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Global funding trends in capital markets in 2016



Alberto Fuertes, José Manuel Marqués and Luis Molina

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The authors of this article are Alberto Fuertes, José Manuel Marqués and Luis Molina of the Associate Directorate General International Affairs.

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Introduction

In 2016 numerous events occurred that gave rise to turbulence and instability on international financial markets. However, despite the long-term implications of some of these events, such as those relating to China's transition to a new economic model, the referendum on the United Kingdom's continued membership of the European Union and the economic and financial proposals of the new Administration in the United States, the capital markets were only temporarily affected and, as a whole, barely reflected the greater degree of uncertainty. All told, the search for yield continued to dominate the financial environment. In fact, the volume of placements in 2016 was larger than in previous years, although this general development needs to be qualified depending on the specific geographical area or segment analysed.

This article reviews the main trends in bond issuance in the various market segments and attempts to identify those factors that may have been most important in each case. The analysis focuses on gross issuance in capital markets with a maturity of more than 18 months by the various sectors, using Dealogic as the main data source. In addition, it presents, for the first time, an estimate of the net volume of funding received by the non-financial private sector in the main developed economies. For this purpose, the information on issuance (and maturities) of non-financial firms on the capital markets is combined with data on bank lending (domestic and cross-border). A funding indicator is thus obtained, that corrects to some extent for the banking disintermediation trend and that can be calculated with a shorter lag than the more complete statistics included in the financial accounts.

The next section describes the evolution of capital markets at global level in 2016, as an introduction to the following two sections, which review the main features of issuance activity in public debt markets, non-financial private fixed-income markets, the banking sector, emerging markets and other markets. The fifth section introduces and discusses the evolution of net funding in the main areas. There is also a methodological box comparing this statistic with the one supplied by the financial accounts. Finally, the conclusions section summarises the main developments in the primary markets in 2016 and discusses the trends that may be anticipated for 2017.

Backdrop to global financial conditions

The year 2016 was replete with events and uncertainties of a macroeconomic and political nature, which affected financial markets individually, but did not together give rise to a persistent increase in volatility. This overall positive market behaviour was supported by the decisions of the economic authorities and, in particular, by the ongoing accommodative central bank policy stance.

Notable during the first few months of the year was the decline in the oil price to very low levels,1 and the sharp fluctuations in Chinese stock markets, as a consequence of the doubts as to the strength of economic growth in China and the difficulties the authorities faced in achieving further financial liberalisation, while maintaining some control over capital flows and avoiding excessive currency depreciation. The intensity of this turbulence spread to other markets, in particular other emerging markets with a high degree of vulnerability, given the systemic importance of the Chinese economy. Finally, the imposition of measures limiting trading on Chinese markets and the slowdown in the rate of financial liberalisation brought this episode to a close.

Once this initial turbulence had been overcome, there followed a period of relative stability, encouraged by stabilisation of the oil price and an improvement in activity, and attention focused on central bank decisions. The ECB announced a step-up in the expansionary stance of its policy at the beginning of March, and expectations of Federal Reserve interest rate rises moderated. The result of the referendum on the United Kingdom's continued membership of the European Union at the end of June prompted a further bout of volatility, principally in the foreign exchange markets and in the yield on public debt, which acted as a safe-haven asset. The extent of this turbulence was limited, once again, by the reaction of the monetary authorities, who adopted a more expansionary stance across the board, and by the publication of better-than-expected macroeconomic data. In the case of Japan, moreover, significant changes were made to its monetary policy strategy which was reoriented towards controlling the slope of the yield curve, with a commitment to expand the monetary base until inflation exceeded the 2% target on a sustained basis.

The final part of the year was marked by the result of the US elections, with the unexpected victory of the Republican candidate, and expectations of significant changes in the orientation of US economic policy. Despite the uncertainty regarding the nature and rate of implementation of the large number of measures announced by the president-elect, the markets reacted selectively to the expansionary fiscal measures proposed and regulatory changes, with the consequent stimulus to business profits, prompting a rise in stock markets, appreciation of the dollar and an increase in the interest rates on public debt. At the end of the year the Federal Reserve resumed the process of raising official interest rates, and revised its projected rate of monetary normalisation upwards.

The emerging financial markets experienced the three waves of global instability mentioned above, which particularly affected those economies with a higher degree of vulnerability, those most exposed to the changes in the direction of US policy and those most dependent on external funding. However, the impact of each wave was limited and temporary, so that their behaviour over the year as a whole was positive, except in exceptional cases, such as Mexico and Turkey.

¹ On 20 January the price of a barrel of Brent crude reached a low of \$27.88, a level not recorded since 2003. Subsequently the price recovered, to \$56.82 per barrel at year-end.



2 INTEREST RATES





3 EXCHANGE RATES AGAINST THE DOLLAR (a)

4 MARKET VOLATILITY AND POLICY UNCERTAINTY





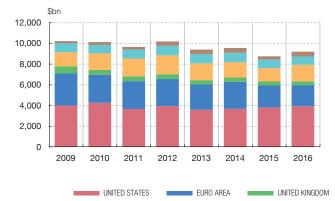
SOURCES: Datastream and Economic Policy Uncertainty.

- a An increase (decrease) denotes an appreciation (depreciation) of the currency against the dollar.
- b Average volatility of the bond market (MOVE), the stock market (VIX) and the euro, yen and sterling exchange rates against the dollar.
- Global economic policy uncertainty index (Global EPU Index).

At the end of 2016 there was greater divergence in financial conditions across the developed countries than at the beginning. In the United States monetary policy normalisation continued, while in the euro area and Japan the policy stance remained markedly expansionary. Divergence also increased among the emerging countries, since those with higher vulnerabilities had to increase their interest rates, while others were able to maintain more accommodating monetary conditions.

Stock markets, at the end of 2016 and in 2017 to date, have benefited from a certain optimism arising from the expectations of greater fiscal stimulus, not only in the United States, where they are at historic highs, but also in other countries such as the United Kingdom, Japan and Canada. Volatility levels on the various markets are also low, despite the high degree of economic policy uncertainty (see Chart 1.4). Finally, credit risk premia have even tended to fall in segments such as US high-yield corporate debt. The only market that has seen more drastic adjustment is the foreign exchange market, in which the dollar has appreciated notably against the main currencies, a development undoubtedly linked to the change in the macroeconomic policy mix and the impact that some of the protectionist measures announced may have in the short run.

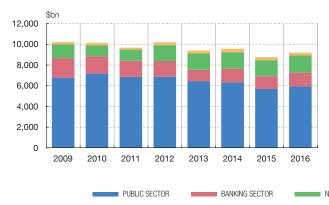
1 GROSS ISSUANCE BY ISSUING COUNTRY OR REGION. ANNUAL DATA



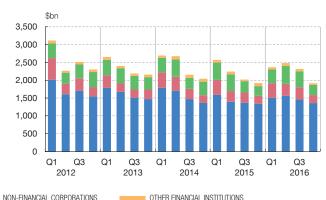
2 GROSS ISSUANCE BY ISSUING COUNTRY OR REGION. QUARTERLY DATA



3 GROSS ISSUANCE BY ISSUING SECTOR. ANNUAL DATA



4 GROSS ISSUANCE BY ISSUING SECTOR. QUARTERLY DATA



SOURCE: Dealogic.

a Excluding securitisations and short-term debt instruments.

Primary bond market activity

Chart 2 shows activity in the primary bond markets up to 2016. In the case of the developed markets, growth of issuance in 2016 was moderate, partly due to the fact that fiscal consolidation in the main economies continued to reduce public sector funding requirements. Notwithstanding this, in 2016 issuance in these countries increased. By market, placements by companies with better credit quality and by the banking sector were notably buoyant. Across countries, however, there were significant differences, both in terms of the conditions of supply of bonds by issuers (the cyclical position of each economy, the need for deleveraging by businesses and the public sector, and the regulatory requirements in the financial sector) and in terms of the factors affecting the demand of investors (risk appetite, the search for yield in a context of negative interest rates and the role of central banks in bond purchases).

With regard to the emerging economies, they continued to have access to the markets despite the factors of uncertainty mentioned in the previous section, the progressive tightening of monetary conditions in the United States, the appreciation of the dollar and the reappearance of vulnerabilities in some companies in these countries. However, the volatility observed in foreign exchange markets led to a certain preference for foreigncurrency issuance, especially in US dollars.

PUBLIC DEBT MARKETS

Over the course of 2016 gross public sector issuance in developed countries showed greater momentum than in 2015, mainly owing to the increase in the United States and Japan, which offset the decline in the euro area and in the United Kingdom (see Table 1 and Chart 3). This trend continues to reflect the influence of the fiscal consolidation in most countries (except for Japan), as a result of which net issuance continued to decline. However, some analysts note that, in view of fiscal expectations in certain countries, particularly the United States, this trend could change from 2018, when issuance may begin to exceed redemptions and acquisitions by monetary authorities, with possible effects on the cost of debt.² As regards the issuer, most of the instruments continue to be issued by Treasuries (see Chart 3.4).

The market placement strategy was mainly marked by changes in the demand for these securities. For example, the entry into force in October 2016 of the US money market fund reform gave rise during 2016 to a strong increase in assets managed by funds investing chiefly in short-term public sector securities, so the US Treasury substantially increased net issuance of Treasury bills at the expense of longer-term issuance.³ In the case of the United Kingdom, issuance was concentrated in the second quarter of the year, possibly because it was advisable to complete placements before the European Union membership referendum, which was held at the end of that quarter. Finally, against a background of low interest rates and low appetite for risk, issues continue to be increasingly longer term. Thus, as can be seen in Chart 3.3, the average maturity of new issues (excluding securities maturing in under 18 months) exceeded ten years, except in the United States. In the latter case, statements made by the new US Treasury secretary before his appointment indicated that the issuance policy may be revised to lengthen the maturities of placements, including very long-term bonds, as has already been done in other countries.

NON-BANK PRIVATE FIXED-INCOME MARKETS

Non-financial corporations (NFCs) were very active in the capital markets in 2016, with a record volume of placements after the slight fall recorded in 2015 (see Chart 4.1). This general performance conceals strong regional and timing differences stemming from central banks' monetary policy decisions, the aforementioned bouts of political uncertainty, or financial stress during the year.

Thus, the differences in monetary policy stance, with a less accommodative Federal Reserve⁴ and more expansionary measures in other areas, affected the primary markets with a slight decrease in corporate issues in the United States, in contrast to the increases in the euro area and Japan. Additionally, there was a substantial increase in the volume of euro-denominated securities issued by US companies to take advantage of the difference in the cost of debt between the two areas (see Chart 4.3).

Another development decisively affecting corporate issues was the commencement of corporate bond purchase programmes by some of the major central banks. The ECB began to implement its corporate bond purchase programme on 8 June 2016, for which investment grade euro-denominated bonds issued by non-bank corporations established in the euro area are eligible.5 These purchases are conducted in both the primary and secondary

² See A. Sheets et al (2016).

³ Issues of Treasury bills are not included in the charts, since they mature in less than one year.

⁴ As anticipated by the markets, the Federal Reserve decided to raise interest rates again in December, Additionally, the rises scheduled for 2017 could be affected if the fiscal package of Donald Trump's Administration materialises.

⁵ See https://www.ecb.europa.eu/press/pr/date/2016/html/pr160421_1.en.html.

| \$bn | | | | | 2016 | | | |
|-----------------------------------|--------------|---------------------|----------------------|------------|------------|------------------|------------------|--|
| | 2015 | 2016 | | Q1 | Q2 | Q3 | Q4 | |
| TOTAL BONDS (a) | 8,748 | 9,190 | 5.05 | 2,365 | 2,478 | 2,315 | 2,031 | |
| TOTAL BONDS, DEVELOPED ECONOMIES | 8,414 | 8,726 | 3.70 | 2,288 | 2,337 | 2,186 | 1,914 | |
| TOTAL BONDS, EMES | 334 | 464 | 39.09 | 77 | 141 | 129 | 117 | |
| TOTAL BONDS, BY COUNTRY | | | 00.00 | | | | | |
| Developed Developed | 8,414 | 8,726 | 3.70 | 2,288 | 2,337 | 2,186 | 1,914 | |
| United States | 3,819 | 3,919 | 2.63 | 967 | 1,078 | 1,005 | 870 | |
| Euro area | 2,111 | 2,044 | -3.21 | 675 | 583 | 468 | 318 | |
| United Kingdom | 387 | 373 | -3.69 | 99 | 98 | 109 | 67 | |
| Japan | 1,290 | 1,588 | 23.11 | 334 | 350 | 400 | 503 | |
| Other developed | 807 | 803 | -0.58 | 214 | 228 | 204 | 156 | |
| Emerging (b) | 334 | 464 | 39.09 | 77 | 141 | 129 | 117 | |
| TOTAL BONDS, BY SECTOR/INSTRUMENT | 001 | 101 | 00.00 | | | 120 | | |
| Public sector | 5,688 | 5,921 | 4.09 | 1,506 | 1,558 | 1,453 | 1,403 | |
| Developed | 5,584 | 5,753 | 3.02 | 1,470 | 1,496 | 1,429 | 1,358 | |
| United States | 2,466 | 2,520 | 2.19 | 640 | 650 | 657 | 573 | |
| Euro area | 1,440 | 1,323 | -8.15 | 417 | 384 | 326 | 196 | |
| United Kingdom | 203 | 169 | -16.38 | 40 | 53 | 36 | 41 | |
| Japan | 1,171 | 1,418 | 21.07 | 298 | 316 | 330 | 473 | |
| Other developed | 305 | 323 | 6.11 | 76 | 92 | 80 | 75 | |
| Emerging | 103 | 168 | 62.18 | 35 | 62 | 25 | 45 | |
| Non-financial corporations | 1,546 | 1,677 | 8.47 | 387 | 502 | 453 | 335 | |
| Developed | 1,385 | 1,465 | 5.77 | 357 | 448 | 375 | 285 | |
| United States | 843 | 841 | -0.28 | 206 | 275 | 186 | 173 | |
| Euro area | 264 | 348 | 31.75 | 102 | 100 | 87 | 58 | |
| | 86 | 83 | -2.79 | 20 | 17 | 35 | 12 | |
| United Kingdom Japan | 67 | 82 | 22.07 | 15 | 17 | 37 | 15 | |
| Other developed | 125 | 111 | -11.17 | 14 | 39 | 31 | 27 | |
| · | | | | 29 | | | | |
| Emerging Sector | 160 1,231 | 211 1,334 | 31.81 8.38 | 408 | 337 | 77 347 | 51 243 | |
| Banking Sector | | | 7.58 | | 313 | 320 | 243 | |
| Developed | 1,161 | 1,249 | | 395 | | | | |
| United States | 333 | 420 | 26.12 | 85 | 111 | 126 | 99 | |
| Euro area | 375 | 337 | -10.11 | 147 | 84 | 51 | 55 | |
| United Kingdom | 79 | 98 | 24.12 | 33 | 24 | 33 | 8 | |
| Japan | 42 | 67 | 59.61 | 17 | 13 | 25 | 12 | |
| Other developed | 332 | 327 | -1.55 | 113 | 81 | 86 | 48 | |
| Emerging | 70 | 85 | 21.71 | 13 | 24 | 27 | 21 | |
| Other financial institutions | 284 | 259 | -8.74 | 65 | 81 | 62 | 50 | |
| United States | 176 | 138 | -21.68 | 36 | 42 | 36 | 25 | |
| Euro area | 33 | 36 | 11.41 | 9 | 14 | 5 | 9 | |
| United Kingdom | 20 | 22 | 11.50 | 6 | 4 | 6 | 6 | |
| Japan | 9 | 21 | 123.57 | 4 | 5 | 8 | 4 | |
| Other developed | 45 | 41 | -9.13 | 10 | 17 | 8 | 6 | |
| MEMORANDUM ITEM | 245 | 215 | 10.00 | | | | | |
| Covered bonds | 245 | 215 | -12.23 | 92 | 57 | 33 | 32 | |
| Euro area | 129 | 108 | -16.80 | 50 | 26 | 14 | 17 | |
| Other | 116 | 108 | -7.15 | 42 | 31 | 19 | 15 | |
| High-yield bonds | 382 | 407 | 6.67 | 64 | 140 | 104 | 98 | |
| Developed | 350 | 341 | -2.60 | 57 | 121 | 85 | 77 | |
| United States | 215 | 236 | 9.74 | 44 | 78 | 54 | 60 | |
| Euro area | 73 | 65 | -10.50 | 11 | 30 | 18 | 7 | |
| United Kingdom | 23 | 13 | -42.68 | 2 | 4 | 5 | 3 | |
| Japan | 6 | 7 | 18.72 | 0 | 0 | 7 | 0 | |
| Other developed | 33 | 20 | -40.85 | 11 | 9 | 2 | 8 | |
| Emerging | 32 | 66 | 109.20 | 7 | 19 | 19 | 21 | |
| Syndicated loans | 4,540 | 4,421 | -2.62 | 943 | 1,235 | 1,103 | 1,140 | |
| Developed | 4,012 | 3,844 | -4.19 | 817 | 1,039 | 968 | 1,020 | |
| United States | 1,461 | 1,513 | 3.52 | 291 | 420 | 353 | 448 | |
| Euro area | 945 | 814 | -13.87 | 177 | 213 | 218 | 206 | |
| United Kingdom | 421 | 338 | -19.64 | 68 | 99 | 87 | 84 | |
| Japan | 550 | 558 | 1.33 | 152 | 138 | 156 | 112 | |
| Other developed | 634 | 621 | -2.05 | 128 | 169 | 154 | 169 | |
| Other developed Emerging | 634 528 | 621 577 | -2.05 9.26 | 128 127 | 169 196 | 154 135 | - | |

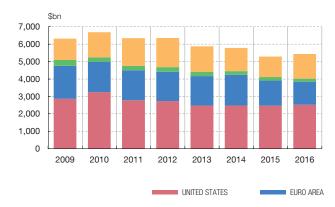
SOURCE: Dealogic.

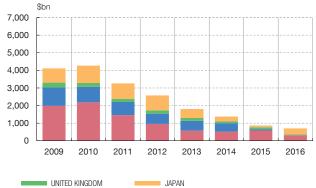
<sup>a Estimated totals. Data exclude securitisations and short-term debt instruments.
b In emerging economies, only issues on international markets are included.
c Other non-bank financial institutions are included in the banking sector of emerging economies.
d Covered bonds issued by all institutions are included, so that the issuer base is broader than the banking sector.</sup>

PUBLIC DEBT MARKETS (a) CHART 3

1 GROSS PUBLIC SECTOR ISSUANCE

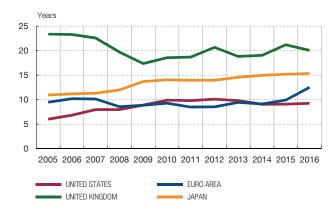
2 NET PUBLIC SECTOR ISSUANCE

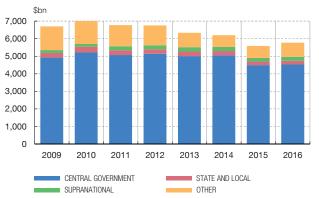




3 AVERAGE MATURITY OF CENTRAL GOVERNMENT ISSUES

4 GROSS PUBLIC SECTOR ISSUANCE BY TYPE OF ISSUER





SOURCE: Dealogic.

a Excluding securitisations and short-term debt instruments.

markets and at end-2016 had reached a volume of €51 billion.⁶ Also, early in August the Bank of England announced a corporate bond purchase scheme, which commenced at the end of September. The scheme, which focuses on secondary market purchases and aims to reduce the cost of borrowing for companies and to stimulate new issues, promotes the bonds of firms making a material contribution to the economy of the United Kingdom, up to a maximum of £10 billion. As with the ECB programme, the bonds must be investment grade.⁷ These programmes have had a positive effect on issuance volumes in the two areas, although that of the United Kingdom fell year-on-year in the fourth quarter.

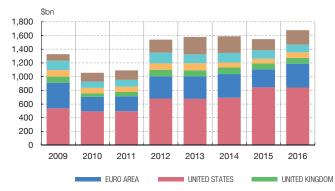
Political uncertainty affected certain corporate issuance segments over the course of 2016. The main event to be noted in this connection was the United Kingdom's European Union membership referendum, which caused greater sterling volatility and strong depreciation. Against this backdrop, corporate issues in pounds sterling by firms outside the United Kingdom decreased (see Chart 4.4), while the proportion of issues in pounds sterling by British firms rose, so as to reduce the exchange rate risk in their debt payments. However,

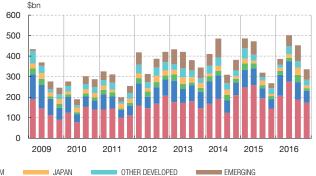
⁶ See https://www.ecb.europa.eu/mopo/implement/omt/html/index.en.html.

 $^{{\}bf 7} \quad \text{See http://www.bankofengland.co.uk/markets/Documents/marketnotice160912apfcbps.pdf.} \\$

1 ANNUAL ISSUANCE BY ISSUING COUNTRY OR REGION

2 QUARTERLY ISSUANCE BY ISSUING COUNTRY OR REGION





3 EURO-DENOMINATED ISSUANCE IN THE UNITED STATES

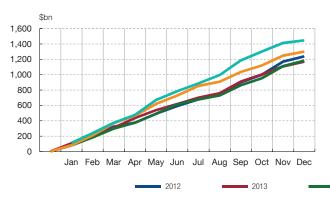
4 STERLING-DENOMINATED ISSUANCE OUTSIDE THE UNITED KINGDOM

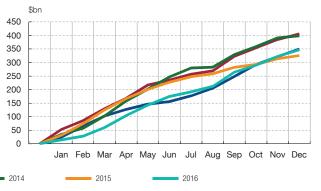




5 WORLD ISSUANCE OF INVESTMENT-GRADE BONDS

6 WORLD ISSUANCE OF HIGH-YIELD BONDS





SOURCE: Dealogic.

a Excluding securitisations and short-term debt instruments.

the actual volume of British firms' issuance does not seem to have been significantly impacted by this context of political uncertainty and was similar to that of 2015.

Other bouts of financial market stress, such as those recorded at the beginning of the year, affected mainly higher-risk corporate issues. Thus, high-yield issues were held back in 2016 Q1 by financial tensions in the early months of the year (see Chart 4.5 and 4.6). Activity was concentrated in the second and third quarters, coinciding with lower uncertainty in fixed-

income markets, which also favoured corporate issues in emerging markets. Taking the year as whole, high-yield issues exceeded those of 2015 despite the low volume recorded in Q1.

Finally, it is noteworthy that the strategies of certain issuers have begun to include characteristics other than price relating to long-term risks such as the environment. Thus, 2016 saw a sharp increase, of around 160% to \$23.7 billion, in issues in the green bond segment, where the funds obtained are used for investment projects compatible with environmental preservation.8

BANK FUNDING MARKETS

Over the course of the past year, banks' access to capital markets remained largely normal, although there were episodes in which issues became more expensive in certain segments and jurisdictions. At the start of the year, in a context of rising uncertainty and the publication of lower earnings than expected by a number of European banks, tensions were noticeable in the European subordinated banking debt market, manifesting themselves in widening spreads and shrinking issue volumes. This was also a reflection of the difficulties interpreting the regulations on suspending coupons or reducing the principal of this type of debt. These tensions were subsequently eased by clarifications from the supervisory authorities and the commitment by banks to maintain coupon payments, although the total volume of subordinated debt issued by European institutions in 2016 was less than in the previous year.

Additionally, there was also a significant and widespread contraction in issues by banks in Europe in the context of the referendum in the UK, although the measures taken and the publication of better-than-expected macroeconomic indicators allowed the markets to assimilate the result without significant disruption. Thus, in August there was already a large volume of issues in Europe, and particularly in the United Kingdom, although a substantial share of British institutions' issues were in dollars.

Over the year as a whole, the volume of issues by the banking sector did not grow significantly, although there were major differences between areas. In the euro area, against the backdrop of an increase in the liquidity supplied by the ECB and the uncertainty over the regulations on loss absorption,9 the sector issued a smaller volume of debt than in the previous year. By contrast, issues increased in the United Kingdom and the United States, particularly issues of senior debt by bank holding companies, with a view to meeting the new regulatory requirements on loss absorption. Lastly, in Japan, where the banking sector is currently pursuing a strategy of expanding international assets, issues also rose compared to the preceding year.

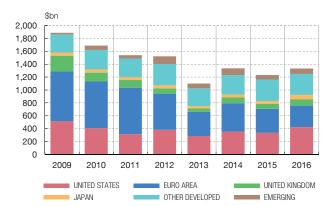
The covered bond market, traditionally a major source of bank finance, particularly at times of financial market stress, declined sharply. In the euro area this could have been the result of a process of substitution by ECB financing. In the case of the United Kingdom, this weakening may reflect doubts as to whether covered bonds issued by British banks will retain their preferential status for the purposes of calculating certain regulatory ratios in Europe.

In common with other issuers, some banks began to show signs of sensitivity to the risks associated with environmental degradation, with a significant volume of "green" placements.

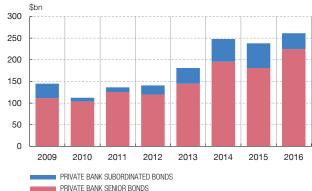
⁸ Most corporate green bond issuance is by energy and utility companies concerned with the generation of clean

⁹ In November 2016 the European Commission made a proposal to standardise this treatment across Member States.

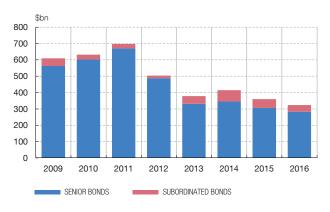
1 BY ISSUING COUNTRY OR REGION



2 UNITED STATES: BY TYPE OF ISSUE



3 EURO AREA: BY TYPE OF ISSUE



4 EURO AREA: DOLLAR-DENOMINATED ISSUES



SOURCE: Dealogic.

a Excluding securitisations and short-term debt instruments.

Nevertheless, this market remains small and the lack of standardisation is a shortcoming, as not all issuers meet international standards.¹⁰

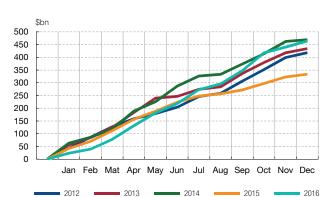
Lastly, as in the case of companies, the role divergences in monetary policies play in the denomination of the currency of issuance is worth noting. During the year, US banks continued to issue euro-denominated bonds in order to exploit interest rate differentials. However, given the mismatches in certain forward markets used for exchange-rate hedging, ¹¹ dollar issues by European banks have also been observed. Trends in these placements do not appear to reflect hedging needs in dollars so much as the desire to take advantage of the premia existing in hedging markets while the currency is strong, so as to then lend dollars to other institutions. ¹² Additionally, money market fund reform in the United States has led these investors to substitute liabilities placed by European issuers with larger issues of dollar-denominated bonds.

¹⁰ China's case is significant: the country's financial institutions issue the largest volume of green bonds, but apply national standards rather than international criteria such as the Green Bond Principles.

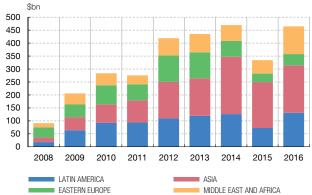
¹¹ There are several factors underlying the distortions in this market, such as divergences in monetary policy, legislative changes affecting banking regulation, and money market fund reform in the United States. For more details, see Nakaso (2017)

¹² See Romo González (2016) and Avdjiev et al (2016)

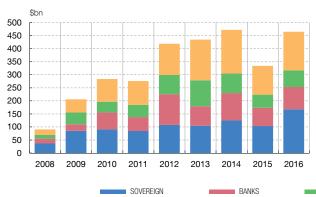
1 CUMULATIVE DATA FROM START OF YEAR



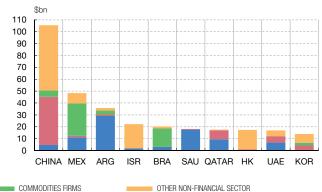
2 BY REGION



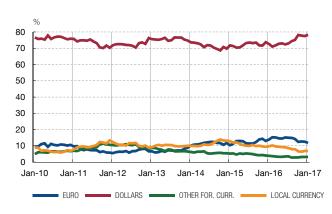
3 BY TYPE OF ISSUER



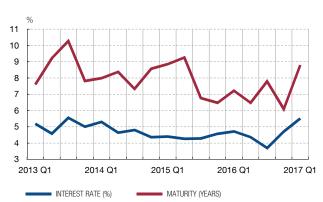
4 BY COUNTRY: LARGEST ISSUERS IN 2016



5 CURRENCY OF ISSUE (% TOTAL)



6 ISSUE CONDITIONS (a)



SOURCE: Dealogic.

a Excluding sovereign issues.

EMERGING MARKETS

Issuance in emerging economies rose substantially relative to 2015, with volumes issued exceeding 2013 levels and falling slightly short of the historical peak reached in 2014. Moreover, this upturn took place in the context of global uncertainty alluded to above, and was particularly visible in market segments that might have been expected to be significantly affected by the uncertainty. Over the year as a whole, placements came to \$464 billion, 39%

more than in 2015 and close to 2014 levels (\$469 billion). The biggest increases in issue volumes were seen in Africa and the Middle East (107%) – influenced by Saudi Arabia's first ever placement, for a value of \$17.5 billion, in a context of oil price stability since March – and in Latin America (81%) – the region potentially most directly affected by political uncertainty in the United States and the tightening of US monetary policy.

The buoyancy of emerging countries' issuance is reflected in the return to the market of high-risk issuers (Russia and, particularly, Argentina, which after settling the dispute with holders of unpaid debt, completed a \$16.5 billion bond issue) and issues by countries with a low sovereign credit rating, such as Honduras, Ecuador, Ghana, Laos and Mozambique (which subsequently applied for a renegotiation of its foreign debt), as well as countries with IMF lending programmes, such as Egypt, and countries whose markets suffered heightened volatility in the year, such as Turkey. Moreover, many issues were heavily oversubscribed, such as Saudi Arabia's (with applications for over \$67 billion), Argentina's (over \$70 billion), and the \$20 billion issued by an Israeli pharmaceuticals company for which there was demand for \$70 billion – the year's third largest placement worldwide, and the biggest ever issue by an emerging economy firm.

Large-scale issues by companies in the raw materials sector also took place (an increase of 300% year-on-year in the second half of the year). In particular, these included the State-owned oil companies of Brazil and Mexico (10% of issues by non-financial corporations), despite the Mexican company's high leverage and the doubts expressed by rating agencies about its financial position. Lastly, the increased appetite for returns was reflected in the strong increase in high-yield corporate issues (109%), in contrast with a modest increase in investment-grade issues (17%). This caused issues' average rating to drop one notch from BBB+ to BBB. The entry of companies with lower credit ratings on these markets did not result in a tightening of financial conditions, however, given that average interest rates on placements remained around 4.4%, as in 2015, and maturities shortened somewhat (from 7.8 to 7 years).

In terms of individual issuers, despite uncertainties concerning the authorities' management of capital account deregulation, China was the year's biggest issuer (\$106 billion, equivalent to 23% of the total and representing an increase of 4.4% on 2015), practically doubling Mexico's placements (\$48 billion, 10.4% of the total and an increase of 82%). Despite the increase in international placements, Chinese companies continued primarily to tap local markets for finance (88% of the total).

Within this strong performance by issues, investors' demand for greater security was apparent in shifts in issues per currency. Thus, placements in foreign currency rose by 43%, compensating for the drop in local currency issues (-7%). The dollar remained the dominant currency for foreign currency issues (80% of the total, compared to 74% in 2015), although there was a recovery in euro issues (€25 billion compared to €23.7 billion in 2015). The inclusion of the Chinese currency in the SDR basket has not so far stimulated the renminbi market. Chinese corporate and sovereign issues on international markets in their own national currency accounted for 6.5% of total Chinese issues in 2016, compared with 6% the previous year. Yuan-denominated issues by other emerging economies dropped from 0.7% to 0.4% of the total, however.

Other markets

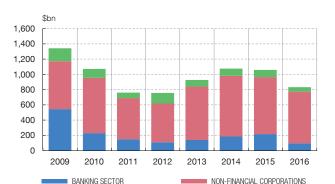
EQUITIES

Equity issuance declined significantly in 2016; this pattern was observed in all regions, to a greater or lesser extent, and persisted throughout the year, save for an uptick in Q3.

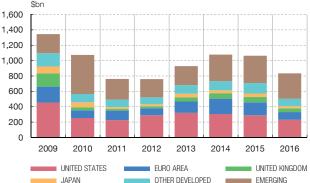
The political uncertainty throughout the year, focused on Brexit in the first six months and then on the US presidential election, may have acted as a constraint on equity

OTHER FINANCIAL INSTITUTIONS

1 ISSUANCE BY SECTOR



2 ISSUANCE BY COUNTRY OR REGION



SOURCE: Dealogic.

market issues, prompting some to be postponed. Additional factors were the low growth and inflation expectations in developed regions, increased volatility in oil prices and the doubts surrounding the Chinese economy, one of the markets where equity issuance had been growing at a strong pace. This pattern ran parallel to a decline in corporate mergers and acquisitions, reflecting the lack of corporate momentum for business expansion.¹³

Developments in market placements in the year were shaped by the emerging markets, which recorded the highest volume in all four quarters and the lowest rate of decline. In contrast, the euro area and Japan recorded the worst performance. By sector, banks posted the most negative performance, against a backdrop of uncertainty regarding their profitability in light of the low interest rate environment and the fall in stock market prices of some banks, especially in the euro area.

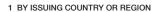
Lastly, by type of instrument, there was a smaller decline in placements by companies already listed on the stock market (known as follow-on placements) and a decrease in initial public offerings (IPOs). The reason for this mixed performance may be that specific stress events that occurred on the markets had more impact on access to markets for unlisted companies than for companies with which investors were more familiar.

SECURITISATIONS AND STRUCTURED PRODUCTS

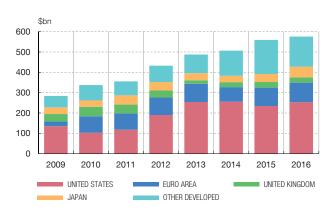
Securitisation issuance continued in the growth pattern observed since 2010, although the volume is still much lower than before the financial crisis (just 30% of the 2007 total). In any event, the growth in this market reflects a decline in the stigma attached to these products and a certain degree of recovery, in a segment that remains sluggish, hindered by the lack of standardisation and weak bank lending.

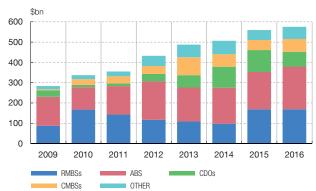
It was clearly a year of two halves, with contraction in the first two quarters followed by a recovery in the second half of the year, especially in Q4, to ensure growth in 2016 overall. The sharpest decline was in Q1, possibly owing to market uncertainty and risk aversion, as reflected by the sharp fall in issuance of CLOs (collateralised loan obligations) that are securitisations backed by loans to firms with low credit ratings.

¹³ The total volume of mergers and acquisitions fell by 18% in 2016 to \$3.84 trillion.



2 BY COLLATERAL TYPE





SOURCE: Dealogic.

By country, Japan saw the highest increase in issuance, followed by the United States and the euro area, while the United Kingdom and all other areas recorded decreases. The growth in Japan was backed by the good performance of the labour market, which held down default rates on the loans used as collateral for securitisations. ¹⁴ In the euro area, the recovery in lending may have encouraged securitisations. The ECB maintained its asset-backed securities purchase programme in 2016, but the total volume of securities acquired was lower than in 2015, so the growth in securitisations cannot be explained by the ECB's purchases. In the United States the most significant development was the introduction of the new risk control regulations, which came into force in December and oblige CLO managers to retain at least 5% of the CLOs they manage. For the time being it seems to have had little impact on securitisation volumes.

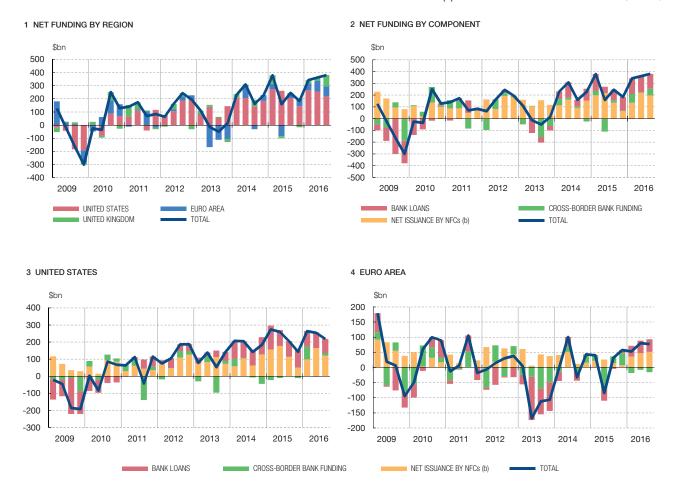
By type of collateral, the largest drop was in collateralised debt obligations (CDOs), which include CLOs, affected by the poor performance in Q1. Mortgage-backed securities were mixed: commercial mortgage-backed securities (CMBSs) recorded the most growth, while residential mortgage-backed securities (RMBSs) were virtually unchanged in the year, despite the strong increase in Q4.

Net funding

This section presents an analysis of net funding to the non-financial corporate sector in the main developed regions, including not only net bond issuance but also bank lending. Unlike the other sections of the article, which focus on primary market activity and placement conditions, the aim here is to present an approach that provides an overview of the flows of financing to the non-financial corporate sector.

There are certain methodological difficulties involved in analysing net funding, owing to the need to use different sources and to provide measures that are comparable across regions. The proxy used to measure net funding includes net bond issuance by NFCs, bank lending to the non-financial private corporate sector (excluding purchases of fixed-income securities) and cross-border bank financing. Using this measure of total net funding limits the scope somewhat compared with using the Financial Accounts (see box), but it provides an indicator

¹⁴ See Saek, S. and Y. Seki (2016).



SOURCE: Dealogic, Datastream and BIS.

- a Quarterly flows in billions of dollars.
- **b** Issuance by non-financial corporations.

that is comparable across regions and that is available much earlier. In this respect, taking into account the sources used, the development of net funding up to 2016 Q3 is analysed.

Naturally, net funding has been affected by the cost of funding. Thus, in the United States, the cost of bank lending rose in the first half of the year, partially correcting in the second half. In the euro area, the cost of funding declined continuously throughout the year.¹⁵

Against this backdrop, financing flows performed well in the first three quarters of 2016, surpassing the volume of previous years. By region, this positive funding pattern had been observed for some years in the United States, but in the case of the United Kingdom and the euro area it was the first time since 2013 and 2012, respectively, that funding had been positive for three consecutive quarters. Net funding for the three regions analysed amounted to \$1,083 billion in the first three quarters of the year, compared with \$782 billion in 2015 (see Chart 9). By region, as indicated above, the sustained nature of the positive

At end-2016 the bank lending rate in the United States stood at 2.11%, down from 2.51% at end-June. In the euro area the cost of funding was 2.32% at end-December, having declined by 32 bp in the course of the year.

financing flows in the euro area and the United Kingdom was noteworthy, following on from 2015 which saw negative flows in one or more quarters and smaller positive flows.

Regarding the components of funding, net bond issuance and bank loans made up the bulk of the flows, with cross-border financing playing a smaller part. In the case of bank credit, there was a noteworthy recovery in the euro area in a setting of more expansionary monetary policies, and to a lesser extent in the United Kingdom. The low volume of bank lending by domestic institutions as a percentage of total funding in the United Kingdom was offset by cross-border bank financing. In the United States, bank financing has held very steady in recent years and remains at around \$90 billion, compared with the period 2009-2010 when negative flows were recorded.

This performance was encouraged by generally positive credit supply conditions for firms. ¹⁶ Bank lending surveys in the United States show that supply conditions have tightened, but to a lesser extent than in the past. In the United Kingdom, and despite the uncertainty following the Brexit vote, supply conditions do not appear to have changed. In the case of the euro area, bank lending surveys reflect moderate easing, in an environment marked by competitive pressure and lower perception of risk.

The demand for credit was mixed by region:¹⁷ it remained robust in the euro area and relatively steady in the United States, but in contrast it contracted severely in the United Kingdom both in Q2 and Q3. This contraction was observed among small, medium-sized and large firms, though it was most marked in the latter. In 2016 Q4 demand recovered and was met, primarily, by cross-border bank lending.

Conclusions

The capital markets showed remarkable resilience in the face of uncertainty in 2016. Not only did political developments such as the British referendum on withdrawal from the EU or the results of the US elections have only a limited effect on secondary market prices, but the impact on primary markets was also slight. Other events, such as market turbulence in early 2016, did have an effect on placements, however, particularly in certain segments (some of the emerging economies and subordinated bank debt) although these difficulties gradually dissipated over the course of the year, which ended with issue volumes similar to those of previous years.

This situation looks unlikely to reverse abruptly in the near term. The volume of issues has been high in almost all segments at the start of 2017, in a context in which risk appetite has not diminished and investor behaviour has been relatively immune to political uncertainties. It therefore seems that the recovery in net lending to the corporate and other sectors could persist, even in the United Kingdom and the euro area, which had not seen sustained positive flows for some time.

Nevertheless, factors exist which could trigger a reversal of this situation, leading to a loss of risk appetite, which would put a brake on lending to higher risk or vulnerable market

¹⁶ The analysis draws on surveys of credit standards: Senior Loan Officer Opinion Survey on Bank Lending Practices. Credit standards applied to large and medium firms (US); Euro area bank lending survey. Credit standards applied to large firms (euro area); Credit Conditions Survey. Credit standards applied to firms (UK); and Senior Loan Officer Opinion Survey on Bank Lending Practices at Large Japanese Banks. Credit standards applied to large firms (Japan).

¹⁷ Surveys of demand for credit: Senior Loan Officer Opinion Survey on Bank Lending Practices. Demand by large and medium firms (US); Euro area bank lending survey. Demand by large firms (euro area); Credit Conditions Survey. Demand by large private non-financial corporations or PNFCs (UK); and Senior Loan Officer Opinion Survey on Bank Lending Practices at Large Japanese Banks. Demand by large firms (Japan).

segments in particular. In a year replete with elections in European countries, market sentiment could change if political uncertainty were to intensify. Furthermore, the new US Administration's proposals could upset the markets if the stimulus measures implemented were to fall short of expectations. In this regard, it is worth noting that some measures, such as tax reform, could have repercussions for companies' financing decisions and so affect activity on bond and equity markets. In any event, countries' slowing pace of fiscal consolidation deriving from a change in the mix of monetary and fiscal policy stances, and the fact that some governments could resume net positive issuance in the not-too-distant future, could have serious implications, which could spill over into other markets, given the scale and significance of these markets for investors' portfolios.

Trends in the foreign exchange markets are particularly important for emerging countries given some countries' dependence on external funding. In this regard, for many countries the pace of normalisation of the US monetary policy stance is also an important factor alongside vulnerability to uncertainty.

REFERENCES

AVDJIEV, S., DU, W., KOCH, C. and H. S. SHIN (2016). "The dollar, bank leverage and the deviation from covered interest parity". BIS Working Papers No 592, November.

NAKASO, H.(2017). "Monetary Policy Divergence and Global Financial Stability:From the Perspective of Demand and Supply of Safe Assets". Speech at the International Bankers Association of Japan. 20 January.

ROMO GONZÁLEZ, L. (2016). "The drivers of European banks' US dollar debt issuance: Opportunistic funding in times of crisis?" Banco de España Documentos de Trabajo No. 1611.

SAEK, S. and SEKI, Y. (2016), "Strong Job Market Will Underpin Low Default Rates", Moody's, Structured Finance. SHEETS, A., NARAPARAJU, P., TANG, S., WANTING, L. and VOLYNSKY, E., "2017 DM Supply Outlook, Global", Morgan Stanley

The fifth section of this article describes how net funding to the corporate private sector has evolved in three regions: the euro area, the United States and the United Kingdom. The variable used to measure net funding combines several sources, including domestic bank lending, cross-border bank lending and net funding obtained on capital markets. Other measures of funding to the private sector, such as those obtained from the financial accounts, although more detailed, may make comparison across regions more difficult and are published with a longer time lag.

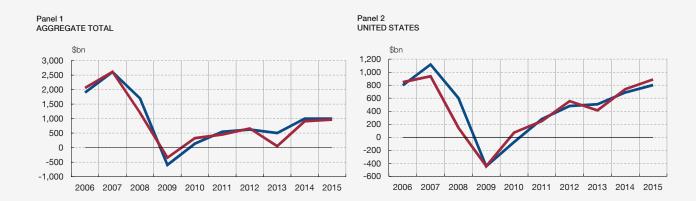
This box analyses the measure of net funding used in the article compared with information drawn from the Financial Accounts, explaining the differences and providing a clear idea of the biases that the different measures may entail. Firstly, the measures of net funding through bond issuance on capital markets are analysed, followed by a study of net bank funding.

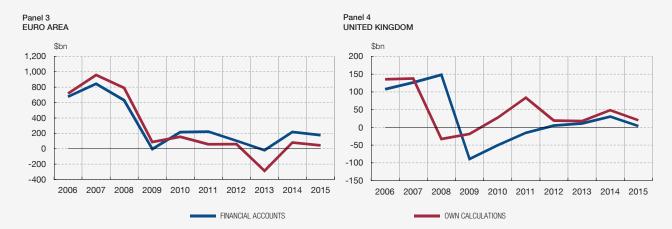
Net bond issuance by the non-financial private corporate sector:

The variable used in the article to measure net bond issuance uses Dealogic as its source. This same source is used throughout

the article to obtain gross issuance and includes bond issuance on domestic and international markets by a country's non-financial sector, excluding the public sector. It only covers placements with maturity of more than 18 months. Net issuance data are constructed from gross issuance, subtracting the notional maturities according to the original maturity schedule. As regards the geographical allocation, issues are classified using the nationality criterion, which implies that all issues by subsidiaries of parent companies registered in the areas under study are included. Issues by subsidiaries registered in those areas but whose parent companies are registered elsewhere are not included.

This calculation method differs from those used by official sources, such as those used for the Financial Accounts. These statistics take into account issues with a maturity of less than one year and the residence criterion is normally used (thus excluding issues by firms in a given country made through their subsidiaries abroad). Moreover these indicators, which are usually published with a time lag of several quarters, present certain methodological differences between countries which





SOURCES: Eurostat, Federal Reserve Board, Office for National Statistics and Bank for International Settlements.

make comparison difficult. Thus, in the euro area and the United Kingdom, the market value of debt securities is used, whereas in the United States, the nominal value is used (as with the data supplied by Dealogic). As regards the flows, in the case of the United States they simply reflect the change in stock, whereas in the euro area and the United Kingdom the series is termed "financial transfers", which would not include revaluation effects and other changes in volume.¹

Loans to the non-financial private corporate sector:

The calculation of net funding through loans is proxied using the aggregate balance sheet information of domestic credit institutions published by central banks.² The main bias that arises when using this variable is that loans not originated in the domestic financial sector will not be recognised. This is not the case with the information obtained from the financial accounts, which covers the total volume of loans. Thus, the financial accounts provide information on inter-company lending and loans from the rest of the world. In any event, this second problem could be partly solved by including cross-border bank lending, which can be obtained from of the Bank for International Settlements statistics and is defined as the financing extended by non-resident banks to a country's non-banking sector. It is measured using the exchange rate-adjusted change in the stock

1 In the case of the United States, there would be no revaluation effect since the nominal value of debt securities is used. Other changes, mainly statistical breaks, would have an impact. of cross-border credit of BIS reporting banks compared with all the residents in a jurisdiction, excluding the banking sector.³

As with the information on debt securities, there are methodological differences between the financial accounts of the different areas. In the euro area and the United Kingdom, the flows calculated using the Financial Accounts take into account valuation effects, such as those owing to defaults, and other changes. However, in the United States, the valuation effects of defaults would not be taken into account.

This problem also arises with respect to the information provided by the aggregate balance sheet of domestic credit institutions, since US data treat defaults as credit flows, whereas euro area and UK data do not. Overall, the balance sheet information of domestic credit institutions is treated similarly to the financial accounts data since these draw on that information as one of their sources.⁴

The accompanying panels compare net funding to the non-financial private corporate sector drawn from the Financial Accounts with the own calculation proposed in this article. As can be observed, the aggregate total is very similar for both variables. The panels also depict a very similar pattern by region, with the measure we have constructed being closest to the information provided by the financial accounts in the United States. This comparison shows the usefulness of the measure proposed as a leading indicator of the developments in net funding as reflected in the Financial Accounts.

- 3 The non-banking sector may include financing to government and non-banking financial institutions. The aggregate evidence suggests that cross-border bank lending to government is limited, but the volume of lending to non-banking financial institutions may be more significant.
- 4 There are some minor exceptions. For example, in the euro area, interest accrued but not paid is added to the loan amount in the Financial Accounts, whereas in the balance sheets of domestic credit institutions it is classified under residual assets.

² For the United States, H.8 Assets and Liabilities of Commercial Banks in the United States (Federal Reserve Board); for the United Kingdom, M4-MFI Credit to the private non-financial sector (Bank of England), and for the euro area, MFI Credit to the private non-financial sector (ECB).