three surveys. The aggregate outstanding value of repo contracts at these institutions grew by 15.8% over the year to June 2002.

Counterparty analysis

The latest survey revealed a much larger share for direct (dealer-to-dealer) business (53.0% compared with a revised 45.3% in December) and a much smaller share for voice-brokers (34.4% compared with a revised 41.8%). The share of electronic trading was virtually unchanged (12.7% compared with a revised 12.9%).

Geographical analysis

The share of outstanding repos with domestic counterparties was much smaller in June than in previous surveys (44.0% compared with a revised 47.8% in December), while the share of repos negotiated anonymously through an ATS (inter-dealer automatic trading system) and settled with a central clearing counterparty (CCP) was modestly smaller (5.6% compared with a revised 6.2%). On the other hand, the shares of repos with cross-border counterparties was much larger (50.4% compared with a revised 45.9%), particularly repos with cross-border counterparties inside the eurozone (25.5% compared with a revised 22.9%).

Settlement analysis

The latest survey showed that 6.3% of outstanding repos reported in June had been negotiated under tri-party repo arrangements, compared with a revised 4.2% in the December survey.

Cash currency analysis

In June, 75.4% of reported outstanding repos were denominated in euros (EUR), 10.5% in pounds sterling (GBP) and 8.2% in US dollars (USD). These numbers are very similar to those from the December survey (which were 75.7%, 11.4% and 7.8%, respectively).

Cross-currency repos (transactions in which the cash and collateral are denominated in different currencies) accounted for 3.3% of reported outstanding contracts compared with a revised 3.1% in December.

Collateral analysis

The bulk of reported holdings of collateral continued to be issued in countries in the eurozone (74.4% compared with a revised 77.2% in December). Compared with the December survey, a very much larger share of collateral was issued in France (14.7% compared with 7.0%). In contrast, a very much smaller share was issued in Germany (26.9% compared with a revised 37.1%). There was also a smaller share for collateral issued in Belgium (4.6% compared with a revised 6.3%). Government securities continued to account for most collateral (90.8% compared with a revised 91.0% in December).

Repo rate analysis

The June survey revealed a very much smaller share than previously for repo contracts paying a fixed rate of return (81.2% compared with a revised 86.6% in December) and a much larger share for floating-rate repos (12.1% compared with a revised 8.1% in December).

Maturity analysis

Compared to December, the share of outstanding repos with one month or less remaining to maturity was very much larger in June (67.2% compared with 58.2% in December) at the expense of repos with a term longer than one month. The share of forward-forward repos was much smaller (4.6% compared with a revised 8.1% in December).

Product analysis

Of the total outstanding contracts

transacted by the repo desks of respondents, 12.5% was securities lending and borrowing compared with a revised 11.1% in December.

Concentration analysis

The top ten banks in the survey accounted for some 55% of total reported business. The top twenty banks accounted for 78%. The top thirty banks accounted for 91%. This compares with revised figures of 60%, 82% and 94%, respectively, in December.

CHAPTER 1: THE SURVEY

On June 12, 2002, the European Repo Council (ERC) of the International Securities Market Association (ISMA) conducted its third semi-annual survey of the repo market in Europe.

The ISMA survey has been supported by the ACI - The Financial Markets Association, and welcomed by the European Central Bank (ECB) and European Commission. The survey was managed and the results analysed on behalf of ISMA by the ISMA Centre at Reading University in England under the guidance of the ERC Steering Committee ("ERC Committee").

1.1 What the survey asked

The survey asked financial institutions in a number of European centres for the value of the cash side of repo and reverse repo contracts still outstanding at close of business on Wednesday, June 12, 2002.

The questionnaire also asked respondents to analyse their business in terms of type of counterparty, currency, type of contract, type of repo rate, remaining term to maturity, method of settlement and source of collateral. In addition, it asked about securities lending and borrowing conducted on repo desks.

The detailed results of the survey are set out in Table 3.1 at the beginning of Chapter 3. An extract of the accompanying Guidance Notes is reproduced in Appendix A.

1.2 The response to the survey

The latest survey was completed by 86 offices of 77 financial entities. This compares with 61 offices of 56 entities in December 2001 and 53 offices of 46 entities in June 2001 (these numbers

include late returns and are therefore different from those quoted in the reports on the previous surveys). While 8 entities which participated in the December survey dropped out of the latest survey, 25 new entities joined and 8 entities from the June 2001 survey which had dropped out in December rejoined.

The institutions surveyed are headquartered in 15 European countries, as well as in the US and Japan. Of the European countries represented, 14 were in the EU (only Denmark was not represented) and 12 in the eurozone. Many institutions provided data for their entire European repo business. Others provided separate returns for each office that has its own repo book. A list of the institutions included in the survey is contained in Appendix B.

1.3 The next survey

The next ISMA survey is scheduled to take place at close of business on Wednesday, December 11, 2002.

Any financial institution wishing to participate in the next survey can download copies of the questionnaire and accompanying Guidance Notes from ISMA's web site. The new forms will be published in October at the following website: www.isma.org/surveys/repo/participate.

Questions about the survey should be sent by e-mail to reposurvey@isma.org.

Institutions who participate in the survey receive confidentially a list of their rankings in various categories.

CHAPTER 2: METHODOLOGICAL ISSUES

Most of the methodological issues raised by the survey were discussed in the reports on the June 2001 and December 2001 surveys. However, new issues have arisen and there is progress to report on some existing issues.

2.1 Country coverage

The under-representation in previous surveys of French institutions has been more than rectified. This is clearly represented by the larger shares of collateral issued in France and of floating-rate repos (which are most common in the French market). The main deficiency in the survey in terms of coverage remains in Italy, Iberia and Scandinavia.

2.2 Collateral analysis

The December survey questionnaire included a new category within the collateral analysis: (1.8.18) - "collateral of unknown origin". This was inserted to address concern that category (1.8.17) - collateral issued in "other countries" - was being used as a residual, in particular, for Eurobonds. While the share of collateral of unknown origin proved to be small, the share of collateral issued in "other countries" has continued to be large. The ERC Committee is therefore considering whether to try to break down category (1.8.17) further by including a new category for collateral issued in "emerging markets". The ERC Committee is also discussing the possibility of asking respondents to distinguish corporate bond collateral.

2.3 Late reporting and revisions to past figures

A number of returns for the December

survey were received too late to be included in the report of that survey. They have now been included and revised figures for December are used in this report. A number of corrections have also been made to previous figures following investigations of anomalies in the two previous surveys.

2.4 New entrants

The continued increase in the number of respondents means that caution is needed when comparing surveys. Changes in reported shares from one survey to another may reflect, not only shifts in the direction of new business, but also the entry of new respondents into the survey and the loss of some old respondents. For example, the share of collateral issued in France was 14.7% in the latest survey compared to about 7.0% in December. The increase is thought to be due to more French institutions joining the survey as well as increasing use of French collateral between December and June. In order to identify changes in the underlying pattern of new business, comparisons have been made of the numbers submitted by a sub-set of respondents consisting only of institutions who participated in previous surveys.

However, it will be difficult to maintain this consistency in future surveys. The group of institutions who have participated in previous surveys will become a progressively smaller (and less representative) sub-set in each new survey. There are some partial solutions. For example, year-on-year changes can be measured by new sub-sets, eg. in the December 2002 survey, a comparison can be made of the results of the sub-set of respondents who also participated in the December 2001 survey. This "rolling" comparison would give a good impression of year-on-year changes, but would not allow safe comparisons to be made across several years.

2.5 Central bank repos

The ISMA survey was intended to measure the size of the “private” market in repos and therefore excluded repos transacted with central banks as part of the latter’s monetary policy operations. However, increasing interest has been expressed in the “official” repos undertaken by respondents in the ISMA survey. In the latest exercise, therefore, we set out to gauge this number. The ECB agreed to produce an aggregate figure for repos outstanding at close of business on June 12, 2002, between itself and those respondents who were eligible to participate in the ECB’s monetary policy operations and who were willing to be included in the aggregate number. Note that not all respondents to the ISMA survey are in the eurozone and therefore eligible to take part in the ECB’s monetary policy operations, and not all respondents in the eurozone are eligible or, even if they are, do not necessarily participate.

CHAPTER 3: ANALYSIS OF SURVEY RESULTS

The aggregate results for all three surveys are set out in Table 3.1.

Table 3.1 - Aggregate survey results June 2001, December 2001 and June 2002			
	Jun-01	Dec-01	Jun-02
Q1 What is the total value of cash you have borrowed and lent through repo transactions that are due to be repaid after June 13, 2002?	2,157	2,400 repo	3,305
Of the amounts given in response to Q1 above,			
1.1 How much was transacted:	June 01	Dec 01	June 02
direct with counterparties			
• in the same country as you	23.2%	19.1%	21.7%
• cross-border in (other) eurozone countries	11.8%	10.8%	13.5%
• cross-border in non-eurozone countries	11.5%	15.1%	18.5%
through voice-brokers			
• in the same country as you	28.3%	24.0%	17.4%
• cross-border in (other) eurozone countries	11.4%	10.8%	10.2%
• cross-border in non-eurozone countries	5.8%	7.3%	5.7%
on ATs with counterparties			
• in the same country as you	1.7%	4.8%	5.0%
• cross-border in (other) eurozone countries	1.5%	1.4%	1.7%
• cross-border in non-eurozone countries	0.3%	0.6%	0.7%
• anonymously through a central clearing counterparty	4.6%	6.2%	5.6%
1.2 How much of the cash is denominated in:			
• EUR	73.3%	75.7%	75.4%
• GBP	11.2%	11.4%	10.5%
• USD	9.5%	7.8%	8.2%
• SEK, DKK	1.6%	1.2%	1.1%
• JPY	3.1%	2.6%	3.6%
• Other currencies	1.3%	1.4%	1.1%
1.3 How much is cross currency	1.9%	3.1%	3.8%
1.4 How much is:			
• classic repo	83.9%	79.8%	78.8%
• documented sell/buy-backs	8.2%	8.5%	12.5%
• undocumented sell/buy-backs	7.9%	11.7%	8.7%
1.5 How much is:			
• fixed rate	90.4%	86.6%	81.2%
• floating rate	5.3%	8.1%	12.1%
• open	4.3%	5.3%	6.7%
1.6 How much fixed & floating rate repo has a remaining term to maturity of:			
• 1 day	14.3%	15.5%	18.6%
• 2 - 7 days	30.3%	17.8%	22.8%

	June-01	Dec-01	June-02
• more than 7 days but no more than 1 month	17.6%	24.9%	25.8%
• more than 1 month but no more than 3 months	11.4%	13.0%	9.9%
• more than 3 months but no more than 6 months	6.9%	6.7%	6.9%
• more than 6 months	10.7%	13.9%	11.4%
• forward-forward	8.8%	8.1%	4.6%
1.7 How much is tri-party repo (of which):	5.5%	4.2%	6.3%
• for fixed terms to maturity	67.0%	88.1%	91.8%
• on an open basis	33.0%	11.9%	8.2%
1.8 How much is against collateral issued in:			
Austria			
• by the central government	1.0%	0.4%	0.7%
• by other issuers	0.0%	0.1%	0.1%
Belgium			
• by the central government	7.5%	6.2%	4.5%
• by other issuers	0.0%	0.0%	0.1%
Denmark			
• by the central government	0.4%	0.3%	0.3%
• by other issuers	0.3%	0.3%	0.1%
Finland			
• by the central government	0.1%	0.1%	0.2%
• by other issuers	0.0%	0.0%	0.0%
France			
• by the central government	5.8%	6.3%	13.8%
• by other issuers	0.4%	0.7%	1.0%
Germany			
• by the central government	29.0%	33.2%	23.2%
• by landesbanks and hypotheke banks in the form of pfandbrief	3.0%	2.3%	1.8%
• by other issuers	2.1%	1.6%	1.9%
Greece			
• by the central government	1.5%	1.5%	1.0%
• by other issuers	0.0%	0.0%	0.1%
Ireland			
• by the central government	0.0%	0.0%	0.1%
• by other issuers	0.0%	0.0%	0.0%
Italy			
• by the central government	17.8%	17.3%	17.5%
• by other issuers	0.4%	0.5%	0.5%
Luxembourg			
• by the central government	0.0%	0.0%	0.0%
• by other issuers	0.1%	0.2%	0.2%
Netherlands			
• by the central government	1.4%	1.2%	1.3%
• by other issuers	0.3%	0.3%	0.5%
Portugal			
• by the central government	0.3%	0.2%	0.3%
• by other issuers	0.0%	0.0%	0.0%
Spain			
• by the central government	5.4%	4.6%	5.0%
• by other issuers	0.1%	0.4%	0.5%
Sweden			
• by the central government	1.1%	0.7%	0.7%
• by other issuers	0.2%	0.2%	0.2%
UK			
• by the central government	11.2%	9.8%	9.9%
• by other issuers	0.6%	1.5%	1.1%

	June-01	Dec-01	June-02
US but settled across Euroclear or Clearstream	3.0%	2.3%	2.8%
other countries	6.9%	6.5%	9.9%
Collateral of unknown origin	Not canvassed	1.2%	0.5%
Q2 What is the total value of bonds loaned and borrowed by your repo desk?			
	June 01	Dec-01	June-02
To/from counterparties			
• in the same country as you	56.2%	49.5%	47.8%
• cross-border in (other) eurozone countries	24.4%	15.9%	24.9%
• cross-border in non-eurozone countries	19.4%	34.7%	27.3%
For which the term to maturity is			
• fixed	72.3%	70.8%	78.5%
• open	27.7%	29.2%	21.5%

Total repo business (Q1)

The total value of repos and reverse repos outstanding on the books of the 86 respondents at close of business on June 12, 2002 was **EUR 3,305 billion**. These contracts were split equally between repos and reverse repos. The values measured by the survey are gross figures, which means that they have not been adjusted for the double counting of transactions between pairs of respondents. Nor does the survey measure the value of repos transacted with central banks as part of the latter's monetary policy operations. However, the ECB has provided a value for "official" repos outstanding at close of business on June 12 with those participants in the ISMA survey who are eligible to participate in the ECB's repo operations and who agreed to be included. This was EUR 68 billion, which represents some 41% of the value of outstanding repos between all eligible banks and the ECB at close of business on June 12, 2002.

In order to gauge the year-on-year growth of the European repo market (or at least that segment represented by the institutions which participated the ISMA survey), it was necessary to eliminate the impact of new respondents and the exit of some previous respondents. This was done by measuring only the returns from the 42 respondents who have participated in all three surveys. The aggregate value of outstanding repos at these institutions grew by 15.8% over the year to June 2002. However, individual repo books showed an extremely wide range of year-on-year changes. Of the 42 respondents who have participated in all three surveys, the books of 21 contracted, 20 expanded and one was virtually unchanged. The range of absolute changes in individual books was from about -EUR 25 billion to almost +EUR 130 billion (compared to an average book size of about EUR 38 billion).

The rate of growth in the six months between the June 2001 and December 2001

surveys that was recorded by the 42 respondents who have participated in all three surveys was 13.3%. Between the December 2001 and the latest survey, growth was 2.2%. This is consistent with anecdotal evidence that growth in the repo market slowed in the first half of 2002.

Counterparty analysis (Q1.1)

The share of reported outstanding repos that had been negotiated directly with the other counterparties was very much larger in June at 53.0% (compared with a revised 45.3% in December). A sub-set of direct repos, equivalent to 6.3% of the total value, was negotiated under tri-party repo arrangements (compared to a revised 4.2% in December). The share of voice-brokers was 34.4% and of inter-dealer automatic trading systems (ATSs) was 12.7% (compared to a revised 41.8% and 12.9%, respectively, in December).

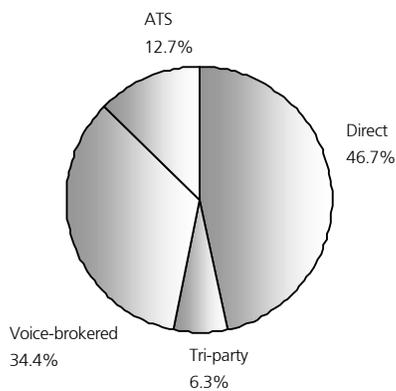
Of the 86 respondents to the June survey, 67 reported using voice-brokers and 39 reported using ATSs. This compares with 43 and 28, respectively, in December.

The smaller share of electronic trading may be a surprise. However, it is important to note that, while the share of electronic trading was smaller in June than in December, this segment continued to grow in absolute terms. In fact, the absolute value of electronic trading increased by about 55% between December and June (this included the contribution of new respondents). The share of electronic business declined because the absolute value of direct business increased much faster, by some 83% (for the opposite reason, the share of voice-brokers - which grew in absolute terms by about 31% - declined in relative terms).

To assess the impact of new respondents on the share of electronic trading, the growth in

electronic business was calculated just for the 28 respondents who reported use of ATSs in both the June and December surveys. It was only 17.6% (compared to growth of 44.5% in their direct business). It can be seen therefore that the 11 ATS users who were new in June made a positive contribution to the statistics for electronic trading (although this was slightly offset by the loss from the June survey of five respondents using ATSs in December).

Figure 3.1 - Counterparty analysis



Geographical analysis (Q1.1)

In June, 44.0% of reported outstanding repo contracts were with domestic counterparties, 50.4% were cross-border and 5.6% were negotiated anonymously on an ATS and settled with a central clearing counterparty (CCP). The cross-border business was analysed into business with counterparties in the eurozone (25.5%) and business with counterparties outside the eurozone (24.9%).

The share of domestic business in June was smaller than in December (down from a revised 47.8%), as was the share of business across ATSs

offering anonymous electronic trading (down from a revised 6.2%). On the other hand, larger shares were taken by cross-border business with counterparties inside the eurozone (up from a revised 22.9%) and, to a lesser extent, with counterparties outside the eurozone (up from a revised 23.0%).

The smaller share of business across ATSs offering anonymous electronic trading does not reflect a contraction in the absolute value of this business. Anonymous electronic trading grew by almost 26% between the December and June surveys. The anonymous electronic business of the 14 respondents using these systems who participated in both the June and December surveys grew by only 1.6%.

In the June survey, 20 respondents reported anonymous electronic trading. Five of these respondents were new. One respondent who reported anonymous electronic trading in December did not report any in June.

Figure 3.2 - Geographical analysis

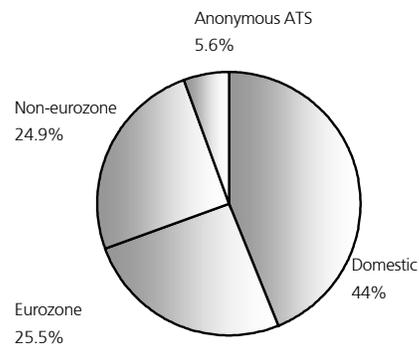
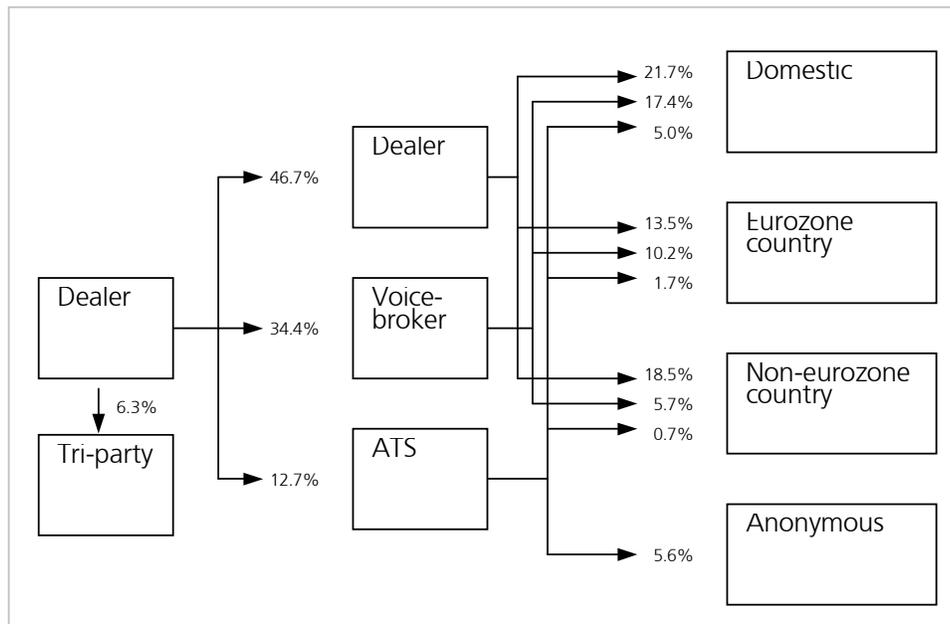


Fig 3.3 Counterparty and geographical analysis combined

The counterparty and geographical analyses can be combined as in Figure 3.3. The shares of direct transactions were significantly larger across the board, i.e. with domestic counterparties and cross-border with counterparties both inside and outside of the eurozone (at 21.7%, 13.5% and 18.5%, respectively, up from a revised 19.1%, 10.8% and 15.1% in December). In contrast, the shares of voice-brokers were significantly smaller in domestic and cross-border business with clients outside the eurozone (at 17.4% and 5.7%, respectively, compared with a revised 24.0% and 7.3% in December), but virtually unchanged with clients inside the eurozone (at 10.2% compared with a revised 10.8% in December). The share of domestic trading across ATs was very slightly larger at 5.0% compared with a revised 4.8% in December, but the share of anonymous electronic trading was smaller.

Settlement analysis (Q1.7)

6.3% of reported outstanding repos had been negotiated under tri-party repo arrangements, compared with a revised 4.2% in

December. The rest were bilateral or with a CCP.

The change in the share of tri-party repos is largely due to the arrival of new respondents in the June survey. There were a net nine new respondents reporting tri-party repos in June, taking the total number of users to 29 from 20 in December.

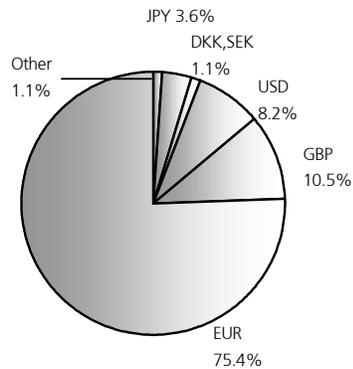
Of the tri-party repo business, 91.8% was for a fixed term and 8.2% was on an open basis (in comparison with a revised 88.1% and 11.9%, respectively, in June).

Cash currency analysis (Q1.2)

75.4% of reported outstanding repos were denominated in euros (EUR), 10.5% in pounds sterling (GBP), 8.2% in US dollars (USD) and 3.6% in Japanese yen (JPY). These numbers are very similar to those in the December survey (which were, respectively, a revised 75.7%, 11.4%, 7.8% and 2.6%).

The share of cross-currency repos was virtually unchanged at 3.3% compared with 3.1% in December. However, the response rate to this question remains low: only 23 respondents answered this question compared to 16 in December.

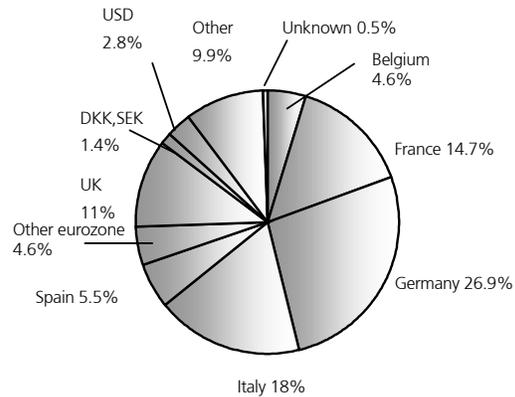
Figure 3.4 - Currency analysis



Collateral analysis (Q1.3 and Q1.8)

74.4% of repo collateral held by respondents was issued in countries in the eurozone, compared with a revised 77.2% in June. The most notable change was a very much larger share for collateral issued in France at 14.7% compared to a revised 7.0% in December. In contrast, there was a very much smaller share for collateral issued in Germany, at 26.9% (down from a revised 37.1%). Other significant changes were a smaller share for collateral issued in Belgium (to 4.6% from a revised 6.7% in December) and a larger share for collateral issued in "other countries" (to 9.9% from a revised 6.5%). The share of collateral of "unknown origin" was smaller at 0.5%, down from a revised 1.2% in December.

Figure 3.5 - Collateral analysis

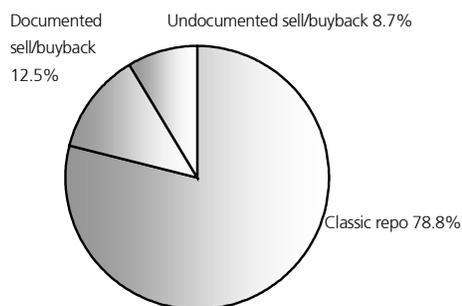


The share of collateral issued by central governments was 90.6% compared with a revised 91.2% in December. However, in Germany, the share of government securities was smaller at 86.4% compared to a revised 89.5% in December, while the share of collateral other than government securities and pfandbrief was larger at 7.0% compared to a revised 4.3%.

As in previous surveys, significant differences remain between the collateral analysis and the currency analysis which are not fully explained by reported cross-currency business. In particular, there continues to be a big discrepancy between the share of collateral issued in the US (but cleared over an ICSD) and the share of US dollar cash (2.8% compared to 8.2%).

Contract analysis (Q1.4)

78.8% of reported outstanding repo contracts were classic repo, 12.5% were sell/buy-backs documented under agreements such as the TBMA/ISMA or PSA/ISMA Global Master Repurchase Agreements (GMRA) and 8.7% were undocumented sell/buy-backs. The overall share of sell/buy-backs continues to become larger with each survey, reflecting the gradual increase in the number of Italian and Spanish institutions participating in the survey.

Figure 3.6 - Contract analysis*Repo rate analysis (Q1.5)*

The June survey gave a very different picture of the relative importance of fixed-rate, floating-rate and open repos than previous surveys. In June, 81.2% of outstanding contracts paid a fixed rate of return compared to a revised 86.6% in December. The share of floating-rate repos (contracts on which the rate of return is refixed at least once during the life of the contract) was much larger, at 12.1% compared to a revised 8.1% in December. The share of open repos (contracts with no fixed maturity but which are terminable on demand by either counterparty subject to an agreed period of notice) was also larger, at 6.7% compared to a revised 5.3% in December. The increase in the share of floating-rate repos reflects the larger number of respondents participating in the survey who are active in the French repo market, where floating-rate repos (typically indexed to EONIA) are popular.

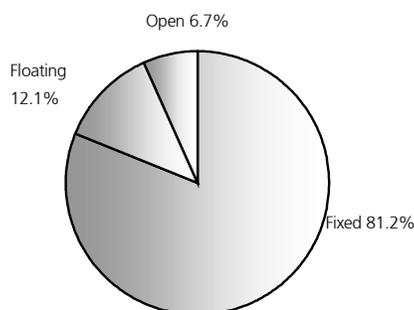
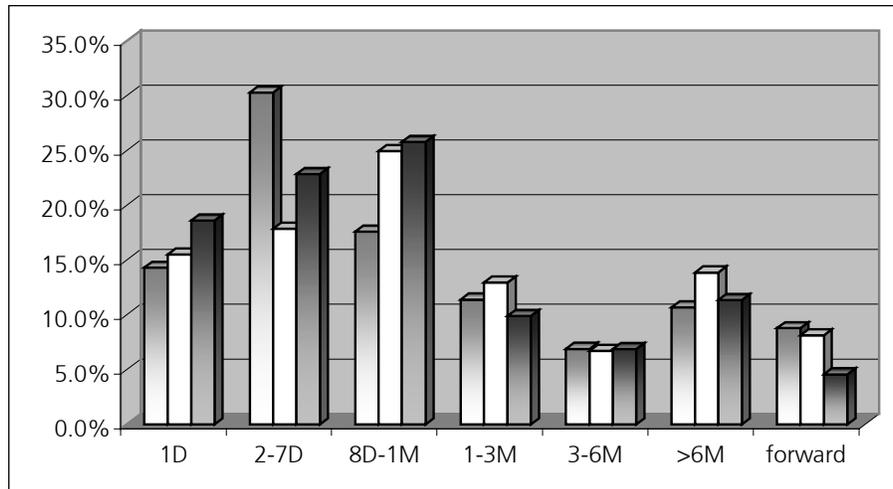
Figure 3.7 - Repo rate analysis

Fig 3.8 Maturity analysis comparison (left-hand columns show June 2001; middle columns show December 2001; right-hand columns show June 2002)



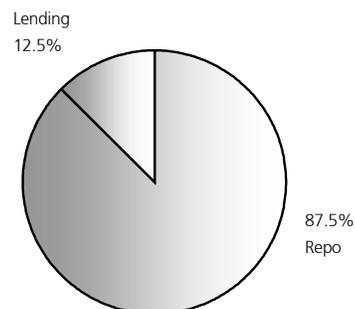
Maturity analysis (Q1.6)

Changes in the maturity distribution of repos between the June and December surveys reversed many of the changes seen between December and June 2001. The share of outstanding repos with less than one week remaining to maturity was larger, at 41.4% compared with a revised 33.3% in December and 44.6% in June 2001. The share of repos with between seven days and one month remaining to maturity was modestly larger, at 25.8% compared with a revised 24.9% in December and 17.6% in June 2001. The share of repos with more than one month remaining to maturity was smaller, at 28.2% compared to a revised 33.6% in December and 29% in June 2001. The share of forward-forward repos (with a value date more than two business days in the future) continued to get smaller, shrinking to 4.6% from a revised 8.1% in December and 8.8% in June 2001. Some of the implied shift back to shorter maturities between December and June, and the relative decline of forward-forwards repos, may reflect the response by banks to the winding down of the monetary

policy operations of central banks which were triggered by the events of September 11. The withdrawal of central banks introduced greater uncertainty into the markets about the direction and timing of future official interest rate changes, causing banks to adopt a more cautious attitude in their proprietary market activities.

Product analysis (Q2)

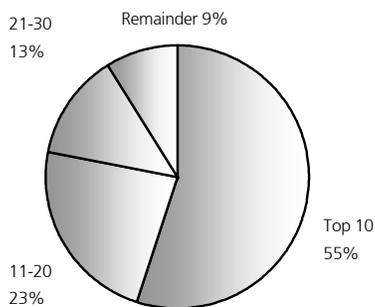
Figure 3.9 - Product analysis



The survey asked respondents to measure how much securities lending and borrowing was conducted on their repo desks (separately from their securities lending and borrowing desks). 46 institutions undertook securities lending and borrowing from their repo desks, compared with 42 in December. The share of total business on those repo desks that was accounted for by securities lending and borrowing was larger at 12.5% compared with a revised 11.1% in December. The share of securities lending and borrowing cross-border to counterparties inside the eurozone was very much larger, at 24.9%, compared to a revised 15.9% in December. The share of cross-border business with counterparties outside the eurozone was very much smaller, at 27.3% compared with a revised 34.7% in December. The share of securities borrowing and lending at a fixed rate was also much larger, at 78.5% compared with a revised 70.8% in December.

Concentration analysis

Fig 3.10 Concentration analysis



The concentration of the survey sample continued to fall between December and June. The top ten banks in the survey accounted for some 55% of total reported business (compared with a revised 60% in December). The top twenty banks accounted for 78% (down from a revised

82%). The top thirty banks accounted for 91% (down from a revised 94%).

This analysis can be misleading. It shows a high degree of market concentration, but this should not be confused with market power. A better measure of market concentration - often used in competition analyses - is the Herfindahl¹ Index. The Index for the survey fell slightly further below the 0.05 recorded in the first survey.

¹ 1 The Herfindahl Index is the sum of the squares of market shares divided by the square of the sum of market shares. The higher the index, the lower the degree of competition. If the index is higher, the more a single respondent has a dominant market share and/or the more insignificant the market shares of all the other respondents. A market in which several respondents have very large market shares can therefore have a relatively low index.

CHAPTER 4: CONCLUSION

The ISMA survey on June 12, 2002 continued to expand the scope of the exercise. The majority of major players in the European repo market are now included.

The lower boundary for the size of the European repo market has been pushed up to EUR 3.305 billion in terms of outstanding contracts. Even allowing for double-counting, this is an astonishing number.

The survey also demonstrates that an important segment of the European repo market has grown by almost 16% since June 2001, notwithstanding the general slowdown in financial activity over the period, which included the widespread disruption following September 11, 2001. However, most of this growth occurred during the second half of 2001 and growth appears to have decelerated sharply during the first half of 2002.

The inclusion of additional French, Italian, and Spanish banks in the survey has helped to give a more balanced picture of the market structure, particularly in respect of the origin of collateral, types of contact and types of repo rate. However, the addition of new banks and the consequent gain in accuracy of the survey means that it is important to treat changes in the composition of reported business between surveys with caution.

The key development revealed by the survey is the stagnation of the market share of electronic trading and a decline in the relative importance of anonymous electronic trading. One explanation could be that there has been a relative reduction in demand for bond financing in the weaker market conditions that have characterised

the first half of 2002. It is often argued that this sort of activity is best suited to the electronic trading of repo.

The shortening of the average remaining term to maturity of reported business between December and June, and also in forward-forward business, appears to reflect a reversal of the factors that led to an extension of the average term over the second half of 2001, ie attempts to lock in funding over the year end and greater interest rate risk positioning in the period following September 11 in response to the rapid lowering of official rates by central banks.

APPENDIX A: SURVEY GUIDANCE NOTES

The following extract is based on the Guidance Notes issued to participants in conjunction with the survey that took place on June 12, 2002.

The data required by this survey are: the total value of the repos and reverse repos booked by your repo desk that are still outstanding at close of business on Wednesday, June 12, 2002, and various breakdowns of these amounts.

Branches of your bank in other countries in Europe may be asked to complete separate returns. If your repo transactions are booked at another branch, please forward the survey form to that branch. If branches of your bank in other countries run their own repo books, please copy the survey form to these branches so that they can also participate in the survey. Please feel free to copy the survey form to other banks if you discover that they have not received it directly.

General guidance

a) Please fill in as much of the form as possible.

b) You only need to give figures to the nearest million. However, if you give numbers with decimal points, please use full stops as the symbols for the decimal points, not commas. For nil returns, please use zeros, not dashes or text.

c) Give the value of the cash side of all repos and reverse repos (not the value of collateral) that are still outstanding at close of business on Wednesday, June 12, 2002.

d) "Outstanding" means repos and reverse repos which will mature or roll over on or after Thursday, June 13, 2002. You should therefore include all open repos and reverse repos that have been rolled over from Wednesday, June 12, 2002 to a later date and all forward-forward repos and reverse repos that are still outstanding at close on Wednesday, June 12, 2002.

e) Give gross figures, i.e. do not net opposite transactions with the same counterparty. If this is not possible, please indicate that your figures are net.

f) Give separate totals for (a) repos plus sell/buy-backs and (b) reverse repos plus buy/sell-backs.

g) Include all classic repos, sell/buy-backs and similar types of transaction (e.g. pensions livrées). There is a separate question (see question 2) on securities lending and borrowing transactions (including securities lending and borrowing against cash collateral).

h) Exclude repo transactions undertaken with central banks as part of their money market operations. Other repo transactions with central banks, e.g. as part of their reserve management operations, should be included.

i) In the case of equity repo, please include the value of synthetic structures.

Guidance on specific questions in the survey form

Q1.1 Transactions (1.1.1) direct with counterparties or (1.1.2) through voice-brokers should exclude all repos transacted over an ATS. These should be recorded under (1.1.3).

Q(1.1.3) "ATs" are automated trading systems (e.g. BrokerTec, Eurex Repo and MTS/EuroMTS, and also voice-assisted electronic systems such as e-speed, Icap's ETC and GFInet). Anonymous transactions through an ATS with a central counterparty (e.g. RepoClear, Clearnet or Eurex Clearing) should be recorded in (1.1.3.4).

Q1.4 "Classic repo" includes transactions documented under the PSA/ISMA Global Master Repurchase Agreement (GMRA) 1995 and TBMA/ISMA Global Master Repurchase Agreement (GMRA) 2000 without reference to the Buy/Sell-Back Annex or other master agreements. Classic repos include pensions livrées. Classic repos are characterised by the immediate payment of a manufactured or substitute payment to the seller upon receipt of a coupon on the collateral by the buyer. In the unlikely event that a coupon is paid on collateral during the term of a sell/buy-back, the buyer reinvests the coupon until the maturity of the sell/buy-back and deducts the manufactured or substitute payment (including reinvestment interest) from the repurchase proceeds due to be paid by the seller. Sell/buy-backs may be quoted in terms of a forward price rather than a repo rate. Where sell/buy-backs are documented (e.g. under the Buy/sell-back Annex to the PSA/ISMA GMRA 1995 and TBMA/ISMA GMRA 2000), adjustments to the relative amounts of collateral or cash - which, for a classic repo, would be performed by variation margins - are likely to be made by early termination and re-pricing. All open repos are likely to be classic repos. "Sell/buy-backs" include all transactions that are not documented.

Q1.6 This section asks for the remaining term to maturity (not the original term to maturity) of the fixed-rate repos reported in (1.5.1) and the floating-rate repos reported in (1.5.2) to be divided up on the following basis:

Q(1.6.1.1) 1 day - all transactions for value up to and including Wednesday, June 12, 2002, that will mature on Thursday, June 13, 2002.

Q(1.6.1.2) 2-7 days - all transactions for value up to and including Wednesday, June 12, 2002 that will mature on Friday, June 14, 2002 or any day thereafter up to and including Wednesday, June 19, 2002.

Q(1.6.1.3) More than 7 days but no more than 1 month - all transactions for value up to and including Wednesday, June 12, 2002 that will mature on Thursday, June 20, 2002 or any day thereafter up to and including Friday, July 12, 2002.

Q(1.6.1.4) More than 1 month but no more than 3 months - all transactions for value up to and including Wednesday, June 12, 2002 that will mature on Monday, July 15, 2002 or any day thereafter up to and including Thursday, September 12, 2002.

Q(1.6.1.5) More than 3 months but no more than 6 months - all transactions for value up to and including Wednesday, June 12, 2002 that will mature on Friday, September 13, 2002 or any day thereafter up to and including Thursday, December 12, 2002.

Q(1.6.1.6) More than 6 months - all transactions for value up to and including Wednesday, June 12, 2002 that will mature on Friday, December 13, 2002 or any day thereafter.

Q1.7 Please confirm whether you have included your tri-party repo business in (1.6).

Q1.8 Eurobonds should be included as bonds issued "by other issuers" in the countries

in which the bonds are issued. This will typically be Luxembourg (1.8.10) and the UK (1.8.15). Equity collateral should be included as collateral issued "by other issuers".

Q(1.8.16) "US but settled across Euroclear or Clearstream" means only domestic and Yankee bonds. This includes Reg.144a bonds, but excludes Eurodollar and US dollar global bonds which, like Eurobonds, should be treated as bonds issued "by other issuers" in the countries in which the bonds are issued. This will typically be Luxembourg (1.8.10) and the UK (1.8.15).

Q2 "Total value of securities loaned and borrowed by your repo desk" includes the lending and borrowing of securities with either cash or securities collateral. Exclude any securities lending and borrowing done by desks other than your repo desk. If your repo desk does not do any securities lending and borrowing, this line will be a nil return.

N.B. "Active" means about once a week, or more often.

APPENDIX B: PARTICIPANTS IN THE SURVEY

The names of the participating banks are included in the list that follows. Company names provided here are as supplied by those involved in producing this survey. Names of ISMA member firms may not, therefore, precisely reflect the manner in which they are published on ISMA's on-line Members' Register

- ABN Amro Bank
- Allied Irish Banks
- AXA Bank Belgium
- Banca di Roma
- Banca d'Intermediazione Mobiliare (IMI)
- Bank Austria
- Bank Brussels Lambert
- Bank fuer Arbeit und Wirtschaft AG (Bawag)
- Bank of Ireland
- Bankgesellschaft Berlin
- Banque du Luxembourg
- Banque et Caisse d'Epargne de l'Etat
- Barclays Capital
- Bayerische Landesbank
- BBVA
- BHF Bank
- BNP Paribas
- Bundesrepublik Deutschland Finanzagentur
- Caixa Geral de Depositos
- Caja de Ahorros y Monte de Piedad de Madrid (Caja Madrid)
- CCF
- CDC Ixis Capital Markets
- Commerzbank
- Confederación Española de Cajas de Ahorros (CECA)
- Credit Agricole Indosuez
- Credit Lyonnais
- CSFB
- Daiwa Securities SMBC Europe Ltd
- Deutsche Bank
- Deutsche Postbank
- Dexia
- DGZ-DekaBank
- Dresdner Bank
- DZ Bank
- EFG Eurobank Ergasias
- EIB
- Erste Bank der Oesterreichischen Sparkassen AG
- Fortis Bank
- General Bank of Greece
- Goldman Sachs
- Halifax
- Hamburgische Landesbank
- HSBC Athens
- HypoVereinsbank
- IntesaBCI
- JP Morgan Chase
- KBC
- Landesbank Baden-Württemberg, Stuttgart
- Landesbank Sachsen Girozentrale
- Lehman Brothers
- LRP Landesbank Rheinland Pfalz
- Maple Bank
- Mizuho International
- Merrill Lynch

- Morgan Stanley
- Natexis Banques Populaires
- National Bank of Greece
- Nomura International
- Norddeutsche Landesbank
Girozentrale
- Nordea Bank Finland
- Omega Bank
- Piraeus Bank
- Rabobank
- Raiffeisen Zentral Bank
- Royal Bank of Scotland
- Sal Oppenheim
- Sampo Bank
- Santander Central Hispano
- Schroder Salomon Smith Barney
(Citigroup)
- SEB
- Société Générale
- Tokyo Mitsubishi International
- UBS Warburg
- Ulster Bank Ireland
- Unicredit Banca Mobiliare
- Vereins und Westbank
- Westdeutsche Immobilien Bank
- Westdeutsche Landesbank

APPENDIX C: ISMA'S REPO COUNCIL STRUCTURE

The International Repo Council (IRC) is a special interest group established by ISMA for members active in the international repo markets.

Beneath the level of the IRC, regional repo councils may be established to represent the repo market of a particular geographic area.

The European Repo Council (ERC) is the first such regional council to have been established. Its members comprise the major banks and securities houses active in Europe's cross-border repo markets.

ISMA members wishing to know more about the repo council and committee structure should refer to section 1000 of ISMA's Rule Book or read the overview provided on ISMA's web site.