III THE EURO AREA FINANCIAL SYSTEM

Box 14

SUBORDINATED DEBT ISSUES BY EURO AREA BANKS

The size and complexity of several euro area financial institutions make it difficult for supervisors and analysts to make an accurate assessment of individual institution risk. At the macro-prudential level, this presents a challenge in determining forward-looking risks to financial stability that originate from the banking sector. Public accounting information can be used for these purposes, but its value tends to be limited by reporting lags and the backwardlooking nature of the data. The third pillar of the Basel II accord clearly recognises the positive role that market discipline can play in reducing the risks to financial stability.¹ Against this background, the prices of securities when issued on the primary market may also influence bank management. There are also advantages in using secondary market information in addition to accounting information, due to the ability of markets to process a large amount of information rapidly and to reflect this information in securities prices under normal market conditions. Subordinated debt holders might exercise more discipline than depositors or equity holders because depositors may be covered by deposit insurance, whereas equity investors may benefit from the bank taking on more risk under certain conditions.² Monitoring the subordinated debt market segment therefore adds to the set of indicators on banking system stability that are capable of conveying information on future systemic risks. This is because wide spreads may indicate concerns of increasing risk. This Box provides a brief overview of the structure of the euro area bank subordinated debt market, comparing the euro area banking sector to other major economies, and it briefly analyses some data on individual issues by euro area banks.



Information concerning the level of risk taken by each institution and how this changes over time is reflected in their securities prices. Previous research on European banks found that for banks, a combination of market (subordinated debt spreads and equity-based measures) and accounting/institutional data is useful for predicting distress – in the form of financial strength rating downgrades – at horizons of 18 months or so. See R. Gropp, J. Vesala and G. Vulpes (2006), "Equity and bond market signals as leading indicators of bank fragility", *Journal of Money, Credit, and Banking*, 38, No 2.

² This discipline could potentially take two forms: direct market discipline, which would result in banks that are perceived as riskier by the market facing increased funding costs in primary markets; and indirect market discipline, which could be based on the market prices of the outstanding securities issued already by these institutions and trading in secondary markets. However, in practice it may be difficult for subordinated debt holders to influence management actively.



Chart B14.2 Frequency distribution of subordinated debt in capital funds



Sources: Dealogic (Bondware) and ECB calculations. Note: Data include fixed and floating issues by financial institutions that are placed on domestic, euro or global markets. The data exclude warrants and shares.

Previous work conducted by the Basel Committee on Banking Supervision (BCBS), based on data ending in 2001, found that European banks tend to be among the most frequent issuers of subordinated debt securities, compared to banks in the US and Japan.³ The BCBS also found that in terms of volume, US financial institutions tended to have larger individual issue amounts than euro area or EU institutions. However, this pattern was reversed in 2003 (see Chart B14.1). While non-euro area EU issuers tend to issue significant amounts of subordinated debt in terms of both volume and number of issues per year, the euro area banking sector as a whole remained the largest issuer of this type of debt among the geographic areas reported.

While euro area banks, as a whole, have been the largest issuers of this type of debt, not every euro area bank was an issuer of subordinated debt. Some banks may have chosen not to issue this kind of debt for reasons such as the availability of adequate funding from retail sources, taxation, and avoidance of the transaction costs associated with debt issuance. Chart B14.2 shows the average amount of subordinated debt issued over the period 1997-2004 as a percentage of the total capital funds of euro area banks. While some banks did not have any subordinated debt over this period, just under 300 banks out of a total of over 400 had some form of subordinated debt as part of their capital funds, suggesting that this has been an important component of bank capital for euro area banks.⁴

⁴ However, as this is a relative measure, it does not say whether it reaches the regulatory maximum allowed or the amount of subordinated debt outstanding. For example, subordinated debt may be included in banks' regulatory capital requirements in Tier 2 capital as hybrid capital (perpetual subordinated debt instruments in the so-called upper Tier 2 capital, and in lower Tier 2 if they have a minimum maturity of greater than five years). The main difference between both is that payments associated with upper Tier 2 are deferrable, and principal, and interest can be written down to make the instrument loss-absorbing. The amount of lower Tier 2 subordinated debt allowed is equivalent to 50% of Tier 1 capital. Subordinated debt may also be used in Tier 3 capital to cover the market risk capital requirement on a bank's trading book with a limit of 250% of Tier 1 capital for market risks. Due to the limited coverage of regulatory capital requirements and their constituent components in Bankscope, the broader ratio of subordinated debt to capital funds is used in Chart B14.2.



Sources: Bureau van Dijk (Bankscope) and ECB calculations. Note: Capital funds are defined in Bankscope as the sum of equity, hybrid capital and subordinated debt.

³ See Basel Committee on Banking Supervision (BCBS) (2003), "Markets for bank subordinated debt and equity in Basel Committee Member Countries", *BIS Working Paper*, No 12.

III THE EURO AREA FINANCIAL **SYSTEM**



Sources: Dealogic (Bondware) and ECB calculations. Note: The data include issues by banks and financing vehicles owned directly or indirectly by banks

The size of individual subordinated debt issues has varied somewhat since 1999. Micro-data illustrate that there has been an increase in the mean size of individual issues over time (see Chart B14.3). This increase may have reflected the desire of some banks to strengthen their capital bases, as well as greater investor demand, tighter pricing at a time of low long-term rates, and access to a substantially wider investor base following the introduction of the euro. The variation of the size of the issued amount differs widely, with both very small and very large issues coming onto the market. The latter (greater than €1 billion) tended to be made by repeat issuers. The majority of these securities are issued in euro, although there are some very large USD and GBP issues by euro area financial institutions.

Chart BI4.4 Ratings of individual subordinated debt at time of issuance by

2000 2001 2002 2003 2004 2005

Sources: Dealogic (Bondware) and ECB calculations. Note: The effective ratings from Bondware are assigned numerical values ranging from AAA = 1 to BBB minus = 11.

BBB-

BBB

BBB+

А-

A

A+

AA-

AA

AA+ AAA-AAA

euro area banks (rating scale)

BBB

BBB

A٠

A4 AA-

AA

AA+

AAA

AAA

1999

А

BBB+

min-max range

median

interquartile range

Rating on issuance decreased slightly in recent years, reflecting the comparatively difficult conditions faced in parts of the euro area banking sector over the period 2001-2003 (see Chart B14.3). The decrease in the highest ratings value in 2005 reflected the withdrawal of state guarantees for certain specialised government credit institutions.

Empirical work for US banks has found that subordinated debt securities tend to be illiquid when issued in small amounts, and the closer they are to maturity.⁵ Hence, the prices of these securities are likely to be less informative than those of newer and larger issues. Secondary market signals have also been found to be limited in terms of their forward-looking ability for US banks. Despite this finding in US data, recent work for EU banks finds that spreads on subordinated debt securities have some power for predicting financial distress.⁶ The increase in average issuance size of euro area banks since 1999, combined with the fact that practically all of the large euro area financial institutions have outstanding subordinated debt suggests that these securities prices should contain useful forward-looking information for financial stability.



⁵ For US banks, see U. Birchler and D. Hancock (2004), "What does the yield on subordinated bank debt measure?", Finance and Economics Discussion Paper No 19, Federal Reserve Board of Governors.

⁶ For EU banks, see A. Sirioni (2003), "Testing for market discipline in the European banking industry: Evidence from subordinated debt issues", Journal of Money, Credit, and Banking, Vol. 35, No 3; R. Gropp and J. Vesala (2004), "Deposit insurance, moral hazard, and market monitoring", Review of Finance, 8, No 4; and Gropp et al. (2006), op. cit.