

Bond Markets 2010

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SUMMARY

The importance of bond markets as a source of finance has increased during the recent economic downturn as companies diversified away from reliance on banks for funding and many governments increased borrowing. Amounts outstanding on the global bond market increased 10% in 2009 to a record \$91 trillion (Chart 1). Domestic bonds accounted for 70% of the total and international bonds for the remainder. The UK's substantial domestic market in bonds is complemented by London's continuing role as a major centre for issuance and the trading of international bonds.

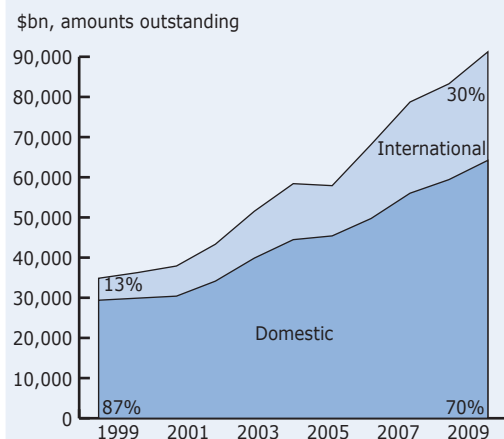
Domestic bonds The global outstanding value of domestic bonds grew by 9% in 2009 to \$64 trillion primarily due to an increase in government bond issuance (Charts 2 and 4). The US was the largest market with 39% of the total followed by Japan (18%). Mortgage-backed bonds accounted for around a quarter of outstanding bonds in the US in 2009 or some \$9.2 trillion. The sub-prime portion of this market is variously estimated at between \$500bn and \$1.4 trillion. Treasury bonds and corporate bonds each accounted for a fifth of US domestic bonds. Issuance of US domestic bonds totalled \$6.8 trillion in 2009, 48% higher than in 2008.

In Europe, public sector debt is substantial in Italy (93% of GDP), Belgium (63%) and France (63%). Concerns about the ability of some countries to continue to finance their debt came to the forefront in late 2009. This was partly a result of large debt taken on by some governments to reverse the economic downturn and finance bank bailouts. Greece's credit rating was downgraded in December 2009, followed by further cuts in 2010. Spain's, Portugal's and Ireland's downgrades in 2010 added to the negative sentiment. Europe is gradually moving towards a more US-style bond market as companies there increasingly diversify away from reliance on banks for funding.

International bonds The outstanding value of international bonds increased by 13% in 2009 to \$27 trillion. The \$2.3 trillion issued during the year was down 4% on the 2008 total (Chart 3), with activity declining in the second half of the year. Countries which experienced a slower pace of recovery generally saw a decline in international bond issuance. The US was the leading centre for international bonds in 2009 and accounted for 30% of global issuance. Other leading centres included France (12%), Spain (8%), Netherlands (8%) and the UK (6%). The US was also the leading centre in terms of value outstanding with 22% of the total in 2009, followed by the UK 14%. London is the leading centre for international bond trading with an estimated 70% of secondary market turnover.

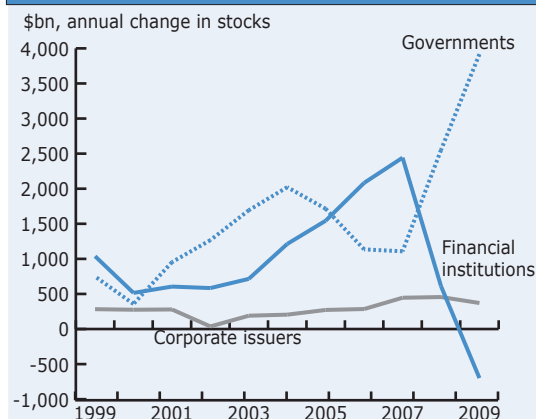
UK bond market The nominal value of bonds outstanding of UK-based issuers totalled a record £3,353bn in 2009, up 5% on the previous year. Government and corporate bonds issuance was particularly strong during the year. The outstanding value of international bonds in the UK increased marginally in 2009, after doubling in value in the two previous years. UK public sector net debt grew by 20% in 2009/10 to £890bn. Nearly £120bn of this was from financial sector interventions. Net debt as a percent of GDP (excluding financial sector interventions) increased from 44% to 54% in 2009/10 and is projected by HM Treasury to rise to 73% by 2012/13.

Chart 1 World bond market¹



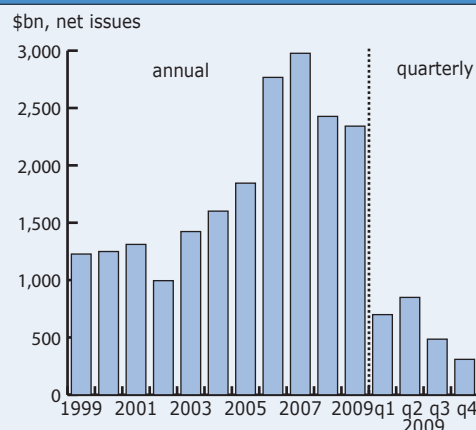
¹ Includes bonds, notes and money market instruments
Source: Bank for International Settlements

Chart 2 Domestic bond markets, annual change in stocks



Source: Bank for International Settlements

Chart 3 Issuance on international bond market



Source: Bank for International Settlements

BOND MARKETS WORLDWIDE

The amounts outstanding on the global bond market exceeded \$91 trillion in 2009, up 10% on the previous year (Chart 1). Domestic bond markets accounted for 70% of the total, and international bonds for the remainder. The economic downturn was reflected in the bond markets from the outset as investors began to avoid more risky fixed-income assets such as corporate and financial institutions' bonds in favour of government bonds which are seen as a safer investment. This prompted a fall in yields on government bonds. Concerns about the ability of some countries to continue to finance and service their debt came to the forefront in late 2009. This is partly a result of large public debt taken on by governments to reverse the economic downturn and finance bank bailouts. Greece's credit rating was downgraded in December 2009 with subsequent cuts in 2010. Portugal's, Spain's and Ireland's downgrades in 2010 added to the negative sentiment.

Domestic bond markets

The outstanding value of domestic bonds increased by 9% in 2009 to \$64 trillion primarily due to an increase in government bond issuance (Charts 2 and 4). The US was the largest market with 39% of the total followed by Japan 18% (Table 2). The large share of the US and Japanese markets primarily stems from the size of their individual economies as well as the high level of government borrowing over time. The corporate bond market began 2010 at a strong pace following on from the rally in 2009 which drove borrowing costs sharply lower. Subsequently however, issuance stalled in many countries due to mounting concerns over public debt problems in some Euro area countries. Foreign demand for US and UK corporate and government bonds on the other hand increased as investments in these securities are traditionally deemed as more secure. China for example added to its US Treasury holdings for the first time in six months in March 2010.

The US bond market is the largest securities market in the world. The value outstanding of US bonds has doubled since the start of the decade to \$35 trillion in 2009. Mortgage-backed bonds accounted for around a quarter of the total or some \$9.2 trillion. The sub-prime portion of this market is variously estimated at between \$500bn and \$1.4 trillion. Treasury bonds and corporate debt accounted for around a fifth of the total each, with most of the remainder in Federal Agency securities and municipal bonds. Issuance of US domestic bonds totalled \$6.8 trillion in 2009, 48% up on 2008. Issuance of Treasury bonds more than doubled during the year to \$2.2bn while mortgage related bond issuance increased 47% and corporate bond issuance 32%.

In relation to the size of the economy, in Europe public sector debt is highest in Italy (97% of GDP), Belgium (63%) and France (63%) with government debt set to increase further in the next few years due to the high level of projected government borrowing in many countries. Europe is gradually moving towards a more US-style bond market as companies there increasingly diversify away from reliance on banks for funding. Unlike in the US, corporate bond issuance in Europe is primarily done by large companies with the best credit ratings. In recent years, however, small and mid-sized European companies are increasingly diversifying their funding sources as it has become more difficult to obtain finance from banks. In

Chart 4 Global bond market issuance

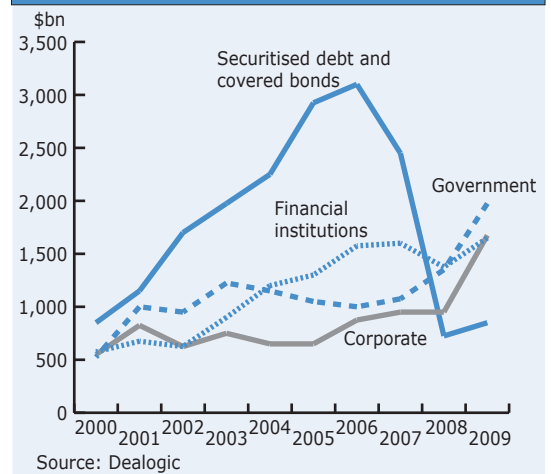


Table 1 London's share of the international bond market

% share	----- 2008 -----		----- 2009 -----	
	UK	Rest of world	UK	Rest of world
Issuance	30	70	6	94
Secondary trading	70	30	70	30
Amounts outstanding	14	86	14	86

Source: Bank for International Settlements; TheCityUK estimates

Table 2 Domestic bond market by nationality of issuer

	\$bn outstanding, 2009			
	Total	----- of which -----		
		Public	Financial	Corporate
US	25,065	9,475	12,805	2,785
Japan	11,522	9,654	1,085	783
Italy	3,688	1,973	1,204	511
France	3,156	1,693	1,185	278
Germany	2,806	1,548	914	345
Spain	1,949	604	630	715
UK	1,560	1,189	349	22
Canada	1,300	906	250	144
Belgium	614	298	254	63
Others	12,562	6,764	4,387	1,409
World	64,222	34,104	23,063	7,055

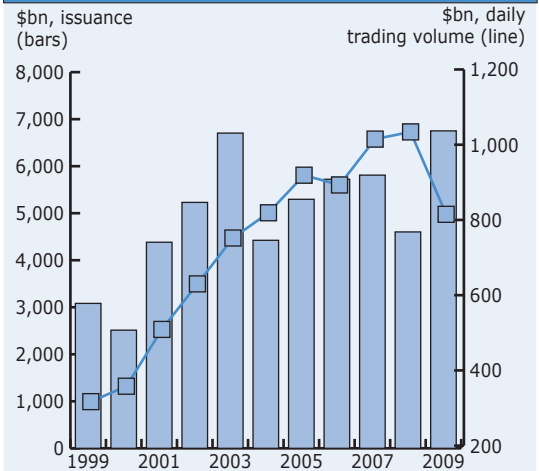
Source: Bank for International Settlements

2009, the average size of UK bond issues was around half the average size two years earlier.

As a proportion of global GDP, the world bond market increased from 80% at the start of the decade to 156% at the end of 2009. Amongst more developed countries, the ratio between the value of the overall bond market and GDP was highest in the UK partly due to the high proportion of international bonds in the UK's total, followed by Italy, Japan and the US (Chart 6). The UK's net Government debt as a percent of GDP (excluding financial sector interventions) increased from 44% to 54% in the financial year 2009/10 and is projected by HM Treasury to rise to 73% by 2012/13.

Secondary trading The secondary market involves the trading of bonds after the initial offering. This is almost entirely an over-the-counter (OTC) market. Most trades are conducted on closed, proprietary bond-trading systems or via phone. An average investor can participate through a broker. Most of the \$815bn traded daily on the US domestic bond market in 2009 took place between broker-dealers and large institutions. The US bond market operates without a central exchange with hundreds of market makers on the OTC market. Around a half of trading was in

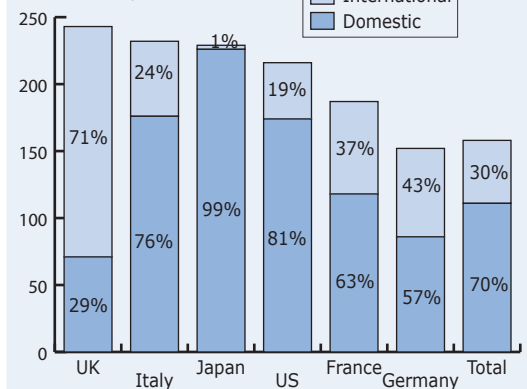
Chart 5 US domestic bond issuance and trading



Source: SIFMA

Chart 6 Relative size of bond market

Value of bond market based in issuers country of residence as % of GDP, 2009



Source: Bank for International Settlements; OECD

European sovereign debt crisis

With the onset of the financial crisis there has been increased focus on rising government deficits and debt levels. Concerns about the ability of countries to continue to finance and service their debt came to the forefront in late 2009. Attention was first drawn to the issue by the financial difficulties encountered by the government owned Dubai World in late November 2009. More recently, the focus has shifted towards the Euro area.

Budget deficits have increased markedly in recent years. The record amounts issued were partly a result of large debt taken on by some governments to reverse the economic downturn and finance bank bailouts. According to the OECD, \$16 trillion will be raised in government bonds in 2010 among its 30 member countries. This is an increase of some \$4 trillion compared to the amount raised two years earlier. Government debt as a per cent of GDP in developed countries rose to over 100% in early 2010 from 78% four years earlier and is forecast by the IMF to rise to 114% by 2014. Developing countries are however likely to see a fall in the debt to GDP ratio during this period from 40% to 35% (Chart 7).

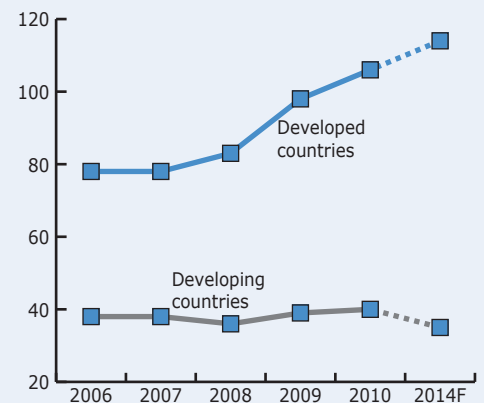
Many countries are experiencing budget shortfalls and some could face credit downgrades by rating agencies in coming years. In the two years up to 2010, the Euro area saw the highest budget balance deterioration and rise in government debt in its history. Up to one-third of this was due to fiscal stimulus measures and government support for the financial sector. Greece's credit rating has been downgraded a number of times since December 2009. This has reduced confidence in other European economies with Ireland, Spain and Portugal at most risk due to high budget deficits (Chart 8). Portugal's, Ireland's and Spain's credit downgrades in 2010 have added to the negative sentiment. This has resulted in the tightening of market conditions for government refinancing in these countries and the widening of bond yield spreads between these countries and other EU members. The subsequent transmission of sovereign risk to local banking systems and the wider economy remains a risk in these countries.

Countries perceived as having low sovereign credit risk, such as Germany and the US have seen their borrowing costs fall. The US Government ended its 2009 fiscal year with a deficit of \$1.4 trillion, the biggest since 1945. Even though the US budget deficit and national debt are globally the highest in nominal terms, demand for its Treasury bonds remains strong due to its traditional safe-haven status.

In May 2010, the Euro area countries and the International Monetary Fund agreed to a €110 billion loan for Greece, conditional on the implementation of a number of austerity measures. Also in May 2010, Europe's Finance Ministers approved a comprehensive rescue package worth almost a trillion dollars aimed at ensuring financial stability across Europe.

Chart 7 Government debt as per cent of GDP

government debt of G20 countries as % of GDP



Source: International Monetary Fund

Debt securities market

Bonds and notes make up around 80% of the global bond market. Nearly four-fifths of this is in domestic securities. The structure of individual domestic markets differs markedly, mostly averaging 10-year maturities. The liquidity of longer term securities tends to be smaller, although in the US, UK and France bonds with longer term maturities are also issued and traded on the market.

Money market instruments The money market is an informal network which has no physical site where wholesale funds are borrowed and lent for short periods. The London Money Market facilitates trading in Bills of Exchange, Certificates of Deposit, Treasury Bills, and Commercial Paper. Most of trading in such instruments has been generated by the money centre financial markets in New York, Tokyo, Frankfurt and London.

The international bond market is a wholesale market where around 90% of bonds are held by institutional investors such as insurance companies, pension funds and mutual funds. Bonds are traded on the secondary market, but are more often purchased and held to maturity. Issuers mostly include large companies, national and local governments and international organisations.

Treasury bonds and a third in mortgage-backed securities. A number of bonds, primarily corporate bonds, are listed and can be traded on some exchanges. According to the World Federation of Exchanges, trading of bonds on exchanges increased by 5% in 2009 to some \$23 trillion (Chart 9). The value of bond turnover on the London Stock Exchange totalled \$6.9 trillion in 2009. This was exceeded in Europe only by trading on the BME Spanish Exchanges (\$8.2 trillion).

Barclays Capital, Deutsche Bank and J.P. Morgan together accounted for 36% of overall European institutional bond market trading in 2009, up from 30% in the previous year according to a Greenwich Associates survey. More than a half of the largest and most active European institutions relocated bond trading business in 2009 to dealers they viewed as more financially secure. A third of all institutions surveyed reduced the number of dealers with whom they trade.

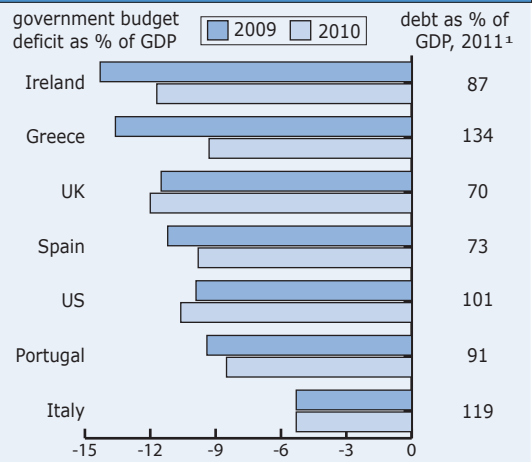
International bond market

The international bond market includes eurobonds and foreign bonds which are instruments issued or traded outside the country of their domestic currency (Table 3). The outstanding value of international bonds increased by 14% in 2009 to \$27 trillion. International money market instruments accounted for \$930bn of the total. The \$2.3 trillion issued during 2009 was down 4% on the 2008 total (Chart 10). After a strong start to the year, issuance declined in the second half. Countries which experienced a slower pace of economic recovery generally saw a decline in issuance.

Advanced economies generate the vast majority of business in international bonds. The US was the leading centre for issuance in 2009 with around 30% of the global total. Other leading centres included France (12%), Spain (8%), Netherlands (8%) and the UK (6%). The US also had the lead in terms of values outstanding with 22% of the global total, followed by the UK (14%) Germany (11%) and France (7%). The UK and London is the leading centre for international bond trading with an estimated 70% of secondary market turnover.

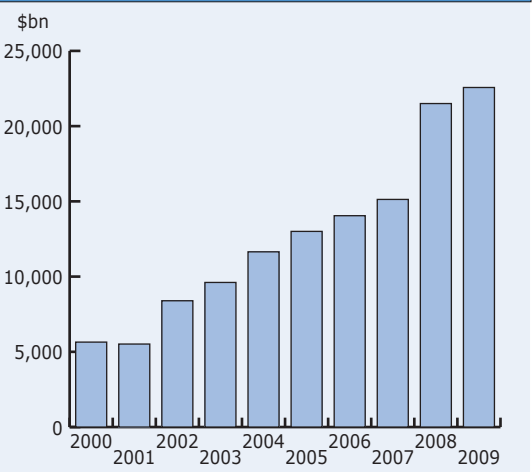
Issuance by non-financial corporations in 2009 approached that by financial institutions for the first time since financial sector issuance started to grow in the early 1990s. For example, in the fourth quarter of 2009, non-financial corporations raised \$123bn, 20% more than in the

Chart 8 Government budget deficits



¹ Forecasts if policies unchanged
Source: Europ. Commiss., Eurostat, HM Treasury, Wikipedia

Chart 9 Bond trading on exchanges



Source: World Federation of Exchanges

Table 3 Bonds by market-place

Market place	Currency	Issuer	Main market	Syndicate	Primary investors
Domestic	Domestic	Domestic	Domestic	Domestic	Domestic
Foreign	Domestic	Foreign	Domestic	Domestic	Domestic
Euro	Eurocurrency	Any	Internat.	Internat.	Internat.

Source: International Capital Market Association (ICMA)

previous three months and just short of the \$132bn placed by financial institutions. Some financial institutions continued to depend on government guarantees to issue debt, although the share of guaranteed paper was lower than in the previous two years at 8% of announced gross issues.

The US dollar accounted for 47% of international bond issuance in 2009, up from 29% in the previous year. The share of euro denominated issues was stable at just over 40%. Sterling had the next largest share with 9%. Straight fixed rate bonds accounted for 91% of issues, significantly up on their 49% share in 2008. This was mirrored by a fall in floating rates bonds from 51% to 9%, a result of borrowers adjusting their debt profile to lock in low funding costs. Equity related bonds either in the form of convertibles or equity warrants remain an important niche market.

Secondary trading Secondary trading in the international bond market has increased over the past decade in line with the growing volume of issues and increase in electronic trading. TheCityUK estimates that trading in international bonds probably grew ten-fold during the past decade to some \$80 trillion in 2009.

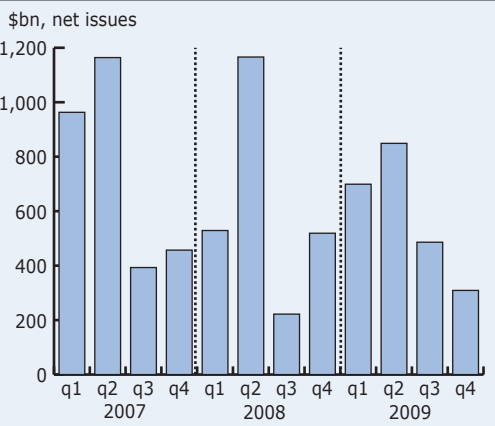
Bond market returns Bonds generally display less volatility than equities. The Barclays Capital Aggregate Bond Index, which includes US Government, corporate and mortgage-backed securities with maturities of at least one year, fluctuated between 2.4% and 11.7% since the start of the decade. During this period the S&P 500 index moved between minus 37.0% and 28.7%. While there is retail investment interest, trading of bonds in value terms is mainly institutional. Factors such as the rate of inflation, the state of government finances and monetary policy all affect returns. Bond returns are however, primarily subject to swings in interest rates. Upward moves in interest rates, for example, erode the value of fixed payments to be received in the future, thereby reducing the value of a bond. Local currency movements also affect bond market returns.

The attraction of bonds as an investment has grown during the recent economic downturn as institutional investors looked for less risky assets in volatile market conditions. Risk aversion and flight to quality has particularly increased demand for government bonds, mainly in countries traditionally seen as more financially stable. Corporate bonds on the other hand have offered the potential for high returns as yields on these types of bonds, particularly below investment grade bonds, reached record levels in 2008 before falling back in 2009.

BOND MARKETS IN THE UK

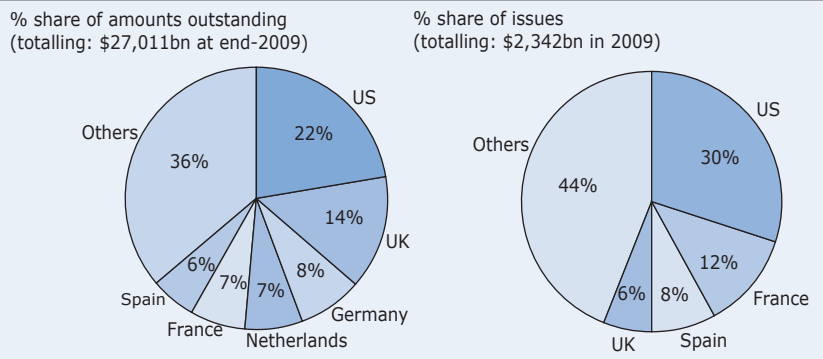
The nominal value of bonds outstanding of UK-based issuers totalled a record £3,353bn in 2009, up 5% on 2008 (Chart 13). Strong issuance of UK Government and corporate bonds resulted in the increase of their value outstanding by a quarter. The increase in US dollar terms was higher due to the 9% appreciation of the pound against the US dollar during the year. Demand for bonds has been strong, partly a result of the Bank of England’s quantitative easing programme. Some £200bn of gilts

Chart 10 International bond market, quarterly issuance



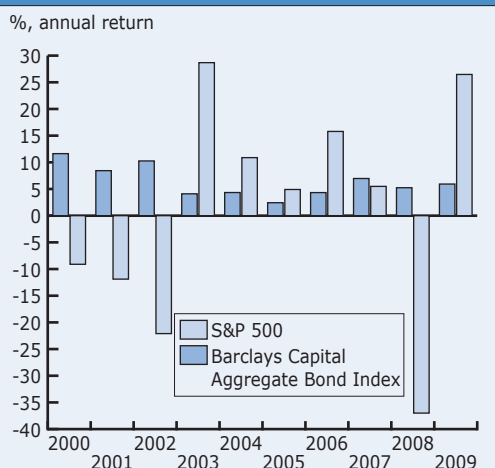
Source: Bank for International Settlements

Chart 11 International bonds, by country of residence



Source: Bank for International Settlements

Chart 12 Bond market returns



Source: S&P 500, Barclays Capital

was bought by the Bank of England which has helped depress yields to historic lows. The proportion of gilts held by the Bank of England is around 20%.

The outstanding value of international bonds in the UK increased marginally in 2009, after doubling in the previous two years. A major feature of the UK bond market over the past decade has been a decrease in the share of UK Government bonds and an increase in the share of non-Government bonds, particularly international bonds. Government bond issuance is however projected to capture a growing share of the market due to the large budget deficit equivalent to 11% of GDP in 2009/10. Issuance will remain at a high level over the next few years.

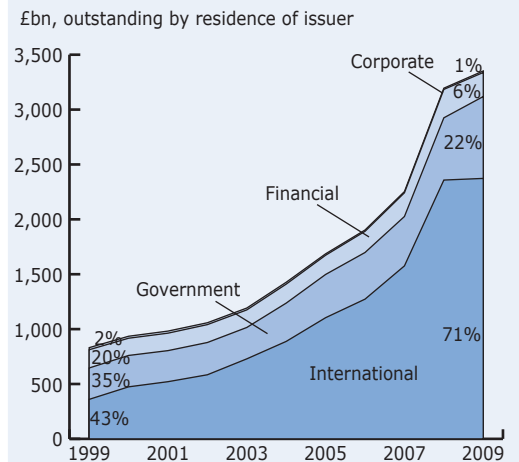
Government securities Figures for UK public sector finances show that the UK Government budget balance was consistently in deficit over the past eight years. Between the financial year 2002/03 and 2009/10 the budget deficit increased from £11.3bn to £107.6bn. The UK Government net cash requirement increased from £60bn in 2008/09 to £134bn in 2009/10 (Chart 15). UK Government net debt issuance which was below £50bn in the years prior to the economic crisis, increased to over £200bn in 2009/10. It is forecast by the Debt Management Office to fall back to £148 in 2010/11 (Chart 16). The Office of Budget Responsibility's forecast is slightly higher at £155bn.

UK public sector net debt increased to £890bn in the financial year 2009/10 from £742bn at the end of the previous year (Chart 17). The 2009/10 total was more than twice the total five years earlier. The outstanding value of net borrowing from recent financial sector interventions totalled £118bn, down from £125bn at the end of the previous year. The Northern Rock and Bradford & Bingley interventions accounted for the bulk of the total. Equity injections into RBS and Lloyds along with compensation payments to depositors by the Financial Services compensation Scheme and HM Treasury and the contribution to net debt from purchases by the Bank of England's Asset Purchase Facility Fund accounted for most of the remainder. The debt the UK Government has taken on for financial sector interventions is different from for example borrowing to pay for pensions as the government has a reasonable chance of getting, at least some of this money back.

UK net debt as a percent of GDP increased from 43% to 62% in the two years up to the financial year 2009/10. The respective values excluding financial sector interventions were 37% and 54% (Chart 18). This is significantly higher than the 30% to 36% range between 1999 and 2007. In addition to financial sector interventions, the economic recession has resulted in lower tax receipts and higher spending on unemployment benefits which has placed an additional strain on public finances. The UK's debt as a per cent of GDP was nevertheless still lower than in other large European countries such as Italy, France and Germany, but due to a higher budget deficit is likely to increase faster than in these countries over the next few years.

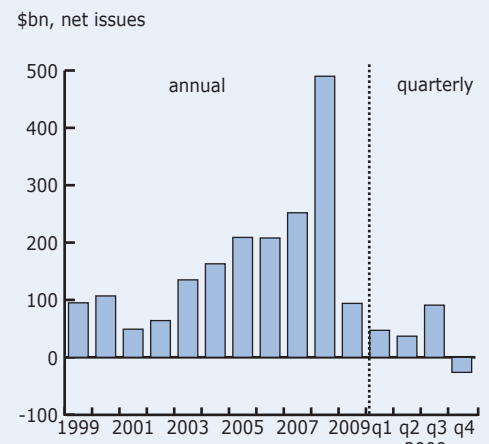
The UK corporate bond market is smaller than in many other developed countries because of the tendency of UK corporations historically to raise debt finance through the banking system rather than bond markets. The outstanding value of UK corporate bonds totalled £14bn at the end of 2009. The outstanding value of bonds of commercial banks and other financial institutions was larger and totalled £252bn, up 3% on the

Chart 13 Size of the bond market in the UK



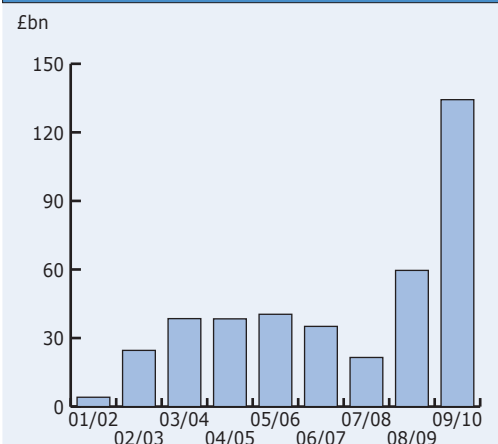
Source: Bank for International Settlements; IFSL estimates

Chart 14 UK international bond issuance



Source: Bank for International Settlements

Chart 15 UK Government net cash requirement



Source: Office for National Statistics

Securities dealing contribution to UK economy

Securities dealing, including both equity and bond market dealing, generated net exports of £3.9bn. Operating profits of securities dealers totalled £9.7bn in 2009, up from £3.7bn in the previous year. Latest available data shows that the number of employed in London in the equity and bond markets sectors totalled 81,500 at the end of 2008, down from a record 84,800 in the previous year.

previous year. The London Stock Exchange (LSE) opened a electronic retail bond trading platform in February 2010. This has helped to open up the UK corporate bond market to retail investors. The LSE estimates that prior to the launch of its platform, of the 10,000 corporate bonds outstanding in the UK, only 150-200 were available in retail-size denominations (less than the customary institutional £50,000 minimum). The LSE's trading platform should also help to increase transparency in the UK corporate bond market. UK pound denominated corporate bonds returned a record 15% in 2009, reversing a 12% loss in 2008 according to Bank of America Merrill Lynch index data. More widely, stock exchanges across Europe are extending services to bond markets to boost growth.

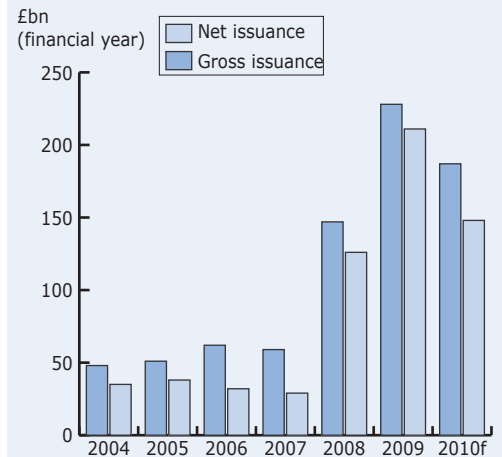
International bond issues in the UK decreased more than 80% in 2009 to £92bn, down to levels at the start of the decade. The outstanding value of international bonds in the UK increased marginally in 2009 to £2,373bn. This was nevertheless nearly double the outstanding value three years earlier. Eurobonds accounted for around three-quarters of the total. International bonds have been the most buoyant part of the UK bond market over the past decade, increasing their share from 43% to 71% of the outstanding value. The share of domestic corporate and financial companies' bonds fell from 22% to 7% during this period while the share of UK Government bonds declined from 35% to 22%.

Dealing in UK bonds An active market exists in UK fixed interest securities, with turnover in UK Government debt and other fixed interest securities totalling £8.8 trillion in 2009, up from £7.2 trillion in 2008 (Chart 19). In the decade prior to 2008, UK Government debt turnover ranged between \$2 trillion and \$3.5 trillion. The comparatively low level of activity was partly a result of less government bond issuance during this period and high returns on other forms of investment. Primary dealing in government securities is handled by Gilt-Edged Market Makers. A Gilt-edged Market Maker is a primary dealer in gilts and actively trades in either conventional gilts, index-linked gilts or both. Inter-dealer brokers act as intermediaries for anonymous trading between market makers.

International bond trading in the UK

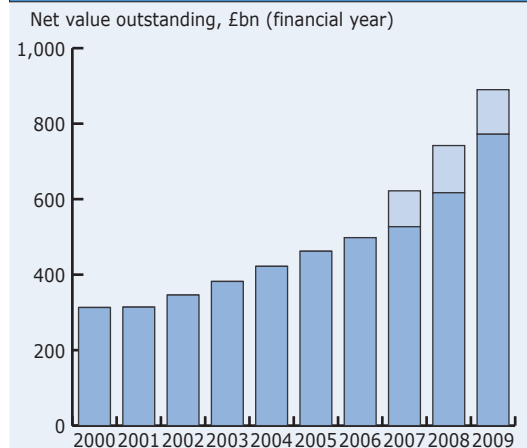
The market for international bonds in the UK is distinct from the domestic market. These bonds are typically traded over-the-counter. Since the beginning of the Euromarkets, the International Capital Market Association (ICMA) has facilitated the interaction between issuers, lead managers, dealers and investors. ICMA has been approved by the HM Treasury as an 'international securities self-regulating organization' (ISSRO) in the UK. ICMA is the only body to be accorded ISSRO status. ICMA has been designated by the UK Financial Services Authority as a Designated Investment Exchange (DIE). It issues the rules and recommendations which form a framework for trading in international debt and related securities (between members and between members and other professional market participants) as well as for the clearing and settlement of trades in such securities. ICMA also produces recommendations, standard documentation and guidance notes which relate to the issuance of international securities which are applied by ICMA members lead-managing cross-border issues of securities.

Chart 16 UK Government debt issuance



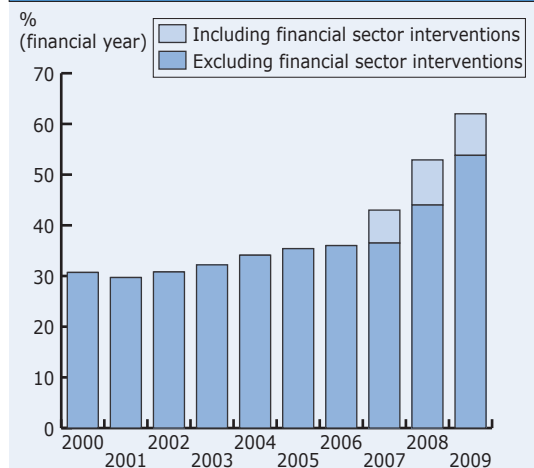
Source: Debt Management Office

Chart 17 UK Government debt



Source: National Statistics

Chart 18 UK public sector net debt as percentage of GDP



Source: Office for National Statistics

As well as UK government bonds, there are a variety of other domestic fixed interest securities that can be traded on the London Stock Exchange. These include fixed interest convertible and preference shares and other bonds issued by companies, local authorities and banks. The remaining fixed interest securities include Commonwealth government stocks and some preference and convertible shares.

LINKS TO OTHER SOURCES OF INFORMATION:

Bank for International Settlements

www.bis.org

Debt Management Office

www.dmo.gov.uk

European Commission

www.ec.europa.eu

Financial Services Authority

www.fsa.gov.uk

International Capital Market Association (ICMA)

www.icmagroup.org

London Stock Exchange

www.londonstockexchange.com

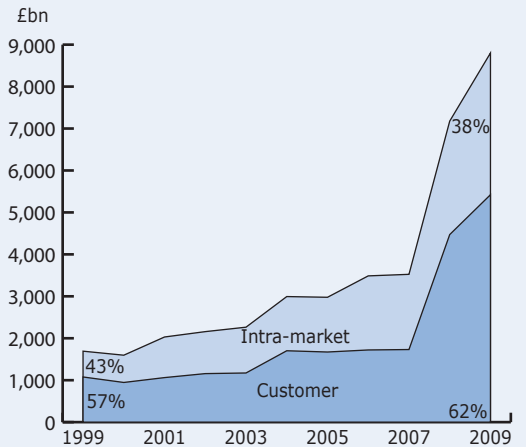
National Statistics

www.statistics.gov.uk

Securities Industry and Financial Markets Association

www.sifma.org

Chart 19 London Stock Exchange turnover in bonds



¹ Turnover includes both sides of transaction
Source: London Stock Exchange

Datafiles

Datafiles in Excel format for all charts and tables published in this report can be downloaded from the Reports section of TheCityUK's website www.TheCityUK.com

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- Creating a partnership for a sustainable industry: demonstrating the industry's role in enabling growth and prosperity in the wider UK economy.
- Using research, insight, data and analysis to meet the needs of its members and to provide the evidence to support our promotional objectives.

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