



International Capital Market Association

European repo market survey

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EXECUTIVE SUMMARY

In December 2013, the European Repo Council (ERC) of the International Capital Market Association (ICMA) conducted the 26th 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 11, 2013. Replies were received from 68 offices of 64 financial groups, mainly banks. Returns were also made directly by the principal automatic repo trading systems (ATS) and tri-party repo agents in Europe, and by the London-based Wholesale Market Brokers' Association (WMBA).

Total repo business

The total value of the repo contracts outstanding on the books of the 68 institutions who participated in the latest survey was EUR 5,499 billion, compared with the EUR 6,079 billion in June 2013, the recent trough of EUR 4,633 billion in December 2008 and the pre-crisis peak of EUR 6,775 billion in June 2007. Using a constant sample of banks, it is estimated that the market shrank over the last six months by 8.2%. The contraction of the market would seem to be the result of the usual shrinkage of repo books at year-end plus the impact of the unlimited liquidity offered by the ECB in December. It may also have been driven by the anticipation of

future regulatory constraints on short-term wholesale funding.

Trading analysis

The share of directly-negotiated repos continued to recover, a possible sign of sustained market confidence, at the expense of electronic repo trading, which may have been held back by the availability of funding from the ECB.

Geographical analysis

Domestic business also appears to have been hit by ECB lending.

Clearing and settlement analysis

The share of anonymous (ie CCP-cleared) electronic trading increased, contrary to anecdotal evidence suggesting that banks were shifting out of CCP-cleared trading to take advantage of lower haircuts in the uncleared market. Unfortunately, a new question in the survey may have produced a one-off adjustment to the total for anonymous electronic trading which has obscured the underlying trend. But it is also possible that reports of a net migration out of CCP-cleared business have been exaggerated.

The share of tri-party repo improved slightly to 9.9% from 9.6% but the outstanding value of tri-party repo reported directly by the major tri-party agents in Europe (ie all tri-party business, not just by the institutions in the survey sample) surged by 22% to a record EUR 1,344 billion.

Cash currency analysis

The share of the euro continued to recover from its recent low of 57.0% in June 2012, to reach 66.3%. This was despite ECB lending, which usually reduces the need to borrow euro in the market. The resilience of the euro on this occasion may be a sign of the strength of the underlying trend back to market funding.

Collateral analysis

The most significant shifts in the composition of the collateral pool were an increase in Italian collateral and, to a lesser extent, in Spanish collateral. Unusual volatility in French repo rates may have discouraged trading in French collateral. The share of German collateral was unchanged, which is consistent with reports that the supply of German government specials remains relatively tight.

In electronic trading directly reported by the ATS, there was another sharp rise in the share of Italian collateral, to 38.7% from 32.6%. This would seem to confirm reports that some Italian banks have had to fund themselves in the CCP-cleared market, which is mainly electronic. This increase in Italian collateral has taken place despite the alarm occasioned in the summer by the announcement of an updated set of rules by LCH.Clearnet SA for closing out positions in Italian collateral held with the Italian domestic CCP, CC&G, in the event of a default by the latter.

In directly-reported tri-party business, the biggest change was in French collateral, perhaps reflecting increased lending by US money market mutual funds to French banks.

Maturity analysis

Short-dated repos were largely unchanged. This disguised an increase in 1-day to 1-week tenors. In addition, contracts with 1 to 3 months remaining to maturity rebounded vigorously. The increase in long dates is partly seasonal but may also represent a lengthening of duration in order to enhance yield and the simultaneous increase in short dates may be the building-up of high level of assets below 1-week in order to balance liquidity requirements.

Forward-start transactions fell back sharply, perhaps because expectations of further changes in ECB policy rates were receded.

The share of floating-rate repo regained ground, possibly responding to the steepening of the euro money market curve

Concentration analysis

There was very little change in market concentration.

CHAPTER 1: THE SURVEY

On December 11, 2013, the European Repo Council (ERC) of the International Capital Market Association (ICMA) conducted the 26th in its series of semi-annual surveys of the repo market in Europe.

The survey was managed and the results analysed on behalf of ICMA by the author, at 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 financial centres for the value of the cash side of repo and reverse repo contracts still outstanding at close of business on Wednesday, December 11, 2013.

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, the method of settlement and the origin of the 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 68 offices of 64 financial groups. This is three more than in June 2013. Two institutions which participated in the last survey dropped out of the latest but four re-joined and there was a new participant (Banco BPI).

55 of the latest participants were based across 18 European countries, as well as in Australia (1), North America (8) and Japan (4). 53 participants were based across 14 of the 28 member states of the EU (there were no institutions in the survey from Finland and Sweden, and only one from a former Accession State). 48 participants were based in 12 of the 18 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 one or more (but not

necessarily all) of their European offices. A list of the institutions that have participated in the ICMA's 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 11, 2014.

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

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

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

Institutions who participate in a 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 of the latest two surveys and of the surveys in each December in the four previous years (2009-2012) are set out in Appendix C. The full results of all previous surveys can be found at www.icmagroup.org.

Total repo business (Q1)

The total value, at close of business on December 11, 2013, of repos and reverse repos outstanding on the books of the 68 institutions which participated in the latest survey was **EUR 5,499.3** billion. This is the lowest result for over four years. It is much higher than the crisis trough of EUR 4,633 billion in December 2008 but much lower than the pre-crisis peak of EUR 6,775 billion in June 2007.

Of the sample of 68 institutions, 31 were net lenders, compared to 31 out of 65 in the last survey.

Table 2.1 – Total repo business from 2001 to 2013

survey	total	repo	reverse repo
2013 December	5,499	49.2%	50.8%
2013 June	6,076	49.8%	50.2%
2012 December	5,611	49.1%	51.9%
2012 June	5,647	48.7%	51.3%
2011 December	6,204	50.3%	49.7%
2011 June	6,124	50.7%	49.3%
2010 December	5,908	51.0%	49.0%
2010 June	6,979	53.5%	46.5%
2009 December	5,582	50.0%	50.0%
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 very 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 the same transactions between pairs of survey participants. However, a recent study (see the report of the December 2012 survey) suggested that the problem of double-counting was not very significant.

Nor does the survey measure the value of repos transacted with central banks as part of official monetary policy operations. Central bank intervention has of course been very substantial during the recent market difficulties, not least, through the exceptional liquidity facilities provided by the European Central Bank and Bank of England.

In order to gauge the year-on-year growth of the European repo

market (or at least that segment represented by the institutions who 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 continuously in several surveys.

Out of the 68 institutions in the present survey, 61 have participated in all of the last three surveys. Overall, the gross repo and reverse repo positions of those 61 institutions shrank by 8.2% over the six months from the June 2013 survey (smaller than the change in the headline number of -9.5%), compared to growth of 8.6% in the first six months of 2013. The year-on-year change for the constant survey sample was +0.5%.

The repo books of 39 of the latest sample of 68 institutions contracted. This is much higher than in the last survey, when 26 repo books out of 65 contracted, suggesting a significant change of behavior by repo dealers.

Trading analysis (Q1.1)

Table 2.2 – Trading analysis

	December 2013		June 2013		December 2012	
	users	share	users	share	users	share
direct	68	53.2%	65	52.3%	71	50.9%
of which tri-party	41	9.9%	37	9.6%	41	9.5%
voice-brokers	52	15.1%	53	14.6%	58	16.3%
ATS	52	31.7%	53	33.1%	52	32.8%

The share of directly-negotiated repos continued to rise from the low touched in June 2012 (48.6%). However, in the latest period, this growth was no longer at the expense of voice-brokered business, which recovered from its all-time low of 14.6% in June 2013. Instead, the counterpart to the growth of the share of directly-negotiated repos was a reduced share for electronic trading.

Electronic trading not only lost market share. Data provided directly by the principal automatic repo trading systems (ATS) operating in Europe – BrokerTec, Eurex Repo and MTS – showed that the outstanding value of all electronic trading (not just by the institutions in the survey sample) also contracted, falling back to EUR 936.7 billion from EUR 1,059 billion.

The share of tri-party repo improved slightly to 9.9% from 9.6%. However, the outstanding value of tri-party repo reported directly by the major tri-party agents in Europe (ie all tri-party business, not just that by the institutions in the survey sample) surged to a record EUR 1,344 billion from EUR 1,103 billion. As

the absolute rate of growth of business reported directly by tri-party agents was some 22%, whereas the change in the share of tri-party repo in the survey was a modest 0.3 percentage points, there would appear to have been a further expansion of the tri-party market outside the survey sample (which is mainly large repo dealers). This supports anecdotal evidence of new types of customer (particularly non-bank financial institutions) adopting tri-party repo as a means of switching into collateralised forms of short-term investment but may also reflect greater use of the European repo market by existing investors such as US money market mutual funds (who were reported to have been once again increasing lending to core eurozone banks, particularly in France and Germany).

The share of directly-reported tri-party repo accounted for by GC financing (mainly Eurex Repo's Euro GC Pooling facility) fell back to 14.2% from 20.8%, possibly suggesting that banks preferred to tap the fixed-rate full-allotment facility provided by the ECB in December in order to mitigate end-of-year liquidity shortages.

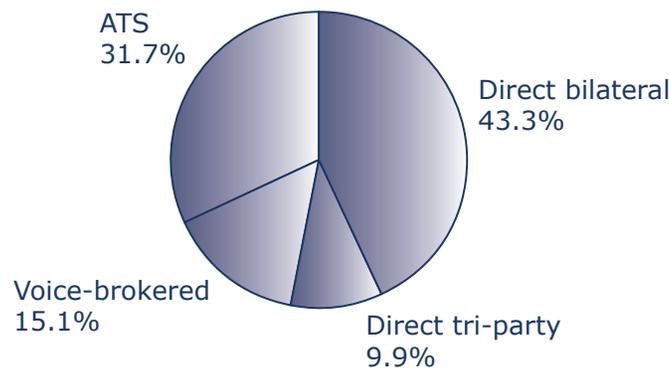
In the current survey, participants were asked to break out their GC financing business from their other anonymous electronic trading. The reported share was 4.4%, which is equivalent to about 40% of the

total outstanding value of Euro GC Pooling reported directly (EUR 164.9 billion). This means that survey participants account for at least this proportion of trading in Euro GC Pooling.

Table 2.3 – Numbers of participants reporting particular types of business

	Dec-13	Jun-13	Dec-12	Jun-12	Dec-11	Jun-11
ATS	52	53	52	45	47	44
anonymous ATS	47	45	44	37	39	37
voice-brokers	52	53	58	51	54	48
tri-party repos	41	37	41	34	39	36
total	68	65	71	62	64	58

Figure 2.1 – Counterparty analysis



Geographical analysis (Q1.1)

Table 2.4 – Geographical analysis

	December 2013		June 2013		December 2012	
	share	users	share	users	share	users
domestic	26.1%		30.7%		29.7%	
cross-border to eurozone	18.0%		18.9%		18.9%	
cross-border to non-eurozone	30.9%		29.3%		31.6%	
anonymous	25.0%	47	21.1%	45	19.8%	44

The share of anonymous electronic trading in the survey continued to expand strongly, reaching 25.0%. This was at the expense of domestic business, which fell back to 26.1% and cross-border transactions with counterparties inside the Eurozone (down to 18%). It was suggested in the report of the previous survey that domestic repo business appeared to be substituted by central bank assistance (in particular, the ECB 3-year LTROs introduced in December 2011 and February 2012). This appears to have happened again in December. Although some large banks continued to pay back their LTRO drawings, most sought to lock in liquidity over the year-end by tapping the ECB (reflected in a jump in the liquidity surplus at the ECB in December).

The rise in anonymous electronic trading was unexpected. Anecdotal evidence suggested that the continuing improvement in market confidence had prompted a decision by some banks that it was less necessary, when dealing with familiar domestic counterparties,

to incur the expense of clearing across CCPs. Given that most CCP-cleared business is negotiated across ATS, less use of CCPs should translate into less use of anonymous electronic business.

There are a number of explanations for the unexpected growth of anonymous electronic trading. First, there may be a problem with the figures collected by the survey in December 2013. The latest survey asked participants, for the first time, to break out their GC financing business (principally, Eurex Repo's Euro GC Pooling facility). The response of 4.4% is part of the overall figure of 25% for the share of anonymous electronic trading. It is possible that, previously, some or all of this business was reported under tri-party repo (given that GC financing involves both anonymous trading and tri-party collateral management). Anonymous electronic trading excluding GC financing was only 20.6%, lower than the 21.1% recorded in June 2013 and more in line with expectations about the reduced use of CCPs. Other data suggests that anonymous electronic

trading was weak. Thus, although anonymous business as a percentage of all electronic trading, as reported directly by the main ATs, increased to 94.7% from 94.1%, this was an increasing percentage of a smaller market share, as the outstanding value of all electronic trading decreased by 17.4%.

Second, anecdotal evidence of a net shift out of CCP-cleared business may not apply to the market as a whole. Many reports referred to Spanish banks taking advantage of the easing of their perceived counterparty credit risk. In contrast, it has also been reported that some Italian banks were forced into the CCP-cleared market by growing concerns over the impact of political instability on their counterparty credit risk. Moreover, the impact of the reported shift of Spanish bank out of CCP-cleared repos will not have affected anonymous electronic trading as much as expected, because the repo business they clear across the domestic CCP, MEFFRepo, is not electronically traded. Rather, they trade directly and via voice-brokers and register with this CCP post trade. Post-trade registrations with MEFFRepo peaked at some EUR 139 billion in July 2013 and then dropped to about EUR 97 billion in October, before recovering to EUR 111 billion in December. The value of repos cleared across the international CCP serving the Spanish market, LCH.Clearnet SA (which accounts for about one-third of Spanish CCP-cleared business), did not change much.

The impact of the new survey question on GC financing makes it difficult to assess the evolution of the repo business that is traded directly or via voice-brokers and then registered post trade with CCPs. If one excludes GC financing from the CCP-cleared total, then non-electronic CCP-cleared business increased to 10.3% from 8.5% in June. If one includes GC financing, then the share of non-electronic CCP-cleared business decreased to 5.9%. Figure 2.3 shows the evolution of both electronic and non-electronic CCP-cleared business. It can be seen that, as one might expect, the share of non-electronic CCP-cleared business has been boosted by crises (the Lehman default in September 2008 and the European sovereign debt crisis during 2010 and early 2011) but appears to be on a downward trend, whereas electronic CCP-cleared business is on an upward trend.

Data provided directly by tri-party repo agents saw domestic business relapse, to 42.2% from 43.8%, while cross-border business within the eurozone fell back to 17.7% from 24.8%. The counterpart to these reductions was a massive expansion in the share of cross-border business between eurozone and non-eurozone counterparties to 40% from 31.5%. It is possible that this reflects external investors such as US money market mutual funds.

The share of domestic business also shrank in the directly-reported business on ATs, to 31.3% from 33.2%. However,

all components of cross-border business expanded.

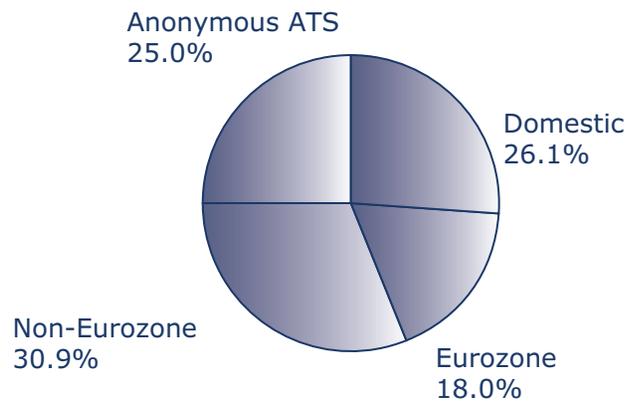
In contrast, the domestic business of voice-brokers recovered some of the losses in the first-half

of last year, reaching 47% from 40.0%. However, given the London bias of the reporting voice-brokers, this change needs to be interpreted cautiously.

Table 2.5 – Geographical comparisons in December 2013

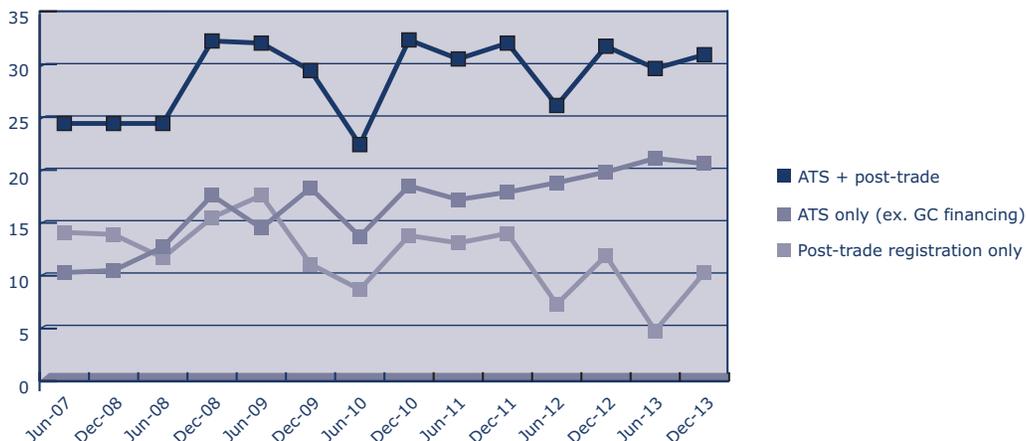
	main survey	ATS	tri-party	WMBA
domestic	26.1%	31.3%	42.3%	47.0%
cross-border	48.9%	68.6%	57.7%	53.0%
anonymous	25.0%			

Figure 2.2 – Geographical analysis



Clearing and settlement analysis (Q1.2 and Q1.8)

Figure 2.3 – Evolution of business cleared across CCPs



Cash currency analysis (Q1.3 and Q1.4)

Table 2.6 – Cash currency analysis

	December 2013	June 2012	December 2012
EUR	66.3%	64.8%	61.4%
GBP	10.2%	10.6%	13.3%
USD	14.8%	15.2%	17.3%
DKK, SEK	2.5%	2.5%	2.1%
JPY	4.9%	4.9%	4.5%
CHF	0.1%	0.2%	0.1%
etc	1.3%	1.8%	1.3%
cross-currency	0.9%	3.1%	2.1%

The share of the euro recovered further from its recent low of 57.0% in June 2012, to reach 66.3%, despite the provision of lending in euro by the ECB over the year-end. This usually reduces the need to borrow euro in the market. The fact that the euro did

not retreat this time may reflect the strength of the underlying trend back to market funding in the Eurozone. On the other hand, the share of euro in the tri-party and voice-brokered segments of the market did fall back.

Figure 2.4 – Currency analysis

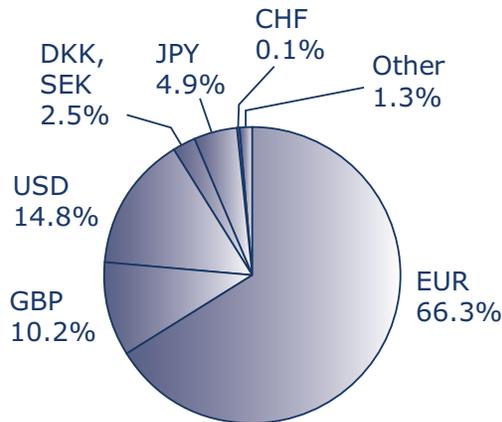


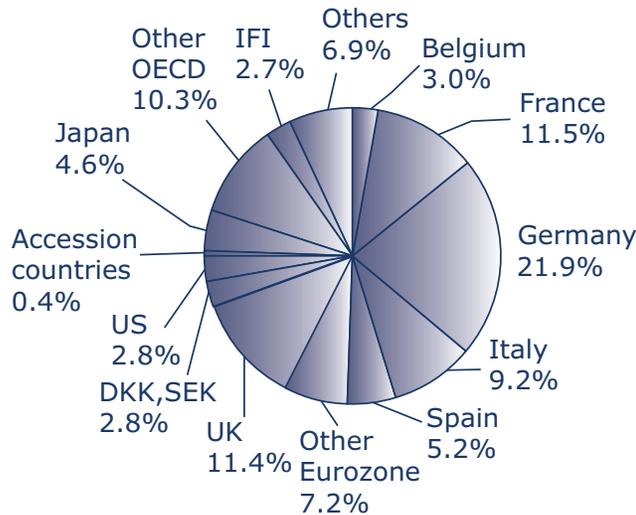
Table 2.7 – Currency comparison in December 2013

	main survey	ATS	tri-party	WMBA
EUR	66.3%	95.4%	74.7%	54.9%
GBP	10.2%	2.2%	4.3%	31.5%
USD	14.8%	1.4%	18.9%	7.2%
DKK, SEK	2.5%	0.0%	0.8%	0.8%
JPY	4.9%	0.0%	0.6%	4.9%
CHF	0.1%	0.9%	0.4%	0.0%
etc	1.3%	0.1%	0.2%	0.7%
cross-currency	0.9%			

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

	December 2013	June 2013	December 2012
Germany	21.9%	21.9%	22.0%
Italy	9.2%	8.2%	8.7%
France	11.5%	11.7%	11.0%
Belgium	3.0%	3.4%	3.4%
Spain	5.2%	4.6%	4.9%
other eurozone	7.2%	8.1%	6.7%
UK	11.4%	12.0%	14.2%
DKK, SEK	2.8%	2.9%	2.4%
International financial institutions	2.7%	2.2%	0.2%
US	2.8%	2.6%	2.6%
Accession countries	0.4%	0.3%	0.3%
Japan	4.6%	4.2%	3.2%
other OECD	10.3%	12.1%	12.7%
other fixed income equity	6.6%	5.6%	7.2%
	0.3%	0.3%	0.5%

Figure 2.5 – Collateral analysis (main survey)



The share of all government bonds within the pool of EU-originated collateral reported in the survey recovered to 81.4% from 80.1%, having fallen from 81.3% in December 2012.

The most significant shifts in the composition of the collateral pool were an increase in Italian collateral to 9.2% from 8.2% and, to a lesser extent, in Spanish collateral (to 5.2% from 4.6%). There was no evidence of any impact from the downgrading of several French banks by rating agencies, but unusual volatility in French repo rates may have discouraged trading. The share of German collateral was unchanged. It is reported that the supply of German government specials remains relatively tight, perhaps as a result of sustained demand from non-European investors who do not lend securities as well as

unusual conditions in the German government bond futures market

In electronic trading directly reported by the ATS, there was a sharp further rise in the share of Italian collateral, to 38.7% from 32.6%. This would seem to confirm reports that some Italian banks have had to fund themselves in the CCP-cleared market, which is electronic, and may be the source of the increase in the use of Italian collateral reported in the survey. This increase in Italian collateral has taken place despite the alarm occasioned in the summer by the announcement of an updated set of rules by LCH.Clearnet SA for closing out positions in Italian collateral held with the Italian domestic CCP, CC&G, in the event of a default by the latter.

In directly-reported tri-party business, the biggest changes were

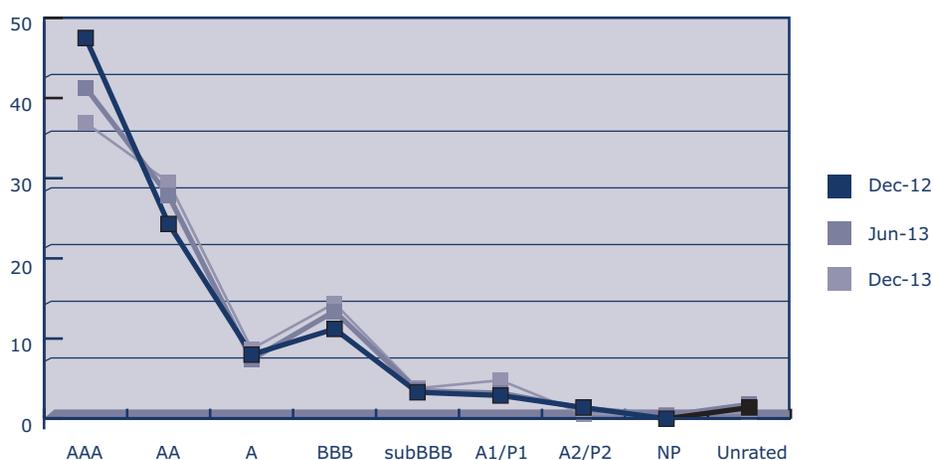
increases in French collateral (to 17.2% from 14.2%) and UK government securities (to 1.9% from 1.0%), and falls in German non-government securities to 11.7% from 15.6% and issues by

international financial institutions to 9.0% from 9.7%. The increase in the use of French collateral in tri-party repo may reflect increased lending by US money market mutual funds to French banks.

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

	December 2013	June 2013	December 2012
AAA	36.9%	41.3%	47.5%
AA	29.5%	27.8%	24.3%
A	8.7%	7.4%	8.0%
BBB	14.4%	13.4%	11.2%
below BBB-	3.8%	3.5%	3.3%
A1/P1	4.8%	3.2%	2.9%
A2/P2	0.6%	1.3%	1.4%
Non-Prime	0.5%	0.4%	0.0%
unrated	0.8%	1.8%	1.4%

Figure 2.6 – Collateral analysis (tri-party agents) by credit rating



According to data reported directly from the tri-party agents, there was another sharp fall in AAA-rated collateral, to 36.9% from

41.3%. This may be the result, in part, of downgrades of France and the Netherlands in November.

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

	Dec 2013	June 2012	Dec 2012
government securities	38.5%	38.2%	37.2%
public agencies / sub-national governments	7.6%	10.4%	10.0%
supranational agencies	4.8%	4.9%	4.0%
corporate bonds	14.9%	13.9%	16.9%
covered bonds	7.3%	7.6%	8.7%
residential mortgage-backed	1.0%	0.9%	1.1%
commercial mortgage-backed	0.2%	0.1%	0.2%
other asset-backed	0.6%	0.4%	0.4%
CDO, CLN, CLO, etc	0.4%	0.4%	0.6%
convertible bonds	0.1%	0.2%	0.2%
equity	23.8%	21.0%	20.0%
other	0.7%	2.1%	0.9%

Figure 2.7 – Historic collateral analysis (tri-party agents) by credit rating

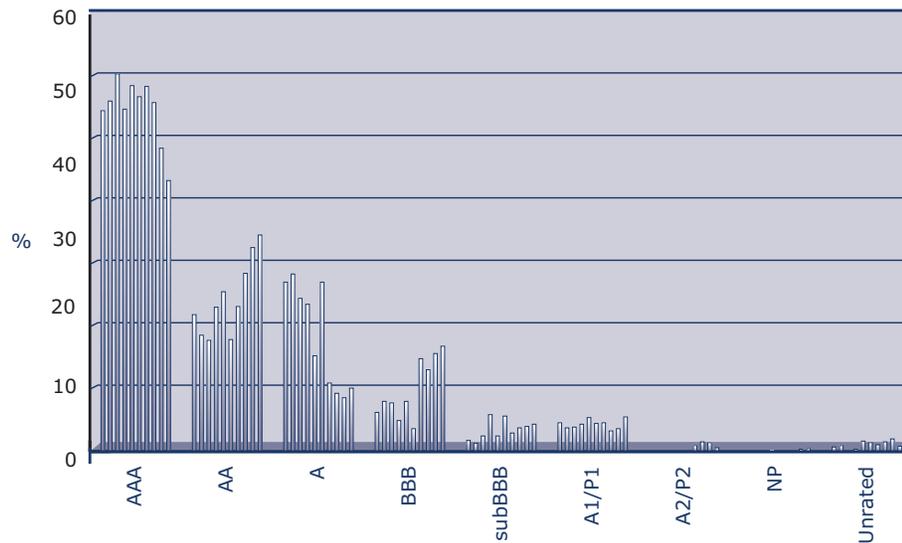


Figure 2.8 – Collateral analysis (tri-party agents) by type of asset

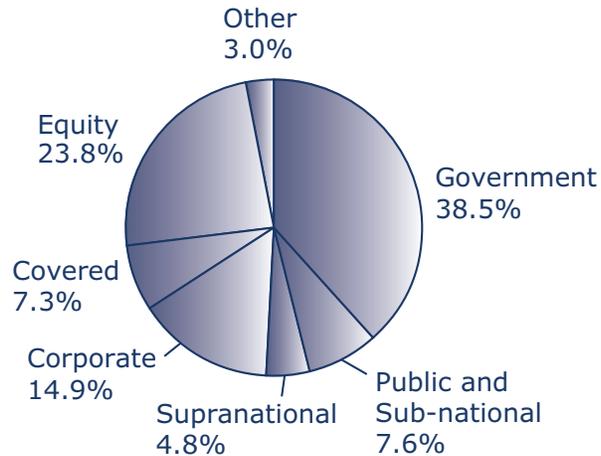
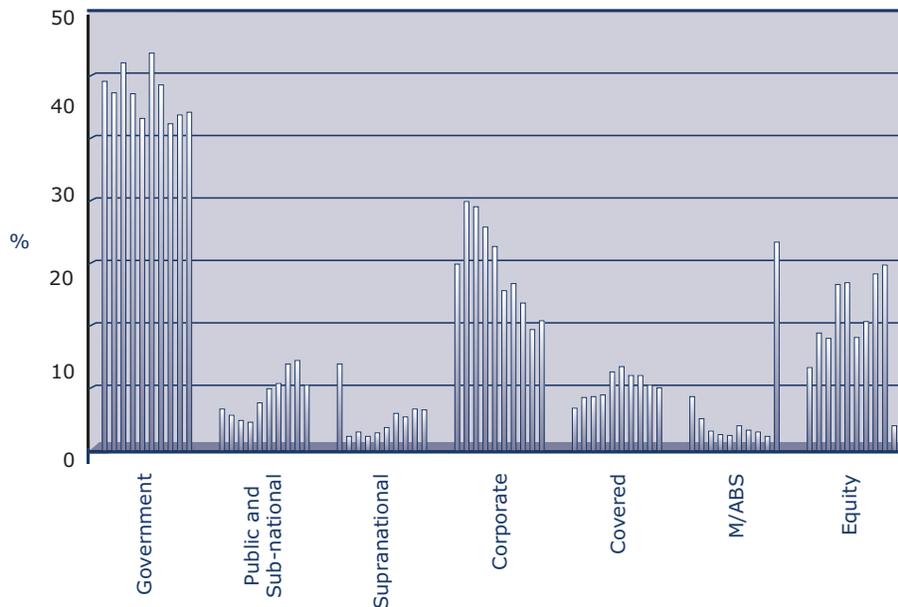


Figure 2.9 – Historic collateral analysis (tri-party agents) by type of asset



Jun 09 – Dec 13

Haircuts on collateral in tri-party repo did not change significantly, except for convertible bonds (up to 13.1% from 4.4% on a weighted average basis), residential mortgage-backed securities (up to 10.9% from 8.6%) and commercial mortgage-backed

securities (down to 8.2% from 9.5%). However, these are small pools of collateral and, where haircuts have changed, this may reflect changes in the specific issues being offered as collateral within each collateral category.

Table 2.11 – Tri-party repo collateral haircuts analysed by type of asset

<i>(weighted average haircuts)</i>	Dec 2013	June 2013	Dec 2012
government securities	2.7%	2.6%	2.7%
public agencies / sub-national governments	2.3%	2.2%	2.6%
supranational agencies	2.5%	2.7%	2.5%
corporate bonds (financial)	5.8%	4.8%	5.5%
corporate bonds (non-financial)		6.3%	
covered bonds	3.1%	2.8%	2.3%
residential mortgage-backed	10.9%	8.6%	9.2%
commercial mortgage-backed	8.2%	9.5%	8.1%
other asset-backed	8.0%	7.4%	6.8%
CDO, CLN, CLO, etc	7.1%	7.6%	7.5%
convertible bonds	13.1%	4.4%	6.9%
equity	6.0%	5.8%	5.5%
other	6.4%	3.3%	6.7

Contract analysis (Q1.5)

Figure 2.10 – Contract analysis

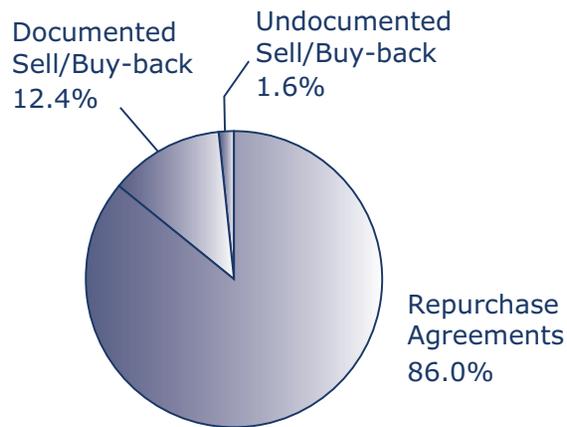


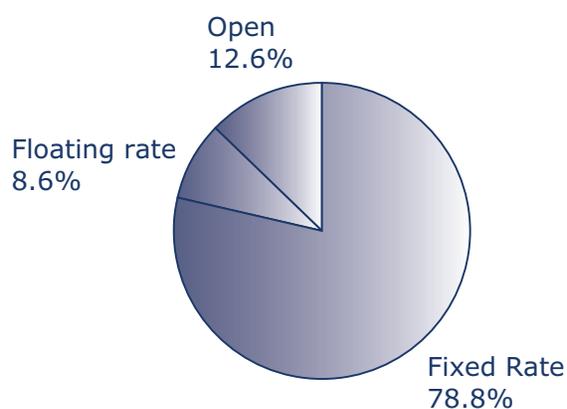
Table 2.12 – Contract comparison in December 2013

	main survey	ATS	tri-party
repurchase agreements	86.0%	67.3%	100.0%
documented sell/buy-backs	12.4%	32.7%	0.0%
undocumented sell/buy-backs	1.6%	0.0%	0.0%

Repo rate analysis (Q1.6)

Open repo continued to lose market share, touching 12.6% from 13.5%. The share of floating-rate repo regained ground, rising to 8.6% from 6.6%, possibly responding to the steepening of the euro money

market curve that was driven by the increasing demand for market funding prior to the year-end and the view that, following the ECB interest rate cut in November, euro rates may finally have bottomed out.

Figure 2.11 – Repo rate analysis**Table 2.13 – Repo rate comparison in June 2013**

	main survey	ATS	tri-party
fixed rate	78.8%	88.3%	48.2%
floating rate	8.6%	11.7%	0.0%
open	12.6%	0.0%	51.8%

Maturity analysis (Q1.7)

Table 2.14 – Maturity analysis

	Dec 2013	June 2013	Dec 2012
1 day	19.9%	18.2%	17.0%
2 days to 1 week	15.8%	15.2%	16.3%
1 week to 1 month	22.0%	23.8%	17.2%
>1 month to 3 months	16.6%	10.7%	16.0%
>3 months to 6 months	4.6%	4.1%	4.1%
>6 months to 12 months	3.1%	4.5%	2.9%
>12 months	3.1%	4.1%	5.9%
forward-start	8.8%	12.1%	7.8%
open	6.2%	7.3%	12.7%

Figure 2.12 – Maturity analysis: short dates, longer terms & forwards (main survey)

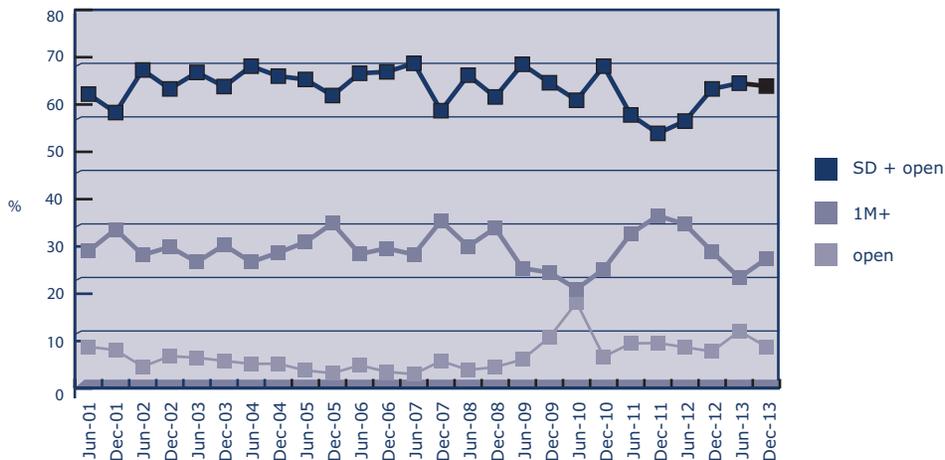


Figure 2.13 – Maturity analysis: non-forward terms (main survey)

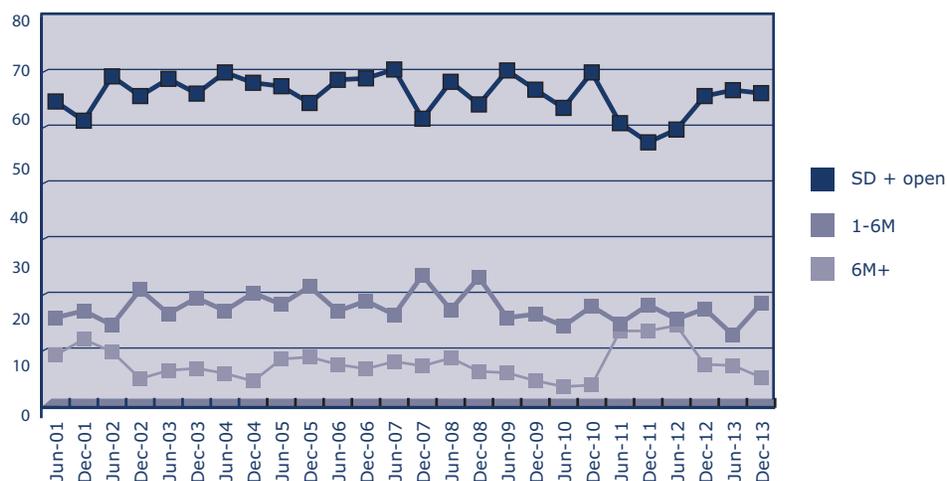
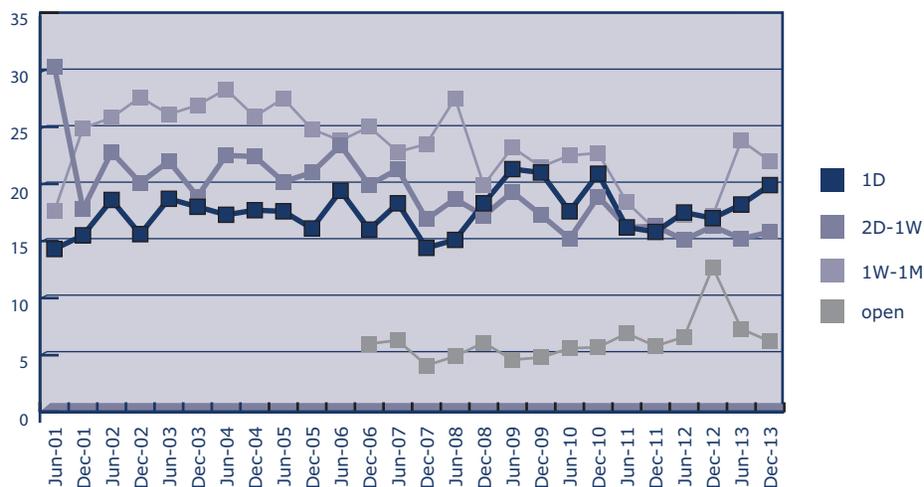


Figure 2.14 – Maturity analysis: breakdown of short dates plus open (main survey)



Short-dated repos (one month or less to maturity) were largely unchanged at 57.7%.

Contracts with 1 to 3 months remaining to maturity rebounded vigorously to 16.6% from 10.7%, in part, due to seasonal factors (this

range of terms always increases in December, approaching the turn of the year, and then falls back in June). The simultaneous rises in very short-term tenors and those in the 1 to 6-month range have been explained as an attempt by banks to lend at longer durations in order to enhance

yield, while building up a high level of assets below 1-week in order to satisfy liquidity requirements.

There were signs of a modest lengthening of tenors in electronic and tri-party repo business too.

Forward-start transactions fell back sharply to 8.8% from a three-year high of 12.1% in June 2013, perhaps as expectations of further changes in ECB policy rates were receded after the cut in November.

Figure 2.15 – Maturity analysis (ATS)

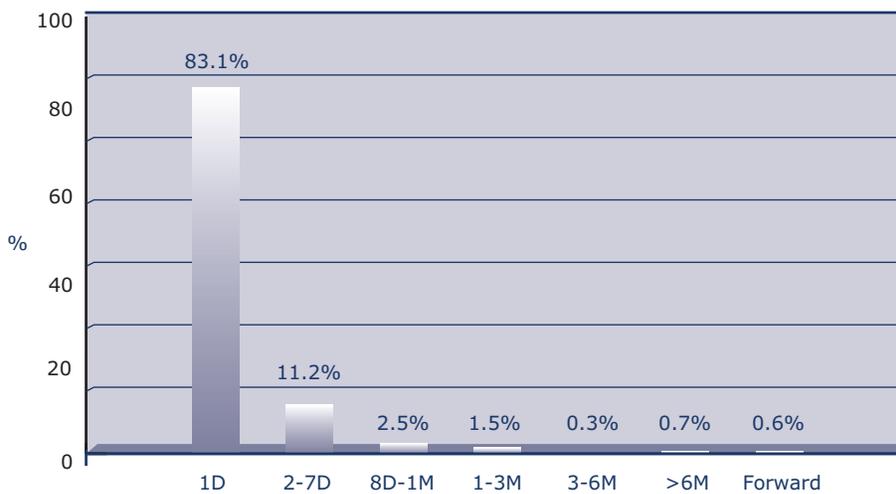


Figure 2.16 – Maturity analysis (tri-party agents)

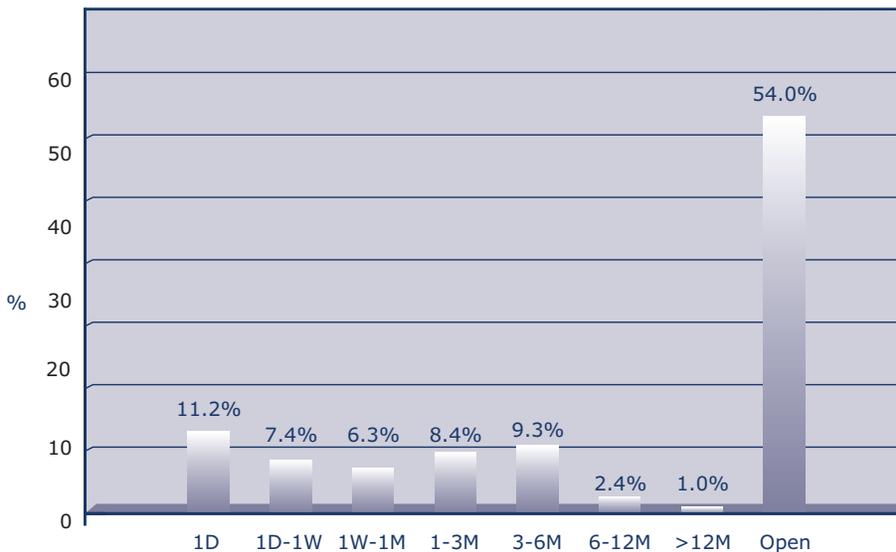
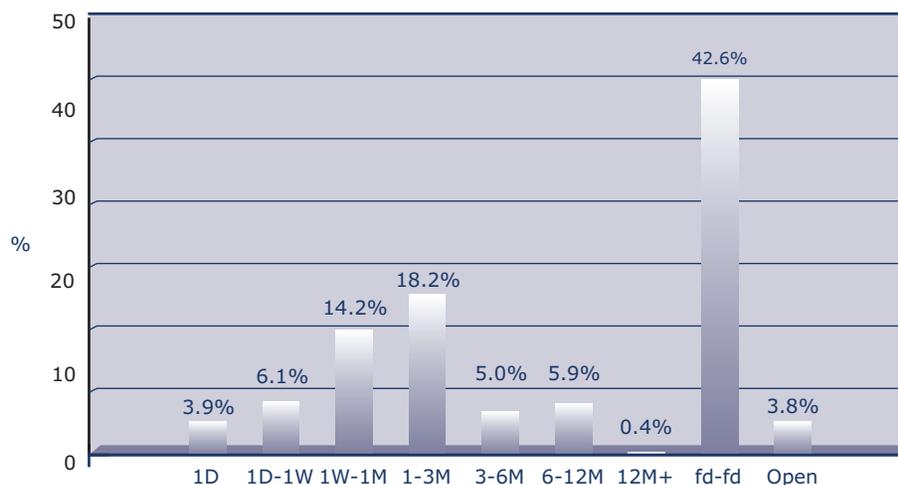


Figure 2.17 – Maturity analysis (voice-brokers)**Table 12.15 – Maturity comparison in December 2013**

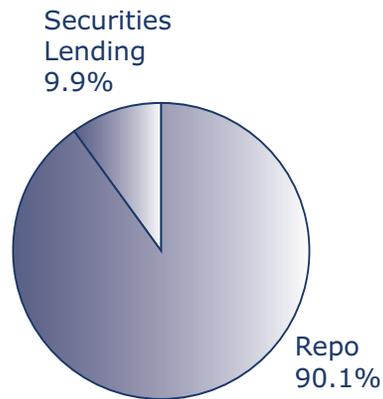
	main survey	ATS	tri-party	WMBA
1 day	19.9%	83.1%	11.2%	3.9%
2 days to 1 week	15.8%	11.2%	7.4%	6.1%
1 week to 1 month	22.0%	2.5%	6.3%	14.2%
>1 month to 3 months	16.6%	1.5%	8.4%	18.2%
>3 months to 6 months	4.6%	0.3%	9.3%	5.0%
>6 months to 12 months	3.1%	0.4%	2.4%	5.9%
>12 months	3.1%	0.3%	1.0%	0.4%
forward-start	8.8%	0.6%		42.6%
open	6.2%		54.0%	3.8%

Product analysis (Q2)

The share of securities lending conducted on repo desks continued

to contract, reaching a new record low of 9.9% from 10.4%.

Figure 2.18 – Product analysis



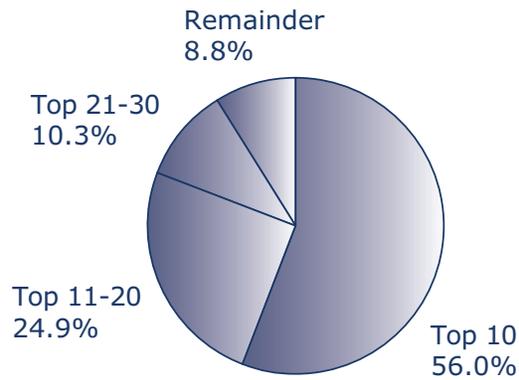
Concentration analysis

The degree of concentration was hardly changed.

Table 2.16 – Concentration analysis

	December 2013	June 2013	December 2012
top 10	56.0%	55.4%	57.3%
top 20	80.9%	79.7%	79.7%
top 30	91.2%	91.5%	91.0%
other	8.8%	8.5%	9.0%

Figure 2.19 – Concentration analysis



Although the apparent degree of concentration of repo business is high, this does not mean that the largest institutions have commensurate market power. A better measure of market

concentration - often used in competition analyses - is the Herfindahl Index. This index shows market concentration unchanged over 2013.

Table 2.17 – Herfindahl Index

	index	numbers in survey
December 2003	0.045	76
June 2004	0.040	81
December 2004	0.047	76
June 2005	0.043	81
December 2005	0.043	80
June 2006	0.042	79
December 2006	0.050	74
June 2007	0.041	76
December 2007	0.040	68
June 2008	0.044	61
December 2008	0.049	61
June 2009	0.051	61
December 2009	0.065	58
June 2010	0.105	57
December 2010	0.064	57
June 2011	0.074	58
December 2011	0.065	64
June 2012	0.062	62
December 2012	0.054	71
June 2013	0.046	65
December 2013	0.046	68

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

CHAPTER 3: CONCLUSION

The significant reduction in the size of the survey over the second half of 2013 would seem to be the result of the usual contraction of repo books at year-end plus the impact of the lending offered by the ECB in December in order to relieve any seasonal funding shortages. It may also have been driven by the anticipation of future regulatory constraints on short-term wholesale funding.

As in the past, ECB lending was reflected in a drop in the share of domestic business, as well as a reduction in the share of the electronic market. With a fixed-rate full allotment facility from the ECB, Eurozone banks had less need of market funding. To this extent, the ECB's facility slowed the return to the market seen in the previous survey, albeit temporarily. However, the continued recovery in market confidence seems to have sustained the share of directly-negotiated repos. And the trend back towards market funding was still visible and not just for core eurozone banks. Thus, there was a large increase in the share of Italian collateral.

A conundrum in the latest survey results was the increase in anonymous (ie CCP-cleared) electronic trading. Anecdotal evidence suggested that banks were taking advantage of increased market confidence to shift out of CCP-cleared trading and take

advantage of the lower haircuts in the uncleared market. It is possible that a new question in the survey asking banks to break out GC financing business may have produced a one-off adjustment to the total for anonymous electronic trading (which includes GC financing) that obscured the underlying trend. It is also possible that reports of a net migration out of CCP-cleared business have been exaggerated. While Spanish banks appear to have reduced their use of the domestic CCP, this business is not electronically originated. And some Italian banks appear to have been forced into the CCP-cleared market by counterparty credit concerns arising from political instability in Italy.

The reduced need for market funding would normally have been expected to hit the share of tri-party repo, as this is a pure cash-driven product. However, the share of tri-party repo actually increased, if only modestly. And there was a dramatic expansion of the tri-party market outside the survey, which would seem to confirm anecdotal evidence of new entrants arriving into that market. It may also be the result of increased use by existing participants, among whom, may be US money market mutual funds. These investors increased their lending to core Eurozone banks, not least, to French banks. It is noteworthy that the share of French collateral in tri-party repo jumped.

ABOUT THE AUTHOR

This report was compiled by Richard Comotto, who is a Senior Visiting Fellow at the ICMA Centre at the University of Reading in England, where he is responsible for the FX and money markets module of the Centre's postgraduate finance programme. He is also Course Director of the ICMA Professional Repo Market Course conducted in Europe and Asia in co-operation with the ACI and AFME/ASIFMA, and of the ICMA-ISLA GMRA-GMSLA Workshop.

The author acts as an independent consultant providing research, advice and training on the international money, securities and derivatives markets to professional market associations, government agencies, regulatory authorities, international financial institutions, banks, brokers and financial information services.

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 trading systems on the bond and repo markets. Following the financial crisis, he has been advising the ICMA's European Repo Council on regulatory initiatives and has produced a series of papers: in July 2010, a 'White paper on the

operation of the European repo market, the role of short-selling, the problem of settlement failures and the need for reform of the market infrastructure'; in September 2011, 'Interconnectivity of central and commercial bank money in the clearing and settlement of the European repo market'; in February 2012, 'Haircuts and Initial Margins in the Repo Market'; in March 2012, 'Shadow Banking and Repo'; and in 'Collateral damage: the impact of the Financial Transaction Tax on the European repo market' in April 2013. He writes on repo market topics on the ICMA Centre blog at icmacentre.wordpress.com/.

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.

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 Wednesday, December 11, 2013

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 11, 2013, 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 layout, 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 11, 2013*. 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 12, 2013. You should include all *open repos and reverse repos* that have been rolled over from Wednesday, December 11, 2013, to a later date and all *forward-forward repos and reverse repos* that are still outstanding at close on Wednesday, December 11, 2013.

i) Give separate totals for (a) repos plus sell/buy-backs and (b) reverse repos plus 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 11, 2013, 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 (e.g. CC&G, LIFFE-Clearnet, MEFF and Eurex Clearing) should be recorded in (1.1.3.4) and (1.1.3.5). GC financing systems in (1.1.3.4) are those ATS that are connected to a CCP and tri-party repo service. Examples include Eurex Euro GC Pooling and LCH-Clearnet's €GC basket traded on Brokertec. They do not include GC basket trading on ATS. This activity may be cleared across a CCP but does not involve a tri-party service, and should be recorded in (1.1.3.5).

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.

1.6 "Repurchase agreements" (also known as "classic repos") include transactions documented under the Global Master Repurchase Agreement (GMRA) 1995, the Global Master Repurchase Agreement (GMRA) 2000 or the Global Master Repurchase Agreement (GMRA) 2011 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, GMRA 2000 or GMRA 2011), 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, December 11, 2013, with a repurchase date on Thursday, December 12, 2013;

- overnight, tom/next, spot/next and corporate/next contracts transacted on Wednesday, December 11, 2013.

(1.7.1.2) 2-7 days - this means:

- all contracts transacted prior to Wednesday, December 11, 2013, with a repurchase date on Friday, December 13, 2013, or any day thereafter up to and including Wednesday, December 18, 2013;
- contracts transacted on Wednesday, December 11, 2013, with an original repurchase date on Friday, December 13, 2013, or any day thereafter up to and including Wednesday, December 18, 2013 (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, December 11, 2013, with a repurchase date on Thursday, December 19, 2013, or any day thereafter up to and including Monday, January 13, 2014;
- contracts transacted on Wednesday, December 11, 2013, with an original repurchase date on Thursday, December 19, 2013, or any day thereafter up to and including Monday, January 13, 2014 (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, December 11, 2013, with a repurchase date on Tuesday, January 14, 2014, or any day thereafter up to and including Tuesday, March 11, 2014;

- contracts transacted on Wednesday, December 11, 2013, with an original repurchase date on Tuesday, January 14, 2014, or any day thereafter up to and including Tuesday, March 11, 2014 (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, December 11, 2013, with a repurchase date on Wednesday, March 12, 2014, or any day thereafter up to and including Wednesday, June 11, 2014;
- contracts transacted on Wednesday, December 11, 2013, with an original repurchase date on Wednesday, March 12, 2014, or any day thereafter up to and including Wednesday, June 11, 2014 (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, December 11, 2013, with a repurchase date on Thursday, June 12, 2014, or any day thereafter up to and including Thursday, December 11, 2014;
- contracts transacted on Wednesday, December 11, 2013, with an original repurchase date on Thursday, June 12, 2014, or any day thereafter up to and including Thursday, December 11, 2014 (irrespective of the purchase date, which will vary).

(1.7.1.7) More than 12 months – this means;

- all contracts transacted prior to Wednesday, December 11, 2013, with a repurchase date on

Friday, December 12, 2014, or any day thereafter;

- contracts transacted on Wednesday, December 11, 2013, with an original repurchase date on or after Friday, December 12, 2014 (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, December 16, 2013, 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). Open repos should, in theory, be floating-rate, but in practice are often re-fixed irregularly, so are being treated separately from floating-rate repo (1.6.2).

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 voice-brokered business because of delays in receiving reports from tri-party agents or the complexity of their tri-party 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) "Official international financial institutions, including multilateral development banks" include:

African Development Bank (AfDB)
 Asian Development Bank (AsDB)
 Caribbean Development Bank (CDB)
 Central American Bank for Economic Integration (CABEI)
 Corporacion Andina de Fomento (CAF)
 East African Development Bank (EADB)
 European Bank for Reconstruction and Development (EBRD)
 European Commission (EC)/European Financial Stability Mechanism (EFSM)
 European Financial Stability Facility (EFSF)
 European Investment Bank (EIB)
 European Stabilisation Mechanism (ESM)
 Inter-American Development Bank Group (IADB)
 International Fund for Agricultural Development (IFAD)
 Islamic Development Bank (IDB)
 Nordic Development Fund (NDF)
 Nordic Investment Bank (NIB)
 OPEC Fund for International Development (OPEC Fund)
 West African Development Bank (BOAD)
 World Bank Group (IBRD and IFC)

(1.9.29) "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).

(1.9.31) "Other OECD countries" are Australia, Canada, Chile, Iceland, Israel, 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 (1.9.31). US collateral settled across Euroclear and Clearstream Luxembourg should be recorded in (1.9.29).

(1.9.32) "Other non-OECD European, Middle Eastern & African countries" should exclude any EU countries, specifically, Bulgaria (1.9.16), Latvia (1.9.21), Malta (1.9.23) and Romania (1.9.25).

(1.9.35) "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).

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 (survey date) (figures in EUR billions)						
	5,758	5,908	6,127	5,611	6,076	5,499
Of the amounts given in response to question (1) above:						
	Dec-09	Dec-10	Dec-11	Dec-12	Jun-13	Dec-13
1.1 How much was transacted:						
direct with counterparties						
• in the same country as you	19.7%	18.6%	16.3%	14.0%	16.8%	15.5%
• cross-border in (other) eurozone countries	14.5%	12.7%	10.6%	11.7%	12.1%	12.5%
• cross-border in non-eurozone countries	19.8%	20.3%	22.8%	25.3%	23.4%	25.2%
through voice-brokers						
• in the same country as you	9.8%	11.0%	11.9%	9.4%	7.4%	7.5%
• cross-border in (other) eurozone countries	5.0%	4.5%	4.0%	3.6%	4.1%	3.5%
• cross-border in non-eurozone countries	3.8%	4.8%	4.4%	3.3%	3.1%	4.1%
on ATs with counterparties						
• in the same country as you	4.2%	4.0%	5.7%	6.3%	6.5%	3.1%
• cross-border in (other) eurozone countries	2.4%	2.9%	3.2%	3.7%	2.6%	2.0%
• cross-border in non-eurozone countries	2.6%	2.9%	3.2%	3.0%	2.8%	1.6%
• anonymously across a GC financing system						4.4%
• anonymously through a central clearing counterparty but not GC financing	18.3%	18.5%	17.9%	19.8%	21.1%	20.6%
1.2 Total through a central clearing counterparty	29.4%	32.3%	32.0%	31.7%	25.9%	30.9%
1.3 How much of the cash is denominated in:						
• EUR	65.6%	62.7%	59.8%	61.4%	64.8%	66.3%
• GBP	12.3%	10.5%	11.5%	13.3%	10.6%	10.2%
• USD	15.9%	20.1%	17.1%	17.3%	15.2%	14.8%
• SEK, DKK	2.4%	2.0%	2.0%	2.1%	2.5%	2.5%

	Dec-09	Dec-10	Dec-11	Dec-12	Jun-13	Dec-13
• JPY	2.7%	3.6%	7.0%	4.5%	4.9%	4.9%
• CHF	0.5%	0.2%	1.5%	0.1%	0.2%	0.1%
• other currencies	0.5%	1.0%	1.0%	1.3%	1.8%	1.3%
1.4 How much is cross-currency?	2.6%	5.6%	3.0%	2.1%	3.1%	0.9%
1.5 How much is:						
• classic repo	86.2%	85.8%	87.0%	87.2%	87.6%	86.0%
• documented sell/buy-backs	10.9%	10.6%	9.7%	10.8%	10.7%	12.4%
• undocumented sell/buy-backs	2.9%	3.6%	3.3%	2.0%	1.8%	1.6%
1.6 How much is:						
• fixed rate	88.9%	86.4%	84.2%	74.7%	77.4%	78.8%
• floating rate	7.0%	7.6%	9.7%	7.8%	6.6%	8.6%
• open	4.1%	5.9%	6.0%	17.4%	13.5%	12.6%
1.7 How much repo is for value before (survey date) and has a remaining term to maturity of:						
• 1 day	22.1%	20.9%	15.8%	17.0%	18.2%	19.9%
• 2-7days	18.2%	18.9%	16.3%	16.3%	15.2%	15.8%
• more than 7 days but no more than 1 month	22.6%	22.7%	16.0%	17.2%	23.8%	22.0%
• more than 1 month but no more than 3 months	15.1%	15.2%	16.5%	16.0%	10.7%	16.6%
• more than 3 months but no more than 6 months	4.9%	5.4%	4.3%	4.1%	4.1%	4.6%
• more than 6 months	4.6%	3.6%	2.9%	2.9%	4.5%	3.1%
• more than 12 months	1.1%	1.0%	12.7%	5.9%	4.1%	3.1%
• forward-forward repos	11.3%	6.7%	9.6%	7.8%	12.1%	8.8%
• open	5.1%	5.7%	5.8%	12.7%	7.3%	6.2%
1.8 How much is tri-party repo:	11.5%	10.5%	11.4%	9.5%	9.6%	9.9%
• for fixed terms to maturity	88.5%	89.5%	87.7%	91.9%	94.8%	95.1%
• on an open basis	8.0%	11.6%	12.3%	12.6%	5.2%	4.7%
1.9 How much is against collateral issued in:						
Austria						
• by the central government	0.8%	1.0%	1.4%	0.9%	1.0%	1.0%
• by other issuers	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%
Belgium						
• by the central government	1.6%	2.2%	3.2%	2.7%	2.7%	2.2%
• by other issuers	0.1%	0.1%	0.9%	0.8%	0.7%	0.7%
Denmark						
• by the central government	0.2%	0.4%	0.5%	0.4%	0.5%	0.5%
• by other issuers	0.4%	0.6%	0.4%	0.6%	0.8%	0.7%
Finland						
• by the central government	0.3%	0.3%	0.6%	0.6%	0.5%	0.5%
• by other issuers	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%

	Dec-09	Dec-10	Dec-11	Dec-12	Jun-13	Dec-13
• by other issuers	0.0%	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%	0.0%
• by other issuers	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Hungary						
• by the central government	0.1%	0.1%	0.2%	0.0%	0.1%	0.1%
• by other issuers	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Latvia						
• by the central government	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
• by other issuers	0.0%	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%	0.0%
• by other issuers	0.0%	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%	0.0%
• by other issuers	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Poland						
• by the central government	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
• by other issuers	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Romania						
• by the central government	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
• by other issuers	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Slovak Republic						
• by the central government	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
• by other issuers	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Slovenia						
• by the central government	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
• by other issuers	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
• official international institutions			0.8%	1.4%	2.2%	2.7%
Japan	2.1%	2.6%	5.2%	3.2%	4.2%	4.6%
• other OECD	10.5%	13.7%	10.4%	12.7%	12.1%	10.3%
• non-OECD EMEA	0.5%	0.6%	0.8%	0.7%	0.6%	0.6%
• non-OECD Asian & Pacific	0.1%	0.3%	0.6%	0.8%	0.3%	0.4%
• non-OECD Latin America	0.2%	0.4%	0.7%	0.5%	0.5%	0.5%
• equity	0.5%	0.7%	0.0%	0.5%	0.3%	0.3%
collateral of unknown origin	6.8%	6.3%	7.0%	4.0%	4.3%	2.5%
collateral in tri-party which cannot be attributed to a country or issuer						2.6%
Q2 What is the total value of securities loaned and borrowed <i>by your repo desk</i> : to/from counterparties						
in the same country as you in						
• fixed income	38.4%	46.8%	39.8%	40.8%	37.3%	38.8%
• in equity	1.9%	1.7%	1.8%	0.8%	2.8%	1.1%

	Dec-09	Dec-10	Dec-11	Dec-12	Jun-13	Dec-13
• cross-border in (other) eurozone countries						
• in fixed income	20.9%	16.8%	20.2%	16.1%	20.9%	23.8%
• in equity	3.5%	3.6%	0.3%	1.2%	0.9%	2.3%
• cross-border in non-eurozone countries						
• in fixed income	35.4%	30.3%	35.8%	39.5%	36.8%	32.3%
• in equity	1.4%	0.8%	2.1%	1.6%	1.3%	1.8%
for which the term to maturity is						
• fixed	74.9%	75.3%	70.1%	54.5%	50.7%	54.7%
• open	25.1%	24.7%	29.9%	45.5%	49.3%	45.3%

APPENDIX D: THE ICMA EUROPEAN REPO COUNCIL

The ICMA 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.

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 its and has sufficient professional expertise, financial standing and technical resources to meet its obligations as a member.

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 is available on www.icmagroup.org.