

# Cahiers Papers

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European banking after EMU



European Investment Bank

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# New capital market opportunities in Euroland



**Graham Bishop**

## 1. Introduction

The launch of the euro proved to be extraordinarily smooth - auguring well for its future. If the EU can build on this initial success, then citizens - from anywhere in the world - should come to recognise the euro as a robust 'store of value' for their savings. That should complete the emergence of the euro as a tried and tested alternative to the US dollar and cement its role as a global reserve currency. By then, the political implications of the euro's economic power should be readily visible and global finance will have acquired a second leg. That will shape banking strategies just as much within EMU-land as outside it, because the cost of funds to the European economy will be set in a global market and not within any national segment.

But a "good start" is not sufficient to ensure this outcome and other supporting developments are essential. Chief amongst these is the creation of a world-scale capital market utilising the euro and founded upon European savings flows. Fundamental and enduring forces - political, economic, demographic and technical - are combining to drive a process of historic change in the channelling of Europe's savings. They may flow into marketable securities as the preferred mechanism to extend credit to the European economy (and beyond) - the securitisation process. For this analysis, securitisation is defined in the broadest sense. It means connecting the suppliers of funds directly with the users - via a market for securities, rather than through an intermediary bank. The term is often applied to the specific process of making small loans - perhaps on residential mortgages or even credit cards - into bonds that can be issued on the capital markets and purchased by large investment institutions. More generally, it can include the process of governments transforming their non-marketable debts into highly liquid bonds that command a lower interest rate - and thus cost saving.

EMU is often cited as the driving force for changes in the banking environment and, by itself, it certainly will create change. But it would be a mistake to view EMU as the sole driving force and, perhaps, one whose economic effects may be muted because of the political motivation. Three key driving forces should be considered. Their interaction over the next decade could easily change the face of Europe's banking system - creating opportunities as well as threats:

- European Integration is an obvious "driver". The practical outcome of this political process is the creation of the Single Market - of which the financial services component is especially relevant.
- Demographic trends are now set for the next few decades. Increasing sophistication plus rising retirement savings opens new opportunities to intermediate these savings - but which part of the financial services sector will win the business? An aging electorate may also have different political priorities: namely preserving the purchasing power of their assets. As a side effect, that rising tide of liquid savings will also increase the political influence of the financial markets on public policy.

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Technology is a global driving force that will have a profound impact - whether EMU exists or not. Information Technology (IT), covering both computing and communications, will re-shape the mechanics of securities markets and their ability to offer competition to the banking sector.

At times of great change, it is useful to step back and consider the most basic functions of the market: That is to act as an intermediary between savers and the eventual users of their funds. Simplifying in the extreme, there are two models of an intermediary:

- A deposit-taking bank. The saver makes a deposit, for a particular term, and is certain that these funds are secure. The bank will manage a diversified portfolio of assets - using that deposit. Reflecting the political clout of savers, public regulators will require that the bank's shareholders put up ample capital to buffer losses so that deposits are safe. Obviously, shareholders also want a proper return on this capital. Therefore, the savers' maximum net return is the return on the asset portfolio *less* management expenses *less* shareholders' return.
- The securities market offers a different bargain. The saver pays a fee to engage directly with the user of the funds, bearing the full risk of market movements and credit problems. To achieve an adequate degree of credit diversification, the saver could pay the management expenses of a mutual fund (or other institution).

If the management expenses of the bank equalled those of a mutual fund, then the saver could increase return simply by capturing the bank shareholders' portion of the return provided by the underlying assets. However, this analysis can only be performed if the type of assets available to the bank are also available for purchase in the securities market. But, in Europe today the short answer is: They are not available.

If EMU has the side effect of bringing those assets to the market, then the playing field will tilt a little. If technology also shifts the 'management expenses' goal posts, then we may well be in a new game.

## **2. Europe should learn lessons from the US - but only some**

When analysing the possible development of the European financial system, a number of parallels can be drawn with the US, particularly its banking system. The share of credit extended by it, as a percentage of GDP, over the past twenty years has remained essentially unchanged. But the striking feature of the US financial system is the rise in total bonds outstanding as a percentage of GDP - a measure of the securitisation of the US economy (see Figure 1).

The enormous surge in activity has included agencies, mortgage-backed bonds, corporate bonds, and Yankee (that is, foreign issuer) bonds - the latter reflecting the role of the dollar as a global reserve currency - as well as bonds backed by all sorts of financial assets, including credit cards, and even loans to small companies. In practice, virtually any financial asset which produces a predictable inflow of cash - a 'receivable' - can now be 'securitised'. This means that a bond can be issued, via the capital markets, that gives the lender the right to receive those cash items, or a proportion thereof.

**Figure 1.** Securitisation and bank credit, as a percentage of GDP

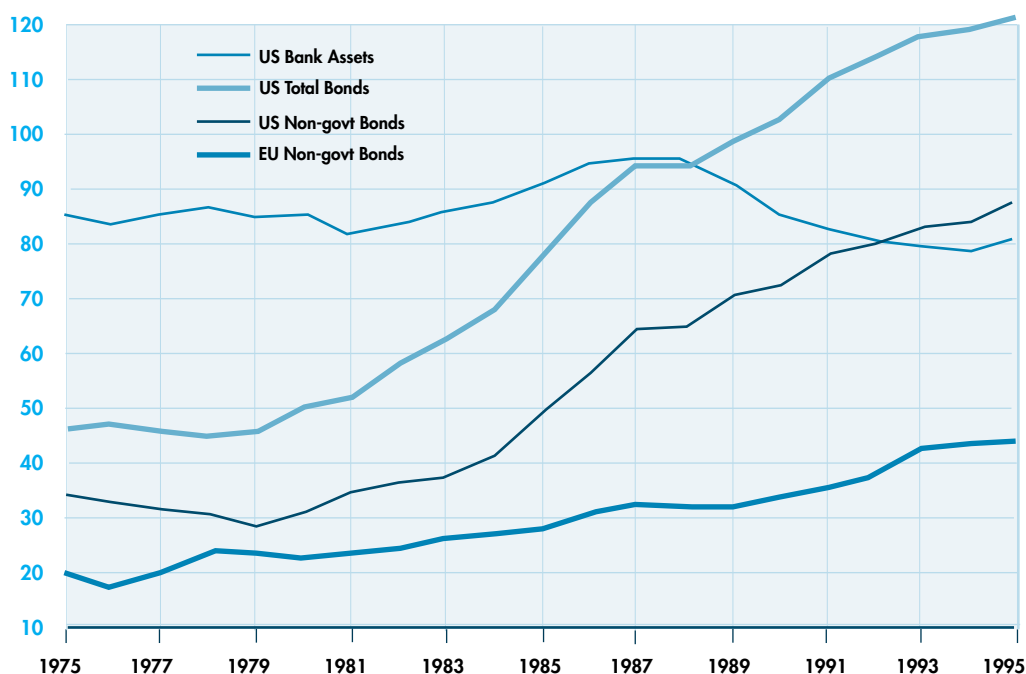


Table 1 shows the build up of these extra components, as well as the agency market that was the raw material for the mortgage bond market. Many of these securities might well have been bank assets, but the high-yield issuers were often trying to escape from onerous debt amortisation provisions or the restrictive covenants that banks would have required.

One significant factor in boosting the US bond market in the mid-1980s was the banking system's capital adequacy problems. In particular, banks like Citibank (now part of Citigroup - the parent of Salomon Smith Barney) decided that the problems of capital inadequacy were so great that they needed to sell off some of the assets on their balance sheet. The chosen mechanism was to securitise them, thereby removing them from the balance sheet whilst retaining customer relationships by servicing the credit cards, etc. That opened the door to new competitors such as speciality credit card companies where economies of scale became a key competitive advantage, or non-banks such as the automobile finance companies, and even mutual funds that invest in bank loans. NationsBank has now securitised a portfolio of loans to small and medium-sized companies - hitherto seen as the last bastion of bank lending.

**The growth of the US bond market has not been driven by the size of the government's deficit, but by the non-Federal government sector.**

This could only happen with the new-found technology, firstly, to do the underlying customer transaction and, secondly, to turn a pool of these into a set of cash flows that can be sold as securities. Europe has the technology and can import these tried and tested techniques, so there are some grounds for regarding the US experience as a leading indicator for Europe.

**Table 1.** US bonds outstanding, USD billion (nominal value)

Year- End	Total Publicly Issued	Governments		Federal Agency <sup>b</sup>			International Bonds <sup>e</sup>			
		Total	Held Outside US Govt <sup>a</sup> .	Total	Mortgage Pass- Throughs	Non-Agency Mortgage Securities <sup>c</sup>	Municipals	Corporate <sup>d</sup>	Foreign Bonds (Yankees)	Eurodollar Bonds <sup>f</sup>
1970	485.4	159.8	105.7	\$77.4	\$0.4	-	131.1	117.1	NA	NA
1975	750.0	205.7	136.6	120.6	17.8	-	224.1	199.6	NA	NA
1976	850.7	257.3	185.6	135.6	28.4	-	239.5	218.3	NA	NA
1977	928.9	298.8	224.4	157.8	49.7	-	236.6	235.7	NA	NA
1978	1,025.2	325.8	245.9	182.5	65.0	-	265.6	251.3	NA	NA
1979	1,176.0	358.1	274.9	235.2	91.1	-	279.7	303.0	NA	NA
1980	1,377.0	407.1	320.2	278.3	114.0	-	288.0	339.8	NA	63.8
1981	1,597.0	475.3	385.3	323.5	129.0	-	347.2	370.7	NA	80.3
1982	1,870.3	569.6	NA	387.2	178.5	-	381.2	418.9	NA	113.4
1983	2,193.7	707.1	NA	455.0	244.9	-	429.0	457.5	NA	145.1
1984	2,626.9	873.0	778.4	529.4	289.0	11.0	477.4	540.2	NA	195.9
1985	3,236.5	1,037.8	915.4	629.9	368.9	24.0	630.6	647.0	NA	267.2
1986	3,860.6	1,192.3	1,067.6	808.2	531.6	16.6	703.7	737.7	51.5	350.6
1987	4,363.0	1,335.2	1,202.3	978.8	670.4	28.5	798.0	779.1	56.0	387.4
1988	4,732.9	1,425.8	1,281.8	1,116.0	745.3	37.3	866.5	804.7	62.0	420.6
1989	5,323.0	1,532.9	1,374.8	1,267.1	869.5	48.3	914.5	997.3	66.3	496.6
1990	5,816.5	1,668.4	1,512.5	1,445.9	1,019.9	61.3	957.3	1,083.9	75.6	524.1
1991	6,466.6	1,881.3	1,716.6	1,577.9	1,156.5	106.4	1,031.7	1,241.5	86.1	541.8
1992	7,062.9	2,096.5	1,918.7	1,734.0	1,272.0	168.6	1,054.0	1,352.5	103.7	553.7
1993	7,657.8	2,274.8	2,074.9	1,907.0	1,356.8	213.9	1,115.1	1,463.3	125.8	557.9
1994	8,232.0	2,422.1	2,183.4	2,199.5	1,472.1	254.7	1,078.6	1,515.0	137.7	624.5
1995	8,845.6	2,546.5	2,326.2	2,405.1	1,570.3	291.6	1,039.9	1,728.7	155.6	678.2
1996	9,583.4	2,682.3	2,446.5	2,634.5	1,711.0	346.9	1,049.6	1,910.0	175.9	784.3

<sup>a</sup> Includes domestic holdings outside of the US Government and US Federal Reserve banks and all foreign holdings.

<sup>b</sup> Includes budgeted and sponsored Federal agencies. <sup>c</sup> Consists of non-Government agency pass-throughs and collateralized mortgage obligations (CMOs); Includes single-family, residential, multi-family and commercial mortgages. <sup>d</sup> Includes straight convertible and floating-rate debt, tax-exempt corporate bonds, medium-term notes (MTNs) and asset-backed securities.

<sup>e</sup> Includes straight, convertible and floating-rate debt. <sup>f</sup> Includes US dollar-denominated bonds issued in Japan. NA Not available.

Note: The non-agency mortgage security series have been revised to reflect a change in source.

Sources: Federal Reserve System Flow of Funds, US Treasury Bulletin, Euromoney Inter-Bond Annual of 1978, International Securities Market Association (ISMA). Moody's Investors Service, IDD Information Services, Orion Royal Bank Ltd., and Salomon Smith Barney Inc.

However, the most interesting aspect for Europe is that the growth of the US bond market was driven by the non-federal government sector - as exemplified by the development of the mortgage-backed securities market. The securitisation of mortgages was fashioned to sponsor home ownership - reflecting the political desire to build a nation. That desire is absent in Europe so the new banking markets here must be based on solutions tailored to the specific mix of attitudes in Europe and there are some parts of the US experience that point in a different direction from that desired in Europe. The political structure of the European Union is designed to achieve "ever closer union" but the Maastricht Treaty explicitly ruled out any sharing of liability for public debt (see Article 104b). As the financing of homes is a matter of vital concern to electors, any formal pan-EU housing finance institution might be put under great pressure to equalise borrowing conditions to such an extent that

**Investors can now extend credit to virtually all sectors of the US economy. This does require investors building the capacity to do detailed investigation of the underlying assets.**

it could become an engine of nation-building. That social and political role was apparent to the US Congress when it founded several agencies for this purpose.

So the creation of quasi-government institutions that, in aggregate, could have obligations greater than those of the collective governments - as is now the case with the three relevant US Agencies and the US Federal Government (see Table 1) - could well be seen as a potential step in the opposite direction to "subsidiarity", which is the EU doctrine of de-centralisation of political power. For perspective, the European Investment Bank has outstanding obligations that are not even 5% of those of the central governments of EU Member States.

Given their potential scale - and the political implications that might flow from that - Europe's desire for closer union seems likely to stop well short of creating government-backed financial institutions designed to give similar access to funding for home ownership throughout the territory of the Union. So it seems most unlikely that public authorities will foster the development of a Mortgage Backed Security (MBS) market within the EU in the way that the Agencies have in the US. Therefore, the European private sector will have to provide the credit support mechanisms, and analysis, to give investors the comfort necessary to invest in this type of market. During the past century or more, the "mortgage banks" in, for example, Germany, Austria, Denmark and Sweden have shown what can be achieved by lending and then collateralising bond issues of the bank itself - the "Pfandbriefe" model - rather than a special purpose vehicle. Typically, this type of bank bond issue has a greater volume outstanding than the central government of that country.

*The coming of the euro does make a difference because the exchange risk barrier disappears from cross-border business.*

Can the "mortgage banks" export this model throughout the EU? Those banks may find it difficult to ensure that there is a sufficiently similar legal basis in each state for taking a mortgage on a property and then putting it into a pan-European collateral pool. The alternative is to continue with a series of fragmented national markets that may not achieve wide enough distribution to ensure the liquidity of EUR 10-20 billion that is necessary to minimise the yield spread versus government bonds. "Jumbo Pfandbriefe" continue to trade at more than 40 basis points over corresponding Bunds - significantly above the spread that would be expected on the basis of their AAA credit rating.

That is the key challenge for a major sector of the banking sector. If the "special-purpose vehicle" model is seen by investors as giving sufficient security - perhaps via over-collateralisation techniques - then mortgage originators may find that a more cost-effective form of funding. The "agency" element of the US experience of the move to securitise residential mortgage credit is unlikely to be a role model for the Eurozone, but the "special-purpose vehicle" may offer stiff competition to the "Pfandbriefe" model.

### **3. Why does the euro make a difference?**

The coming of the euro *does* make a crucial difference because the exchange risk barrier disappears from cross-border business. As a specific consequence for Europe's largest pool of long-term savings - the life insurance industry - currency matching rules within the EU lapsed at the end of 1998.

That is not the end of the process of regulatory change. The European Union is already combing through the remaining obstacles to a genuine 'Single Market' in financial services. The European

Commission published its Communication, "Financial Services: Building a Framework for Action", in October 1998 (1). This does indeed propose a collection of actions that should "eliminate remaining capital market fragmentation to minimise the cost of capital raised on EU markets, [and] make the advantages of open markets available to both users and suppliers of financial services". The European Council Summit in Vienna in December accepted the European Commission's suggestion for a High-Level Group to prioritise the steps needed to achieve that completion. Amongst the key proposals, the Commission has undertaken to:

- improve the cross-border acceptability of prospectuses;
- alleviate the burden of investment restrictions for institutional portfolios;
- clarify the definition of professional users of financial services to ease their access to cross-border services; and,
- ensure that legal provisions on collateral are mutually compatible.

Eventually, some of these provisions should apply beyond the EU, but agreement with say the US authorities on recognition of prospectuses will have to await a corresponding recognition of accounting standards.

**Removing currency matching rules should dramatically extend the range of institutions that can buy new types of security.**

The crucial problem in launching a new market sector is to get the initial critical mass. Investors are reluctant to buy paper that is both unfamiliar in its credit nature and obviously destined to be illiquid. This is where EMU may have a vital influence. Removing the importance of currency matching rules should dramatically extend the range of institutions that can purchase new types of security.

For example, Europe's life insurance companies must match 80% of their assets to the currency of their liabilities. As the vast majority of those liabilities are denominated in national currency, so are most of the assets. Now these institutions can diversify their portfolios, they may look around the Eurozone for other investment opportunities that yield more than government bonds. Insurance companies are key as their total assets match those of pension and mutual funds combined, yet insurance funds have been most affected by the currency matching rules. Asset-backed securities and corporate bonds should loom large on that menu of new opportunities, though it will take some years for that menu to build up. There should be little doubt that this will happen eventually, as companies disintermediate the banking system, avoiding the costs and relative inflexibility of the "covenant burdens" of bank loans, and go directly to the capital markets.

### **Opportunities abound - especially for governments**

Issuers have a wealth of new opportunities - partly triggered by the fall in interest rates throughout the maturity spectrum. The chance to stabilise the riskiness of debt portfolios by lengthening maturity is a particular opportunity for governments. Non-government issuers should experiment with raising credit from a broader investor base and use financial engineering to structure their bonds to reach highly targeted buyers.

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1) The author participated in DG XV's Strategy Review Group that provided background analysis for this process.



The current benchmark US Treasury ten-year is EUR 10 billion. As the US budget is in surplus, that will be the normal size, unless there is an unusual market opportunity to re-open an earlier issue. In Europe, the Spanish government has, in recent months, built up its longer dated bond issue to a size of about EUR 17 billion equivalent. The French government has, as a matter of policy over many years, built up the size of its ten-year fungible bonds - OATs - to about EUR16 billion; the largest German government bond in that maturity segment is about EUR 16 billion, as is the largest Italian bond, though the Italian Treasury plans to increase the issue size. A number of government debt managers are increasing the size of their bond issues with an implicit intention of making them as liquid (because they would be as large) as a US Treasury issue.

Moreover, many states are now looking at bond yields that are the lowest for decades. This seems a golden opportunity to lock in, for as long as possible, the benefits of getting into EMU. These factors point to a surge in long-term bond issuance by governments - irrespective of their indebtedness. Already, this process seems to be getting under way - judged by the examples since 1997 of 30-year bonds from Austria, Belgium, France, Germany, Italy, Netherlands and Spain. This process should expand the maturity choices in the top credit category available to institutional investors. For insurance companies trying to match-fund annuities for an ever-ageing population, this trend should be highly welcome.

### **Non-government bonds in Euroland**

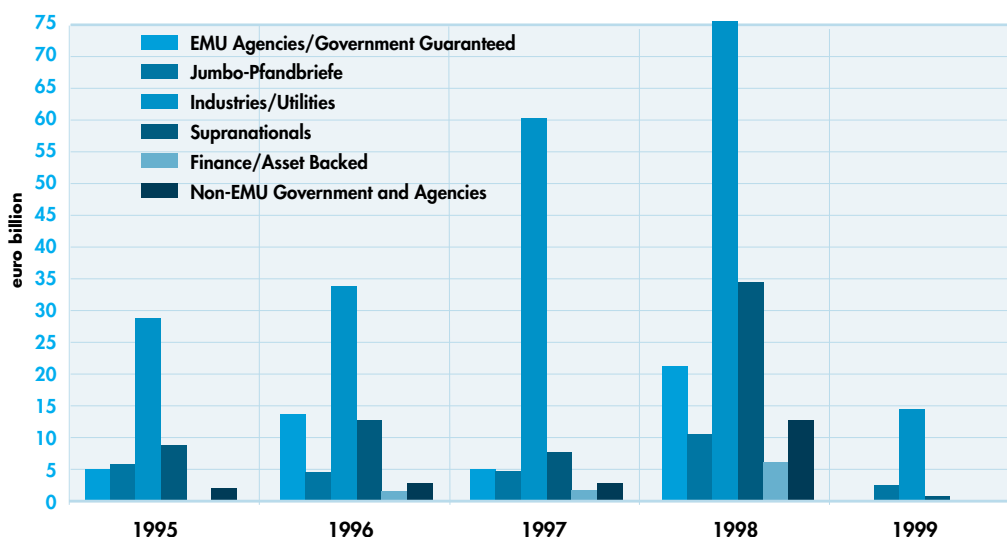
Figure 2 shows that issue volumes in the euro's constituent currencies have continued to grow strongly despite the recent global hiatus. A number of points emerge:

- The "Jumbo Pfandbriefe" sector has grown dramatically and established itself as a major asset class.
- The asset-backed market has shown spectacular growth - but this has been heavily influenced by a number of banks issuing Collateralised Loan Obligations (CLO's) as a mechanism to shift low-yielding corporate loans off their balance sheet to economise on regulatory capital.
- High-yield markets opened last year but have suffered particularly badly from the rush to quality and liquidity.
- The finance subsidiaries of some major companies, e.g. autos, continue to be major borrowers so that they can fund their parents' retail sales. This continues the process of dis-intermediating the banking system.
- Governments and their agencies have been particularly active in the *international* market, quite apart from their domestic markets, as they have sought to initiate "tributary" bonds that convert into euro and become fungible with their domestic issues once EMU begins.

Despite this upsurge in issuance, the US non-government bond markets continue to dwarf their EU counterparts. Salomon Smith Barney introduced the Euro Broad Investment Grade Bond Index (Euro BIG) in May, as a counterpart to our long-established US Broad Investment Grade Index (BIG). These indices set out to provide performance yardsticks for institutional investors and attempt to measure the performance of all bonds that are deemed sufficiently liquid to be traded by institutions. We believe that this criterion is met currently by the minimum size threshold of EUR 500 million

outstanding, well above the USD 100 million threshold in the US. Additionally, bonds must be fixed rate and have at least one year of life remaining.

**Figure 2.** International issuance volume, euro constituent currencies



Source: EMU Government Bond Index, January 1999, Salomon Smith Barney

Modern portfolio management techniques argue for active management so liquidity is a major factor in the choice of investments. Indeed, this is a driving force in the development of government markets. But private sector issuers cannot compete on sheer size and so cannot match liquidity in the secondary market. So there is a risk that investors may shun private sector bonds for that reason alone. One of the major challenges flowing from EMU is to bring liquidity to smaller issues so that institutions will be prepared to invest in smaller sized corporate issues. That would make the bond market an effective alternative source of capital for corporations.

Table 2 compares the characteristics of our Euro BIG and BIG indices while Figure 3 sets out the comparative sizes - split into government and sub-sectors of the non-government component. Salient features include:

- The relative sizes of the two central government sectors - now that all borrowings by European Governments in any euro-constituent currency are included.
- The longer maturity of the US market - whether measured by duration, average life or maturity distribution.
- The minimal size of the low-rated sectors in Europe, reflecting the much higher dependency of European corporations on bank finance and a tradition of less leveraged capital structures.

**Whether European markets catch up their US counterparts seems likely to depend on the non-government sectors.**

Whether European markets catch up with their US counterparts seems likely to depend on the non-government sectors. In the world of EMU, that development will be a balance between the access of new types of issuer to the market whose structure will be determined by the needs of investors.

**Table 2.** Characteristics of "Broad Investment Grade" bonds: EU vs US

	Euro BIG	US BIG
Number of Issues	807	6 940
Market Capitalisation (ECU/euro, bn)	2 815	4 831
Average Modified Duration, yrs	5.24	4.54
Remaining Life, yrs	6.91	8.20
Yield, %	3.47	5.59
Breakdown:		
1-10 Yrs	86.8%	78.4%
10+ Yrs	13.2%	21.6%
AAA Rated	60.0%	78.6%
AA Rated	36.8%	3.9%
A/BBB Rated	1.4%	17.5%
Note: Criterion for inclusion in Index:	ECU/EUR 500m	USD 100m

Source: Salomon Smith Barney Fixed Income Indices, February 1999

### **Who can issue?**

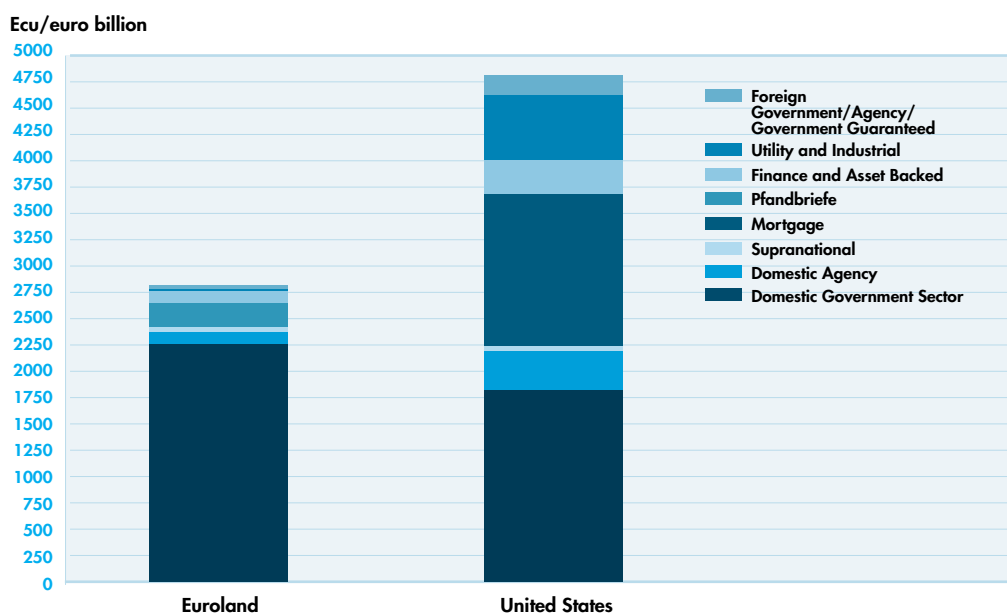
The simplistic, traditional concept of a market consisting largely of major companies issuing long term bonds to a number of investors, such as life insurance companies, is already out-dated and, indeed, such issues will probably only be a fragment of the new market. There are likely to be two additional and key sources. Firstly, pan-European banks with sophisticated administrative and sales systems may be able to offer their products throughout Euroland, giving them a major competitive edge. Secondly, possible new types of issuer are already apparent from the US and UK models. These include:

**Regional governments are another sector of potential issuers.**

- Companies that wish to sell their products on credit are well placed to economise on working capital by selling the right to the customer's payments and the scale of issuance by financial corporations in recent years attests to the potential demand.
- Regional governments are another sector of potential issuers, though the relationship with central government will be a key factor in determining the cost of funds. A straightforward guarantee is one approach, or the region may have the power to raise taxes separately from the central authority. In the last year, a variety of European regions and cities have borrowed in the international markets - ranging from the cities of Stockholm and Vienna, to the regions of Andalucia, Azores, Ile de France, Lazio, Sachsen-Anhalt and Valencia. These issues are not large, but show the willingness of regions to act on their own.
- Infrastructure projects that themselves generate cash flows, the classic example being a toll road or bridge, are another category. Regional governments may wish to stimulate these.

For the banking community in general, a key result of all these trends is that the securities markets can offer a more competitive cost of funds to the user - thus shifting the structure further towards securities.

**Figure 3.** Bond markets - euro vs USD



Source: Salomon Smith Barney Fixed Income Indices, February 1999

#### 4. Stretching for yield? Take credit or maturity risk

Investors will be searching to replace the high nominal yields that they have enjoyed for many years. Some, such as life insurance, may feel impelled to change investment strategy because of the implied guarantees they have given on their liabilities. Yield-seeking investors have a simple choice: Take extra maturity risk (with liquid, longer dated government bonds) or take credit risk with a wide variety of non-government issuers.

Bond yields have fallen to remarkably low levels. For investors in formerly high-yielding bond markets, such as Italy, the problem is particularly acute. Yields are down from 13% in 1995 to about 4% today. For investors such as pension and life insurance funds, the problem of low interest rates is likely to be significant. Indeed, the greater the depth of any deflationary period that leads to a long period of low bond yields, the greater the difficulty in meeting the expectations of the underlying beneficiaries.

Many European insurance companies have to contend with the problem of guaranteed interest rates on their life insurance and annuity contracts. Moreover, some companies - especially in France - have to offer surrender values that are hardly penal. The current level of interest rates should mean that any new yield-enhancements should be attractive.

With a net return that appears so unattractive, the investment managers may have little option but to take greater risk. At this stage of low confidence, that may amount to nothing more than lengthening maturity in the government market. In the German Government market, lengthening from 5 to 10 years improves yield by 14% but going to 30 years gives a 44% increase - from 3.2% to 4.7%. In the US dollar markets, the 5 to 30 year pick-up is only 12%.

***Monetary Union is likely to present investors with a new set of trade-offs between maturity and credit risk.***

The alternative strategy might be to take extra credit risk - the incentive is clear. The increment in yield is relatively minor within the government sector - unless maturity is extended substantially. But taking credit risk can produce a 20% gain in yield without increasing maturity - based on current indications of new-issue yields. That is a powerful incentive to lenders to take the credit risk directly themselves rather than invest in capital-certain but lower-yielding bank deposits.

Monetary Union is likely to present investors with a new set of trade-offs between maturity and credit risk. Their response will determine whether EMU also opens up new funding opportunities for issuers - whether governments, corporations or consumers (using their credit cards) - as the low level of bond yields may prompt a re-assessment of investment patterns in search of higher yields. That demand should eventually encourage the process of securitisation - a process that could transform the competitive landscape between banks and securities markets.

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