Debt Instruments and Eurosystem Eligible [illegible] Perspective

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ABSTRACT

Changing demands of market investors, combined with developments in risk management and sources of finance for credit institutions, have led to huge changes in the type and volume of debt instruments issued in recent years. This has been facilitated by legislation in euro area countries, including Ireland. Where straightforward bond issues were once the dominant type of instrument, credit institutions' assets are now increasingly used to issue structured finance debt instruments such as asset backed securities (ABS) and collateralised debt obligations (CDOs), due to their risk management and structured financing benefits. Many such instruments are now being issued in Ireland with the result that the type of assets being listed by the Central Bank and Financial Services Authority of Ireland (CBFSAI) as Tier One eligible assets, to be used as collateral in Eurosystem open market operations, has changed substantially. With the impending change to a Single List of eligible collateral in the Eurosystem from the current two-tier format and the expected impact Basel II will have on structured finance, the type of debt instruments that will be issued by credit institutions and listed as eligible assets is set to change further.

1. Introduction

The issuance of debt instruments in Ireland has changed dramatically in recent years, in line with euro area-wide developments. Debt instruments have evolved such that their role as a source of finance can be almost a secondary consideration behind risk management, albeit with a wide variety of short- and long-term instruments providing differing benefits. Debt instruments involving the securitisation and collateralisation of assets into tradable securities move cash generating assets off banks' balance sheets and, as a result, reduce banks' regulatory capital requirements and improve their liquidity ratio, as well as providing additional financing for further loan growth. This has come about largely as a result of the increased credit risk management benefits that these instruments offer, but also because of investor demand for additional types of high quality secured debt instruments.

These developments have been facilitated by additional legislation throughout euro area economies to allow for the issuance of a broader range of debt instruments. The relative

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success of certain types of country-specific debt instruments, such as pfandbriefe-style issues, i.e., a type of on-balance sheet asset covered security, has led to other countries in the euro area adopting legislation to allow their market to offer similar products. This has occurred in response to demand by credit institutions and to provide a 'level playing field' for euro area market participants. Legislative reform in Ireland has contributed in no small way to the increased issuance of new types of debt instruments. Among recent developments has been the passing of the Asset Covered Securities Act, 2001 which enables the issuance of both mortgage and public credit covered securities, and the update of Section 110 in the Finance Bill, 2003 which has facilitated the issuance of a wider range of collateralised debt obligations through special purpose vehicles (SPVs).

The number of such debt instruments listed on the Irish Stock Exchange (ISE) has grown rapidly in line with the increased issuance of debt securities and the establishment of SPVs. This has impacted on the number and type of securities being added by the CBFSAI to the European Central Bank's (ECB) Tier One list of assets eligible to be used as collateral in Eurosystem open market operations between credit institutions and national central banks (NCBs). Tier One eligibility status is now being sought for a wider range of debt instruments and securitised assets than previously. This is in stark contrast to the early days of Monetary Union when straightforward bonds were the predominant type of Tier One collateral. Developments and issuance of debt instruments in other euro area countries and the listing of such instruments on the ISE have also resulted in such instruments being added to the Eligible Assets Database (EADB) by the CBFSAI[1].

The remainder of this paper is structured as follows. The next section of the paper looks at some of the developments that have taken place in the issuance of debt instruments in Ireland and the euro area. The third section looks at how these developments have impacted on the types and number of debt instruments listed on the Tier One eligible assets list by the CBFSAI. It also undertakes a broad comparison of debt instruments added to the EADB by euro area NCBs which identifies trends specific to the types of debt issuance in each country. The fourth section discusses the possible impact of some forthcoming developments, such as the Basel II Accord, on the issuance of debt instruments and their listing as eligible collateral. It also looks at the Eurosystem's impending switch to

1 The ECB publication *The Implementation of Monetary Policy in the Euro Area: General Documentation on Eurosystem Monetary Policy Instruments and Procedures* (February, 2004) sets down the eligibility criteria that debt instruments must meet in order to be listed on the EADB. See also the CBFSAI publication *Documentation on Monetary Policy Instruments and Procedures 2004*, which sets out the terms and conditions applicable to counterparties for monetary policy operations with the CBFSAI.

a single list of eligible collateral away from its current two-tier system. The final section sets out some conclusions.

2. Some Recent Developments in the Issuance of Debt Instruments

This section discusses some of the trends and legislative developments that have led to the increased issuance of certain types of debt instruments. In the context of credit institutions, much of this issuance trend has been driven by risk management and credit risk transfer, which are important features of structured finance products. Prior to the growth in such structured debt instruments, credit institutions primarily issued bonds in order to generate additional sources of finance with which to issue more loans. While bond issuance has the benefits of sourcing finance at reasonable rates of interest, depending on the rating of the bank and relative to the prevailing policy interest rate, it had the downside effect of increasing the leverage ratio. A range of debt instruments issued by credit institutions now provides financing opportunities to meet short-term (one to 12 months) and long-term requirements. Asset backed securities allow the credit institution to sell income generating assets, such as loans, which are moved off the balance sheet. This allows the credit institution to generate funds with which to increase its loan book without affecting its leverage ratio and allows it to increase its liquidity ratio. The securities are sold to investors and can be traded in the market place, with the demand by investors for such liquid and highly rated securities also helping to encourage the increased issuance of such debt instruments. In recognising the demand for such securities by credit institutions for an increased range of debt instruments and by investors who wish to purchase high credit rated asset backed securities, additional legislation has been passed to facilitate the continuation of these issuance trends. All these factors should ensure that the dynamics of the trend in debt instrument issuance will continue.

2.1 Asset Backed Securities

Arguably the most progressive area of growth in debt instruments, in Ireland and across the euro area, has been in asset backed securities[2]. Such securities are generated through the process of securitisation by which income generating assets, e.g., loans, are taken off the balance sheet and sold as repackaged securities to investors. These securitised instruments

2 Figures for the European securitisation market produced by the European Securitisation Forum in its Summer 2004 Data Report show that new issuance figures for the first half of 2004 stood at €125.6 billion which is approximately double the new issuance figure for the whole of 2000. Of this, European MBS issuance totalled €70.1 billion, up from a new issuance figure of €59.7 billion in the first six months of 2003.

are termed asset backed securities as they are backed by an underlying portfolio of cash flow generating assets. Repackaging these assets into securities allows them to be traded on the secondary market which increases their liquidity[3]. The process of securitisation allows the originator of the assets, e.g., the credit institution, to generate new funds at favourable costs to finance additional loan growth, for example, without affecting the leverage ratio. In addition, by removing the assets from the balance sheet the credit institution's regulatory capital requirements are reduced, thus freeing up additional funds for further business growth. Securitisation also encompasses credit risk transfer in that a credit institution moving assets such as loans off its balance sheet and selling them to an investor or SPV is also transferring all the concomitant risks, including credit risk, associated with the loans.

The most common type of asset backed securities originated by credit institutions are backed by mortgage loans, called mortgage backed securities (MBS)[4], and can be classified as residential mortgage backed securities (RMBS) and commercial mortgage backed securities (CMBS). Another form of asset backed securities is collateralised debt obligations (CDOs). The latter, while similar to MBS, are based on a pool of secured and unsecured debt issued to commercial and industrial customers of one or more banks. CDOs can be further distinguished by two different types, namely, collateralised loan obligations (CLOs) where the underlying assets are loans, and collateralised bond obligations (CBOs) where the underlying assets are corporate and asset backed bonds.

While securitisations involving Irish assets, in particular mortgage loans, have been relatively modest in volume there has been huge growth in the issuance of non-Irish collateral asset backed securities through SPVs located in Ireland. Much importance can be attributed to SPVs in facilitating the transfer of credit risk from originator to investor. For example, in the case of asset backed securities the assets underlying the transaction are transferred by the originator to an SPV which, in turn, issues notes to investors and holds the loans or other assets as collateral which backs the notes.

3 See Fitzpatrick (2002) for a detailed discussion of the mechanics of structured finance transactions which describes the securitisation process through the example of mortgage backed securities.

4 Collateralised mortgage obligations (CMOs) are based on the same principle as MBS but differ in the ordering of payments towards interest payments and principal payments on the CMO Notes. As the difference is more mechanical than structural, the remainder of this paper does not distinguish between CMOs and MBS and both are referred to collectively as MBS.

The Finance Bill, 2003 updated the existing legislation relating to securitisation and should facilitate increased issuance of securitised instruments through SPVs. In particular, the updating of Section 110 of the Taxes Consolidation Act allows for the issuance of a wider range of ABS-type structures such as CDOs, CLOs and synthetic securitisations[5]; its amended tax framework removed the previous restrictions requiring that assets to be securitised had to be acquired directly from the originator. In addition to paving the way for further types of issuance, Section 110 grants exemption from withholding tax on interest payable by SPVs to its note holders who are resident in the EU or have a domicile covered by a joint tax agreement, thereby expressly providing for the tax treatment of SPVs and making their location in Ireland an attractive proposition. This enables credit institutions and originators in other EU countries to securitise their assets by establishing a SPV in Ireland which purchases assets from the originator or other collateralised debt obligations and issues debt instruments backed by these income generating assets.

Legislation facilitating the setting up of SPVs has also been enacted in recent times in Spain, Belgium, Portugal and, in particular, Italy and this has contributed to strong growth in securitisation in these countries also (ECB, 2002). Legislative amendments are also expected in Norway. Securitisation law has also recently been introduced in Luxembourg which attempts to update its financial system and its ability to accommodate securitisation and SPVs.

2.2 Asset Covered Securities

The Asset Covered Securities Act, 2001 provides for the issuance of mortgage and public credit covered securities in Ireland. Asset covered securities (ACS) are different from the securitised instruments issued by SPVs in that the pool of loans underlying the securities remain on the balance sheet of the originator but is ring-fenced from the claims of other creditors in order to back up the payments owing on the securities issued. Under the Act, in order for ACS to be issued the issuer must have successfully applied for Designated Credit Institution (DCI) status to the CBFSAI. This can take the form of a designated mortgage credit institution and/or a designated public credit institution. If a bank does not fulfil the necessary criteria to be awarded this status, it must set up a separate subsidiary which will assume the DCI

5 Synthetic securitisation involves the transfer of the credit risk associated with the underlying assets to the investor via a SPV. In this case the assets do not leave the balance sheet of the originator, just the credit risk associated with the assets is transferred using credit derivatives to the SPV which issues instruments based on these cash flows. These debt instruments are commonly in the form of synthetic CDOs.

status and issue the ACS. DCI status restricts the credit institution to carrying out defined business activities, including issuing ACS and providing mortgage credits. A cover pool of mortgage and public loans issued by the DCI can be ring-fenced on its balance sheet and used to provide security against issues of ACS.

ACS legislation allows for an additional source of financing using residential and commercial loans as well as public-sector loans located in Ireland, EEA countries and in non-EEA G10 countries (i.e., Japan, US, Switzerland and Canada). Demand for the development of ACS issues in Ireland has followed from the success of similar products elsewhere in Europe, in particular traditional pfandbriefe issues and 'Jumbo' pfandbriefe[6] issues, which are backed mainly by public-sector debt, in Germany, Obligations FonciEres in France and Cedulas Hipotecarias in Spain. Demand has been particularly driven by the strong lending growth of recent years and as a source of funding for this. These three continental instruments have broadened in their scope in recent years to reflect a more securitisation type structure, developing from what were simple mortgage sector funding instruments while maintaining a traditional financing objective. While these covered assets are broadly similar in structure, Cedulas Hipotecarias differ slightly in terms of their cover pool. Their main feature of over-collateralisation[7] means that their securities are backed by the whole pool of loans and not just a portion of them.

Irish asset covered securities fall within the category of Jumbo pfandbriefe issues and follow on from the growth in issuance volume of similar products elsewhere in Europe. According to figures released by the European Securitisation Forum (2004a), new pfandbriefe issues in the first half of 2004 in Europe reached €104 billion, down from €153.3 billion in the first half of 2003. German pfandbriefe issues account for much of the 2004 first-half figures, totalling €81.5 billion[8]. The third issuer of ACS in Ireland since the legislation was enacted in 2001 was Bank of Ireland Mortgage Bank (a subsidiary of Bank of Ireland) which

6 Jumbo pfandbriefe issues began in Germany in 1995 as an extension of the traditional pfandbriefe issuance. Jumbo transactions turned the product into a highly liquid international-type transaction by issuing debt with a value of €500 million and upwards for a single issue and established book-building as a method of issue and the assignment of an external rating (ECB, 2002).

7 Over-collateralisation is a credit enhancement feature of many debt instruments. It refers to the process whereby the pool of mortgages, for example, over which the debt instrument is issued, is of a higher value than the amount of debt actually issued. By over-collateralising, the issuer has included a buffer stock of extra assets within the collateral portfolio which will ensure that there remains a considerable amount of asset value even in the event of a number of defaults of loan payment to the originator. This increases the credit quality of the issue by increasing the likelihood that the note holders will be fully repaid and will also contribute to securing a higher rating for the issue.

8 Bank-issued German pfandbriefe constitutes the largest individual bond market in Europe (ECB, 2002).

carried out the sale of €2 billion ACS backed by mortgage loans in September 2004. This was Bank of Ireland's first foray into the ACS market to finance future lending growth and the issue was heavily over-subscribed. It followed previous ACS issuances by Depfa ACS Bank and West LB Covered Bond Bank, both International Financial Services Centre (IFSC) based credit institutions, which issued these securities to finance further lending growth for their parent companies. Only a small portion of the loans backing the issues by the two IFSC based credit institutions were Irish based, with the remainder issued over a range of G10 countries. The key feature for such ACS issuances is that they allow the credit institution to finance further lending activity at rates usually cheaper than what the Irish Government could access through bond issues.

In recognition of the success of pfandbriefe and covered bond securities in the countries outlined above, a number of euro area countries have recently legislated or are currently in the process of forming legislation specifically to deal with their issuance. These include Finland, Sweden, Italy and Norway. A special interim arrangement is in place in Italy to allow the first issue of ACS to take place early in 2005 in the absence of a specific legal framework (Simensen, 2004). Further issues by a range of Italian banks will be possible once the legislative amendments take place. It is expected that the introduction of these countries to the covered bond market will help to bring more depth and liquidity to the market across the euro area, encouraging increased cross-border investing. The UK, however, has yet to make any moves towards the enactment of specific covered bond legislation. Despite this, HBOS issued the UK's first covered bonds in 2003 based on common law and following securitisation industry standard-type structures. On account of the absence of specific legislation in the UK, covered bonds carry a higher risk weighting than in other countries and this may restrict investors entering the market. Despite this, the success of existing transactions suggests that the absence of specific legislation may not be a problem as they have tended to trade at acceptable spreads. Aside from the UK, there is a growing consensus across euro area countries on the need to enact legislation to facilitate the growing sector of covered bonds. This is likely to increase liquidity in the market further and will facilitate increased covered bond issuance.

2.3 Medium- and Short-Term Instruments

While the previously discussed debt instruments are mainly used for providing longer-term financing for a credit institution, financing is similarly needed to cover shorter horizons for what tend to be correspondingly more specific requirements. Medium-term oriented instruments are often used to provide funds to finance expected lending growth and to fill funding gaps which may arise between short-term issues and longer-term borrowings in the bond markets, while shorter-term instruments are often issued to meet large investor demand and to access relatively cheap funding. The most common examples of debt instruments covering these time horizons are medium term notes (MTNs) and commercial paper (CP), respectively.

2.3.1 Medium Term Notes

These debt instruments are usually issued as part of a series of notes, uniform in structure, within a medium term note programme. The total principal amount of the sum of each of the MTN issues cannot exceed the predefined principal amount of the MTN programme. MTNs are issued at fixed or floating rates of interest and can be issued at a discount or on a structured basis whereby they are index or credit linked. Common practice entails each individual issue obtaining a listing on a recognised exchange to enhance liquidity. The majority of MTN issuances fall into the maturity bracket of between two and five years. The concept of a medium term note is not specifically defined in Irish law and MTNs are classified in the same manner as negotiable instruments that constitute debt securities (including bonds, debentures, notes, etc.).

Issuances of MTN programmes have been favoured by some credit institutions in Ireland in recent times at the expense of longer-term bond issues. Their medium-term nature makes them attractive to investors in the current low interest rate environment and they can be tailored to meet the exact requirements of individual investors in terms of type of notes, principal amount and maturity date. As a result, their issuance has developed largely as an extension of the market for short-term commercial paper, but with longer maturities. While often tailored as such to meet the specifications of individual investors, listing on exchanges and the rising profile of these instruments has also led to their increased liquidity. Much of the success of MTN markets is due to the speed with which issuers are able to access capital from their issues and the increased issuance of MTNs in Europe has seen the European MTN market surpass the US market in size[9] (Moodys, 2004c).

9 Issuance of ECP and certificates of deposits have been a more attractive proposition for financial institutions in Ireland since the Finance Act, 2002. It stated that interest paid by financial institutions on ECP and certificates of deposit issued on or after the date the Finance Bill became law was to be taken out of the DIRT and withholding tax regimes subject to reporting conditions.

2.3.2 *Commercial Paper*

The legal basis for commercial paper in Ireland defines CP as short-term unsecured, unsubordinated promissory notes issued by both government and private issuers, with a maturity range of between seven days and one year. CP issues form part of a CP programme where the sum of the total principal amount of the issues cannot be greater than the predefined principal value of the programme. CP notes are short-term unsecured debt issuances which are usually issued as fixed-rate or floating-rate interest bearing notes in discounted or structured form[10].

Issuance of CP in Ireland is quite low and for the most part CP is issued privately without the need to comply with prospectus requirements of the Companies Acts, with the result there is no secondary market for Irish CP (ACI-STEP Task Force, 2002). However, more liquid forms of CP,[11] notably Euro Commercial Paper (ECP), are widely traded on secondary markets across the euro area and issuances of ECP have been listed on the ISE. Debt securities and short-term securities markets are largely governed by the respective legislative arrangements of resident countries, hence the difficulty in issuing instruments with enough euro area-wide conformity to provide liquidity and create demand. ECP is growing in issuance and popularity as it attempts to address some of these deficiencies in the euro area market for short-term securities and has built an increasing profile and generated liquidity across the euro area. This is largely attributable to ECP issues taking the form of a Global Certificate[12] which is deposited and cleared through a central securities depository such as Euroclear or Clearstream.

A distinct advantage of the ECP market is that it provides a cheap source of funding to credit institutions, particularly those which need short-term funding to finance business growth, working capital and to bridge between lending and longer-term debt. Many such issuances have also been demand driven, providing an alternative source of funding while meeting large demand for

10 There exists another type of commercial paper in the form of asset backed commercial paper (ABCP). ABCP issues are senior secured short-term debt instruments backed by receivables and generally issued by a special purpose vehicle or conduit sponsored by a bank. ABCP programmes are effectively a receivables financing vehicle enabling financing in an off-balance sheet manner that does not effect its regulatory capital requirements. Their popularity has grown due to their cheap source of short-term funding, the off-balance sheet treatment of underlying assets and the preference for secured asset backed CP. See Moodys (1993) for a fuller discussion of this type of instrument. No data are available for ABCP issues in Ireland. ABCP issues in Europe accounted for a significant proportion of the ECP market at end-2003, with amounts outstanding totalling $72.8 billion which equates to almost 20 per cent of all ECP issues (Fitch, 2004a).

11 There are strong liquid markets for commercial paper in France and Germany.

12 Debt instruments which are traded internationally are usually issued in registered form and represented by beneficial interest in a Global Certificate which is registered in the name of a subscriber or nominee. This is deposited on behalf of subscribers with a common depository such as Euroclear or Clearstream. Subscribers' interests are usually represented initially by a Temporary Global Note which is exchangeable after a specified period after the closing date for offers for a Permanent Global Note.

highly rated and liquid short-term securities by money market funds. However, CP amounts outstanding have declined substantially since late 2000. This appears to be due to credit deterioration, economic downturn and low interest rates which resulted in CP investors becoming reluctant to invest with issuers with any sign of credit concerns (Fitch, 2004a). This also coincided with a reduced demand for working capital financing during the downturn. Commercial paper markets across Europe are highly segmented, so it is expected that the volume of issuance of CP that is liquid and tradable euro area-wide will remain restricted until the development of a European short-term paper market and until an economic upturn is fully underway. As regards a common European CP market, moves are underway to develop a Short-Term European Paper (STEP) label for short-term CP issues which fulfil certain area-wide criteria, including minimum issue amount and duration (greater than one day but less than a year). Proposed by Euribor-ACI, the Financial Markets Association, to promote the integration of the short-term securities market, a STEP label will be awarded to securities fulfilling the criteria in order to encourage the convergence of standards and practices which currently prevail in the European domestic markets and the international ECP market (ACI-STEP Task Force, 2003). This convergence and voluntary compliance with standards will take place within the existing national and European legislative, regulatory and supervisory frameworks. Although the STEP label will stop short of implying the creditworthiness of the issue or the issuer(s), it will help to achieve an increased degree of harmonisation across the short-term paper market and thus improve liquidity and investor demand.

2.4 Developments in French Fonds Communs de Creances

There have been a number of other developments in euro area countries that have led to changes in the issuance of debt instruments, some of which have been exposed to the Irish market through their listing on the Irish Stock Exchange. One such example is that of French fonds communs de creances (FCCs)[13]. The French Law on Financial Security enacted in August 2003 amended the securitisation law which covered FCCs and allowed for a wider range of asset backed securitisations, including the direct issuance of debt instruments. FCCs can be viewed as purchasing vehicles in commercial and consumer receivable-backed transactions.

Prior to the change in the law, they were restricted to issuing FCC units backed by these cash flows, which confer co-ownership rights upon the unit holder. This structure is used as

13 FCCs were initially listed as Tier One collateral in France only. However, following the listing of FCCs on the Irish Stock Exchange, the CBFSAI has added two FCCs to the EADB.

an alternative to the common law[14] equivalent of establishing SPVs as French law does not recognise trusts, which retain ownership of SPVs. The 2003 legislation made provisions for FCCs to issue more standard types of debt instruments, such as bonds and commercial paper, allowing FCC debt instruments to be marketed and listed in other euro area countries. However, the co-ownership structure remains attached to FCC units, which must still issue units representing the value of the underlying assets[15].

Although there are currently examples of FCC units being listed on exchanges outside France, on the ISE for example, the French legislation has allowed proposed FCC debt instruments to be issued in other markets and they can be issued under other euro area law systems. Accordingly, it is likely that some issuances of these debt instruments will be listed on exchanges in other euro area countries[16]. In addition, it is likely that French FCCs will begin to issue synthetic CDO structured instruments following on from the legislative provisions, in which case the presence of FCC debt instrument listings on international exchanges is likely to increase further.

2.5 Comparative Trends in International Securities Issuance

In line with these developments in the debt instrument industry it comes as no surprise that the volume of issues has increased substantially in Ireland. A significant amount of this increased issuance can be attributed to the residency of a large number of SPV issuers and subsidiaries of overseas parent banks in the IFSC in Dublin. Much of the residency of these SPVs and the issuance of debt instruments backed by overseas collateral in Ireland is due to the favourable tax concessions available. Very few of the credit institutions located in the IFSC or the debt instruments which they issue have much interaction with the domestic Irish economy as they predominantly carry out their business with foreign residents. The one exception to this is the degree of participation of IFSC based credit institutions in monetary policy open market operations conducted with the CBFSAI. Nevertheless, the net result of this issuance trend has seen Ireland elevated into the position of one of the largest residency locations among the developed economies for issuance by outstanding amount.

International securities statistics compiled by the Bank for International Settlements (BIS) illustrate the growth in debt

14 The English and Irish legal systems are common law systems whereby the legislature adopts a law which the courts interpret and in many instances expand the law's scope through case law. In civil law systems, which are in operation throughout the rest of the euro area, the legislature alone creates and changes law. As a result, civil law systems are less responsive to changes in market dynamics in comparison to common law systems.

15 See Standard & Poors (2003) for a discussion of these legislative issues.

16 Debt instruments issued directly by FCCs will have to meet the ECB's General Documentation eligibility criteria in order to be added to the ECB's list of eligible assets, irrespective of the place of issuance or listing.

Table 1: International Bonds and Notes by Residence of Issuer: All Issuers

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
	Amounts outstanding US $ billion										
Developed countries	**1,721.1**	**1,929.0**	**2,191.2**	**2,397.6**	**2,980.6**	**3,824.5**	**4,614.2**	**5,743.5**	**7,219.2**	**9,331.4**	**10,311.0**
Australia	62.2	67.3	78.6	75.6	77.9	87.2	93.1	106.3	126.7	177.0	227.7
Austria	53.2	61.8	61.7	60.5	72.8	74.0	84.5	97.7	129.4	173.8	189.5
Belgium	20.2	23.4	26.7	27.9	21.6	28.6	31.9	40.8	58.7	85.9	100.4
Canada	163.9	175.0	179.3	181.2	199.3	209.5	200.5	217.8	241.7	286.0	293.3
Denmark	32.0	31.3	30.4	29.2	29.0	28.6	29.0	30.6	34.6	46.4	52.3
Finland	54.6	53.6	50.7	43.7	41.9	38.4	36.2	37.6	48.6	71.7	80.0
France	166.4	183.1	186.6	187.6	226.7	269.7	314.4	388.9	510.7	722.9	758.7
Germany	65.6	95.2	135.7	156.7	218.3	315.4	404.9	588.8	876.5	1,254.0	1,453.6
Greece	18.1	19.3	21.2	20.7	24.7	24.6	24.3	26.0	42.9	63.9	80.1
Iceland	1.5	1.7	1.8	1.7	1.8	2.1	3.2	3.6	4.7	8.3	14.7
Ireland	**15.8**	**20.8**	**26.3**	**33.4**	**39.4**	**44.4**	**48.4**	**60.3**	**83.2**	**167.2**	**227.0**
Italy	54.2	61.6	63.4	65.4	78.3	93.5	132.7	175.1	257.2	383.2	470.6
Japan	256.2	231.4	198.3	155.2	132.9	124.2	104.6	95.2	104.0	119.6	131.6
Luxembourg	23.6	28.3	31.7	30.7	38.5	46.4	54.5	79.7	108.0	158.4	174.0
Netherlands	167.4	204.7	233.3	253.3	324.1	397.1	460.7	527.5	678.3	903.9	908.3
New Zealand	8.5	7.5	6.3	6.2	6.5	6.5	6.0	6.3	7.0	7.9	10.0
Norway	19.8	19.2	19.3	21.5	28.1	31.3	35.5	39.5	47.2	62.5	66.4
Portugal	7.4	10.3	11.5	12.6	14.8	14.8	19.2	22.3	34.9	48.4	49.4
Spain	19.4	22.6	26.2	28.3	37.8	51.6	59.6	70.9	117.7	231.3	312.1
Sweden	84.1	92.5	96.6	89.4	84.5	85.0	76.8	80.5	95.2	117.1	120.6
Switzerland	2.3	3.5	4.8	7.1	9.7	11.0	15.1	12.3	15.2	17.5	21.5
UK	198.6	219.5	271.7	314.0	384.4	506.3	597.3	676.8	847.3	1,156.9	1,364.8
United States	226.0	294.9	429.1	595.7	887.6	1,334.4	1,781.7	2,359.1	2,749.5	3,067.5	3,204.5

Source: BIS.
Note: Amounts outstanding are at year-end except for 2004 which is at end-Quarter 3. All Issuers include financial institutions, corporate issuers and government.

instruments' amount outstanding by residence of issuer[17]. Table 1 illustrates such a trend for international bonds and notes. In 1994 Ireland was nineteenth of 23 developed countries in terms of amount outstanding in bonds and notes, with a figure of US $15.8 billion. This rose to US $227 billion by end-Quarter 3 2004, which ranked Ireland tenth by amount outstanding. The significant rate of growth in amounts outstanding by Irish resident issuers began in the second half of the 1990s.

A similar trend can be observed from the data presented in Table 2, which illustrate amounts outstanding for international money market instruments. Using end-year data from 1994 to 2003 and end-Quarter 3 figures for 2004, it is observed that Ireland has moved from being the joint eighteenth largest issuer by residents in amounts outstanding of 23 developed countries in 1994 to the third largest in 2004. In numerical terms, amounts outstanding in money market instruments issued by all Irish resident issuers at end-1994 stood at US $0.2 billion, which rose to US $57.7 billion at end-Quarter 3 2004. It can also be seen that the growth in amounts outstanding in money market instruments began to take off in the latter years of the 1990s. The growth in issuance of both categories of instruments shown in the tables from the second half of the 1990s corresponds with developments in the IFSC and SPVs, in particular amendments to the legislation governing securitisation in Ireland which broadened the range of

17 Country of residence is determined by the residence of the borrower. Nationality of issuer is determined by the country of incorporation of the parent company of the borrower.

Table 2: International Money Market Instruments by Residence of Issuer: All Issuers

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
	Amounts outstanding US $ billion										
Developing countries	**99.5**	**123.2**	**137.5**	**159.8**	**192.1**	**309.1**	**439.0**	**354.3**	**390.6**	**519.4**	**577.3**
Australia	18.7	22.0	25.8	24.0	27.2	33.6	34.6	31.5	37.4	49.8	50.4
Austria	1.2	1.6	1.6	2.1	1.1	4.4	6.7	6.8	4.6	3.9	7.2
Belgium	0.9	1.5	0.2	0.1	0.5	4.4	10.6	13.5	15.5	17.5	16.2
Canada	1.3	1.2	2.0	3.7	5.0	5.3	3.7	1.5	3.2	4.0	3.1
Denmark	1.0	1.9	1.7	1.1	1.5	2.6	2.4	3.6	2.9	5.9	5.4
Finland	1.7	1.6	2.0	2.0	1.0	2.2	1.8	1.6	3.2	2.2	3.2
France	4.5	4.3	7.1	8.8	12.3	9.4	12.5	13.5	18.9	25.3	41.8
Germany	4.6	9.4	4.5	9.3	13.0	50.5	81.8	51.8	65.1	81.1	74.4
Greece	–	–	–	0.2	–	–	–	–	–	–	0.1
Iceland	0.3	0.3	0.3	0.2	0.2	0.7	0.8	0.9	0.8	1.7	2.0
Ireland	**0.2**	**0.4**	**1.7**	**6.5**	**11.7**	**19.0**	**23.2**	**29.9**	**34.1**	**44.1**	**57.7**
Italy	2.5	2.2	1.1	0.6	–	0.8	0.2	0.3	–	1.7	1.6
Japan	0.1	–	–	0.2	0.3	0.6	0.4	0.5	1.0	1.0	1.4
Luxembourg	1.8	3.9	8.7	9.9	10.5	11.7	16.2	22.1	17.5	22.5	16.5
Netherlands	7.3	11.0	6.9	9.8	17.0	27.9	42.2	41.9	47.3	52.6	52.0
New Zealand	1.7	1.8	1.9	2.2	1.7	1.4	2.3	2.0	1.8	2.5	4.8
Norway	0.1	0.1	0.4	0.7	1.6	1.4	4.5	1.7	2.0	2.2	1.3
Portugal	–	0.6	0.2	0.5	0.3	1.4	0.9	2.6	1.3	3.3	2.3
Spain	0.7	1.5	1.0	0.7	0.7	2.0	0.8	0.7	0.8	1.0	1.0
Sweden	10.1	7.7	8.1	7.8	10.3	10.7	15.8	8.7	8.8	8.0	11.8
Switzerland	0.1	0.1	0.1	0.3	1.0	1.9	1.2	1.0	1.0	0.8	1.1
United Kingdom	24.8	40.6	51.8	54.6	59.2	75.1	111.3	79.5	92.9	146.8	171.6
United States	16.0	9.5	10.4	14.3	16.0	41.9	65.0	38.8	30.6	41.6	50.3

Source: BIS.
Note: Amounts outstanding are at year-end except for 2004 which is at end-Quarter 3. All Issuers include financial institutions, corporate issuers and government.

transactions and structures possible and further encouraged the location of issuing SPVs in Ireland.

This is further shown by BIS figures for amounts outstanding of securities by nationality of issuers. Amounts outstanding for Quarter 3 2004 in money market instruments by Irish nationality issuers totalled US $22.4 billion, compared with US $57.7 billion by issuers purely resident in Ireland. Similarly, amounts outstanding in bonds and notes by Irish nationality issuers reached US $110.5 billion at end-Quarter 3 2004 compared with US $227 billion for Irish resident issuers. The difference in the residency and nationality figures illustrate the impact legislative and market developments have had on the value of securities issued in Ireland over the past decade.

Of the combined amount outstanding of US $132.9 billion of debt securities issued by Irish nationality issuers, amounts issued by financial institutions account for the vast majority. Table 3 shows the amounts outstanding of debt securities by category of Irish nationality issuer from end-1994 to end-Quarter 3 2004. While government issues have declined steadily over the period in line with strong exchequer figures, amounts outstanding issued by corporate issuers has risen at a relatively small rate. Amounts outstanding by Irish nationality financial institution, however, have grown sharply from US $2.9 billion at end-1994 to US $123.1 billion at end-Quarter 3 2004. The significant portion of the growth rate in amounts outstanding by financial institutions began in the latter years of the 1990s, as increased securities

Table 3: International Debt Securities by Category of Irish Nationality Issuer

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
	Amounts outstanding US $ billion										
All issuers	**14.0**	**16.4**	**20.0**	**20.5**	**25.3**	**30.2**	**34.7**	**47.0**	**65.5**	**107.5**	**132.9**
—Financial institutions	2.9	5.0	10.9	12.5	18.0	23.0	28.3	34.5	51.4	94.2	123.1
—Corporate issuers	0.6	0.5	0.5	1.2	0.6	0.7	1.5	4.1	7.2	9.7	8.8
—Governments	10.4	10.9	8.6	6.8	6.7	6.4	4.9	8.4	6.9	3.5	1.0

Source: BIS.
Note: Amounts outstanding are at year-end except for 2004 which is at end-Quarter 3.
Debt Securities comprise Money Market Instruments and Bonds and Notes.
Data is based on the sector of the borrower itself and not on the sector of the parent company of the borrower or any guarantor.

financing methods became available. This illustrates the additional funding methods accessed by financial institutions in order to provide increased sources of funds from which to expand their business and loan books. A large portion of the increase in amounts outstanding by Irish nationality financial institution issuers is accounted for by the increase from US $51.4 billion at end-2002 to US $94.2 billion at end-2003. This is partly attributable to the establishment of two ACS Banks and the transfer of assets and liabilities to a newly formed Irish credit institution by a large overseas parent bank.

3. Debt Instruments Listed as Eurosystem Tier One Eligible Assets

3.1 Role of Collateral in Eurosystem Monetary Policy Operations

Article 18.1 of the Statute of the ESCB/ECB provides that the ECB and the NCBs may operate in the financial markets by buying and selling underlying assets outright or under repurchase agreements, and that the ECB and the NCBs may conduct credit operations, with lending being based on adequate collateral. The implementation of monetary policy in the Eurosystem is carried out on a decentralised basis, whereby individual NCBs conduct monetary policy operations on behalf of the Eurosystem. The operational framework for the implementation of monetary policy comprises a set of monetary policy instruments and procedures which are used to meet this objective.

There are two main groups of monetary policy operations available to the Eurosystem for the conduct of the single monetary policy: open market operations and standing facilities. Open market operations are executed by NCBs with credit institution counterparties. These operations allow the Eurosystem to steer interest rates and manage the liquidity situation in the money market (ECB, 2003). The role of collateral in these liquidity-providing operations is to protect the Eurosystem against potential loss arising from the risks of granting the short-term credit[18].

18 The debt instruments eligible for use as collateral in open market operations are also eligible for use as collateral in intraday credit operations. Monetary policy operations and intraday credit operations combined are referred to as ‘Eurosystem credit operations’.

In order to ensure the equal treatment of counterparties and to provide for a level playing field across the euro area, assets must fulfil certain specified criteria in order to be eligible for use as collateral in monetary policy operations. However, the differing national law systems and financial structures of the euro area mean that most countries have types of debt instruments that are highly important to their own country but perhaps not marketable across the euro area. As such, two categories of assets eligible for Eurosystem monetary policy operations were created, namely, Tier One and Tier Two assets. Tier One consists of marketable debt instruments fulfilling uniform euro area-wide eligibility criteria specified by the ECB. Tier Two consists of additional assets, marketable and non-marketable, which are of particular importance to national financial markets and banking systems and for which eligibility criteria are established by the national central banks, subject to the minimum eligibility criteria established by the ECB and the approval of the ECB. The listing of Tier One assets in one particular Member State that meet the eligibility criteria, for example in Ireland, may be used by counterparties as collateral to NCB liquidity-providing operations in any of the other Member States of the euro area. The categories of assets currently accepted on the Tier One list across all euro area countries include bonds, medium term notes, treasury bills/commercial paper, Jumbo pfandbriefe-style/asset covered security type assets, traditional pfandbriefe-style assets and, finally, other securitised assets such as MBS/ABS. Tier Two assets specific to certain Member States include bank loans, equities and, in Ireland, mortgage backed promissory notes (MBPNs).

3.2 Comparison of Tier One Collateral Listed by Euro Area Countries

A comparison of the number of assets included on Tier One of the EADB by individual euro area countries illustrates the trends in types of debt issuance in each country[19]. This section uses data available from the ECB website on the assets provided to the EADB[20] by each euro area country of reference market location[21] and CBFSAI data on the assets listed on the EADB by Ireland at 2004 Quarter 3. The charts in this section illustrate certain countries' assets on an alternative right hand scale where their number of assets is particularly high in comparison to the remaining euro area countries. Chart 1 illustrates the number of assets included on Tier One of the EADB by each euro area country of reference market. Immediately apparent is that

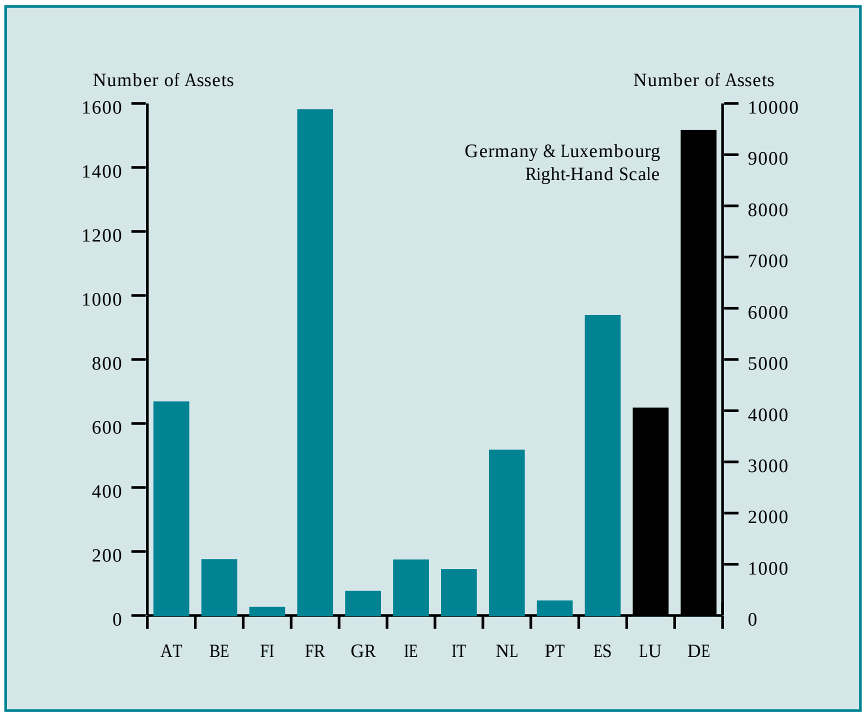
19 European Union (EU) Members who are not part of the euro area also provide assets to the EADB. This comparative analysis, however, only concerns itself with the euro area countries in order to illustrate the trends of debt issuance that have occurred in the euro area.

20 See the web page www.ecb.int/mopo/implement/assets/assets/html/index.en.html for information about eligible assets and a link to the eligible assets database.

21 Country of reference market location refers to the location where the asset is listed on a market or exchange.

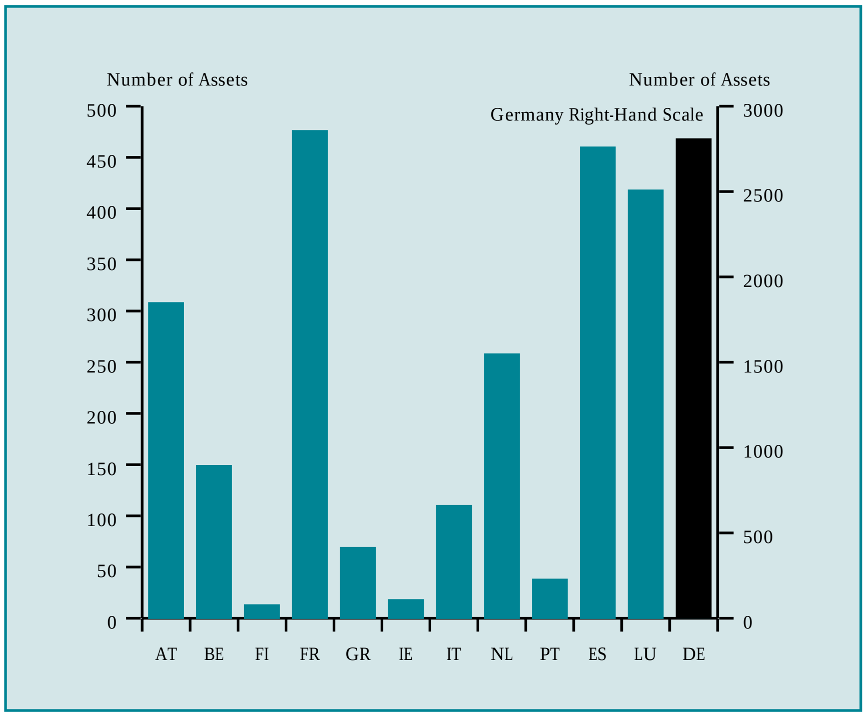
Germany is by far the largest contributor to the EADB by number of assets, with 9,470 assets, followed by Luxembourg (4,047 assets) and then France (1,580 assets). France is the only country to report assets under each of the Tier One asset categories. Ireland ranks eighth of the twelve euro area countries by number of assets listed.

Chart 1: Tier One Eligible Assets by Country of Reference Market



Source: ECB and CBFSAI.

Chart 2: Tier One Bonds by Country of Reference Market

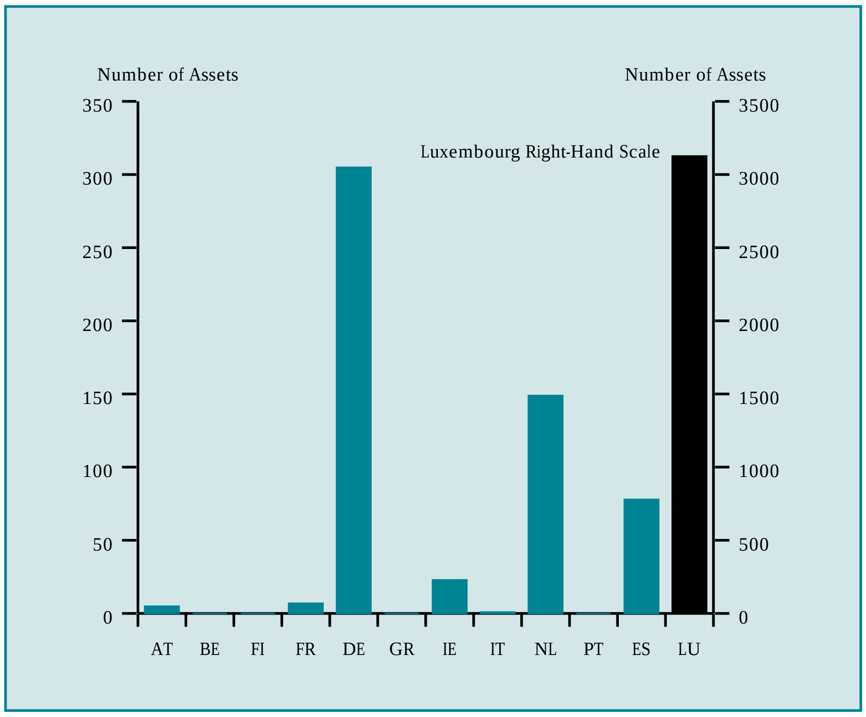


Source: ECB and CBFSAI.

A breakdown of assets by country for each category of Tier One assets illustrates some notable trends. Chart 2 shows the number of assets included on Tier One by each euro area country of reference market location under the category of Bonds. Germany is the largest contributor to this category, accounting for 2,808 bonds from a total of 5,125. Ireland is the second lowest contributor of bonds (18), just ahead of Finland which has reported only 13. This is partly reflective of the reduced need for the Irish Government to issue bonds given the strong performance of the Irish economy over recent years compared with other euro area countries. All twelve countries report assets within this category.

Chart 3 shows the number of assets included on Tier One by each euro area country of reference market location under the category of Medium Term Notes. Ireland is the fifth largest contributor of eight countries for this category of asset, reporting 23 MTNs, ahead of France, Italy and Austria of the other reporting countries. Luxembourg dominates the number of issue listings of MTNs, accounting for 3,127 out of a total of 3,695. This large-scale issuance of MTNs in Luxembourg reflects the financing requirements of non-resident corporations, as 93 per cent of debt security issuances in Luxembourg are by non-residents (ECB, 2002).

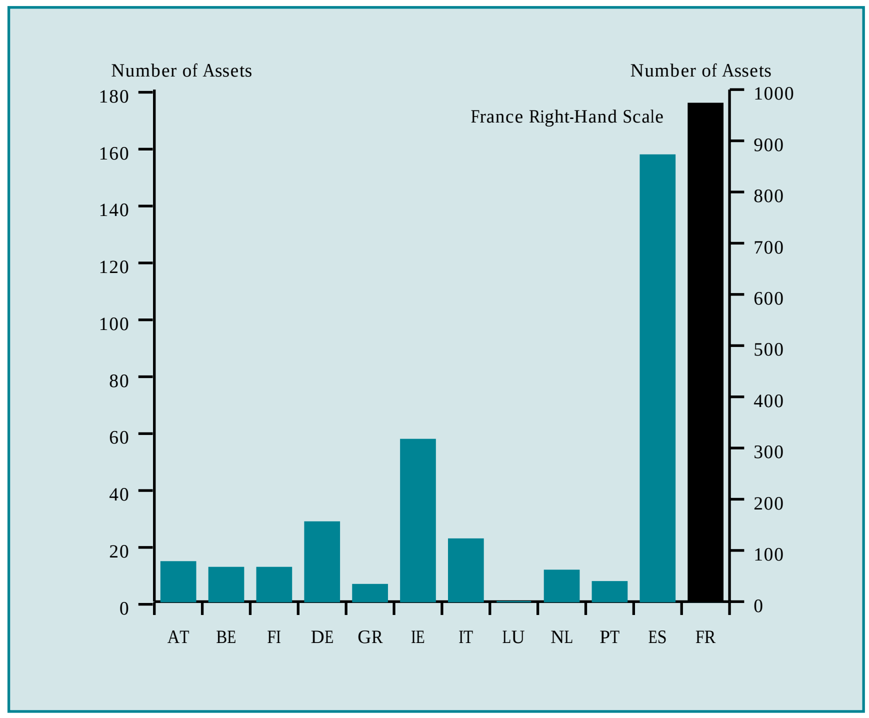
Chart 3: Tier One MTNs by Country of Reference Market



Source: ECB and CBFSAI.

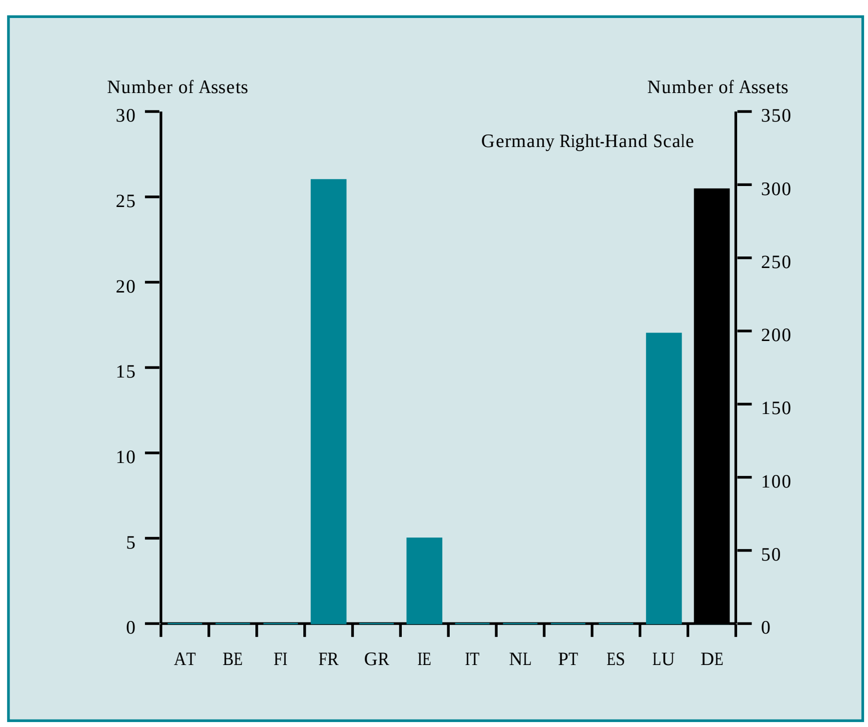
The number of assets included by each euro area country of reference market location under the category of Treasury Bill/Commercial Paper on the Tier One list is depicted in Chart 4. This category is dominated by assets listed in France, accounting for 973 of a total of 1,299 assets in the category. This reflects the liquid market for commercial paper in France. Of the eleven countries contributing to this category, Ireland is the third largest contributor with 57 assets, behind France and Spain. Only Luxembourg has no assets to report in this category. The assets included by Ireland in this category are predominantly exchequer notes (see Table 5).

Chart 4: Tier One T-Bill/CP by Country of Reference Market



Source: ECB and CBFSAI.

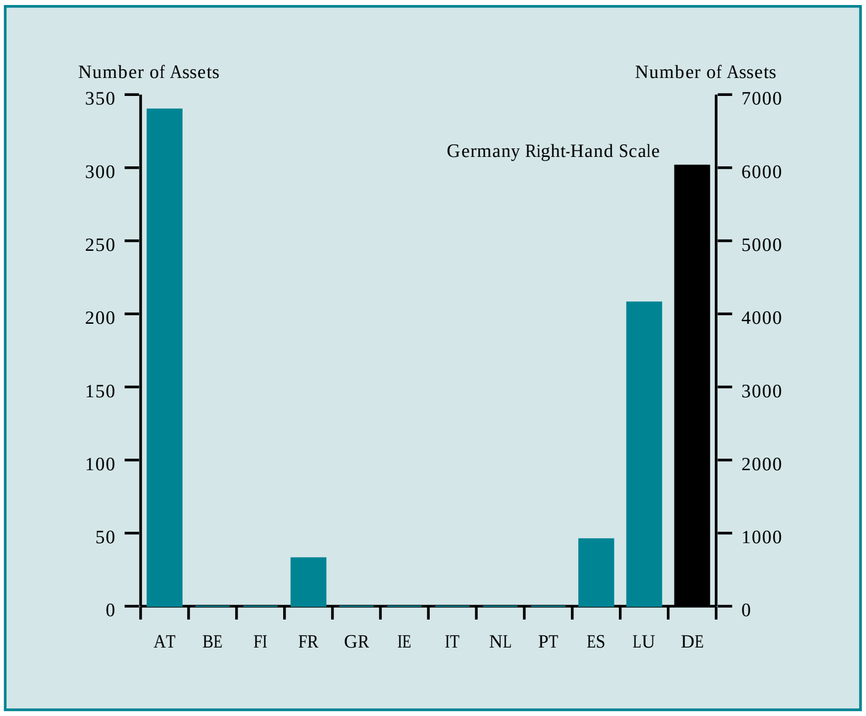
Chart 5: Tier One Jumbo Pfandbriefes by Country of Reference Market



Source: ECB and CBFSAI.

Assets included on Tier One by country of reference market location in the Jumbo pfandbriefe-style category are shown in Chart 5. This category includes Irish Asset Covered Securities. Only four countries report assets under this category and, as would be expected, Germany is by far the largest contributor with 297 Jumbo pfandbriefes, followed by France with 26 issues, Luxembourg with 17 issues and finally Ireland with five issues of ACS. The number of countries contributing to this category of asset will increase once the requisite legislation, which is currently being proposed in some countries, has been adopted. Within the similar category of traditional pfandbriefe-style assets, only five countries report assets as shown in Chart 6. For reasons outlined above, Germany is by far the highest contributor in this category accounting for 6,032 out of a total of 6,659 assets. This is followed by Austria (340 assets), Luxembourg (208 assets), Spain (46 assets) and finally France (33 assets).

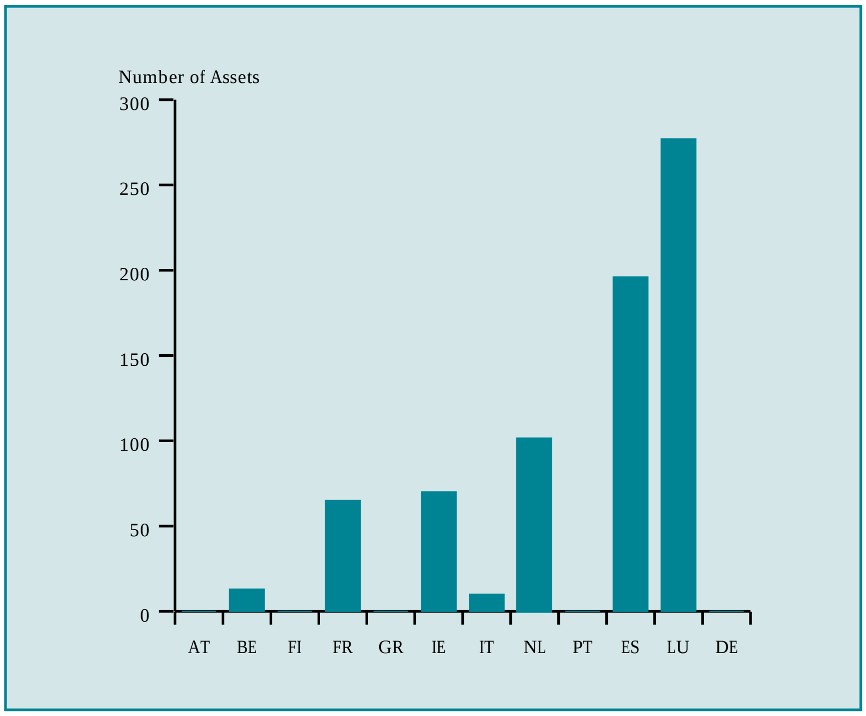
Chart 6: Tier One Traditional Pfandbriefes by Country of Reference Market



Source: ECB and CBFSAI.

The final category of assets on Tier One, Other Securitised Assets, is the most notable from an Irish perspective, as evidenced by the country comparison shown in Chart 7. There are seven countries reporting assets under this category. Luxembourg is the largest contributor with 277 assets, followed by Spain with 196 assets, the Netherlands with 102 assets and then Ireland contributing 70 assets. The other reporting countries are France (65 assets) Belgium (13 assets) and Italy (10 assets). While Ireland is the fourth largest contributor to this category, the 70 assets it reports here make this its most important category by number of issues. This reflects the developments in securitisation and the facilitation of SPVs as outlined earlier. Ireland is the only country to have reported more Other Securitised Assets to the Tier One list than any other category of asset.

Chart 7: Tier One Other Securitised Assets by Country of Reference Market



Source: ECB and CBFSAI.

Table 4: Assets Added to Tier One by Category and Country of Reference Market

	Bonds	MTNs	Treasury Bill/CP	Jumbo Pfandbriefe	Traditional Pfandbriefe	Other Securitised Assets	Total
Ireland	18	23	57	5	0	70	173
France	476	7	973	26	33	65	1,580
Spain	460	78	157	0	46	196	937
Portugal	38	0	7	0	0	0	45
Finland	13	0	12	0	0	0	25
Germany	2,808	305	28	297	6,032	0	9,470
Belgium	149	0	12	0	0	13	174
Greece	69	0	6	0	0	0	75
Netherlands	258	149	11	0	0	102	520
Italy	110	1	22	0	0	10	143
Luxembourg	418	3,127	0	17	208	277	4,047
Austria	308	5	14	0	340	0	667
Total	5,125	3,695	1,299	345	6,659	733	17,856

Source: ECB and CBFSAI.

Some other country-specific details are also noticeable from the data breakdown provided in Table 4. It is evident that assets reported under the Bonds category accounted for the largest number of assets included on the Tier One list in seven of the countries, while it was the second highest category in four of the remaining countries. The last remaining country, where the number of bonds reported represented only the fourth largest category by number of issues, is Ireland. Overall, these figures suggest that typical debt instruments remain highly important across euro area countries; however other instruments, such as ACS, pfandbriefe-style assets and securitised assets, are growing in importance in those countries which have adopted the necessary legislation. This suggests that should further legislation be passed in other euro area countries these instruments will also gain increased importance on an aggregate basis.

Table 5: Assets Added to Tier One by Category and Country of Reference Market

Asset type	No. of issues	Amount outstanding € billion	No. of issuers		
			Irish SPV	Non-Irish	Irish non-SPV
Bonds	**18**	**31.41**	**0**	**1**	**17**
–Government Bonds	10	31.16	0	0	10
–Callable Bonds	1	0.03	0	0	1
–Debentures	6	0.12	0	0	6
–Floating Rate Bond	1	0.11	0	1	0
Medium Term Notes (MTNs)	**23**	**4.98**	**0**	**3**	**20**
(Treasury) Bill/Commercial Paper	**57**	**0.34**	**0**	**0**	**57**
–Central Treasury Notes	16	0.04	0	0	16
–European Commercial Paper	7	0.13	0	0	7
–Exchequer Notes	34	0.17	0	0	34
Jumbo Pfandbriefe	**5**	**12.00**	**0**	**0**	**5**
–Asset Covered Securities (ACS)	5	12.00	0	0	5
Other Securitised Assets	**70**	**17.40**	**39**	**31**	**0**
–Mortgage Backed Securities (MBS)	39	11.74	31	8	0
–Collateralised Bond Obligations (CBO)	2	0.25	1	1	0
–Collateralised Debt Obligations (CDO)	19	3.57	3	16	0
–Collateralised Loan Obligations (CLO)	3	0.43	0	3	0
–Fonds Communs de Creances (FCC)	2	0.34	0	2	0
–Whole Business Securitisation (WBS)	1	0.05	1	0	0
–Other Asset Backed Securities (ABS)	4	1.02	3	1	0
Total	**173**	**66.13**	**39**	**35**	**99**

Source: CBFSAI.

3.3 Analysis of Debt Instruments Listed as Tier One Collateral in Ireland

A further disaggregated breakdown of the CBFSAI data on assets added to the EADB by Ireland pinpoints the impact of the trends in debt instrument issuance and how they have led to specific types of instruments being added to the EADB by the CBFSAI. Table 5 provides a detailed breakdown of the type of assets added to the EADB by the CBFSAI at Quarter 3 2004 and some specific features of the instruments. The first column shows the ECB classification of the assets along with a further disaggregated asset class description. The second column shows the number of individual assets issued in each category which have been added to the EADB by Ireland. The third column shows the aggregate amount outstanding of the assets in each category. The final three columns illustrate the location and type of issuer and identifies how many of the assets have been issued by SPVs located in Ireland, non-Irish issuers and non-SPV Irish issuers.

As can be seen, of the 173 assets added to the EADB by Ireland as at Quarter 3 2004, only 18 were classified as bonds. However, this category accounted for the largest aggregate amount outstanding, a total of €31.4 billion. The further breakdown of asset categories provided in the table shows that much of this category was composed of straightforward government bonds, with debenture issues accounting for much of the remainder. Only one of the bonds, which can be classified as a floating rate bond, was issued by a non-Irish resident issuer. The 23 MTN issues, with a combined amount outstanding of almost €5 billion, represent more than 7 per cent of the total value of assets added to the EADB by Ireland. Non-Irish resident issuers issued three of the 23 MTNs reported in this category.

The second highest number of assets by category was reported under the category of Treasury Bills/Commercial Paper, constituting 57 assets. However, this category represented the smallest amount outstanding, of almost €0.34 billion. This reflects the nature of these instruments in that they are of a more short-term orientation than the other types of assets. Following on from the Irish Asset Covered Securities Act, 2001, five ACS issued by designated credit institutions have been added to the EADB by the CBFSAI, with a combined worth of €12 billion, representing roughly 18 per cent of the total amount outstanding of all assets. By nature of the legislation and the requirement that only DCI status institutions can issue ACS, all issuers were located in Ireland. In a short space of time, a small number of ACS issues have, therefore, contributed a significant proportion of the total amount outstanding of all assets added to the EADB. It is likely that this classification of assets will continue to develop further.

Following on from the earlier discussion of developments in securitisation and SPVs, the category breakdown for Other Securitised Assets illustrates some notable findings. The 70 assets added to the EADB by the CBFSAI in this category can be further identified as follows: 39 were mortgage backed securities[22], three were collateralised loan obligations, 19 were collateralised debt obligations, two were collateralised bond obligations, one could be classified as a whole business securitisation, two were FCCs, while four were classified as other asset backed securities. These 70 assets had an aggregate amount outstanding of €17.4 billion. Significantly, however, 39 of the 70 assets were issued through SPVs located in Ireland, 31 of which were MBS. Issuers not resident in Ireland issued the remaining 31 assets, 16 of which were CDOs issued through SPVs in other Member States such as the Netherlands and Luxembourg but listed on the Irish Stock Exchange, hence their reporting to the Tier One list by the CBFSAI. This category of asset particularly illustrates how the Irish market has become exposed to new issues of debt instruments due to changed legislation and in response to euro area trends.

4. Developments in the Medium Term: Towards a Single List of Eligible Collateral

A number of developments are due to take place over the medium term which will alter the landscape which has provided the backdrop to the trends outlined previously in this paper. The new Basel II Capital Accord is first on the horizon, which may radically alter the type and extent of debt instrument issuance by

22 The category MBS does not distinguish between residential mortgage backed securities and commercial mortgage backed securities for the purposes of this analysis.

credit institutions. Further along the horizon will be the proposed introduction of a Single List of eligible collateral, replacing the current two-tier system. Although preceded by the addition of euro-denominated non-EEA G10 country-issuer assets to the list of possible eligible collateral in May 2005, the gradual adoption of the Single List will further open up the use of additional assets as collateral in euro area countries and add to the level playing field of the collateral framework for counterparties.

4.1 Basel II and its Impact on Debt Instruments

The first Basel Capital Accord (Basel I), signed in 1988, was enacted to set minimum capital requirements to be held by credit institutions in order to reduce the risk of insolvency and the related risks and costs to individuals and the banking system were a credit institution to fail. The new Basel II Capital Accord, which is scheduled to come into force by end-2006, is aimed at increasing the security and soundness of the banking system, in part by bringing the regulatory capital charges closer to the level of underlying economic risk. This may have the effect of reshaping the structured finance market as it applies to credit institutions.

Securitisation removes assets off a credit institution's balance sheet, thereby reducing the amount of loans which are used to calculate the bank's regulatory capital requirements and frees up that equivalent capital requirement amount to be used for issuing loans or generating other business. However, Basel II effectively aims to end such regulatory capital arbitrage by aligning regulatory capital with economic capital. To the extent that these two classifications are better aligned, Basel II effectively applies capital requirements to securitised assets and will thus reduce the incentive to securitise in order to reduce regulatory capital requirements.

The key feature of Basel II in this context is the change in credit risk weightings, which are to become more risk sensitive. They will now be determined by public ratings supplied by an External Credit Assessment Institution (ECAI) or by Internal Ratings Based (IRB) systems. In view of these risks and ratings, capital requirements will be higher during periods of recession (higher risk weighting) and lower during growth periods (lower risk weighting) (Moodys, 2004a). The capital requirement is calculated as 8 per cent times the risk weighted assets. Basel II effectively changes the manner in which risk weighted assets are calculated. This is now determined by market risk, credit risk and a new feature not present in Basel I, operational risk; this is defined as the risk of direct loss resulting from inadequate or failed internal processes, people and systems or from external events. Basel II allows credit institutions to adopt one of two approaches in calculating the underlying risk used to calculate the risk-weighted assets, namely, a standardised approach and an IRB approach. Furthermore, treatment of securitisation differs within these approaches depending on whether the credit institution is also the originator of the loans or whether it has simply invested in a securitisation programme. These differing approaches and treatments can lead to different amounts of regulatory capital being applied to a single securitisation transaction.

Basel II also increases the penalties imposed on banks that originate loans and then provide support to a securitisation, for example, by substituting better loans for poor performing loans in the SPV portfolio. In such cases, the bank will have to hold regulatory capital to cover the assets of the entire transaction. Similarly, Basel II can also increase the capital requirement on over-collateralisation of issues, reducing the incentives for issuers to incorporate this level of in-built protection. Structured covered bonds, however, are not affected in the same manner and are not specifically treated in Basel II. As the nature of such covered bonds entails that the assets remain on the originating bank's balance sheet, there is no further penalty in providing support to ensure the quality of the issue or in replacing non-performing loans in the pool (Fitch, 2004b). Ultimately, securitisations will suffer the most from the increased specific treatment of these instruments and concomitant capital requirements.

To the extent that Basel II aligns regulatory capital risk weightings with economic risk weightings, including credit enhancement and over-collateralisation, the net effect on structured finance would appear to create disincentives to the issuance of certain debt instruments, namely, the elimination of regulatory capital arbitrage. The remaining benefits to securitisation, i.e., access to cheaper sources of funding and risk management, will vary across credit institutions depending on their issuer ratings and the in-built protection features of their issues which will ultimately decide on the cost of funding and the extent of risk transfer that can be achieved.

The likely effect of this will be an increased tendency for credit institutions to issue structured covered bonds and asset covered on-balance sheet debt instruments, e.g., pfandbriefe and ACS, as opposed to off-balance sheet securitisation transactions. However, issuers of covered bonds with a relatively low issue rating (below Aa3) will be disadvantaged as risk weightings depend on the issuer and not the issue (Moodys, 2004a). There will undoubtedly exist a number of niches and opportunities to issue structured finance debt instruments post-Basel II. However, these may often be company-specific and driven by the ability to access cheaper funding, with issuer and issue ratings becoming the key to achieving this. The exact extent to which regulatory capital risk weightings are fully aligned with the underlying economic risk weightings will also be a factor. It may be the case that some regulatory capital arbitrage may still exist. Even where this is small in nature, the existence of opportunity cost of capital incentives may help maintain a certain degree of securitised structured debt instruments. Over time, altered market conventions and dynamics may help define the structured finance arena in the context of the Basel II requirements.

4.2 The Single List of Eligible Collateral

In reviewing the two-tier collateral system, the ECB recognised that the country-specific nature of Tier Two assets may have been preventing the attainment of a level playing field for counterparties and may have contributed to a reduction in the transparency of the collateral framework. In order to accentuate the concept of a level playing field to counterparties accessing the collateral framework, the Eurosystem will gradually replace the current two-tier system of eligible collateral with a new Single List, most of which will come into existence by mid-2007. This decision has come about following the recognition of the scope for improving the transparency of the collateral framework and the public consultation process undertaken by the ECB in the latter half of 2003. This was followed by a thorough review of the merits of each instrument being included on a new Single List. The ECB states that the purpose of the Single List is to enhance the level playing field in the euro area, to further promote equal treatment for counterparties and issuers and to increase the overall transparency of the collateral framework (ECB, 2004c).

The key to deciding on which assets to include on the Single List is the principle that all counterparties should be in a position to use similar assets wherever they are located, thus accentuating the level playing field. It has been widely recognised that there has been increasing demand for collateral, with debt instruments becoming more liquid for issuers and investors alike once ECB Tier One eligibility status has been awarded. In many instances, Tier One listing has been sought as a *de facto* form of asset rating by issuers. The demand for scarce collateral could further increase if Basel II has the effect of reducing the attractiveness of issuing such debt instruments. In principle, all current Tier One assets will be included on the Single List; therefore, the major issues for discussion are which Tier Two assets to include on the Single List and how the types of eligible collateral might be expanded.

As a first step, the ECB announced that it intended to introduce in its collateral framework a new category of previously ineligible assets; euro-denominated debt instruments issued by Group 10 (G10) countries not in the European Economic Area (EEA), currently the US, Canada, Japan and Switzerland. This is seen as the first step in expanding the list of collateral towards the introduction of the Single List and is scheduled to be implemented by May 2005. These instruments must be issued in the EEA but settled in the euro area and as they are governed by a law system outside the euro area, they must be accompanied by a legal assessment pertaining to the position in the event of the enforcement by the Eurosystem of its rights deriving from the debt instruments.

The second step towards the Single List came with the approval of certain current Tier Two assets for inclusion. The first Tier Two asset to be included on the Single List in principle is bank loans from all euro area countries. In the current Tier Two context, bank loans are accepted as collateral in Spain, France, Germany and Austria, with varying degrees of usage and importance. Naturally, the vast majority of Eurosystem counterparties have a strong preference for the use of on-balance sheet loans as collateral given the ease and readiness of a large amount of assets that would thus become eligible for the Single List. In order to fulfil the objective of widening the list of eligible collateral, the inclusion of bank loans is seen as highly important given the amounts that are involved and the fact that they are widely distributed across the banking sector. A degree of harmonisation across bank loans and jurisdictions could be required to ascertain specific eligibility criteria such as applying a minimum size for assets to be considered eligible, the range of their maturities, the eligible categories of debtors and to ensure mobilisation.

As a related issue, it has also been decided that Irish mortgage backed promissory notes, which are non-marketable retail mortgage backed debt instruments, will also be included on the Single List. Currently eligible for inclusion on the Tier Two list of eligible collateral, MBPNs are debt instruments in the form of promissory notes backed by a pool of mortgage loans under a floating charge, thereby offering greater protection to the Eurosystem than individual bank loans. These instruments owe their origin to Irish common law and are issued solely by domestic credit institutions with predominantly domestic lending business and are structured to be specifically used by credit institutions as collateral for Eurosystem credit operations. As distinct from fully-fledged securitisations, the underlying assets remain on the credit institution's balance sheet, albeit ring-fenced from other charges. Owing to the importance of MBPNs to Irish credit institutions they will also be eligible for inclusion on the new Single List.

A more tenuous argument could be made for the inclusion of equities on the Single List. Owing to the small amount of equities currently used as collateral and the comparatively small amount of equities credit institutions are likely to hold on their balance sheet, their inclusion on the Single List would not strengthen nor improve the transparency of the collateral framework.

Consequently, equities will continue to remain eligible on the Tier Two list where they are currently accepted in Spain, Netherlands and Portugal, but will be phased out from eligibility over the horizon to the Single List.

Further decisions are yet to be made on the inclusion of a range of other Tier Two marketable assets. The steps towards a new Single List of eligible collateral which have been agreed in principle, however, may lead to a radically different cross-sectional trend of types of assets used as collateral in euro area countries to what is currently the case. It is unlikely that the expansion of the list of eligible collateral will impact, to any great extent, on the type of debt instruments issued by credit institutions. If any change in debt instrument issuance does occur, however, it is possible that the increased facilitation of on-balance sheet loans and ring-fenced blocs of assets on the Single List may detract from the benefits of issuing securitised products. Debt instruments such as ABS are issued largely to take assets off-balance sheet or to generate additional funding often at a cheaper rate than that available elsewhere. It is unlikely that the ability to use additional types of assets as collateral will change this.

Further developments in debt instruments themselves may lead to changes in the types of asset classes that will be added to the Single List. One such example is the extension of securitised assets to include whole business securitisation. The common structure to a whole business securitisation transaction involves a bankruptcy remote SPV issuing asset backed securities, from which the proceeds are lent to an operating company in order to generate financing. Security is granted over the loan in the form of a charge over all of the assets of the borrower, hence the term 'whole business securitisation'. In contrast to the traditional types of loan securitisation, the underlying assets to the whole business securitisation remain in the control of the borrowing company and are not sold to the SPV issuer. One example of whole business securitisation was the financing of London City Airport in 1999.

A relatively recent concept, this is an area likely to expand in the future, albeit more suited to certain types of business than others. Whole business securitisations originated in other countries can be registered and issue debt instruments in Ireland through SPVs, one example of which has been added to the Tier One list of eligible assets. Whole business securitisation by Irish companies, however, is probably still some way off, particularly given the current legislative situation regarding examinership. The receivership process in Ireland does not allow secured creditors the right to veto the appointment of an examiner, who can deal with charged property and sell property subject to a floating charge (Ali, 2003). Therefore, the appointment of an examiner would adversely affect an investor's security and potentially impact on the cash flow from the securitised assets. The uncertainty as to whether an examiner could be appointed and in what circumstances, can deter investors as regards to whole business securitisation in Ireland. It is unlikely that this area will develop significantly in Ireland until measures are taken to reduce the uncertainty and improve the security investors will have over the charged assets.

5. Conclusions

This paper has discussed some of the key developments of recent times that have led to significant changes in the type of debt instruments that have been issued in Ireland. Many of the developments that have taken place are as a result of, and in response to, the success of a number of debt instruments in other euro area countries, which have provided a range of risk management and funding benefits. These developments and the demand for related financial products on behalf of both the issuer and investor have led to numerous other Member States adopting legislation, or undertaking a process of reviewing legislation, in order to facilitate a wider range of issuance of debt instruments in their own countries. Much of the recent growth in debt instrument issuance in Ireland has followed the enactment of new legislation governing debt instruments in response to growing demand for the products. Perhaps most significantly, amendments to the legislation governing securitisation in the Finance Bill, 2003 have facilitated strong growth in the issuance of ABS and CDOs through the location of SPVs in Ireland. Much of the asset backed notes issued by these entities are backed by a range of loans and receivables originated in Member States throughout the euro area. Further legislative developments, such as the passing of the Asset Covered Securities Act, 2001 have allowed credit institutions in Ireland to issue Jumbo pfandbriefe-style instruments, allowing them to benefit from the success of similar products in Germany, France and Spain. Developments in debt instruments in other euro area countries have also impacted on the Irish market through their listing on the Irish Stock Exchange, such as issuance of French FCCs and of ECP.

The result of this issuance trend has seen Ireland elevated into the position of one of the largest residency locations among the developed economies for issuance by outstanding amount. With the increased issuance of a range of debt instruments in Ireland and their listing on the ISE there has been an increase in the number and type of debt instruments listed by the CBFSAI as Tier One eligible assets for use as collateral in Eurosystem open market operations. A country comparison of assets included on the EADB shows that traditional debt securities remain highly important across the euro area. However, other instruments such as ACS, pfandbriefe-style assets and securitised assets are growing in importance in those countries which have adopted the necessary legislation. This suggests that, should further legislation be passed in other euro area countries, these instruments will gain increased importance on an aggregate basis also.

The inclusion of Other Securitised Assets by the CBFSAI onto the EADB as Tier One collateral is the most significant category by number of issues at 2004 Quarter 3, accounting for 70 of the 173 assets reported. Of the 70 assets, 39 were issued through SPVs located in Ireland. Issuers not resident in Ireland issued the remaining 31 assets, 16 of which were CDOs and were issued through SPVs in other Member States such as the Netherlands and Luxembourg but were listed on the Irish Stock Exchange, hence their reporting to the Tier One list by the CBFSAI. This category of asset particularly illustrates how the Irish market has become exposed to new issues of debt instruments due to changed legislation and in response to euro area trends.

Future developments were also discussed and how they might impact on the above identified trends in debt instrument issuance and the listing of such instruments by the CBFSAI on the ECB Eligible Assets Database. The new Basel II Capital Accord aims to reduce regulatory capital arbitrage by aligning regulatory capital with economic capital, effectively applying capital requirements to securitised assets. This will reduce the incentive to securitise in order to reduce regulatory capital requirements. In this regard, it is possible that credit institutions will issue asset covered securities to a greater extent in the future, particularly in euro area countries that are in the process of enacting legislation to facilitate their issuance. This is likely to add to the liquidity of the market and make it more popular with investors and issuers alike.

Further change will come about through the replacing of the current two-tier collateral system with a new Single List of eligible collateral. This development has come about in order to accentuate the concept of a level playing field to counterparties accessing the collateral framework. The most significant feature of the Single List is the inclusion of bank loans and mortgage backed promissory notes. By their inclusion on the Single List, it is acknowledged that on-balance sheet assets are increasingly important to credit institutions. The increasing ability of credit institutions across the euro area to issue asset covered securities, coupled with the disincentives to issue securitised assets as a result of Basel II and the increased facilitation of on-balance sheet assets such as loans in the new Single List of eligible assets suggests that there may be a reduction in the issuance of ABS at the expense of ACS in future years. In addition, recent issues of ACS in Ireland suggest that it can be a cheaper source of funding than ABS. Notwithstanding this, there remain a number of benefits to securitisation such as the removal of credit risk and the source of alternative finance.

Glossary of Terms

ABCP: Asset Backed Commercial Paper – A form of short-term financing, ABCP issues are senior, secured short-term debt instruments backed by receivables and generally issued by a SPV or conduit sponsored by a bank.

ABS: Asset Backed Security – Bonds which are generated by SPVs in order to transform illiquid assets of the originator into transferable securities. Securitised assets could include auto loans, credit cards, mortgages, real estate or trade receivables.

ACS: Asset Covered Securities – These are mortgage and public credit covered securities. The pool of loans underlying the securities remain on the balance sheet of the originator but are ring-fenced from the claims of other creditors.

BIS: Bank for International Settlements – http://www.bis.org

CBFSAI: Central Bank and Financial Services Authority of Ireland – http://www.centralbank.ie

CBO: Collateralised Bond Obligation – A variation of a CDO, except the security is backed by a pool of bonds.

CDO: Collateralised Debt Obligation – A variation of ABS, a CDO is a structured debt security backed by a portfolio of bonds or other assets.

Cedulas Hipotecarias: Spanish asset covered securities.

CLO: Collateralised Loan Obligation – A variation of a CDO, except the security is backed by a pool of loans.

CMBS: Commercial Mortgage Backed Security – Mortgage backed security backed by commercial mortgages.

CMO: Collateralised Mortgage Obligation – These are based on the same principal as MBS but differ in the ordering of payments towards interest and principal payments on the CMO notes.

CP: Commercial Paper – Short-term obligations issued by banks, corporations and other borrowers. Such instruments are unsecured and usually discounted, although some are interest bearing.

DCI: Designated Credit Institution — This is the status which a credit institution must obtain from the CBFSAI in order for the institution to issue ACS.

EADB: Eligible Assets Database — The list of Tier One and Tier Two assets eligible for use as collateral in open market operations in the Eurosystem. — https://mfi-assets.ecb.int/query_EA.htm

ECAI: External Credit Assessment Institution — An independent and external body which provides impartial credit ratings. Under Basel II, rating agencies must satisfy six criteria to be recognised as an ECAI; objectivity, independence, transparency, disclosure, resources and credibility.

ECB: European Central Bank — http://www.ecb.int

ECP: Euro Commercial Paper — Type of commercial paper which can be traded across the euro area, initially represented by a Global Certificate.

EEA: European Economic Area — The EEA is comprised of the Member States of the European Union along with Iceland, Liechtenstein, Norway and Switzerland.

ESCB: European System of Central Banks — Comprises the European Central Bank and the national central banks of the EU Member States.

EU: European Union.

Euro Area: The area encompassing the 12 EU Member States in which the euro has been adopted as the single currency.

FCCs: Fonds Communs de Creances — FCCs can be viewed as purchasing vehicles in commercial and consumer receivable-backed transactions. FCCs issue units backed by these cash flows, which confer co-ownership rights upon the unit holder.

IFSC: International Financial Services Centre.

IRB: Internal Rating Based Systems.

ISE: Irish Stock Exchange — http://www.ise.ie

Jumbo pfandbriefe: An extension of traditional pfandbriefe, 'Jumbos' are a highly liquid international type instrument with a minimum value of €500 million.

MBPN: Mortgage Backed Promissory Notes — Debt instruments in the form of a promissory note backed by a pool of mortgage loans under a floating charge. They are structured to be specifically used by Irish credit institutions as collateral in Eurosystem credit operations.

MBS: Mortgage Backed Security — A specific type of ABS whereby debt instruments issued are backed by residential mortgages or commercial mortgages.

MTN: Medium Term Notes — Debt instruments issued at a fixed or floating rates of interest, as part of an overall medium note programme.

NCB: National Central Bank.

Obligations FonciEres: French asset covered securities.

Pfandbriefe: German mortgage bonds where the underlying mortgages stay on the balance sheet of the credit institution.

RMBS: Residential Mortgage Backed Security — Mortgage backed security backed by residential mortgages.

SPV: Special Purpose Vehicle — This is an independent, legally and bankruptcy remote entity, which is set up to issue asset backed securities in order to protect investors from possible bankruptcy of the originator.

STEP: Short-term European Paper — A STEP label will be awarded to short-term commercial paper issues which voluntarily fulfil certain area-wide criteria in order to encourage the convergence of standards and practices which currently prevail in the European domestic markets and the international ECP market.

WBS: Whole Business Securitisation — This is a form of asset backed securitisation issued through a SPV. Security is granted over the loan in the form of a charge over all of the assets of the borrower, hence the term 'whole business securitisation'. The underlying assets remain in the control of the borrowing company and are not sold to the SPV issuer.

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