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# *Eurosystem Money Markets Survey 2006*

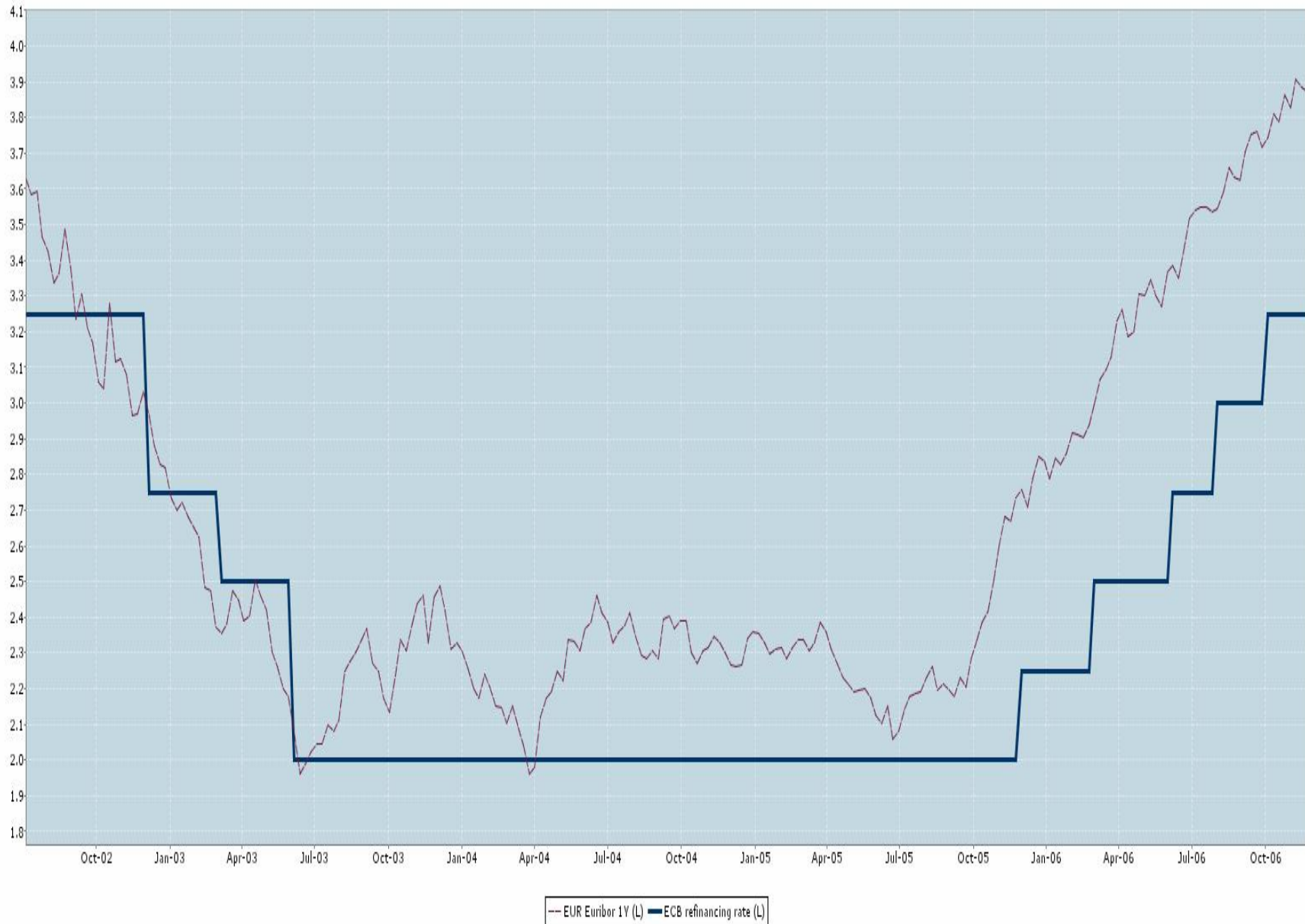
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*Jean-Michel MEYER, HSBC France  
Mark DEARLOVE, Barclays Capital  
November 23<sup>rd</sup>, 2006*



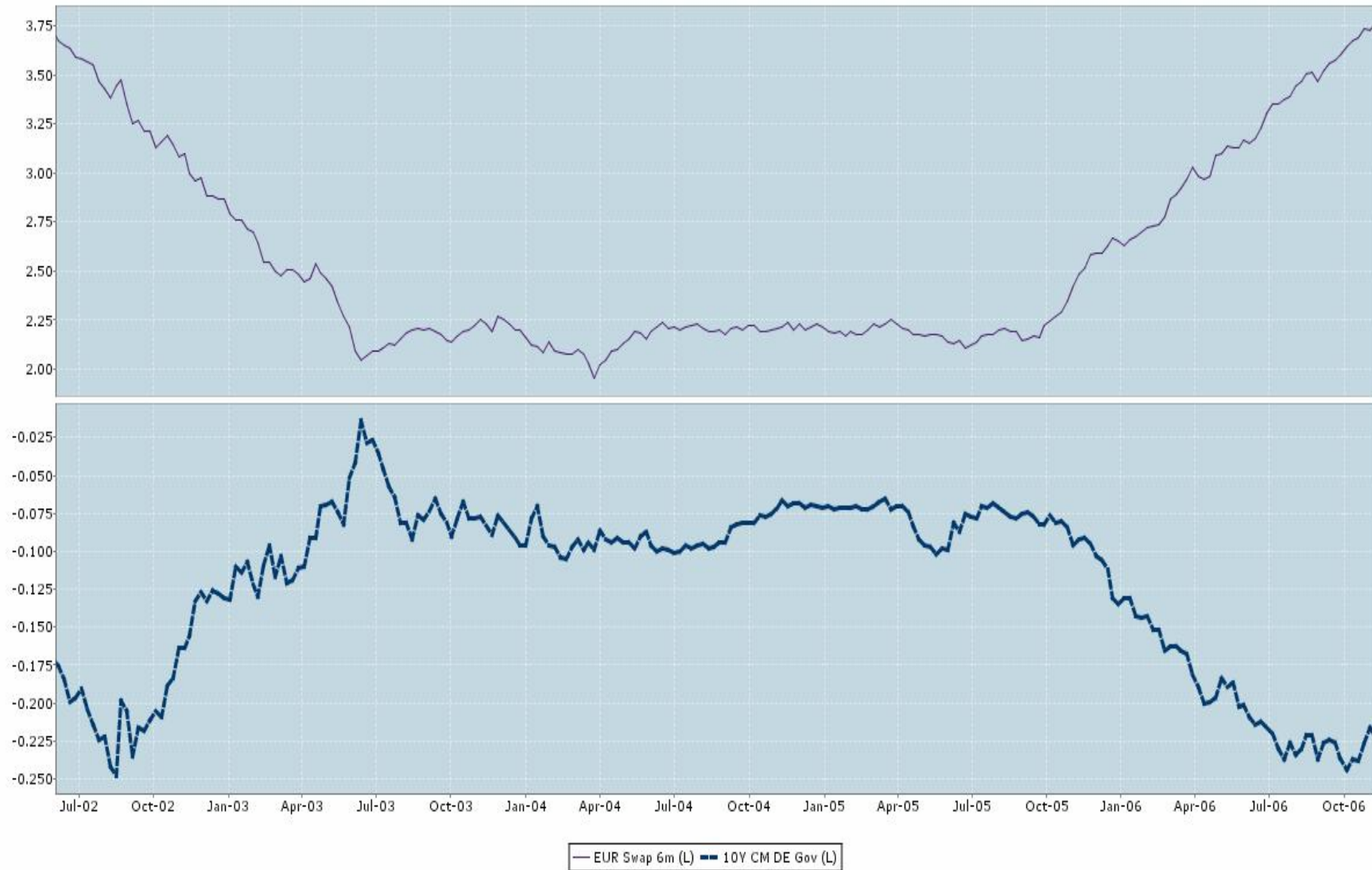
# 12mth Euribor fixing/ ECB minimum bid rate.

4 Jul 02 to 23 Nov 08

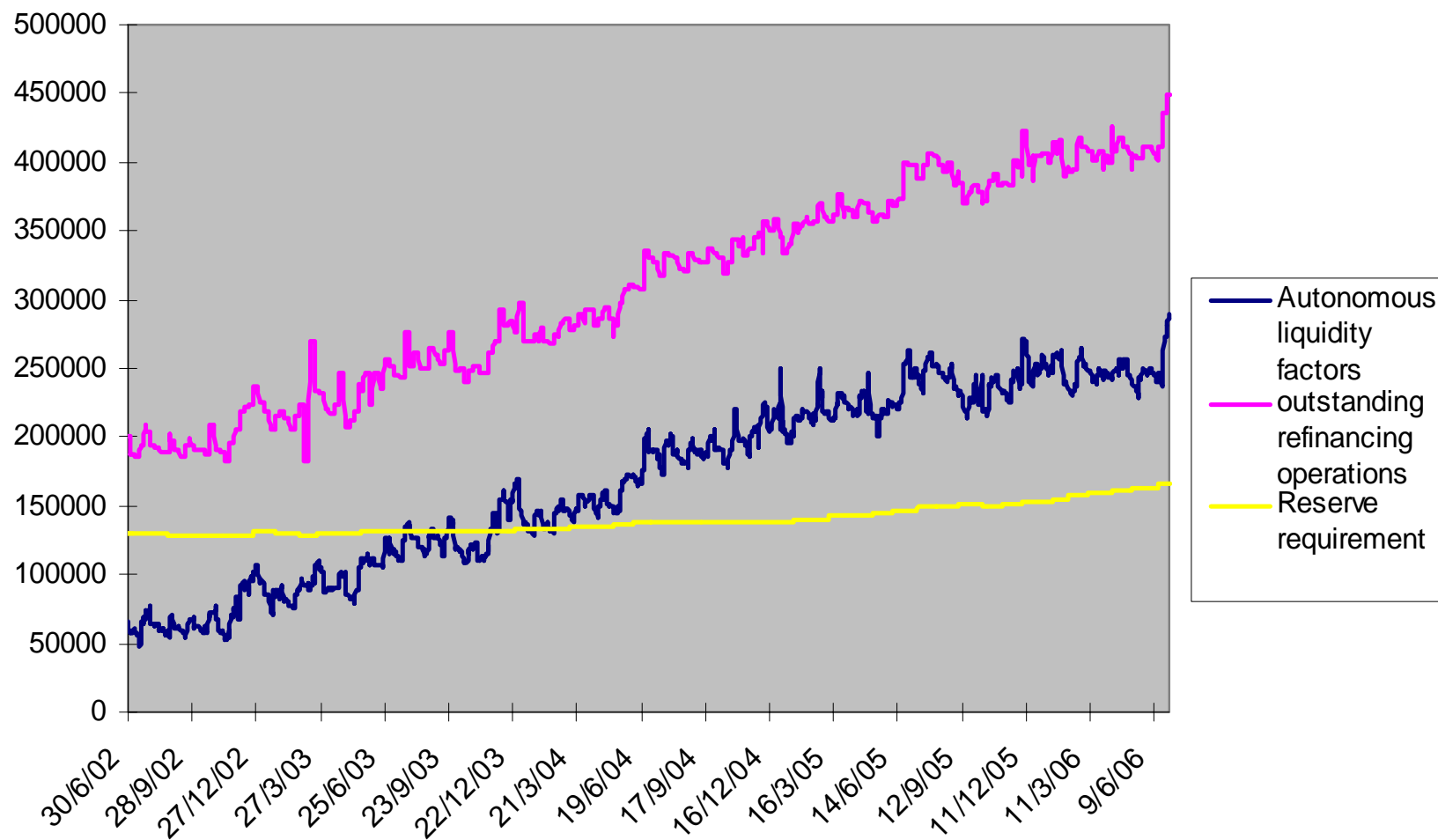


# 10Y asset swap spreads and 6mth Euribor: Does the turn in 10y spreads indicate the end of the current hiking cycle? Or are 10y's cheap?

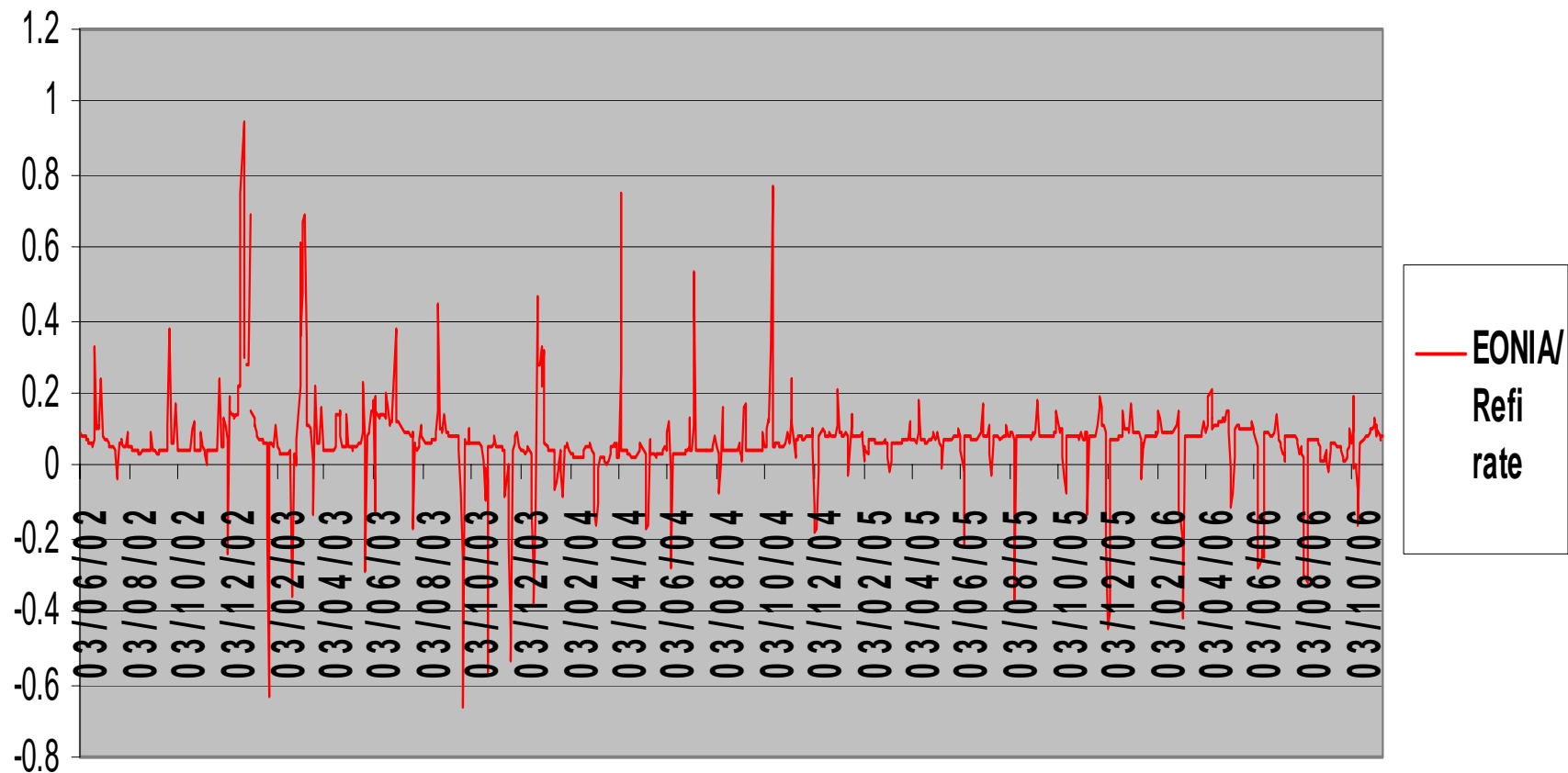
3 Jun 02 to 9 Nov 06



The total size of outstanding refinancing operations has increased from 200 bio in June 2002 to 448.5 bio in June 2006 as liquidity requirements have grown mainly from the increase in autonomous liquidity factors



The average spread of the Eonia over the min bid rate is 0.0639 (3/06/02 – 09/11/06). The spread on the first 2 days of the current reserve period is + 0.08.



# *PART 1*

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## ***MARKET TRENDS***

*Unsecured*

*Secured*

*Derivatives*

*FX*

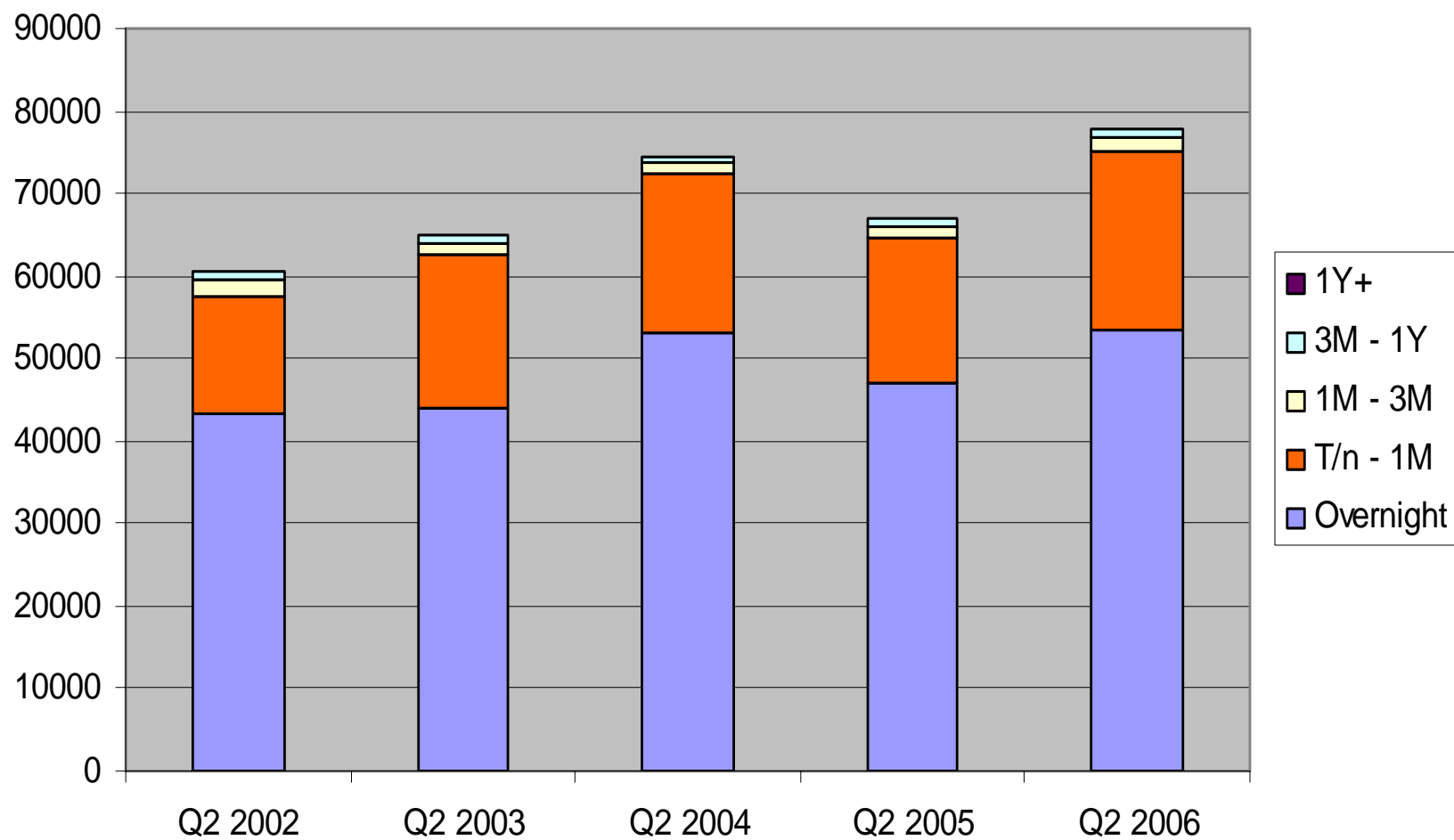
*Short term paper*

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# Survey methodology

|                      |  |
|----------------------|--|
| Metric               | Daily average turnover   |
| Period               | Annual   |
| Location of pannel   | All 15 EU countries  |
| Type of institutions | Pannel of Credit institutions (114) and domestic booking         |
| Currency             | Only Euro leg  |
| Transactions         | Only interbank (excluding intragroup, Corporates, Central banks) |

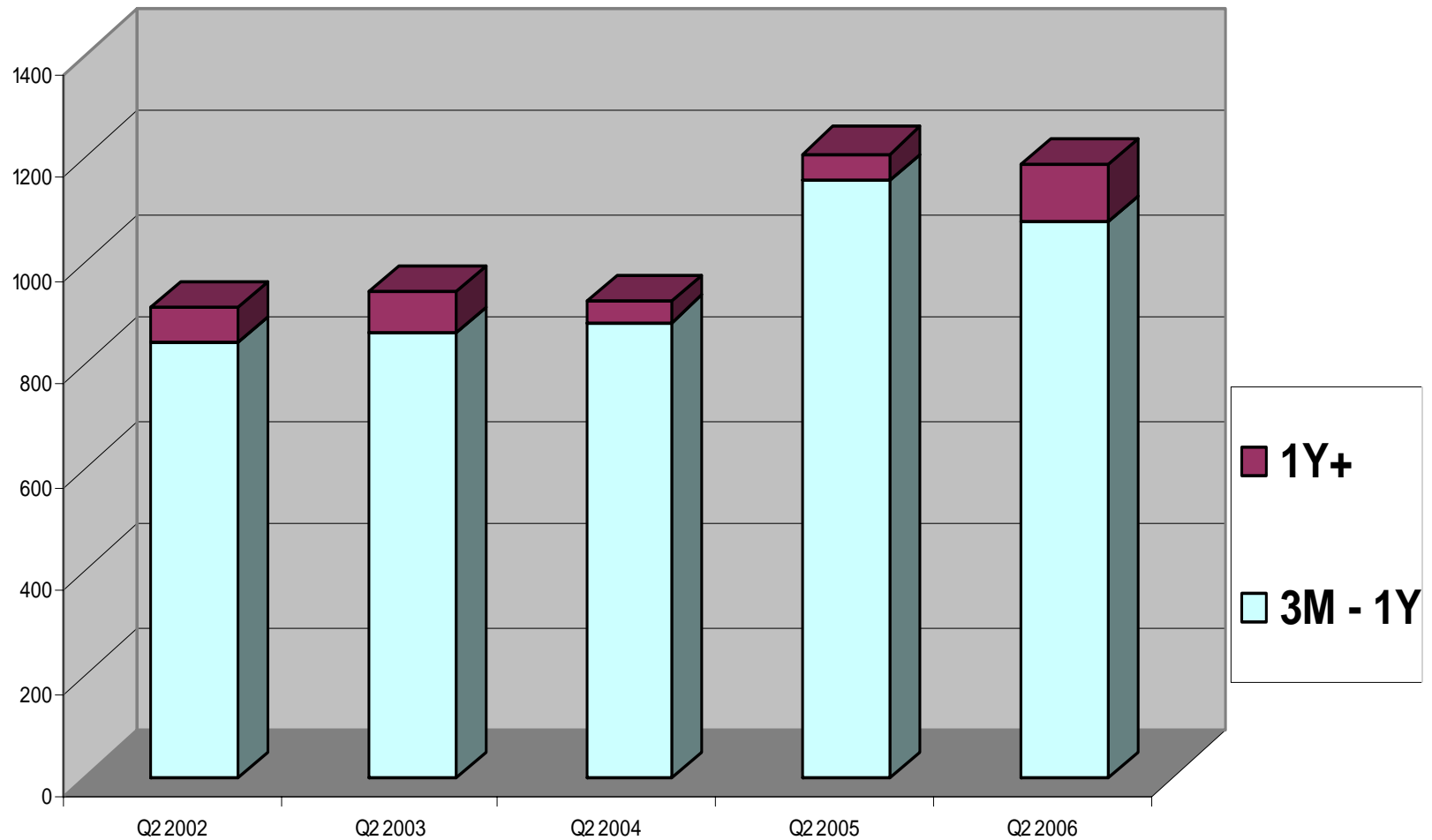
# Unsecured lending. Panel:114 Banks



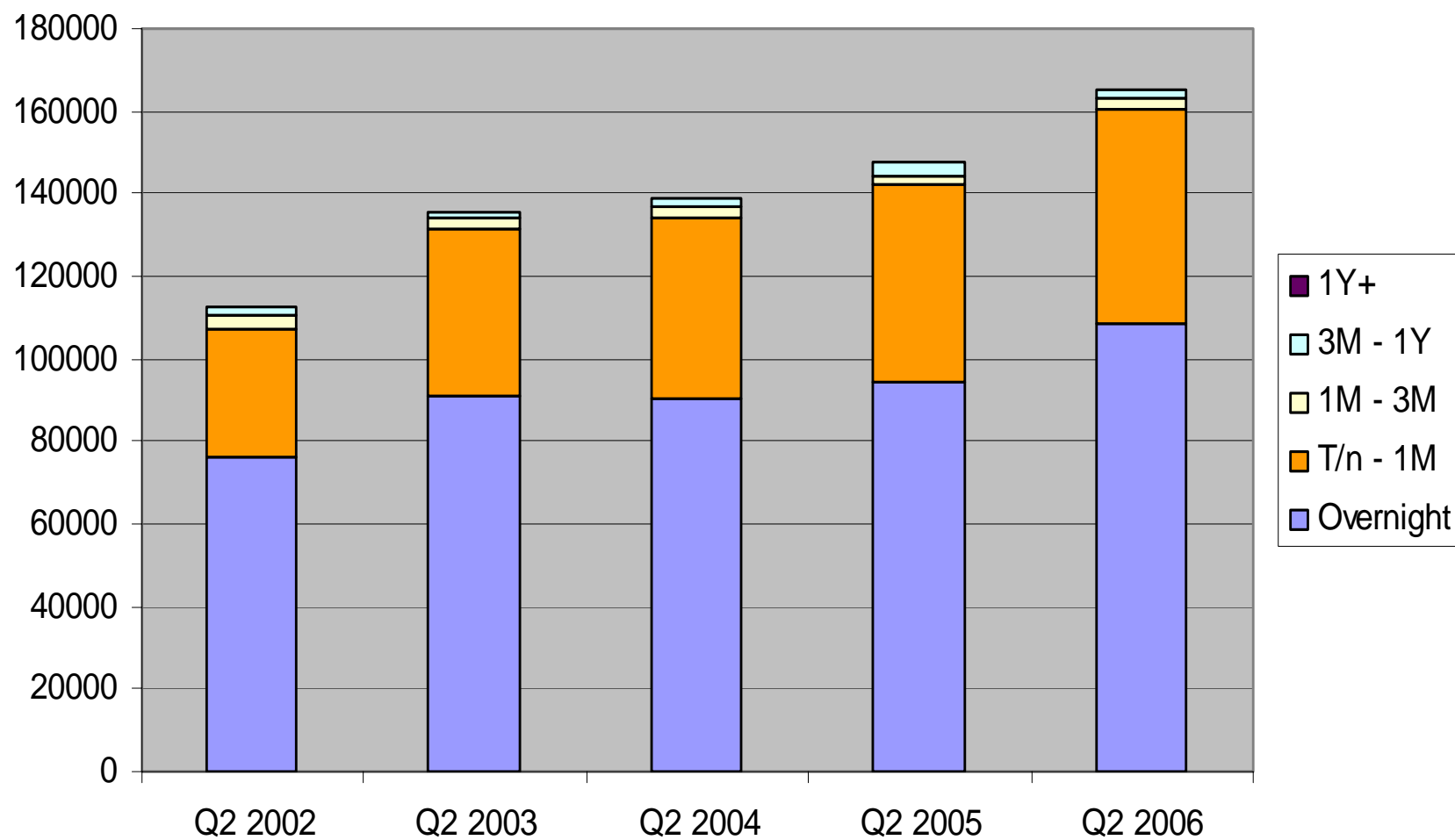


# Unsecured lending. Panel:114 Banks

Breakdown of activity 3mth and over

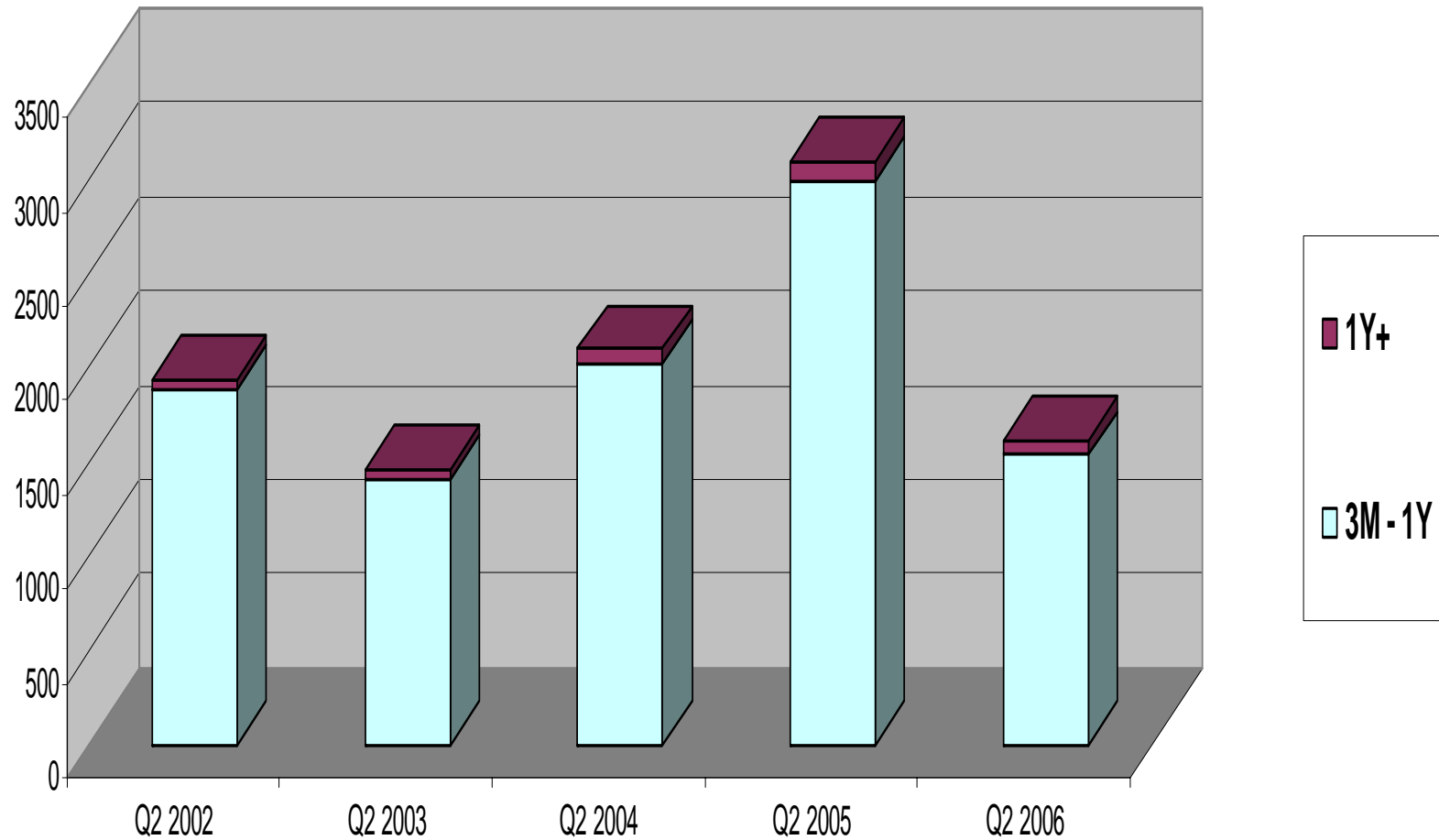


# Unsecured borrowing. Panel:114 Banks



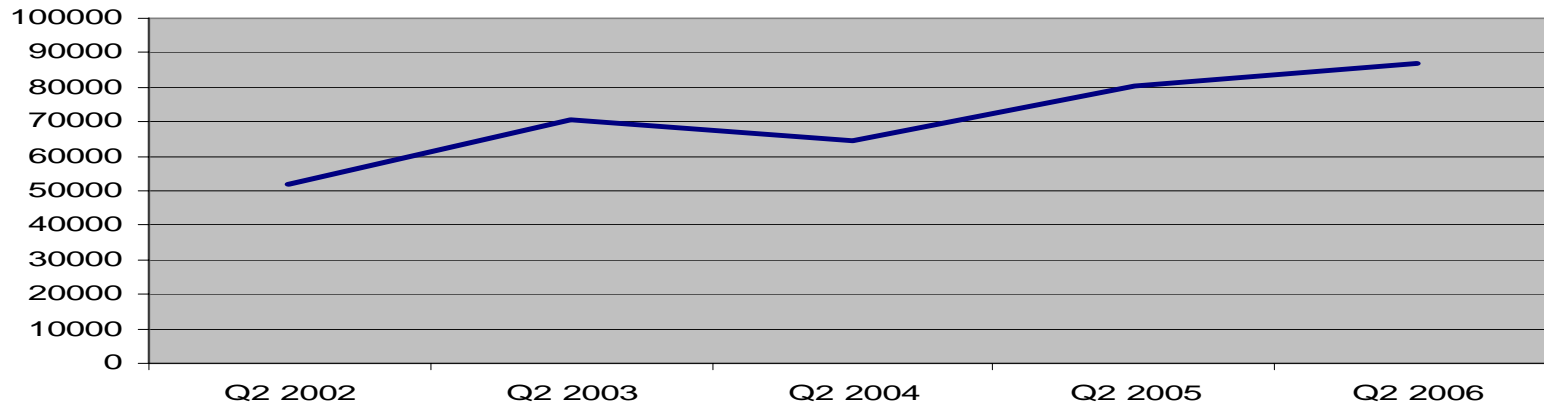
# Unsecured borrowing. Panel:114 Banks

breakdown of activity 3mth and over

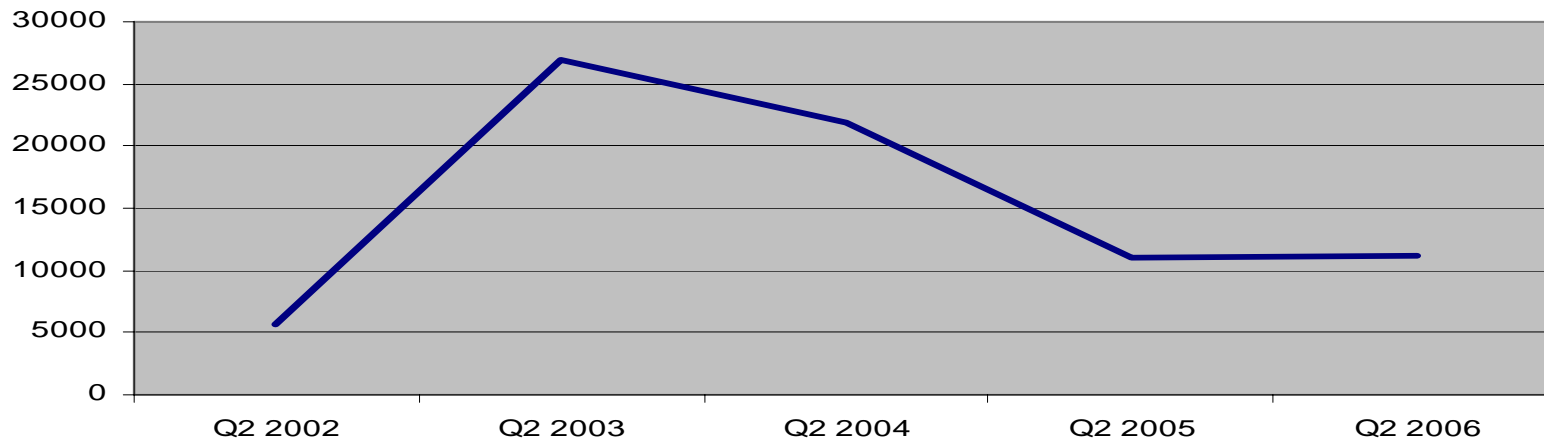


As volumes have grown so has the gap between unsecured lending and borrowing from 51.8 bio in 2002 to 87 bio in 2006

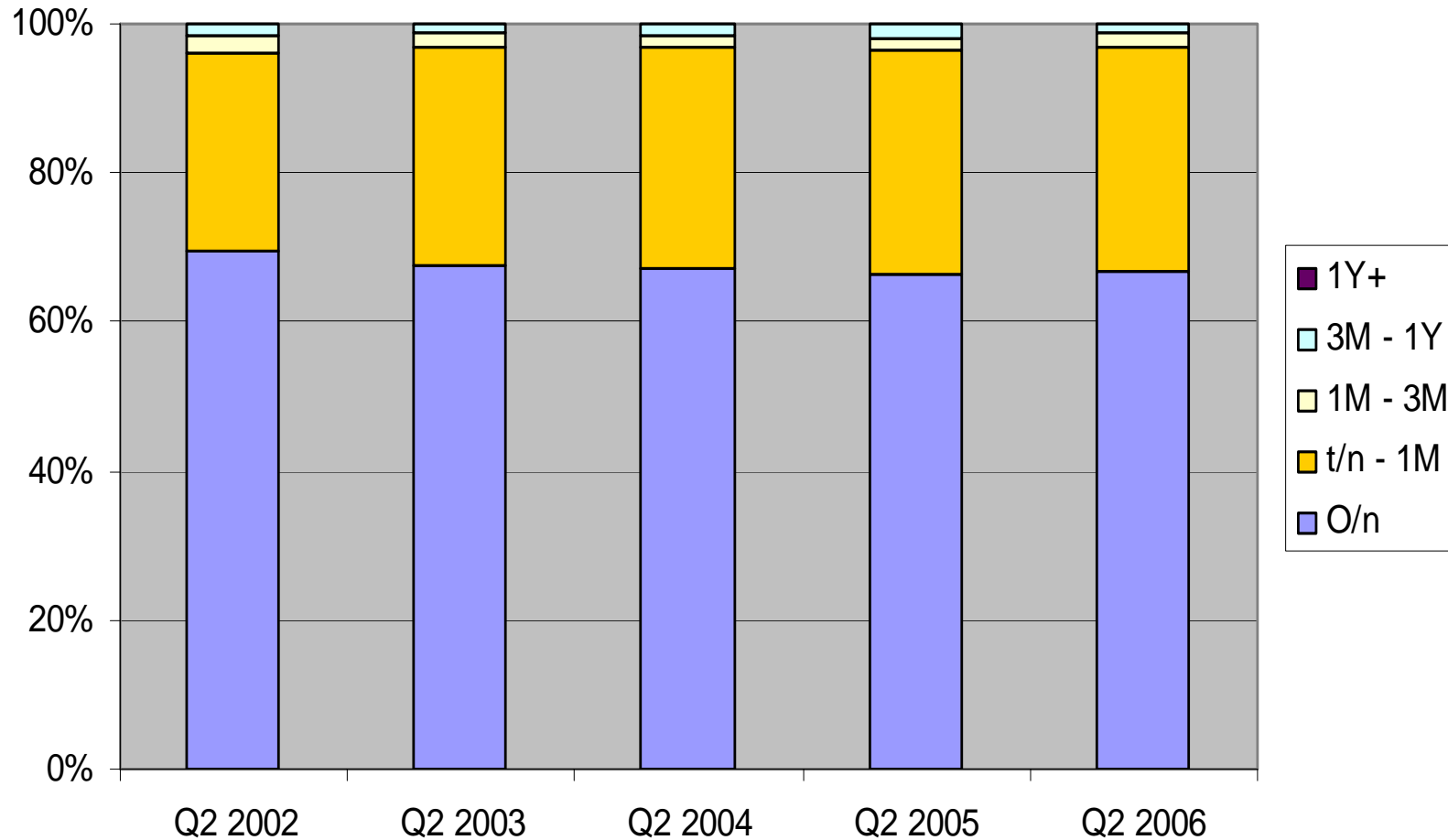
**Unsecured borrowing - Unsecured lending**



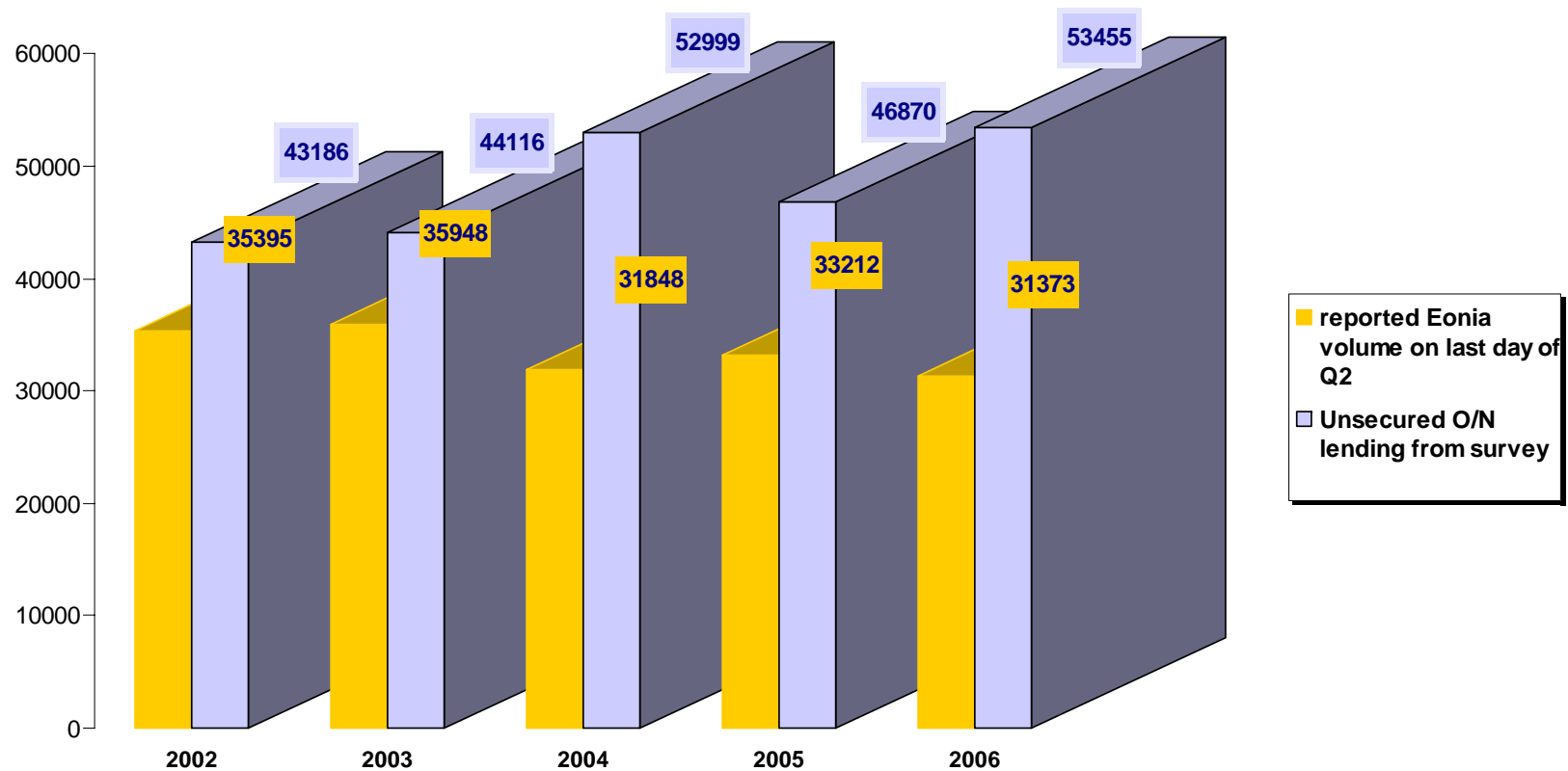
**Secured borrowing - Secured lending**



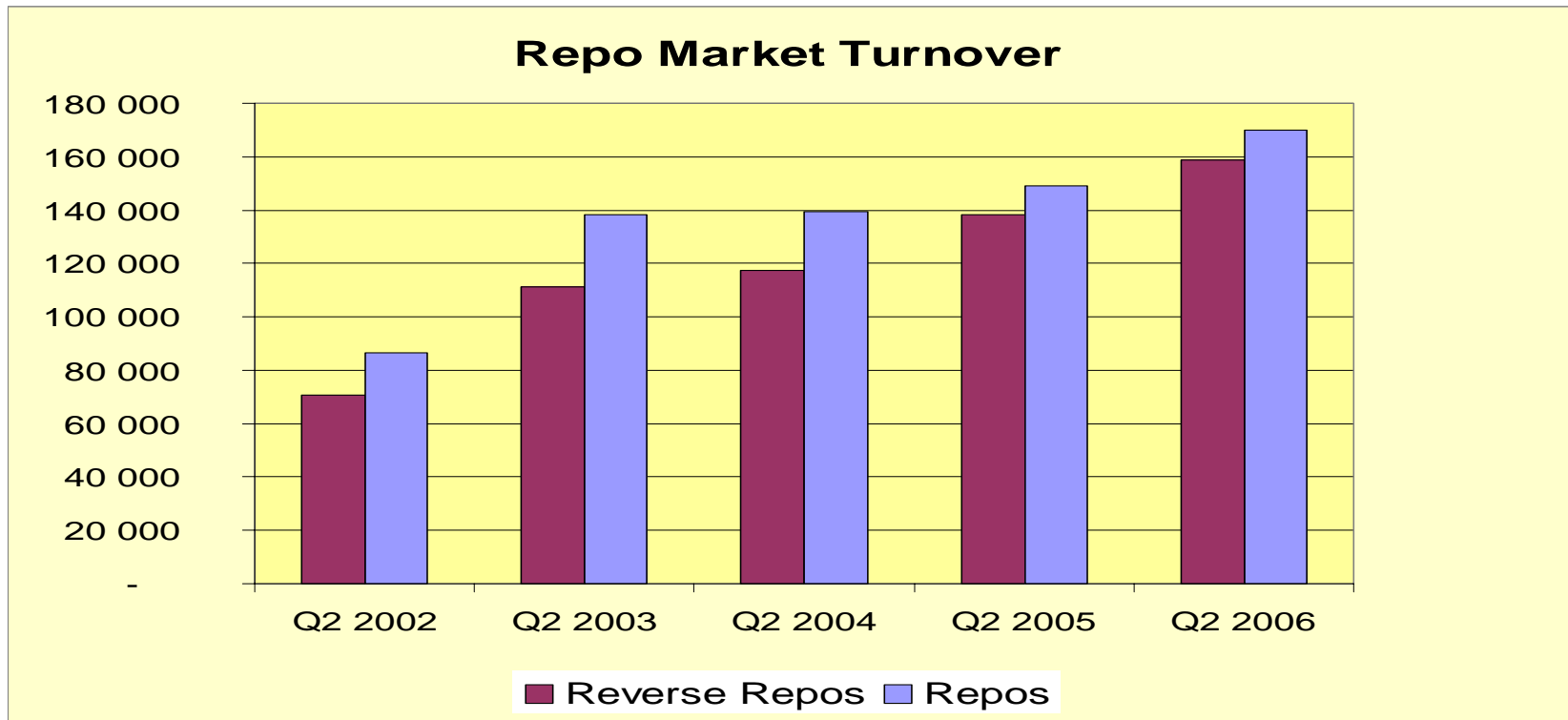
## Maturity profile for unsecured cash (borrowing & lending): close to 95% of turnover is 1mth and under.



Although there has been a steady increase in unsecured lending (our panel 114 Banks), the volume at the Eonia fixing is stable. From our qualitative survey we see that 20% of unsecured cash business is done away from euro area or national counterparties.



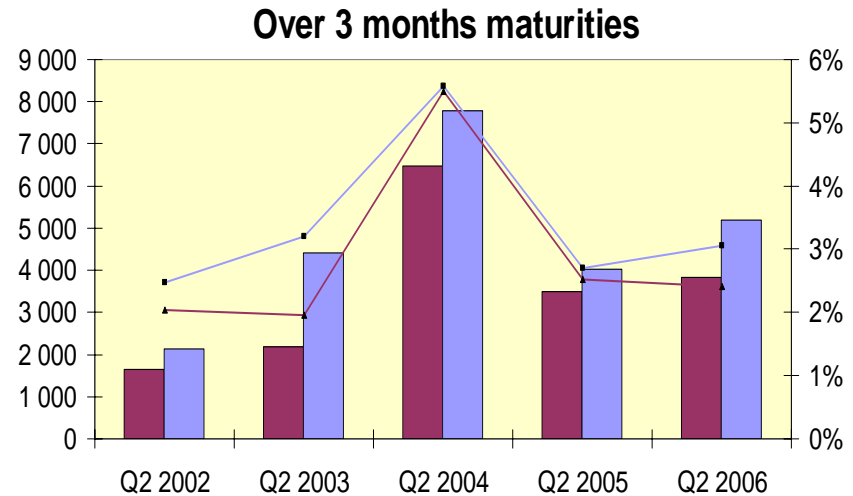
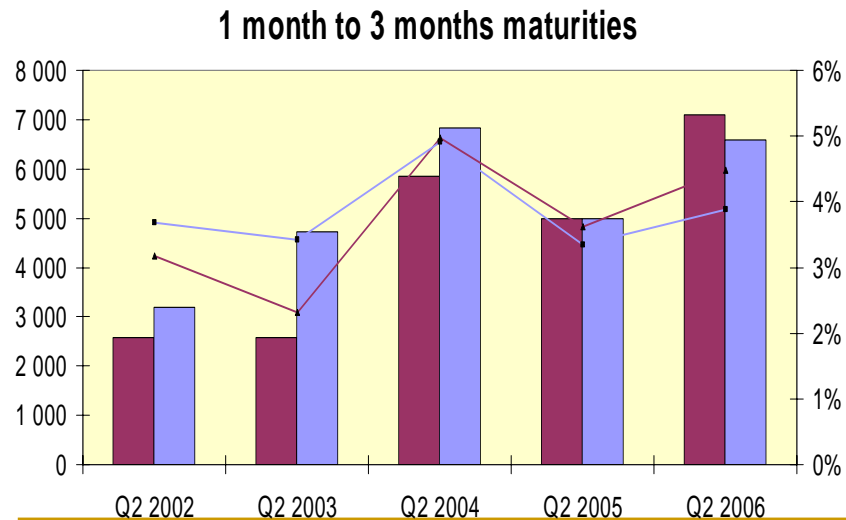
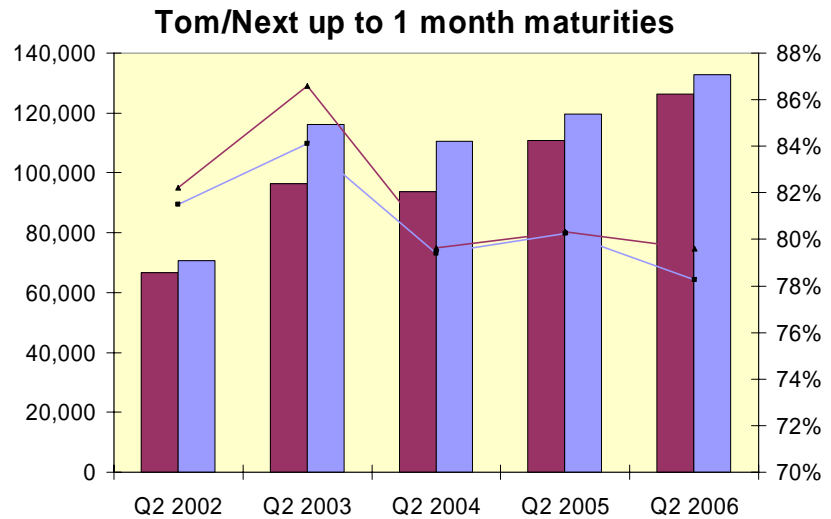
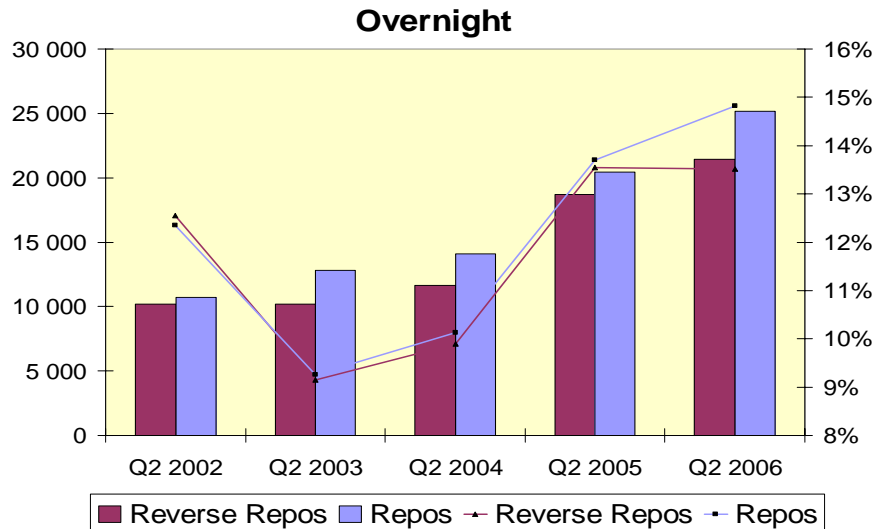
# REPO Global Market Turnover



- Nominal Traded Volume increased by 96% between 2002 and 2006
- Globally, Repo activity remains greater than Reverse Repos
- After initial surge in volume 2002/2003 (+37%), the rate of growth has slowed for the period 2003-2006 (average of 13% per Year)

# REPO – Breakdown by maturities

by nominal (rhs) and as a proportion of all maturity buckets (rhs)





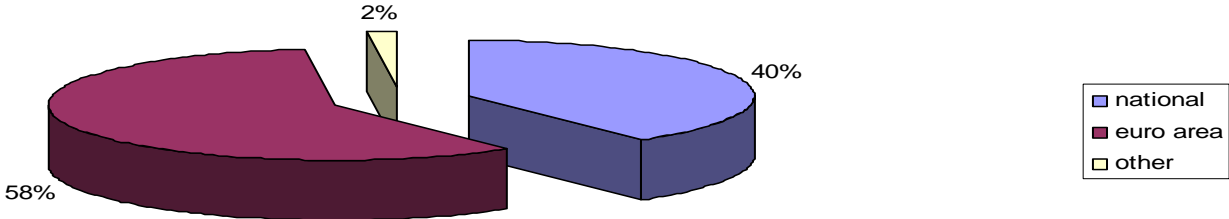
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## REPO – Breakdown by maturities

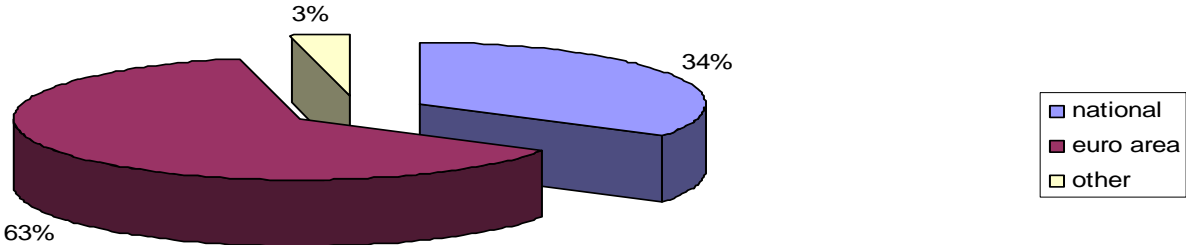
- In terms of nominal volume, the bulk of the activity remains in the '*Tom/Next up to 1 month maturities*' bucket, although its proportion of the overall volume has decreased
  - Overnight bucket is steadily increasing in nominal and relative terms since 2003
  - Generally, Repo volumes are greater than Reverse Repo, with the exception of the latest '*1 month to 3 months maturities*' figures.
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# 2005-2006 Bilateral repo collateral split, cash lending: 159 Banks, 93 active

Q2 2005

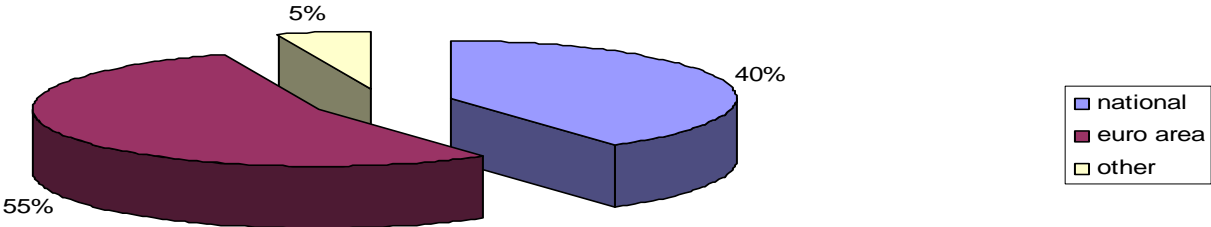


Q2 2006

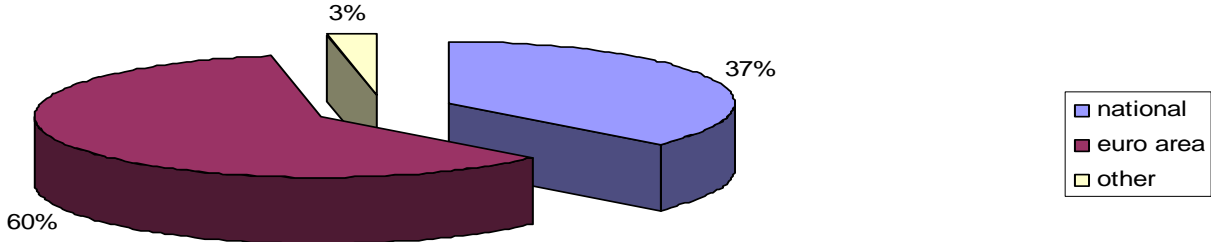


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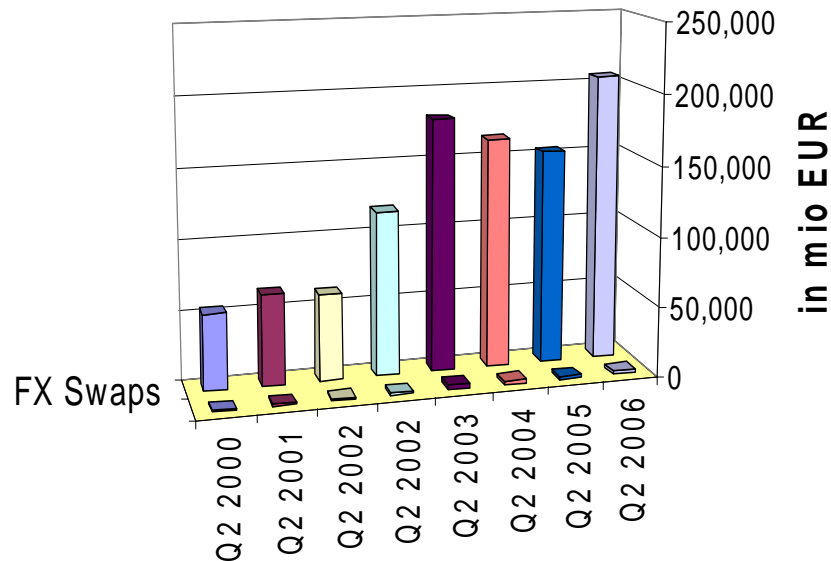


Q2 2006

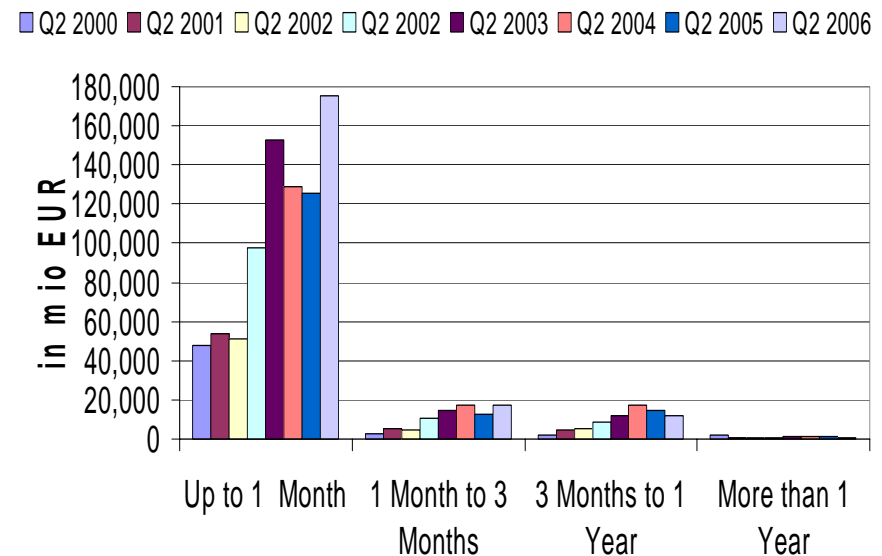


# Fx swaps

## Fx and Cross currency swaps



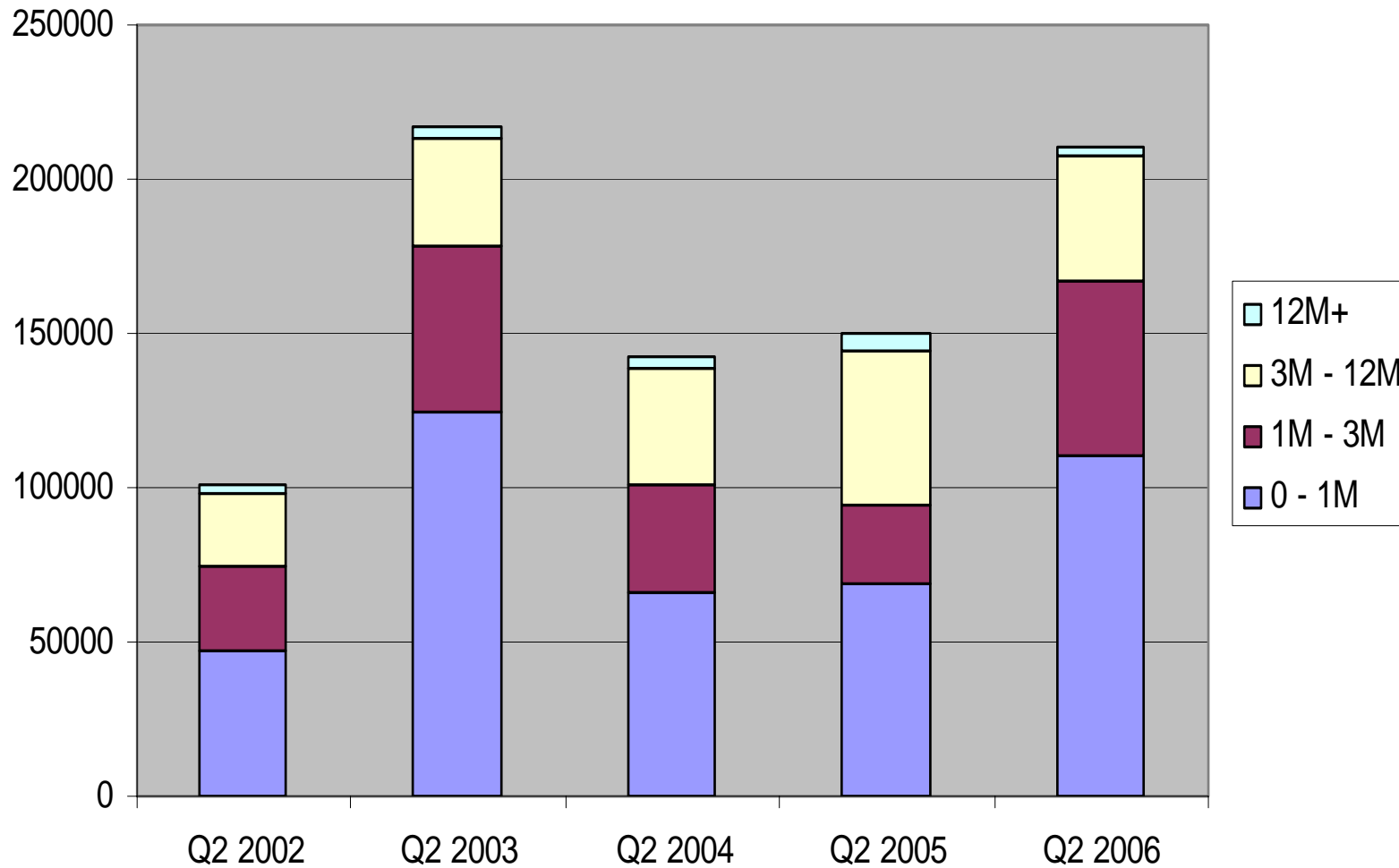
## Fx swaps per maturity



- Fx swaps turnover jumps by 34 % (Q2 2006/2005)
- 85 % is below 1 month (75 % below 1 week)
- The average maturity decreases and is now 18 days (26 days Q2 2005) .

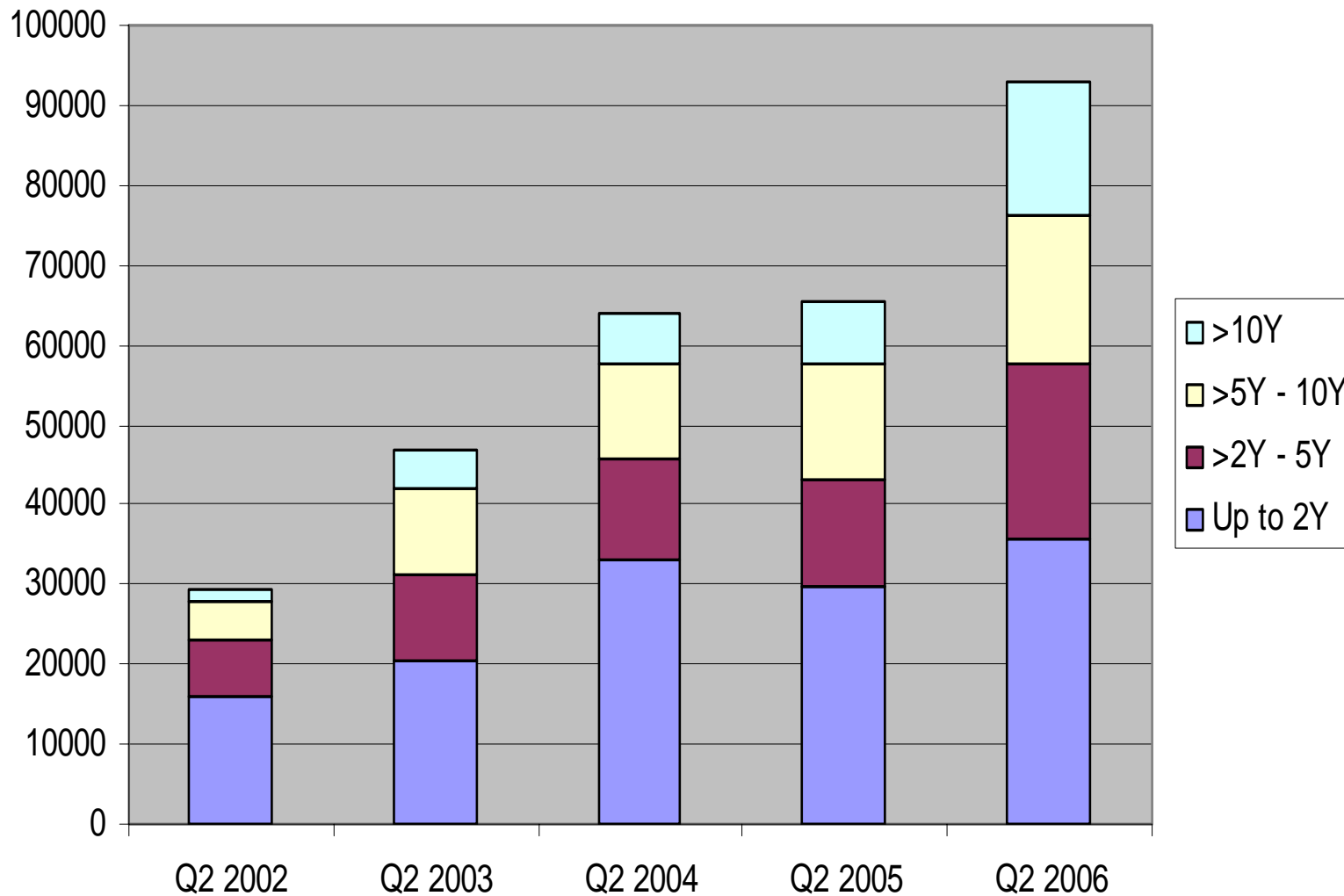
☞ *Banks use more Fx swaps as a Treasury product in their daily multicurrency liquidity management ?*

# OIS total turnover. Panel:114 Banks

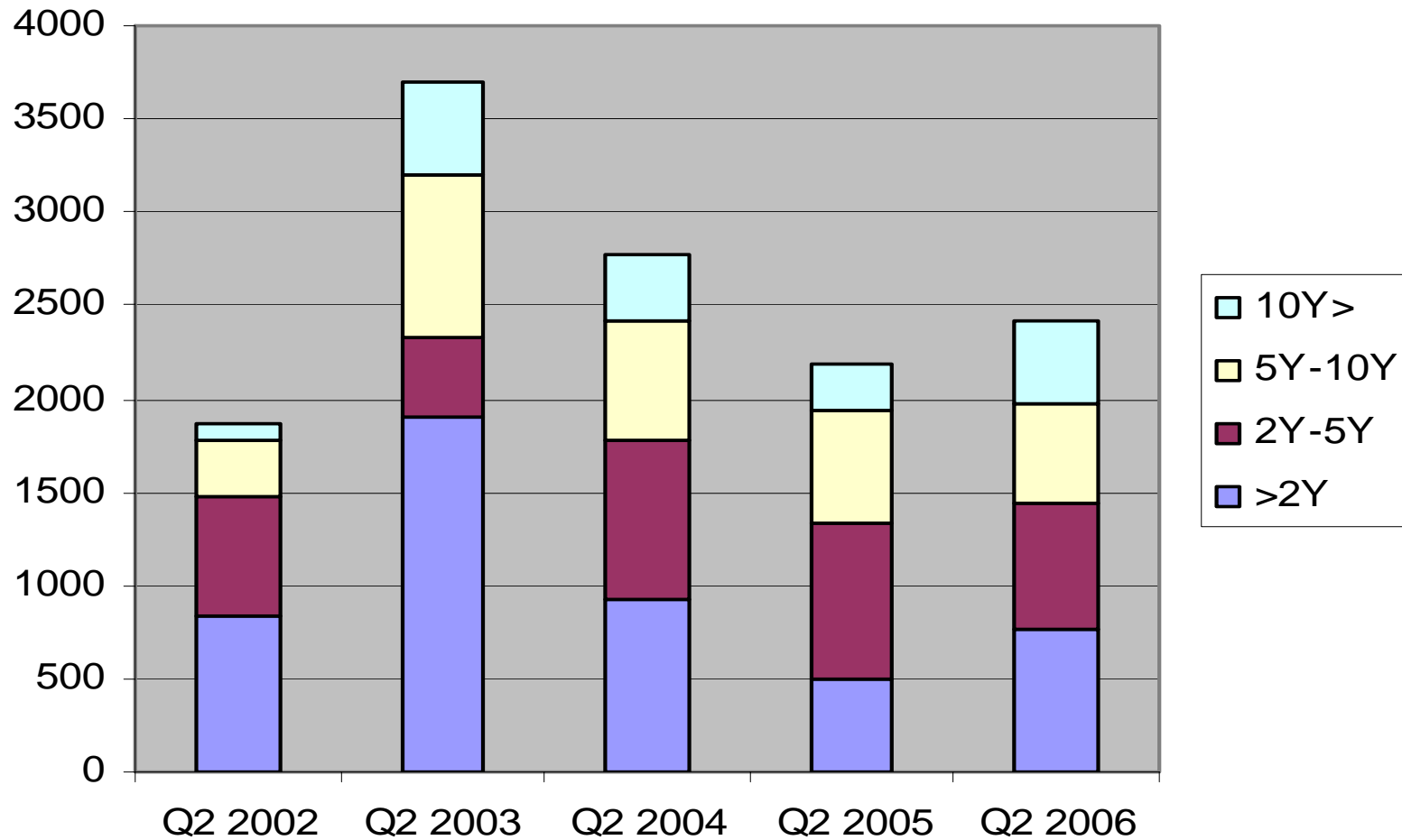


# Other IRS total turnover. Panel:114 Banks

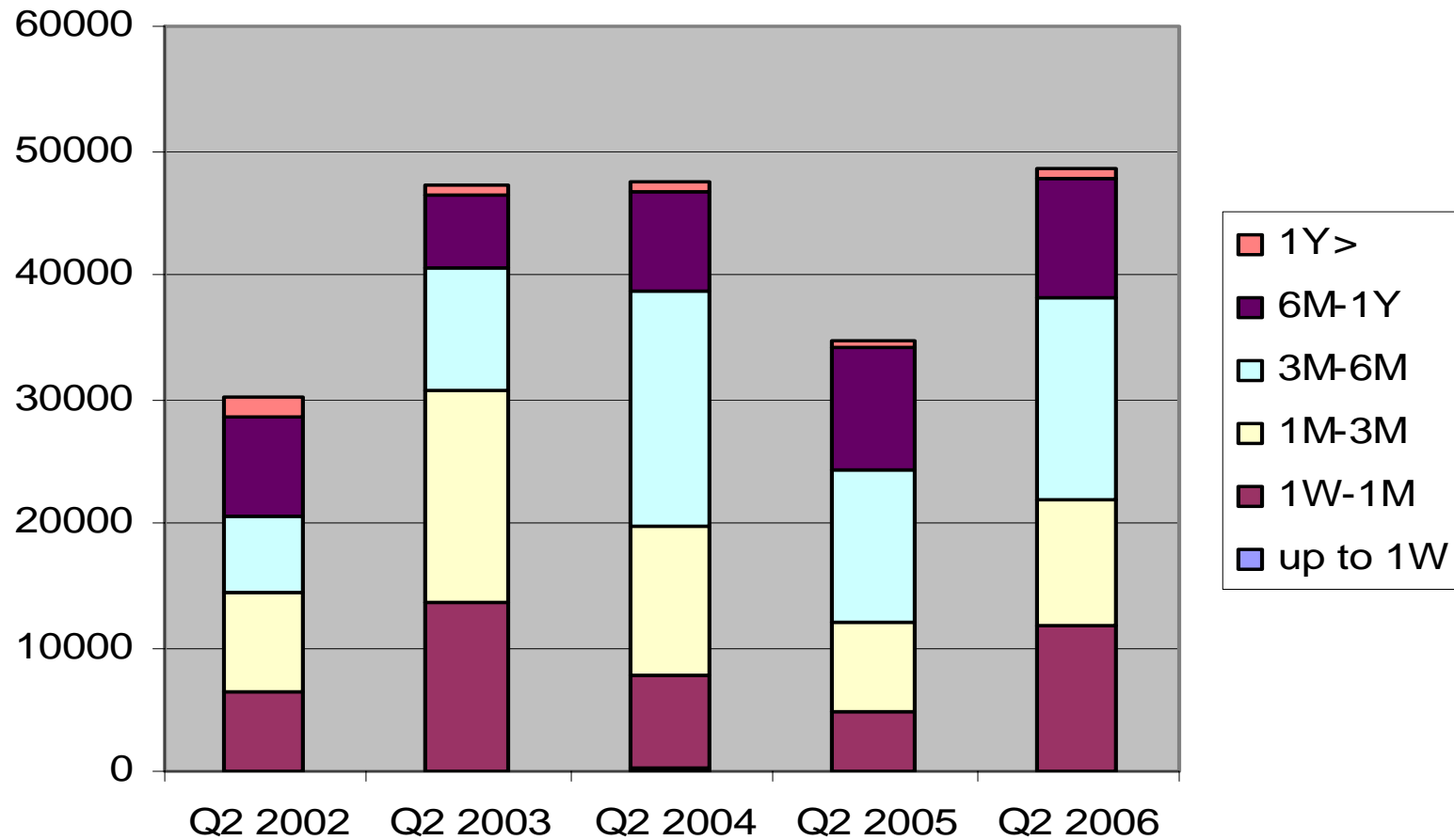
growth in volume 10y and over is due to Pension fund buying of longer term assets



# Xccy total turnover. Panel:114 Banks

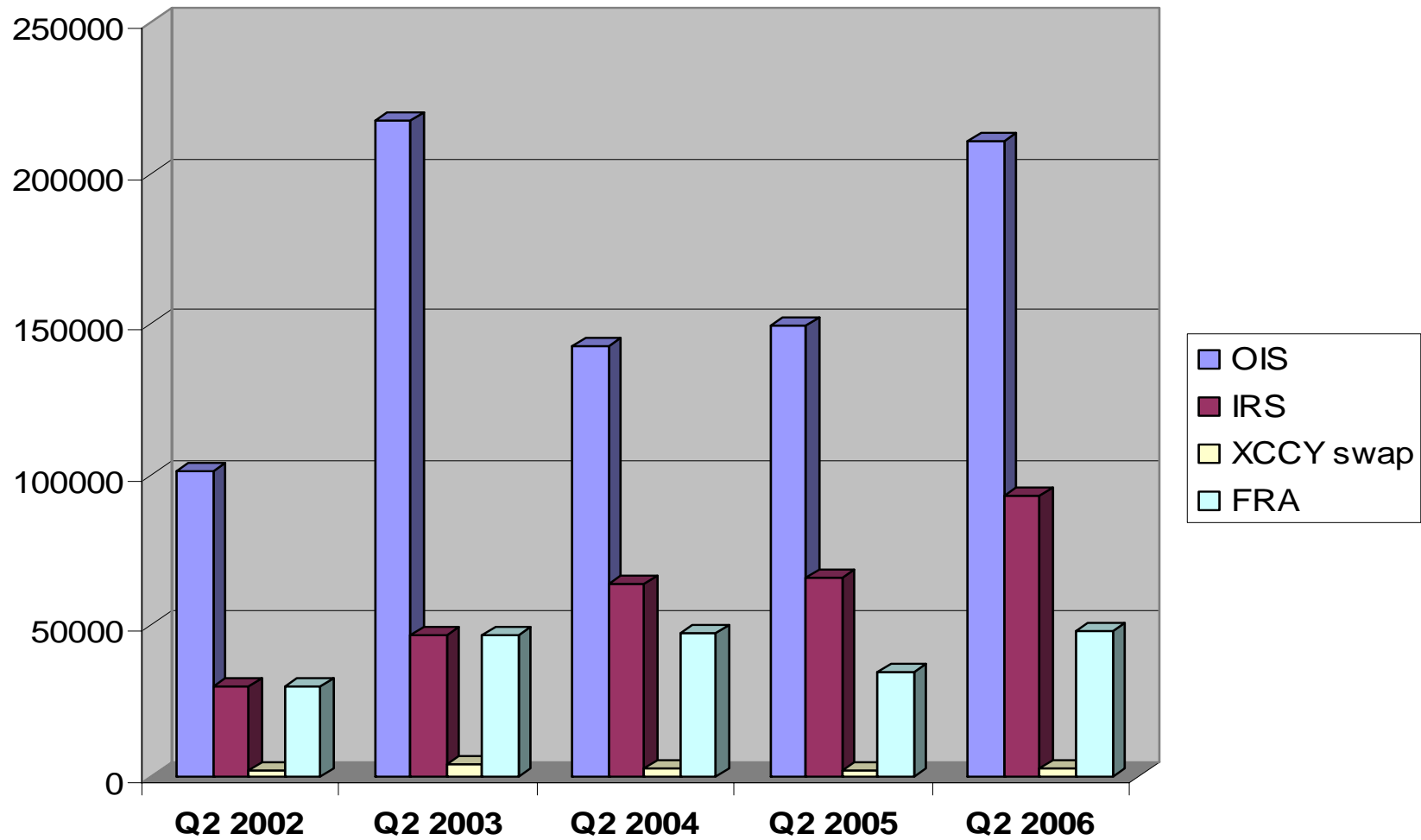


# FRA total turnover. Panel:114 Banks

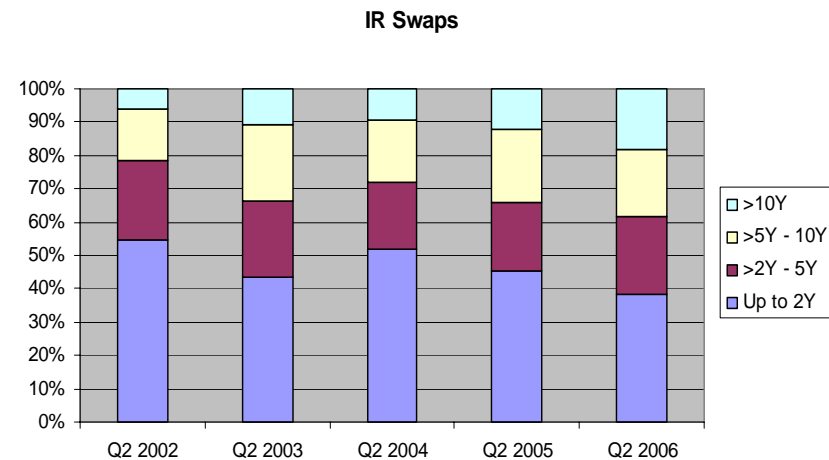
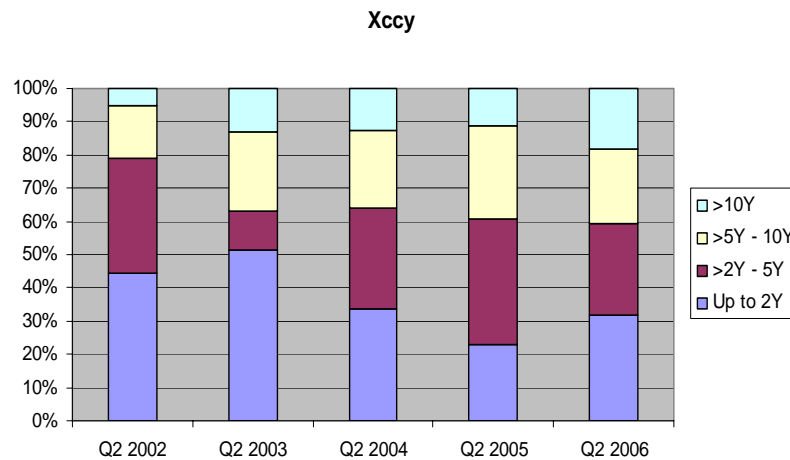
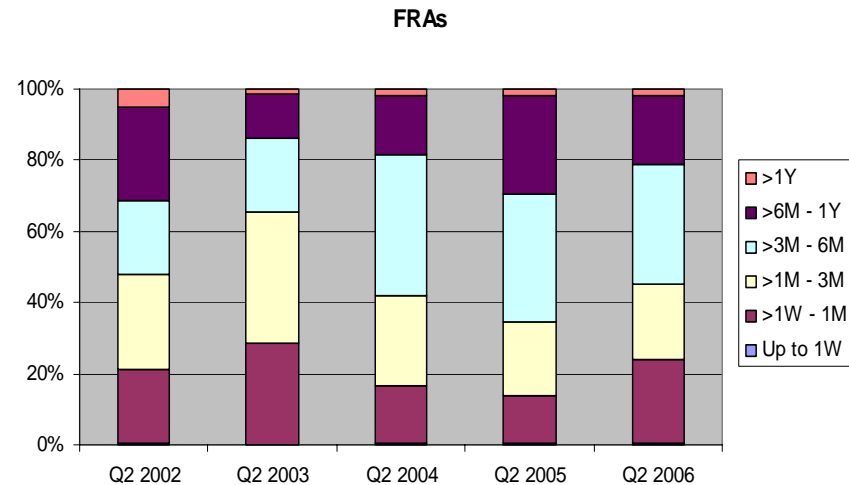
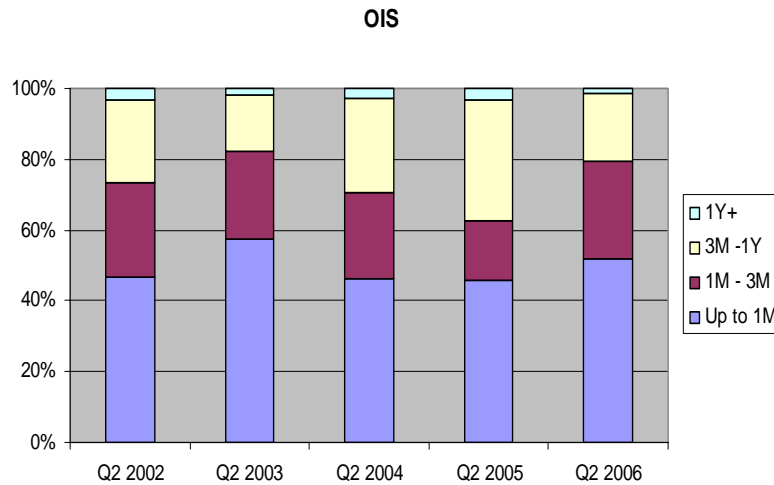




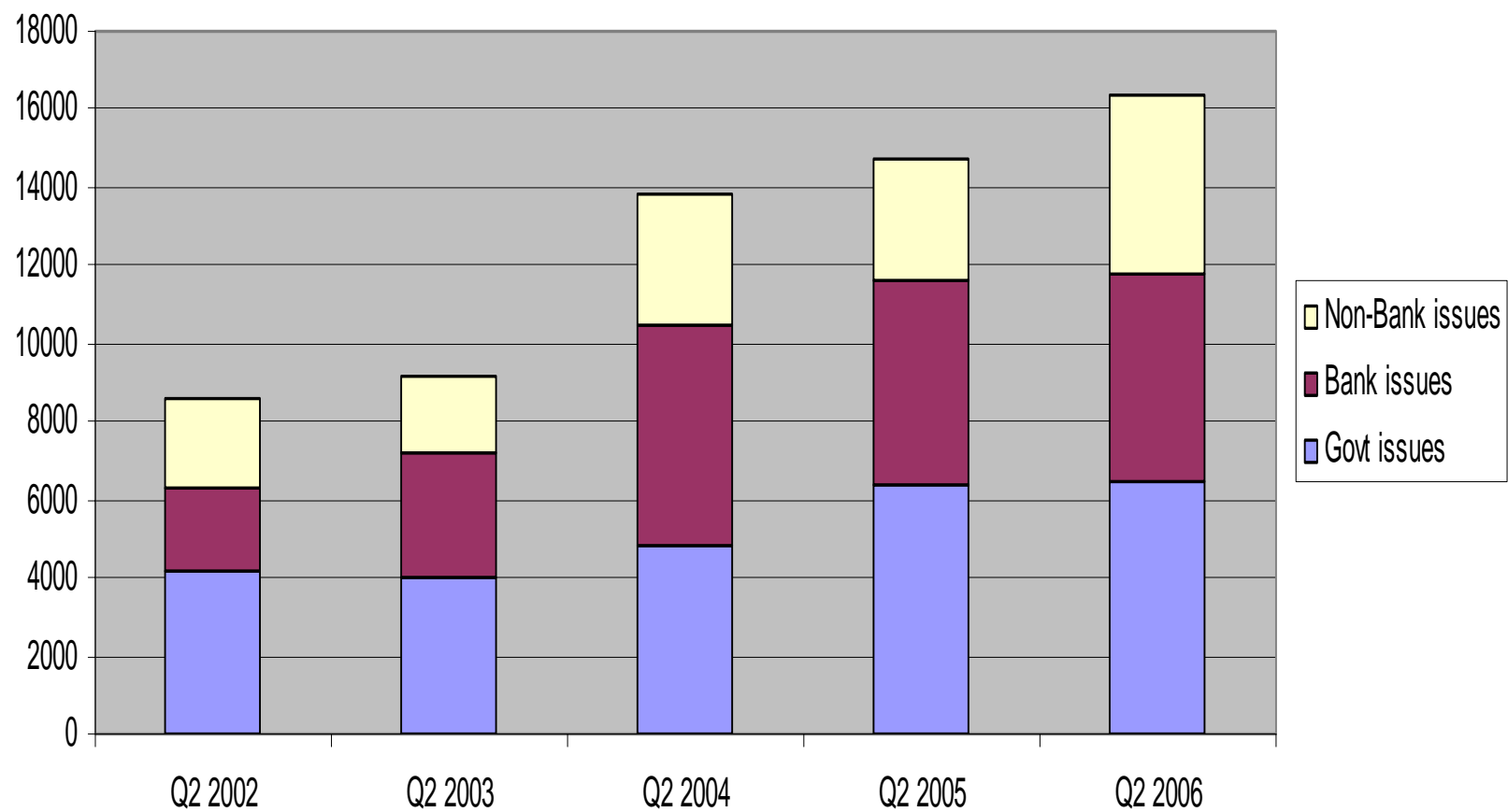
# Total derivatives turnover: Panel:114 Banks



**Maturity profile for derivatives:** Almost 80% of OIS trades are under 3mths, almost 80% of FRAs are under 6mths. The maturity profile in IRS has been extended.



# Short-term securities. Panel:114 Banks



# *PART TWO*

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## *PLAYER TRENDS*

*concentration of the market*

*total turnover in all products*

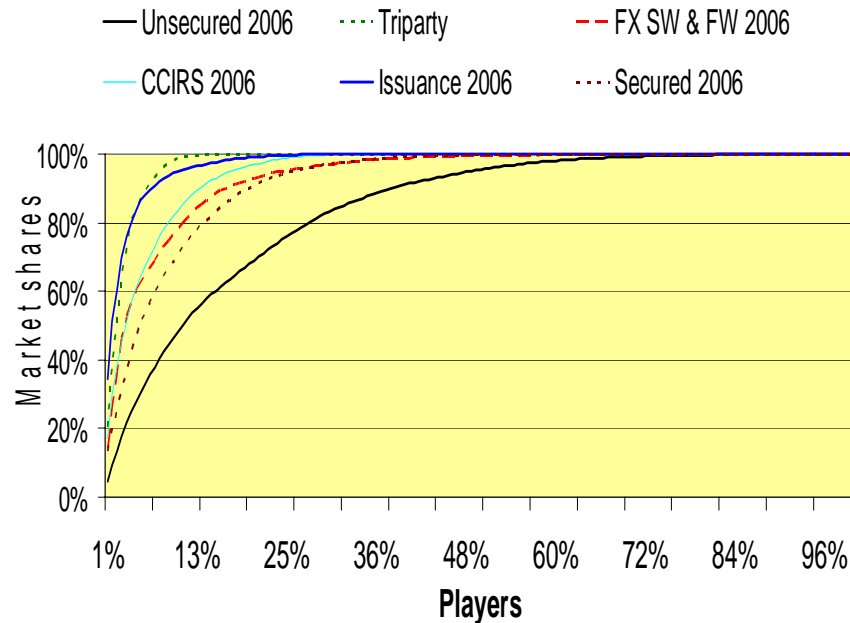
*qualitative information on the Euro market*

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# Concentration (on-balance sheet)

## Curve of Lorentz

### Balance sheet products



### Market shares of 20% players

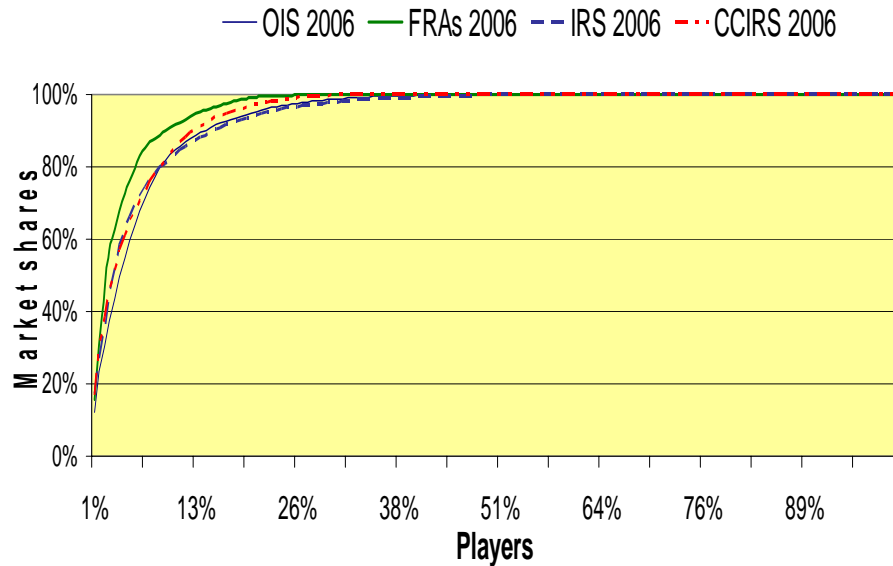
|                       | 2005 | 2006 |
|-----------------------|------|------|
| <b>Secured</b>        | 89%  | 91%  |
| <b>Unsecured</b>      | 69%  | 69%  |
| <b>Triparty</b>       | 100% | 100% |
| <b>FX SW &amp; FW</b> | 91%  | 93%  |
| <b>Issuances</b>      | 99%  | 99%  |

- All markets are highly concentrated. In triparty and Cd's, 80% of the market is in the hands of 4% players.
- In all other segments, this trend is confirmed (Q2 2005/Q2 2006).

# Concentration (off-balance sheet)

## Curve of Lorentz

Off-Balance sheet products

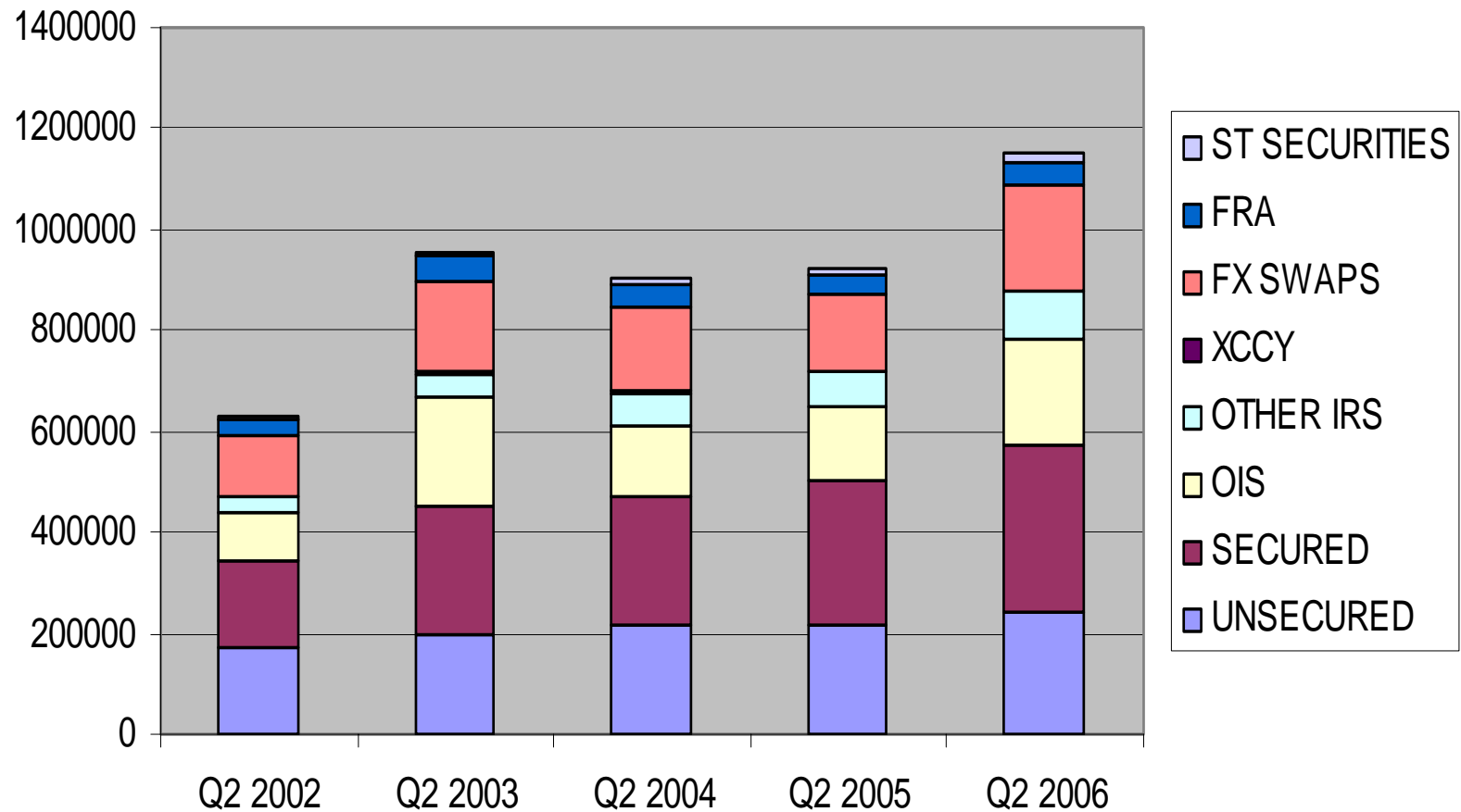


## Market shares of 20% players

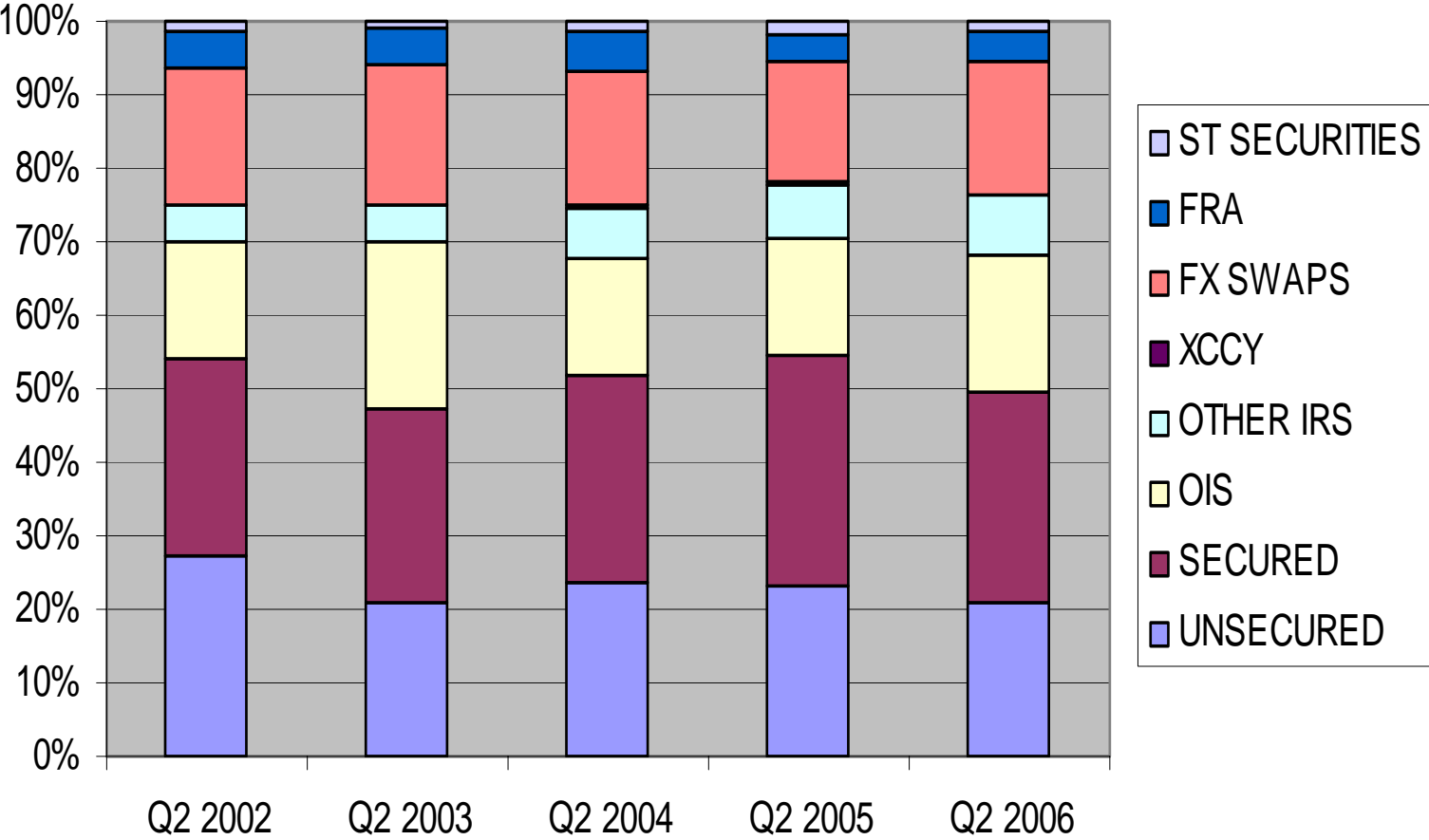
|              | 2005 | 2006 |
|--------------|------|------|
| <b>OIS</b>   | 95%  | 95%  |
| <b>FRAs</b>  | 98%  | 99%  |
| <b>IRS</b>   | 93%  | 94%  |
| <b>CCIRS</b> | 97%  | 97%  |

- 5 % of players (6) get more than 60% of market share in all products.
- More concentration for the first tier of market players (Q2 05/06).

**Total turnover all products in volume:** volume has increased to 1,149 bio in Q2 2006 from 629 bio in Q2 2002 an increase of 520 bio

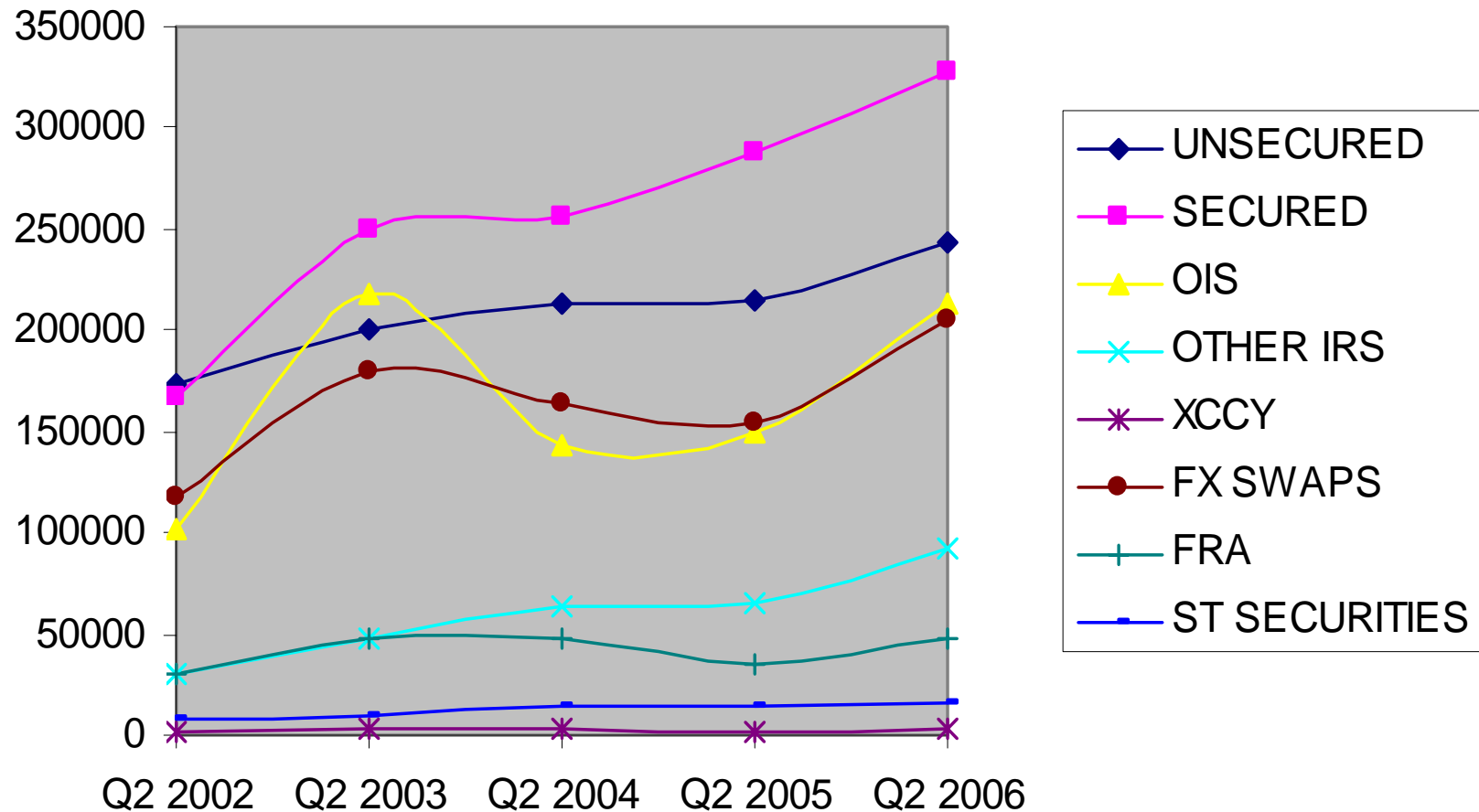


# Total turnover all products %

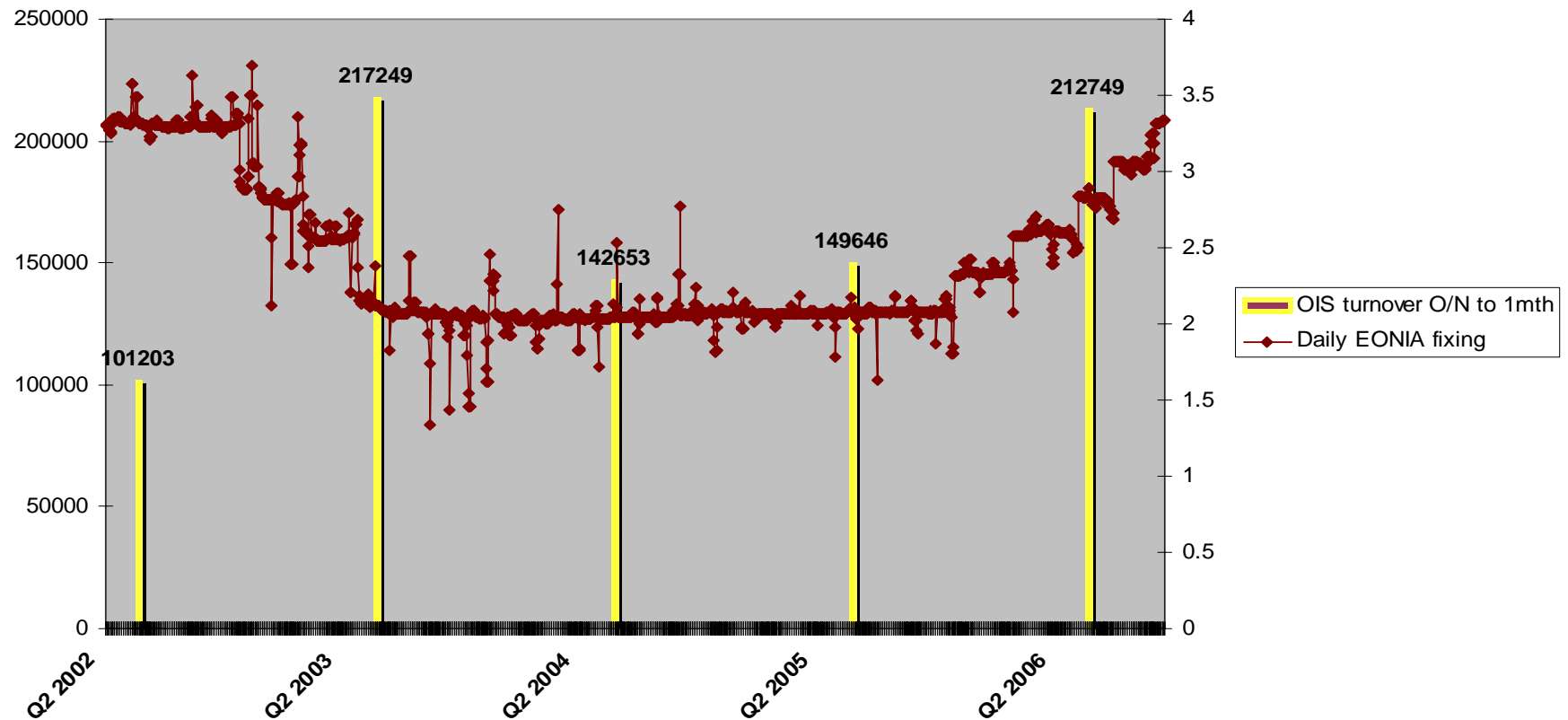




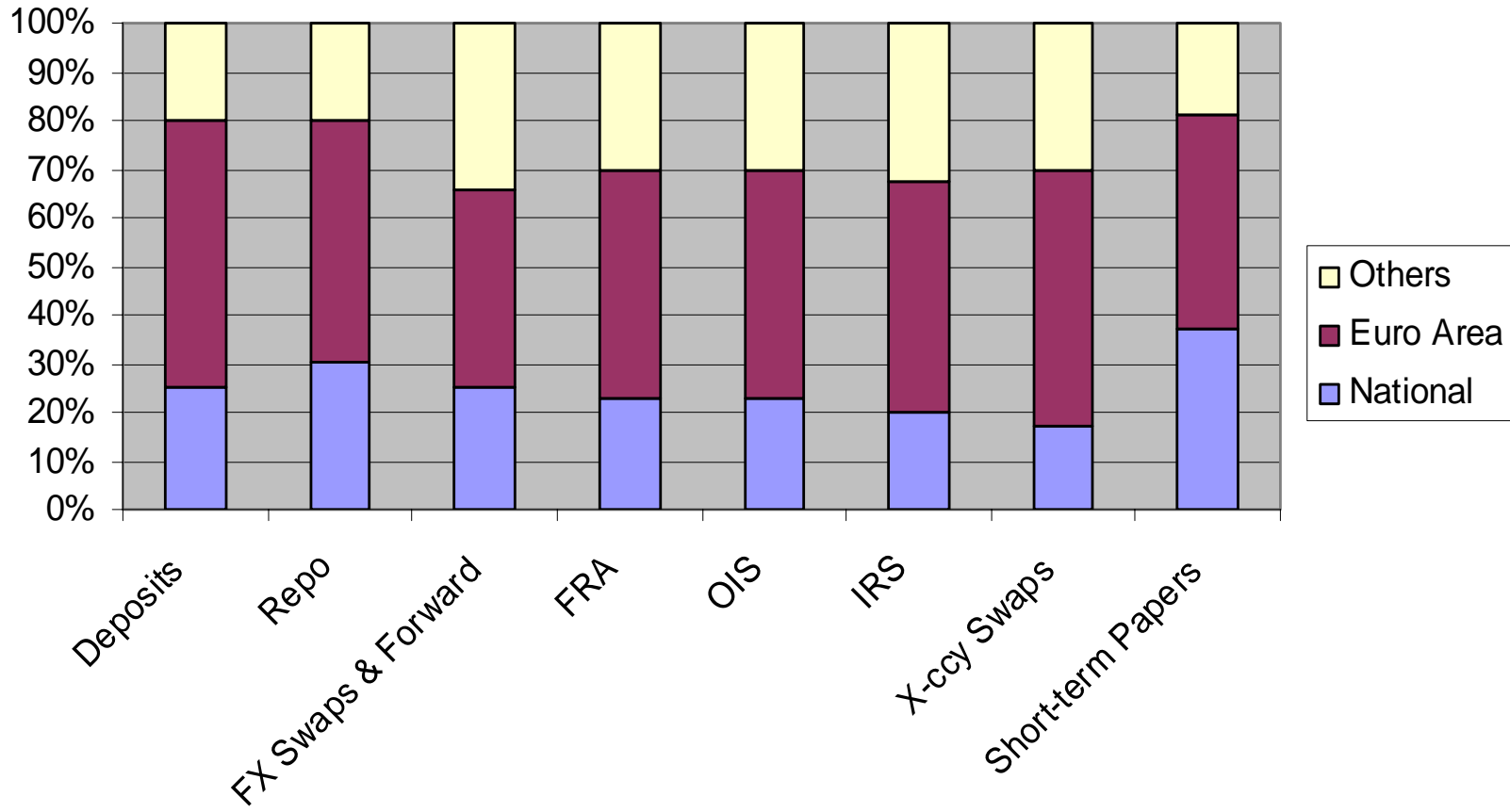
**Total turnover all products:** the biggest growth is in the secured market where overall turnover has increased 93% since Q2 2002



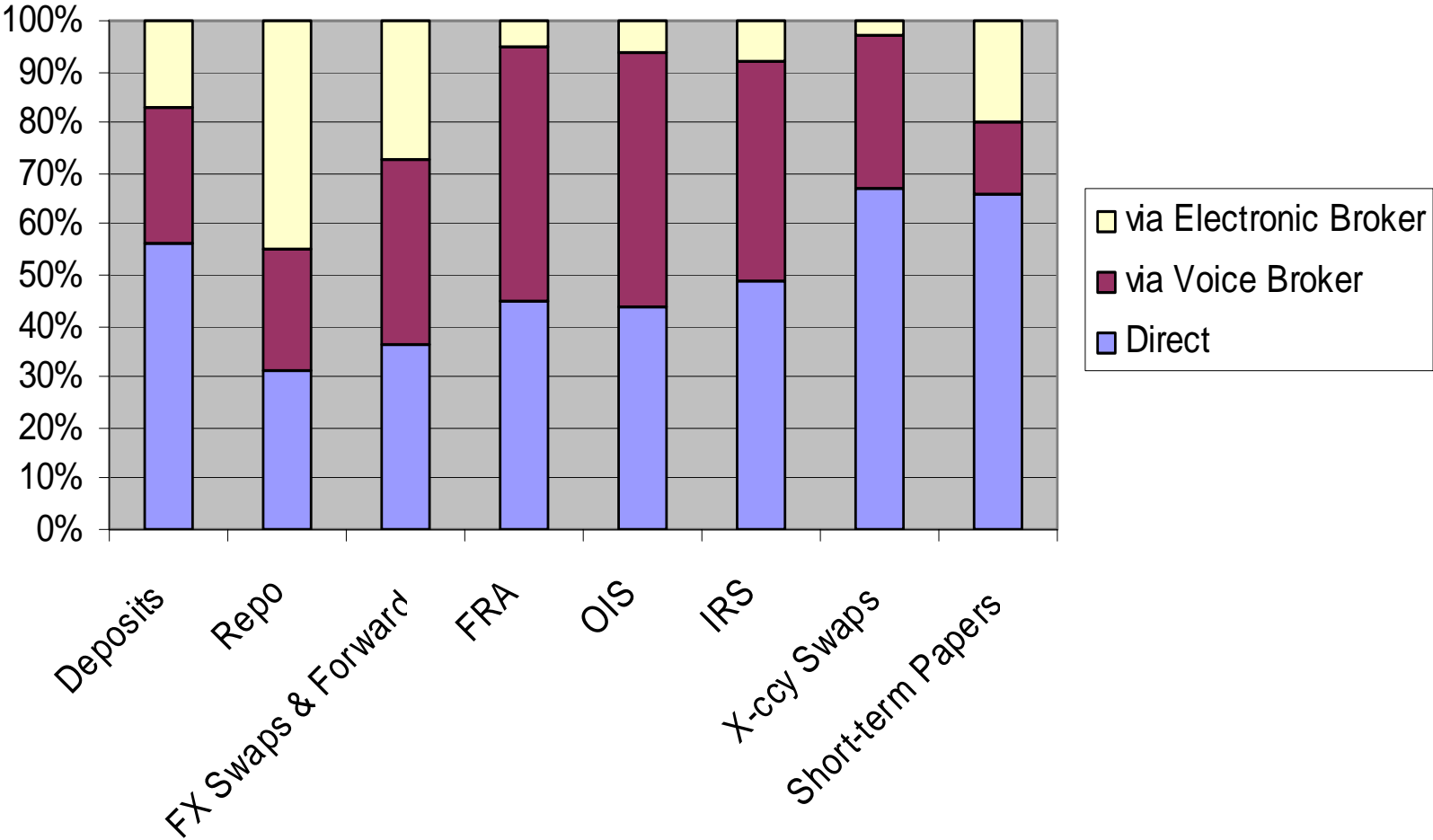
**Daily EONIA fixing and OIS turnover:** whilst the growth in most products is upwards, in the derivatives market the volumes tend to fluctuate depending on the rate cycle and so it is harder to measure organic growth.



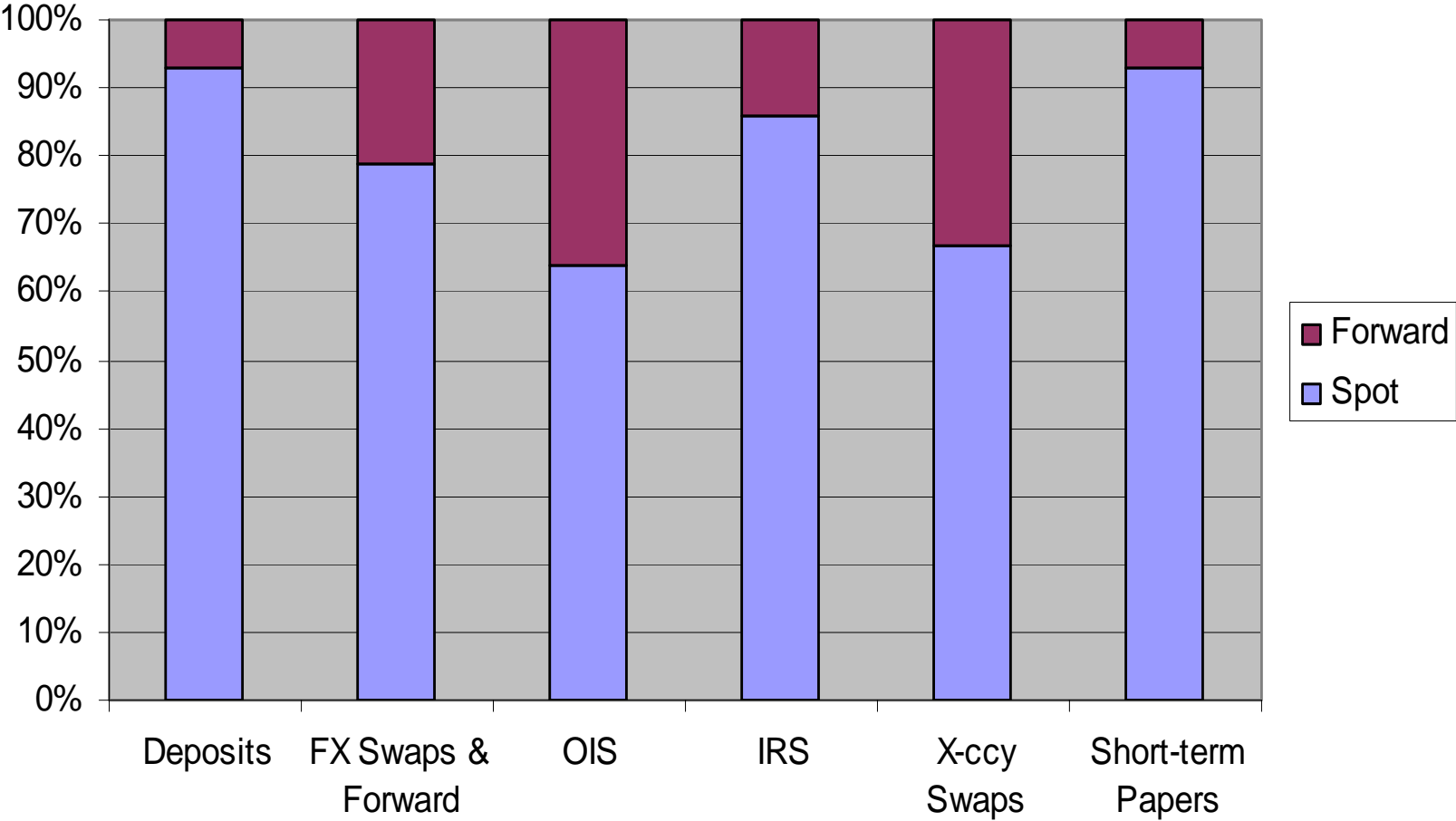
# Counterparty split by product



# Method of trade execution



# Value date for trade settlement.



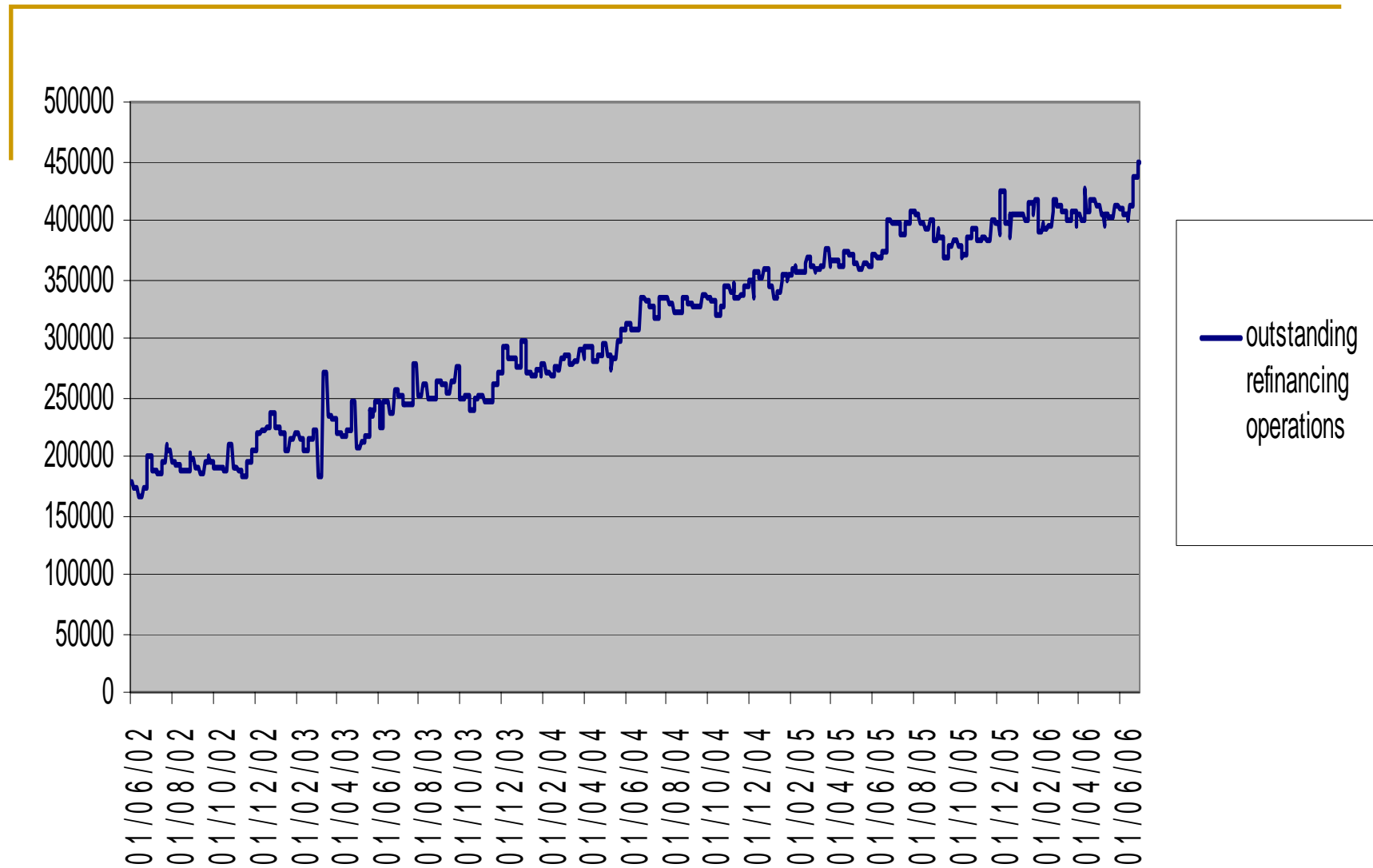
# *PART THREE*

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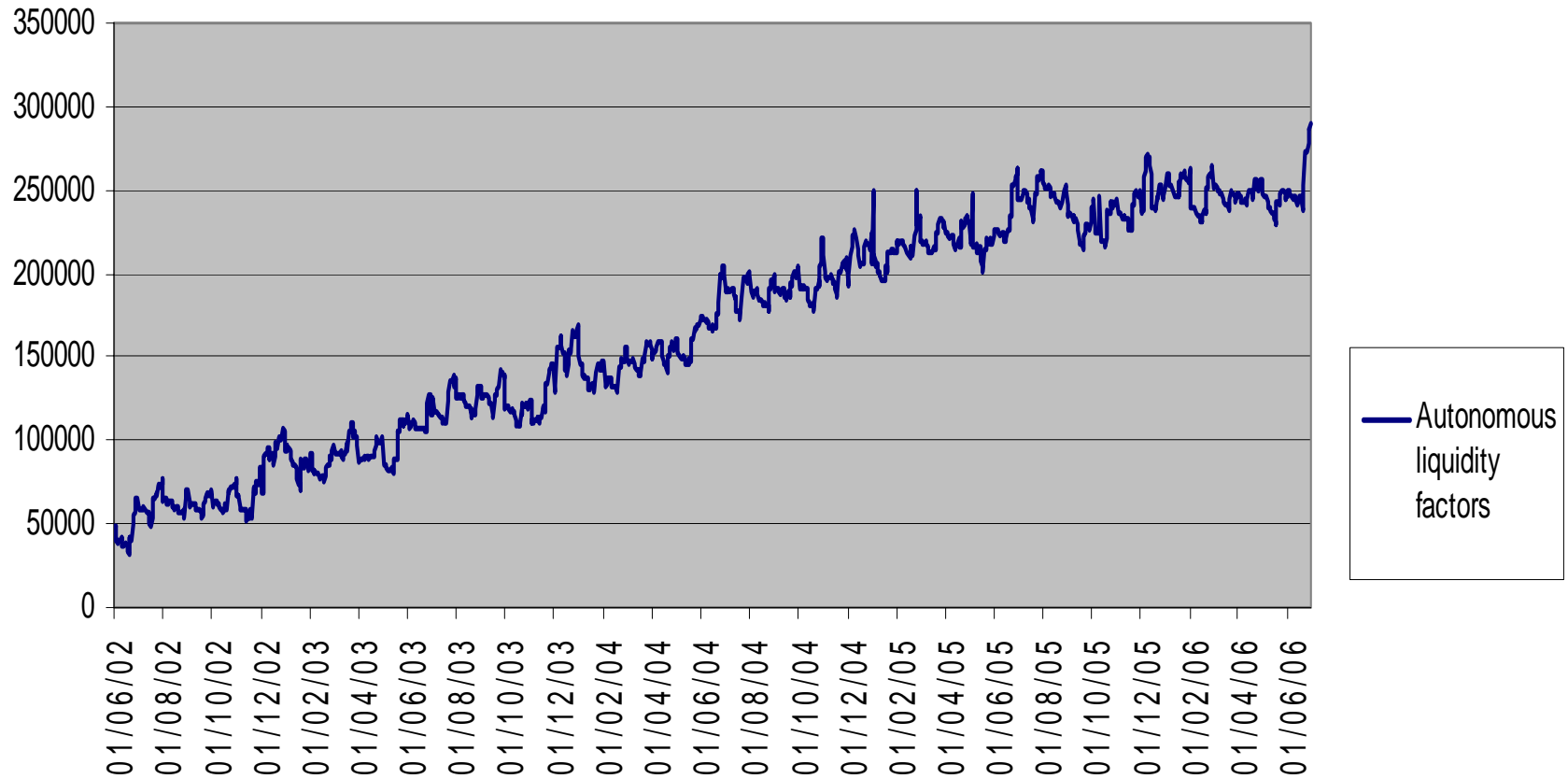
## *ANNEXES*

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**Outstanding refinancing operations (MRO,LTRO& FT) have grown from 200bio on 30/6/2002 to 448.5 bio on 30/6/2006**

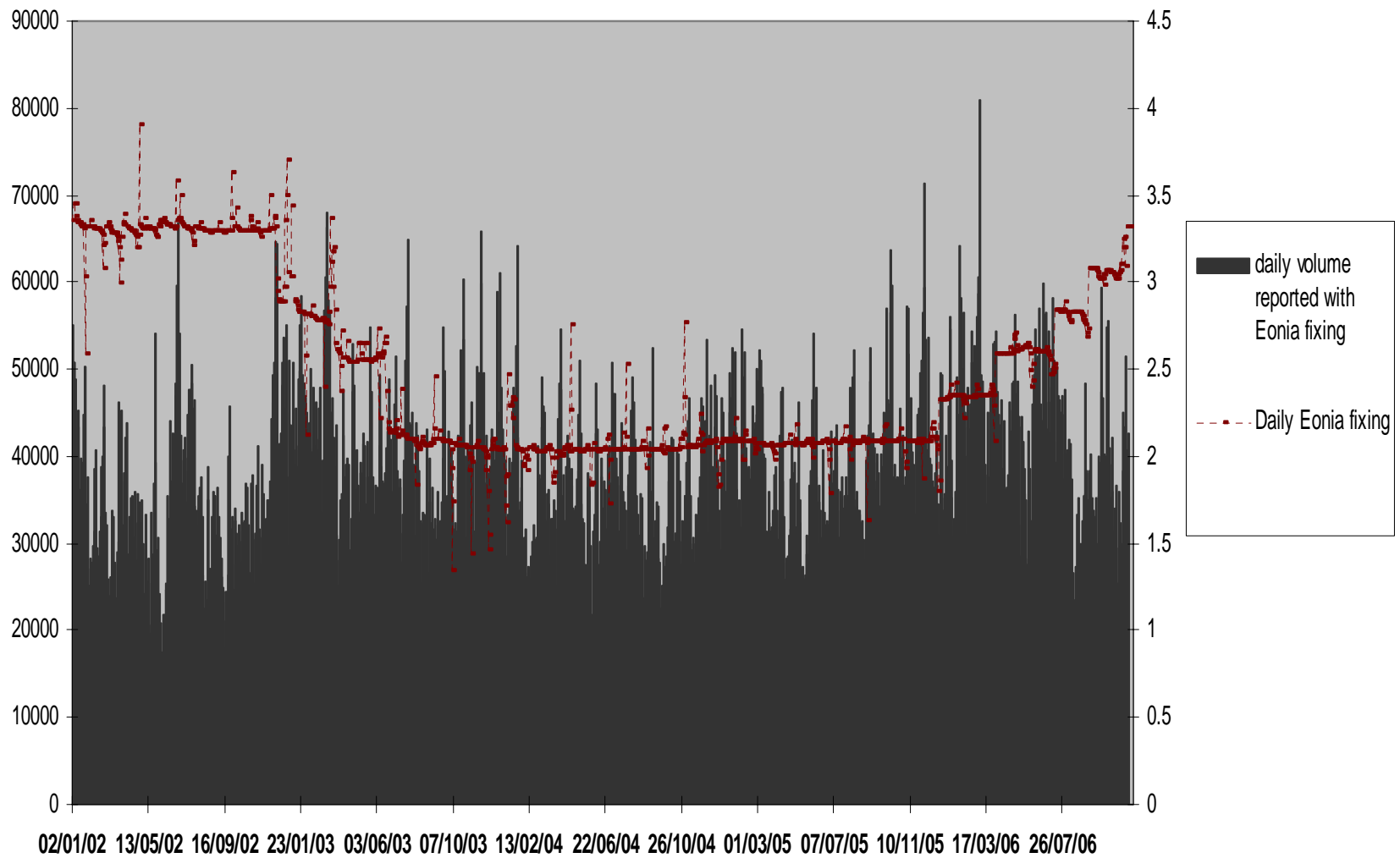


## Autonomous liquidity factors have grown from 66 bio on 30/6/2002 to 290 bio on 30/6/2006



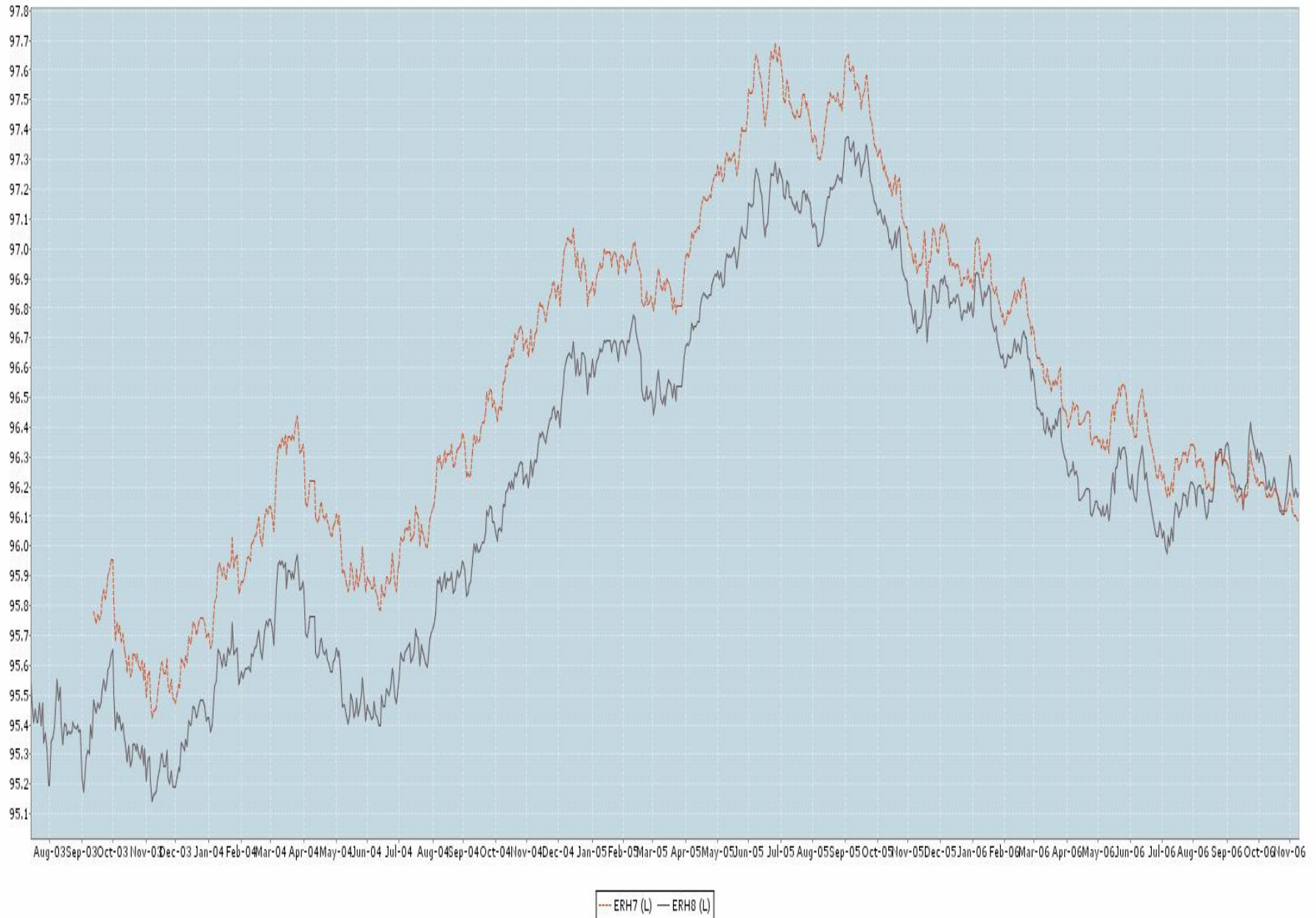


The volume reported at the daily Eonia fixing has remained relatively steady during all interest rate cycles.



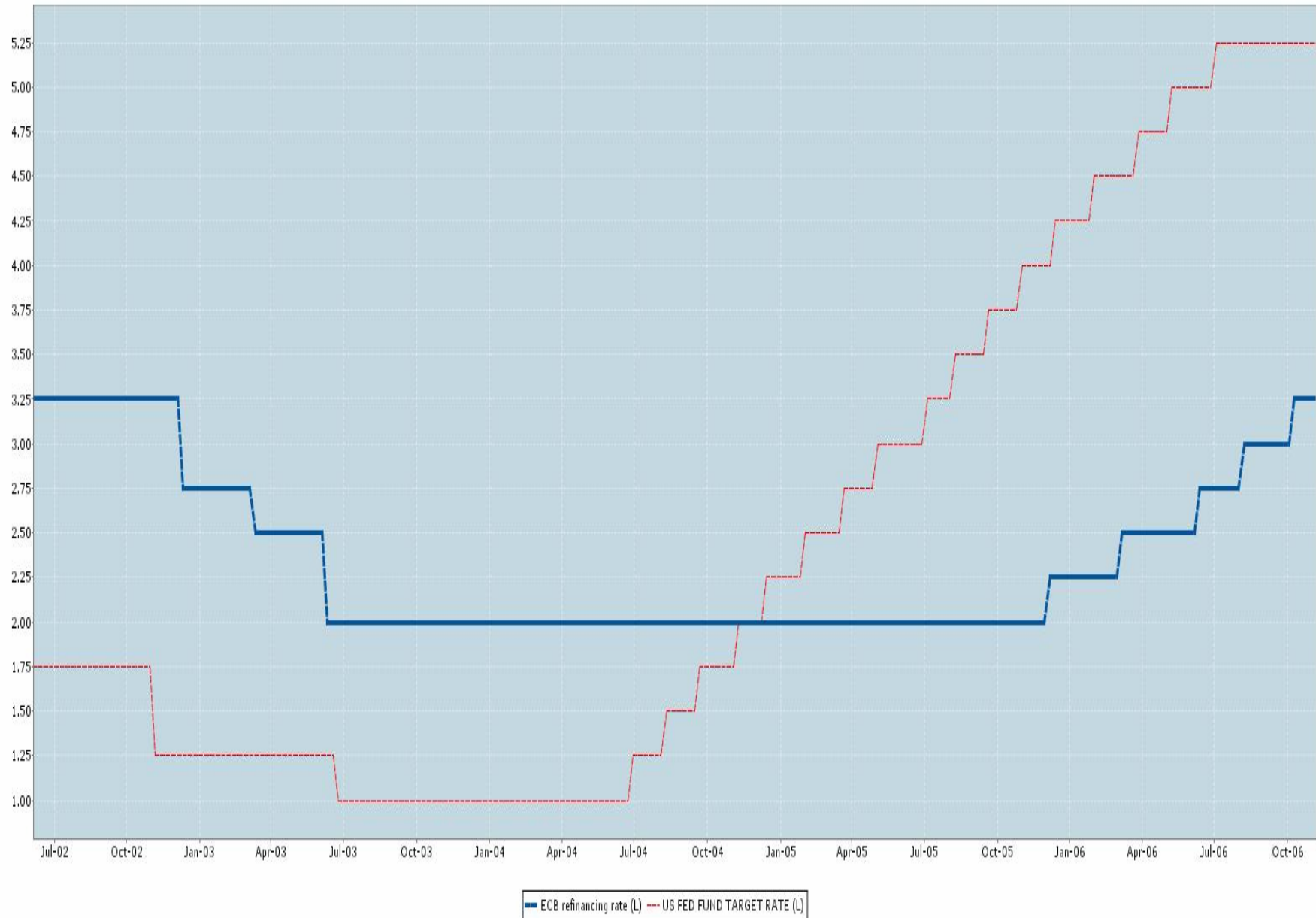
# MAR 07 / MAR 08 Euribor has now inverted

15 Jul 03 to 9 Nov 06



# ECB minimum bid rate & FED funds rate

15 Jul 03 to 9 Nov 06



# EUR/USD

3 Jun 02 to 9 Nov 06



# EUR/JPY

3 Jun 02 to 9 Nov 06

