



# **International Capital Market Association**

## **European repo market survey**

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## **ABOUT THE AUTHOR**

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The author has written a number of books and articles on a range of financial topics, including the foreign exchange and money markets, swaps and electronic trading systems. He takes particular interest in the impact of 'electronic brokers' on the foreign exchange market and in the more recent introduction of electronic trading systems into the bond and repo markets.

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 December 2008, the European Repo Council (ERC) of the International Capital Market Association (ICMA) conducted the 16th 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 December 10, 2008. Replies were received from 61 offices of 56 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 4,633 billion, compared to EUR 6,504 billion in June 2008 and the peak of EUR 6,775 billion reached in June 2007.

This is the most severe reduction in the headline number since the survey began in 2001, reflecting the acceleration of de-leveraging by banks since the collapse of Lehman Brothers in September 2008.

Comparing the aggregate returns from a sample of institutions that have participated in all of the last three surveys, the repo market contracted by almost 26% in the six months since the last survey, after a modest contraction in the previous six months. The average size of repo books has shrunk since June 2008 to EUR 76 billion from EUR 107 billion.

### Counterparty analysis

The growth of electronic trading continued, reaching a record 28.2% from 24.4% in June 2008.

### Geographical analysis

There was a dramatic increase in the share of outstanding repo contracts that were negotiated anonymously on an ATS and settled with a central clearing counterparty (CCP) to a record 17.6% from 12.7% in June 2008, confirming the importance attached by the market to the creditworthiness and automatic netting facilities of CCP.

### Settlement analysis

The share of tri-party repos fell back to 9.4% from 10.1%.

### Cash currency analysis

The pound sterling continued to fall, touching 13.0% from 14.5%. The US dollar also retreated sharply, falling back to

9.6% from 12.7%. Exchange rate effects are likely to have contributed to these falls.

### **Collateral analysis**

The trend decline in the use of government bonds as collateral was reversed. The share of government bonds increased to 83.6%, compared to the record low of 81.0% in June 2008. The share of government bonds in tri-party repos fell back from a corrected 47.3% in June 2008 but remained historically high at 41.8%. There was an increase in the use of German government bonds as collateral, and also a large increase in the use in triparty repo of German collateral other than government bonds or pfandbrief.

### **Contract analysis**

The share of floating-rate repos continued to fall, touching 9.3%, compared to 10.4% in June 2008 and the record high of 13.3% in December 2007. The share of open repo recovered very slightly to 5.1% from its record low of 4.8%. Open repo expanded sharply in directly-reported triparty business, increasing from 10.8% to 20.9%, which is a historically more normal level.

### **Maturity analysis**

The seasonal need of banks to lock in term funding over the year-end was evident in a significant increase in business with remaining

terms of 1-3 months. This may have disguised an underlying reduction in duration, which was reflected to some extent in a reduction in short-dated transactions to 55.4% from 61.3%. The maturity profile of tri-party repos continued to shorten dramatically, with transactions with one day remaining to maturity jumping to 46.5% from 29.1% in June 2008, largely at the expense of transactions with remaining terms of between one week and one month. This means that turnover in triparty repos will tend to appear healthier than outstandings would suggest.

### **Product analysis**

The share of total business conducted on repo desks that was accounted for by securities lending and borrowing fell back sharply to 12.5% from 21.7%, confirming anecdotal evidence from this market.

### **Concentration analysis**

There was a reduction in the concentration of the repo market, suggesting bigger banks have tended to de-leverage faster.

## **CHAPTER 1: THE SURVEY**

On December 10, 2008, the European Repo Council (ERC) of the International Capital Market Association (ICMA) conducted the sixteenth 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, December 10, 2008.

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 56 financial groups. These are the same numbers as in June 2008, but not the same institutions. While 6 institutions which participated in the last survey dropped out of the latest survey, 6 institutions rejoined.

The institutions surveyed were based in 14 European countries, as well as in North America (4) and Japan (4). 50 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 45 were based in 10 of the 16 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, June 10, 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](http://www.icmagroup.org/surveys/repo/participate).

Questions about the survey should be sent by e-mail to [reposurvey@icmagroup.org](mailto: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 (2005-2008), are set out in Appendix C. Full details for all previous surveys can be found at [www.icmagroup.org](http://www.icmagroup.org).

### Total repo business (Q1)

The total value at close of business on December 10, 2008, of repos and reverse repos outstanding on the books of the 61 institutions which participated in the latest survey fell dramatically to EUR 4,633 billion. Of the sample of 61 institutions, 29 were net lenders, unchanged from the last survey.

**Table 2.1 – Total repo business from 2001 to 2008**

survey	total (EUR bn)	repo	reverse repo
<b>2008 December</b>	4,633	49.9%	50.1%
<b>2008 June</b>	6,504	48.8%	51.2%
<b>2007 December</b>	6,382	49.4%	50.6%
<b>2007 June</b>	6,775	50.8%	49.2%
<b>2006 December</b>	6,430	50.7%	49.3%
<b>2006 June</b>	6,019	51.7%	48.3%
<b>2005 December</b>	5,883	54.6%	45.4%
<b>2005 June</b>	5,319	52.4%	47.6%
<b>2004 December</b>	5,000	50.1%	49.9%
<b>2004 June</b>	4,561	50.6%	49.4%
<b>2003 December</b>	3,788	51.3%	48.7%
<b>2003 June</b>	4,050	50.0%	50.0%
<b>2002 December</b>	3,377	51.0%	49.0%
<b>2002 June</b>	3,305	50.0%	50.0%
<b>2001 December</b>	2,298	50.4%	49.6%
<b>2001 June</b>	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 54 institutions that participated in all of the last three surveys contracted by 25.7% over the six months from the June 2008 survey and by 27.3% year-on-year. There can be little doubt that this contraction reflected the more rapid de-leveraging of balance sheets by banks that is reported to have taken place since the collapse of Lehman Brothers in September 2008.

Of the 61 institutions in the latest survey, the repo books of 18 expanded and two were unchanged, a similar pattern to the last survey, but clearly with the magnitude of decreases exceeding

increases. The average size of repo books dropped to EUR 76 billion from EUR 107 billion in June 2008.

## Counterparty analysis (Q1.1)

**Table 2.2 – Counterparty analysis**

	December 2008		June 2008		December 2007	
	users	share	users	share	users	share
<b>direct</b>	61	51.6%	61	54.5%	68	54.5%
<b>of which tri-party</b>	30	9.4%	30	10.1%	36	9.4%
<b>voice-brokers</b>	47	20.2%	46	21.1%	51	24.3%
<b>ATS</b>	45	28.2%	47	24.4%	48	21.2%

The sharp recovery in the share of electronic repo trading continued, but largely at the expense of direct business, rather

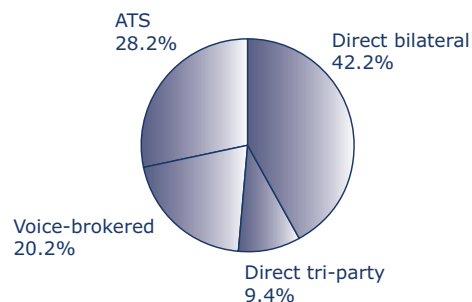
than voice-brokers, as previously tended to be the case. Triparty activity fell back.

**Table 2.3 – Numbers of participants reporting particular types of business**

	Jun-06	Dec-06	Jun-07	Dec-07	Jun-08	Dec-08
<b>ATS</b>	54	51	56	48	47	45
<b>anonymous ATS</b>	34	33	39	35	33	35
<b>voice-brokers</b>	58	54	54	51	46	47
<b>tri-party repos</b>	42	37	45	36	30	30
<b>total</b>	79	73	77	68	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 December 10, 2008, was EUR 766 billion, down from the EUR 816.8 billion reported in June, but still above the EUR689.6 billion in December 2007, although well below the EUR 961.1 billion peak in June 2007. Thus, electronic trading took a larger share of a shrinking market, rather than growing in absolute terms.

**Figure 2.1 – Counterparty analysis**



## Geographical analysis (Q1.1)

**Table 2.4 – Geographical analysis**

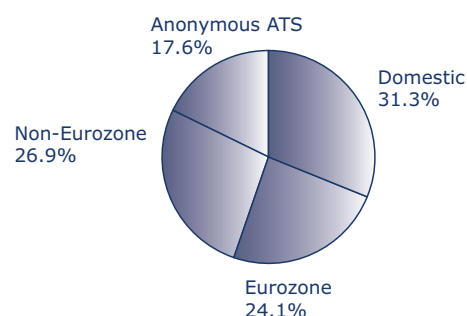
	December 2008		June 2008		December 2007	
	share	users	share	users	share	users
<b>domestic</b>	31.3%		32.2%		34.7%	
<b>cross-border</b>	51.0%		55.1%		54.7%	
<b>anonymous</b>	17.6%	35	12.7%	33	10.5%	35

The share of anonymous trading across ATS's expanded significantly to a record 17.6%, confirming the attraction of central clearing counterparties (CCP's) as a means of reducing risk. Anonymous electronic trading grew largely at the expense of cross-border activity, which fell back to 51.0% from 55.1% in June 2008, particularly business with eurozone counterparties.

The share of anonymous electronic trading in the business reported directly by the ATS's grew further to 79.6% from 77.9%.

There was a shift in directly-reported electronic and triparty business into transactions with eurozone counterparties, largely from other cross-border business. In contrast, voice-brokered business, as reported by the WMBA for London-based brokers, moved away from eurozone counterparties into domestic and non-eurozone transactions. Given that the WMBA members are London-based, their data will be biased towards the business of London-based banks.

**Figure 2.2 – Geographical analysis**



**Table 2.5 – Geographical comparisons in December 2008**

	main survey	ATS	triparty	WMBA
<b>domestic</b>	31.3%	39.6%	25.2%	39.2%
<b>cross-border</b>	51.0%	60.4%	74.8%	60.8%
<b>anonymous</b>	17.6%			n/a

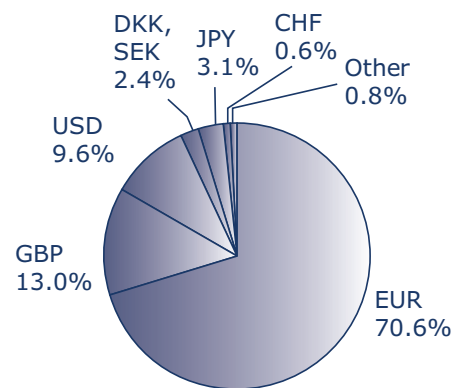
**Table 2.6 – Cash currency analysis (Q1.3 and Q1.4)**

	December 2008	June 2008	December 2007
<b>EUR</b>	70.6%	66.6%	64.8%
<b>GBP</b>	13.0%	14.5%	15.5%
<b>USD</b>	9.6%	12.7%	11.7%
<b>DKK, SEK</b>	2.4%	2.2%	2.4%
<b>JPY</b>	3.1%	2.8%	3.7%
<b>CHF</b>	0.6%	0.2%	0.2%
<b>etc</b>	0.8%	0.9%	1.7%
<b>cross-currency</b>	0.6%	1.0%	2.3%

The share of the euro increased further by December 2008, while the pound sterling and US dollar contracted, to some extent, reflecting the depreciation of these currencies against the euro (by about 11% and 16%, respectively). Sterling also continued to lose ground in electronic trading and triparty business (falling to 6.0% from 7.5% and to 6.8% from 10.5%, respectively), but advanced in voice-brokered business (from 30.5% to 38.9%), doubtless reflecting the London-based nature of the reporting brokers. The share of the dollar in triparty business fell back again, albeit modestly (to 16.1% from 17.3%), but took an increased share of electronic trading (2.4% compared to 0.9% in June 2008). There was also relatively greater electronic trading in Swiss francs (8.5% from 6.6%).

Cross-currency business fell further, touching 0.6% in the main survey, and falling sharply to 13.5% from 21.0% in triparty business.

**Figure 2.3 – Currency analysis**

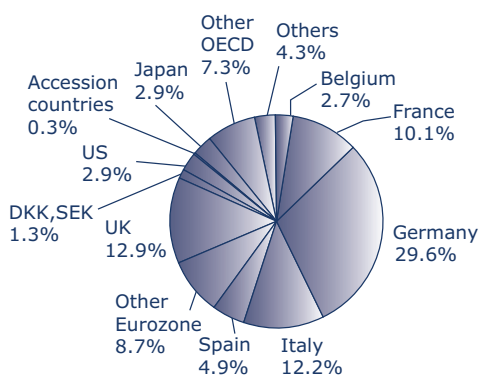


**Table 2.7 – Currency comparison in December 2008**

	main survey	ATS	triparty	WMBA
<b>EUR</b>	70.6%	83.1%	76.3%	55.9%
<b>GBP</b>	13.0%	6.0%	6.8%	38.9%
<b>USD</b>	9.6%	2.4%	16.1%	3.3%
<b>DKK, SEK</b>	2.4%	0.0%	0.0%	1.2%
<b>JPY</b>	3.1%	0.0%	0.6%	0.5%
<b>CHF</b>	0.6%	8.5%	0.3%	0.0%
<b>etc</b>	0.8%	0.0%	0.0%	0.2%
<b>cross-currency</b>	0.6%	n/a	13.5%	n/a

**Collateral analysis (Q1.9)****Table 2.8 – Collateral analysis**

	December 2008	June 2008	December 2007
<b>Germany</b>	29.6%	25.5%	25.1%
<b>Italy</b>	12.2%	12.4%	13.5%
<b>France</b>	10.1%	10.9%	9.7%
<b>Belgium</b>	2.7%	3.5%	2.8%
<b>Spain</b>	4.9%	5.0%	4.9%
<b>other eurozone</b>	8.7%	9.8%	8.4%
<b>UK</b>	12.9%	14.9%	16.0%
<b>DKK, SEK</b>	1.3%	1.3%	1.4%
<b>US</b>	2.9%	3.0%	2.3%
<b>Accession countries</b>	0.3%	0.4%	0.5%
<b>Japan</b>	2.9%	2.0%	2.9%
<b>other OECD</b>	7.3%	7.3%	7.4%
<b>other</b>	3.2%	2.8%	3.7%
<b>equity</b>	1.1%	1.1%	1.3%

**Figure 2.4 – Collateral analysis**

The trend decline in the use of collateral issued by EU central governments was reversed. The share of government bonds

rebounded to 83.6% from the record low in June 2008 of 81.0%. There was a significant increase in the share of German collateral, possibly reflecting a flight to quality, given the increasing differentiation of eurozone government debt, and a reduction in the share of UK collateral, possibly reflecting exchange rate changes.

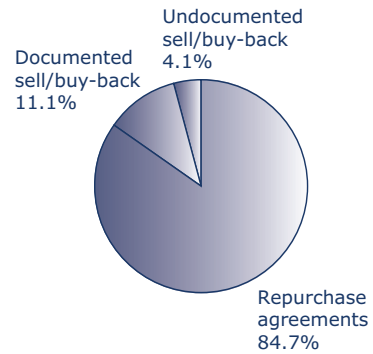
The share of OECD, but especially EU and eurozone collateral, increased in triparty business. This included a large

increase in the use of German collateral other than government bonds or pfandbrief. The share of government bonds in tri-party repos fell back from a corrected 47.3% in June 2008 but remained historically high at 41.8%.

**Contract analysis (Q1.5)**

The share of reported outstanding repo contracts taking the form of repurchase agreements recovered to 84.7% from 83.6%, entirely at the expense of documented sell/buy-backs

**Figure 2.5 – Contract analysis**



**Table 2.9 – Contract comparison in December 2008**

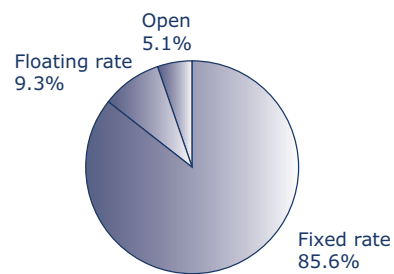
	main survey	ATS	tri-party
repurchase agreements	84.7%	67.3%	100.0%
documented sell/buy-backs	11.1%	32.7%	0.0%
undocumented sell/buy-backs	4.1%	0.0%	0.0%

**Repo rate analysis (Q1.6)**

The share of floating-rate repos (typically indexed to EONIA) fell back further to 9.3% from 10.4% in June 2008 and its record high of 13.3% in December 2007.

Open repo expanded sharply in directly-reported triparty business, increasing from 10.8% to 20.9%, which is a historically more normal level, and expanded as a share of triparty business reported in the main survey, reaching 10.7% from 7.9%.

**Figure 2.6 – Repo rate analysis**

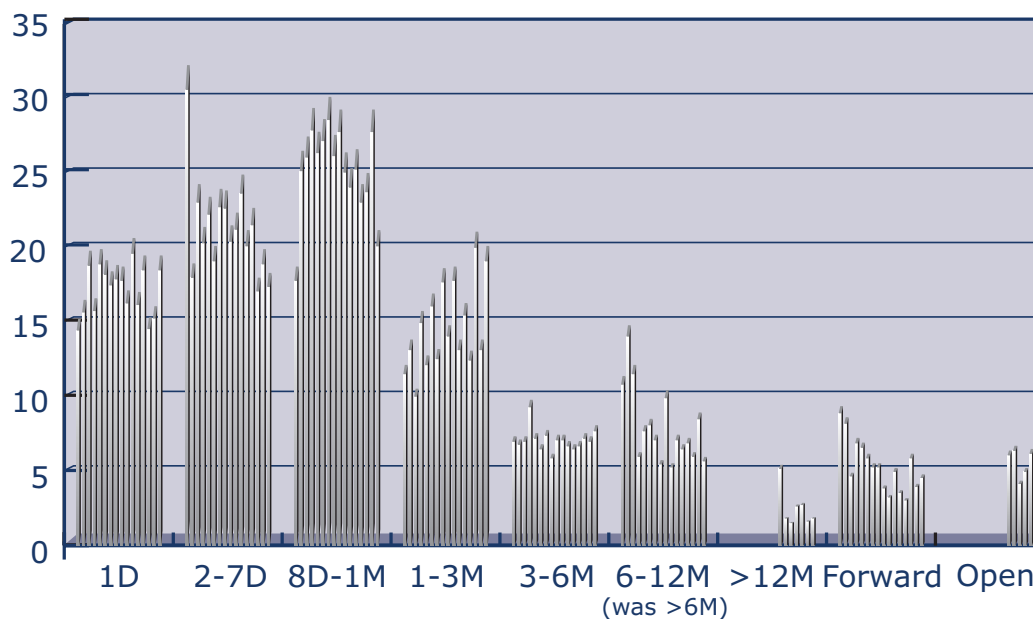


**Table 2.10 – Repo rate comparison in December 2008**

	main survey	ATS	tri-party
<b>fixed rate</b>	85.6%	88.0%	79.1%
<b>floating rate</b>	9.3%	12.0%	n/a
<b>open</b>	5.1%	0.0%	20.9%

**Maturity analysis (Q1.7)****Table 2.11 – Maturity analysis**

	December 2008	June 2008	December 2007
<b>1 day</b>	18.3%	15.1%	14.4%
<b>2 days to 1 week</b>	17.2%	18.7%	16.9%
<b>1 week to 1 month</b>	19.9%	27.5%	23.5%
<b>&gt;1 month to 3 months</b>	18.9%	13.0%	19.8%
<b>&gt;3 months to 6 months</b>	7.6%	6.9%	7.1%
<b>&gt;6 months to 12 months</b>	5.6%	8.4%	5.9%
<b>&gt;12 months</b>	1.8%	1.6%	2.7%
<b>forward-start</b>	4.5%	3.9%	5.8%
<b>open</b>	6.1%	4.9%	4.1%

**Figure 2.7 – Maturity analysis**

The seasonal need of banks to lock in term funding over the year-end was evident in a significant increase in business with

remaining terms of 1-3 months, which fell to 18.9% from 13.0%. This may have disguised an underlying reduction in duration,



which was reflected to some extent in a reduction in short-dated transactions to 55.4% from 61.3%, largely in business between one week and one month. In part, reduced duration would be a consequence of more electronic trading, which tends to be shorter-term.

The shortening of maturities was even more marked in business reported directly by the ATS's. One-day business increased to 81.7% from 76.6%, while other short dates contracted from 21.4% to 14.3%.

The maturity profile of tri-party repos also continued to shorten dramatically, with transactions with one day remaining to maturity jumping to 46.5% from 29.1% in June 2008, largely at the expense of transactions with remaining terms of between one week and one month. This means that turnover in triparty repos will tend to appear healthier than outstandings would suggest.

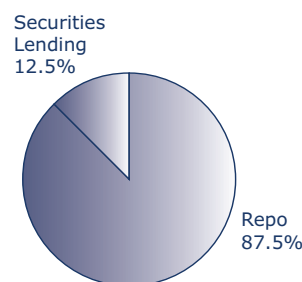
In contrast to the rest of the market, brokered business, as reported by the WMBA, saw increased business between one and six months, which reached 24.3% from 18.3%.

**Table 2.12 – Maturity comparison in December 2008**

	main survey	ATS	triparty	WMBA
<b>1 day</b>	18.3%	81.7%	46.5%	3.5%
<b>2 days to 1 week</b>	17.2%	9.2%	8.8%	8.6%
<b>1 week to 1 month</b>	19.9%	5.1%	6.7%	11.3%
<b>&gt;1 month to 3 months</b>	18.9%	2.5%	7.3%	16.7%
<b>&gt;3 months to 6 months</b>	7.6%	0.9%	5.0%	7.6%
<b>&gt;6 months to 12 months</b>	5.6%	0.1%	1.6%	9.7%
<b>&gt;12 months</b>	1.8%	0.0%	1.3%	0.6%
<b>forward-start</b>	4.5%	0.6%		41.0%
<b>open</b>	6.1%			1.0%

### Product analysis (Q2)

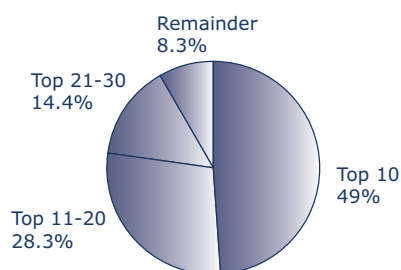
A significant development in the latest survey was a fall in the share of total business on repo desks accounted for by securities lending and borrowing conducted to 12.5% from 21.7% in June 2008. However, the share of equity in securities lending bounced back to 14.3% from 10.8% previously.

**Figure 2.8 – Product analysis**

### Concentration analysis

**Table 2.13 – Concentration analysis**

	December 2008	June 2008	December 2007
<b>top 10</b>	49.0%	56.0%	54.2%
<b>top 20</b>	77.3%	81.7%	79.0%
<b>top 30</b>	91.7%	92.9%	90.4%
<b>other</b>	8.3%	7.1%	9.6%

**Figure 2.9 – Concentration analysis**

There was a marked reduction in the concentration of the surveyed repo market in December 2008, reflecting greater de-leveraging by larger firms.

However, there was little change in the concentration of triparty repo, but an increase in the share of the top 10 banks in

electronic trading from 60.8% to 65.5%, at the expense of the second decile, whose share fell to 23.3% from 27.5%.

The pattern in anonymous electronic trading was the reverse: the top 10 lost share to the lower deciles (the shares of the top 10, 20 and 30 electronic traders were 65.6%, 26.9% and 6.9%, compared with 73.7%, 94.9% and 99.9%, respectively, in June 2008).

### **CHAPTER 3: CONCLUSION**

The latest survey essentially reflects the impact of the collapse of Lehman Brothers in September 2008, and the further but more dramatic loss of confidence in the financial markets that this event triggered. Many banks began or accelerated the de-leveraging of their balance sheets and the consequent reduction in the need for funding is seen in a decline in the overall size of the survey to EUR 4,633 billion from EUR 6,382 billion. Measured for a constant sample of participants, the contraction between June and December 2008 was almost 26%, by far the largest fall seen since the survey began in 2001.

The six months to December 2008 therefore mark a sea-change in the contagion unleashed by the "sub-prime crisis" and its impact on the European repo market, which had slowed but not overall gone into reverse. The faint signs perceived in the June 2008 survey of receding market instability were crushed.

However, even now, not all institutions have reduced their repo books. Some have been able to take advantage of their strong balance sheets to exploit the widespread demand for liquidity and are doing so within the safe environment of the repo market.

Greater risk aversion is seen in a shift in directly-negotiated business to electronic trading, particularly anonymous electronic trading

through CCP's; less cross-currency business; shorter maturities; greater resort to German collateral; and a reversal in the trend decline of government bond collateral. These shifts are seen in the results of the main survey as well as in business reported directly by ATS's and triparty agents.

In parallel with the contraction of repo business, there has been an even more dramatic contraction of the securities lending business done on repo desks.

## 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 December 10, 2008.

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, December 10, 2008, 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, December 10, 2008. 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, December 11, 2008. You should include all open repos and reverse repos that have been rolled over from Wednesday, December 10, 2008 to a later date and all forward-forward repos and reverse repos that are still outstanding at close on Wednesday, December 10, 2008.

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, December 10, 2008, 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**

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

Q (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.

Q(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 GFI-net). 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).

Q1.2 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.

Q1.5 "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 masteragreements. "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 repricing. 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:

Q(1.7.1.1) 1 day – this means:

- all contracts transacted prior to Wednesday, December 10, 2008, with a repurchase date on Thursday, December 11, 2008
- overnight, tom/next, spot/next and corporate/next contracts transacted on Wednesday, December 10, 2008.

Q(1.7.1.2) 2–7 days – this means:

- all contracts transacted prior to Wednesday, December 10, 2008, with a repurchase date on Friday, December 12, 2008, or any day thereafter up to and including Wednesday, December 17, 2008;
- contracts transacted on Wednesday, December 17, 2008, with an original repurchase date no earlier than Friday, December 12, 2008, but no later than Wednesday, December 17, 2008 (irrespective of the purchase date, which will vary).

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

- all contracts transacted prior to Wednesday, December 10, 2008, with a repurchase date on Thursday, December 18, 2008, or any day thereafter up to and including Monday, January 12, 2009;
- contracts transacted on Wednesday, December 10, 2008, with an original repurchase date no earlier than Thursday, December 18, 2008, but no later than Monday, January 12, 2009 (irrespective of the purchase date, which will vary).

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

- all contracts transacted prior to Wednesday, December 10, 2008, with a repurchase date on Tuesday, January 13, 2009, or any day thereafter up to and including Tuesday, March 10, 2009;
- contracts transacted on Wednesday, December 10, 2008, with an original repurchase date no earlier than Tuesday, January 13, 2009, but no later than Tuesday, March 10, 2009 (irrespective of the purchase date, which will vary).

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

- all contracts transacted prior to Wednesday, December 10, 2008, with a repurchase date on Wednesday, March 11, 2009, or any day thereafter up to and including Wednesday, June 10, 2009;

- contracts transacted on Wednesday, December 10, 2008, with an original repurchase date no earlier than Wednesday, March 11, 2009, but no later than Wednesday, June 10, 2009 (irrespective of the purchase date, which will vary).

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

- all contracts transacted prior to Wednesday, December 10, 2008, with a repurchase date on Thursday, June 11, 2009, or any day thereafter up to and including Thursday, December 10, 2009;
- contracts transacted on Wednesday, December 10, 2008, with an original repurchase date no earlier than Thursday, June 11, 2009, but no later than Thursday, December 10, 2009 (irrespective of the purchase date, which will vary).

Q(1.7.1.7) More than 12 months – this means;

- all contracts transacted prior to Wednesday, December 10, 2008, with a repurchase date on Thursday, June 11, 2009, or any day thereafter;
- contracts transacted on Wednesday, December 10, 2008, with an original repurchase date on or after Friday, December 11, 2009 (irrespective of the purchase date, which will vary).

Q(1.7.2) Forward-forward repos are defined for the purposes of this survey as contracts with a purchase date of Monday, December 15, 2008, 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.

Q(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).

Q1.8 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

Q1.9 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).

Q(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).

Q(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).

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

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.

Q3 "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](mailto: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
Banque et Caisse d'Epargne de l'Etat			x	x	x	x	x	x	x	x	x	x	x	x	x	x
Barclays Capital	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Bayerische Landesbank	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
BBVA	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
BHF-Bank	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
BHF-Bank Luxembourg							x			x	x		x	x	x	x
BNP Paribas	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x
Bundesrepublik Deutschland Finanzagentur			x	x	x	x	x		x		x	x	x	x	x	x
BW-Bank		x														
Caixa d'Estalvis de Catalunya					x				x				x	x	x	x
Caixa Geral de Depositos			x	x												
Caja de Ahorros y Monte de Piedad de Madrid (Caja Madrid)			x	x	x	x			x	x	x	x	x	x	x	x
Calyon		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Capitalia			x				x	x	x	x	x					
CDC IXIS																
Capital Markets Zweigniederlassung Deutschland			x	x	x	x	x	x			x		x	x	x	x
Citigroup Global Markets Ltd	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Commerzbank	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x
Confederación Española de Cajas de Ahorros (CECA)	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x
Credito Valtellinese					x											
Croatian National Bank		x			x											
Credit Suisse Securities (Europe) Ltd	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Danske Bank									x	x			x	x	x	x
Daiwa Securities																
SMBC Europe	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Dekabank																
Deutsche Girozentrale	x	x	x	x					x	x						
Delta Lloyd Securities					x											
DePfa ACS				x	x	x	x	x	x	x	x	x	x	x		
DePfa Bank				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
Deutsche Bank	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x
Deutsche Postbank			x	x	x	x	x	x	x	x	x	x	x	x	x	x
Dexia	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Dexia BIL						x				x	x	x		x		
Dexia Kommunal Bank Deutschland	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
EFG Eurobank Ergasias			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
Euroclear Bank				x	x		x	x	x	x	x	x	x	x	x	x
Eurohypo						x		x	x	x	x	x				
Eurohypo Europäische Hypothekebank S.A.													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
General Bank of Greece			x	x												
Goldman Sachs	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
HSBC Athens			x													
HSBC France			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							
HypoVereinsbank	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
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
JP Morgan	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
Landesbank Baden- Württemberg, Stuttgart	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	
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
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	
Maple Bank	x	x	x													
Merrill Lynch	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
Mizuho International	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
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
Nomura International	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
Nordea Markets			x	x	x	x	x	x	x	x	x	x	x	x	x	x
Norinchukin Bank						x	x	x	x	x	x	x	x			
Nova Ljubljanska Banka d.d.							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
Royal Bank of Scotland			x	x	x	x	x	x	x	x	x	x	x	x	x	
RZB	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
Toronto Dominion Bank					x	x										
UBS	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 Banca Mobiliare			x	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	
Zagrbacka 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 Dec 10, 2008 (figures in EUR billions)					
	5,883	6,430	6,382	6,504	4,633
Of the amounts given in response to question (1) above:					
	Dec-05	Dec-06	Dec-07	Jun-08	Dec-08
1.1 How much was transacted:					
<b>direct</b> with counterparties					
• in the <b>same country</b> as you	19.8%	20.2%	19.4%	17.3%	17.6%
• cross-border in (other) <b>eurozone countries</b>	17.1%	15.4%	14.9%	14.0%	14.7%
• cross-border in <b>non-eurozone countries</b>	17.2%	20.6%	19.8%	20.4%	19.3%
through <b>voice-brokers</b>					
• in the <b>same country</b> as you	9.4%	8.7%	11.3%	9.9%	10.4%
• cross-border in (other) <b>eurozone countries</b>	8.6%	7.6%	8.1%	7.5%	5.5%
• cross-border in <b>non-eurozone countries</b>	4.0%	3.9%	5.5%	5.7%	4.3%
on <b>ATs</b> with counterparties					
in the <b>same country</b> as you	6.3%	4.1%	4.1%	5.0%	3.3%
• cross-border in (other) <b>eurozone countries</b>	3.9%	2.4%	3.2%	5.3%	3.9%
• cross border-border in <b>non-eurozone countries</b>	2.6%	1.8%	3.2%	2.2%	3.4%
• anonymously through a central clearing counterparty	11.0%	15.2%	10.5%	12.7%	17.6%
Total through a central clearing counterparty				24.4%	33.2%
1.2 How much of the cash is denominated in:					
• EUR	68.2%	64.7%	64.8%	66.6%	70.6%
• GBP	12.7%	13.1%	15.5%	14.5%	13.0%
• USD	11.3%	14.6%	11.7%	12.7%	9.6%
• SEK, DKK	2.1%	1.8%	2.4%	2.2%	2.4%
• JPY	3.6%	3.2%	3.7%	2.8%	3.1%
• CHF	0.2%	0.1%	0.2%	0.2%	0.6%
• other currencies	1.9%	2.4%	1.7%	0.9%	0.8%
1.3 How much is cross-currency?	1.1%	1.2%	2.3%	1.0%	0.6%
1.4 How much is:					
• classic repo	83.0%	83.4%	84.6%	83.6%	84.7%

	Dec-05	Dec-06	Dec-07	Jun-08	Dec-08
• documented sell/buy-backs	10.0%	11.2%	10.3%	12.2%	11.1%
• undocumented sell/buy-backs	7.7%	5.4%	5.0%	4.2%	4.1%
1.5 How much is:					
• fixed rate	82.3%	78.7%	82.2%	84.8%	85.6%
• floating rate	10.1%	10.2%	13.3%	10.4%	9.3%
• open	7.7%	11.1%	4.5%	4.8%	5.1%
1.6 <b>How much fixed and floating rate repo is (1.6.1) for value before December 13, 2008 and has a remaining term to maturity of:</b>					
• <b>1 day</b>	16.1%	16.0%	14.4%	15.1%	18.3%
• <b>2-7days</b>	21.0%	19.9%	16.9%	18.7%	17.2%
• more than <b>7 days</b> but no more than <b>1 month</b>	24.8%	25.0%	23.5%	27.5%	19.9%
• more than <b>1 month</b> but no more than <b>3 months</b>	17.6%	15.3%	19.8%	13.0%	18.9%
• more than <b>3 months</b> but no more than <b>6 months</b>	7.0%	6.4%	7.1%	6.9%	7.6%
• more than <b>6 months</b>	5.2%	6.4%	5.9%	8.4%	5.6%
• more than 12 months	5.1%	1.5%	2.7%	1.6%	1.8%
• <b>forward-forward repos</b>	3.2%	3.5%	5.8%	3.9%	4.5%
• <b>open</b>		6.0%	4.1%	4.9%	6.1%
1.7 How much is tri-party repo:	10.4%	8.8%	9.1%	10.1%	10.7%
for <b>fixed terms to maturity</b>	85.8%	85.4%	96.7%	92.1%	89.3%
on an <b>open</b> basis	14.2%	14.60%	5.0%	7.8%	9.4%
1.8 How much is against collateral issued in:					
Austria					
• by the central government	0.9%	0.9%	1.1%	1.3%	1.0%
• by other issuers	0.1%	0.1%	0.2%	0.3%	0.1%
Belgium					
• by the central government	3.3%	2.5%	2.8%	3.3%	2.6%
• by other issuers	0.3%	0.3%	0.1%	0.2%	0.1%
Denmark					
• by the central government	0.2%	0.4%	0.1%	0.1%	0.2%
• by other issuers	0.3%	0.3%	0.2%	0.2%	0.3%
Finland					
• by the central government	0.2%	0.2%	0.2%	0.4%	0.3%
• by other issuers	0.0%	0.1%	0.1%	0.0%	0.0%
France					
• by the central government	9.5%	9.1%	8.7%	9.4%	8.4%
• by other issuers	1.0%	1.2%	1.0%	1.5%	1.7%



	Dec-05	Dec-06	Dec-07	Jun-08	Dec-08
Germany					
• by the central government	24.9%	18.7%	19.4%	19.9%	23.8%
• pfandbrief	2.0%	1.6%	1.5%	1.4%	1.5%
• by other issuers	2.9%	3.7%	4.2%	4.2%	4.3%
Greece					
• by the central government	1.6%	1.9%	2.0%	2.5%	2.3%
• by other issuers	0.0%	0.0%	0.0%	0.0%	0.0%
Ireland					
• by the central government	0.1%	0.3%	0.1%	0.2%	0.3%
• by other issuers	0.1%	0.3%	0.5%	0.5%	0.4%
Italy					
• by the central government	13.1%	13.5%	12.7%	11.8%	11.8%
• by other issuers	0.3%	0.6%	0.8%	0.7%	0.4%
Luxembourg					
• by the central government	0.0%	0.1%	0.0%	0.0%	0.2%
• by other issuers	0.6%	0.0%	0.8%	0.7%	0.4%
Netherlands					
• by the central government	1.7%	1.4%	1.7%	2.0%	2.2%
• by other issuers	0.9%	0.6%	0.7%	0.6%	0.4%
Portugal					
• by the central government	0.7%	0.7%	0.8%	1.0%	1.1%
• by other issuers	0.0%	0.0%	0.0%	0.1%	0.1%
Spain					
• by the central government	3.4%	3.6%	3.7%	3.4%	3.6%
• by other issuers	0.5%	0.9%	1.1%	1.6%	1.3%
Sweden					
• by the central government	1.3%	1.1%	0.7%	0.6%	0.5%
• by other issuers	0.4%	0.3%	0.4%	0.3%	0.4%
UK					
• by the central government	11.3%	11.5%	12.2%	11.4%	10.6%
• by other issuers	2.5%	2.1%	3.7%	3.5%	2.2%
US but settled across EOC/CS	2.2%	0.0%	2.3%	0.0%	2.9%
other countries					
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%	0.0%	0.0%
• by other issuers	0.0%	1.2%	0.0%	0.0%	0.0%
Hungary					
• by the central government	0.5%	0.0%	0.2%	0.0%	0.1%
• by other issuers	0.0%	0.0%	0.0%	0.1%	0.0%

	Dec-05	Dec-06	Dec-07	Jun-08	Dec-08
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%	0.0%	0.0%
• by other issuers	0.0%	0.2%	0.0%	0.0%	0.0%
Poland					
• by the central government	0.1%	0.0%	0.2%	0.0%	0.1%
• by other issuers	0.0%	0.0%	0.0%	0.1%	0.0%
Romania					
• by the central government			0.0%	0.0%	0.0%
• by other issuers			0.0%	0.0%	0.0%
Slovak Republic					
• by the central government	0.0%	0.0%	0.1%	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%	3.0%	0.0%	0.0%	0.0%
Japan		2.8%	2.3%	2.0%	2.9%
other OECD	10.1%	9.7%	7.4%	7.3%	7.3%
non-OECD EMEA	0.5%	0.7%	0.7%	0.6%	0.5%
non-OECD Asian & Pacific	0.3%	0.3%	0.4%	0.4%	0.3%
non-OECD Latin America	0.6%	0.6%	0.5%	0.5%	0.3%
equity	0.4%	1.0%	1.3%	1.1%	1.1%
collateral of unknown origin	1.0%	1.5%	2.1%	1.3%	2.1%
Q2 What is the total value of securities loaned and borrowed by your repo desk: to/from counterparties					
in the <b>same country</b> as you					
• in fixed income	45.6%	37.7%	35.4%	46.7%	35.0%
• in equity	4.5%	3.7%	4.6%	3.2%	6.3%
cross-border in (other) <b>eurozone</b> countries					
• in fixed income	23.4%	25.0%	31.8%	20.0%	17.5%
• in equity	3.7%	5.6%	5.1%	3.8%	6.8%
cross-border in <b>non-eurozone</b> countries					
• in fixed income	21.3%	26.7%	20.3%	22.5%	33.2%
• in equity	1.5%	1.2%	2.7%	3.8%	1.3%
for which the term to maturity is					
• fixed	59.0%	52.4%	61.5%	70.3%	65.1%
• open	41.0%	47.6%	38.5%	29.7%	34.9%

## **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](http://www.icmagroup.org).