



International Capital Market Association

European repo market survey

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The author served for ten years at the Bank of England, within its Foreign Exchange Division and on secondment to the International Monetary Fund in Washington DC.

EXECUTIVE SUMMARY

In June 2009, the European Repo Council (ERC) of the International Capital Market Association (ICMA) conducted the 17th in its series of semi-annual surveys 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 10, 2009. Replies were received from 61 offices of 54 financial groups, mainly banks. Returns were also made directly by the principal tri-party repo agents and automatic repo trading systems (ATS) in Europe, and by the London-based Wholesale Market Brokers' Association (WMBA).

Total repo business

The total value of repo contracts outstanding on the books of the 61 institutions who participated in the latest survey was EUR 4,868 billion, compared to EUR 4,633 billion in December 2008 and the peak of EUR 6,775 billion reached in June 2007.

Although the headline number grew by 5.1%, a comparison of the aggregate returns from a constant sample of institutions showed growth over the last six months to be 1.3%. There was an increase in the number of banks reporting

growth in their repo books, but the recovery in overall market activity was held back by continued deleveraging by other banks and possibly by the impact of mergers between large banks.

Counterparty analysis

Electronic trading consolidated the advance seen in the last survey, increasing its share to a record 28.5% from 28.0%.

Geographical analysis

After a dramatic increase in December 2008 to a record 17.6%, the share of outstanding repo contracts that were negotiated anonymously on an ATS and settled with a central clearing counterparty (CCP) fell back to 14.5%, although this was still well above the 12.7% recorded in June 2008.

Settlement analysis

The share of tri-party repos recovered to 11.1% from 9.4%.

Cash currency analysis

The retreat of the pound sterling and US dollar was reversed. The pound reached 15.3% from 13.0% and the dollar jumped to 14.2% from 9.6%. Dollars took a larger share of tri-party repo, although well below its long-term average, and cross-currency transactions in tri-party repo jumped.

Collateral analysis

The share of government bonds used as collateral fell back from 83.6% to 81.2%, close to the record low of 81.0% reached in June 2008. However, the share of government bonds in tri-party repo increased dramatically to a record high of 53%, well above average. There was also a noticeable shift in tri-party repo into the most liquid government bonds.

Contract analysis

The share of floating-rate repos fell further, reaching 8.5% from 9.4%, well below the record high of 13.3% reached in December 2007. The share of open repo fell back to 5.0% from 5.1%, close to the record low of 4.8% touched in June 2008.

Maturity analysis

The seasonal pattern of the survey, in which the average duration of repo transactions lengthens in December, as banks lock in term funding over the year-end, and then shortens in June, in reaction, continued to be evident. Short-dated repo (with one month or less remaining to maturity) increased to 63.8% from 55.4%. Forward-start repo increased to 6.1% from 4.5%, suggesting greater interest rate positioning or perhaps the hedging of interest rate gaps between one-year borrowing from central banks and shorter-term reinvestment. There

was also a shortening in average duration in tri-party repo, with a noticeable increase in the share of transactions with one day remaining to maturity.

Product analysis

There was a sharp recovery in securities lending conducted on repo desks to 19.1% from a record low of 12.5%.

Concentration analysis

The previous reduction in the concentration of the repo market was reversed, with the share of the ten largest repo books increasing from 49.0% to 57.2%, close to historical levels.

CHAPTER 1: THE SURVEY

On June 10, 2009, the European Repo Council (ERC) of the International Capital Markets Association (ICMA) conducted the seventeenth in its series of semi-annual surveys of the repo market in Europe.

The ICMA survey was actively supported by the ACI - The Financial Markets Association, and has been welcomed by the European Central Bank and European Commission. The survey was managed and the results analysed on behalf of ICMA by the ICMA 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 operating 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 10, 2009.

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

The detailed results of the survey are set out in Appendix C. An extract of the accompanying Guidance Notes is reproduced in Appendix A

Separate returns were made directly by the principal automatic repo trading systems (ATS) and tri-party repo agents in Europe, and an aggregate return was made directly by the London-based Wholesale Market Brokers' Association (WMBA).

1.2 The response to the survey

The latest survey was completed by 61 offices of 54 financial groups. This is the same number of institutions as in December 2008, but not the same institutions. While 7 institutions which participated in the last survey dropped out of the latest survey, 7 institutions rejoined.

The institutions surveyed were based in 14 European countries, as well as in North America (5) and Japan (5). 49 institutions were based in 13 of the 27 member states of the EU (no institutions from Finland, Portugal, Sweden and most former Accession State participated in the latest survey), and 43 were based in 11 of the 15 countries of the eurozone. However, although some institutions were based in one country, much of their business was conducted in others. Many institutions provided data for their entire European repo business.

Others provided separate returns for each office with its own repo book. A list of the institutions that have participated in ICMA repo surveys is contained in Appendix B.

1.3 The next survey

The next survey is scheduled to take place at close of business on Wednesday, December 9, 2009.

Any financial institution wishing to participate in the next survey can download copies of the questionnaire and accompanying Guidance Notes from ICMA's web site. The latest forms will be published shortly at the following website:

www.icmagroup.org/surveys/repo/participate.

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

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

CHAPTER 2: ANALYSIS OF SURVEY RESULTS

The aggregate results for the latest two surveys, and the December surveys in the three previous years (2006-2009), are set out in Appendix C. Full details for all previous surveys can be found at www.icmagroup.org.

Total repo business (Q1)

The total value at close of business on June 10, 2009, of repos and reverse repos outstanding on the books of the 61 institutions which participated in the latest survey increased to **EUR 4,868** billion. Of the sample of 61 institutions, 24 were net lenders, down from 29 in the last survey. There was also a shift in the overall sample from net lending to net borrowing.

Table 2.1 – Total repo business from 2001 to 2009

survey	total (EUR bn)	repo	reverse repo
2009 June	4,868	52.2%	47.8%
2008 December	4,633	49.9%	50.1%
2008 June	6,504	48.8%	51.2%
2007 December	6,382	49.4%	50.6%
2007 June	6,775	50.8%	49.2%
2006 December	6,430	50.7%	49.3%
2006 June	6,019	51.7%	48.3%
2005 December	5,883	54.6%	45.4%
2005 June	5,319	52.4%	47.6%
2004 December	5,000	50.1%	49.9%
2004 June	4,561	50.6%	49.4%
2003 December	3,788	51.3%	48.7%
2003 June	4,050	50.0%	50.0%
2002 December	3,377	51.0%	49.0%
2002 June	3,305	50.0%	50.0%
2001 December	2,298	50.4%	49.6%
2001 June	1,863	49.6%	50.4%

It is important to remember that the survey measures the value of outstanding transactions at close of business on the survey date. Measuring the stock of transactions at one date, rather than the flow between two dates, permits deeper analysis but is difficult to reconcile with the flow numbers published by other sources.

As the survey is a 'snapshot' of the market, it can miss peaks and

troughs in business between survey dates, especially of short-term transactions. In addition, the values measured by the survey are gross figures, which mean that they have not been adjusted for the double counting of transactions between pairs of survey participants. Nor does the survey measure the value of repos transacted with central banks, as part of official monetary policy operations.

In order to gauge the year-on-year growth of the European repo market (or at least of that segment represented by the institutions which have participated in the survey), it is not valid to simply compare the total value of repos and reverse repos with the same figures in previous surveys. Some of the changes represent the entry and exit of institutions into and out of the survey, mergers between banks, and the reorganization of repo books within banks. To overcome the problem caused by changes in the sample of survey participants, comparisons are made of the aggregate outstanding contracts reported only by a sub-sample of institutions which have participated in several surveys. However, the size and direction of the change can be very dependent on the choice of sample.

The repo business of the 50 institutions that participated in all of the last three surveys grew by 1.3% over the six months from the December 2008 survey and contracted by 20.7% year-on-year. Of the 61 institutions in the latest survey, the repo books of 29 expanded, compared to 18 in the last survey. However, the modest aggregate recovery in the repo market hides a very varied picture among individual institutions, a number of whom have been deleveraging, sometimes by substantial amounts. Growth in repo activity may also have been affected by mergers between large institutions, which tends to reduce market capacity in the short term, as the credit lines of a merged entity is typically smaller than the sum of the credit lines of the two institutions before they merged.

Counterparty analysis (Q1.1)

Table 2.2 – Counterparty analysis

	June 2009		December 2008		June 2008	
	users	share	users	share	users	share
direct	61	52.1%	61	51.6%	61	51.7%
of which tri-party	31	11.1%	31	9.4%	30	10.1%
voice-brokers	50	19.3%	48	20.2%	46	23.1%
ATS	46	28.5%	48	28.2%	47	25.2%

The sharp recovery seen in the share of electronic repo trading in

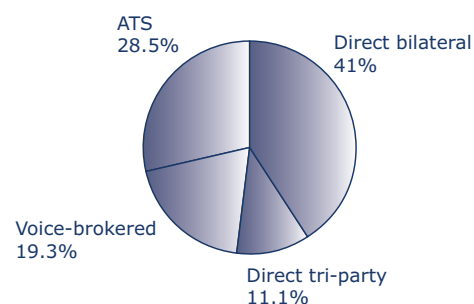
December 2008 was consolidated. Triparty activity recovered.

Table 2.3 – Numbers of participants reporting particular types of business

	Dec-06	Jun-07	Dec-07	Jun-08	Dec-08	Jun-09
ATS	51	56	48	47	48	46
anonymous ATS	33	39	35	33	38	33
voice-brokers	54	54	51	46	48	50
tri-party repos	37	45	36	30	31	31
total	73	77	68	61	61	61

The principal automatic trading systems (ATS) operating in Europe – BrokerTec, Eurex Repo and MTS – provided data directly to the survey. The directly-reported value of repos outstanding on June 10, 2009, was EUR 752 billion, slightly down from EUR 766 billion in December 2008 and well below the peak of EUR 961.1 billion recorded in June 2007.

Figure 2.1 – Counterparty analysis



Geographical analysis (Q1.1)

Table 2.4 – Geographical analysis

	June 2009		December 2008		June 2008	
	share	users	share	users	share	users
domestic	34.1%		31.3%		32.2%	
cross-border	51.5%		51.0%		55.1%	
anonymous	14.5%	33	17.6%	38	12.7%	33

The share of anonymous trading across ATS's fell back from the 17.6% reached in December 2008 to 14.5%.

The share of anonymous electronic trading in the business reported directly by the ATS's was virtually unchanged at 79.6%.

There was a continued fall in domestic business in directly-reported tri-party repo to a record low of 20.3% but domestic activity continued to grow in the voice-brokered market, as reported by the WMBA for London-based brokers. In directly-reported electronic business, there was greater activity into and out of the eurozone.

Table 2.5 – Geographical comparisons in June 2009

	main survey	ATS	tri-party	WMBA
domestic	34.1%	40.2%	20.3%	42.2%
cross-border	51.5%	59.8%	79.7%	57.8%
anonymous	14.5%			

Figure 2.2 – Geographical analysis

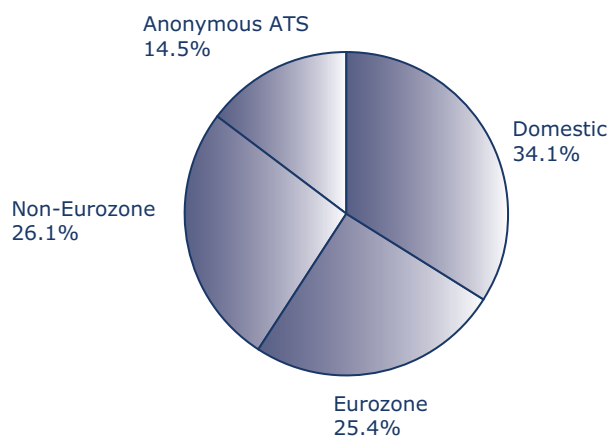


Table 2.6 – Cash currency analysis (Q1.3 and Q1.4)

	June 2009	December 2008	June 2009
EUR	64.2%	70.6%	66.6%
GBP	15.3%	13.0%	14.5%
USD	14.2%	9.6%	12.7%
DKK, SEK	1.8%	2.4%	2.2%
JPY	3.1%	3.1%	2.8%
CHF	0.6%	0.6%	0.2%
etc	0.9%	0.8%	0.9%
cross-currency	1.3%	0.6%	1.0%

Changes in the currency composition of repo activity seen in the last survey were largely reversed in June 2009, with the pound sterling and US dollar more than recovering lost ground, to some extent, reflecting swings in exchange rates. In tri-party business, the euro lost share to the dollar, yen and "other" currencies.

However, sterling and the dollar continued to lose ground to the euro in electronic trading.

Cross-currency business recovered, reaching 1.3% in the main survey, and jumped from 13.6% to 25.0% in tri-party repo.

Figure 2.3 – Currency analysis

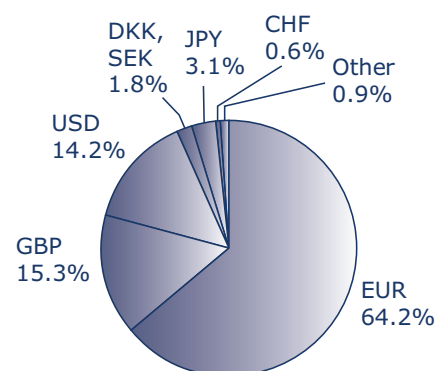


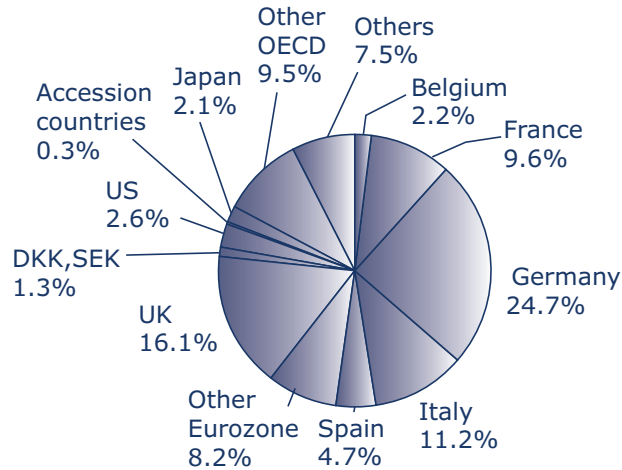
Table 2.7 – Currency comparison in June 2009

	main survey	ATS	tri-party	WMBA
EUR	64.2%	86.5%	70.2%	53.1%
GBP	15.3%	4.9%	6.8%	39.9%
USD	14.2%	0.5%	19.7%	3.9%
DKK, SEK	1.8%	0.0%	0.4%	1.5%
JPY	3.1%	0.0%	1.9%	1.3%
CHF	0.6%	8.1%	0.2%	0.0%
etc	0.9%	0.0%	0.9%	0.3%
cross-currency	1.3%		25.0%	

Collateral analysis (Q1.9)

Table 2.8 – Collateral analysis

	June 2009	December 2008	June 2008
Germany	24.7%	29.6%	25.5%
Italy	11.2%	12.2%	12.4%
France	9.6%	10.1%	10.9%
Belgium	2.2%	2.7%	3.5%
Spain	4.7%	4.9%	5.0%
other eurozone	8.2%	8.7%	9.8%
UK	16.1%	12.9%	14.9%
DKK, SEK	1.3%	1.3%	1.3%
US	2.6%	2.9%	3.0%
Accession countries	0.3%	0.3%	0.4%
Japan	2.1%	2.9%	2.0%
other OECD	9.5%	7.3%	7.3%
other	6.9%	3.3%	2.8%
equity	0.7%	1.1%	1.1%

Figure 2.4 – Collateral analysis

The trend decline in the use of collateral issued by EU central governments may have resumed. The rebound in the share of EU government bonds to 83.6%, from the record low in June 2008 of 81.0%, was almost entirely reversed.

In tri-party business, the share of government rebounded to a record high of 53.0% from 41.7%, compared to the previous peak of 47.3% in June 2008.

In the main survey, there appears to have been a general reduction in the share of eurozone collateral. This was to some extent due to a sharp increase in unidentified collateral reported by a single survey participant. However, even adjusting for this possible anomaly, there was a significant shift back out of German collateral and into UK and "other OECD" collateral.

In tri-party repos, the increase in government bond collateral was in the most liquid government bonds,

particularly German government bonds (from 9.3% to 15.1%), but also Italian government bonds (from 3.5% to 6.5%), UK governments bonds (from 0.9% to 3.0%) and French government bonds (from 5.2% to 6.4%).

In the latest survey, tri-party agents provided additional information in the form of analyses of their clients' collateral holdings in terms of credit rating and type of collateral. These analyses are shown in the following tables.

Table 2.9 – Tri-party repo collateral analysed by credit rating

	June 2009
AAA	46.4%
AA	18.7%
A	23.1%
BBB	5.4%
below BBB-	1.6%
A1/P1	4.0%
A2/P2	0.1%
Non-Prime	0.0%
unrated	0.7%

Table 2.10 – Tri-party repo collateral analysed by type of collateral

	June 2009
government securities	42.0%
public agencies / sub-national governments	4.9%
supranational agencies	10.0%
corporate bonds	21.3%
covered bonds	5.0%
residential mortgage-backed	1.6%
commercial mortgage-backed	1.4%
other asset-backed	1.2%
CDO, CLN, CLO, etc	2.1%
convertible bonds	1.6%
equity	8.1%
other	0.8%

Contract analysis (Q1.5)

The share of reported outstanding repo contracts negotiated electronically, which took the form of documented buy-sell-backs, jumped from 32.7% to 42.0%, possibly reflecting the introduction of facilities in the domestic Italian repo market (which is entirely composed of buy-sell-backs) to report direct trades to the central clearing counterparty

(CCP) through ATS’s. In the main survey, the share of undocumented buy-sell-backs fell to 3.9%.

Figure 2.5 – Contract analysis

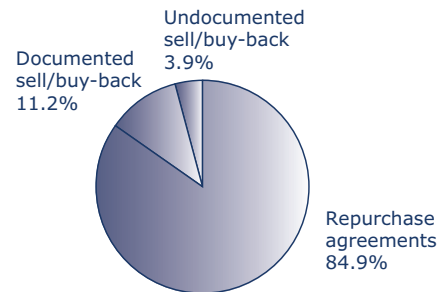


Table 2.11 – Contract comparison in June 2009

	main survey	ATS	tri-party
repurchase agreements	84.9%	58.0%	100.0%
documented sell/buy-backs	11.2%	42.0%	0.0%
undocumented sell/buy-backs	3.9%	0.0%	0.0%

Repo rate analysis (Q1.6)

The share of floating-rate repos (typically indexed to EONIA) fell back further to 8.5% from 9.3%, well below its record high of 13.3% in December 2007.

Figure 2.6 – Repo rate analysis

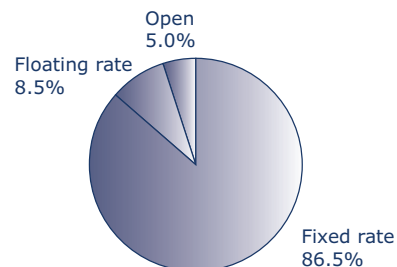
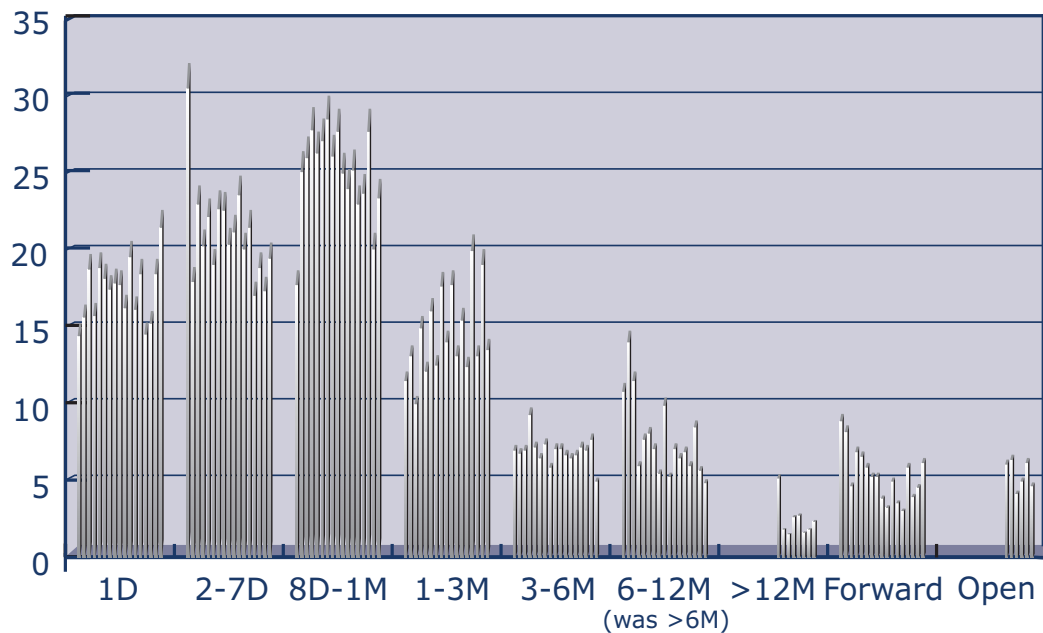


Table 2.12 – Repo rate comparison in June 2009

	main survey	ATS	tri-party
fixed rate	86.5%	88.4%	78.1%
floating rate	8.5%	11.6%	n/a
open	5.0%	0.0%	21.9%

Maturity analysis (Q1.7)**Table 2.13 – Maturity analysis**

	June 2009	December 2008	June 2008
1 day	21.3%	18.3%	15.1%
2 days to 1 week	19.3%	17.2%	18.7%
1 week to 1 month	23.2%	19.9%	27.5%
>1 month to 3 months	13.4%	18.9%	13.0%
>3 months to 6 months	4.9%	7.6%	6.9%
>6 months to 12 months	4.8%	5.6%	8.4%
>12 months	2.3%	1.8%	1.6%
forward-start	6.1%	4.5%	3.9%
open	4.6%	6.1%	4.9%

Figure 2.7 – Maturity analysis for all surveys

The seasonal pattern of the survey, in which the average duration of repo transactions lengthens in December, as banks lock in term funding over the year-end, and then shortens in June, in reaction, continued to be evident. Short-dated repo (with one month or less remaining to maturity) increased to 63.8% from 55.4%.

There was also a shortening in average duration in tri-party repo, with a noticeable increase in the share of transactions with one day remaining to maturity, which grew from 46.4% to 50.3%.

However, voice-brokered business, as reported by the WMBA, saw greater activity in transactions with a remaining term of between one week and three months, as well as forward-start repo, which grew from 41.0% to 45.7%. Forward-start repo also increased in the main survey from 4.5% to 6.1%. Greater forward-start activity traditionally reflects increased interest rate positioning but may also result from the hedging of interest rate gaps between one-year borrowing from central banks and shorter-term reinvestment.

Table 12.14 – Maturity comparison in June 2009

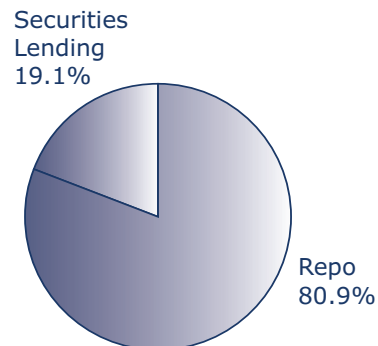
	main survey	ATS	tri-party	WMBA
1 day	21.3%	79.8%	50.3%	3.2%
2 days to 1 week	19.3%	11.9%	9.4%	6.9%
1 week to 1 month	23.2%	3.9%	8.4%	14.2%
>1 month to 3 months	13.4%	1.9%	6.8%	17.2%
>3 months to 6 months	4.9%	1.1%	4.1%	4.9%
>6 months to 12 months	4.8%	0.7%	0.5%	5.8%
>12 months	2.3%	0.0%	0.4%	0.4%
forward-start	6.1%	0.7%	20.1%	45.7%
open	4.6%			1.6%

Product analysis (Q2)

There was a dramatic recovery in securities lending conducted on repo desks to 19.1% from a record low of 12.5%.

Securities lenders appear to be returning to the market after retreating in response to the shock of the Lehman Brothers’ collapse.

Figure 2.8 – Product analysis

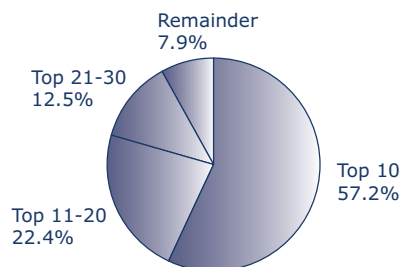


Concentration analysis

Table 2.15 – Concentration analysis

	June 2009	December 2008	June 2008
top 10	57.2%	49.0%	56.0%
top 20	79.6%	77.3%	81.7%
top 30	92.1%	91.7%	92.9%
other	7.9%	8.3%	7.1%

Figure 2.9 – Concentration analysis



December 2008 saw a marked reduction in the concentration of the surveyed repo market, reflecting greater de-leveraging by larger firms. This change was reversed in June 2009, when the share of the ten largest repo books increased from 49.0% to 57.2%, close to historical levels.

CHAPTER 3: CONCLUSION

The last survey largely recorded the aftermath of the collapse of Lehman Brothers in September 2008. The latest survey shows the return of some stability to the European repo market. However, growth was modest at 1.3% since December 2008. This reflects the continued de-leveraging among some banks and possibly, the impact of mergers between large banks.

There may be evidence of increased risk appetite in the reversal of some of the shifts seen in December 2008, notably a reduction in the share of government bonds, particularly

German government bonds, but also stronger cross-currency business, more forward-start transactions and a recovery in securities lending from repo desks.

On the other hand, tri-party repo appears to have become more cautious in some respects, eg increased use of government bonds, particularly the most liquid securities.

The events of 2007 and 2008 continue to be reflected in the increased share of electronic trading, the retreat of open repo and the greater use of documented repos. It remains to be seen whether all these developments are structural changes to the market.

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 10, 2009.

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 10, 2009, 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. For each question that you answer, you will receive back your ranking in that category.

b) If your institution does not transact a certain type of repo business, please enter 'N/A' in the relevant fields.

On the other hand, if your institution does that type of business but is not providing the data requested by the survey, please do not enter anything into the relevant field. If your institution does that type of business but has no transactions outstanding, please enter zero into the relevant field.

c) You only need to give figures to the *nearest million*. However, if you give figures 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.

d) Please do not re-format the survey form, ie change its lay-out, and do not leave formulae in the cells of the underlying spreadsheet.

e) Include all repurchase agreements (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).

f) Exclude repo transactions undertaken with central banks as part of their official money market operations.

Other repo transactions with central banks, e.g. as part of their reserve management operations, should be included.

g) Give the value of the cash which is due to be repaid on all repo and reverse repo contracts (*not* the market value or nominal value of the collateral) that are still *outstanding* at close of *business on Wednesday, June 10, 2009*. This means the value of transactions at their repurchase prices.

h) "Outstanding" means repos and reverse repos with a repurchase date or which will roll over on or after Thursday, June 11, 2009. You should include all *open repos and reverse repos* that have been rolled over from Wednesday, June 10, 2009 to a later date and all *forward-forward repos and reverse repos* that are still outstanding at close on Wednesday, June 10, 2009.

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

j) The survey seeks to measure the value of repos and reverse repos on a *transaction date basis*, rather than a purchase date basis. This means that you should include all repo and reverse repo contracts that have been agreed before close of business on Wednesday, June 10, 2009, even if their purchase dates are later.

k) 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.

l) In the case of equity repo, for synthetic structures, please give the value of the cash payment.

Guidance on specific questions in the survey form

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

(1.1.2) Transactions through voice-brokers should be broken down in terms of the location of the counterparties, rather than the location of the voice-brokers.

(1.1.3) "ATSs" are automatic trading systems (e.g. BrokerTec, Eurex Repo and MTS, but not voice-assisted electronic systems such as e-speed and GFInet). Transactions through voice-assisted systems should be included in (1.1.2). Anonymous transactions through an ATS with a central counterparty or CCP (e.g. CCG, LIFFE-Clearnet and Eurex Clearing) should be recorded in (1.1.3.4).

1.2 This item includes all the transactions recorded in (1.1.3) plus any transactions executed directly with counterparties and via voice-brokers which are then registered with and cleared through a central counterparty.

1.5 “Repurchase agreements” (also known as “classic repos”) include transactions documented under the Global Master Repurchase Agreement (GMRA) 1995 and the Global Master Repurchase Agreement (GMRA) 2000 *without* reference to the Buy/Sell-Back Annexes, and transactions documented under other master agreements. “Sell/buy-backs” are therefore taken to include all transactions that are not documented.

Repurchase agreements include pensions livrées. Repurchase agreements are characterised by the immediate payment by the buyer to the seller of a manufactured or substitute payment upon receipt by the buyer of a coupon on the collateral held by the buyer. If a coupon is paid on collateral during the term of a sell/buy-back, the buyer does not make an immediate manufactured or substitute payment to the seller, but reinvests the coupon until the repurchase date of the sell/buy-back and deducts the manufactured or substitute payment (plus reinvestment income) from the repurchase price due to be received from 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 Annexes to the GMRA 1995 and GMRA 2000), periodic adjustments to the relative amounts of collateral or

cash - which, for a repurchase agreement, would be performed by margin maintenance transfers or payments - are likely to be made by early termination and adjustment or re-pricing. All open repos are likely to be repurchase agreements.

1.7 This section asks for the *remaining* term to maturity (not the original term to maturity) of repos to be broken down as follows:

(1.7.1.1) 1 day - this means:

- all contracts transacted prior to Wednesday, June 10, 2009, with a repurchase date on Thursday, June 11, 2009;
- overnight, tom/next, spot/next and corporate/next contracts transacted on Wednesday, June 10, 2009.

(1.7.1.2) 2-7 days - this means:

- all contracts transacted prior to Wednesday, June 10, 2009, with a repurchase date on Friday, June 12, 2009, or any day thereafter up to and including Wednesday, June 17, 2009;
- contracts transacted on Wednesday, June 10, 2009, with an original repurchase date no later than Wednesday, June 17, 2009 (irrespective of the purchase date, which will vary).

(1.7.1.3) More than 7 days but no more than 1 month - this means:

- all contracts transacted prior to Wednesday, June 10, 2009, with a repurchase date on Thursday, June 18, 2009, or any day thereafter up to and including Friday, July 10, 2009;
- contracts transacted on Wednesday, June 10, 2009, with an original repurchase date no later than Friday, July 10, 2009 (irrespective of the purchase date, which will vary).

(1.7.1.4) More than 1 month but no more than 3 months – this means:

- all contracts transacted prior to Wednesday, June 10, 2009, with a repurchase date on Monday, July 13, 2009, or any day thereafter up to and including Thursday, September 10, 2009;
- contracts transacted on Wednesday, June 10, 2009, with an original repurchase date no later than Thursday, September 10, 2009 (irrespective of the purchase date, which will vary).

(1.7.1.5) More than 3 months but no more than 6 months – this means:

- all contracts transacted prior to Wednesday, June 10, 2009, with a repurchase date on Friday, September 11, 2009, or any day thereafter up to and including Thursday, December 10, 2009;
- contracts transacted on Wednesday, June 10, 2009, with an original repurchase date no later than Thursday, December 10, 2009 (irrespective of the purchase date, which will vary).

(1.7.1.6) More than 6 months but no more than 12 months – this means;

- all contracts transacted prior to Wednesday, June 10, 2009, with a repurchase date on Friday, December 11, 2009, or any day thereafter up to and including Thursday, June 11, 2009;
- contracts transacted on Wednesday, June 10, 2009, with an original repurchase date no later than Thursday, June 11, 2009 (irrespective of the purchase date, which will vary).

(1.7.1.7) More than 12 months – this means;

- all contracts transacted prior to Wednesday, June 10, 2009, with a repurchase date on Friday, June 11, 2010, or any day thereafter;
- contracts transacted on Wednesday, June 10, 2009, with an original repurchase date on or after Friday, June 11, 2010 (irrespective of the purchase date, which will vary).

(1.7.2) Forward-forward repos are defined for the purposes of this survey as contracts with a purchase date of Monday, June 15, 2009, or later. There is therefore an overlap with corporate/next transactions. If the latter cannot be identified separately, it is accepted that they will be recorded as forward-forward repos.

(1.7.3) Open repos are defined for the purposes of this survey as contracts that have no fixed repurchase date when

negotiated but are terminable on demand by either counterparty. This item should be equal to item (1.6.3).

1.8 Please confirm whether the transactions recorded in the various questions in (1.7) include your tri-party repo business. Some institutions do not consolidate their tri-party repo transactions with their direct or voicebrokered business because of delays in receiving reports from tri-party agents or the complexity of their triparty business.

1.9 Eurobonds should be included as fixed income securities issued "by other issuers" in the countries in which the bonds are issued. This will typically be Luxembourg (1.9.10) and the UK (1.9.15). Equity collateral should be recorded in (1.9.34).

(1.9.28) "US in the form of fixed income securities 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 should be treated as bonds issued "by other issuers" in the countries in which the bonds were issued.

This will typically be Luxembourg (1.9.10) and the UK (1.9.15).

(1.9.30) "Other OECD countries" are Australia, Canada, Iceland, Korea, Mexico, New

Zealand, Norway, Switzerland, Turkey and the US. In the case of collateral issued in the US, only collateral settled across the domestic US settlement system should be included in (1.9.30). US collateral settled across Euroclear and Clearstream Luxembourg should be recorded in (1.9.28).

(1.9.34) "Equity" includes ordinary shares, preference shares and equity-linked debt such as convertible bonds.

2 "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.

3 "Active" means about once a week or more often.

For further help and information

If, having read the Guidance Notes, you have any further queries, please e-mail the ICMA Centre at reposurvey@icmagroup.org or contact one of the following members of the ERC Steering Committee:

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This survey is being conducted by the ICMA Centre, University of Reading, UK, at the request of ICMA's European Repo Council (ERC).

List of respondents	Jun -01	Dec -01	Jun -02	Dec -02	Jun -03	Dec -03	Jun -04	Dec -04	Jun -05	Dec -05	Jun -06	Dec -06	Jun -07	Dec -07	Jun -08	Dec -08	Jun -09
Dexia BIL						x				x	x	x		x			
Dexia Kommunal Bank Deutschland	x	x							x	x	x	x	x	x	x	x	x
Dresdner Bank	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
DZ Bank	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
EFG Eurobank Ergasias			x	x			x		x	x	x	x	x	x	x	x	x
Egnatia Bank					x		x										
Erste Bank der Oesterreichischen Sparkassen	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Euroclear Bank				x	x		x	x	x	x	x	x	x	x	x	x	x
Eurohypo						x		x	x	x	x	x					
Eurohypo Europäische Hypothekenbank													x	x	x	x	x
European Investment Bank			x				x	x									
Fortis Bank	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
General Bank of Greece			x	x													
Goldman Sachs	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Halifax Bank of Scotland	x	x	x	x	x	x	x	x	x	x	x						
HSBC														x		x	x
HSBC Athens			x														
HSBC France			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSH Nordbank	x	x	x	x	x	x	x	x	x								
Bayerische Hypo-und-Vereinsbank	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
IIB Bank					x												
ING Bank					x	x		x	x	x	x	x	x	x	x	x	x
ING Belgium	x		x	x	x	x				x	x	x					
Intesa SanPaolo	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x
JP Morgan	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
KBC	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x
KfW							x	x	x		x	x	x	x	x		
Kingdom of Belgium Federal Public Service Debt Agency					x		x		x	x	x	x	x	x	x	x	x
Landesbank Baden- Württemberg, Stuttgart	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Landesbank Hessen- Thüringen- Girozentrale (Helaba)					x	x	x	x	x	x	x	x	x	x	x		x
Landesbank Rheinland Pfalz	x	x	x	x	x	x	x	x	x	x	x	x	x				

List of respondents	Jun -01	Dec -01	Jun -02	Dec -02	Jun -03	Dec -03	Jun -04	Dec -04	Jun -05	Dec -05	Jun -06	Dec -06	Jun -07	Dec -07	Jun -08	Dec -08	Jun -09
Landesbank Sachsen Girozentrale	x	x	x	x	x	x	x	x	x	x	x	x	x				
Lehman Brothers		x	x	x	x		x	x	x	x	x	x	x	x	x		
Maple Bank	x	x	x														
Merrill Lynch	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x
Mitsubishi Securities International		x	x	x	x	x	x	x	x	x						x	x
Mizuho International	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Morgan Stanley	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Natexis Banques Populaires		x	x	x		x											
National Bank of Greece	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x
Nomura International	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x
Norddeutsche Landesbank Girozentrale	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Nordea Markets			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Norinchukin Bank						x	x	x	x	x	x	x	x				x
Nova Ljubljanska Banka d.d.							x						x	x			x
Omega Bank			x	x													
Piraeus Bank			x														
Rabobank		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Royal Bank of Scotland			x	x	x	x	x	x	x	x	x	x	x	x	x		x
Sal. Oppenheim Jr.	x	x	x			x	x	x					x				
Sampo Bank			x	x					x	x		x					
SEB		x		x													
Société Générale		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Toronto Dominion Bank					x	x											
UBS	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Ulster Bank			x	x			x	x	x	x		x					
Unicredit/Bayerische Hypo-un-Vereinsbank Milano Branch			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Unicredit CAIB (RZB)	x	x	x		x		x	x	x	x	x	x	x			x	x
Unicredito Italiano Bank (Ireland)					x												
Vereins und Westbank			x	x	x	x	x										
Westdeutsche Immobilien Bank		x	x														
Westdeutsche Landesbank Girozentrale	x		x			x	x			x	x	x	x	x	x		x
Zagrabacka Banka				x				x		x	x		x				

APPENDIX C: SUMMARY OF SURVEY RESULTS

Q1 What are the total gross values of cash due to be repaid by you and repaid to you on repo transactions maturing after June 10, 2009? (figures in EUR billions)					
	6,047	6,775	6,504	4,633	4,868
Of the amounts given in response to question (1) above:					
	Jun-06	Jun-07	Jun-08	Dec-08	Jun-09
1.1 How much was transacted:					
direct with counterparties					
• in the same country as you	19.2%	19.5%	17.3%	17.6%	19.2%
• cross-border in (other) eurozone countries	17.5%	15.9%	14.0%	14.7%	13.1%
• cross-border in non-eurozone countries	22.1%	23.8%	20.4%	19.3%	19.8%
through voice-brokers					
• in the same country as you	9.1%	7.6%	9.9%	10.4%	10.3%
• cross-border in (other) eurozone countries	7.5%	6.7%	7.5%	5.5%	5.6%
• cross-border in non-eurozone countries	3.8%	4.7%	5.7%	4.3%	3.5%
on ATs with counterparties					
in the same country as you	6.3%	4.8%	5.0%	3.3%	4.6%
• cross-border in (other) eurozone countries	3.5%	3.1%	5.3%	3.9%	6.6%
• cross border-border in non-eurozone countries	2.2%	3.5%	2.2%	3.4%	2.8%
• anonymously through a central clearing counterparty	8.7%	10.3%	12.7%	17.6%	14.5%
• total through a central clearing counterparty			24.4%	33.2%	32.0%
1.2 How much of the cash is denominated in:					
• EUR	65.2%	65.2%	66.6%	70.6%	64.2%
• GBP	13.5%	12.4%	14.5%	13.0%	15.3%
• USD	13.9%	15.5%	12.7%	9.6%	14.2%
• SEK, DKK	1.8%	2.5%	2.2%	2.4%	1.8%
• JPY	3.5%	2.8%	2.8%	3.1%	3.1%
• CHF	0.2%	0.2%	0.2%	0.6%	0.6%
• other currencies	1.9%	1.4%	0.9%	0.8%	0.9%
1.3 How much is cross-currency?	1.5%	5.30%	1.0%	0.6%	1.3%
1.4 How much is:					
• classic repo	83.0%	82.7%	83.6%	84.7%	84.9%

	Jun-06	Jun-07	Jun-08	Dec-08	Jun-09
• documented sell/buy-backs	12.0%	9.4%	12.2%	11.1%	11.2%
• undocumented sell/buy-backs	5.0%	7.8%	4.2%	4.1%	3.9%
1.5 How much is:					
• fixed rate	81.3%	78.9%	84.8%	85.6%	86.5%
• floating rate	10.5%	13.1%	10.4%	9.3%	8.5%
• open	8.2%	8.1%	4.8%	5.1%	5.0%
1.6 How much fixed and floating rate repo is (1.6.1) for value before June 10, 2009 and has a remaining term to maturity of:					
• 1 day	19.4%	18.3%	15.1%	18.3%	21.3%
• 2-7 days	23.4%	21.3%	18.7%	17.2%	19.3%
• more than 7 days but no more than 1 month	23.8%	22.8%	27.5%	19.9%	23.2%
• more than 1 month but no more than 3 months	13.0%	12.3%	13.0%	18.9%	13.4%
• more than 3 months but no more than 6 months	6.6%	6.6%	6.9%	7.6%	4.9%
• more than 6 months	7.0%	6.8%	8.4%	5.6%	4.8%
• More than 12 months	1.8%	2.6%	1.6%	1.8%	2.3%
• forward-forward repos	4.9%	3.0%	3.9%	4.5%	6.1%
• open		6.3%	4.9%	6.1%	4.6%
1.7 How much is tri-party repo:	11.3%	11.8%	10.1%	89.3%	86.9%
• for fixed terms to maturity	87.9%	92.6%	92.1%	10.7%	13.1%
• on an open basis	12.1%	6.6%	7.8%	9.4%	11.1%
1.8 How much is against collateral issued in:					
Austria					
• by the central government	0.8%	1.1%	1.3%	1.0%	1.0%
• by other issuers	0.1%	0.1%	0.3%	0.1%	0.2%
Belgium					
• by the central government	3.2%	2.6%	3.3%	2.6%	2.1%
• by other issuers	0.3%	0.1%	0.2%	0.1%	0.0%
Denmark					
• by the central government	0.3%	0.2%	0.1%	0.2%	0.1%
• by other issuers	0.3%	0.2%	0.2%	0.3%	0.4%
Finland					
• by the central government	0.3%	0.2%	0.4%	0.3%	0.2%
• by other issuers	0.1%	0.1%	0.0%	0.0%	0.0%
France					
• by the central government	9.1%	9.8%	9.4%	8.4%	7.7%
• by other issuers	1.0%	1.4%	1.5%	1.7%	1.9%
Germany					
• by the central government	18.4%	19.0%	19.9%	23.8%	19.3%

	Jun-06	Jun-07	Jun-08	Dec-08	Jun-09
• pfandbrief	2.0%	2.3%	1.4%	1.5%	1.5%
• by other issuers	3.2%	3.1%	4.2%	4.3%	3.9%
Greece					
• by the central government	1.8%	2.3%	2.5%	2.3%	2.3%
• by other issuers	0.2%	0.0%	0.0%	0.0%	0.1%
Ireland					
• by the central government	0.2%	0.1%	0.2%	0.3%	0.4%
• by other issuers	0.2%	0.3%	0.5%	0.4%	0.3%
Italy					
• by the central government	14.8%	12.8%	11.8%	11.8%	10.8%
• by other issuers	0.5%	0.5%	0.7%	0.4%	0.4%
Luxembourg					
• by the central government	0.0%	0.3%	0.0%	0.2%	0.2%
• by other issuers	0.5%	0.4%	0.7%	0.4%	0.4%
Netherlands					
• by the central government	1.8%	2.0%	2.0%	2.2%	1.8%
• by other issuers	0.7%	0.5%	0.6%	0.4%	0.4%
Portugal					
• by the central government	0.9%	0.9%	1.0%	1.1%	0.8%
• by other issuers	0.0%	0.0%	0.1%	0.1%	0.1%
Spain					
• by the central government	3.3%	3.2%	3.4%	3.6%	3.4%
• by other issuers	0.9%	1.0%	1.6%	1.3%	1.2%
Sweden					
• by the central government	1.1%	0.9%	0.6%	0.5%	0.4%
• by other issuers	0.4%	0.4%	0.3%	0.4%	0.4%
UK					
• by the central government	11.5%	10.3%	11.4%	10.6%	12.8%
• by other issuers	2.7%	2.5%	3.5%	2.2%	3.3%
US but settled across EOC/CS	2.2%	4.0%	0.0%	2.9%	2.6%
other countries					
Bulgaria					
• by the central government	0.0%	0.0%	0.0%	0.0%	0.0%
• by other issuers	0.0%	0.0%	0.0%	0.0%	0.0%
Cyprus					
• by the central government	0.0%	0.0%	0.0%	0.0%	0.0%
• by other issuers	0.0%	0.0%	0.0%	0.0%	0.0%
Czech Republic					
• by the central government	0.0%	0.0%	0.0%	0.0%	0.0%
• by other issuers	0.0%	0.0%	0.0%	0.0%	0.0%
Estonia					
• by the central government	0.0%	0.0%	0.0%	0.1%	0.0%
• by other issuers	0.0%	0.0%	0.1%	0.0%	0.0%
Hungary					
• by the central government	0.8%	0.5%	0.0%	0.0%	0.0%
• by other issuers	0.0%	0.0%	0.0%	0.0%	0.0%

	Jun-06	Jun-07	Jun-08	Dec-08	Jun-09
Latvia					
• by the central government	0.0%	0.0%	0.0%	0.0%	0.0%
• by other issuers	0.0%	0.0%	0.0%	0.0%	0.0%
Lithuania					
• by the central government	0.0%	0.0%	0.0%	0.0%	0.0%
• by other issuers	0.0%	0.0%	0.0%	0.0%	0.0%
Malta					
• by the central government	0.0%	0.0%	0.0%	0.1%	0.0%
• by other issuers	0.0%	0.0%	0.1%	0.0%	0.0%
Poland					
• by the central government	0.2%	0.2%	0.0%	0.0%	0.2%
• by other issuers	0.0%	0.0%	0.0%	0.0%	0.0%
Romania					
• by the central government		0.0%	0.0%	0.0%	0.0%
• by other issuers		0.0%	0.0%	0.0%	0.0%
Slovak Republic					
• by the central government	0.0%	0.0%	0.0%	0.0%	0.0%
• by other issuers	0.0%	0.0%	0.0%	0.0%	0.0%
Slovenia					
• by the central government	0.0%	0.0%	0.0%	0.0%	0.0%
• by other issuers	0.0%	0.0%	0.0%	0.0%	0.0%
Japan	4.5%	2.5%	2.0%	2.9%	2.1%
other OECD	8.8%	7.9%	7.3%	7.3%	9.5%
non-OECD EMEA	0.4%	0.7%	0.6%	0.5%	0.5%
non-OECD Asian & Pacific	0.4%	0.4%	0.4%	0.3%	0.2%
non-OECD Latin America	0.6%	0.6%	0.5%	0.3%	0.4%
equity	0.5%	1.6%	1.1%	1.1%	0.7%
collateral of unknown origin or type	1.3%	3.0%	1.3%	2.1%	5.8%
Q2 What is the total value of securities loaned and borrowed by your repo desk: to/from counterparties					
in the same country as you					
• in fixed income	43.9%	40.8%	46.7%	35.0%	48.3%
• in equity	4.2%	4.4%	3.2%	6.3%	2.0%
cross-border in (other) eurozone countries					
• in fixed income	26.3%	22.1%	20.0%	17.5%	20.7%
• in equity	3.5%	5.6%	3.8%	6.8%	2.7%
cross-border in non-eurozone countries					
• in fixed income	20.7%	23.1%	22.5%	33.2%	25.8%
• in equity	1.5%	3.9%	3.8%	1.3%	0.6%
for which the term to maturity is					
• fixed	60.1%	55.3%	70.3%	65.1%	80.8%
• open	39.9%	44.7%	29.7%	34.9%	19.2%

APPENDIX D: THE EUROPEAN REPO COUNCIL

The European Repo Council (ERC) is the forum where the repo dealer community meets and forges consensus solutions to the practical problems of a rapidly evolving marketplace. In this role, it has been consolidating and codifying best market practice. The contact and dialogue that takes place at the ERC underpins the strong sense of community and common interest that characterises the professional repo market in Europe.

The ERC was established in December 1999 by the International Capital Market Association (ICMA, which was then called the International Securities Market Association or ISMA) as a body operating under ICMA auspices. Its governing board is the International Repo Committee (IRC Committee), which consists of two representatives appointed by regional repo councils, which in turn comprise those IRC members that are active in the repo market of a particular geographic area. The regional repo councils are to be established by the IRC Committee for those geographic regions in which it considers there to be a reasonable number of ICMA members active in the repo market and a reasonable level of repo dealing. So far, the ERC is the only regional repo council has been formed, but the IRC is in the process of considering whether to establish Asian and Japanese Repo Councils.

Membership of the ERC is open to any ICMA member who has commenced, or has undertaken to commence, a dedicated repo activity, is willing to abide by the rules applicable to members of the IRC and has sufficient professional expertise, financial standing and technical resources to meet its obligations as a member of the IRC. Membership of the ERC is granted by the IRC Committee in consultation with the ERC Steering Committee.

The ERC meets twice a year (usually in February/March and September) at different financial centres across Europe. The Steering Committee now comprises 19 members elected annually and meets four times a year.

More information about the ERC and IRC is available on www.icmagroup.org.