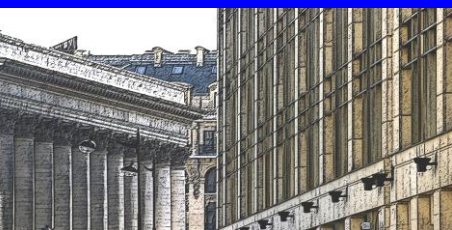


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EDITORIAL



When it published its 2013-2016 Strategic Plan, the AMF described the measures taken in the wake of the financial crisis to promote safer, more transparent financial markets. The regulatory agenda remains busy, as work continues on implementing the reforms called for by the G-20. The broad guidelines provided by the heads of state have to be translated into precise, technical measures to ensure that they are operational and effective.

Meanwhile, the authorities remain on their guard as they monitor recent trends and risks observed on the markets. By summer 2014, some of the issues that we had identified in terms of investor protection and information, orderly markets and financial stability had changed in nature or intensity compared with the previous year. While the European Central Bank cut euro area interest rates in early June, US monetary policy is shifting to become less accommodative. Plentiful global liquidity continues to drive the hunt for returns, raising a number of questions. Are investors correctly assessing the risks that they are taking on? How are investors readying themselves as regards strategy diversification to cope with low long-term interest rates for a protracted period or a gradual or abrupt upward revision by the markets?

Particularly in Europe, the coming period will be decisive in terms of implementing the market reforms included in the MiFID review and reforming post-trade organisational arrangements in accordance with EMIR, notably via tangible progress towards setting up central counterparties to clear standardised derivatives. Unquestionably, these reforms will help to enhance transparency and control the risk borne by certain financial instruments. Although decisive in my view, however, these two reforms merely comprise one of many steps, and we will continue to devote energy to other projects, including the establishment of a banking union to promote more resilient banks, ongoing international efforts to enhance the regulation of shadow banking, the AMF's continuing push to promote more market-based financing, but also our focus on ensuring that retail investors properly gauge the risks to which they may be exposed.

While systemic risks have receded on the whole compared with previous years, the threats to orderly markets and investor protection have become more diffuse. We continue to work alongside our European and international partners to establish a regulatory framework that is safer and more consistent globally to support healthy, fair competition between firms. This is undoubtedly the most important contribution that we can make as we strive to build strong foundations for a return to more sustained economic activity.

Gérard Rameix,
Chairman, Autorité des Marchés Financiers

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SUMMARY OF RISKS IDENTIFIED AND ACTION TAKEN BY THE AMF

Purpose

Every year the AMF publishes the results of a mapping exercise in which it identifies key risks and trends. It looks specifically at markets and financing (Chapter 1), market organisation and intermediation (Chapter 2), household savings (Chapter 3) and asset management (Chapter 4). The goal is to draw attention to the main developments in these areas, from a domestic, European and international perspective, particularly where these trends might generate risks that come under the AMF's remit.

Under French law, the AMF is responsible for safeguarding savings and investors, overseeing orderly financial markets and maintaining financial stability. The analyses of the four sectors mentioned above are accompanied by a recap of the main activities in which the AMF has been involved to bolster the regulatory framework and make sure it is commensurate with actual risks. The aim is to ensure that financial market regulation is appropriate in its scope, proportionate in its response to evolving serious threats, and consistent and coordinated as far as possible with measures adopted in the same areas by the AMF's fellow regulators and other competent authorities.

This year's summary presents the major risks identified as at mid-2014. It assesses developments relative to last year and describes the action taken recently by the AMF in these areas.

Assessment at mid-2014 of risks and trends over the last year

A still-precarious economic environment

As at the end of June 2014, the overall economic backdrop for financial markets remained prey to a number of uncertainties. In France, as elsewhere in Europe, the economic upturn was shaky, held back by the flat performance of the main components of GDP. In France, domestic demand was a drag on activity in Q1 2014, while investment fell for the third straight quarter, delaying the improvement in the country's productive potential. In the euro area, contrasting country performances hampered both the much-needed fiscal consolidation process and the array of measures taken by the European Central Bank (ECB). That said, falling short- and long-term interest rates have so far been helpful in easing the repayment burden on euro area borrowers, with debt exceeding 92% of GDP in the government sector and 130% among households and companies. In 2013, while bond issuance by non-financial companies (NFCs) was less brisk than in 2012, financing costs fell as the perception of credit risk improved overall.

Looking ahead to a gradual phase-out of the unconventional monetary policies conducted by the main central banks, which will be non-synchronised by nature, the rock-bottom levels reached by interest rates should act as an incentive for indebted agents in the euro area and elsewhere to reverse the uptrend in debt levels seen in past years. If they fail to do so, maintaining liquidity at a negative real cost will increase the likelihood that prices on some markets – particularly fixed income and property – could become disconnected from fundamentals. Equally, the hunt for attractive returns could lead more investors to underestimate the nature and scale of the risks they take on, as well as their proper valuation. This would affect the accuracy of the information provided to the public.

The low level of interest rates is totally warranted by the systemic effects of the financial crisis, beneficial to speeding up the return to growth, and necessary at a time when some economies are posting very low or even negative annual rates of inflation. Be that as it may, financial participants should not view this situation as carved in stone, but rather as a variable that markets should swiftly reassess as soon as the nature of risks changes. The triggers for such a change are not limited to a pick-up in activity, seemingly unsustainable medium-term debt profiles for certain economic agents or, more broadly, renewed investor risk aversion owing to volatility caused by financial, geopolitical or other stress. In particular, the risks presented by some emerging countries, which are exposed to stress or structural imbalances, must continue to be monitored carefully. In summer 2013, some of these countries were adversely affected by impacts – notably capital flight – linked to the USA's announcement that it was planning to taper its asset purchases.

Stock markets on a positive trend

Against this macroeconomic backdrop marked by a slow upturn in activity, stock markets in the main geographical zones fared better in 2013 than they did in 2012. The CAC 40 index, for one, gained 18% after 15% the previous year. From autumn onwards, these gains were accompanied by a significant recovery in initial public offerings and mergers. In early 2014, the global capitalisation of the world's equity markets exceeded USD 64 trillion, after rising 17% in 2013 to regain the level reached in 2008, before the Lehman failure. Overall, the decline in systemic risk indicators, combined with plentiful liquidity and broad confidence among investors in the prospects for a gradual recovery in activity, enabled financial markets to make a bigger contribution to financing the economy. At the same time, bank lending to NFCs continued to dry up, particularly in the euro area, shrinking at an annual rate of close to 3% in spring 2014.

This economic transition period was also evident in commodity prices, which in 2013 continued the stabilisation process that began in 2012 after a decade-long uptrend, albeit rudely interrupted by the crisis. While low inflation hurt precious metals (gold lost 28% over 2013), non-precious metals and energy prices held up better, while geopolitical and meteorological factors fuelled high and volatile agricultural prices. However, the prices of some non-precious metals suffered from slowing growth in a number of emerging countries that are producers and especially consumers. Moreover, in a new development that surely points to a more pronounced medium-term shift, commodity derivatives on organised markets, as compared with over-the-counter (OTC) markets, showed a sharp increase compared with the previous three years and featured a bigger role for portfolio managers, which are paying closer attention to this asset class.

Similarly, the financialisation of commodity markets continued with increased contract standardisation, which certainly opens up possibilities for switching between assets or markets but also creates the risk that price movements could become magnified and deviate from predictable trends. Another feature of this shift was diversification in products, which are now being traded by a broader range of participants, with algorithmic trading firms now occupying an important place. Going forward, regulation of these commodity markets is expected to be more effectively framed by the revised version of the Markets in Financial Instruments Directive (MiFID), which strengthens reporting requirements and position limits for participants in commodity derivatives markets.

Close watch on market fragmentation and the post-trade sector

In connection with the MiFID revision, and with lessons still to be drawn from the euro area financial crisis, the trend towards market fragmentation, although seemingly more stable over the recent period, was another major focus of attention. The public authorities are continuing to work together to identify these lessons. To take an example, research into the impact of fragmentation on market liquidity, order execution conditions and the overall resilience of financial market infrastructures has produced cautious and nuanced findings, which sometimes differ depending on the country, period, venue or securities concerned. How to ensure that end clients are best served? Is demand for financing being matched with supply? How to make certain that all financial institutions are sheltered from a large-scale shock ranging from a liquidity squeeze to a cyberattack? All these questions warrant the AMF's close attention.

The introduction of MiFID II should provide a more effective framework for the rules governing pre- and post-trade transparency waivers. The entry into force of the implementing legislation should go a long way towards mitigating the risks linked not only to non-transparent trading on unregulated or insufficiently regulated venues (addressed through much stricter requirements for transparency waivers), but also to liquidity differences between markets, and to the uneven robustness of the risk management arrangements to which intermediaries and venues are subject.

Another focus for the regulator will be to assess the extent to which market conditions are affected by the recent trend towards consolidation among exchanges and firms involved in different stages of the securities chain. That a single company can operate in so many different business areas – from brokerage to trading, clearing, settlement, delivery and the provision of economic and financial data – certainly has a bearing on investor protection and financial stability. The rise of large groups, which is natural and desirable when based on exporting economies of scale that flow from a successful business model, should enable the emergence of specialisations in market segments that objectively improves the quality of financial services provided to investors. Conversely, the creation of oligopolistic silos that companies and individuals cannot avoid because of a highly concentrated supply side is generating the risk of conflicts of interest and unfair pricing. In an environment featuring poor informational transparency or inadequate comparability, this inevitably raises questions about the best execution of end client orders.

A more effective framework is needed for the risks posed by high-frequency trading (HFT)

In Europe, the agreement obtained in January 2014 on revising MiFID was an important step forward in strengthening market regulation. At the end of 2007, the first version of MiFID led to a proliferation of venues that offered alternatives to regulated markets but that fell short in terms of transparency and fair treatment in order execution. In particular, this competition between venues provided HFT firms with fertile conditions for growth, to the extent that HFT accounted for the bulk of trading on some markets in the recent period.

The risks of market abuse still posed by HFT should lead to more effective rules in Europe, provided the goals of MiFID II are faithfully transposed into the technical standards to be proposed by the European Securities and Markets Authority (ESMA). Specifically, this includes identifying HFT firms as investment services providers, flagging algorithm-driven orders, setting minimum tick sizes and introducing stricter rules in two areas: colocation (i.e. installing HFT firms close to venues to have their orders executed more quickly), and rebates offered by some venues to intermediaries they want to attract so as to post liquidity terms that are more attractive to the investment community. In the interim, and while recognising that these new provisions alone will not be enough to eliminate the risks related

to HFT, the AMF will continue to pay close attention to the quality of liquidity offered by intermediaries, including high-frequency traders, on whose benefits the academic literature continues to take a mixed view.

Central clearing, collateral and liquidity management are essential to risk management

This question of structure and information has particular relevance for central clearing, a critical component of the systemic risk prevention system introduced in the aftermath of the crisis at the urging of the G-20 heads of state. Under the European Market Infrastructure Regulation (EMIR), central counterparties are required to clear all OTC derivatives that are considered eligible by ESMA, while all trades in derivative products, including listed products, must be reported to trade repositories approved and supervised by ESMA. While these repositories, created by EMIR, help to improve transparency on derivatives market by strengthening the information available to regulators, many challenges remain to ensure that the new European provisions satisfy the demands made by the G-20 in 2009. This applies equally to clearing-related risks (supervising compliance with the central clearing obligation, with an exemption for intragroup transactions), techniques for mitigating operational and counterparty risk (supervision of compliance with these techniques) and proper trade reporting. The AMF will also pay close attention, particularly through its participation in the colleges of European regulators, to supervising the capital requirements and organisational and governance rules applicable to clearinghouses.

Furthermore, at the intersection of market and prudential regulations set forth in Basel III and Solvency II, significant risks continue to be raised by changes in collateral supply and demand. Collateral, which is theoretically designed to improve management of counterparty risk by making financing, securities-lending and derivative transactions safer, is the subject of diverse definitions and practices. These depend on the assets being secured (compliance with eligibility rules), the competent authorities (e.g. central bank in the case of refinancing operations) or the parties to a transaction (i.e. a management company does not have the same objectives as a central securities depository).

Published estimates reveal considerable uncertainty over the quantity and quality of collateral available, after recognising demand factors, which have increased substantially in recent years and are expected to continue in the same vein. Although distrust of the financial sector, which is always liable to increase in the event of liquidity shocks or stress, has certainly eased in the recent period in Europe, regulation is poised to have a more structural impact. The prudential rules on liquidity for banks and insurers, along with provisions aimed at encouraging derivatives to be centrally cleared, will boost medium-term demand for collateral. Meanwhile, the quality requirements for collateral have been raised in order to more effectively contain the potentially destabilising impact of a counterparty default. Overall, while the supply of collateral is likely to continue outstripping growth in demand, the risks linked to collateral quality, liquidity and management will continue to require close monitoring on the part of the AMF, especially if the velocity and reuse of collateral were to increase.

As regards broader supervision of financial market functioning and liquidity-related developments, two further observations are germane. First, activity on the credit default swap (CDS) market contracted sharply over the year, reflecting receding pressure on credit risk, but also stricter European reporting requirements and a ban on naked sales, leading to an improvement in the perceived liquidity of assets whose default many investors previously wished to insure against.

Tax-related issues also impact market functioning

In recent months, the regulatory schedule of competent authorities has featured progress in negotiations on introducing a financial transactions tax in several European countries. As far as its own remit is concerned, the AMF believes it is important for the proper financing of the real economy that the tax regime adopted by the European states should, as far as possible, preserve the competitiveness of French firms relative to foreign firms and decision-making centres, whether European or not, that are not affected in the same way by the tax. Given that capital is almost perfectly mobile in Europe, the introduction of a tax bias could have a damaging effect on the Paris marketplace.

In this respect, a potential tax in 11 European countries on derivative trades with the stated aim of “regulating” these markets seems inconsistent with the ambitious measures to regulate cleared and non-cleared derivatives currently being implemented at European and global level at the request of the G-20.

Furthermore, a precise and comprehensive study into the impact of the proposed tax should be carried out beforehand to ensure there are no long-term effects on business-location decisions and to avoid interference with the liquidity and orderly operation of the securities markets liable to be taxed. The environment of record low interest rates poses a challenge for financial intermediaries, which have to show investors that they can continue delivering attractive pre-tax returns on investments without taking on excessive risk. Accordingly, the tax message from the competent authorities to investors, who are paying particularly close attention to the work by the Paris Marketplace Committee 2020, has to be both credible and consistent.

In 2013, households' financial investments declined and a smaller proportion went into deposits

The question of tax treatment is also directly connected to the allocation and changing pattern of household savings. Household savings and financial savings rates both fell again in 2013, reaching 14.7% and 5.6% respectively at the end of the year according to INSEE (base year 2010). Household economic wealth, in which non-financial assets still represent a three-quarter share (73% according to the latest available data for 2012), has been growing less and less rapidly since 2010, although the overall rate masks substantial differences between the sharp growth in financial net worth (up 7.4% in 2012) and a 0.3% contraction in non-financial wealth, essentially reflecting recent developments on the property market. Once liabilities are factored in, however, the growth rate of household financial net worth falls more than five-fold between the 2002-2006 period, when average annual growth was 7.8%, and the 2007-2012 period, when the average increase was just 1.4%.

Given that financial investments generally offer better returns than property or gold over the long run, the AMF draws the attention of the public authorities to two points: firstly that main households' financial investments flows fell substantially in 2013 compared with 2012 (-18%); and secondly that this main financial investments flows in 2013 (EUR 71 billion) were far below the average over the 2001-2010 period (EUR 115 billion), making 2013 the second-lowest year since 1996 after the trough in 2000 (EUR 66 billion). At a time when measured promotion of market-based financing, alongside traditional bank lending, seems highly necessary to diversify investment vehicles according to risk/reward preferences specific to individual saver profiles, these developments deserve to be highlighted. They show, at the very least, the effort that still needs to be made to bridge the gap between would-be investors in France and financial markets, which are now better regulated.

Moreover, 2013 brought a change in the pronounced shift by investors away from life insurance policies and pension funds in 2011 and 2012. The two-year decline in these investments was interrupted in 2013, which saw positive net inflows to life insurance. Accordingly, for the first time since 2010, investment flows into life insurance and pension funds exceeded inflows into bank investments, made up of deposits and cash. In addition, net disposals of shares/units in collective investment schemes reached their highest level (EUR 14 billion in 2013) since 2010, while the increase in investment flows into equities concerned not listed shares, which were the subject of net disposals in 2013 just as in 2012, but unlisted shares and other equity interests, whose market value and economic rationale are hard to pinpoint. Overall, in an environment where households' main net investments flows had fallen by half since the outbreak of the crisis, shrinking from EUR 130 billion in 2007 to EUR 71 billion in 2013, life insurance policies and pension funds, having been shunned in 2011 and 2012, were among the vehicles that were most successful in attracting household savings in 2013, despite an ongoing downtrend in policy returns.

French households' investments are exposed to moderate risk overall and span a diverse range of assets

Within Europe, French households are positioned in the middle between northern countries including the UK and the Netherlands, where life insurance and pension funds account for at least 60% of outstanding financial investments, and neighbouring countries, such as Germany, Italy and Spain, where cash and debt securities represent a larger proportion of the stock of households' financial assets. Note also that the financial wealth of French households increased by half over the 2002-2012 period, less than in the Netherlands (74%) and the UK (68%), but more than in Germany (41%) or Italy (25%).

All in all, the exposure of French households' savings to the risk of principal loss, while broadly limited in terms of its amount, rose slightly in 2013 compared with the levels seen in 2011-2012. The increase in the proportion of unlisted shares and other equity interests in household wealth is not the only explanation for this. For one thing, the supply of structured products marketed to the general public surged once again in France in 2013, after two years of declining sales in 2011-2012. While they account for a small share of household financial wealth, these products require special attention from the AMF, given the low level of protection they offer (a full capital guarantee is not provided in over 80% of cases) and the often complicated arrangements for remuneration, which may be deferred, reduced or quite simply cancelled. It is thus vital for investors to be properly informed and aware not only of the advertised return, but also of the risks associated with holding such products.

Furthermore, the investment opportunities offered to households in 2013 featured a large increase not only in miscellaneous assets and more unusual investments, such as wine, art, books and manuscripts, but also the promotion of virtual currencies, of which Bitcoin was probably the most widespread. These virtual currencies, which are not true currencies insofar as they are not legal tender, pose numerous risks to households that might be tempted by the chance to diversify their investments and by the powerful lure of technology. These risks include counterparty risk (non-repayment of an asset or exposure to large swings in the prices of virtual currencies), tax risk (connected with laundering or illegal activities) and the risk of piracy, since trading venues and servers are not subject to prudential regulations. Operational, capital loss and fraud risks are extremely high for investors tempted by such risky investments.

Enhanced supervision of systemic financial institutions at European level

These recent trends, which could have a lasting influence on individuals' investment choices, strengthen the AMF in its resolve to ensure that published disclosures are of a high calibre. Following reforms for credit rating agencies and the gradual establishment of trade repositories for derivatives, two categories of participants placed under ESMA supervision, accounting and auditing are two areas where Europe should show its determination to promote intelligible information that is not unnecessarily complicated and gives a true and fair view of economic transactions. On this point, the lack of convergence between European and US accounting standards is regrettable, making it harder for the general public to compare information published on both sides of the Atlantic without distortions. Conversely, the asset quality review undertaken by the ECB in the lead-up to the introduction of the single supervisory mechanism (SSM) is a historic development that should be hailed as such. The aim is to standardise regulation in an area where the financial crisis exposed the scale of progress still to be made, namely convergence in the models used to supervise prudential rules for banks.

Thus, insofar as the SSM, in coordination with the relevant market authorities, succeeds in convincing investors that a more effective supervisory and, ultimately, resolution framework is taking shape in Europe, considerable progress will have been made in containing systemic risk. With this in mind, the AMF, which is participating actively in macroprudential bodies both within Europe through the European Systemic Risk Board (ESRB) since it was set up in early 2011, and domestically through the High Council for Financial Stability (HCSF), which met for the first time in June 2014, plans to strengthen its analytical capabilities and step up efforts to ensure early detection of new risks falling within its remit.

The level of interest rates continues to pose major challenges for asset management

Although there were no truly new developments in 2014, the future of asset management continues to warrant the regulator's full attention. Across all the main geographical regions, in 2013 total assets under management continued the rebound that began in 2012, with net new money tripling in Europe. But inflows were virtually unchanged in France, with total assets expanding by a mere 0.5%, chiefly because French management is comparatively more exposed to fixed income products and under-exposed to equities. Accordingly, despite the creation of new products and range adjustments, persistently low interest rates hamper the ability of money market funds to generate positive performances. This then leads to large-scale redemption requests from investors and affects the contribution that these funds make to economic financing, particularly for euro area banks and governments.

By contrast, the launch of a new tax mechanism based on equity savings plans devoted to financing small and mid-sized firms was accompanied in late 2013 by large inflows of new money. Meanwhile, some management companies used securitisation, loan management and specialisation strategies, focusing on segments such as property and private equity, to seize development opportunities and avoid the drag placed on the profitability of asset management companies by the current level of interest rates.

Risks identified so far

Compared with the levels of mid-2013, the risks identified by the AMF to financial stability, market organisation and functioning, and financing of the economy were stable overall through to the summer of 2014. However, it may be assumed that with the deepening of regulatory reforms in many geographical areas, the question of the convergence of these

advances and their coordinated application now has even greater importance, particularly with a view to preventing regulatory competition and arbitrage. Meanwhile, from a systemic viewpoint, that is, in terms of potential threats to financial market stability, the risks identified by the AMF in the following table remain high in most cases.

Looking ahead to 2015, overall, these risks are not expected to change significantly in terms of their nature or level. However, it is clear that the three challenges represented respectively by interest rates, fiscal and monetary policy coordination, and the establishment of the SSM for European banks should be a central focus of attention for the public authorities, given their decisive bearing on financial markets.

Summary of the main risks identified by the AMF as of mid-2014

	Risk description	Level mid-2014	Change 2014-2013	2015 outlook
Financial stability	1. Faster-than-expected increase in long-term interest rates or risk premia, adversely affecting firms carrying debt or assets whose prices do not reflect their fundamentals and could be abruptly corrected	High	→	↗
	2. Financial stress fuelled by a lack of coordination in fiscal consolidation, phase-out of unconventional monetary policies or the adjustments stemming from the introduction of the single supervisory mechanism for banks	High	→	→
	3. Lack of resilience among financial institutions exposed to a systemic shock, subsequently transmitted to other participants (banks, insurers, funds, infrastructures)	High	→	↘
Market organisation and operation	4. Sudden swings in liquidity conditions within fragmented markets, which are insufficiently transparent and characterised by the rise of high-frequency trading	High	→	↘
	5. Increased need for high-quality collateral, with the risk of poorly managed reuse and transformation in the face of potential local shortages of collateral in times of stress	High	→	→
	6. Reorganisation of stock exchanges and consolidation of firms in the securities chain, promoting the creation of oligopolies that could raise conflicts of interest with respect to end investors	Significant	→	↗
Financing of the economy	7. Situation of financial institutions faced with still-fragile economic conditions, tougher prudential requirements and/or whose lack of coordination encourages regulatory arbitrage	High	↗	→
	6. Companies, especially smaller ones, find it hard to access markets in a setting where alternative financing approaches such as securitisation, debt funds, crowdfunding and private equity remain underdeveloped	Significant	→	↘
	7. Lack of protection for investors in the event of misinformation about the risks associated with certain investments, such as structured products, miscellaneous assets, online trading and virtual currencies	Significant	→	→
		Systemic		
		High		
		Significant		
		↘	Lower	
		→	Unchanged	
		↗	Higher	

The risks identified by the AMF reflect a situation of contrasts in summer 2014. Relative to summer 2013, the risks to financial stability continue to dominate and none of these key risks declined notably over the year. Looking ahead to 2015, however, the effects of the level of long-term interest rates and the organisation of financial markets in Europe will be major areas of focus for the regulator.

This risk analysis supports the AMF's choices in terms of the priority action areas that it plans to continue or begin working on in the short or medium term. The AMF's work, which is conducted under the authority of its Board, will also involve, where appropriate, the AMF Scientific Advisory Board, which was relaunched in early 2014, and the Risk Committee, which brings together the AMF directorates responsible for risk analysis and monitoring every quarter.

AMF actions

The strategic plan published by the AMF in November 2013 picked out three areas that will guide the regulator's action over the 2013-2016 period, including in terms of risk prevention and management, namely to strive to achieve transparent, safe markets in Europe, to restore investor confidence and to bolster the financing of the economy.

On the first of these points, the application in France of MiFID II and EMIR will anchor the AMF's efforts, underpinning the broad principles of the reform of the organisation of European markets, including derivative markets. Accordingly, the AMF is actively involved in discussing and drafting the Level 2 regulatory texts, i.e. the technical standards (*Regulatory Technical Standards and Implementing Technical Standards*) that ESMA is required to draft following a round of public consultations and hearings, along with the technical advice that ESMA will provide to the European Commission with a view to enabling the latter to adopt delegated acts. The AMF plans to promote more transparent trading venues, better regulation of HFT and central clearing of eligible derivative products that meet enhanced risk management criteria, to ensure that liquidity is continually maintained on financial markets, even in stressed situations.

Meanwhile, the AMF intends to help to restore investor confidence in financial markets through a variety of measures. It will cooperate in establishing a new institutional framework for bank supervision in Europe, working closely with market authorities and the bodies with responsibility for macroprudential supervision (ESRB and HCSF). Within CPSS-IOSCO and under the auspices of the FSB, the AMF will be involved in defining consistent principles for the recovery and resolution of systemic institutions, including insurance companies, but potentially also market infrastructures and other institutions that are currently considered to be part of the shadow banking sector. And it will be part of the reforms by the European Commission on benchmarks, which the Libor scandal in particular has called into question, and on money market funds, which should be able, through liquidity risk management and reduced reliance on credit ratings, to ensure appropriate valuation of assets and cope with client runs.

In terms of financing the economy, the AMF's actions will seek to promote the resumption of orderly securitisation, i.e. based on precise information on the quality of underlying assets, so that they may be used within the framework of the rules set down for obtaining ECB refinancing. Another focus will be relaxing the framework for alternative financing approaches, such as crowdfunding and loan management, while at the same time making them safer. In addition, the AMF will work to ensure proper introduction of the new UCITS V Directive, which is scheduled to come into force in 2016 and which is expected to enhance risk surveillance, depositary liability and sanctions for non-compliance, in keeping with the spirit of the Alternative Investment Fund Managers Directive for alternative funds. Finally, the AMF has shown, for example by boosting the resources earmarked for small and medium-sized businesses and by suggesting avenues of discussion to the Paris Marketplace Committee 2020, that it intends to remain anchored at national, European and international levels so that it can act with even greater effectiveness.

CHAPTER 1: MARKET TRENDS AND FINANCING

Brightening economic prospects and highly accommodative monetary policies provided powerful support for financial markets in most developed countries from the beginning of 2013 onwards. The improvement in the financial environment was especially noticeable in the euro area, where the easing of pressures generated by the sovereign crisis was a boon for peripheral countries and created favourable conditions for an upturn on many market segments, including initial public offerings (IPOs), mergers and acquisitions. Conversely, against a broadly less supportive economic backdrop, emerging markets were adversely affected by expectations that the USA would phase out its quantitative easing policy. In general, continued record low interest rates and ongoing regulatory reforms, particularly on the prudential front, shaped the financing and investment behaviour of economic agents, in some cases prompting the emergence or development of innovative products.

1.1. Credit risk perception improved in Europe

In 2013, the main central banks in developed countries continued to pursue accommodative monetary policies, holding policy rates at record low levels, providing forward guidance on long-term interest rates and, in some cases (US Federal Reserve, Bank of Japan - Figure 1), pursuing quantitative easing policies.

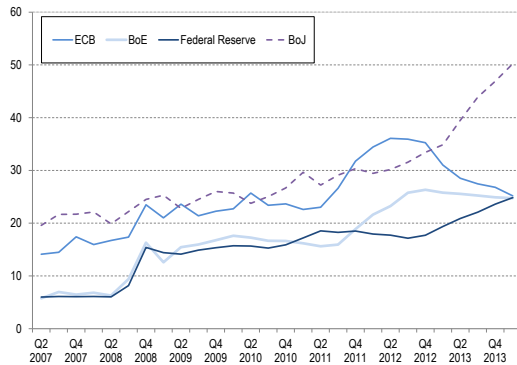
However, US bond yields began trending upwards in late May 2013 after the Fed said that it was planning to taper its asset purchases if the economic recovery took hold. The markets immediately interpreted this announcement as heralding the phase-out of the third quantitative easing (QE3) programme. Emerging, German and UK bond yields also went up following the news. This trend continued until the autumn, amid pressures linked to a new fiscal cliff, which resulted in a US government shutdown in October. In the end, the QE3 phase-out announcement came at the end of 2013 and has so far had a limited impact, since the markets had already priced it in. Between end-2012 and end-May 2014, US ten-year yields climbed 80 basis points, rising from 1.7% to 2.5% (after peaking at 3% in late 2013).

In Europe, sovereign risk and its interactions with bank risk remained at the heart of problems on the credit market until the early months of 2013. This pressure then eased over the remainder of the year, notably owing to decisive institutional progress towards the banking union with adoption of the single supervisory mechanism (SSM) and the single resolution mechanism (SRM).

Other factors, such as the improved economic situation of peripheral countries, reduced bank financing needs¹ and non-activation of the Outright Monetary Transactions (OMT) programme, also helped to reduce risk perception in Europe and encouraged investors to once again buy sovereign bonds at the expense of emerging markets, which were faced with a macro-financial downturn caused by economic cooling, structural imbalances and the expected US tapering.

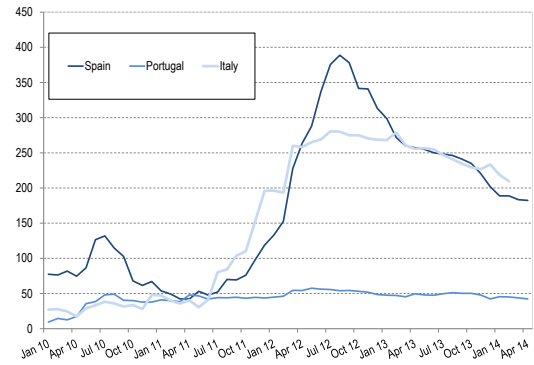
¹ Notably for Spanish banks, which were the main beneficiaries of the two Very Long-Term Refinancing Operations (VLTROs) set up by the ECB in late 2011 and early 2012.

Figure 1: Central bank balance sheets (% of GDP)



Source: Thomson Reuters Datastream, AMF calculations.

Figure 2: ECB financing for European banks by country of origin (EUR billion)

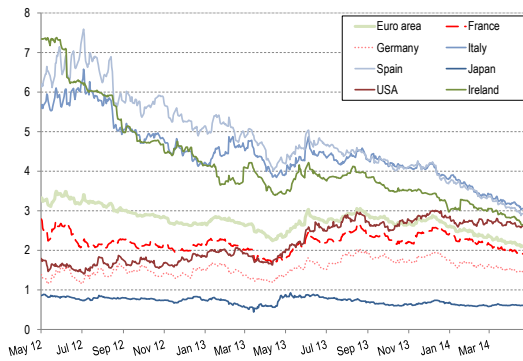


Sources: AMF, Thomson Reuters Datastream. Last updated 09/05/2014

Financing costs declined for non-financial agents

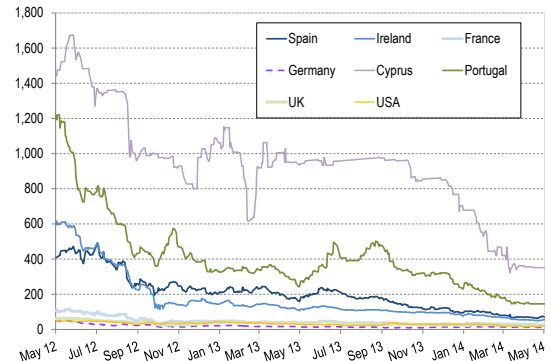
As a result, government bond yields and sovereign CDS premia in Europe fell significantly in peripheral countries, particularly Greece, Portugal and Spain (Figures 3 and 4). Between the end of 2012 and the end of May 2014, government bond yields in these three countries fell by 550, 293 and 223 basis points (bps) respectively, causing spreads between core and peripheral countries to narrow considerably. By mid-May 2014, yields on ten-year Greek government bonds were 500 bps over a German Bund of the same maturity, as compared with around 1,100 bps at the end of 2012.

Figure 3: Government bond yields (%)



Sources: AMF, Thomson Reuters Datastream. Last updated 22/05/2014

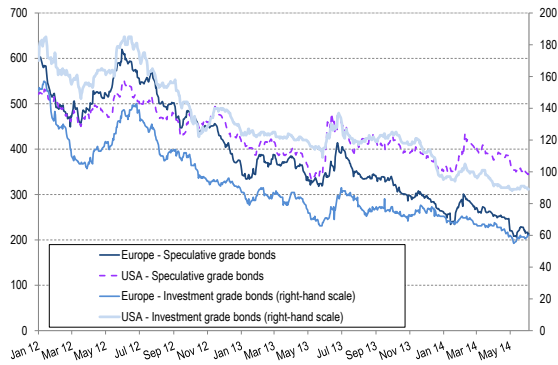
Figure 4: Five-year sovereign CDS premia in Europe (basis points)



Sources: AMF, Thomson Reuters Datastream. Last updated 22/05/2014

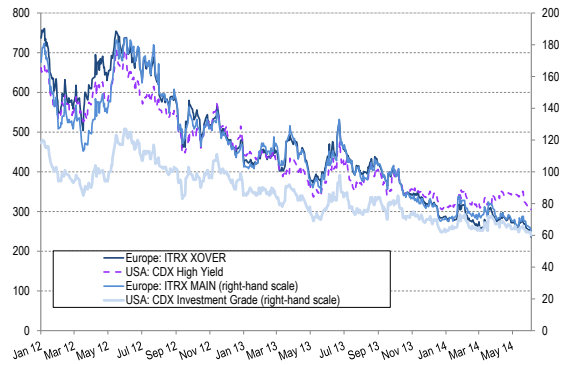
Corporate issuers also enjoyed improved funding conditions in Europe (Figure 5 and Figure 6). The iTraxx Europe Crossover index, which reflects the cost of protection against the risk of default by high-risk companies, fell by 230 basis points between end-2012 and end-May 2014. Remarkably, despite the pressure on US government bonds, the cost of corporate bond issues continued to improve overall in the USA, including for firms rated investment grade.

Figure 5: Change in cost of European and US bond issues by rating category (basis points)



Sources: AMF, Bloomberg. Last updated 30/05/2014

Figure 6: CDS indices, European and US corporate issuers (basis points)

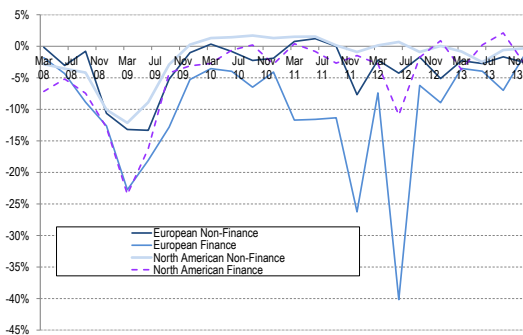


Sources: AMF, Bloomberg. Last updated 30/05/2014

In Europe, credit risk perception improved in the financial sector

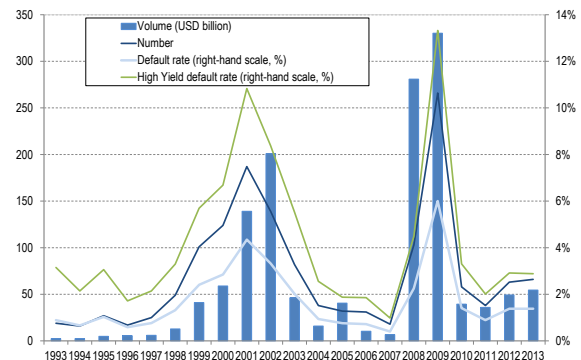
As firms saw their economic and financial environment improve, creditworthiness firmed generally, and especially in the European financial sector, in connection with easing sovereign risk and the ongoing reorganisation of the banking system (Figure 7). In the non-financial sector, credit quality remained stable. In particular, in the USA, over 2013 the number of credit rating upgrades was the same as the number of downgrades, while default rates remained low, including in the speculative grade category (Figure 8).

Figure 7: Difference between credit rating upgrades and downgrades (% rating drift)



Sources: AMF, Moody's.

Figure 8: Corporate defaults



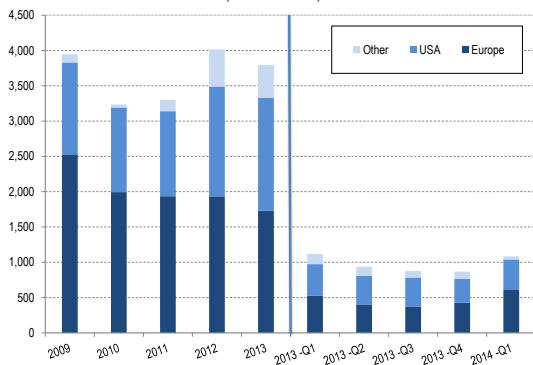
Sources: AMF, Moody's.

Primary market activity slowed overall

Although still vigorous, corporate bond issuance was down compared with end-2012. Total global issuance in the 12 months to the end of Q1 2014 was close to USD 3.8 trillion, down 5% compared with the same period in the previous year (Figure 9). However, this overall figure masked pronounced geographical and sector disparities.

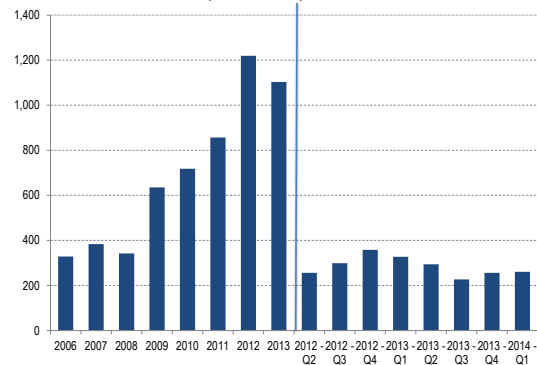
US issuance remained sustained, increasing 5% in 2013 over one year, including among low-risk investment grade issuers, even though their funding conditions were relatively less favourable than they had been previously. Activity was less brisk in other geographical areas. For example, issuance contracted markedly in Europe, shrinking by 11% year-on-year in 2013, before firming noticeably in the early months of 2014. In emerging markets, although the broadly less supportive macro-financial environment certainly had an adverse impact in 2003, issuance nevertheless remained at high levels, exceeding USD 1.1 trillion (down 10% compared with 2012-Figure 10).

Figure 9: Global corporate bond issuance (USD billion)



Sources: AMF, Bloomberg.

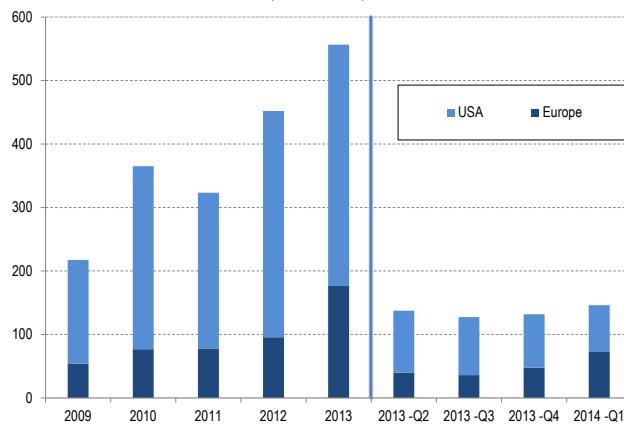
Figure 10: Debt securities issuance in emerging countries (USD billion)



Sources: AMF, Bloomberg.

Continued record low interest rates and the difficulties encountered by some emerging countries lent strong support to high-risk bonds, which, as in 2012, were highly sought after, particularly in Europe, where issuance virtually doubled in 2013 to EUR 180 billion, with this trend continuing in early 2014 (Figure 11).

Figure 11: Issues of high-risk debt securities in the USA and Europe (USD billion)



Sources: AMF, Bloomberg.

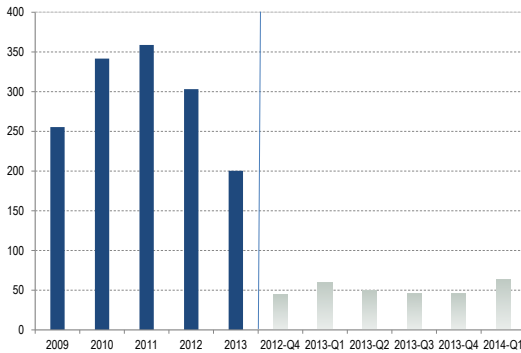
Sector-wise, the European bond market downturn in 2013 primarily reflected trends within the banking sector. Continuing their drive to cut debt and restore balance to funding sources, European banks made less use of bond markets to obtain financing, which resulted in a decrease in net issuance (EUR 350 billion decline for the euro area as a whole, of which EUR 50 billion for France).

Issuance of covered bonds continued to decline

In particular, issuance of covered bonds contracted in 2013 to EUR 200 billion, or a third less than in 2012 (Figure 12). It is true that since 2011, much of the value of covered bonds as a refinancing tool for banks has been removed by the discontinuation of the ECB's purchase programmes² and implementation of the two LTROs, improved costs notwithstanding (Figure 13). In early 2013, some issuers such as Commerzbank attempted to give these products fresh appeal by diversifying the underlying assets beyond public and property loans, but failed to start off a new trend. In the end, global outstanding covered bonds fell for the first time in a decade, decreasing to EUR 2.5 trillion.

² Covered Bond Purchase Programmes CPB1 and CPB2.

Figure 12: European covered bond issues
(EUR billion)



Sources: AMF, Bloomberg.

Figure 13: Iboxx Euro Covered 1-10 years
(%)



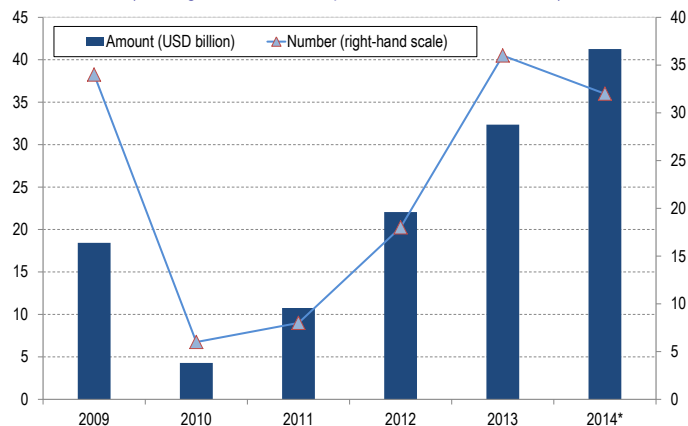
Sources: AMF, Thomson Reuters Datastream. Last updated 14/05/2014

This trend could change in response to regulatory developments in Europe, which may generate more interest in these instruments for investment but especially financing purposes. The European Banking Recovery and Resolution Directive (BRRD), for example, excludes these instruments from bail-ins. Meanwhile, CRD IV treats covered bonds favourably overall in terms of short-term liquidity ratio requirements, particularly as compared with securitisation products. The growing transparency of this market segment could also help to boost activity.

Banks' capital requirements support the issuance of hybrid securities such as CoCos in Europe

By contrast, issues of contingent convertible bonds (CoCos) were extremely vigorous. In 2013, CoCo issuance totalled close to USD 30 billion, which is small compared with total bond issuance, but these issues have been growing strongly and steadily since 2011 (Figure 14). In a low interest rate setting, CoCos, which offer high interest – generally between 6% and 9% – are an appealing option for investors hunting for returns. However, CoCos are riskier than conventional bonds, and creditors have to play a bigger role if the issuer runs into serious financial difficulty. For issuer banks, which are mostly in Europe and Asia to a lesser degree, CoCos offer a way to bolster regulatory capital, because under Basel III they can be included in Tier 2 capital or additional Tier 1 capital. In most issues in 2013 and early 2014, which were mainly attributable to European banks but also to Asian institutions to a lesser degree, the securities are written down if the bank's Tier 1 ratio falls below a predetermined level.

Figure 14: Global issuance of CoCos
(Contingent convertible capital instruments, USD billion)



Sources: AMF, Bloomberg. Note*: Data at 22/05/2014

The features of CoCos may vary considerably depending on the types of clauses used (automatic or discretionary; triggered at the initiative of the bank or the supervisor), the trigger level (high or low), the complexity of the trigger clause and the loss absorption mechanism (conversion of bonds to shares or haircut and/or coupon payment postponed)³. This diversity, which has increased with the rise of the market segment⁴, reflects the adaptability of CoCos and their capacity to act as a bespoke tool. At the same time, this lack of uniformity could hinder proper understanding of products or lead to conflicts of interest between creditors and shareholders (who are in principle first in line to absorb losses), and thus might also be a major obstacle to development and should at any rate continue to receive the regulator's attention. For example, CoCos that are convertible into shares required special vigilance on the part of regulatory authorities, especially when the holders of these securities are arbitrageurs or short-term investors more generally. In this case, there is a risk of disruptive self-fulfilling expectations (expectations of conversion cause the price of shares to fall, undermining the position of the bank and ultimately leading to conversion of the securities). Similarly, if the trigger level is set too low, the bank's position could already be so degraded that its capital structure is insufficient to allow it to remain in business. In other words, CoCos are not necessarily an appropriate tool to strengthen the financial resilience of an issuing bank and could actually weaken institutions in situations of high stress.

Alternative financing approaches to bank credit continued to develop in France

Meanwhile, bond issues by private enterprises revealed contrasting trends by geographical region in 2013. Issuance was sustained overall in 2013 in the USA, with a slight increase (2% year-on-year) to more than USD 610 billion. In France, too, recourse to bond debt increased by 7% among private enterprises, including SMEs, which benefited from several initiatives in 2012, including the creation of dedicated bond funds, such as the Micado 2018 fund, and the development of the Euro PP market⁵. Alongside bond financing, other alternative financing approaches to bank credit, such as crowdfunding, continued to gain ground in 2013.

Box 1: Crowdfunding

At a time when small and mid-sized enterprises (SMEs) face many challenges in accessing traditional funding sources, crowdfunding has developed in the recent period, particularly online, emerging as a possible source of funding for these types of companies. It is however hard to obtain reliable figures on the growth of crowdfunding, bearing in mind that this approach is still far off the levels of financing provided by banks.

According to some estimates, the crowdfunding market in France grew from EUR 7.9 million in 2011 to more than EUR 78 million in 2013⁶. Globally, crowdfunding has increased swiftly, with over USD 5.1 billion raised in 2013⁷, compared with USD 1.1 billion in 2011.

1/ Crowdfunding: a generic term covering a variety of business models

Crowdfunding has no legal definition. The European Commission describes it as "an open call to the public to raise funds for a specific project"⁸. The funds, typically small amounts, are most often raised through the internet. The types of projects financed tend to be artistic, humanitarian, social or entrepreneurial, and often include a local dimension and/or uphold certain values. The more "affective" nature of this type of financing sets it apart from more traditional approaches.

Crowdfunding is a generic term that encompasses various types of funding associated with different

³ Avdjiev *et alii* (2013): "CoCos: a primer", Bank for International Settlements Quarterly Review, September.

⁴ For a comparative analysis of the features of recent issues, see for example Boulad-Traversini *et alii* (2014): "Additional Tier 1 Contingent Capital: Securities Have Common Features, but Structural Differences Pose Degrees of Credit Risk to Investors", Moody's Investors Services, February.

⁵ See Anne Demartini (2013): "What share does private placement occupy in bond issuance by French companies?", AMF Economic and Financial Newsletter No. 4.

⁶ 2013 survey of crowdfunding in France by Compinnov in partnership with Financement Participatif France.

⁷ *Crowdfunding Industry Report*. Massolution. June 2013.

⁸ *Unleashing the potential of crowdfunding in the European Union*. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 27 March 2014.

business models and risks. It is customary to differentiate two main categories. First, donation-based, reward-based and pre-sales systems, which involve no financial return. Second, lending (with or without interest) and profit-sharing schemes, which may generate a return on the investment. Since this second type is the riskiest for investors, regulators (ACPR and AMF) began analysing the risks and rewards related to crowdfunding in 2011.

2/ Huge development potential

While according to a study published by IOSCO⁹ crowdfunding does not pose a systemic risk, it nevertheless raises a number of concerns. In this regard, regulators view the crowd investing market as especially risky¹⁰. Because this market is not liquid – the shares issued by financial entities are not tradable on a secondary market – there is considerable risk of capital dilution, and the medium-term failure rate is high among crowdfunded companies.

Even so, crowdfunding could have major effects, particularly in terms of job creation, research and innovation. It could help to marshal funds for long-term investment, which is a pre-requisite for sustainable growth.

This channel is also a growing source of financing for start-ups and SMEs and could become an alternative to the more conventional funding channels, particularly bank lending, on which SMEs remain heavily reliant.

The European Commission has pointed out that the limited scope of crowdfunding means that it cannot satisfy all SME financing needs. But crowdfunding could provide a new link in the financing chain. It addresses financing needs that cannot be met by conventional providers of financing because of their aversion to start-up risks.

As well as providing an alternative to bank financing, crowdfunding could also supplement bank lending. Banks are beginning to play an increasingly active part in crowdfunding projects, offering co-financing arrangements or partnerships with platforms.

3/ France is establishing a regulatory framework to promote the development of crowdfunding

Given the risks and rewards, France's policymakers and regulators are adopting proportionate regulations to strike a balance between the development of crowdfunding and investor protection.

Crowdfunding is covered by a variety of banking and financial regulations. To clarify which current regulations apply and reduce legal uncertainty, the ACPR and the AMF published two guides in May 2013, for funding platforms and project owners and for the general public respectively.

Because the existing regulatory framework was too restrictive, however, inaction by the authorities could have hindered the development of crowdfunding. Accordingly, in February 2014, following a public consultation, the ACPR, AMF and the Ministry for the Economy and Finance proposed a special framework to support crowdfunding while still ensuring investor protection, making France a trailblazer in crowdfunding regulation¹¹. Executive Order 2014-559 of 30 May 2014 on crowdfunding comes into force on 1 October 2014.

Among the main reforms, simplified joint-stock companies will be allowed to offer financial securities to the public exclusively through crowdfunding platforms. To ease the regulatory burden on issuers, the threshold for a prospectus exemption (in the event of an offer involving more than one-half of the capital) was raised from EUR 100,000 to EUR 1,000,000.

Two specific statuses have been created for crowdfunding platforms and may be combined, namely crowdfunding adviser (CIP) for crowd investing and crowdfunding intermediary (IFP) for lending. These offer considerable flexibility to crowdfunding platforms, which undertake in return to comply with disclosure obligations on risks, costs and the main attributes of issuers. For the platforms, the CIP and IFP statuses are a preliminary stage prior to the status of investment services provider, which is eligible for a European passport.

4/ Crowdfunding in Europe

In June 2013, the European Commission organised a workshop (*Crowdfunding: Untapping its potential, reducing the risks*) that laid the foundations for discussing this new financing approach. After holding a public consultation entitled *Crowdfunding in the EU – Exploring the added value of potential EU action*¹² at end-2013, the European Commission published a communication on 27 March 2014 – *Unleashing the potential of crowdfunding in the European Union* – in which it described a series of measures, including exploratory studies and the possibility of establishing a European quality label to promote crowdfunding and raise awareness among stakeholders.

⁹ *Crowdfunding: An Infant Industry Growing Fast*. IOSCO. 5 February 2014.

¹⁰ *Responses to the public consultation on crowdfunding in the EU*. European Commission, March 2014.

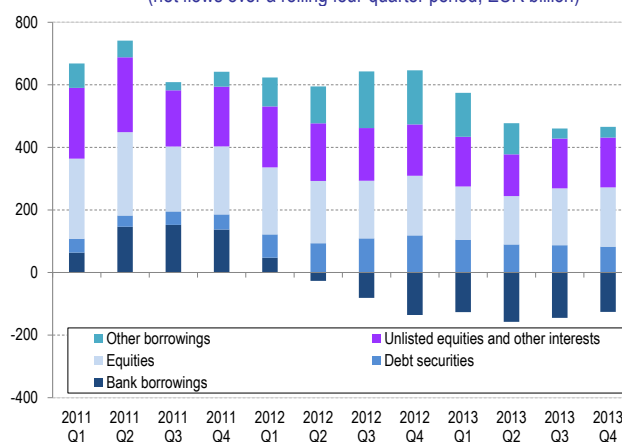
¹¹ *Un nouveau cadre pour faciliter le développement du financement participatif*. ACPR-AMF-Ministry for the Economy and Finance, 30 September 2013.

¹² http://ec.europa.eu/internal_market/consultations/2013/crowdfunding/index_en.html

A number of countries, including Italy, the UK, the USA, Canada and Spain, have already created or are about to create a regulatory framework for crowdfunding. In Europe, the wide variety of approaches to the treatment of crowdfunding creates legal uncertainty and increases the risk of gradual fragmentation of the internal market, prompting the European Commission to consider the merits of a harmonised regulatory framework¹³. One of the main challenges in the medium term will therefore be to promote the cross-border provision of services by crowdfunding platforms within Europe.

Conversely, in the euro area, bond issuance by private non-financial companies slowed markedly. More generally, European companies appeared to continue their drive to reduce debt in 2013 (Figure 15).

Figure 15: Funding for companies in the euro area
(net flows over a rolling four-quarter period, EUR billion)



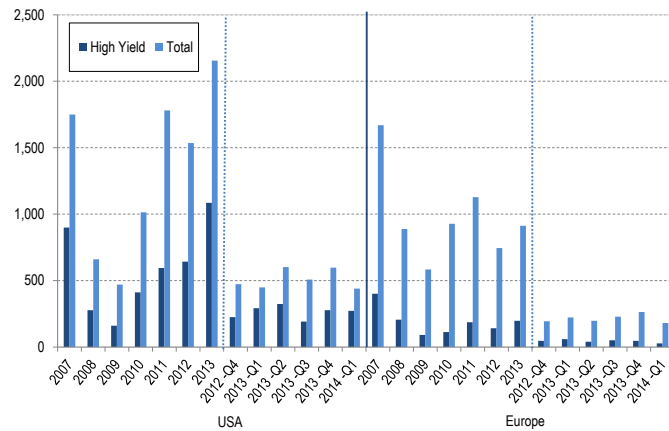
Sources: AMF, ECB.

Syndicated loans rebounded sharply in Europe and the USA

Meanwhile, business on the syndicated loans market rebounded sharply, in connection with low financing costs and the economic upturn in 2013. In the USA, lending was close to USD 2.2 trillion in 2013 (up 40% compared with 2012) and remained vigorous in early 2014, with cumulative 12-month volumes up more than 30%. Europe saw a comparable trend, albeit of lesser magnitude, although the increase tailed off considerably in the early months of 2014: after contracting by more than 30% in 2012, loans jumped 23% in 2013, while cumulative volumes in the 12 months to the end of Q1 2014 rose by 7% compared with the same period in the previous year. The high yield segment was especially busy in Europe (40% increase in 2013), accounting for one-fifth of the market (compared with one-half in the USA).

¹³ *Unleashing the potential of crowdfunding in the European Union*. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 27 March 2014.

Figure 16: Syndicated loans in Europe and the USA
(USD billion)

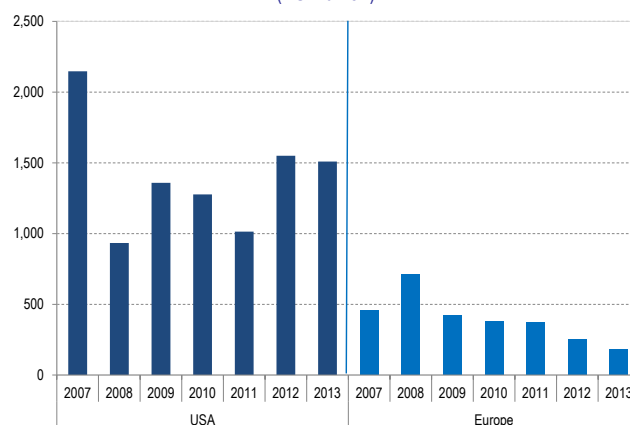


Sources: AMF, Bloomberg.

1.2. The securitisation market is struggling to recover, particularly in Europe

Although securitisation products had continued appeal for investors on the hunt for returns, the market was depressed in 2013. Reflecting the economic slowdown, US issuance contracted by 2.7% over the year to EUR 1.51 trillion, albeit after rebounding by more than 50% in 2012 (Figure 17). This outcome was primarily driven by a pronounced decrease in issues of mortgage-backed securities (MBS) guaranteed by federal agencies (down 7% to around USD 1.24 trillion), which had grown strongly in 2012. The non-guaranteed MBS and CDO segments firmed markedly, although the volumes involved were relatively small (about USD 60 billion in total). This situation could change as the economic climate brightens, household consumption holds up and the property market recovers.

Figure 17: Issuance by securitisation vehicles in Europe and the USA
(EUR billion)

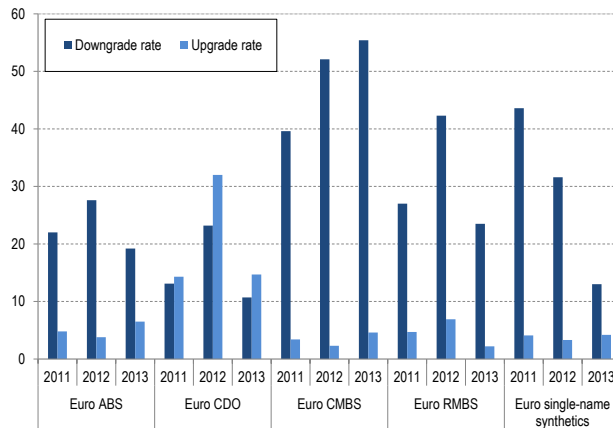


Sources: AMF, AFME.

In Europe, although the recession ended in summer 2013 and despite a significant improvement in credit quality across virtually all market segments except CMBS (Figure 18), issuance of structured finance products was flat, actually falling below the EUR 200 billion mark for the first time in a decade. This situation reflects the depressed state of the European credit market, but also regulatory factors, which continue to put securitisation

products at a relative disadvantage compared with other debt instruments, notwithstanding measures to relax the rules, notably as part of the implementation of Solvency II for insurance companies and, in the case of banks, the liquidity coverage ratio (LCR).

Figure 18: Rating migration rates in the EMEA region by asset class (%)



Sources: AMF, Standard & Poor's.

Developments in proposed prudential regulations

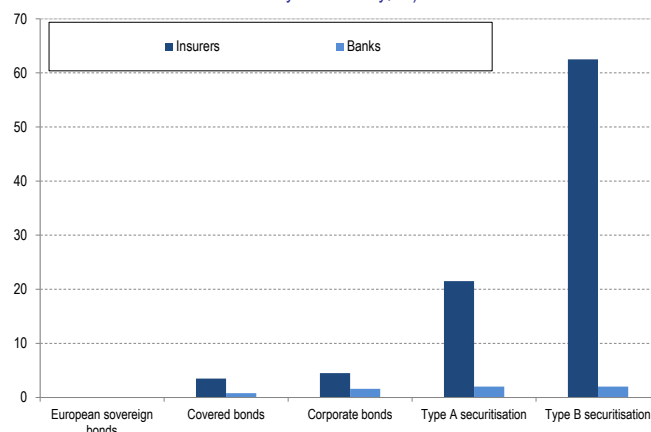
In a communication to the European Parliament and Council at the end of March 2014, the European Commission stressed the need to correct the undesirable effects of regulations on long-term investments, focusing particularly on the treatment of securitisation. The Commission said that when formulating the Delegated Acts for Solvency II, it would take into account the recommendations put forward by the European Insurance and Occupational Pensions Authority (EIOPA)¹⁴ at the Commission's request in a report published at end-2013¹⁵. In this report, EIOPA proposed measures to support the development of securitisation that would promote growth within an appropriate and secure regulatory framework. Investments in products meeting this objective would thus be subject to reduced capital requirements¹⁶. But despite these modifications, securitisation products, including the least risky ones, could be the subject of regulatory arbitrage because they would still carry far heavier capital charges than those applicable to other debt products, and also because insurers are subject to more onerous requirements than banks across all products. According to estimates by Standard & Poor's, the capital requirements for an AAA-rated debt instrument maturing in five years would be around five times higher for a Type A (optimal) securitisation compared with a corporate bond.

¹⁴ Communication from the Commission to the European Parliament and Council on long-term financing of the European economy, 27/03/2014.

¹⁵ *Technical Report on Standard Formula Design and Calibration for Certain Long Term Investments*, 19/12/2013

¹⁶ As defined by EIOPA, an optimal securitisation is a product that meets a number of criteria, some of which are derived from the eligibility criteria used for ECB refinancing. These include, in addition to duration, rating and seniority, criteria relating to product structure, the quality of underlying assets and the level of market transparency. EIOPA proposes recalibrating the standardised capital requirements (as opposed to capital charges calculated using an internal model) intended to cover spread risk (i.e. sensitivity to variations affecting the level or volatility of credit spreads relative to the risk-free interest rate curve).

Figure 19: Estimated standardised capital charges on spread risk by product and investor type (AAA-rated product, five-year maturity, %)



Sources: AMF, Standard & Poor's, based on EIOPA specifications (December 2013), BIS (December 2013 consultation paper).

In the banking sector, the Basel Committee (BCBS) made substantive changes to the LCR in January 2014. This ratio requires banks to hold sufficient high-quality liquid assets (HQLA) to cope with a liquidity crisis for 30 days. Two main categories of HQLA (Level 1 and 2) were identified, with classification determining the haircut (smaller for Level 1) applied to instruments and the maximum authorised proportion of these assets in the bank's portfolio (higher for Level 1). In a noteworthy development, the new approach does not rule out the possibility that some securitisation products may be considered to be HQLA. However, unlike equivalently rated corporate bonds, no securitisation product may be counted as Level 1; the difference in treatment is attributable to the lower liquidity of securitisation products compared with other asset classes¹⁷. At the same time, the Committee published a consultation paper on changes to the net stable funding ratio (NSFR), which is designed to ensure that banks have sufficient sources of funding for a year. In particular, whereas under the previous draft, equivalent stable funding was required for securitisation instruments, this factor was lowered to 85% for non-HQLA securitised assets, and to 50% for HQLA. Even so, as with the LCR, the regulatory requirements are more demanding for securitised assets, which could discourage banks from holding them.

A number of initiatives have been undertaken to help the market to recover, including the launch in April 2014 of a common securitisation platform for the Paris financial centre to refinance small bank claims (particularly relating to SMEs). Called Euro Secured Notes Issuer (ESNI), the platform is actually a securitisation company within which each participating credit institution has its own independent compartment. ESNI has a number of specific features. First, securitisation is not deconsolidated: securitised claims stay on bank balance sheets (as covered bonds do). Second, although securities that are not intended for listing on a regulated market are not rated, securitised claims must nevertheless have a minimum credit quality, as measured by the Banque de France scoring system or banks' internal rating models. Securities are not divided into tranches.

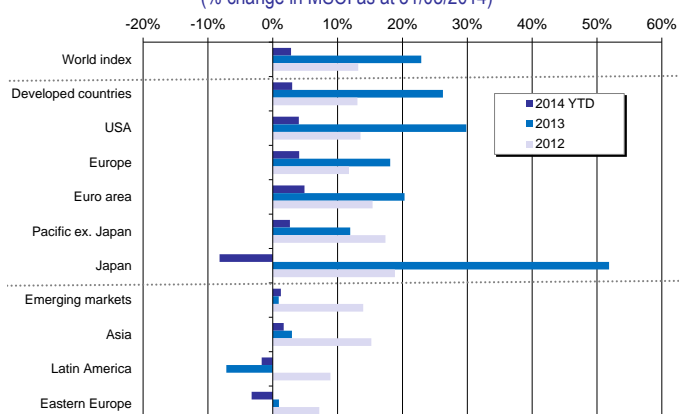
¹⁷ Report on appropriate uniform definition of extremely high-quality liquid assets (extremely HQLA) and high quality liquid assets (HQLA) and on operational requirements for liquid assets under Art 509(3) and (5) CRR, European Banking Authority, 20 December 2013.

1.3. Central bank interventions and economic conditions had a decisive impact on equity markets

A wide spread of stockmarket performances

Equity markets posted contrasting performances in 2013. Emerging countries were adversely affected overall by the weakness of global trade and the first steps towards monetary tightening in the USA. The MSCI emerging markets index rose by less than 1% in 2013 and over the first few months of 2014 (Figure 20). Yet markets were not uniformly affected: those that saw the largest falls were also those, such as Brazil, that had major structural imbalances and/or were most reliant on international capital.

Figure 20: Performance of key equity indices by geographical region
(% change in MSCI as at 31/05/2014)



Sources: AMF, Thomson Reuters Datastream.

Strong showing by developed markets

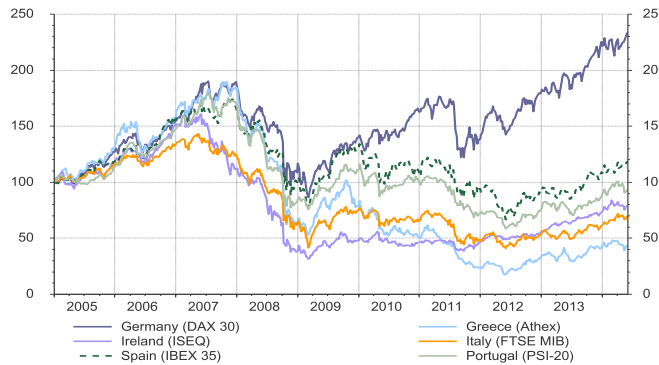
Conversely, an improved economic outlook in the USA, due in large part to strong domestic demand, and to a lesser extent in Europe, helped to restore confidence on equity markets on both sides of the Atlantic in 2013. Above all, and more generally, the continuation of accommodative monetary policies was powerful factor of support for equity markets in developed countries. The main US indices performed impressively in 2013 (29.6% increase for the S&P 500, 38.3% for the Nasdaq composite –Table 1), and the trend continued in early 2014, enabling the markets to reach record highs. Japan's ultra-accommodative monetary policy translated into massive purchases of government bonds by the central bank, leading investors to shift into other asset classes, led by equities. After rising by 23% in the previous year, the Nikkei soared by almost 57% in 2013, before easing back down in early 2014. Equities also did well in Europe, including in some peripheral euro area countries, such as Ireland, Spain and Greece, which were lifted by improving fundamentals and the repatriation of capital from emerging regions from the spring onwards as investors continued to search for returns (Figure 21). In some European countries, certain indices, such as the DAX 30 and FTSE 100, hit record levels at the beginning of 2014.

Table 1: Performance of key equity indices

	Value at 12-05-14	Ten-year high/date		Change		
				YTD 2014	2013	2012
DOW JONES INDUSTRIALS	16,695.5	16,695.5	12/05/14	0.7 %	26.5 %	7.3 %
S&P 500 COMPOSITE	1,896.7	1,896.7	12/05/14	2.6 %	29.6 %	13.4 %
NASDAQ COMPOSITE	4,143.9	4,358.0	05/03/14	-0.8 %	38.3 %	15.9 %
CAC 40	4,493.7	6,168.2	01/06/07	4.6 %	18.0 %	15.2 %
DAX 30	9,702.5	9,743.0	17/01/14	1.6 %	25.5 %	29.1 %
FTSE 100	6,851.8	6,865.9	24/02/14	1.5 %	14.4 %	5.8 %
FTSE MIB INDEX	21,493.7	44,364.4	18/05/07	13.3 %	16.6 %	7.8 %
EURO STOXX 50	3,207.0	4,557.6	16/07/07	3.2 %	17.9 %	13.8 %
NIKKEI 225	14,149.5	18,262.0	09/07/07	-13.1 %	56.7 %	22.9 %

Sources: AMF, Thomson Reuters Datastream.

Figure 21: Performance of equity indices in Germany and the main peripheral euro area countries (1 January 2005 = 100)

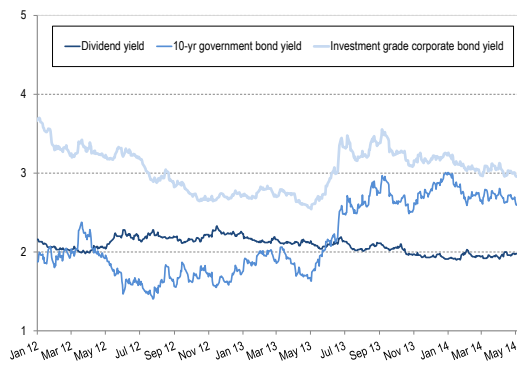


Sources: AMF, Thomson Reuters Datastream. Last updated 30/05/2014.

Capital gains from market performances combined with generous payouts for shareholders

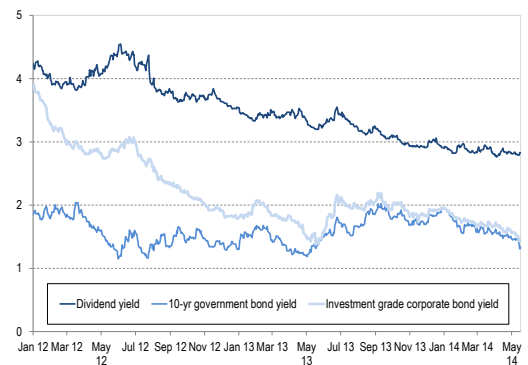
In addition to overall upbeat market performances, shareholders also continued to benefit from generous dividend policies in 2013. Dividend payouts were up by almost 3% worldwide, setting a record as they breached the USD 1 trillion mark, according to Henderson Global Investors. In the USA, dividend payments by S&P 500 companies totalled USD 330 billion, or 6% higher than in 2012. In France, total dividends paid by CAC 40 firms were virtually unchanged at USD 36 billion and were mostly paid in cash. However, the strong performance by equity markets meant that the dividend yield ratio continued to decline in 2013 in the USA, falling below government bond yields when the latter came under heavy pressure in the spring (Figure 22). In Europe, conversely, despite falling more steeply, dividend yields remained well above the yields on government bonds and investment grade corporate bonds throughout 2013 and in the first few months of 2014 (Figure 23).

Figure 22: Dividend yield, government bond yields and yields on investment grade corporate bonds in the USA... (%)



Sources: AMF, Bloomberg and Thomson Reuters Datastream. Last updated 16/05/2014.

Figure 23: ...and the euro area (%)



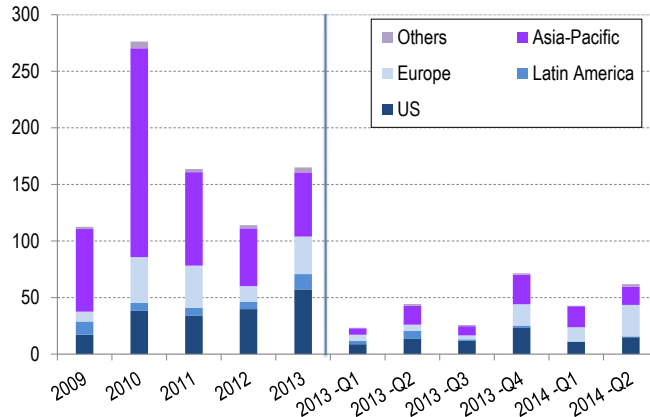
Sources: AMF, Bloomberg and Thomson Reuters Datastream. Last updated 16/05/2014.

As stock markets rebounded, listed companies also undertook massive share buybacks, totalling USD 477 billion for the S&P 500, the highest level since the start of the crisis and 23% more than in 2012, according to Factset. In France, gross share buybacks by CAC 40 firms rose by approximately 20% compared with 2012 to EUR 13.2 billion (source AMF).

The upturn in IPOs spread to all geographical regions

The upturn in initial public offerings (IPOs) that began in 2012 in the USA took hold in 2013, spreading gradually to all geographical areas. Over 2013 as a whole, funds raised worldwide through IPOs rose by 45% to USD 165 billion, with the trend carrying over into early 2014 (Figure 24).

Figure 24: Capital raised in IPOs, by geographical region (USD billion)

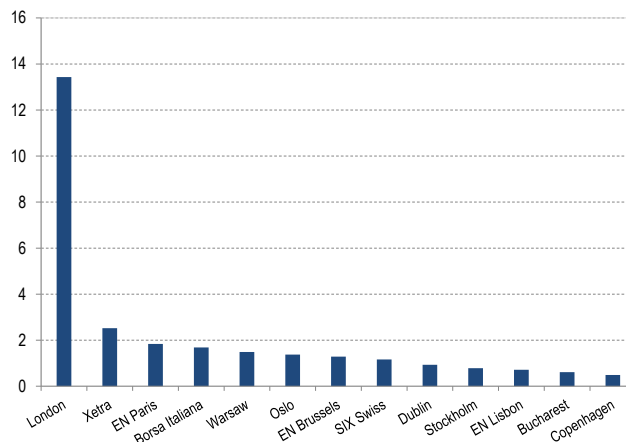


Sources: AMF, Bloomberg.

Remarkably, fund-raising remained sustained in Asia despite the Chinese IPO market shutdown between November 2012 and end-2013¹⁸. The Hong Kong, Tokyo and Thai markets, in particular, exerted strong appeal and topped the fund-raising rankings behind New York, taking second, fourth and sixth places respectively.

In Europe, IPO activity, which had been struggling to take off, rebounded sharply at end-2013. Over the year as a whole, the amount of capital raised more than doubled to over USD 30 billion, of which around half was raised in London (Figure 25). In Paris, the number of IPOs was more or less stable on Alternext (six in 2013, compared with five in 2012) and increased slightly on Euronext (around 15, after ten in 2012). Notably, the amount of capital raised in Paris surged to about EUR 1.4 billion in 2013 (compared with less than EUR 300 million in 2012) and had already increased to twice that amount (EUR 2.8 billion) in H1 2014.

Figure 25: Capital raised in European IPOs in 2013, by listing venue (USD billion)



Sources: AMF, Bloomberg.

¹⁸ The decision was taken to shut down the IPO market to prevent the Shanghai and Shenzhen financial markets from overheating and to implement measures to enhance the IPO process and the quality of listed companies.

Private equity firms were responsible for more than one-third of IPOs

As equity markets rose, private equity firms got the opportunity to take their assets to the markets, as illustrated by the Plains GP Holdings, Hilton and Twitter IPOs in the USA (Table 2) and the Numericable and Tarkett deals in France. All in all, private equity IPOs totalled close to USD 57 billion in 2013, accounting for more than one-third of all capital raised over the year. Market performances also go a long way to explaining the rebound in privatisations, which included the UK's Royal Mail.

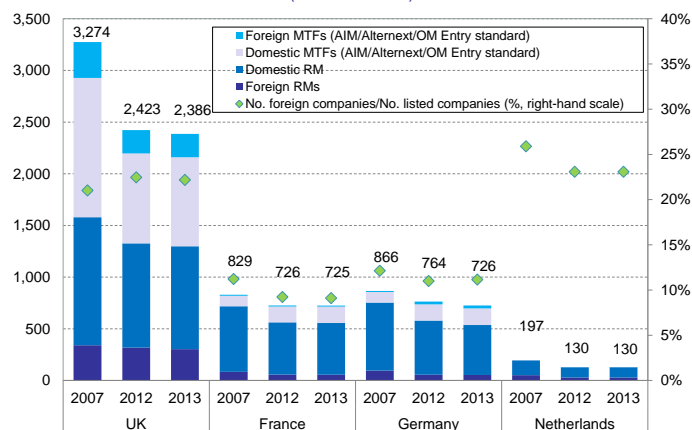
Table 2: Largest IPOs (01/01/2013 - 02/05/2014)

Date	Name	Amount (USD billion)	Country	Sector	Market
29/04/2013	BB Seguridade Participacoes	5.7	Brazil	Insurance	BM&FBOVESPA
24/06/2013	Suntory Beverage & Food Ltd	4.0	Japan	Food	Tokyo
22/01/2014	HK Electric Investments SS	3.1	Hong Kong	Utilities	Hong Kong
10/03/2014	Japan Display Inc.	3.1	Japan	Electronics	Tokyo
15/10/2013	Plains GP Holdings LP CLA	2.9	USA	Energy	New York
10/10/2013	Royal Mail Plc	2.7	UK	Transport	London
11/12/2013	Hilton Worldwide Holdings Inc	2.7	USA	Lodging	New York
05/12/2013	China Cinda Asset Management	2.7	China	Fin. services	Hong Kong
31/01/2013	Zoetis Inc	2.6	USA	Pharma	New York
05/04/2013	BTS Rail Mass Transit G Fund	2.1	Thailand	Transport	Bangkok
06/11/2013	Twitter Inc	2.1	USA	Internet	New York

Sources: AMF, Bloomberg. Note: IPOs in grey denote offerings involving private equity funds

At the same time, the number of delistings was down markedly: in Paris, there were 26 delistings excluding transfers in 2013 on Euronext and Alternext, compared with 48 in 2012, of which just two followed a failure. As a result, the contraction in the number of listed companies observed in Europe over recent years either slowed (Germany, UK), or stopped altogether, as in Paris and Amsterdam (Figure 26).

Figure 26: Number of listed companies (number and %)

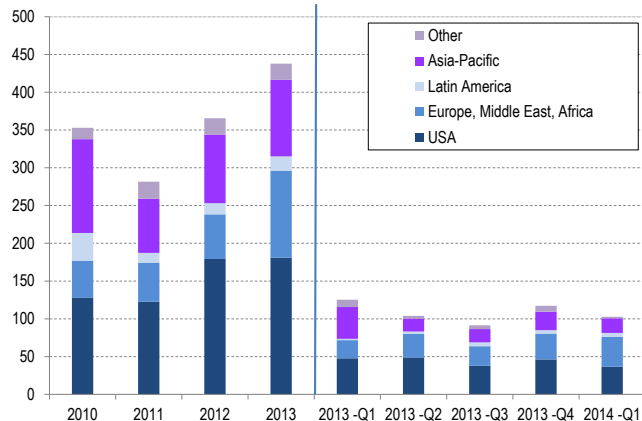


Sources: AMF, market undertakings.

The rebound in mergers and acquisitions provided strong support for share issuance

Share issuance by listed companies was also extremely high in 2013. Worldwide, new equity issues came to almost USD 440 billion in 2013, up 20% compared with 2012 (Figure 27). In Europe and France, the market was busy, as issuance doubled in 2013. In Paris, issuance totalled EUR 5.4 billion over the year as a whole (compared with EUR 2.6 billion in 2012) and EUR 2.4 billion in the first four months of 2014.

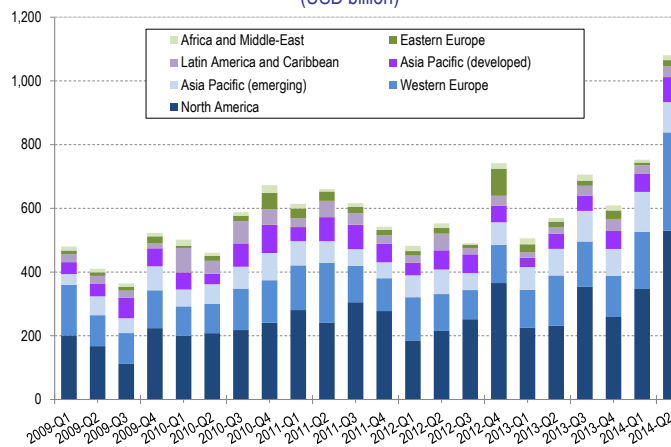
Figure 27: Worldwide share issuance by listed companies
(excl. IPOs, USD billion)



Sources: AMF, Bloomberg.

This trend is partly attributable to the upturn in mergers and acquisitions (M&A) in the second half of 2013, which was spurred by improving growth prospects in most developed countries and historically low financing costs. Global M&A activity was up 7% in 2013 to around USD 2.6 trillion, returning to pre-crisis levels (Figure 28), and business remained brisk in the first quarter of 2014, particularly in the USA. Large-scale deals made a comeback, including Verizon's takeover of Cellco in the USA for more than USD 130 billion.

Figure 28: Worldwide mergers and acquisitions
(USD billion)



Sources: AMF, Bloomberg.

There were also three cross-border deals involving at least one listed French company that ranked among the largest takeovers announced since the beginning of 2013, namely General Electric's offer of over USD 17 billion for Alstom's energy business, SFR's takeover of Altice for around USD 19 billion, and the USD 40 billion merger between Lafarge and Holcim. While this trend points to the attractiveness of large listed French groups, it also carries a risk that the new entities created by these deals could move their listing and/or headquarters¹⁹. This was the case for seven deals in the first five months of 2014, or almost the same number as over 2013 as a whole. Conversely, listed companies in Paris were responsible for nine deals (mainly strategic alliances or joint ventures) involving foreign

¹⁹ For example, in the case of the Lafarge/Holcim merger, the new entity is expected to set up its headquarters in Switzerland and the company's shares will be listed in Zurich and Paris.

listed companies between January and May 2014, compared with 14 in 2013 (these deals ranged in size from USD 1 to 6 billion).

More generally, owing to the mega-mergers mentioned above, deals involving at least one company listed on Euronext Paris, whether as target, acquirer or seller, amounted to close to USD 110 billion over the first five months of 2014 alone, exceeding the 2013 full-year total of USD 85 billion.

Table 3: Largest mergers and acquisitions
(announced between 01/01/2013-02/05/2014, completed or ongoing at 02/05/2014)

Announced	Status	Target (country)	Value (USD billion)	Buyer (country)
02/09/13	Completed	Cellco Partnership (U.S.)	130.1	Verizon Com. (U.S.)
13/02/14	Underway	Time Warner Cable Inc (U.S.)	68.4	Comcast Corp (U.S.)
01/05/14	Proposed	DIRECTV (U.S.)	50.0	AT&T Inc (U.S.)
22/04/14	Underway	Allergan Inc/United States (U.S.)	44.4	Valeant Pharma. (U.S.)
07/04/14	Underway	Lafarge SA (France)	37.5	Holcim Ltd (Switzerland)
14/02/13	Completed	HJ Heinz Co (U.S.)	27.4	Multiple (U.S.)
05/02/13	Completed	Virgin Media (U.K.)	21.6	Liberty Global Plc (U.S.)
18/02/14	Underway	Forest Labo. Inc (U.S.)	20.8	Actavis plc (U.S.)
14/03/14	Underway	SFR SA (France)	18.8	Altice SA (Lux)g
19/02/14	Underway	WhatsApp Inc (U.S.)	18.0	Facebook Inc (U.S.)
30/04/14	Underway	Alstom (energy arm) (France)	17.1	General Electric Co (U.S.)

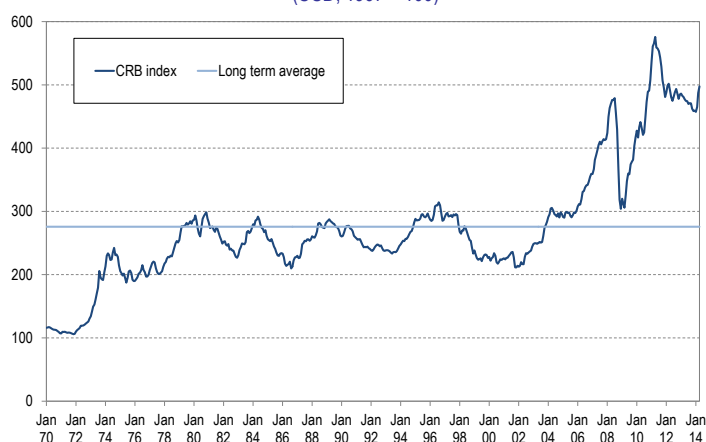
Sources: AMF, Bloomberg.

1.4. Commodities: sharply contrasting trends combined with structural changes

Commodity prices eased but remain at historically high levels

Although global demand continues to grow, the commodities super-cycle looks to have ended after the peak in early 2012, as prices eased in a relatively unsupportive macroeconomic setting. The super-cycle, which began at the start of the 2000s, was driven by brisk Chinese demand (which alone accounts for 40% of global demand for industrial metals), combined with competition from Asian firms, supply disruptions and increased price volatility, against a backdrop of increasing commodity financialisation. The crisis that erupted in 2007 strengthened the links between financial-asset and commodity markets, highlighting the process by which commodities are financialised (increased volumes on OTC derivatives markets, new investors coming into the market, and portfolio diversification techniques using the asset class).

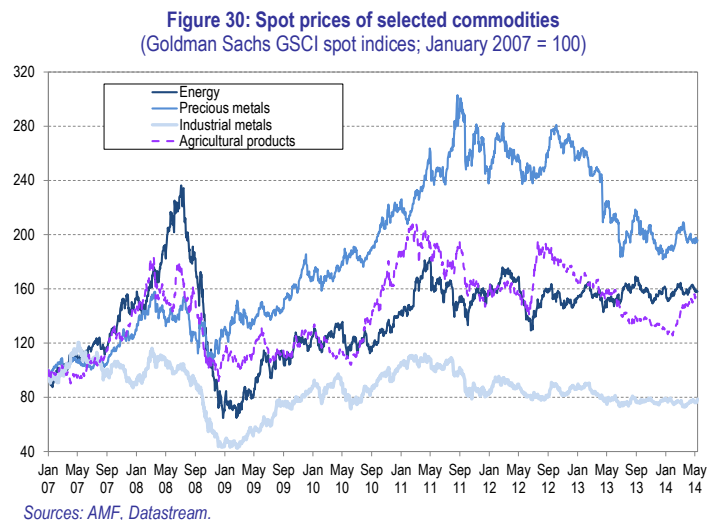
Figure 29: CRB spot commodity index
(USD, 1967 = 100)



Sources: AMF, Commodity Research Bureau, Datastream.

Commodity prices were also sharply differentiated in 2013 after moving in lockstep for half a decade (both with each other and with other asset classes), signalling a return to more fundamental components on energy, agricultural and mineral markets (supply and demand especially), the withdrawal of prominent financial participants such as J.P Morgan Chase and Morgan Stanley, illustrated in particular by net outflows of funds from gold ETFs in 2013 and 2014, and continued significant country and weather risk factors. Accordingly, 2013 ended with a wide spread in performances by different commodities: many recorded double-digit contractions, led by maize (40%), silver (36%), gold (28%) and coffee (23%), while others saw sharp increases, such as cocoa (21%), orange juice (18%), palm oil (13%) and cotton (13%).

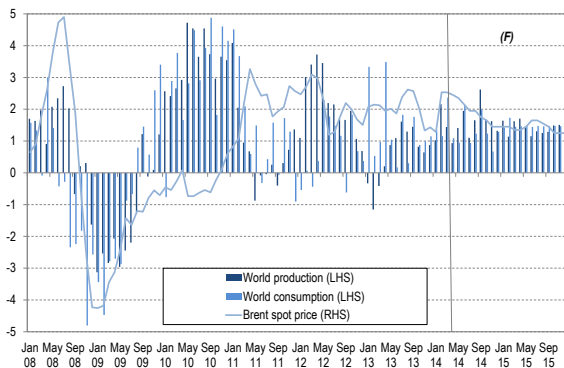
After reaching two all-time highs in July 2008 and April 2011, commodity prices fell overall on average, while spiking up and down in response to newsflow (political crises, droughts, etc.). Precious metals were pulled down by depressed global activity and the highly accommodative monetary policies pursued by the G-3, which lowered inflation expectations. Energy and industrial metals held up better, while agricultural commodities fluctuated more dramatically in response to weather conditions and bad geopolitical news.



Oil has traded above USD 100 per barrel since 2012 Global oil prices were supported by political tension in the Middle East and by demand for oil as an investment product (to hedge against inflation and dollar weakening). Other factors also appear to have been at play: the prospect of changes in the expansionary monetary policies pursued by the main G-20 countries (USA, euro area, UK and Japan), growing storage capacity in China and investor sentiment in general. Excessively high oil prices dampen the long-term growth outlook and encourage the development of alternative forms of energy and energy savings. However, supply-side tensions are easing and, in light of the moderate global economic growth forecasts (3.6% and 3.9% according to the IMF in 2014 and 2015 respectively, after 3% in 2013) and rapid growth in production in non-OPEC countries (including in particular the USA and Brazil), production should slightly exceed demand for crude in 2014 and 2015 according to the annual forecasts of the International Energy Agency (AIE)²⁰. This will alleviate inflationary pressure on oil prices, barring geopolitical risks and production incidents.

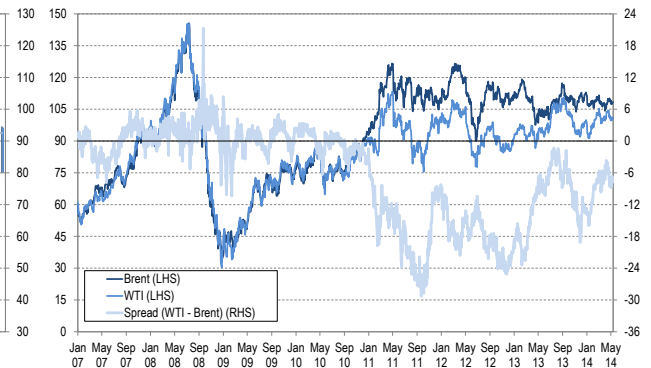
²⁰ World Energy Outlook 2013, IEA.

Figure 31: Oil production, consumption and price
(yoy % change in global production and consumption;
price in USD/barrel)



Sources: AMF, US Energy Information Administration.

Figure 32: Brent and WTI price
(USD/barrel and spread in USD)



Sources: AMF, Datastream.

Furthermore, note that US investments aimed at making it easier to transport crude to the Gulf of Mexico have helped to reduce the bottleneck at Cushing, the delivery and listing point for WTI, and hence to narrow the spread between WTI and Brent.

The end of easy oil?

Major changes to production approaches are continuing. New fields are located in deepwater regions (such as Brazil's *présal* field off the coast of Rio de Janeiro, which lies more than 5,000 metres below sea level beneath a thick salt layer). Many are exposed to extreme weather conditions and comprise unconventional hydrocarbons (heavier, less fluid, high pressures and temperatures). It is harder to make these giant projects profitable and breaking even depends on global prices. This introduces more risk into forecasts on sector production and profitability owing to increased exploration costs and uncertainty about whether production forecasts will be met. However, these upside pressures on prices are being offset by the ramp-up in US production (shale oil) and growth in Iraqi and Libyan production.

According to the IEA's annual report, in the coming years the USA could temporarily become the number-one global producer of crude, after years of declining production. However, from the mid-2020s, OPEC countries, and particularly those of the Middle East, led by Iraq, will once again become the main source of production. Unconventional production requires major capital investment because of the technical challenges and the short lifespan of facilities – wells have a production life of just a few years. Moreover, a large proportion of the firms that have traditionally been involved in petrochemicals (refiners, chemical firms, manufacturers) and consumers are far from the new production fields, which limits the potential benefits. There is also the question of the abolition of the US law prohibiting crude exports. These developments will affect, at least temporarily, the long-term financing of countries that are dependent on hydrocarbons, such as Russia and Qatar.

Deepwater sources (Brazil), oil sands (Canada and Venezuela) and Arctic exploration will also play a part in the rebound in production supply. Other countries, particularly Poland and China, are exploring shale gas deposits with a view to reducing their energy dependence. As a result, the share of unconventional oil in production is expected to increase from 5% in 2012 to 15% in 2035. As the technology currently stands, France, meanwhile, is maintaining its ban on shale gas development.

Table 4: Proven oil reserves at end-2012

	Billion barrels	% of proven reserves	% change since 2002
Venezuela	298	17.8	284.9
Saudi Arabia	266	15.9	1.2
Canada	174	10.4	-3.6
Iran	157	9.4	20.1
Iraq	150	9.0	30.4
Kuwait	102	6.1	5.2
UAE	98	5.9	0.0
Russia	87	5.2	14.7
Libya	48	2.9	33.4
Nigeria	37	2.2	8.3
USA	35	2.1	14.1
Kazakhstan	30	1.8	455.6
Qatar	24	1.4	-13.4
Brazil	15	0.9	56.2
China	17	1.0	11.8
Others	131	7.9	-
Total	1,669	-	26.3

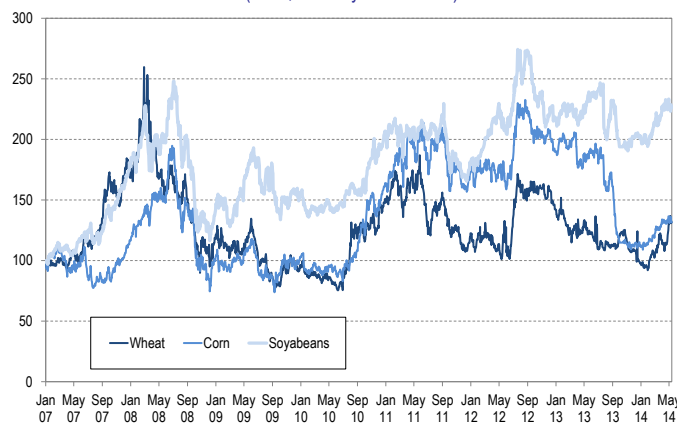
Sources: AMF, BP Statistical Review 2013.

Agricultural commodity prices under pressure

Three main factors explain the lastingly high level and volatility of agricultural commodity prices: 1) increasingly large-scale weather disruptions caused by global warming; 2) fears of a return by El Niño in Q2 2014, with potential repercussions for rice, wheat, maize, cocoa, palm oil and sugar cane production in the Americas and Asia; and 3) rising living standards, particularly in Asia, which are lifting demand for products such as cocoa and coffee, propelling prices upwards.

According to the Food and Agriculture Organization (FAO), the overall outlook for the 2013-14 harvest is good (9.2% growth), but this will be followed by a 2.4% contraction in 2014-15. In particular, the FAO is forecasting a high year-on-year growth rate of 8.4% for the 2013-14 wheat harvest, which should offset some of the upside pressure on prices caused by the Ukrainian crisis (*see below*). For this reason, the prices of the main agricultural commodities have been trending downwards since Q3 2012. However, the large-scale production disruptions that have affected the main global markets in recent years (USA, Black Sea, Latin America, Europe and France especially) mean that caution is required, especially in such a tense geopolitical environment. This situation has led to a marked rebound in prices since the beginning of 2014, fuelling growing interest among market participants in forward markets as they seek to protect themselves against these considerable risks.

Figure 33: Spot prices of selected agricultural commodities (USD, January 2007 = 100)



Sources: AMF, Datastream.

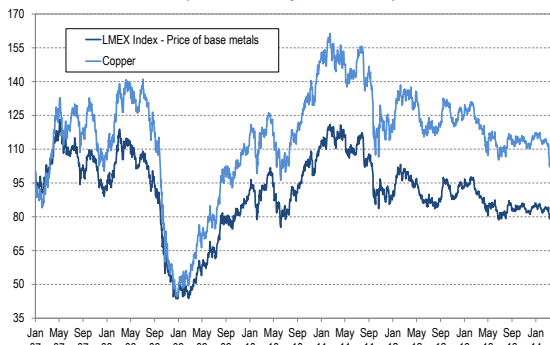
Metal prices continued to decline, pulled down by the weak recovery

After exploding in 2010-2011, industrial metal prices have been trending downwards for three years, reflecting the slower pace of economic activity on the main import markets. On the London Metals Index (LMEX), prices have fallen by around 25% since Q3 2011. Despite the limited increase in global supply, and after bouncing back more strongly than other metals from the trough in early 2009, copper prices are also down by around 30% since Q3 2011, hurt by cooling demand in emerging countries.

The main factor behind the fluctuations in global demand for industrial metals, and in particular in copper and iron prices, is the outlook for Chinese activity. China on its own accounts for more than 40% of global demand for industrial metals. The price outlook for industrial metals therefore depends on the scale of the Asian economic slowdown and more specifically on the ability of the Chinese government to support activity without generating new sector bubbles (property, automotive, shadow banking). An excessive credit squeeze could undermine the financial health of already-weakened industrial groups, such as polluting and indebted steelmakers. Moreover, as regards shadow banking, note that some 40% of iron and copper ore stored at Chinese ports is linked to finance contracts in which the metal is used as collateral for carry trades, making the stocks one of the links in the shadow banking chain. An increase in margin calls due to stricter regulations, for example, would result in trader defaults, leading to seizure by the banks of stocks, which would then be sold off at a discount, potentially with a major deflationary impact on global prices.

Meanwhile, court challenges have been launched in the UK against the new storage rules proposed by the London Metal Exchange (LME), which is the benchmark market for forward contracts on non-ferrous metals. The new rules were supposed to put an end to a storage system that had (1) created waiting times of 15 to 17 months for a delivery of aluminium, for example, and (2) seen an explosion in contract premia. The new rules are intended to remedy the situation by making sure that outgoing volumes exceed incoming volumes, to limit the enormous queues that curb the availability of metals traded on the exchange.

Figure 34: Industrial metal and copper prices
(USD, January 2007 = 100)



Sources: AMF, Datastream.

Figure 35: Gold and silver prices
(USD per oz.)



Sources: AMF, Datastream.

No more safe haven as gold fell by a record 28% in 2013

Precious metals, which provided a safe haven during the crisis, have been on a downtrend since late 2011, ending a decade of appreciation. Since September 2011, gold has lost 28%, while silver, which is highly correlated with gold, has come down by 44%.

The decline is driven by a number of factors:

- ▶ Expectations of lastingly weak inflation (or even deflation), since gold is traditionally used as a hedge against higher prices;
- ▶ An upturn in the outlook for activity, especially in the USA, and hence in principle reduced risk for public finances and the expectation that accommodative monetary policies will be phased out, which is propelling sovereign long yields higher;

- › The withdrawal of hedge funds and a contraction in inflows of new money to exchange-traded funds and products indexed to gold (in the USA and in Europe since the beginning of 2013) have made prices more volatile;
- › Renewed appetite for risk and better stock market performances, coupled with investor efforts to diversify portfolios.

Even so, support factors remain on the demand side (continued growth in US and Japanese central bank balance sheets, demand from major emerging countries, particularly China and India), and gold production increased by 6% in 2013 to hit a record 3,022 tonnes according to Gold Fields Mineral Services (GFMS). According to the World Gold Council²¹, China alone accounts for 26% of global private demand²² for gold, which remains a preferred form of saving at a time of bubbles and high volatility on equity and property markets and capped returns on bank deposits. The World Gold Council also expects demand in China, which became the world's largest market in 2013, to increase by 20% between now and 2017 (from 1,132 tonnes in 2013).

The sharp downside price correction is causing exploration projects to be pushed back or even shelved for want of profitability, while some operations are no longer profitable amid massive asset writedowns. It also heralds a probable resumption of sector concentration, as smaller firms struggle to comply with their financing plans and large producers look to get bigger in an effort to generate economies of scale and offset increased direct and indirect costs.

**Political
uncertainties are
contributing to
higher and more
volatile
commodity prices**

In addition to weather disturbances, 2013 and 2014 have featured major geopolitical uncertainties affecting leading commodity producers, pushing prices upwards (supply-side concerns) and making them more volatile:

- › In the Black Sea region, a crisis took shape in early 2014 between Ukraine and Russia, both large producers and exporters of cereals (wheat, sunflower and maize) as well as of gas and nickel in Russia's case, with the risk of major economic sanctions;
- › In the Middle East and North Africa, stress and uncertainty impacted Libyan and Iraqi oil production, while events in Egypt and Syria exerted upside pressure on prices;
- › In Sub-Saharan Africa, the situation in Nigeria, another large oil producer, is affecting prices;
- › In Asia (as in 2013), a nickel export ban was imposed in January 2014 by Indonesia, which accounts for 20% of world production, to promote the local metal processing industry, while Thailand experienced political upheaval;
- › In Venezuela, there were pressures on oil, amid uncertainty over the post-Chavez transition.

²¹ *China's gold market: progress and prospects*, World Gold Council, April 2014.

²² Jewellery, investment (bars and coins) and industry demand (electronics, industrial), excluding producer hedges.

Increased regulatory constraints and withdrawal of long-time financial players Several national regulators began investigating the impact of banking activity on commodity prices and the possible existence of price-fixing agreements among market participants on global markets for precious metals²³, including in Germany, the USA and the UK²⁴. The questions raised mirrored those asked about interest rate indices such as Libor. One direct consequence was the abandon of the daily silver price fix in London from 14 August 2013, after one of the three members withdrew (Deutsche Bank, which also withdrew from the gold fix) and a replacement could not be found. Market participants launched a consultation to decide on an alternative model for establishing benchmarks²⁵.

Meanwhile, regulatory initiatives involving commodities are underway on both sides of the Atlantic and will strengthen the framework governing the conduct of these activities.

In Europe, the new Markets in Financial Instruments Directive (MiFID II) provides for the introduction of reporting and publication arrangements and limits on the positions that firms may hold on commodity derivative markets²⁶, including over the counter (OTC). These arrangements will be clarified by technical (Level 2) measures and should enter into application with the overall directive at end-2016/early 2017. In addition, the revision of the Market Abuse Directive (MAD) and its associated regulation will enhance the transparency of transactions in derivative products and increase the penalties for insider dealing and market manipulation, which, given the sophisticated market insight of commodity traders, could interfere with the growth plans of these firms.

In France, the Banking Regulation and Separation Act introduced provisions of this kind for agricultural commodity markets²⁷. At the same time, discussions are underway on setting up an agricultural sector regulator to ensure more orderly agricultural markets, particularly in terms of access to data and supervision of physical markets and the underlyings of financial derivatives.

In the USA, from mid-January to mid-March 2014, the Fed held a public consultation on revising the rules authorising financial and banking institutions to trade on the physical market for hydrocarbons and metals, with a view to modifying the rules on the holding by these institutions of means of commodity production, transport and processing, considering the risks of environmental disasters spreading to the balance sheets of financial institutions, the risks of collusion between producers and traders, and the risks in connection with the concentration of activity with a small number of financial firms. The Fed wanted to analyse

²³ The method for setting the gold price, which has been overseen since 1919 by the London Gold Fix, may have given participating banks the opportunity to manipulate prices. Five banks (Scotia-Mocatta, Barclays, Deutsche Bank, HSBC and Société Générale), meeting through conference calls, set the price twice a day based on supply and demand. Various reports have explored this question, including the French National Assembly's Report No. 3863 of October 2011 on commodity prices; Study 11.11 of December 2012 commissioned by the Research and Prospective Analysis Centre of the French Ministry for Agriculture, Agrifood and Forestry on new investment approaches on agricultural commodity derivatives markets; and the November 2013 European Parliament study entitled *Regulating Agricultural Derivatives Markets*.

A study by Rosa Abrantes-Metz and Albert Metz of the Stern School of Business suggested that there were signs of collusion between the five main members of the London Gold Market Fixing (Barclays, Deutsche Bank, Nova Scotia, HSBC and Société Générale) in their daily 3:00 pm price-setting conference call. In March 2014, they were brought before a federal court in New York after a trader accused them of manipulating prices in the London fix.

²⁴ An investigation was opened in summer 2013 to assess the impact that warehouse owners have on storage prices (affecting Goldman Sachs, which manages one-quarter of aluminium inventory stored at LME-approved facilities).

JP Morgan was fined USD 410 million by the energy regulator in 2013 because of suspected manipulation of the power market in California. Following this, in March 2014 JP Morgan sold its physical commodities brokerage business (worth an estimated USD 3 billion) to Mercuria, a Swiss trading house subject to less stringent rules. However, the bank will keep its financing and market-making activities.

²⁵ After aluminium, legal action was taken in the USA in late May regarding the zinc price fix on the LME amid accusations of monopolistic and anti-competitive practices, again linked to storage infrastructures.

²⁶ The financial instruments concerned include all commodity derivatives that can be physically settled, provided they are traded on a regulated market, an MTF or an OTF, excluding wholesale energy products covered by the sector specific REMIT rules and traded on an OTF, which must be physically settled under a delegated act.

²⁷ The Banking Act provides for early transposition of the provisions on commodities in MiFID and MAD, particularly regarding reporting and position limits.

the risks to the security and stability of banks arising from the trading and storage of commodities, as well as any potential conflicts of interest. This process may result in rules requiring financial institutions to bolster capital or restrict these activities.

International regulators are working to improve the transparency of commodity markets through a range of initiatives. In 2001, the Joint Organisation Data Initiative Oil (JODI) was launched with view to improving the transparency of oil markets and was subsequently extended to gas. As part of this, international databases and statistics have since been published, based on national data on physical markets. The organisation, which comprises 90 countries, is continuing its efforts to enhance the quality and comprehensiveness of published data. A similar initiative, known as the Agricultural Market Information System (AMIS), was launched by the G-20 in June 2011 to improve the transparency and encourage the coordination of international policies on agricultural markets. Also at the behest of the G-20, IOSCO published a report in 2011 on the principles that should guide national regulators and lawmakers when regulating and supervising commodity markets, followed by a second report in 2012 on the regulation of Oil Price Reporting Agencies (Oil PRAs). The G-20 is closely monitoring implementation of these principles, which should enhance market functioning and supervision. The principles chiefly concern the quality and transparency of the methodologies used to assess prices, the integrity of data transmission to Oil PRAs, prevention of conflicts of interest, cooperation with competent authorities and the establishment of complaint procedures.

Meanwhile, decision-support systems for farmers are emerging in the commodities sector, in particular developed by large seed companies. Depending on the use made of the gathered data and the cost, this research on land-use optimisation could influence land prices and forward prices and also raise questions about the independence of seed producers (which might have an incentive to encourage farmers to plant higher quality seeds to maximise their profits).

As a result, since 2013, players on the commodity market have been reorganising, with some major investment banks, including JP Morgan, Morgan Stanley, Deutsche Bank, BofA-Merrill Lynch and Goldman Sachs, withdrawing partially or totally from certain segments, after investing massively in them from 2008. By doing this, some firms are looking to avoid legal action for potential market abuse (such as Deutsche Bank, which withdrew from the gold and silver fixes) while others are seeking to get out of businesses whose profitability will be threatened by regulatory risk and increased capital requirements.

In most cases, major commodity trading firms such as ADM, Bunge, Cargill and Louis Dreyfus Commodities have taken over these activities, strengthening their vertical diversification, which ranges from harvesting to manufacturing and financial instruments. In many cases, these firms are also diversifying their financing sources, for example by floating on the stock market. New Asian trading groups such as Hong Kong's Noble and Singapore's Olam and Wilmar are also coming to the fore in this vertical integration process. Longer-term questions are raised concerning the possible market impact (liquidity, price, volatility) of the withdrawal of financial firms from areas in which they have greater expertise than industrial firms and concerning the ability of industrial firms to replace financial ones in terms of their financial, technical and strategic capabilities.

Whereas in principle commodity traders were excluded from the scope of entities examined by the FSB as potentially having global systemic importance, this question could be revisited in view of their ongoing business diversification. The shift in these activities out of the traditional financial sector towards more lightly regulated players such as commodity traders and large energy producers may present risks: there is no guarantee that the withdrawal of pure financial firms will lead to less financialisation of these activities and reduced risk, particularly since industrial firms do not have the same levels of expertise or regulatory

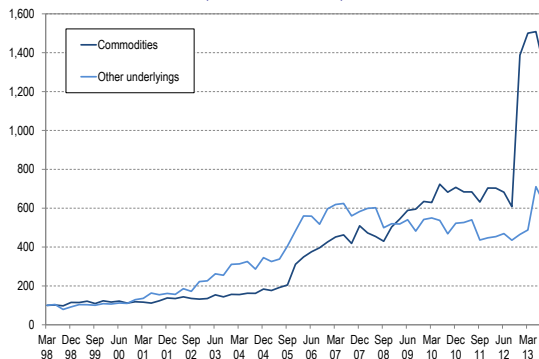
capital and will have less capacity to absorb wrong way risk because their businesses are highly correlated.

Surge in commodity derivative trading on organised markets

After declining between 2010 and 2012, trading in commodity derivatives on organised markets rebounded strongly (120% year-on-year increase in December 2013 in the number of derivative contracts, which is the only statistic available on this market), chiefly reflecting the effect of futures contracts on the US market. Since Q1 2013, the scope covered by futures contracts on commodities cleared on the US market has been expanded to include contracts that used to be considered OTC. The fact that the nature of contracts is assessed domestically complicates transatlantic comparisons between OTC and organised markets.

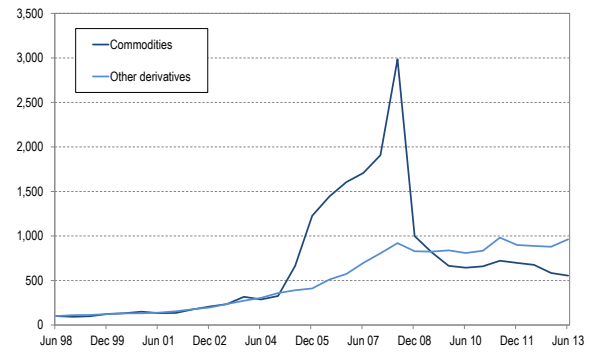
Furthermore, activity on global OTC commodity derivatives markets continued to contract, with an 18% year-on-year decline in June 2013 in the USD notional amount, reflecting a massive shift to organised markets from the second half of the 2000s prompted by legislation to this effect.

Figure 36: Number of derivative contracts traded on organised markets
 (June 1998 = 100)



Sources: AMF, BIS.

Figure 37: Notional amounts outstanding in OTC derivatives
 (USD, June 1998 = 100)

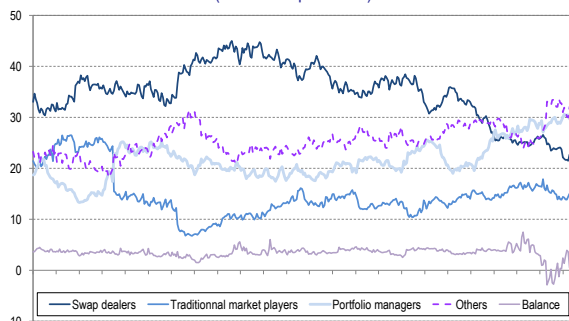


Sources: AMF, BIS.

Money managers rise in prominence, displacing swap dealers

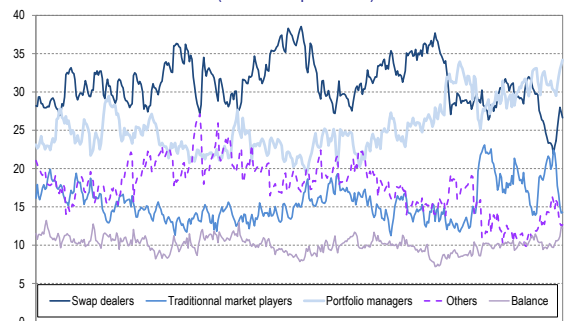
Weekly statistics gathered in the USA by the Commodity Futures Trading Commission (CFTC) can be used to measure the presence of the main non-commercial traders in commodity derivatives markets for each commodity traded, on the basis of outstanding futures and options involving each category. The CFTC also reports the shares represented by different trader categories on commodity derivatives markets, breaking participants down into traditional participants, such as producers, merchants and manufacturers, plus swap dealers, money managers and other participants. Figure 38 and Figure 39 track the respective shares of these categories of traders, as defined by the CFTC, on the oil and wheat futures markets since June 2006.

Figure 38: Share of oil futures market by category of trader
 (% of total positions)



Sources: AMF, CFTC.

Figure 39: Share of wheat futures market by category of trader
 (% of total positions)



Sources: AMF, CFTC.

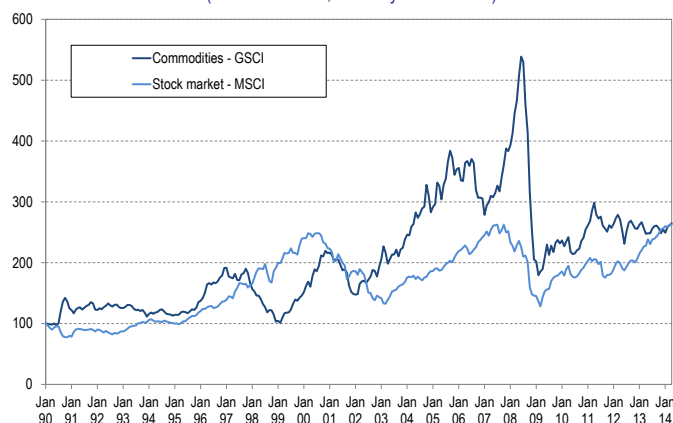
Two trends emerge for these commodities. First, while the share of traditional participants (producers and non-financial intermediaries) remains small (14% of open positions in oil and wheat in mid-March 2014), it has been gradually increasing since 2010. Second, while the most “financialised” market participants – swap dealers and money managers – continue to account for a majority and relative stable share of activity (53% for oil in mid-March 2014 and 62% for wheat), money managers have increased their share since early 2011 and are now the main player in both cases.

**The
financialisation
of commodities
is influencing
the markets**

Commodities have been affected by unprecedented events since the early 2000s, raising questions over new factors that could influence the price formation mechanism, causing prices to become uncorrelated from (or, conversely, extremely correlated with) their fundamentals, including the global economic climate, harvests, stocks, adverse weather conditions, geopolitical uncertainty, the growth outlook in China and India, the growing use of food products in biofuel production, safe haven investments (gold, silver and diamonds) and dollar fluctuations against other currencies. A number of factors illustrate the increasing sophistication of commodity investment methods, and in particular the rising use of high-frequency trading following the widespread introduction of central clearing for commodity derivatives and the expanded range of traded products: increasing volatility; greater standardisation of commodity derivative contracts, leading to increased arbitrage opportunities between markets and asset classes; a significant increase in volumes on futures markets; and the arrival of new players such as hedge funds and exchange-traded investments.

This increased liquidity on commodity markets, which can serve to meet investment needs, and copycat behaviour, particularly index investing, increase the correlation between commodities and other asset classes and alter price formation mechanisms, sometimes even accelerating price distortion through copycat behaviour that is disconnected from market fundamentals, based on self-reinforcing and ultimately potentially destabilising mechanisms²⁸.

Figure 40: Correlation between the global stock market and commodities
(indices in USD, January 1990 = 100)



Sources: AMF, Datastream.

The commodity market has also been influenced by various developments since 2012. First, reflecting changes in bank balance sheets as a result of Basel Committee rules, European banks have stopped financing commodity traders (via syndicated loans), though admittedly the latter have a relatively weak presence in Europe compared with the situation in English-speaking countries. Second, alternative financing methods, such as securitisation, appear to be emerging. Third, pressure on good quality collateral is likely to bolster the financialisation

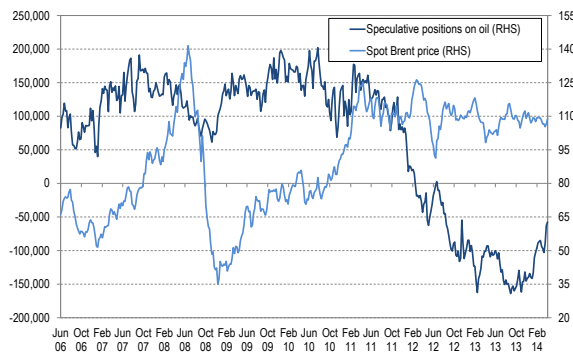
²⁸ See Steve Ohana’s work on the impact of index investors on price formation for agricultural commodities.

of commodities by driving greater use of commodities (oil, copper, aluminium and gold) as collateral. Fourth, the supply of commodity derivatives continues to expand, with, for example, Hong Kong Exchanges & Clearing, which owns the LME, planning to launch forward contracts in four commodities (thermal coal, copper, aluminium and zinc) in 2014, targeting the Asian market.

Natixis²⁹ highlights the following stylised facts: the lack of a link between demand for commodities and the global business cycle in the case of food (unlike oil and metals); the major price impact of supply in the case of oil (supply adjusts to suit demand), agricultural commodities (size of harvests with a one-year lag) and gas, where there is a link to the oil price (i.e. impact of shale gas production in the USA on the price of natural gas and coal, arising from substitution effects); and weak downside price-elasticity relative to demand owing to the marginal cost of production in the case of oil.

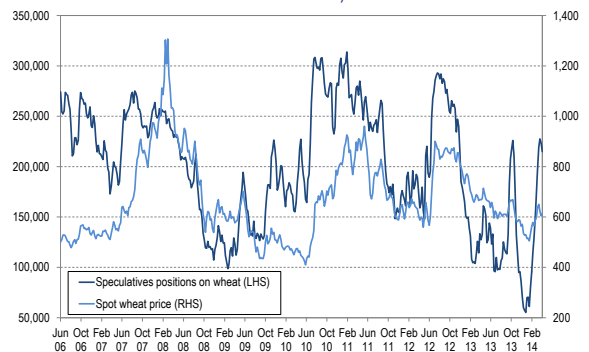
Comparing spot oil and wheat prices with net speculative positions³⁰ in these two commodities does not prove beyond doubt that speculation and the prices of these commodities are strongly correlated, especially since oil prices are also affected by foreign exchange hedges. In the case of wheat, however, a degree of similarity can be observed between the change in net speculative positions and the price of wheat during certain periods, with substantial volatility and overshooting in the case of speculative positions. Finally, it should be noted that net positions in oil have been short since early 2012, indicating that prices are expected to fall, whereas oil prices have, in fact, proven resilient.

Figure 41: Oil price and speculation
(Net speculative positions in thousands of contracts, price in USD/barrel)



Sources: AMF, CFTC, Datastream.

Figure 42: Share of wheat futures market by category of trader
(Net speculative positions in thousands of contracts, price in USD/bushel)



Sources: AMF, CFTC, Datastream.

1.5. Shadow banking: recent trends and regulatory guidelines

Ongoing debate over the definition of shadow banking

The Financial Stability Board (FSB), which was one of the first to examine this question as the crisis came to an end in 2010, established a generally accepted definition for shadow banking as “credit intermediation involving entities and activities outside the regular banking system”³¹. In other words, shadow banking does not refer to specific financial intermediaries or to unregulated activities. Primarily carrying a negative connotation, especially given its name, shadow banking encompasses a broad swathe of market financing that is necessary in some respects to fund growth.

Authorities around the world responded to the financial crisis by making the prudential framework for banks more stringent. The FSB wants to ensure that this does not cause

²⁹ Global cycle and commodity prices, P. Artus, 12 September 2013, Flash No. 624.

³⁰ Net speculative positions are defined for regulatory purposes by the Dodd Frank Act as the sum of long and short positions not taken on to reduce commercial risk.

³¹ http://www.financialstabilityboard.org/publications/r_111027a.pdf.

activities that have customarily been performed by banks to move out of the regulated sector and generate new sources of risk. The FSB is also encouraging authorities to pay special attention to shadow banking entities that might pose systemic risks resulting from liquidity transformation (using liabilities to fund less liquid assets), maturity transformation (funding long-term assets using shorter-term liabilities), excessive leverage and imperfect credit risk transfer taking place at least partly outside the regulated banking system. Interconnections between participants can trigger procyclical chain reactions, especially since, while it plays a similar role to traditional banks in terms of transformation, shadow banking falls outside the standard prudential framework, without necessarily having guaranteed access to central bank liquidity facilities or public sector credit guarantees.

The IMF³² proposes an alternative, forward-looking definition for shadow banking as consisting of all financial activities, except traditional banking, which require a private or public backstop to operate. Analyses arising from this approach are however somewhat constrained by the poor availability of data on these activities.

Table 5: Spectrum of financial activities

“Traditional” intermediation by institutions	Activities commonly referred to as forms of “shadow banking”	“Traditional” intermediation by market entities
Traditional banking (deposit-taking and lending) Traditional insurance	Securitization , including: tranching of claims, maturity transformation, liquidity “puts” from banks to SIVs, support to par value money funds. Collateral services , primarily through dealer banks, including: supporting the efficient re-use of collateral in repo transactions, for OTC derivatives and in prime brokerage; securities lending. Bank wholesale funding arrangement , including the use of collateral in repos and the operations of the tri-party repo market Deposit-taking and/or lending by non-banks : insurance companies, bank-affiliated companies	In capital markets: Hedge funds, Investment companies, Underwriters, Market-makers, Custodians Brokers In non-bank sector: leasing and finance companies, corporate tax vehicles

Sources: IMF 2014, AMF.

The ECB defines shadow banking as encompassing all types of banking intermediation carried out by non-bank entities subject to the risk of runs by virtue of their balance sheet structures: by contrast with banks, their liabilities consist mainly of debt rather than capital. Shadow banking is thus associated with the emergence of risks which take the form of modern runs, reflected in a sudden collapse in liquidity and massive withdrawals by investors (an example of which being the collapse of Lehman Brothers), followed by chain reactions that set up systemic contagion mechanisms between banks and markets, which subsequently affect the real economy

The FSB estimated that the shadow banking system was worth USD 71.2 trillion at end-2012

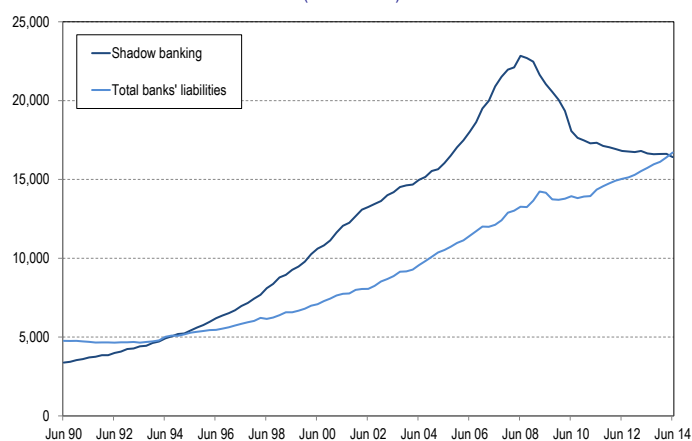
Shadow banking developed quickly from the end of the 1990s, accounting for the majority of financing in the USA from early 1996 to September 2012. This shift took place against a backdrop of financial market deregulation, financial innovation (securitisation, developments in origination and distribution systems) and a globally supportive macroeconomic environment (low interest rates, high saving levels, increased demand for safe, liquid assets). Though the intermediation played by the shadow banking industry is useful to financing the economy, it also contributes to the formation of systemic risks in the same way as certain banks and other financial market participants do, creating the need for appropriate responses. This segment of the financial sector, which is only partly regulated, contributed to

³² What is shadow banking? S. Claessens and L. Ratnovski, WP/14/25 IMF, February 2014.

the formation of real estate bubbles and thus to the 2007 crisis, as well as to the emergence of potential systemic risks that are closely connected with the banking industry. Any attempt to measure the size of the shadow banking system depends on the definition used, which will be based on either activities or types of participants and institutions. Furthermore, currently available statistics cover shadow banking marginally, if at all: they are often aggregated at group level or are lacking in granularity and frequency.

The shadow banking system is very large and continues to grow: the FSB estimated it to be worth more than USD 71.2 trillion in 2012³³, or 8.1% higher than in 2011. This represented one-quarter of total financial assets, one-half of banking system assets and almost 120% of the aggregate GDP of the jurisdictions examined. These levels were relatively steady during the crisis. The shadow banking system is thus systemically important for the global financial system overall and for the European financial system in particular.

Figure 43: Shadow banking versus bank financing in the USA
(USD billion)



Sources: AMF, Datastream.

According to the FSB, the USA remains the leading contributor to shadow banking, holding 37% of total non-bank financial assets (equivalent to 174% of banking system assets), followed by the euro area (31%) and the UK (12%). Non-bank financial assets are more than twice the size of GDP in three jurisdictions, Netherlands, UK and Switzerland, which also boast large banking sectors. While shadow banking continues to make a limited contribution to emerging economies (less than 20% of GDP in India, Turkey, Indonesia, Argentina, Russia and Saudi Arabia, in decreasing order of size), a major catch-up is underway, with large growth rates in evidence. Four emerging countries are posting growth rates of over 20%, led by China (42% year-on-year increase in 2012), followed by Argentina, India and South Africa.

³³ Third Global Shadow Banking Monitoring Report, FSB, November 2013

http://www.financialstabilityboard.org/publications/r_131114.pdf

The report includes data from 25 jurisdictions (Argentina, Australia, Brazil, Canada, Chile, China, Germany, France, Hong Kong, Indonesia, India, Italy, Japan, Korea, Mexico, Netherlands, Russia, Saudi Arabia, Singapore, Spain, Switzerland, Turkey, UK, USA, and South Africa), accounting for 80% of global GDP and 90% of global financial system assets. Data are taken from national flow of funds tables and sector balance sheet data for other financial intermediaries.

Box 2: Chinese shadow banking: a need for increased vigilance

China's credit expansion has been driving growth since the early 2000s, providing financing for extremely active business investors, with the business fixed investment rate averaging 43.3% of GDP. This trend has actually picked up pace since the economic slowdown that began in 2008. Chinese government and private debt have virtually doubled as a result, increasing from 130% of GDP in 2008 to more than 220% in 2014, according to S&P.

On the whole, the situation nationally is reassuring: the vast majority of banks are public (with the State as credible lender of last resort), the loans/deposits ratio is moderate (84% at the beginning of 2014) and the official level of impaired loans is very low (around 1%). Yet warning signs have been on the rise since mid-2013³⁴, resulting in strain on liquidity on interbank markets, sharp increases in interbank interest rates (particularly the Shibor overnight rate) and a downtrend in the main bank stocks. Accordingly, shadow banking poses at the very least a material and growing risk for China that could affect financing in the short and medium term. However, the State has powerful prudential and monetary tools at its disposal that should enable it to contain the risks of systemic contagion.

Figure 44: Overnight Interbank rate and stock prices of main banks in Hong Kong
(%, start of period = 100, HKD)



Sources: AMF, Datastream. * January to April 2014

While China's credit expansion is partly cultural, analysts are concerned about a number of factors, including **a relative lack of discipline and transparency on the part of financial institutions** arising from **major moral hazard created by the implicit government guarantee** (owing to the quasi-public nature of banks and the high level of foreign reserves³⁵) but also from a probable **lack of oversight by monetary authorities over the pace and sources of the credit expansion**.

Another concern is the **lack of transparency and comparability** of the Chinese financial system compared with the rest of the world. Major sources of credit lie outside the regulated credit channels and are partly missed by the statistics, such as loans to companies that are converted into interbank claims, inter-company lending, private equity funds (including those aimed at local authorities), lending between individuals and the off-balance sheet exposures of public banks, which are exposed to market, counterparty, interest rate and other risks. These sources of shadow finance may help to artificially sustain the profitability of certain corporate entities that are playing the part of credit institutions for smaller businesses despite a ban on this type of financing by the central bank (PBOC). Regulatory constraints, such as the ban on bank financing for land acquisitions or the cap on the rate of return on regulatory deposits, can also be circumvented by engaging in regulatory arbitrage between financial products. These developments are strengthening the interconnections between entities (which are not necessarily financial) and could have systemic repercussions, maintaining bubbles, which the central authorities are endeavouring to prevent, particularly in real estate and certain sectors (energy). According to the PBOC, one-third of credits received by SMEs via shadow banking are invested in construction.

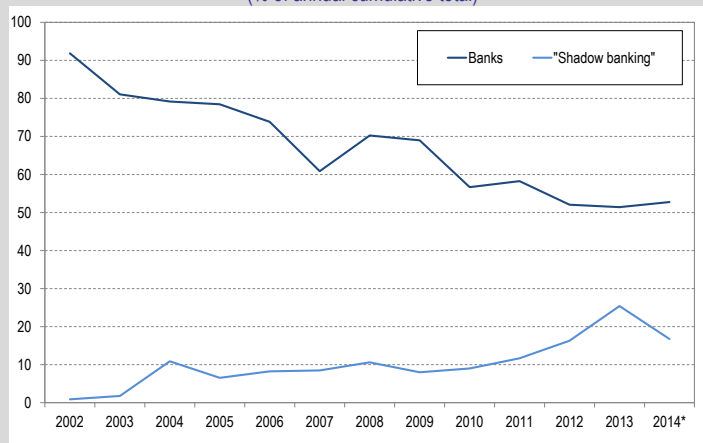
³⁴ Non-bank lending in China: composition, trends and gap, FSB SCAV/2013/20 REV, 25 October 2013.

³⁵ USD 3.8 trillion at end-December 2013, excluding gold reserves.

The growing share of non-bank financing, albeit from low levels, is also evident in social financing³⁶. Particularly prominent in this shift are entrusted loans and trust companies, **whose cumulative share of TSF rose from 1% in 2002 to 24% in 2013, while the share of bank loans fell over the same period from 92% to 52%.**

Another concern is that an audit of the government accounts published in January 2014 revealed **growing exposure among local authorities to shadow banking**, although debt levels are increasing at a moderate pace (from 34.1% in 2010 to 37.1% of GDP) thanks to strong GDP growth. In all, 43% of total local authority debt (RMB 17.9 trillion) is from non-bank sources, for an increase of 67% between end-2010 and mid-2013.

Figure 45: Total social financing³⁷ in China
(% of annual cumulative total)



Sources: AMF, Datastream. * January to April 2014 (Shadow banking = entrusted loans + trust loans)

► **What is the scope of Chinese shadow banking? Many little-known and specifically Chinese players.**

It is no easy task to identify the scope of Chinese players that conduct credit intermediation involving liquidity and maturity transformation as well as leverage, given the diverse array of participants, which range from familiar institutions applying customary practices, such as insurers, pension funds and money market funds, to specifically Chinese entities and products such as trust companies, wealth management products (WMPs)³⁸, entrusted loans³⁹, finance companies, informal lenders,

³⁶ The PBOC has made an effort to improve transparency by publishing since 2011 statistics on total social financing (TSF), which have fuelled the debate over the size of the shadow banking system. TSF captures all new lending by the entire domestic financial system to the economy over a given period (but not the stock of total credit); it has been recalculated back to 2002 and is based on an activity rather than an entity approach. Accordingly, non-bank financing of the Chinese economy can now be measured as a residual.

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³⁸ China's 70 or so trust companies are a preferred investment channel for affluent individuals and institutional investors. These companies generally raise funds through bank-based wealth management networks to finance a wide variety of projects offering varying levels of risk and transparency (property development, infrastructure, SMEs, local government, but also risky bank loan portfolios). They benefitted from a transfer of assets after stricter requirements were placed on bank financing channels.

Trust companies are typically independent but may also be bank subsidiaries (bank-trust cooperation products). Generally, financing for these entities is closely linked to banks, particularly via wealth management products (WMPs), for which banks act as the agent between individual investors looking for better returns than those offered by bank deposits and trust companies, without carrying the WMPs on their balance sheets. WMPs are thus an alternative to term deposits, offering higher returns and short maturities (under one year and often quarterly, corresponding to the quarterly close of accounts, enabling banks to bring their loans/deposits ratio under the authorised 75% maximum). These products mainly target individuals and companies and may come with capital guarantees, as banks seek to attract deposits that earn a better return than the rates set by the central bank so that they can extend loans.

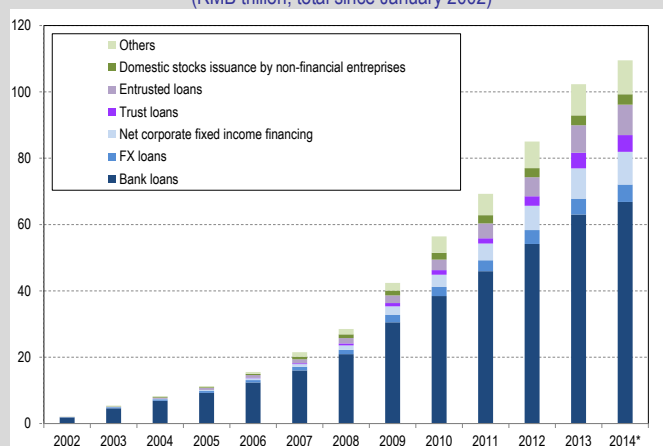
Note that the CBRC, which supervises trusts, excludes them from its definition of shadow banking.

The trust companies place investments in less liquid products with longer maturities. This credit intermediation thus generates maturity transformation as well as liquidity risk when, at each quarter end, the trust companies have to refinance on the interbank market to offset the withdrawal of bank financing. This also means that the credit intermediation chain becomes longer, and adds complexity, reducing transparency. Transparency is also affected by the pooling of project financing by trust companies. Furthermore, many investors believe that WMPs issued by banks carry an implicit government guarantee. Fitch

structured finance vehicles, loan insurance, market intermediaries and so on. All these participants are strongly interconnected with each other and with the regular banking system, which poses a risk to financial stability.

Credit Suisse⁴⁰ estimates that more than 40% of all credits (including unofficial lending) come from the shadow banking system. Some sectors are particularly concerned and hence exposed to more risk, such as real estate, mining⁴¹ and some manufacturing groups.

Figure 46: Total social financing flows in China
(RMB trillion, total since January 2002)



Sources: AMF, Datastream, PBOC. * 2014: January to April.

- **Difficulties have been multiplying since 2013, with trusts particularly affected**

 - **Default narrowly avoided in late January 2014 on redemption of a RMB 3 billion (EUR 365 million) WMP⁴² by a trust company (China Credit Trust⁴³). ICBC, a bank, had decided not to bear the trust company's loss as liquidity became scarce, given the deleveraging process underway, but it is probable that public/local government intervention made it possible to avert the default. The decision was widely criticised as a missed opportunity to curb moral hazard.**
 - **Default on a loan to Shanxi Zhenfu Energy Group, a coal producer, from China Credit Trust in late January 2014, followed by restructuring against a backdrop of reputational risk. ICBC and China Construction Bank absorbed the losses.**
 - **Default by Shanxi Liansheng Energy, a coal mining firm, in early February 2014 in relation to a RMB 973 million product issued by Jilin Province Trust Co. and Haitong Securities Co. and distributed by China Construction Bank.**
 - **Default by Zhejiang Xingrun Real Estate, a property developer with billions of renminbi in debt, on payments to 15 banks (RMB 2.4 billion) and individuals (RMB 1.1 billion) in Fenghua province.**
 - **First onshore bond default in early March 2014 on a RMB 4 million coupon payment by Chaori, a solar equipment manufacturer that was unable to refinance its debt because of a shortage of credit. The default marked a turning point because the government did not intervene, signalling the end of the implicit government guarantee on investment products for financial institutions. This also marked a new step towards reforms**

Ratings lists the following risks in connection with WMPs: short-term nature, weak liquidity of underlying assets, considerable mobility of investors in WMPs and asset/liability asymmetries.

The CBRC tightened up the regulations for WMPs in March 2013 by increasing the requirements on transparency, disclosure and standardised accounting practices. In addition, no more than 35% of WMP assets may be invested in illiquid credits.

Fitch Ratings estimated in May 2013 that total outstanding WMPs in issuance came to RMB 13 trillion, or 16% of commercial bank deposits and more than twice bank capital. The official statistics provided by the Chinese regulator give a figure of RMB 7 trillion and consider only accrued interest on WMPs at the end of the period.

³⁹ As participants seek to get round the ban on lending between non-bank entities, there has been a rise in structured loans by banks (or security firms), where the terms of the transaction (amount, maturity, interest rate) are set by the lender, while the bank plays the role of broker, receiving a fee, while the credit does not appear on its balance sheet. This is strengthening the interconnections between the bank and non-bank sectors.

⁴⁰ *Embracing Higher Risks*, Credit Suisse, April 2014.

⁴¹ The number of trusts financing coal groups quadrupled in 2013, even as the economic slowdown and anti-pollution policies caused the coal price to fall; 13 out of 50 listed coal groups have debt/equity ratios of more than 100%.

⁴² 2010 China Credit / Credit Equals Gold #1 Collective Trust Product, a three-year product with a guaranteed return of 10%, as compared with the 3% cap on bank deposits, was purchased by wealthy individuals and used to finance Zhenfu Energy Group, a coal mining firm in Shanxi that closed down after its senior executive was arrested in May 2012 on suspicion of embezzlement.

⁴³ China Credit Trust is one of the largest trusts in China, with RMB 11 billion (EUR 1.3 billion) under management.

and consolidation of the financial system, which will be key to restoring investor confidence in trusts.

- **Default at end-March by Haixin Steel, a private steelmaker from central China.**

› ***A flurry of regulatory responses to bolster confidence***

Given the amounts at stake and the diverse range of participants (producers, financial institutions, savers and central/local government), the future of shadow banking will shape confidence in the Chinese financial system. The authorities are thus seeking to avoid any spillover of difficulties to the wider system, while gradually deregulating the system. In addition, the government announced in March that the wave of defaults would continue and that it would intervene only in the event of a genuine threat to financial stability.

Accordingly, a series of monetary interventions and reforms have already been undertaken and are set to continue:

- Massive interventions by the PBOC on certain market segments, with liquidity injections via reverse repos to limit strain on interbank markets;
- Tightening of credit conditions to rein in credit and direct it more effectively towards financing the real economy, with, in particular, increased capital requirements for small banks in early 2014;
- Enhanced bank supervision through a range of measures: (i) clearer coordination of Chinese authorities (banking, insurance and market regulators and supervisors), (ii) stricter application of prudential standards to limit regulatory arbitrage, (iii) tougher rules (stricter liquidity ratios introduced in June 2013) and (iv) steps to promote more transparency (including on off-balance sheet items) by large banks;
- April 2014: publication of a bill aimed at expanding the number of local authorities authorised to issue debt autonomously. The goal is to stem the spread of financing by non-transparent shadow banking vehicles as a replacement for direct bank credit.

Further out, reform projects include liberalising interest rates and introducing a deposit guarantee system.

The FSB also identified sharply contrasting sector trends in 2012, with strong growth in some management sectors, such as real estate investment trusts (REITs) and funds (30%), other investment funds (16%) and hedge funds (11%, although the size of the hedge fund sector seems to be significantly undervalued given the findings of IOSCO's second hedge fund survey). By contrast, structured finance vehicles and finance companies saw total assets contract by 9.9% and 0.6% respectively in 2012.

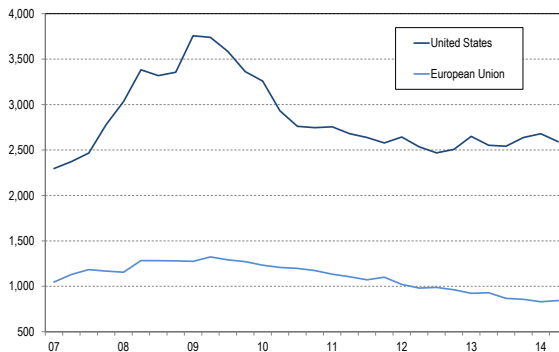
A smaller presence in Europe than in the USA

Shadow banking has a much smaller presence in the European Union than in the USA, where shadow banking assets are on a par with bank liabilities, even after falling for seven years in a row. Unlike in the USA, the vast majority of credit within the European Union is still generated by banks, even though other types of financial institutions are involved in credit intermediation.

Two factors provide much of the explanation for the fact that shadow banking is relatively less developed in Europe (estimates put it at between one-quarter and one-half of total bank assets) than in the USA:

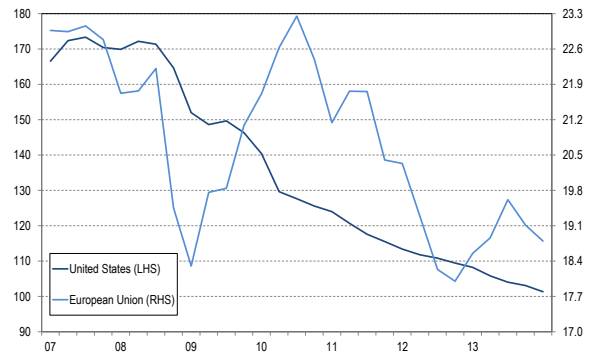
- › Securitisation is far less developed in Europe, both because it emerged later and because it has been slow to recover since the crisis ended, despite IOSCO's recommendations aimed at supporting sound and sustainable securitisation and current European initiatives. Total outstanding securitised collateral was equivalent to 11.5% of GDP in Europe in Q4 2013 compared with 51% in the USA, according to the Association for Financial Markets in Europe (AFME).
- › Assets under management in money market funds are much higher in the USA (EUR 1.971 trillion at end-2013, compared with EUR 912 billion in Europe, according to the European Fund and Asset Management Association (EFAMA)), where assets are stagnating in domestic currencies and the money market sector involves a much broader range of market participants. The French Asset Management Association (AFG) estimates that the total assets of money market funds domiciled in France contracted 13% year-on-year to EUR 316 billion at end-2013.

Figure 47: Size of money market funds
(EUR billion)



Sources: AMF, ECB, Datastream.

Figure 48: Size of the shadow banking sector
(% of bank liabilities)



Sources: AMF, AFME, ECB, Datastream, ICMA.

Current regulatory initiatives

Shadow banking represents an alternative source of funding to the traditional banking system – and therefore an alternative source of support for the real economy and a way to avoid the more stringent prudential framework applicable to banks – in an environment characterised by financial innovation and increasing complexity. The shadow sector thus generates bank-like risks such as liquidity and maturity transformation, leverage and imperfect credit risk transfer outside the conventional banking system. These risks could ultimately affect the regulated banking system because of the interconnections with the shadow system. The regulatory goal is therefore to limit and control these risks to guarantee financial stability, in principle without curbing appropriate non-bank financing methods. The international workstreams currently in progress therefore seek to strengthen the regulatory framework while protecting a “useful financial intermediation channel”

Since 2010, shadow banking has been the subject of numerous regulatory projects taken forward at global level (G-20, FSB, IOSCO), within Europe (European Commission, ESRB), and by central banks (particularly the ECB) and national regulators. Based on its mandate from the G-20, the FSB has instigated many of these initiatives, taking a dual activity- and entity-based approach to put forward recommendations that are then adapted and applied regionally or nationally. Projects cover areas such as:

- › **Interactions between banks and shadow banking entities**, to ensure that all bank activities, including those with shadow banking entities, are properly captured by prudential consolidation regimes, to control large bank exposures to specific counterparties and to introduce supplementary capital requirements for banks’ interests in funds, based on risk, and transparency requirements for funds’ investment activities. This work is ongoing.
- › **Money market funds**, which initially emerged in the USA given that country’s regulatory ceilings on bank interest rates, invest in short-term debt products (certificates of deposit, commercial paper, repos, etc.) and play a key role in the short-term financing of financial institutions and companies, with some products, such as constant net asset value (NAV) money market funds (MMFs), bearing a strong similarity to bank deposits. Recommendations aimed at reducing money market funds’ exposure to investor runs were published by IOSCO and endorsed by the FSB in October 2012, and the European Commission, following the ESRB, has introduced the recommendations at European level, proposing a new regulation in September 2013⁴⁴.

⁴⁴ New framework proposed by the European Commission for money market funds (MMFs) domiciled or marketed in Europe (http://ec.europa.eu/internal_market/investment/money-market-funds/index_en.htm) to strengthen their liquidity profile and stability:

- **Liquidity management.** MMFs should invest at least 10% of their assets in daily maturing assets and a further 20% of assets should be comprised of weekly maturing assets, to be able to meet redemption requests at short notice. Maximum exposure per issuer is also capped at 5% of the fund’s net asset value to limit concentration risk.

- › The Commission's proposed reforms provide a framework for MMFs to make them more resilient to runs through a body of rules addressing such areas as eligible assets, diversification ratios, liquidity risk management, valuation and reference to credit ratings. Positive aspects include provisions to reduce reliance on credit ratings (ban on soliciting a rating agency, elimination of reference to agency ratings to determine the credit quality of portfolio securities). However, some provisions, which are modelled directly on the US framework and the code of conduct applicable to CNAV funds, might not suit the specific characteristics of the French MMF market. In particular, the diversification ratios proposed by the Commission, which are stricter than those applied under the UCITS directive (applied by most French MMFs), could undermine the central role played by these funds in the short-term financing of banks and corporates in the Union. Because of the limited scope of available high-quality eligible money market instruments, French MMFs might be forced to scale back their exposure to certain bank issuers and reallocate large sums to comply with these stricter ratios, which are based on those followed by CNAV funds.
- › **Securitisation vehicles and other special purpose off-balance sheet vehicles**, which are used to resell loans in the form of issued securities. The conclusions of the FSB, published in November 2013, sought to make these transactions more transparent and encourage harmonisation of certain practices through product standardisation and risk retention requirements. Discussions are continuing, with a number of regulators recognising the need for disintermediated long-term financing to support an economic recovery. In particular, the FSB is partnering IOSCO to clarify its recommendations (risk retention and regulatory incentives to promote simple and transparent structures, for example, targeting non-bank investors). Meanwhile, in a communication to the Parliament and Council in March 2014, the European Commission stressed the need to correct the unwanted effects of regulation on long-term investment, focusing particularly on securitisation.
- › **Repos (or sale and repurchase agreements) and securities lending/borrowing**, which are agreements between two parties to lend cash or securities in exchange for a temporary transfer of assets, with interest payable. These financing tools, which usually have a term of less than one month, play a key role on global money markets. However, they are still extremely opaque, even when cleared through a central counterparty. The IMF estimates⁴⁵ that overall, any given security was lent out an average of 2.5 times in 2011 (compared with three times in 2007), pointing to a slight reduction in the velocity of collateral over this period. Accordingly, securities financing transactions make it possible to generate leverage and maturity transformation and therefore contribute to procyclicality. The FSB published recommendations in August 2013 and is looking at introducing haircut methodologies and minimum haircuts (at least for certain transactions) and conducting discussions on procedures and scope. For its part, the European Commission took up some of the recommendations in a draft regulation on transparency for these transactions⁴⁶.
- › **Other shadow banking entities**, spanning a wide range of activities and players, ranging from asset management to credit reinsurance and including securitisation and finance companies. The aim is to ensure that all shadow banking entities are properly identified. To this end, a definition of economic functions was drawn up to clarify the five

- **Stability.** A predetermined reserve (buffer amounting to 3% of the fund's net asset value to be established within three years in the case of existing funds) needs to be established by constant NAV funds (which exist in Luxembourg and Ireland, but not France) to limit the need for sponsor support to stabilise redemptions at par.

- **Establishment of internal credit rating and stress testing procedures.**

⁴⁵ <http://www.imf.org/external/pubs/ft/sdn/2012/sdn1212.pdf>

⁴⁶ The Commission proposed three directions in its draft regulation:

- Report SFTs to trade repositories (TRs),

- Transparency rules for funds (UCITS and AIFM) vis-à-vis investors on use of SFT,

- Minimum contractual and operational transparency measures covering rehypothecation of collateral (express knowledge of inherent risks and prior consent of the providing counterparty in a contractual agreement).

main types of activities that may be considered as credit intermediation outside the regular banking system and potentially creating bank-type risks⁴⁷. In August 2013, optional policy toolkits were published for each of these economic functions, to reduce the risks to financial stability. The activity-based approach is designed to be forward-looking to be able to capture future entities conducting the same type of risky activities.

Several objectives are thus being pursued: better identification of these activities with enhanced requirements, particularly in terms of transparency, more effective monitoring of these activities⁴⁸ and a reduction in associated systemic risk. These recommendations are already in the process of being adapted for Europe, as in the case of MMFs and SFT transparency, and in other jurisdictions. In 2015, the FSB will begin conducting international reviews to check that its recommendations are being applied consistently across jurisdictions, to limit the opportunities for regulatory arbitrage across zones (and thus prevent activities from relocating to the most lightly regulated jurisdictions) but also to identify the initial lessons and adjust the recommendations accordingly.

**Risks
associated with
SFTs**

Securities financing transactions (SFTs) are a key funding source for global financial institutions. Moreover, they are crucial to proper price formation, transmission of monetary policy and secondary market liquidity. However, some of their features make them highly sensitive to market parameters, even though the majority of these transactions are short (even very short) term. Accordingly, their liquidity can dry up quickly and they could potentially become the source of a run following an abrupt reassessment of the terms of these contracts, as in the case of a financial crisis. This remains a major risk, as evidenced for example by the fact that the Financial Stability Oversight Council (FSOC) cites reliance on short-term wholesale financing as the number-one potential emerging risk in its annual report⁴⁹.

Several features of SFTs contribute to this perception of risk, even though SFTs receive preferential treatment under bankruptcy law, being exempt from the automatic stay in the event of liquidation, which makes them very similar to currency:

- ▶ **The limited transparency of these markets (participants, outstanding amounts, haircuts, etc.),** whether in terms of the amounts in play, participants, guarantees provided and market practices. Only a few market surveys⁵⁰, of limited frequency, offer a view on the large amounts at stake. Some regulators, particularly the New York Federal Reserve, have enhanced their data by gathering granular information on tri-party repos. For its part, the ECB has published statistics since 2006 that are aggregated by jurisdiction, product, clearing and counterparty type, as well as rates applied. However, no granular data (by entity, transaction, collateral type, haircut, etc.) are available. For this reason, some of the FSB's recommendations stress the urgent need for enhanced transparency, to be achieved by collecting more granular and more frequent data through reporting of transactions and stocks to TRs or regulatory reporting arrangements. Further out, the FSB would be placed in charge of monthly aggregation and publication of international data. The Commission's draft regulation calls for the more ambitious option of reporting to TRs, which would subsequently allow regulators (in principle ESMA) to aggregate market data.

⁴⁷ The following five economic functions were identified and paired with regulatory recommendations: 1) Management of collective investment vehicles with features that make them susceptible to runs; 2) Loan provision that is dependent on short-term funding; 3) Intermediation of market activities that is dependent on short-term funding or on secured funding of client assets; 4) Facilitation of credit creation (through credit insurance); and 5) Securitisation.

⁴⁸ Notably through the establishment of TRs.

⁴⁹ FSOC annual report, May 2014

<http://www.treasury.gov/initiatives/fsoc/Documents/FSOC%202014%20Annual%20Report.pdf>

⁵⁰ For example the ICMA half-yearly European repo market survey <http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/short-term-markets/Repo-Markets/repo/latest/>

- ▶ **Procyclicality of SFTs and risk of fire sales in the event of a default by a major market participant.** There is no regulatory framework to ensure orderly liquidation of collateral in the event of market panic. Yet very large amounts are at stake, which complicates their potential liquidation, especially in stressed market conditions with associated risks of contagion. The New York Federal Reserve estimates that tri-party repo portfolios are between USD 100 and 200 billion, even reaching USD 400 billion in some cases. For this reason, the FSB has recommended improving market structures through measures such as incentives to support central clearing.
Some areas of shadow banking, notably repo activities, influence procyclicality and the transmission of monetary policy. Central banks must therefore build these activities into their analyses and be part of managing the systemic risks posed by shadow banking (to limit procyclicality), innovation and complexity, and limit negative interactions with monetary policy.
- ▶ **Danger of risks being further concentrated with certain counterparties,** from already high levels. Taken together, tri-party repos account for the majority of transactions in the USA (the proportions are reversed in Europe). But all of these transactions are cleared by two banks, JP Morgan Chase and Bank of New York Mellon, which are responsible for managing collateral and settlement services. Difficulties for one of these counterparties could have major market repercussions.
- ▶ **SFTs may offer a way to generate leverage and thus contribute to procyclicality in a market reversal.** Leverage depends, among other things, on minimum haircuts applied: overcollateralisation automatically limits the quantity of collateral provided in a transaction that may be reused. Two FSB recommendations, which are in the process of being finalised, seek to limit the possible reduction in haircuts applied to non-centrally cleared SFTs: methodological standards for calculating haircuts and minimum haircuts for certain transactions (in principle for financing provided by banks or market intermediaries to other types of entities against non-sovereign collateral) to limit excessive use of leverage and the associated procyclicality. Looking beyond the objective, it is not certain that imposing minimum haircuts will be effective in helping to curb leverage and the associated procyclicality. They will not prevent actual haircuts from increasing dramatically in a crisis, before the financing channel closes completely. Moreover, this type of rule may always be followed by change or degradation in market practices, as minimums become the market rule and are potentially associated with a deterioration in risk analyses by participants or with arbitrage involving other unregulated financial products with equivalent effects.
- ▶ **Reuse of securities and collateral chains.** One of the risks identified by the FSB arises from the difficulty (or even impossibility) of unwinding positions in the event of a participant failure or market panic, owing to long chains of collateral created by the reuse of securities. French securities law protects against this risk because all SFTs are governed by the “no debit without credit” principle, which ensures that there is only one holder of securities posted as collateral at any time. Accordingly, these transactions entail full transfer of ownership over the term of the contract. The counterparty receiving the collateral may thus use it to conduct other transactions as long as it is able to return the collateral in a timely fashion in accordance with the terms of the master agreement. The FSB and the European Commission are however recommending more transparency so that collateral providers give explicit consent and have the means to know whether their collateral is being reused.
- ▶ **Risk of a shortage of (or at least pressure on) high-quality collateral.** Collateral provides protection against counterparty risk. Yet increasing collateralisation requirements (EMIR, Dodd Frank Act, FSB recommendations on SFTs, in particular minimum haircuts, etc.) and tougher prudential rules (especially liquidity and leverage ratios) are tending to increase demand for high-calibre collateral and reduce its liquidity. Estimates of the cumulative impact of regulations vary considerably, ranging from USD 100 billion to USD 4 trillion (see *table below*), while the stock of high-quality

collateral is constrained by sovereign ratings, some of which have been downgraded in recent years, by government and corporate financing trends and monetary policy developments. The vast majority of SFTs across all jurisdictions mainly use sovereign collateral, in particular high-quality collateral. The risk of a shortage⁵¹ is, for example, mentioned as a major risk in a report by the European Repo Council⁵² and is likely to lead to an upside price correction for top-quality collateral.

Table 6: Estimates of incremental collateral requirements for OTC centralised clearing

Institution (by increasing order of impact)	Incremental collateral required	Basis for estimate
IMF (April 2012)	USD 100-200 billion	The shift to CCPs will elevate collateral demand for Initial Margin (IM) and guaranteed funds.
Bank of England (October 2012)	USD 130-450 billion	The IM required for IRS/CDS under normal market conditions, assuming no change in the gross notional volumes and 80% of trades being subject to central clearing.
BIS (March 2012)	USD 720 billion	IM required for dealers and non-dealers where all clearing for IRS/CDS takes place at only one CCP for each product (to reduce negative impact on netting).
Oliver Wyman / Morgan Stanley (April 2013)	USD 750 billion by 2015 USD 1.4 trillion by 2018	A combination of increased requirements in IM in the near term for centrally cleared transactions and independent amount (IA) in the longer term for non-cleared transactions. The increase will also be driven by the inability of firms to net across regions/CCPs.
US Treasury (Q2 2013)	USD 800 billion – USD 2 trillion	Quantum of new IM and stringent eligible collateral requirements will greatly increase the demand for high-quality collateral.
CGFS (May 2013)	USD 4 trillion	Sum of estimates for increased requirements for liquidity regulations; IM for non-centrally cleared derivatives; and IM for centrally cleared derivatives.

Sources: AMF, Barclays⁵³, ICMA.

- **Monetary policy transmission and interbank market liquidity.** On a more structural level, the functioning of central bank refinancing and the interbank market will also be affected by the tougher rules for repos (among other things through the quality, availability and reuse of collateral). This is the channel through which central bank liquidity is provided to banks, as well as a source of liquidity for banks, and hence of leverage. Yet SFTs are based on mark-to-market values, which may lead, in the event of inappropriate regulation, to a pick-up in margin calls, stricter eligibility criteria for collateral and, ultimately, the ineligibility of certain asset classes as collateral in situations of stress, compounding the financial strain caused by fire sales.
- **Regulatory arbitrage and relocation of transactions to the non-regulated sector.** This is a particularly important risk given the current shift of non-secured financing to secured money markets in bank financing and increased capital requirements for unregulated entities. Moreover, the rules of collateral reuse and rehypothecation, which are intended to clarify collateral chains and regulate use of leverage, could also become stricter. This points to the risk that liquidity could become scarcer if the rules for repos are not properly calibrated.

In particular, care must be taken to limit regulatory inconsistencies that could potentially fuel arbitrage in favour of shadow banking, i.e. efforts to take advantage of differences in regulatory treatment between highly regulated sectors and/or countries and other sectors/countries where similar financial activities are conducted without being subject to the same regulatory or supervisory requirements. To ensure a level international playing

⁵¹ *Mind the gap? Sources and implications of supply-demand imbalances in collateral asset markets*, I. Fender and U. Lewrick, BIS Quarterly Report, September 2013

⁵² *Collateral is the New Cash: the Systemic Risks of Inhibiting Collateral Fluidity*, ICMA, April 2014
<http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/short-term-markets/Repo-Markets/icma-european-repo-market-reports-and-white-papers/collateral-fluidity/>

⁵³ *Much Ado about Collateral: Recent Changes in the Regulatory landscape for OTC Derivatives and the Potential Impact on Collateral*, Barclays, February 2014

field and prevent the relocation of shadow banking activities, it is vital to avoid being limited to the name or legal form of entities, but to consider also the nature of activities, as part of a coordinated international approach.

Box 3: Too big to fail?

In 2010, the Financial Stability Board (FSB)⁵⁴ initiated an international effort to design rules for entities deemed too big to fail. Systemically important financial institutions (SIFIs) are defined as institutions that are so large, complex and interconnected with the rest of the financial system that any difficulties or their disorderly failure could significantly disrupt that system as well as the real economy. To prevent such systemic risks, and thereby guarantee global financial stability, these entities are identified and must have recovery and resolution mechanisms, enhanced supervision and heightened loss absorption capacity. These measures are proportionate to the systemic risks involved and consistent between the different sectors.

Two methodologies for identifying globally systemic institutions have already been developed for **banks** and **insurers** and have led to the public designation of such entities by the Basel Committee (BCBS)⁵⁵ and the IAIS⁵⁶, respectively. **Market infrastructures** are also considered systemically important.

During these first two stages, the FSB worked with the International Organization of Securities Commissions (IOSCO) on methodologies for designating global systemically important non-banking, non-insurance institutions. The result was the publication in January 2014 of three sector-specific methodologies for **finance companies, market intermediaries and investment funds**⁵⁷, offered for public consultation until April 2014. This work is supplemented with a default methodology summarising the high-level principles for developing new methodologies in future. These processes are still being finalised.

The desire for consistency between different methodologies is a major theme of these work streams. This is why the same five impact factors have been used for banks and insurers: size (which also serves as the materiality threshold, to restrict the assessment pool⁵⁸), interconnectedness, substitutability, complexity and global activities. Risk indicators specific to each sector have been developed for these impact factors to assess the potentially systemic character of the entities under review.

As many of the financial industry's responses to the consultation mentioned, a number of key questions have to be answered before the methodologies can be finalised.

How can consistency between the different methodologies be guaranteed? The need for a level playing field

Apart from the stated objectives of convergence and consistency between sectors (banking and insurance on the one hand and miscellaneous entities on the other), whether in terms of designation or enhanced supervision measures, these sector approaches raise a number of questions and could

⁵⁴ *Reducing the moral hazard posed by SIFIs (SIFI Framework)*:
http://www.financialstabilityboard.org/publications/r_101111a.pdf

⁵⁵ Concerning banks, the annual designation exercise has already been carried out twice, resulting in the identification of 29 institutions in November 2013 (http://www.financialstabilityboard.org/publications/r_131111.pdf). They are classified by buckets of additional loss absorbency requirements:

- **Bucket 1 (3.5%)**
- **Bucket 2 (2.5%)**: HSBC, JP Morgan
- **Bucket 3 (2%)**: Barclays, BNP Paribas, Citigroup, Deutsche Bank
- **Bucket 4 (1.5%)**: Bank of America, Credit Suisse, Goldman Sachs, Groupe Crédit Agricole, Mitsubishi UFJ FG, Morgan Stanley, Royal Bank of Scotland, UBS
- **Bucket 5 (1%)**: Bank of China, Bank of New York Mellon, BBVA, Groupe BPCE, Industrial and Commercial Bank of China Limited, ING Bank, Mizuho FG, Nordea, Santander, Société Générale, Standard Chartered, State Street, Sumitomo Mitsui FG, Unicredit Group, Wells Fargo.

⁵⁶ In July 2013, the IAIS designated a first group of insurers as systemically important (http://www.financialstabilityboard.org/publications/r_130718.pdf), even though the measures to be applied to them had not been finalised. This generated a degree of uncertainty on the markets. The insurers identified are as follows, in alphabetical order: Allianz SE, American International Group, Inc., Assicurazioni Generali S.p.A., Aviva plc, Axa S.A., MetLife, Inc., Ping An Insurance (Group) Company of China, Ltd., Prudential Financial, Inc. and Prudential plc.

⁵⁷ http://www.financialstabilityboard.org/publications/r_140108.pdf

⁵⁸ The materiality thresholds are as follows: for finance companies and financial intermediaries, 100 billion dollars in balance sheet total assets; for conventional funds, 100 billion dollars in net assets under management; for hedge funds, 100 billion dollars in net assets under management or 400 to 600 billion dollars of gross notional exposure (i.e. the sum of absolute values of all short and long positions, taking into account of the notional value of derivatives, delta-adjusted when authorised). The objective is to align the rules as far as possible with banking and insurance methodologies to guarantee maximum consistency between sectors.

give rise to regulatory arbitrage. Specifically, an actor-based approach could clash with an approach based on financial institutions' activities, implying potential systemic risks. This is because certain activities (or types of behaviour) are strengthening interconnections within the financial system, such as derivatives, securities financing operations and the use of high leverage. As all the methodologies are based on the state of institutions' balance sheets, this could lead both to under-estimating certain risks (when derivatives positions are netted, for example, or in the case of extremely high leverage) and over-estimating the systemic nature of certain entities (such as a large investment fund exposed to fixed income products).

Another aim is to focus on the most consolidated basis possible for the parent company as a means of taking stock of risks in their broadest possible sense. In some sectors, most of the significant players are subsidiaries of banking or insurance groups that are already candidates for designation as systemic or at least have been analysed on the basis of the above methodologies. This raises the question of the re-designation of entities when it is believed that the full extent of risks was not taken into account the first time around (particularly in the case of non-consolidated assets). This would apply to market intermediaries, for example, as the vast majority are subsidiaries of the major banking groups and have therefore already been analysed using the BCBS methodology. While this limits the issue for this sector at the moment, it does ask what should happen to challengers, who could be subjected to stricter (or at least different) rules than those applied to market leaders and who might therefore suffer a competitive disadvantage. Lastly, accounting and prudential consolidation issues will have to be clarified if clear, comparable and intelligible rules are to be put once again to these financial institutions.

What approach for asset management?

In their methodology proposals put out to consultation in January 2014, IOSCO and the FSB suggest **approaching the potentially systemic nature of asset management via investment funds** rather than via managers or managers and their funds, leaving open the issue of families of funds⁵⁹. There are several reasons for this choice:

- ▶ The economic exposures arising from the portfolio of assets under management are created at fund level. It is the portfolio that generates an exposure to the financial system, through counterparty commitments or leverage, for example. Funds' investment strategies and risk profiles can be extremely varied even when a single manager is involved. By definition, investors in funds are exposed to capital losses, and funds are regularly opened and closed.
- ▶ Fund assets are held by legally independent and independent entities (custodians or depositories). This means they are not consolidated with the manager's own assets, which – like their capital – are generally very limited. Fund managers cannot use the assets in their funds to pay their own debts or take positions on their balance sheet; they act on their funds' behalf.
- ▶ The data needed for the methodologies are (or will be) available at fund level, whether in the USA (SEC/CFTC Form PF/PQF) or in Europe, given the transparency required in AIFMD and UCITS reporting schedules.

There is a counter-argument to this approach, namely that a fund could easily escape designation by being divided into several smaller funds in order to reduce its assets under management to below the materiality threshold.

Some organisations advocate an **approach based on asset managers**, for the following reasons:

- ▶ Potentially systemic risks could arise from activities and positions taken on certain markets, particularly in derivatives in the context of risk management and securities financing operations (securities borrowing/lending, repos, etc.). Aggregating the positions taken by a manager's funds can result in huge outstandings, as can positions created directly at the level of the management company (e.g. when hedging is centralised at group level for optimisation purposes).
- ▶ Asset managers are exposed to operational and reputational risks, which could trigger a run on their funds.

However in some jurisdictions, notably in Europe, asset managers have tools that can limit the potentially systemic consequences of any difficulties their funds might encounter. These include redemption gates, side-pockets and the temporary suspension of redemptions, which are listed among the FSB's recommendations for other shadow banking entities. And in the event of an asset manager's default in normal market conditions, the fact that fund assets are held by a depository or custodian means they can be transferred to another depository or custodian.

In principle, the AMF does not consider asset management to carry systemic risks comparable to those generated by banks, insurers or market infrastructures; the industry is already regulated with tools specific to the sector adapted to its particular risks (or will be, as for money market funds). Even so, the AMF is actively involved in FSB and IOSCO work streams on identifying possible specific entities that combine features that could render them too big to fail, such as very large, complex and interconnected entities with a global reach. Should such entities experience difficulties or fail, the

⁵⁹ Any bid to analyse families of funds would imply an ability to define similar or identical investment strategies implemented by a single asset manager.

stability of the financial system would be undermined. Lastly, particular issues related to separately managed accounts⁶⁰, sovereign funds and pension funds will have to be clarified.

What is the impact of designation?

The G-20's mandate to the FSB is limited to the development of methodologies. It does not cover the designation of entities or the framing of recommendations associated with a designation. This lack of visibility on the consequences of designation makes the work on methodology more complex and is hampering the industry's understanding of the process. The industry fears that the framework for banks (implying, inter alia, enhanced prudential supervision and additional regulatory capital) will be applied to a very different sector.

1.6. The emergence of virtual currencies: risks or opportunities?

Amid a gradual return of confidence in financial markets, and given a degree of suspicion over traditional finance, investors hurt by the underperformance of conventional investments during the crisis appear increasingly tempted by potentially riskier alternatives. The AMF has issued repeated warnings to savers to be especially vigilant over unusual investment opportunities offered to the public, such as books and manuscripts, works of art, solar panels, stamps, wine and even diamonds. Since 2009, and as part of this trend, a new type of investment has grown in importance: virtual currencies. The implications and risks of these vehicles merit investigation.

What is a “virtual currency”?

The ECB defines a virtual currency as “a type of unregulated, digital money, which is issued and usually controlled by its developers, and used and accepted among the members of a specific virtual community”. This type of currency implies an online offer of a unit of account stored on an electronic platform, as well as a means of payment that permits the commercial exchange of goods and services over the internet without the use of legal tender.

As the Banque de France points out⁶¹, virtual currencies only partially fulfil the three traditional functions of currencies, which are: 1) a unit of account (i.e. a standardised unit that can be used to measure the value of flows and stocks of goods, services and assets); 2) a means of exchange and of facilitating commercial transactions; and 3) a store of value for future use. Virtual currencies are not electronic money, which is regulated by the Electronic Money Directive, as they are not issued against the receipt of funds for the purposes of payment transactions⁶².

Table 7: Matrix of different types of money

Format		
Legal status	Physical	Digital
Unregulated	Certain types of local currency	Virtual currencies
Regulated	Notes and coin	E-money
		Bank money (deposits)

Source: ECB 2012.

⁶⁰ The question of how separately managed accounts (i.e. assets under management by an asset manager according to a mandate specified by the investor) are dealt with has not been settled yet. WS3 considers that their weight in the asset management industry requires more work on their systemic character. The September 2013 OFR report quotes the following outstandings at end-2012: registered investment advisers separate accounts 10.076 trillion dollars, insurer separate accounts: 2.07 trillion dollars and bank holding company separate accounts 10.377 trillion dollars.

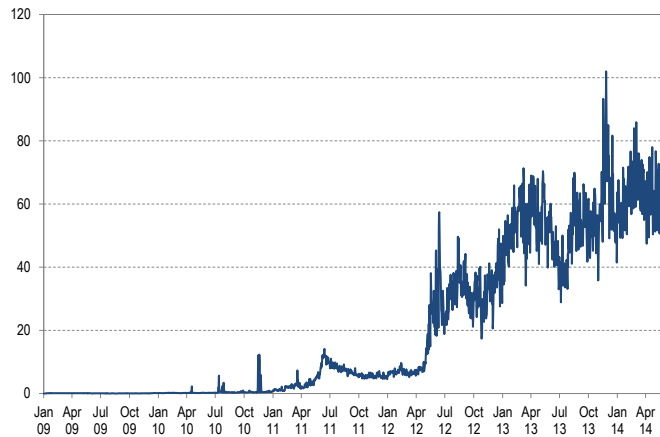
⁶¹ *Les dangers liés au développement des monnaies virtuelles : l'exemple du Bitcoin*, Focus n°10, Banque de France, December 2013.

⁶² In the Electronic Money Directive (2009/110/EC), electronic money is defined as monetary value substituting for physical money (notes and coin), stored in an electronic, including magnetic form (electronic system, remote server, portable telephone or online payment account), representing a claim on the issuer and which is issued on receipt of funds for the purpose of making payment transactions and is accepted by a natural or legal person other than the electronic money issuer. The Directive aims to provide a framework for the development of innovative and secure electronic money services, to facilitate access to the market for new firms and to encourage genuine competition between market participants. The prudential regulation regime for electronic money institutions has been adapted to the requirements imposed on payment institutions by the Payment Services Directive.

These currencies' very rapid development

The growth in virtual currencies has been spectacular in terms of both volumes and supply. Daily trading volumes have soared since 2012. Around 40,000 purchases of goods and services per day are now denominated in bitcoins, for example, and more than 100 virtual currencies are in circulation. Created in 2009, the bitcoin is the main virtual currency (see Box), with an almost 90% market share at the beginning of 2014. Others include LiteCoin, WebMoney, Perfect Money, Ven, Ripple, DogeCoin, InfiniteCoin and Amazon Coins.

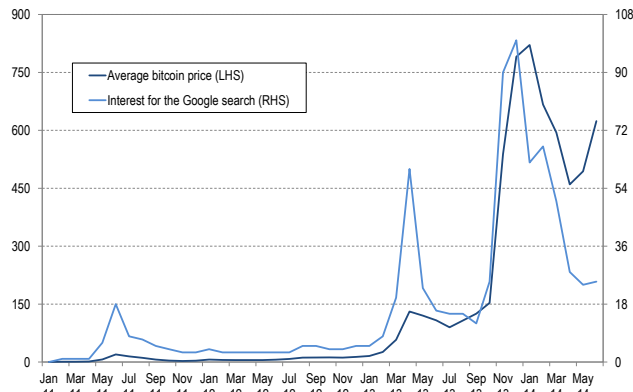
Figure 49: Number of bitcoin transactions per day (thousands)



Sources: AMF, Blockchain.info.

While IT and electronic payment systems are key to the existence virtual money, they are even more important for obtaining or exchanging it. There is a strong correlation between the price of bitcoins since the beginning of 2011 and interest in this currency on one of the main search engines, for example. The success of virtual currencies, and thus the appreciation of their value, stems from marked network effects and a herd mentality that generate swift increases in demand. This in turn creates self-fulfilling prophecies of bitcoin appreciation.

Figure 50: Bitcoins: an e-phenomenon (against dollars and Google index)



Sources: AMF, Blockchain.info, Google trends. NB: partial data for June 2014.

Many ways of acquiring virtual currency

Investors can acquire virtual currency in a number of ways. They can do so directly, by mining, i.e. using servers to resolve the algorithms from which bitcoins are derived (see Box), by concluding a bilateral transaction with another investor who already owns bitcoins, or by buying options online⁶³. Investing in this market can involve a crowd funding

⁶³ <http://fr.anyoption.com/options-Bitcoin> or <http://www.optionsdigitales.com/options-binaires/les-options/Bitcoin>.

platform⁶⁴, for example. Indirect means of acquiring virtual currency exist as well, via a platform, a payment institution⁶⁵ or by borrowing.

Advantages of virtual currency

Apart from their innovative aspect – financial innovation can be seen as a synonym for an alternative form of payment and investment – virtual currencies claim numerous advantages over electronic money and legal tender. These include lower transaction costs⁶⁶, speed of execution, their virtually universal character, their independence from the traditional banking sector and their broad guarantee of anonymity for transaction counterparties (and therefore difficult traceability).

That said, relative to other means of payment they also imply a large number of risks, particularly legal risks, which we examine below. They can also prove highly volatile, far more so than traditional currencies or gold, and have suffered numerous flash crashes since the beginning of 2013.

The rapid expansion of possible uses for virtual currencies

The European Banking Authority (EBA) has pointed out⁶⁷ that virtual currencies, which are neither issued nor guaranteed by a central bank, were originally used as means of payment in the context of video games and social media⁶⁸. Even so, they can be used to settle online transactions denominated in virtual money⁶⁹, resulting in the transfer of funds or transactions in the real economy with retailers that accept it⁷⁰, using the internet or not, at lower cost and without bank intermediation. Some 20,000 retailers already accept payment in bitcoins. The supply of these sorts of payment services has a substantial communications and marketing component, transmitted inter alia by social media, and is based largely on trust.

In consequence, services have been set up to permit convertibility against legal tender. For example, bitcoin distributors have been established in countries such as Canada, Hong Kong, Finland, Slovakia, Switzerland and, in May 2014, France (Paris and Bordeaux).

The range of financial products backed with virtual currencies has also expanded swiftly. It is possible to invest in vehicles linked to virtual currency, for example, such as in the USA (Bitcoin Investment Trust⁷¹, Pantera Bitcoin Partners⁷², Bitcoin ETF projects⁷³) and Singapore. Financial products are being developed in Europe as well, but according to ESMA they remain marginal⁷⁴, with contracts for difference (CFDs) offered by two

⁶⁴ For example, <http://coinfunder.com/> and <http://www.raiseBitcoins.com/>.

⁶⁵ For example, Paymium uses a payment institution authorised by the Banque de France: LemonWay (<http://paymium.com/#services>).

⁶⁶ Transactions in Bitcoins are estimated to be only a third to a half as expensive as those transiting via banks. But this competitive advantage is set to weaken in line with the steadily increasing costs of "mining", with bigger and bigger ancillary investments required in hardware and electricity consumption against a backdrop of falling returns.

⁶⁷ In a warning published in December 2013: <http://www.eba.europa.eu/-/eba-warns-consumers-on-virtual-currencies>.

⁶⁸ It is worth remembering that the name of the former principal Bitcoin exchange, MtGox, was derived from "Magic The Gathering Online' eXchange". It initially served as an exchange for *Magic the Gathering* medieval fantasy playing cards before moving into Bitcoins.

⁶⁹ We have also seen an increase in donation offers denominated in virtual currencies by organisations or projects such as Wikileaks.

⁷⁰ One list of such retailers appears on <http://www.Bitcoin.fr/post/2010/12/30/Que-faire-avec-mes-Bitcoins#main>. A trend towards the proliferation of instruments permitting the use of virtual money appears to be emerging, such as payment cards in Cyprus backed with virtual currency accounts, Bitcoin changing terminals in Canada – in the planning stage in the Czech Republic and Italy – and a project to print coins on Alderney, in partnership with the Bank of England.

⁷¹ BIT is a private, open investment vehicle invested exclusively in Bitcoins and sponsored by a FINRA- (ACAM-) registered broker.

⁷² A USD 150 million fund launched in March 2014 dedicated entirely to virtual currency. Fortress Investment Group, Ribbit Capital and Benchmark have all invested in the fund.

⁷³ Fortress Investment Group and the Winklevoss brothers are in the process of launching Bitcoin-backed ETFs.

⁷⁴ ESMA has specifically examined Bitcoins in the light of their growing use as a speculative investment product rather than as a currency for commercial trade.

investment firms⁷⁵ and Exante Ltd, a hedge fund authorised in Malta in October 2012 that invests in bitcoins. In October 2013, Coinfloor launched a trading venue in London. Operational since March 2014, it enables institutional investors to trade blocks of bitcoins over the counter completely anonymously, in partnership with a Financial Conduct Authority-regulated financial institution as market maker. Elsewhere, the US group Tera Inc. concluded the first bitcoin swap against dollars in March 2014. The counterparties were two US firms, and the deal was for several millions of dollars' worth of bitcoins.

Capital increases for listed or unlisted companies are perfectly conceivable, as is the payment of dividends in virtual currency. This again raises the question of their legal position (contribution or payment in cash or in kind), and companies whose securities are offered to the public could expose investors directly or indirectly to virtual currencies.

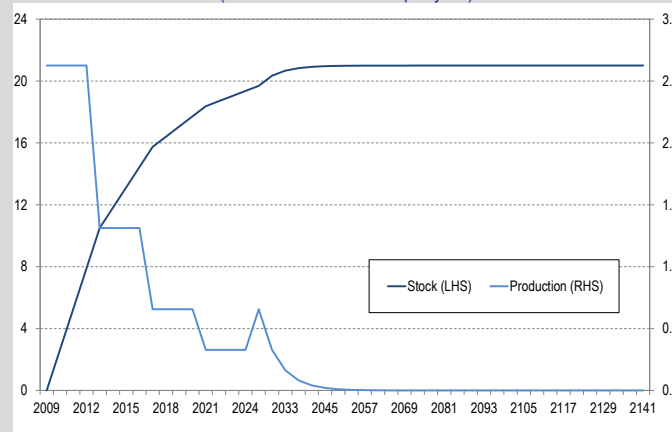
Box 4: To B or to b: Bitcoin or bitcoin?

Bitcoin refers to an internet-based payments system; bitcoin is a unit of account used in this payment system (BTC, ₿ or B). The cryptographic protocol was designed in Japan in 2009 by a developer known under the pseudonym Satoshi Nakamoto.

Bitcoin is based on a peer-to-peer online "mining" network, which is the procedure in which bitcoins are put into circulation. "Miners" use their computers to run mathematical calculations through a network of Bitcoin users to confirm transactions and increase network security. Miners of Bitcoins keep a tally of the costs of the transactions they confirm, and receive bitcoin units of account (or blocks) to compensate them for participating in the system's operation and for resolving increasingly complex mathematical algorithms ("discovering" new blocks). Earnings from mining depend on the resources using in terms of electricity and processing power, and are designed to decline over time in a more and more competitive and technical environment. Management of Bitcoin is spread over all the nodes of the network, such that Bitcoin operations do not depend on the integrity or competence of a central issuer but solely on the robustness of the cryptographic procedures.

The quantity of money created by the system is limited by a predefined programme to 21 million bitcoins, which will create a deliberate shortage when the limit is reached in 2040 (although in practice, 99.8% of bitcoins will already have been produced by then). 12.7 million bitcoins were in circulation in May 2014. The rate at which they are created is regulated and fluctuates in line with the number of miners and the development of calculation capacity among connected computers (50 bitcoins every ten minutes in 2009, 25 every ten minutes since January 2013).

Figure 51: Stock and annual production of bitcoins
(in millions and millions per year)



Sources: AMF, Blockchain.info.

The advantage of Bitcoin over its predecessors is that it has resolved the double-payment problem, which had previously hindered the development of virtual currencies. Its other strength is the impossibility of falsifying participants' identifiers. Participants remain anonymous even though all transactions are public.

⁷⁵ Two MIF firms, regulated by the UK's FCA and the Bank of Ireland, respectively, already trade Bitcoin and litcoin CFDs: Plus500 and Ava Capital Markets Ltd. They are therefore authorised to operate in all European jurisdictions via offers of free services. Plus500 classes its CFDs as forex.

Numerous risks mean investors should remain extremely wary

Apart from their very swift success, a great many risks are associated with virtual currencies and stem from their unconventional nature. Apart from the legal risk implied in their vague status, issues related to taxation, monetary policy, the protection of market participants and savers, the security of the financial system etc. have already prompted several supervisors to put forward initial attempts at regulation, particularly for the purposes of taxation.

› **Legal and regulatory risks**

The legal and regulatory status of virtual currency has not yet been defined. Since they can be refused for payment without breaking the law, they do not violate the monopoly of central banks for the issue of legal tender. They cannot be considered as legal tender or a means of payment as regulated by the Payment Services Directive⁷⁶ and the Electronic Money Directive at European level. They are not a means of payment in the sense of the Monetary and Financial Code either, as they are not issued against the receipt of funds. Among the options for their classification, virtual currencies could be considered as a banking product, an index, a “financial measure” in the sense of Article D.211-1 A 1 of the Monetary and Financial Code that could serve as a basis for financial contracts, a good in the sense of merchandise or even a “miscellaneous good” under Article L.550-1 of the Monetary and Financial Code.

Because of their non-existent legal framework, no protection is available for virtual currencies as a means of payment. As there is no guarantee of proper performance of future financial obligations, users are exposed to credit risk on the funds they hold in their portfolios. Virtual currencies carry no legal guarantee of repayment at their nominal value at any time. Every completed transaction is irreversible, irrespective of the circumstances of its execution (i.e. even in cases of online piracy: for example, electronic “wallets” containing bitcoins are protected solely by two keys, which if discovered can result in the coins being purloined, in full transparency). This means that in the event of default or the cessation of activity on the platform that is guaranteeing the transaction or that is storing the virtual currency, for example as a result of online piracy by a third party⁷⁷, the bitcoins are lost forever. It should be borne in mind that the dark internet – web pages not indexed on search engines – now accounts for 80% of the entire Web and, apparently, avoids supervision.

It follows that market participants are exposed to a high degree of reputational risk in the event that fraud, money laundering or the financing of criminal activity are discovered. Given that transactions in virtual currency are public but the owners and beneficiaries of transactions are not, this makes most transactions virtually impossible to trace and guarantees a high degree of anonymity for users.

This situation creates risks of non-coordination at international level and hence of regulatory arbitrage. Some jurisdictions have already started to regulate virtual currencies or have actually banned them, while others are only starting to consider the issue. It is important that the competent authorities and applicable legislation are clarified as soon as possible to limit the risks of fraud, while promoting maximum international cooperation to limit opportunities for regulatory arbitrage. In the light of the various initiatives that have already been launched (see below), it is essential that further steps are made and that approaches are coordinated at G-20 and European level.

› **Operational risks**

Because of the very complex way in which virtual currencies now work, the platforms on which they are traded are exposed to a high degree of operational risk, against a backdrop of limited transparency, information asymmetry and legal uncertainty. These platforms are

⁷⁶ This would guarantee reimbursement to users in the event of fraud or an unauthorised transaction.

⁷⁷ Bitcoins are stored in electronic wallets held directly on their owners' computers, protected by two keys (one public and one private digital signature). The protection of these assets (i.e. the keys) therefore depends entirely on adequate anti-virus protection and other safeguards.

not subject to any guarantee of service quality and have no regulatory capital or even basic procedures for risk management.

This makes virtual currencies vulnerable as vehicles for scams, including tax fraud⁷⁸, money laundering, terrorist financing, the illegal exercise of a regulated profession. Another hazard is cyber-criminality, for example in the form of attacks on the electronic storage of virtual money. The anonymous character of bitcoin transfers followed by possible conversion facilitates the sale of illicit goods and services (see Box).

Lastly, participants face a risk of higher transaction costs as trading volumes rise, and therefore of increasingly complex administration.

Box 5: The first high-profile bankruptcies

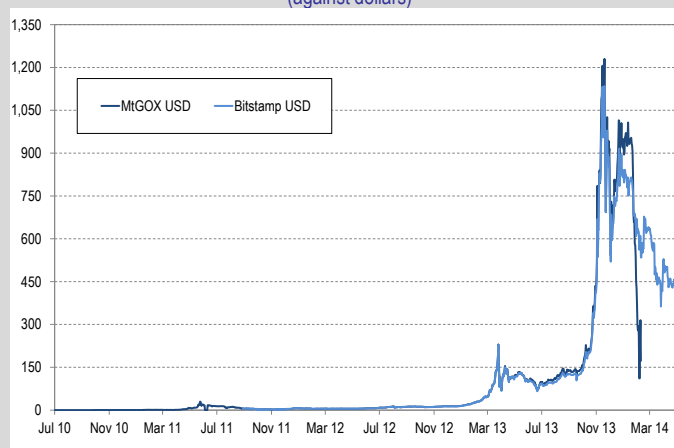
1/ **Silk Road: Bitcoins used to sell drugs**

The Silk Road e-commerce website was set up in the USA in February 2011. In October 2013, founder Ross Ulbricht was arrested and the website shut down by the FBI in the wake of wide-reaching legal action against conversion platform providers suspected of money laundering and tax fraud. This investigation revealed that Silk Road was basically an electronic platform used to sell drugs online, with bitcoins the sole currency of payment.

2/ **MtGox: massive online piracy of the top bitcoin platform**

A series of major online piracy attacks coupled with shortcomings in the system of so-called transaction malleability – which led to the forgery of bitcoins – struck MtGox on 7 February 2014. This Japanese platform was the leader in bitcoin trading at the time, with an 80% market share. The piracy and fraud resulted in the disappearance of 850,000 bitcoins, representing over USD 480 million. In all, 200,000 of the 950,000 bitcoins on the platform were subsequently recovered; around 130,000 investors were affected. There were massive repercussions on bitcoin prices, and some observers predicted the currency's demise. The bitcoin slumped in value from USD 904 on 6 February to USD 111 on 22 February, amid extreme volatility triggered by every passing announcement. Following this episode, MtGox was declared bankrupt at end-February and placed in receivership on 24 April. It was then sold to an American company for a symbolic dollar.

Figure 52: Prices of the two main Bitcoin indices
(against dollars)



Sources: AMF, Blockchain.info.

3/ **Flexcoin: another spectacular example of online piracy**

A second intermediary, Flexcoin, a Canadian firm specialising in bitcoin exchange and storage, was driven to bankruptcy at the beginning of March 2014 after the theft of USD 600,000-worth of virtual money by online pirates.

⁷⁸ Some regulators have decided to impose value-added tax or capital gains tax (depending on the definitions they use) on virtual currencies.

› **Counterparty, liquidity and non-execution risks**

Transactions in virtual currency are anonymous and therefore carry security risks. Market participants are neither regulated nor subject to minimum capital requirements, transactions are not centrally cleared and investors stand to lose their entire investment. Neither prices nor liquidity are guaranteed on trading platforms: the price results solely from the interplay of supply and demand. There is no authority that ensures the conditions are met for convertibility into legal tender or for the security of the electronic wallets in which bitcoins are stored. No legal recourse is possible in the event of piracy or the loss of the two keys giving access to electronic wallets.

Bitcoin trading platforms are notorious for their cash flow deficits in a shallow market, which could make these investments less liquid by lengthening exit times or cause a transaction to be carried out at a price other than the one price during periods of market stress or price volatility. This reduces arbitrage opportunities. No guarantees are offered over the future liquidity of any investment, which depends on the future volume of market participants. To unwind positions, it is of course necessary to find bitcoin buyers, and this raises a question over the very nature of virtual currencies: are they Ponzi schemes? The ECB has highlighted this risk, given that users of bitcoins have to obtain them by changing currency but can only get out if they find other investors to buy them, that is to say if a new participant joins the system.

› **Market risk**

Holders of virtual currency can be rapidly destabilised by changes in the value of their assets. Not only do bitcoin prices fluctuate widely according to supply and demand, but the currency is extremely volatile. The volatility of bitcoins has been particularly marked in recent years, and only weakly correlated with most traditional assets, yet their value depends heavily on user confidence in the system's security. By its very design, bitcoin is complex, largely opaque and has significant information asymmetries; this could make it a speculative investment vehicle or even a safe haven. Yet the value of bitcoins is not backed by any real activity and does not represent any underlying asset.

› **Accounting risk**

The accounting treatment of assets or liabilities denominated in virtual currency will also have to be clarified to guarantee valuations and the quality of financial information for an issuer or a fund by allowing auditors to verify the accounts. Specifically, the following questions will have to be answered:

- Can virtual currencies be considered as cash (cash in hand, for example, for an issuer holding a virtual currency accepted as a means of payment)? Or should they be treated as physical assets such as gold or wheat? Without any precise legal definition, virtual currencies can only be considered as physical assets at this stage, rather than financial assets or as cash.
- How should cash held in the form of a virtual currency and products with a virtual currency as their underlying asset be valued?

› **Systemic risk of financial instability**

Were virtual currencies to gain in importance, the resulting difficulties could have systemic repercussions. Bitcoin was set up with built-in shortage that makes it highly speculative: there is an upper limit on the number of bitcoins that can be created, and their rate of creation is set to decline over time. The built-in shortage has created a risk of speculation and price volatility (the price of a bitcoin was initially set at 30 US cents in April 2010, exceeded USD 1,200 at the end of November 2013 and was about USD 445 in mid-May 2014).

Given the regulatory implications, initial reactions from the authorities, notably on tax

Although virtual currencies are not yet included in the regulatory and supervisory scope of supervisors responsible for payment services, they are monitored very closely by the authorities because of the risks arising from their use and the illicit activities they could facilitate, such as money laundering, terrorism and tax fraud.

In the European Union, the business of exchanging and converting virtual currencies into legal tender on online trading platforms comes under the Payment Services Directive. This is because the platforms provide payment services involving legal tender, including receipt of funds from the virtual currency buyer, transfer to the virtual currency seller, and book-keeping. In France, this means that the activity requires ACPR authorisation as a payment institution, but this does not provide adequate protection to consumers or investors who use bitcoins (or any other virtual currency) online or retailers in the real economy. With regard to the Monetary and Financial Code, regulatory supervision of entities does not cover virtual currency transactions with economic agents that accept such currency, notably when illicit goods or services are sold on the internet. In these cases, only action by law enforcement agencies can stop that business.

In the USA, the legal status of virtual currencies has not yet been clarified but the business of virtual currency trading platforms has been categorised as funds transfer and requires authorisation⁷⁹.

Given that virtual currencies are by definition international, with no attachment to any jurisdiction in particular, one of the critical global challenges in regulating them will be international coordination. Importantly, their issue does not depend on a central bank. Action is needed to limit regulatory arbitrage and protect savers as far as possible, and the fact that different initiatives have already been launched both within the European Union and in the rest of the world argues for action sooner rather than later. Given the range of risks associated with virtual currencies, it will be important not to confine an international response to tax issues alone.

⁷⁹ Recommendation from the US Treasury's FinCEN on 18 March 2013. Mt.Gox obtained a licence as a Money Service Business on 13 August 2013, for example.

Table 8: Initial interpretations of the status of bitcoins and associated regulations

Jurisdiction	Legal status of bitcoins	Proposed regulatory framework
European Union	Falls within the first and third criteria of the Electronic Money Directive (electronic storage, acceptance as a means of payment) but not the second (issuance upon receipt of funds).	EBA warning on the dangers of bitcoin transactions (purchase, ownership or trading of virtual currencies); no consumer protection and realised gains potentially liable to taxation. Payment institutions have no right to issue electronic money.
China	Prohibition on use of bitcoins in financial institutions (Dec. 2013) and payment companies (Apr. 2014). Online trading permitted.	
Cyprus	-	Central bank declaration on the risks associated with virtual currency (Dec. 2013)
Denmark	Not a currency but an electronic service.	FSA statement that it will not regulate bitcoin use as it falls outside the scope of financial regulation (Dec. 2013). Gains from this electronic service could be taxable (not yet the official position).
Estonia	-	Transactions monitored by the central bank.
Finland	Commodity.	No legislation but taxation of gains realised upon the conversion of virtual currencies into legal tender; mining liable to income tax.
France	Intangible personal property (Treasury). Not a currency. Not a means of payment.	Banque de France warning on the associated risks (Dec. 2013). ACPR position (Jan. 2014) ⁸⁰ : the exchange of virtual currency for legal tender is a payment service and therefore requires ACPR authorisation as payment services provider ⁸¹ .
Germany	Private unit of account (binding financial instrument, private means of payment within private trading exchanges) (August 2013).	BaFin statement: no requirement for a banking licence but bitcoin trading regulated. No tax position yet. Prior authorisation required for commercial use, own-account trading, broking and multilateral platforms.
Greece	-	Bitcoins are accepted by some payment firms.
Ireland	-	Monitored by the tax authorities.
Italy	-	-
Japan	A good or an article (but not a currency).	Liable to tax (Mar. 2014)
Malta	-	A Maltese hedge fund is invested in bitcoins.
Netherlands	Not an electronic currency. Not a financial product.	Issue of the taxation of capital gains yet to be resolved. Central bank warning on the associated risks (Dec. 2013).
Poland	-	-
Portugal	Bitcoin: two-way virtual currency payment model. bitcoin: -	Central bank statement on the risks associated with bitcoins (Nov. 2013), described as an unsafe currency.
Russia	Illegal.	
Singapore	Not a security.	Regulation of virtual currency intermediaries (Mar. 2014) to limit such risks as money laundering and terrorist financing: obligation to check the identity of counterparties to transactions and to report any suspect transactions to the Suspicious Transaction Reporting Office.
Slovenia	Not a means of payment. Not a financial instrument.	Finance ministry opinion issued (Dec. 2013) but no definition of status. Issue of taxation to be resolved.
Spain	Not legal tender. Considered as a digital good.	As a digital good, bitcoin is subject to VAT.
Taiwan	Illegal.	
Thailand	Illegal.	Prohibition on virtual currencies.
UK	A "single purpose voucher", according to the tax authorities.	Subject to VAT.
USA	Property but not a currency.	An asset liable to tax: capital gains subject to capital gains tax and earnings from mining above 600 dollars subject to income tax (IRS, Mar. 2014). As trading/exchange of a virtual currency against legal tender is deemed to be a funds transmission service, requirement for authorisation as a Money Service Business (FinCEN, Mar. 2013).

Source: AMF.

⁸⁰ ACPR Position 2014-P-01 on Bitcoins in France, January 2014.

⁸¹ Credit institution, electronic money institution or payment institution.

1.7. Risks to the quality of information given to the public

New accounting rules could be risk factors for issuers

Already in progress in 2012, several initiatives concerning accounting standards have pressed on since 2013. They include preparations for the first-time adoption of the new consolidation principles under International Financial Reporting Standards (IFRS) and issues concerning the length of notes to the accounts, and in a context of relatively poor business conditions for French and European companies. The future of formal convergence of accounting standards between the two sides of the Atlantic has been sidelined indefinitely, but this will not prevent gradual convergence between reporting standards. Lastly, the ECB has launched an accounting and prudential review of major banks' accounts with a view to implementing the Single Supervisory Mechanism (SSM), which has significant implications for accounting practices.

Changes and questions around international accounting standards

In December 2012, the European Union adopted new standards on consolidation (IFRS 10-11-12), effective on 1 January 2014. One result is that the definition of control⁸² (IFRS 10) has been altered and harmonised, which in turn could prompt changes to the consolidation scope at some groups. This particularly affects groups, such as financial institutions and (to a lesser extent) major industrial groups in project mode, using special-purpose vehicles

Another important change for French issuers will stem from IFRS 11, which abolishes the option of proportionate consolidation. The method has been commonly used in France for jointly-controlled companies because the applicable accounting approach in their case is on an equity basis. The new standard raises a number of issues, particularly the distinction between a joint venture and a joint operation (an arrangement where the parties exercising joint control over the arrangement have rights to its assets and obligations for its liabilities), and the accounting method for joint undertakings. The switch to the new standard is therefore a source of uncertainty, risks and costs for some groups, especially in the property and construction sectors.

Several standards could result in longer notes to accounts, including the following:

1. More detailed information will be required in the notes on consolidated and unconsolidated entities under IFRS 12. This will allow a deeper analysis of the structures put together by issuers.
2. More details will be also required in the notes on derivatives netting under an amendment to IFRS 7, which is a move towards comparability with US GAAP.
3. More details on fair value and the way it is determined are required by IFRS 13 from FY2013 onwards.

Generally speaking, the steadily increasing sophistication of IFRS, stemming inter alia from the growing complexity of transactions that therefore require a redoubled effort on transparency, is a concern for issuers, especially in Europe.

The trend towards lengthier note disclosures is fuelling criticism of the international accounting standard from the financial industry, which favours simplification and a focus on entity-specific information. Many investors, companies and regulators want the notes to be easier to read and therefore more useful. One very positive development is the IASB's decision to sponsor discussion on so-called disclosure overload at end-2012. This initiative is to suggest improvements in response to criticism in the short and medium term.

⁸² Under IFRS 10, three conditions have to be met for real or potential control to be recognised:

1. (potential) power over the entity in which an investment is made, i.e. the right to direct key activities;
2. exposure or rights to variable returns (positive and negative) from the entity;
3. the ability to affect these returns (i.e. a relationship between the power and returns).

The AMF emphasises the importance of good information in the notes on the manner in which issuers apply IFRS accounting principles, both to provide proper information to investors and analysts and to permit comparability between the accounts of different issuers.

Given a gradual shift in the sources of corporate finance, with bank loans steadily losing ground to market financing in the form of bond or share issuance, the question of mid-sized firms' access to the capital markets is becoming critical. The AMF is examining the matter carefully, with a particular focus on potential simplifications for these companies. Even within the current regulatory framework, it would be perfectly possible to relax information requirements by applying concepts such as materiality more effectively. That said, the issue extends well beyond the French financial industry and requires coordinated action at European level or even at the IASB to lay down rules that are better suited to mid-sized firms. Possible work streams could include studies of the impact of regulatory measures and accounting standards on these firms.

At the end of 2013, the IASB indefinitely postponed the implementation of IFRS 9 (Financial Instruments), initially scheduled for 2015. The delay was decided despite substantive progress on such issues as hedging, where principles introducing greater flexibility for issuers – and therefore adapting to the growing sophistication of hedging activities – had been finalised. Work has still to be completed on the depreciation section, which may be published in 2014.

Debate is under way on reshaping the conceptual framework for IFRS; the consultation will lead to reform but only in 2015 at the earliest. Among the outstanding structural issues, it is noteworthy that the industry expects more account to be taken of the business model, thereby making financial statements less volatile and more understandable for investors, as well as discussion of the reintroduction of the notion of prudence. In mid-February 2014, EFRAG published a bulletin in collaboration with national accounting standards bodies (the ANC in France, DRSC in Germany, FRC in the UK and OIC in Italy) on the complexity of financial statements. According to the authors, this initiative stems not only from the growing sophistication of transactions but also from the numerous details taken into account in accounting standards and the formulations that make understanding more difficult. The idea is to seek comment from stakeholders and in so doing to give Europe more weight in the debates initiated by the IASB on the conceptual framework for international standards.

What is Europe's influence over IFRS design and implementation?

Following years of hesitation, the USA finally announced in February 2014 that adoption of IFRS for domestic issuers would be postponed indefinitely. This implied the *de facto* deferment of convergence between IFRS and United States Generally Accepted Accounting Principles (US GAAP)⁸³. It follows that the legitimacy of US representation on the IFRS Foundation (where it holds a quarter of all strategic posts), the IASB and various other bodies and committees should at least be questioned. By contrast, Europe represented 55% of the total capitalisation of countries in which IFRS is obligatory in 2011. In the meantime, the latest developments on the standard relating to rental contracts foreshadow a risk of divergence between IFRS and US GAAP.

For Europe, 2013 was a busy year. Published by the European Commission in October 2013, the Maystadt Report⁸⁴ made a number of recommendations intended to give the European Union more power to design and implement accounting standards as well as to improve the governance of the institutions that frame them. The main recommendations include a proposal to reform EFRAG⁸⁵, the European body charged with adopting

⁸³ Following a 2007 SEC decision, more than 450 companies listed in the USA representing a total market capitalisation of 5 trillion dollars are authorised to use IFRS in their financial reports.

⁸⁴ Reinforcing the EU's contribution to International Financial Reporting Standards:
http://ec.europa.eu/internal_market/accounting/docs/governance/reform/131112_report_en.pdf.

⁸⁵ European Financial Reporting Advisory Group.

accounting principles, in order to increase its decision-making power, legitimacy and representativeness and thereby boost European influence in formulating international standards. A new council is to be created that will set out EFRAG positions vis-à-vis the IASB and European Commission. Private sector participation by national accounting standards bodies and issuers will be increased and observer seats will be offered to ESMA, EIOPA, the European Commission, the ECB and the EBA. The report also recommends greater recognition of the economic impact of new standards and the fact that they pose no threat to financial stability and will not hinder European economic development. In February 2014, the Commission extended Philippe Maystadt's appointment as special adviser to ensure that this major reform of EFRAG would be effectively monitored on a regular basis.

Establishing the banking union: a decisive step

The ECB's review of asset quality at the 128 major euro area banks

In preparation for the Single Supervisory Mechanism (SSM) for 128 major banks⁸⁶ (including 13 French institutions⁸⁷), which comes into effect in November 2014, the ECB has collaborated with the European Banking Authority (EBA) and national bank supervisors since October 2013 on an exhaustive review of all these banks, in three stages:

- ▶ Prudential assessment of risks. This phase aims at a prudential assessment of risk profiles and major risk factors, notably liquidity, leverage and funding. For the ECB, this involves data preparation and portfolio selection. Qualitative and quantitative reviews are being carried out, along with forward-looking and backward-looking analyses, to position banks relative to others in terms of their intrinsic risk profiles and their vulnerability to various exogenous risk factors. This exercise will set the foundations for the SSM's future supervision tool.
- ▶ An asset quality review (AQR). This second phase involves an assessment of data quality, asset valuations (particularly Level 3), classification of non-performing or restructured exposures and the valuation of guarantees and provisions to analyse exposures to credit and market risks.
- ▶ Stress tests. The ECB and EBA will together test the ability of 124 banks to cope with two crisis scenarios ("baseline" and "stress") over a long period in order to determine whether Common Equity Tier 1 (CET1) requirements are adequate (8% and 5.5%, respectively, of CET1 – including additional Tier 1-type hybrid instruments). The scenarios incorporate an increase in long-term interest rates (including in the USA), a deterioration in credit quality, failure of structural reforms in European countries and the inability of national governments to bail out their banks. The scenarios are expressed in a 0.7% contraction in GDP in 2014, another 1.4% decline in 2015 and zero growth in 2016, together with a sharp rise in unemployment and virtually no inflation.

At the end of this exercise, and depending on the results, adjustment measures could be imposed on banks. These could include additional requirements for provisioning, with a six-month limit under the baseline scenario and nine months under the stress scenario, for recapitalisation or for the retention of earnings. It should be noted that banks have already

⁸⁶ These 128 institutions represent 85% of euro area assets. The following criteria are taken into account:

- total assets > 30 billion euros with a 10% downside margin;
- total assets as % of GDP > 20% (except if assets < 5 billion euros), with a 10% downside margin;
- at least the three largest credit institutions in the member state (aside from exceptions);
- institutions of particular importance to their domestic economy (at the request of the competent national authorities);
- institutions with large cross-border assets/liabilities (as a % of their assets) and/or at least one subsidiary in another euro area country (at the ECB's discretion);
- institutions that have benefited from EFSF or ESM support.

⁸⁷ Banque Centrale de Compensation (LCH Clearnet, solely for the accounting rules review), BNP Paribas, Banque PSA Finance, Caisse de Refinancement à l'Habitat (solely for the accounting rules review and the stress test), BPI France, Groupe BPCE, Groupe Crédit Mutuel, HSBC France, La Banque Postale, RCI Banque, Société de Financement Local, Société Générale. Dexia and BESV will also be invited to participate.

anticipated the risk of a recapitalisation requirement by reporting smaller balance sheets at end-2013, following the sale of potentially doubtful assets and the issue of hybrid debt.

A range of issues other than accounting are being raised by this exercise, which is unprecedented in the number of participants and the range of portfolios analysed.

For the ECB, the exercise has major implications for credibility that will in turn be critical to the credibility of the SSM, especially after the criticisms levelled at the previous EBA stress tests, which were focused on capital⁸⁸, in 2010 and 2011. Moreover, and given the number of participants in the process, issues surrounding the formalisation of harmonised treatment will have to be given due consideration. In other words, the ECB will have to demonstrate that it can take specific national characteristics into account while guaranteeing standardised analyses between jurisdictions. Definitions have been harmonised in order to do this, notably as regards non-performing or restructured loans.

For banks, the AQR will also be a test of their ability to respond quickly to requests for additional exhaustive and high-quality information, even though this data may have to come from different parts of the bank's information chain (management, risk, accounting and regulatory systems).

In terms of financial disclosures, the exercise will be based on a "conservative interpretation of IFRS" currently applicable to banks. This applies particularly to the adequacy of their assessment of provisions for credit risk exposures and their valuations of guarantees required to cover credit risk exposures on their balance sheets. A proper distinction will have to be made between possible corrections of accounting errors from prudential adjustments, which would not cast doubt on the compliance of annual accounts with accounting standards. The quality of banks' communications with the market will be a delicate and important issue and will have to be managed properly. The question of the timetable in which the ECB will inform banks of the results, and therefore the time available to them to take steps to recapitalise, for example, remains open. As far as the AMF is concerned, it will be important to ensure that transparency requirements vis-à-vis the markets are respected and that no information is leaked. In certain circumstances, for example where there is a significant recapitalisation requirement, the market might not be informed immediately of the ECB's conclusions so as not to affect orderly trading. That would give the issuer time to react, without undermining the transparency of the exercise as a whole. Any such obligations will have to be met in full upon the final AQR and stress test results sent to institutions in the first two weeks of October; institutions will be given only 48 hours or so to react.

***A plethora of
unregulated non-
financial
information in
virtual form***

The internet, computers and social media play an increasingly important role in disseminating information (especially non-financial information) to investors and savers, and therefore in shaping their investment decisions. Although these media are a major step forward, providing decision-support information easily, quickly and cheaply, it is important to remember that this information is not regulated. This can result in market risks and distortions, notably a herd mentality that is disconnected from fundamentals and can trigger swift booms or crashes in asset prices in a context of self-fulfilling prophecies. Other dangers include short-lived fads and even the transmission of false information.

⁸⁸ The main criticisms were that the scope was too limited (91 banks were reviewed, representing only 65% of the banking sector), taking account of a government default was optional (except for Greece), there was too much leeway given to national regulators and banks, and there was little control over the methodologies and quality of data analysed.

Box 6: European reform of external audit, and recent developments in the USA and UK

The financial crisis was the principal factor in triggering reform of external audit. According to Commissioner Michel Barnier, lessons from the 2008/2009 crisis highlighted shortcomings in statutory audits, particularly of banks and other financial institutions. This gave rise to the notion of possible systemic risks transmitted by the Regulation of the audit profession, given that the market is effectively dominated by the “big four”: Deloitte, EY, KPMG and PricewaterhouseCoopers. The main themes of this European reform drive were to **reduce concentration in the audit market, reinforce the independence of auditors while avoiding conflicts of interest, standardise systems for supervising the profession and improve the quality of audit reports.**

In October 2013, the European Council (COREPER – the Committee of Permanent Representatives) decided on an amended version of the project. The main points discussed were the following:

- ▶ **On the rotation principle,** the COREPER compromise provides for the rotation of auditors at so-called public interest entities (PIEs) every ten years, with a possible extension to 15 years at banks and insurers where the audit contract has been put out to tender, and 20 years at other PIEs. An extension (to 24 years) would also be possible where there are joint auditors;
- ▶ **Cooperation, notably by creating a Committee of European Auditing Oversight Bodies (CEAOB).** The CEOAB is to take over from the European Group of Auditors’ Oversight Bodies (EGAOB) and will have one member per country plus a non-voting ESMA representative. The chair is elected for a four-year term by a two-thirds majority of members; the vice-chair reverts to the Commission. CEOAB’s role is to propose guidelines and recommendations to promote the consistent application of European texts;
- ▶ **On non-audit services.** Provisions for “pure audit” firms do not appear in the COREPER proposal. Those for non-audit firms are maintained in the Regulation, but the Commission’s proposals are altered. In this context, only a **list of prohibited services** binding on the auditor and members of its network are retained. All services other than prohibited services must be approved by the **audit committee** of the audited entity. National adaptations are possible⁸⁹. A different regime is to apply to services provided by the **network outside the EU**. A limit on fees related to non-audit services is set by the audited entity at **70% of total audit fees** (for the auditor itself, not for its network).

Following an agreement reached in December 2013 by the European Parliament, the Council of the European Union and the European Commission during the trilogue process on audit sector reform, **the JURI Committee approved the draft agreement on 21 January 2014. The Parliament and Council of Ministers adopted the trilogue proposal in April 2014.** Both the Directive and the Regulation were published in the Official Journal of the European Union (OJEU) on 27 May and entered into force in mid-June 2014 (i.e. 20 calendar days later). It is up to individual member states to identify any necessary or desirable legislative changes. Unusually, both the Audit Directive and Regulation leave certain choices to member states’ discretion.

The package is unlikely to be operational before mid-2016, for the following reasons:

- the Regulation enters into force two years after its publication in the OJEU, and
- the Directive provides for a two-year transposition limit for member states, starting from the OJEU publication date.

The main features of the European reform

- ▶ **Rotation:** consensus on the obligatory rotation of PIE auditors every ten years, rising to 20 years if these services are put to tender and 24 years in the case of joint auditors (strongly encouraged).
 - **The retention of the principle of audit firms’ mandatory rotation, but in a less rigid framework, is satisfactory. A compromise was needed to avoid a rupture in the understanding of the audited entity (the principle of audit durability/continuity) while avoiding abuses.**
 - The possibility of a **balanced joint audit** (encouraging auditor diversity) favours competition in an oligopolistic sector, while ensuring that both auditors do not move on at the same time.
- ▶ **The establishment of CEOAB:** the features described above have been retained. But the diminished role for ESMA (which has no vote) in the implementation of European surveillance of the audit sector is regrettable.
- ▶ **Audit quality:** according to the legislation, auditors within the EU will publish audit reports in line

⁸⁹ Notably stricter rules on the conditions in which auditors (and their network) can provide services to audited entities and the prohibition on other services posing a risk to independence.

with international standards (ISA). For auditors of PIEs such as banks, insurers and listed companies, the agreed text constrains audit firms to supply stakeholders and investors with a detailed document describing all the auditor's actions and certifying, in a general sense, the accuracy of the company's accounts.

- **According to the AMF, a more descriptive and educational report is needed for the general reader and a specific report is needed for the audit committee. The Regulation amounts to progress in the direction expected of it.**
- **Against this backdrop, the committee's enhanced role is clearly desirable. Closer dialogue with the regulators (and therefore confirmation of ESMA's role) would also have been desirable.**

- ▶ **Non-audit services / audit committee:** in the AMF's opinion, non-audit services should have to be approved. It follows that **the creation of a "blacklist"** (aimed particularly at tax advice, services related to the client's investment and financial strategy, with a limit of 70% of total fees) is **warmly welcomed**. The notion of pure audit firms was abolished in draft amendments to the initial text destined for the European Parliament.

Recent developments in the USA and UK

- ▶ In the UK, the Competition Commission published a draft report in July 2013 proposing **the rotation of the signatory partners of the 350 most highly capitalised companies (included in the FTSE 350 index) every five years**. But it **refrained from imposing the rotation of audit firms for all companies** and from an obligation for accounts to be certified by two audit firms. The final report was published in October 2013.
- ▶ In the USA, **Congress approved legislation that permits the banning of audit firm rotation, in contradiction with the wishes of the Public Company Accounting Oversight Board (PCAOB).**

1.8. Summary of Chapter 1

The trends observed since the beginning of 2013 confirm an improvement in the economic and financial environment, particularly in Europe. This is related to the continuation of highly accommodating monetary policies, economic agents' continuing efforts to reduce debt, and decisive institutional and regulatory progress in reforms designed to increase the markets' resilience. The upturn is reflected in renewed confidence and a certain appetite for risk, shown in a loss of interest in gold – the ultimate safe haven – and, on the other hand, a keen interest in peripheral euro area countries. It is also reflected in dynamic primary market activity and in mergers and acquisitions.

Despite this generally positive context, several risks should be emphasised:

- the risk that Europe's economic recovery could be hampered by corporate finance constraints, reflected in reduced lending, especially by banks, and flat growth in securitisation. This risk could be contained in the near term by the ECB's planned new refinancing operations⁹⁰, aimed precisely at stimulating the distribution of credit to firms;
- the risk that the level of interest rates and/or regulatory reforms in progress contribute to a distortion of economic agents' financing and investment mechanisms. This could emerge as heightened risk-taking by yield-hungry investors and the appearance and/or collapse of localised bubbles, as with the spectacular boom-and-bust of bitcoins, the most popular virtual currency;
- the risk of regulatory arbitrage and excesses stemming from insufficient international coordination, which could undermine the European economic recovery.

⁹⁰ Targeted longer-term refinancing operations (TLTROs)

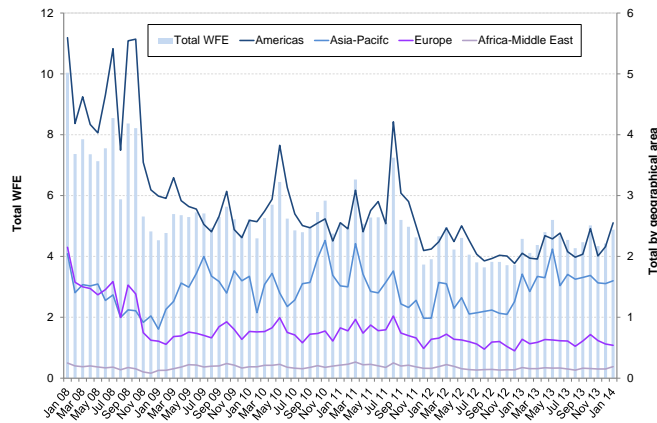
CHAPTER 2: MARKET ORGANISATION AND INTERMEDIATION

2.1. Despite a rebound in valuations, stagnant secondary market activity

A stabilisation in activity on secondary markets

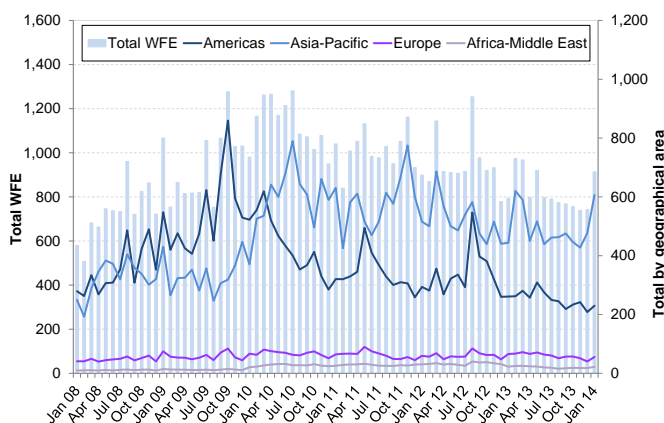
In 2013, following five consecutive years of marked decline, trading volumes on secondary equity markets as measured by the World Federation of Exchanges (WFE) stabilised in Europe and the USA, but at levels about a third of where they were before the crisis (Figure 53). Monthly trading volume in electronic order books contracted from an average USD 4.5 trillion in the Americas and USD 1.5 trillion in Europe in 2008 to around USD 2 trillion and USD 600 billion, respectively, in 2013. These figures were still higher than in 2012, however (12% for the Americas and 21% for Europe).

Figure 53: Trading volumes in exchanges' electronic order books (USD trillion)



Sources: AMF, World Federation of Exchanges.

Figure 54: Number of shares traded in exchanges' electronic order books (millions of securities)



Sources: AMF, World Federation of Exchanges.

Stabilisation masks regional differences

The change between 2012 and 2013 masks differences between Europe and the Americas. In the Americas, the downtrend in total transaction volumes, i.e. the number of shares traded multiplied by their market value, is worsening (Figure 54). The number of shares traded on electronic order books dropped again, by almost 30%. This reduced turnover does not show up in total volumes because it was offset by a sharp rise in valuations. The capitalisation of US listed firms increased by 29% in 2013, for example. Europe saw a marginal 3% increase in trading volumes in 2013, caused by softer equity markets, combined with a drop in the number of shares traded.

The methodological limits to this analysis should be emphasised, however. WFE data cover trading on transparent electronic order books only, and therefore exclude over-the-counter (OTC) transactions and trading on platforms where pre-trade transparency is not required (Section 2.2). The breakdown of volumes traded on transparent markets, opaque platforms and OTC is not constant over time. That said, the data available for OTC transactions show that their rising volumes are not enough to counteract the massive downtrend on order books. This is particularly true of opaque trading using mechanisms such as dark pools, where volumes are only a fraction of those on transparent exchanges (Section 2.2, Figure 64 to 69).

In any case, and given that trading volumes are volatile by nature, it is hard to isolate the quantitative impact of each of their determinants in isolation, and especially at world level. From a more qualitative viewpoint, trading volumes are determined by a series of factors, including the following:

- The organisation of intermediation, marked by the very significant role played in recent years by high-frequency trading (HFT). Although formally trading for their own account, the participants involved make extensive use of market-making strategies that make them closer to market intermediaries. The way they operate is to take modest positions to reduce their risk of loss: they therefore contribute to the trend decline in order size, although it is not impossible that increased order size on US markets can be explained by a lower incidence of HFT⁹¹;
- Market sentiment, which determines price effects to the upside and downside as well as volume effects via the propensity of individual and institutional investors to participate in equity markets. The correlation between the CAC 40 price and the number of shares traded from the Paris index is positive and significant⁹². Accordingly, the rebound in valuations in 2013 helped to buoy activity on equity markets;
- Tax changes, which can push volumes higher or lower. In France (Figure 55), 2012 saw the introduction of financial transactions taxation and an HFT tax. The impact on trading volumes was significant in the first few months (but not the HFT tax, whose impact was negligible), partly because of a temporary halt in trading on the part of several major players. Colliard and Hoffman (2013) estimate a -26% impact on volumes in taxable transactions the month the tax came into force (August 2012), which was reduced to -5.5% the following month. The permanent impact of the French tax package on trading volumes in taxable securities on Euronext, around 10% (Figure 55), appears minor by comparison with the far larger decline in volumes observed since 2008. Research on the effects of the French financial transactions tax concludes that there has been no significant impact on market liquidity. The main providers of liquidity to Euronext seemed to have completed the adjustment phase, following an initial period of business interruptions at several major market makers;
- Regulatory developments, which can trigger changes in the nature of the trading process. Concerning trading platforms, MiFID II will eventually impose trading on transparent platforms as the default option for equities. The national and European regulatory agenda does not appear to have made much of a difference to activity on

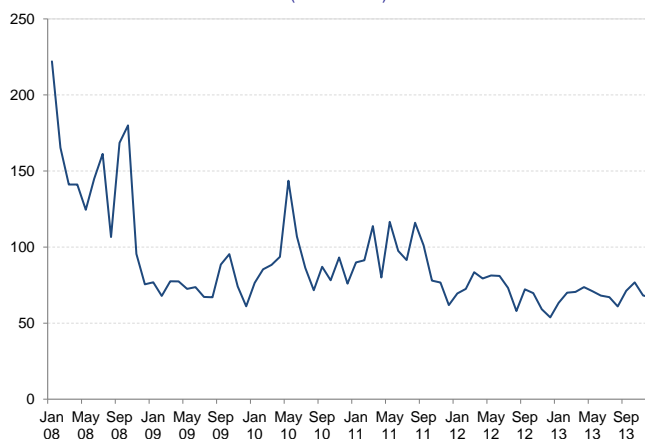
Actors adapt to France's financial transactions tax

⁹¹ World Federation of Exchanges (2013).

⁹² AMF calculations based on daily prices and trading volumes on the CAC 40 since 1 January 1992.

secondary equity markets in 2013. As far as intermediaries are concerned, and in the medium term, reforms to the structure of banks could have an impact on their equities trading business, notably in France, where legislation on the ring-fencing of banking activities will come into force on 1 July 2015.

Figure 55: Equity trading volumes on Euronext Paris
(EUR billion)



Sources: AMF, NYSE Euronext.

Box 7: Risks from high-frequency trading (HFT)

HFT on equity markets seems to be consolidating. In the fourth quarter of 2013, “pure” HFT firms accounting for 22% of trading volume on Euronext Paris. Factoring in the share of trading at investment banks, HFT represented 31% of trading volume⁹³. Measured by orders rather than volumes, the market impact of HFT looks even greater, with pure HFT firms accounted for 58% of orders. Internationally, the World Federation of Exchanges (2013) estimates that the share of HFT in European share trading volumes declined from 41% in 2010 to 39% in 2012; on American equity markets, HFT contracted from 60% of volumes in 2009 to 51% in 2012. This trend has yet to be confirmed, and market shares can shift rapidly between players against a backdrop of reduced profitability linked to heavy technological investment and heightened competition. In 2014, the revised version of MiFID will be implemented, significantly affecting HFT. In all probability, operational incidents on the markets and episodes of financial instability linked to HFT will also occur, similar to those seen in previous years.

HFT carries several types of risk for the financial markets:

- *Risks to investor protection and fair markets.* Although the whole purpose of HFT was to use technology to consolidate the liquidity fragmented between several platforms, end-investors can lose out if HFT firms use their speed advantage systematically to reap gains from price movements. Offers of colocation, the exclusive sale of information flows and asymmetric platform pricing aimed at attracting HFT orders have to be monitored to ensure that competition between HFT and longer-latency participants is fair. Because of its negative externalities (Biais, Foucault and Moinas, 2012), HFT can encourage other liquidity providers using different technological and business models and end-investors to seek alternatives to trading via electronic order books – for example, dark pools –with potentially negative consequences for the diversity of market participants, market makers’ ability to withstand shocks and, ultimately, the markets’ capacity to finance economy activity.
- *Risks to market quality.* HFT affects the markets’ transparency, liquidity and depth. Since HFT firms operate with shorter latency than other participants, order books are less predictable for slower firms, which cannot be sure of executing orders at the prices and volumes observed when sending their orders. The result can be a difference between apparent and actual liquidity. Some HFT firms replicate their offer of liquidity on several platforms simultaneously, leading them to cancel their offers on all platforms once they have executed an order on just one of them. Using a sample of FTSE shares in 2009, Van Kervel (2012) documented this situation, which he calls “ghost liquidity”. There is also the question of whether the liquidity supplied by HFT firms can withstand episodes of market stress.
- *Risks to financial stability.* Although research on the relationship between HFT and volatility does not deliver an unambiguous message, episodes such as the May 2010 flash crash indicate that

⁹³ This figure is the positively identified HFT share, with the portion from investment banks more difficult to estimate and probably not taken fully into account.

automatic execution – i.e. without human intervention – of a very large number of orders, without taking appropriate account of market prices, can subject those prices to extreme movements during high-pressure periods. This type of reaction could be fuelled by the instantaneous correlation between the strategies followed in HFT (Brogaard, 2011) and the time correlation between the positions generated by the same algorithm (Chaboud *et al*, 2012, on the forex market is one example). This creates self-sustaining spirals of rising or falling prices followed by violent corrections. The fact that HFT is not subject to prudential regulation – and particularly capital requirements – is another factor in its limited capacity to absorb shocks.

In all likelihood, 2014 will be a key year for HFT regulation on both sides of the Atlantic. In the USA, quite apart from the provisions of the Dodd-Frank Act, investigations carried out by the New York Attorney-General concerning the practice of the prior sale of information and the supply of privileged access to HFT firms could result in tougher law in their regard (New York Attorney-General, 2014). In Europe, the revised MiFID includes steps to improve the regulation and coordination of HFT in Europe:

- HFT firms will have to register as investment services providers, so all of them will have to meet tighter requirements on internal organisation and reporting to their national supervisor.
- Risk control within these firms is likely to be improved, for example by ensuring resilience in IT systems and the quality of their internal control, which would reduce the market impact of any failures.
- Algorithms may have to be flagged, such that firms will have to match their algorithms and orders but also make information available to supervisors when asked for it, especially on which algorithm is at the origin of which order.
- The introduction of a standardised minimum tick size (the smallest price increment between two orders), aimed at preventing participants playing on excessively small and excessively disparate price gaps in different instruments and platforms.
- ESMA is set to provide a better definition at European level of the pricing structure on trading platforms. The key issue is that these prices should not encourage but actually penalise excessive order volumes that are frequently cancelled immediately afterwards.
- ESMA will probably be able to clarify and better frame the colocation conditions for HFT firms.

Even so, and even after the revision of the MIF directive, several issues will remain outstanding in enabling supervisors to assess fully the reality of the risks posed by HFT:

- Access to a substantial amount of data and the handling and use of that data, which implies work on standardisation and the provision of resources by the national authorities. On this point, the introduction of the Legal Entity Identifier (LEI) will eventually make more effective use of available information;
- Cooperation and exchanges of relevant information – derived partly from order books – between supervisors, enabling them to ensure their respective rules are properly complied with and eliminating or reducing the possibilities of regulatory arbitrage.

2.2. Fragmentation and opacity of equity markets

2.2.1 Stabilisation in the fragmentation of equity markets

In Europe, the entry into force of MiFID I in November 2007 formally abolished the order concentration rule, allowing participants to compete for order flows and diversifying order matching mechanisms. According to Thomson Reuters data⁹⁴, there was only one alternative platform capable of trading CAC 40 shares in January 2008; by April 2014, 15 platforms operating outside the regulated markets were offering this service. MiFID I defined four types of equity trading: regulated markets (RMs), multilateral trading facilities (MTFs), systematic internalisers (SIs) and over-the-counter (OTC).

A stable share of alternative platforms in transparent markets

OTC volumes continue to account for a significant share of total trades. According to Thomson Reuters data, OTC volumes have represented between 40% and 60% of all European equity trading, depending on the year, since 2008. The OTC share of CAC 40 trading was 52% in 2013 after 54.2% in 2012, although with marked fluctuations from quarter to quarter⁹⁵. Moreover, as the Association for Financial Markets in Europe has pointed out⁹⁶, OTC volumes are subject to double-counting, which can lead to significant differences in estimates between sources⁹⁷.

⁹⁴ Thomson Reuters Equity Market Share Reporter.

⁹⁵ Source: AMF data.

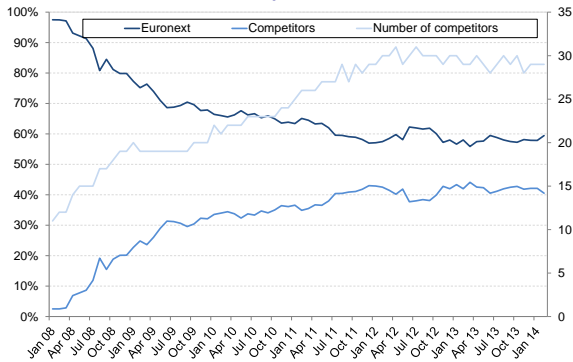
⁹⁶ Association for Financial Markets in Europe (2011).

⁹⁷ Fidessa data indicate an OTC share of the CAC 40 of 36% in 2013 after 49% in 2012.

Equity market fragmentation remains at an historical high

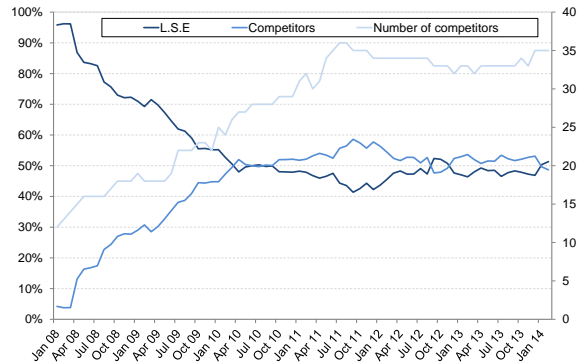
Thomson Reuters data show that the fragmentation of share trading volumes on multilateral platforms (“lit” volumes) has been stable on the major European markets for the past two years. The huge erosion of the market shares of the incumbent exchanges in France, the UK and Germany appears to be over, at least for the time being (Figure 56 to Figure 58), although the extent of the decline has varied in each country. The loss of market share resulted essentially from an increase in MTF market share; the share of trading in equities with multiple listings on regulated markets has been stable.

Figure 56: Euronext and its competitors' market shares in French equities



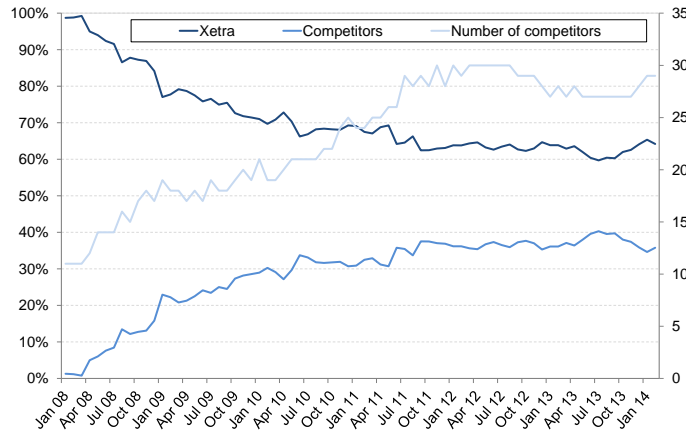
Sources: AMF, Thomson Reuters Equity Market Share Reporter.

Figure 57: LSE and its competitors' market shares in UK equities



Sources: AMF, Thomson Reuters Equity Market Share Reporter.

Figure 58: Xetra and its competitors' market shares in German equities



Sources: AMF, Thomson Reuters Equity Market Share Reporter.

Concentration indices also indicate a stabilisation in the fragmentation of trading volumes (Figures 59 to 61). Measured by the Herfindahl-Hirschman index or the Cheuvreux Fragmentation Index (Box 8), most of the fragmentation took place between 2008 and 2011 in France, the UK and Germany. With a London Stock Exchange market share of 51% and a Herfindahl-Hirschman index of 0.32, the UK equity market appears to be the most fragmented, followed by those of France and Germany.

Box 8: Measuring market fragmentation

Market fragmentation is generally measured by variants of the Herfindahl-Hirschman index (HHI) applied to volumes traded by trading venue. If each trading venue indexed as i accounts for a volume v_i of trades in the asset or asset class in question, the index is expressed as:

$$HHI = \sum \left(\frac{v_i}{\sum v_i} \right)^2$$

A value close to 1 indicates the concentration of volumes traded in a restricted number of venues. In this case, it would show the continuing dominance of historical operators over the market's issuers. For a given number of markets n , values close to $1/n$ indicate an equitable distribution of volumes.

Cheuvreux (2010) proposes an indicator (CFI) adapted to measures of entropy to assess the dispersion of market shares across trading venues:

$$CFI = -\frac{1}{\log(n)} \left(\sum \left(\frac{v_i}{\sum v_i} \right) \log \left(\frac{v_i}{\sum v_i} \right) \right)$$

Values close to 0 indicate a virtual monopoly of a single platform, and a rise in the index corresponds to a lower degree of market concentration. For a given number of trading venues, a rise in the index corresponds to more of a random distribution of traded volumes.

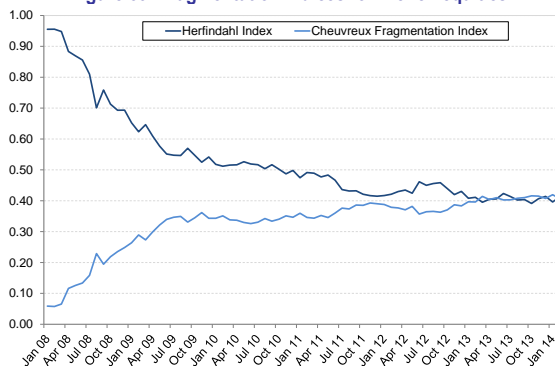
The limits to interpreting these indices bear emphasising. Firstly, the market shares of historical operators remain relevant information in themselves, as they determine the notion of the reference market, with implications for determining the competent national authorities.

Secondly, the range of markets to which the fragmentation index calculation is applied makes a difference. In fact, the fragmentation of volumes can be analysed only by taking account of trades executed on markets that report their volumes to regulators or to private data aggregators. OTC and internalised trades are therefore not counted.

Lastly, the analysis of fragmentation of traded volumes has to be extended in two directions:

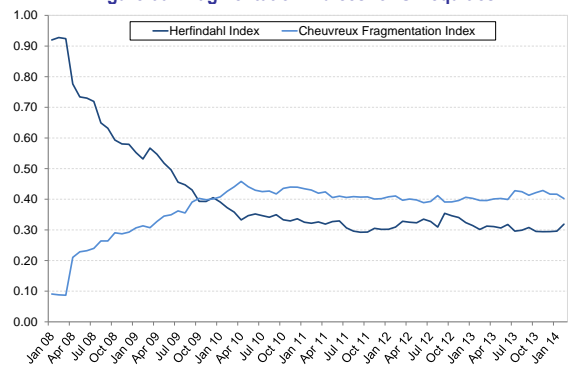
- ▶ analysis of the fragmentation of order flows, regardless of whether they are executed, to assess competition between trading venues in capturing these flows. Madhavan (2011) reveals greater fragmentation of Dow Jones and associated ETF equities business when it is measured by orders rather than volumes executed.
- ▶ analysis of fragmentation by intermediary, based on volumes or orders for a given asset on all platforms, to measure the concentration of intermediation and its role in the re-consolidation of the trading process.

Figure 59: Fragmentation indices for French equities

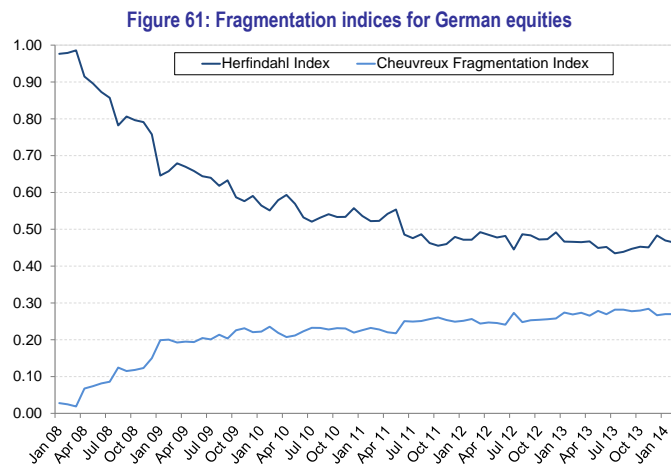


Sources: AMF, Thomson Reuters Equity Market Share Reporter.

Figure 60: Fragmentation indices for UK equities



Sources: AMF, Thomson Reuters Equity Market Share Reporter.



Sources: AMF, Thomson Reuters Equity Market Share Reporter.

Fragmentation can produce adverse effects on liquidity

By promoting fragmentation, competition between trading venues can induce a series of positive effects on the quality of equity markets. Competition between platforms can lead to cuts in their prices⁹⁸ and a better response to the mixed preferences of investors in terms of execution mechanisms. The fact that a security is traded on several platforms can increase the number of liquidity providers as well as competition between them for business in that security, generating positive effects on its liquidity⁹⁹. Even so, the potential advantages of stiffer competition have to be weighed against the risk of dispersing liquidity between trading platforms, as well as against economies of scale and network externalities associated with the concentration of participants in one or a few platforms. The results of empirical studies emphasise the point that the benefits of fragmentation are conditional on transparency requirements as well as the effective degree of market consolidation by participants. In a US context, O'Hara and Ye (2011) studied the behaviour of 262 NYSE and Nasdaq equities over a six-month period in 2008. They estimated that the most fragmented equities are subject to lower execution times and costs but also that these positive effects are related to the existence of a consolidated tape and the obligation to trade at the National Best Bid- Offer, i.e. the best available bid and ask prices. Neither condition is met in Europe. Analysing the behaviour of market-makers on the Nasdaq and Island, a study by Biais, Bisière and Spatt (2010) shows that the introduction of competition between platforms is accompanied by competition between the liquidity suppliers on each. The effects of fragmentation seem to materialise differently under MiFID I, partly because of a less strict definition of the best execution rule. On the basis of Euro Stoxx 50 shares traded on ten platforms in 2007 and 2008, Ende and Lutat (2011) calculated that after all explicit transaction costs are taken into account, 1.5% of orders could be executed at better prices. The effects on liquidity are also ambiguous. Degryse, De Jong and Van Kervel (2014) found from a sample of 52 Dutch shares between 2006 and 2009 that the fragmentation of transparent markets¹⁰⁰ increases total liquidity (measured by spreads and the depth of the consolidated order book), but tends to undermine it in the reference market. From this point of view, fragmentation can be detrimental to participants using only traditional markets or that route their orders only to a small number of trading platforms. Using a sample of 152 shares traded on Euronext and the LSE, Gresse (2013) could find no negative impact from fragmentation on liquidity in the reference market. But liquidity for the smallest capitalisations in that market was negatively affected by fragmentation.

⁹⁸ Colliard and Foucault (2013) associate the decline in fees billed by platforms with heightened competition in this sector following the entry into force of Regulation NMS in the USA.

⁹⁹ Foucault and Menkveld (2008) build a model in which fragmentation increases the liquidity available at the best limit if it allows liquidity suppliers to engage in heightened price competition.

¹⁰⁰ The authors distinguish fragmentation between transparent markets (lit fragmentation) from the rising market shares of opaque markets (dark fragmentation), cf. Section 2.2.2.

**Fragmentation can
create disparities
between categories
of market
participants**

The appearance of fragmentation as a permanent fixture in the European equity trading environment has also revealed several types of risks associated with it. In Europe, the MiFID in the process of revision introduces significant provisions in response to these issues (Section 2.2.3):

- ▶ Unless accompanied by measures to make best execution effective and guarantee satisfactory post-trade transparency, the dispersion of liquidity among multiple markets can create a mismatch between participants with access to the prices available on all platforms and those trading on only one or a few platforms. In the context of equity markets as they are at present, this risk can also materialise out of arbitrage strategies and inter-platform market-making by HFT firms, to the detriment of slower participants. Menkveld and Yueshen (2013) built a fragmented markets model in which market-makers' consolidation activities were accompanied by undesirable effects for investors, notably a deterioration in the information content of price movements. Lastly, liquidity fragmentation can make it harder to assess brokers' execution policies and lead to undesirable effects for their clients. This question arises in the context of European rules on best execution that allow brokers to use multi-criteria measures of execution quality, and in which price is just one factor among others, such as transaction costs and the speed and probability of execution. The multiplication of platforms with different characteristics can therefore contribute to an increase in the frequency of orders executed on less than optimal terms.
- ▶ Similarly, the diversity of operating systems and trading rules can unduly favour certain participants such as HFT firms, particularly via pricing practices and the dissemination of information on platforms. This is because they can be encouraged (mainly for profitability reasons) to attract HFT order flows (see Biais, Foucault and Moinas, 2012, for example) and Menkveld (2012). These practices help to increase order volumes and make HFT more ubiquitous, with externalities that can be negative in terms of operating costs and infrastructure resilience.
- ▶ For these reasons, the combination of a proliferation of trading venues and the emergence of HFT has helped to make the trading process increasingly complex and endogenous, with potentially negative repercussions for financial stability. The increase in the number of platforms is creating a risk that specific shocks spread between markets, as in the May 2010 flash crash in the USA. From this point of view, discussions on how to configure circuit breakers in order to manage volatility must not only continue but also produce regulatory solutions.

2.2.2 Equity markets largely transparent, but less than they were

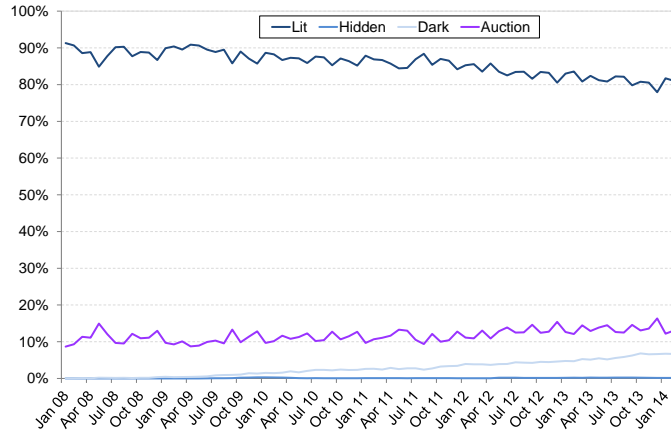
One of the major changes in the organisation of equity trading post-MiFID I is the growing share of so-called dark trading, i.e. trading under an exemption from rules on pre-trade transparency. Although statistics have to be handled with care – the classification of transactions¹⁰¹ between lit and dark is sometimes qualitative and can differ between data providers – figures from Thomson Reuters and research published by Fidessa (see Fidessa 2013 and Figures 64 to 69) confirm this trend for European markets as a whole in 2013.

**The share of equity
trading on opaque
markets remains
modest**

At European level, Fidessa reports that dark trading accounted for 4% of equity volumes in October 2013, up from 3% a year earlier. Calculations using Thomson Reuters data indicate a market share of 7% in February 2014 compared with 4% in February 2013. So while they still represent only a small fraction of equity trading, volumes in dark pools have risen very significantly in Europe since 2008 (Figure 62).

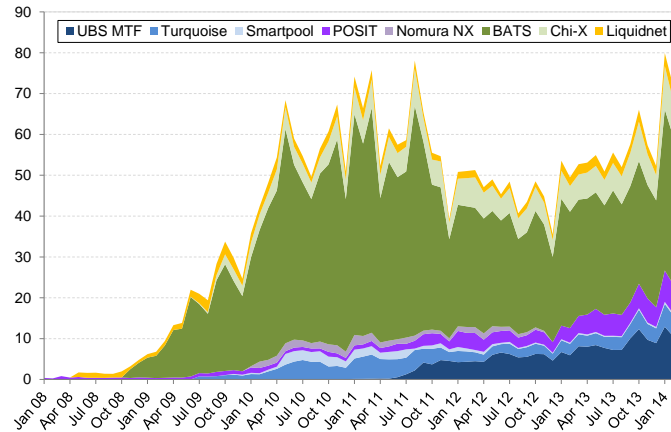
¹⁰¹ And not just platforms: some offer access to several types of more or less transparent execution.

Figure 62: European equities market share by execution type



Sources: AMF, Thomson Reuters Equity Market Share Reporter.

Figure 63: Monthly European equity volumes in dark pools (EUR billion)

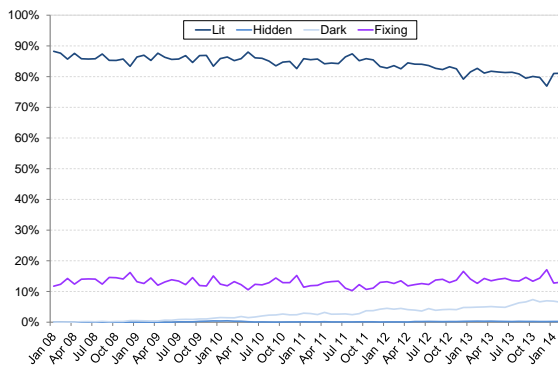


Sources: AMF, Thomson Reuters Equity Market Share Reporter.

Volumes have increased sharply since 2009, however

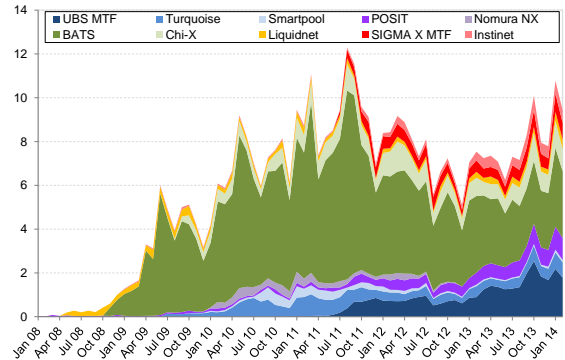
With differences in timescale and magnitude, this phenomenon is common to French, UK and German equities (Figures 64 to 69). The estimated incidence of dark trading is 10% in UK equities, 7% in French equities and 5% in German equities. Although these shares still look modest, they have increased dramatically since 2008: volumes executed in dark pools increased by a factor of 156 between January 2008 and January 2014 in European equities, and by factors of 240, 170 and 112, respectively, in French, German and UK equities.

Figure 64: French equities market share by execution type



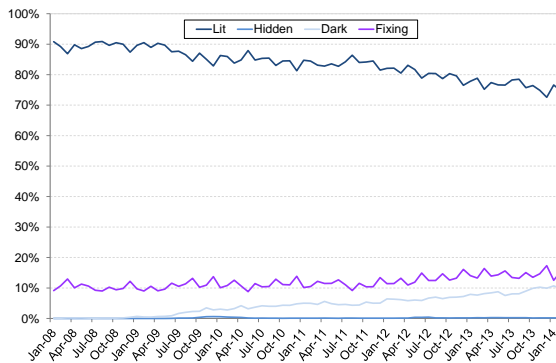
Sources: AMF, Thomson Reuters Equity Market Share Reporter.

Figure 65: Monthly volumes in dark pools, French equities (EUR billion)



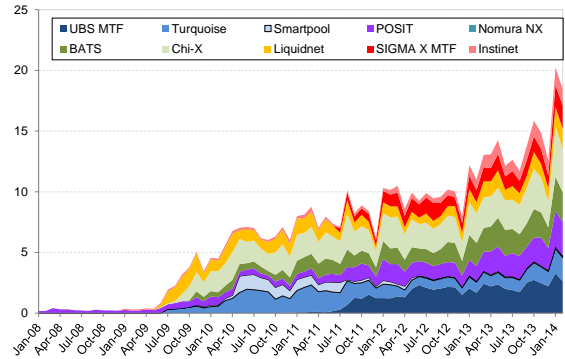
Sources: AMF, Thomson Reuters Equity Market Share Reporter.

Figure 66 : UK equities market share by execution type



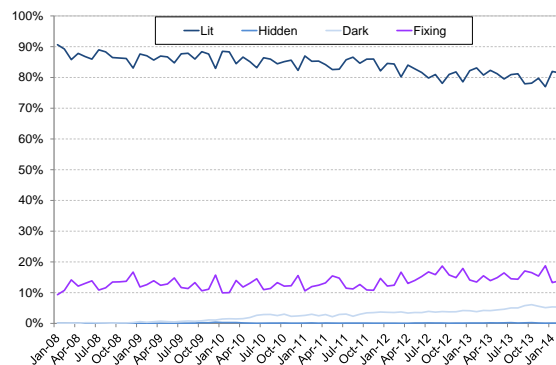
Sources: AMF, Thomson Reuters Equity Market Share Reporter.

Figure 67 : Monthly volumes in dark pools, UK equities (EUR billion)



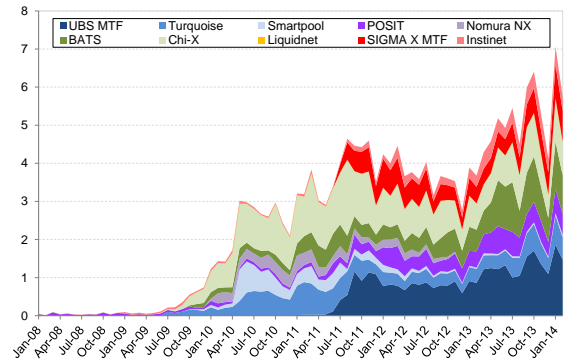
Sources: AMF, Thomson Reuters Equity Market Share Reporter.

Figure 68 : German equities market share by execution type



Sources: AMF, Thomson Reuters Equity Market Share Reporter.

Figure 69 : Monthly volumes in dark pools, German equities (EUR billion)



Sources: AMF, Thomson Reuters Equity Market Share Reporter.

Opaque markets create externalities for transparent ones

Like fragmentation, dark trading has potential advantages in theory. In principle, exemptions from transparency rules enable participants to execute large volumes of orders in a given security without encountering adverse selection, i.e. while minimising the effect that the discovery of a large order by other participants would have on its execution price. Some investors can turn to this type of execution to prevent detection by automated or HTF players, who take advantage of the price movements triggered by large orders. Opacity can also benefit market makers, who can supply liquidity to dark pools without divulging private information¹⁰². But the issue is not so much the liquidity of dark pools as such, but rather the mutual enhancement or crowding-out on transparent markets, the optimal proportion of dark trading and the effects on market quality as a whole.

Several empirical studies emphasise the spillover effects of the growth of dark trading and its associated risks on lit markets:

- ▶ Based on equity trading on NYSE, AMEX and NASDAQ, Weaver (2011) found a link between trading spreads and volumes in dark pools internalised by intermediaries (70% of dark pool flows in the sample), with spreads tending to widen with the proportion of dark trading. Moreover, when a security is traded relatively more in a dark pool, its volatility and the impact on the number of trades on its price both rise, which could be explained by reduced volumes at best limits or by heightened adverse selection on transparent markets.

¹⁰² cf. Boulatov and George (2013) for a theoretical model.

Excessive growth in dark trading can reduce the quality of the price formation process

- ▶ Nimalendran and Ray (2013) used intraday data on 100 US equities to show an increase in spreads and price-impact indicators immediately after dark pool trades are executed.
- ▶ Foley and Putnins (2013), using Canadian data, and Comerton-Forde and Putnins (2013), using Australian figures, suggested that the relationship between the proportion of dark trading and measures of market quality is not uniform. When the market share of dark trading is modest, its impact on liquidity and information efficiency appears to be positive. At higher levels, dark trading has negative effects on the price formation process and can contribute to wider spreads. The authors estimate a tipping point at around 10% of volume, excluding block transactions. This highlights the importance of restricting the use of dark pools to their initial purpose – block trading – via an appropriate framework for exemptions to pre-trade transparency rules (Section 2.2.3). It follows that the trend decline in order size on the vast majority of dark pools documented by Fidessa (2013) is a matter of concern to the regulator (Figure 70), as it could show a use of dark pools for ends other than those initially envisaged¹⁰³. Such concern warrants stricter access rules by derogation to the non-transparent trading provisions in MiFID II.

Figure 70: Average order size in dark pools (in euros)



Sources: AMF, Fidessa data.

- ▶ In the European context, Degryse, De Jong and Van Kervel (2014) found that an increase in the prevalence of dark trading tends to have an adverse impact on aggregate spreads, depth and volatility. In the sample used by Gresse (2013), which was based on transactions in UK and French equities executed on eight different platforms, dark trading is associated with more depth but also wider bid-offer spreads. These negative externalities of dark markets affecting lit markets indicate, at the very least, the need to guarantee non-discriminatory access to all types of platform.

¹⁰³ cf. SEC (2014) for the US context.

2.2.3 Regulatory changes stemming from MiFID II

MiFID II: while remaining vigilant on the application of its provisions, particularly on the transparency regime, the AMF hopes that this agreement will improve the operation of the markets

The proposals to revise the MiFID include several significant provisions on fragmentation. The compromise reached in January 2014 during trilogue discussions between the European Commission, Council and Parliament on the general principles framing MiFID II rounded off two years of debate after the publication of the Commission's proposals in October 2011. The definition of so-called Level 2 measures, for which ESMA is responsible¹⁰⁴, is set to result in Regulatory Technical Standards in May 2015 and in Implementing Technical Standards in December 2015.

In all, MiFID II comprises significant progress on market structure, and offers a partial response to the problems of market transparency and fragmentation. Pre- and post-trade transparency requirements are extended from equities to derivatives, bonds and exchange traded funds. Rules have been introduced under the Markets in Financial Instruments Regulation (MiFIR) to limit equity trading to three types of platforms – regulated markets, multilateral trading facilities, and systematic internalisers – to the detriment of OTC trading. Going forward, Organised Trading Facilities will be limited to non-equity products, i.e. derivatives, bonds, structured products and emission allowances.

As far as pre-trade transparency is concerned, the use of waivers¹⁰⁵ is limited by a double cap. There will be a limit on the volume of a given security that can be traded in dark pools: no more than 4% of the total volume traded (on-venue and off-venue) in Europe for the security concerned can be executed on a platform that has obtained a waiver, and no more than 8% on all trading platforms operating on the basis of such exemptions. ESMA is already working on the definition of the technical standards for this dual-cap system, particularly the determination of transactions that do not contribute to price formation on lit markets.

A new framework for automated trading, including HFT

MiFID II also defines algorithmic trading and HFT. The new regulation introduces an authorisation requirement for HFT firms, together with provisions for systems resilience and control¹⁰⁶, supplemented by new rules for trading platforms. Among these advances, the following in particular are worthy of note: HFT firms have to be able to flag the algorithm underlying an order; platforms are required to establish transparent, fair and non-discriminatory price structures; a standardised system of tick sizes will be introduced; and regulators will have the power to impose surcharges for cancelled orders or on participants showing large volumes of non-executed orders.

Better investor protection

MiFID II extends to measures not directly related to market fragmentation. Some improve investor protection:

- clarification of the fee structure and compensation for advisers (tighter controls on fees charged for independent advisory services);
- product governance measures that improve the fit between products and client requirements¹⁰⁷;
- product intervention powers that enable ESMA and national authorities to act when marketed products and services create serious risks to clients or to financial stability.

Concerning investment services providers, the main changes are tougher governance rules, with exemptions for financial investment advisers being made contingent on establishing a

¹⁰⁴ ESMA has a relatively short time to finalise these Level 2 measures: 12 months for the Regulatory Technical Standards, 18 months for the Implementing Technical Standards and 8 months to provide technical advice.

¹⁰⁵ The directive restricts derogations from the pre-trade transparency rules to systems operating on the basis of a price imported from a reference market ("reference price waiver") and systems operating on the basis of negotiated trades in liquid instruments ("negotiated trade waiver").

¹⁰⁶ That said, practical details of how the regulator will inspect and validate algorithms have yet to be released.

¹⁰⁷ An extension of the range of products that cannot be sold without an "appropriateness test". There is also provision for stricter requirements on information provided to clients.

national regime applying certain provisions in the directive, as well as a clearer framework for market-making activities.

A specific framework for commodity-based financial instruments

Commodity derivatives are now included in the revised directive. The principal innovation lies in the introduction of reporting requirements and position limits for participants holding these financial instruments. Waivers are possible, however: oil and coal derivatives will be fully subject to the new directive only after 30 months.

Concerning the consolidation of post-trade data, the AMF regrets the absence of provisions for a single consolidated tape aggregating post-trade data from the various trading platforms. This would have given a more precise idea of the consequences of market fragmentation for investor protection and the proper financing of the real economy, thereby enabling regulators to draw the necessary conclusions.

2.3. Trading and post-trade infrastructures for equities and derivatives

2.3.1 Sizeable reorganisation in the exchange sector

ICE's takeover of NYSE Euronext completed

The purchase of NYSE Euronext by IntercontinentalExchange (ICE) was completed in 2013, yet another example of the significant consolidation that has taken place in the exchange sector over the past few years. The initial takeover plan put forward by ICE in December 2012 contained an agreement between the two entities that payment would be in cash or in stock on the basis of a roughly 37% premium on the NYSE Euronext price, corresponding to a total transaction of around EUR 6.5 billion. Following a green light from the US anti-trust authorities, the European authorities examined the proposal in 2013 and judged it acceptable subject to a few adjustments. The Euronext College of Regulators concluded that Euronext would still have the resources needed to operate its markets satisfactorily once the transaction was complete, and even after the UK's Liffe had decoupled from Euronext's continental markets. Assurances were received on the clearing of transactions executed on Euronext's continental derivatives markets. These trades would continue to be cleared by LCH.Clearnet SA, as was the case for cash market trades. Taking account of all these factors, the AMF sent a favourable opinion to the Economy Minister on 15 October 2013. The minister then approved the deal, which was completed on 13 November 2013.

A structural transformation in exchanges' functions and sources of income

The Euronext IPO in June 2014 should not cast any doubt on the commitments made by ICE. During this phase, the competent authorities will continue to ensure that the vital functions needed for the markets to operate smoothly will be maintained.

The transaction will enable ICE to integrate Liffe, one of Europe's leaders in derivatives markets. But it also raises the question of Euronext's strategic positioning, initially as a key component of a diversified electronic market and then, in the medium term, as an independent entity. Its equities business has been dwindling for several years as a result of a decline in total trading volumes and a loss of market share to alternative platforms. One of Euronext's strategies appears to be to develop niche products such as the Entrepreneurs' Exchange project, the details of which have yet to be spelled out. More generally, the business and sources of income of all market operators are being transformed, with technology assuming a greater role; in fact, they look increasingly like IT services providers and financial data vendors.

The regulators will have to monitor the effects of the obligation to trade on transparent markets

Apart from these trends, which appear to be permanent, there is the question of how competition will be affected by the entry into force of the MiFID II obligation to trade on transparent markets. While a significant shift in volumes towards transparent markets is likely to take place, in line with the objectives of the revised Directive, the competent authorities will have to monitor closely the breakdown of business between regulated markets, multilateral trading facilities and opaque platforms.

2.3.2 The entry into force of new regulations will strongly influence the structure of the post-trade industry

The regulators will have to monitor the consequences of the concentration of risks in post-market infrastructures

For the market infrastructure sector, the implementation of the Central Securities Depositories Regulation (CSDR) and EMIR (Box 10, Section 2.4) are the most significant regulatory changes on the horizon. The impact of MiFID II and the changes it is likely to encourage among market operators must also be taken into account because of the interdependence between trading and post-trade infrastructures.

Effective competition between markets partly depends on how the post-trade sector is organised and the degree of integration among operators throughout the security trading process. The new regulations, as well as economic logic, argue for the post-trade stages to be concentrated as far as possible, because they are more sensitive to economies of scale (notably in settlement and delivery, where the TARGET2-Securities project will make fundamental organisational changes, see Box 9). Be that as it may, excessive and poorly managed concentration in certain activities can generate systemic risks. As far as the clearing industry is concerned, and given that a cost-based approach points to pooling and hence to concentration, a risk-based approach highlights the possibility of concentrating risks in a small number of central counterparties (CCPs). The sheer number of post-trade structures combined with market structures is challenging in terms of cost control and management of operational risks. Failures in these areas could derail the unification of the European financial services market and stifle competition between trading platforms. From this point of view, ongoing work on the drafting of technical standards for Level 1 regulations will have to allow competition between different post-trade segments to continue without fragmenting liquidity. This could be achieved notably by finding solutions to issues over data standardisation, infrastructure interoperability and regulatory convergence at European and international levels.

Box 9: Central depositories and the TARGET2-Securities settlement system

Post-trade infrastructures – central depositories and securities settlement systems – will be at the heart of two Europe-level harmonisation projects.

- ▶ Pending TARGET2-Securities (T2S), the electronic settlement system developed by the European Central Bank to facilitate cross-border securities trading, Euroclear France will have to adapt its organisation and services because it has outsourced its settlement system to the ECB. This migration is planned for March 2016 and carries project-related and operational risks that will be monitored extremely closely by both the market infrastructures and the ECB.
- ▶ The European Regulation on central depositories voted in April 2014 will shorten the trade settlement deadline for securities from three days at present to two days (T+2). The French financial industry is seeking to anticipate this change and to introduce the new settlement deadline over the weekend of 4-5 October 2014. Despite careful preparation, this move could result in a temporary increase in delivery fails when it takes effect on 6 October 2014.

In the longer term, these two harmonisation projects could also lead to the reorganisation of market participants, as the Regulation allows central depositories to compete with each other in their respective markets. Further, the infrastructure provided by the ECB will tend to favour cross-border securities trading among investors and issuers.

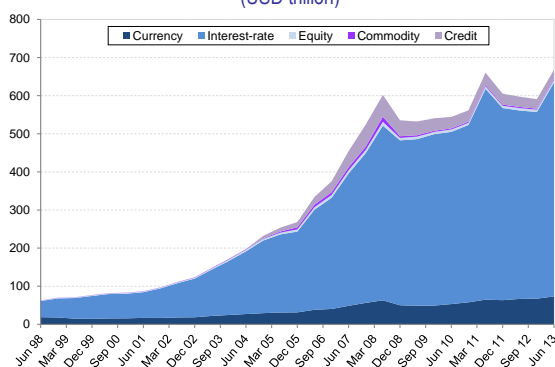
2.4. Derivatives markets

2.4.1 Activity marked by the low interest rate environment; confirmation of reduced market concentration

Less dynamic derivatives markets

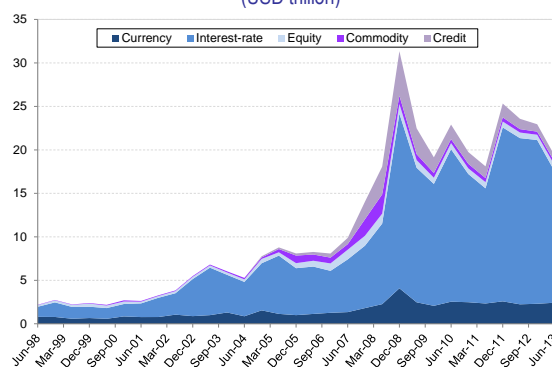
According to the latest figures from the Bank for International Settlements (BIS) to the end of June 2013, the derivatives market was still overwhelmingly an over-the-counter market: 91% of gross nominal derivatives volumes¹⁰⁸ are covered by OTC contracts. The gross notional amount of OTC derivatives worldwide was USD 692 trillion in June 2013 (Figure 71). Following an 8% year-on-year increase from USD 639 trillion in June 2012, this total was close to the all-time peak noted in mid-2011 (USD 707 trillion). Interest-rate derivatives continue to make up most of the OTC derivatives universe, with a gross notional amount of USD 561 trillion (81% of the total) at end-June 2013, and are entering another phase of strong growth (14% year-on-year), as is the currency derivatives segment (10%). Gross notionals declined among credit derivatives (-10%) and commodity derivatives (-18%).

Figure 71: OTC derivatives: global notional amount (USD trillion)



Sources: AMF, BIS.

Figure 72: Gross market value (USD trillion)



Sources: AMF, BIS.

Data on the gross market value of OTC derivatives¹⁰⁹, which give a rough indication of the net asset value of derivatives contracts, confirm the breakdown by derivative market segment (Figure 72) but also show a general decline in aggregate value from USD 25.4 trillion in June 2012 to USD 20.2 trillion in June 2013 (-21%). Gross market value therefore represents just 2.9% of notional volume. Gross credit exposure, which adjusts these amounts for bilateral netting between counterparties, was USD 3.9 trillion at end-June 2013, or 0.6% of notional volume, confirming a marked decline since the historical peak of over USD 5 trillion in 2008.

Ahead of full implementation of regulatory measures aimed at improving transparency, the process of collecting, collating and analysing statistical information on derivatives markets is constrained by their OTC structure. The stocks data published by the BIS twice a year aggregate consolidated data from reporting dealers worldwide, covering a wide range of derivative products and giving some indication of the total amounts involved. But notional volumes are an imperfect reflection of risk transfer between participants, as they are not systematically exchanged in full between counterparties. The share of interest rate instruments – where notionals are exchanged only very rarely – tends to be overestimated in statistics on notionals.

However, the reduction in volumes seems to be largely attributable to the growing use of compression techniques for interest rate portfolios, which reduce financial institutions' regulatory leverage. TriOptima estimates that its portfolio compression operations cut

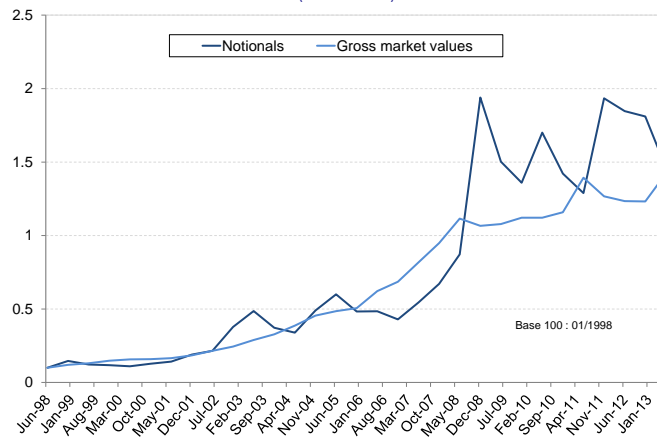
¹⁰⁸ The notional amount of a derivative corresponds to the value of the asset underlying the derivative contract.

¹⁰⁹ Gross market value is an aggregate of the market values of derivative contracts of each reporting dealer without taking account of portfolio compression operations or the bilateral cancellation of risk exposure (netting).

Growing recourse to compression techniques for interest-rate portfolios partly explains these trends

notional interest rate derivatives volume by USD 100 trillion in 2013, from USD 80.4 trillion in 2012 and USD 56.4 trillion in 2011. Once this effect is taken into account, notional interest rate derivatives volume declined 23% between June 2008 and June 2013. Financial institutions' exposure to the derivatives markets as measured by gross market value, which has risen continuously, does not appear to be an explanatory factor in this decline (Figure 73). In the final analysis, and with unchanged portfolio compression, the trend towards contracting or stagnating volumes largely disappears.

Figure 73: Exposures to financial counterparty derivatives (USD billion)

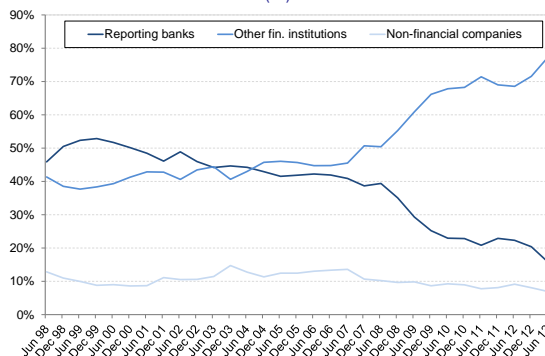


Sources: AMF, BIS.

Confirmation of reduced concentration in interest-rate derivatives

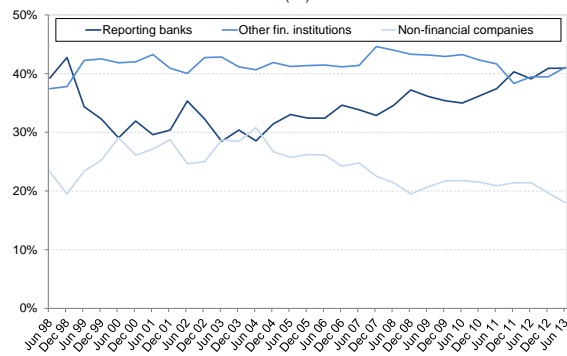
The long-standing domination of the main banks in the market – the 14 reporting dealers for BIS statistics¹¹⁰ – continued to wane in interest rate derivatives markets in 2013. The role of reporting dealers is stable or increasing in equity and currency derivatives (Figures 73 to 75). Analysis of volumes traded in April 2013 shows the same trends (Figure 76) as those captured in BIS surveys¹¹¹. The reduced role for these banks is explained by increases in notional amounts and transactions associated with other financial institutions, including smaller banks not included in BIS reports, central counterparties, funds, insurers, central banks and securitisation vehicles. Lastly, the share of non-financial entities (non-finance companies and public sector entities) is limited to just 6% of total notional outstandings (USD 35.8 trillion). These firms mainly use interest rate swaps (USD 29.4 trillion) and forward rate agreements (USD 9 trillion).

Figure 74: Market shares, interest rate swaps (%)



Sources: AMF, BIS. Calculated on the basis of gross market values.

Figure 75: Market shares, currency derivatives (%)

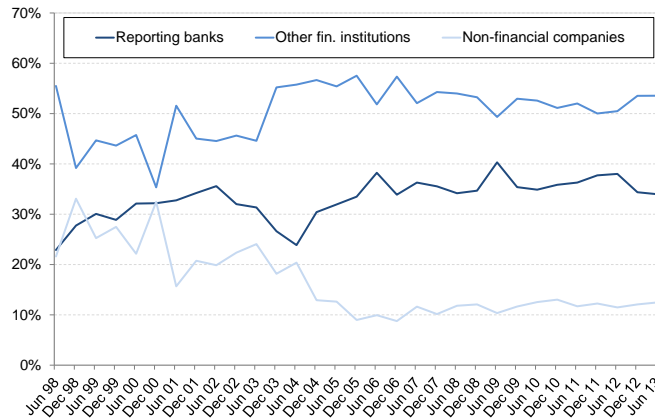


Sources: AMF, BIS. Calculated on the basis of gross market values.

¹¹⁰ Bank of America, Barclays, BNP Paribas, Citigroup, Credit Suisse, Deutsche Bank, Goldman Sachs, HSBC, JP Morgan Chase, Morgan Stanley, Royal Bank of Scotland, Société Générale, USB, Wells Fargo.

¹¹¹ BIS, *The OTC interest rate derivatives market in 2013*, and BIS, *Foreign Exchange turnover in April 2013: preliminary global results*.

Figure 76: Market shares, equity derivatives (%)

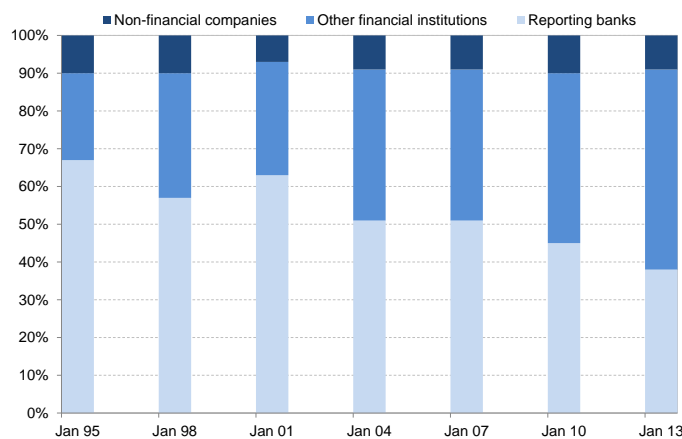


Sources: AMF, BIS. Calculated on the basis of gross market values.

Activity marked by the low-rate environment

The update of the BIS triennial survey¹¹² provides a useful opportunity to examine flow data (i.e. trading volumes) in addition to stock data (i.e. notional amounts). Growth in trading volumes slowed from 18% between 2007 and 2010 to 12% for the 2010-2013 period. In interest rate markets, one of the possible explanations for this deceleration is the modest increase in corporate bond volumes between 2010 and 2013, estimated at 4% by the BIS, since firms that rely more heavily on debt financing tend to make greater use of swaps. A flatter yield curve also played a part in reducing banks' incentive to manage maturity transformation risk by swapping fixed rates for floating rates. Low interest rates can lead to increased use of fixed-rate debt financing, which consequently decreases the use of floating-rate versus fixed-rate swaps. Conversely, low rates on long-term debt are a good reason to swap long-term floating-rate liabilities for their fixed-rate counterparts. The decrease in swap trading volumes among non-financial counterparties suggests the first effect has outweighed the second in recent months. Lastly, one of the reasons why options and FRAs have been used less frequently to hedge short-term interest rate risk is that persistently low policy rates have made short rates less volatile.

Figure 77: Market share by type of counterparty in interest rate derivative volumes, April 2013 (%)



Sources: AMF, BIS.

¹¹² BIS, *The OTC interest rate derivatives market in 2013*, and BIS, *Foreign exchange turnover in April 2013: preliminary global results*.

Most interest-rate trading volumes are executed on organised markets

The view that trading in the interest rate derivatives market is organised almost exclusively on a bilateral basis is mitigated to some extent by the data on flows. While the percentage of derivatives traded on organised markets, as measured by notional amounts, seems fairly low (9.1% for all derivatives and 8.5% for credit derivatives¹¹³) and on a downtrend, volume data show that nearly two-thirds of volumes are executed on organised markets. This mismatch stems from the shorter maturity of interest rate options and forwards traded on organised markets, which generate higher volumes relative to notional amounts. Additionally, while a lack of data makes it impossible to measure this trend against an appropriate denominator, trading volumes for FRAs and interest rate options – the main interest rate instruments traded on organised markets – rose by 26% between June 2012 and June 2013. This mitigates the picture derived from stocks statistics that organised market activity is stagnating. However, although new regulatory standards are encouraging interest rate derivatives to migrate to organised markets, the sustained growth in the swaps segment (on both a notional and volume basis) underscores the limits of a potential “futurisation” of the market. The economic characterisation of volumes data, which also need to be corrected for double counting, is limited still further because it is impossible to distinguish between “administrative” transactions, intended to manage existing positions, and transactions involving new contracts¹¹⁴.

2.4.2 Regulatory developments are already having a significant impact

The new regulatory framework derived from the roadmap adopted at the 2009 G-20 summit in Pittsburgh seeks to address the lack of transparency on risk exposure and to improve management of the counterparty and contagion risks stemming from interconnections between market participants. The reform of the derivatives market implemented by EMIR and the related technical measures are structured around three key priorities (detailed in Box 10 below).

Use of central clearing is expanding

The EMIR trade repository (TR) reporting requirements came into force in February 2014. The FSB¹¹⁵ announced in April 2014 that the requirements had been adopted in 15 of its member countries, albeit with their own specific standards. Twenty-five trade repositories are expected to be operational by end-2014 for all classes of derivatives. Once this development phase is complete, the benefits of the reform in terms of post-trade transparency will be maximised by achieving standardisation, finalising agreements on data access and improving infrastructure interoperability. Trade repository data (notional amounts, underlyings, prices, clearing houses, counterparties, exposures and collateral) will allow for a closer analysis of market trends and broaden regulators' scope of action.

Worldwide, the market share of central clearing has increased significantly since 2007, particularly in the interest rate derivatives segment (Figure 78), even though the formal central clearing requirement for eligible derivatives will not take effect in Europe until 2014. According to estimates from the FSB based on trades reported to the Depository Trust & Clearing Corporation (DTCC) at end-February 2014, centrally cleared interest rate swaps now account for 59% of volumes, equivalent to 41% of notional amounts, compared with 21% in 2007¹¹⁶. The proportion of centrally cleared FRAs exceeds 70%. The decision to bypass central clearing can be attributed to factors such as the relative cost of centrally cleared bilateral trades, the management of existing positions in run-off mode or delays resulting from cross-border approval processes in certain jurisdictions. The FSB also estimates that the central clearing offering covers 90% of swap notional amounts, suggesting substantial room for an increase. The situation is similar for credit derivatives, for

¹¹³ The share of derivatives in total notional amounts on organised markets tends to be underestimated due to the more systematic use of compression and netting than on OTC markets.

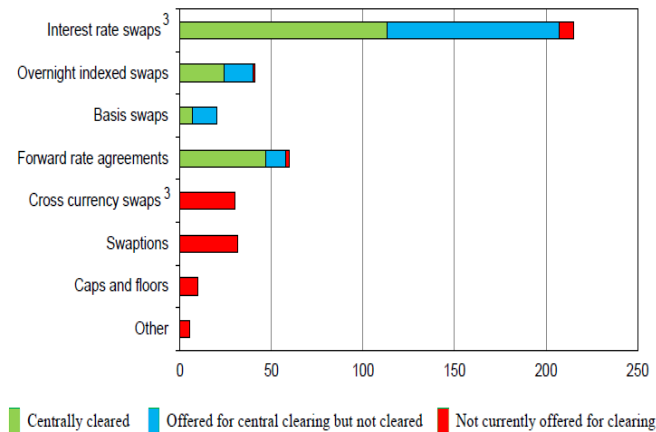
¹¹⁴ See Fleming et al. (2012)

¹¹⁵ See FSB, OTC Derivatives Market Reforms, Seventh Progress Report on Implementation, April 2014.

¹¹⁶ LCH.Clearnet data.

which 19% of notional amounts were centrally cleared at end-2013. That said, the figure for new contracts in this segment is more than 70%, according to data reported by the DTCC for fourth quarter 2013.

Figure 78: Notional amounts of centrally cleared interest rate derivatives (USD trillion)



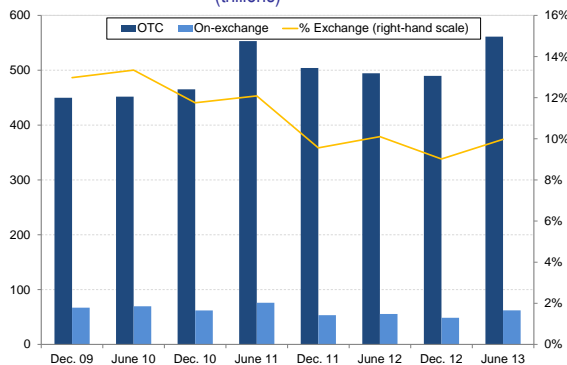
Source: FSB (2014).

A clear trend is definitely emerging. However, cyclical factors may play an important part in the decision to use central clearing, because it also involves a choice between standardised and customised derivatives, which are imperfectly substitutable, and is therefore likely to evolve as new risk factors emerge. The broad coverage of the existing central facilities, as documented by the FSB, shows that the clearing requirement does not distort this choice to any significant degree. Some important regulatory parameters still need to be finalised, including details of margin add-on requirements for uncleared derivatives.

Limited swaps futurisation

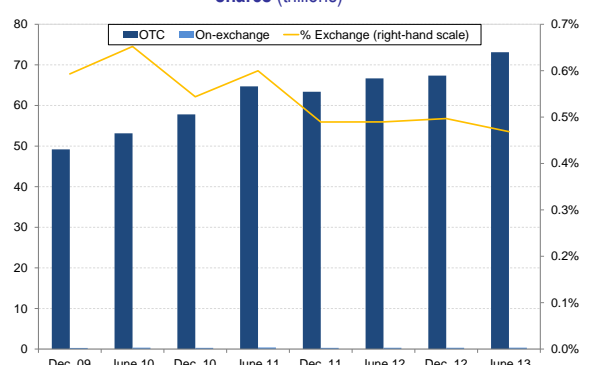
Since futures and swaps with the same structure can provide the same economic exposure, the new regulatory arrangements (MiFID II in Europe, Dodd-Frank in the USA), which impose higher margin requirements on OTC derivatives while requiring that eligible derivatives be traded on organised facilities, should encourage substitution between interest rate products traded OTC and on multilateral facilities. In fact, the extent of this product “futurisation” seems limited, as highlighted by the fact that the share of interest rate products (forwards and options) listed on organised trading facilities has stood still in terms of notional amounts. For interest rate and credit derivatives, the share of derivatives traded on facilities on a total notional amount basis has actually fallen since 2009. Half of all equity derivatives are still traded on organised platforms (Figure 79 to Figure 81).

Figure 79: Interest-rate swap volumes and market shares (trillions)



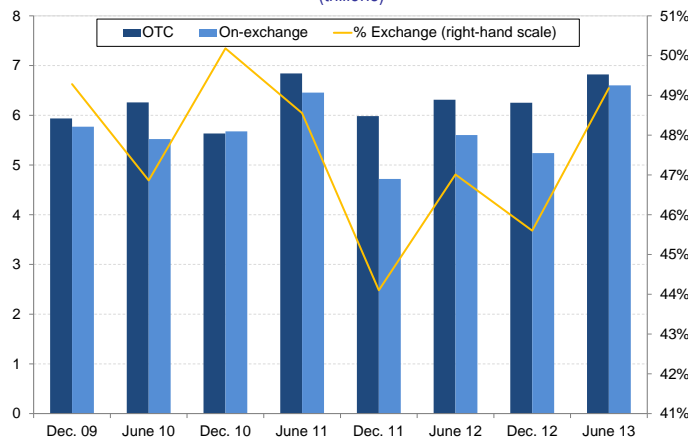
Sources: AMF, BIS. Calculated on a notional amount basis.

Figure 80: Foreign-currency derivative volumes and market shares (trillions)



Sources: AMF, BIS. Calculated on a notional amount basis.

Figure 81: Equity derivative volumes and market shares (trillions)



Sources: AMF, BIS. Calculated on a gross market value basis.

2.4.3 The new regulatory environment, combined with market participants' evolving strategies, is changing the nature of derivatives market risk

CCPs must implement stringent risk management to address the concentration of risks

Several key facets of derivatives market reform are changing the nature of risks in this area. Implementing regulatory reform implies firstly that risks will be concentrated on central counterparties (CCPs), which have a dual remit: manage the positions of clearing members in order to reduce the probability of default and limit the effects of default on financial stability; and ensure that financial risk mitigation measures are sufficient to cover any losses. As such, CCPs are one of the main tools for reducing systemic risk and must therefore be safe and sound. If they are unable to fulfil this management role, they need to have a recovery plan that includes ex ante arrangements to pool any remaining losses and share them among non-defaulting members. Should the recovery plan fail, the authorities must be able to resolve a CCP safely without using public funds (Tucker (2013)).

Second, regulatory developments will change the requirements for collateral and collateral management¹¹⁷, meaning that CCPs will have to tailor their business models to their risk management policy. Greater risk concentration implies the need for debate and discussion – now underway both within the industry and among academic researchers – about the best ways to calibrate CCPs' guarantee funds and margin calls. Menkveld (2014) has developed a model in which contributions to the guarantee fund, and hence its size, increase in parallel with systemic risk. Similar to the CoVar-type approaches used for financial institutions, Cruz-Lopez et al. (2013) have proposed a so-called CoMargin approach whereby, in addition to each CCP member's idiosyncratic risk, any changes in the correlation between their counterparty risks are factored into the margin requirement. Though beneficial in the medium term, regulation can increase operational complexity and the related costs (particularly in terms of compliance) for companies subject to a reporting requirement. Nevertheless, TRs will achieve economies of scale and offer a degree of flexibility to ensure that large volumes can be processed with high cost transparency.

¹¹⁷ One example is Eurex Clearing's development in 2011 of the individual segregation model, not to be confused with value-based models, also known as Legally Segregated Operationally Commingled (LSOC). ESMA once again clarified the difference between these models in its August 2013 Q&A.

Industrial reorganisations are possible and their impacts on competition must be monitored

In general, the reporting and central clearing requirements promoted through new regulations raise the twin issues of horizontal competition among providers of the same service and vertical integration across the entire securities services chain. In this respect, one landmark was the finalisation in 2013 of the London Stock Exchange's acquisition of LCH.Clearnet, resulting in an entity that combines trading, clearing and reporting. The authorities will therefore need to promote industrial models that weigh the benefits of integration against the constant need for fair competition. It should also be noted that uncertainty is unavoidable since some of the current regulatory projects have not yet been finalised. This is true in particular for the calibration of margin requirements on uncleared derivatives, currently being addressed internationally. At another level, the functioning of the derivatives market could be severely affected by the implementation of a Europe-wide financial transaction tax, depending mainly on how differences in instruments' maturities are taken into account.

Will markets be more exposed to high-frequency trading?

The standardisation and migration of trading to organised facilities is also likely to encourage the development of automated trading, and more specifically high-frequency trading (HFT) on the derivatives market. Fragmented liquidity and the large number and complexity of contracts are spurring high-frequency traders to adopt market-making and arbitrage strategies. Electronic markets in standardised derivatives (options and futures on equities or equity indices), where HFT is already dominant in terms of volumes, may offer a hint of what is to come. Future trends will need to be closely monitored, firstly so as not to jeopardise the reforms' goal of transparency and, secondly from the standpoint of financial stability. The example of the May 2010 flash crash in the USA, triggered by a malfunction on the S&P 500 futures market, showed that disruptions on the derivatives market can ripple out almost immediately to the underlying market.

Box 10: European Market Infrastructure Regulation (EMIR)

Regulation (EU) No. 648/2012 on OTC derivatives, central counterparties and trade repositories (EMIR), which came into force on 16 August 2012, is the European response to the commitments made at the G-20 Pittsburgh summit in September 2009 concerning derivatives markets. Intended to make these markets safer and more transparent, EMIR was supplemented by the first technical standards that came into force on 15 March 2013.

The Regulation is based on four key principles:

- ▶ a central clearing requirement for all OTC derivatives determined by ESMA to be sufficiently liquid and standardised;
- ▶ a harmonised legal framework at the European level to ensure that clearing houses meet strict requirements in terms of capital, organisation and business conduct rules;
- ▶ a set of techniques for mitigating counterparty and operational risk on uncleared contracts;
- ▶ an obligation to report all listed and unlisted derivatives trades to the central repositories.

EMIR applies to all financial counterparties (credit institutions, investment firms, insurance companies, funds (UCITS/alternative investment funds, etc.) and non-financial counterparties that trade in derivatives. The Regulation provides less stringent requirements for non-financial counterparties that trade in derivatives for hedging purposes only, or at least whose non-hedging activity on the derivatives market remains below the so-called clearing threshold.

EMIR covers a broad range of products:

- ▶ as regards the clearing requirement and risk mitigation techniques: any OTC derivative (i.e. any derivative financial instrument within the meaning of MiFID, if the trade is not executed on a regulated market);
- ▶ as regards the provisions applicable to central counterparties: any financial instrument;
- ▶ as regards reporting to central repositories: any derivative contract, whether traded OTC or on a regulated market.

The schedule for implementing EMIR requirements is as follows:

- ▶ Trade valuation and confirmation within the timeframes specified in the regulation: effective since 15 March 2013;
- ▶ Dispute resolution and portfolio compression and reconciliation among counterparties: effective since 15 September 2013;
- ▶ Approval of TRs by ESMA: November 2013;
- ▶ Reporting to a TR: in force as from 12 February 2014;

- ▶ Clearing requirement for eligible products: expected to come into force in the second half of 2014;
- ▶ Bilateral margining for non-centrally cleared contracts: expected to come into force in 2015.

In France, EMIR is monitored under the Banking Separation and Regulation Act of 26 July 2013, which gives the AMF responsibility for all market participants as regards trade reporting and central clearing requirements, and tasks the AMF and ACPR with jointly ensuring compliance with risk mitigation techniques. The AMF, ACPR and Banque de France have joint oversight of the clearing houses.

One of the last major points currently being finalised relates to regulatory arbitrage, due to differences between certain European and US rules. The clearing requirement has been in effect since June 2013 in the USA under the Dodd-Frank Act.

The authorities in question have been negotiating for several months on an agreement covering the content of the rules applicable to OTC derivatives, as well as frameworks for regulating and overseeing cross-border activities.

On 11 July 2013, the European Commission and the US Commodity Futures Trading Commission (CFTC) jointly announced the common principles that will govern their approach to this issue. The statement was accompanied by the CFTC's issuance on 12 July of several no-action letters to European institutions and infrastructures for which a substituted compliance determination is expected for certain provisions of the Dodd-Frank Act. At the same time, ESMA published its own draft standards on extraterritoriality on 17 July.

Discussions to determine the exact terms and conditions for equivalence are ongoing.

ESMA also published advice on the equivalence of the legal frameworks in the USA, Japan, Australia, Hong Kong, Singapore, Switzerland, Canada, India and South Korea. It compared third-country rules with EMIR requirements for central counterparties, TR reporting, clearing and non-financial counterparties, as well as for risk mitigation techniques for uncleared contracts. Equivalence determinations – the European equivalent of substituted compliance determinations – are a prerequisite for third-country clearing houses to continue providing services in Europe, but also for cross-border transactions to be subject to a single body of rules.

However, despite the July 2013 agreement, differences emerged between Europe and the USA in the last quarter of 2013. On 20 December 2013, the CFTC published an analysis of the comparability of applicable regulations in six areas (Europe, Australia, Canada, Japan, Hong Kong and Switzerland) with Dodd-Frank. This analysis was published just prior to expiry of the exemptive order applicable, inter alia, to European banks registered with the CFTC as swap dealers.

Broadly, the CFTC recognises the principle of substituted compliance but is apparently unwilling to relinquish direct supervision of swap dealers, even though the scope of this oversight remains highly ambiguous because it is not explicitly confined to doing business with an entity subject to supervision as a US person.

2.5. Bond market operation and regulatory developments in the CDS segment¹¹⁸

Bond market activity declined in 2013 Issuance and transaction volumes fell on the French bond markets in 2013. Primary activity was down 12% in value terms for all French issuers, and down 13% for government issues. The weaker momentum in the primary market affected trading volumes on the secondary market.

Bond markets performed well overall, with a sharp pick-up in prices in the riskiest segments (European speculative-grade corporate bonds generated an 8% return¹¹⁹). At the same time, a moderate rise in sovereign yields — the French 10-year yield was up 56 basis points in 2013 — allowed core European country government bond indices to stave off a full-year underperformance (the Euro-MTS France 7-10 year was up 0.4%) and risk premiums in peripheral countries fell sharply (Italian 10-year yield fell 37 basis points). The one-notch downgrade of France's credit rating by both Fitch and Standard & Poor's had no impact on the country's funding costs.

¹¹⁸ This section is based on Demartini A., Garrau P., Rocamora O. (2014) "Le marché français des CDS *single name* : état des lieux et évolution du marché (notamment impact du règlement VAD)", AMF internal memo.

¹¹⁹ Markit iBoxx Euro Liquid High Yield index.

Market structures can be explained in part by the specific nature of debt products

It is true that the debt product market has its own unique structure, which differs from that of the equity market in several respects. First, participants are mainly professionals or eligible counterparties within the meaning of MiFID. Average amounts traded are therefore high, at several million euros per transaction on the French market¹²⁰, and the market is driven by the OTC segment rather than by the regulated market or MTFs.

Also, there are a large number of instruments on the market. In 2013, the number of new bonds in France stood at nearly 900, for a total of nearly EUR 400 billion¹²¹. This explains why the market is apparently illiquid, due to the low average number of trades per instrument, which can also be attributed in part to the wide variety of products available. Daily trading volumes on a CAC 40 share will be spread across among several dozen securities on the bond market, depending on the issuer.

As in the equity market, the debt security market is organised around benchmark instruments (bonds) and derivatives. In addition to plain vanilla swaps, which involve buying or selling interest rate risk, investors can enter into a credit default swap (CDS) to take a position on a public or private issuer's credit risk. This market segment has grown rapidly, to the point of facing widespread criticism for its post-crisis lack of transparency. There have been a number of regulatory developments since then, and the 2014 implementation of EMIR is also likely to affect how participants use CDS.

CDS have been subject to a number of new regulations since 2012

In recent years, the regulatory environment for CDS has changed significantly. Some measures have already come into force, including the requirement to report transactions to the AMF, in effect since January 2012, as well as the ban on naked CDS selling in Europe as a result of the European regulation on short selling.

In 2013, CDS activity plummeted for all types of issuers

The AMF has analysed recent trends on this market using data collected over the course of more than two years. The first notable fact is the drop in activity in 2012 and 2013 across all French issuers, on both a number-of-transaction and volume basis. CDS contracts outstanding stood at less than EUR 650 billion at end-2013. This decline was largely due to the sharp contraction in government debt volumes, which have more than halved.

The ban on naked sales may account for some of the drop-off in activity among public issuers in Europe

The ban on naked short positions on sovereign CDS, which came into force on 1 November 2012, may partly explain the decline in CDS outstanding on government debt. In theory, the ban on naked sovereign CDS may have reduced outstandings, trading volumes and numbers of participants. In fact, trading volumes have dropped in all European countries (IMF, 2013). There was a sharp decrease in the number of holders of French CDS between 1 October and 1 November 2012 (-20%). Net outstandings also began to fall steeply in August 2012, just before the European regulation came into force. That decline subsequently accelerated.

It should be stressed, however, that the regulatory impact is especially hard to estimate, since the ban on naked sovereign CDS sales was brought in at the same time as major monetary policy measures, including the liquidity supply programme, which transformed the market environment by venting pressures in the euro area and triggering a rebound in global stock markets. Another complicating factor is the launch of major new financial products, such as futures on French government bonds, or OATs. Lastly, the decline in activity in 2013 is consistent with the weaker momentum in the bond market as a whole (see previous section).

¹²⁰ Source: AMF internal database.

¹²¹ Source: DEALOGIC.

Depending on the type of issuer, CDS or bonds could be the leading market

Interestingly, the entities in France with the highest exposure, namely the government and financial firms, are mostly large bond issuers. As a result, the amounts outstanding in CDS, while high, are low compared with bonds outstanding for these issuers. Consequently, the main price-setting market is still the bond market. Conversely, CDS outstandings for some non-financial issuers are much higher than their bond outstandings. As liquidity is higher in the CDS market than in the bond market, it is the CDS market that is key for assessing an issuer's creditworthiness.

However, the phasing-in of EMIR will entail greater transparency as from 2014 due to mandatory reporting to central repositories. In the next phase, the clearing requirement for some CDS (most likely index and single name contracts, excluding sovereigns) will be implemented in 2015. Major banks have already broadly anticipated EMIR's counterparty risk management requirements.

2.6. Demand, supply and movement of collateral

Cyclical factors and regulatory developments are responsible for the growing importance of collateral

Financial transactions are collateralised to protect lenders against the counterparty risk arising from transactions involving secured funding, securities lending/ borrowing, or derivatives. A wide array of assets can be used as collateral. They may change based on the intrinsic quality of the classes of securities, market practices for accepting pledged assets, and the scope of eligible assets used by regulators (e.g. to calculate liquidity ratios) and central banks (to determine eligibility for refinancing). Collateral holders may therefore be central and commercial banks, insurers, pension funds, asset managers, CCPs and central securities depositories.

A number of factors combine to explain the growing use of collateral. Cyclical factors include the increase in perceived counterparty risk since the financial crisis, which has spurred participants to turn increasingly to secured funding in recent years. The trend is especially strong in the European financial sector, with major shifts from conventional bonds into covered bonds in banks' liabilities (Table 9), and from unsecured short-term financing into repos. ESMA¹²² (2013) estimates that this shift has helped increase worldwide demand for high-quality assets (HQA, see Box 11) by USD 1.2 trillion since 2007, while the French Treasury (2013) assesses the impact at USD 1.4 trillion across the same scope.

Table 9: Covered bonds secured by mortgage receivables
(EUR million)

	2003	2005	2007	2009	2010	2011
Canada			2	7,525	18,003	38 61
Denmark	204,695	246,411	244,696	319,434	332,505	345,529
France	21,079	32,133	63,555	134,757	156,239	198,395
Germany	256,027	237,547	206,489	225 1	219,947	223,676
Italy				14	26,925	50,768
Netherlands		2	15,727	28,367	40,764	54,243
Spain	57,111	150,213	266,959	336 75	343,401	369,208
Sweden			92,254	133,903	188 75	208,894
UK	5	26,778	81,964	201,096	205 37	194,783

Sources: AMF, European Covered Bond Council.

Structural factors include a number of core aspects of regulatory developments that increase financial institutions' need for collateral. Regulations for which technical standards are being drafted, due to come into force in 2015, will require central clearing of certain asset classes and an initial margin exchange on a gross basis, with no possibility of reusing the collateral

¹²² See ESMA (2013b).

exchanged for bilateral OTC trades. The clearing requirement will have a significant impact on the quantity of collateral needed only to the extent that the asset classes to which the requirement will apply are not already all cleared at present. The impact of the initial margin requirement on OTC transactions will have to be closely monitored, in terms of both available collateral and the volume of transactions processed. As regards prudential regulation (Basel III), the short-term liquidity coverage ratio (LCR) requires banks to hold sufficient high-quality liquid assets to cover the equivalent of 30 days of net cash outflows. In addition, Basel III and Solvency II capital requirements make capital charges subject to asset credit quality, creating an incentive to replace risky assets with safe assets. At the same time, however, these rules create incentives to issue covered bonds that help increase the supply of collateral.

Box 11: Defining collateral categories

To estimate changes in total demand for collateral, a distinction must be drawn between the regulatory and real-world definitions. The regulatory criteria for eligibility for bank prudential ratio calculations and for collateralisation of derivatives exposure are relatively static, albeit subject to revision based on the risks and requirements identified by regulators. In practice, however, the types of assets accepted as collateral may change in the short term based on changes in how market participants perceive counterparty risk.

A first, narrow definition includes only high-quality liquid assets (HQLA) eligible for the short-term liquidity ratio calculation (liquidity coverage ratio, LCR¹²³) as defined by the Basel Committee¹²⁴. These assets must be easily and immediately convertible into cash at little or no discount. The Basel Committee has asked regulators to consider two sets of criteria to determine the precise scope of eligible assets:

1/ Characteristics of the asset

- ▶ Low risk, since an asset's liquidity tends to increase with the issuer's credit quality and decrease with its sensitivity to the risks from interest rates (duration), inflation and exchange rates, as well as legal risk;
- ▶ Transparent and robust valuation, because the most standardised assets and those whose valuation is robust to assumptions, transparent and replicable using publicly available inputs tend to be the most liquid;
- ▶ Low correlation with risky (mainly bank) assets, meaning that these assets will not be affected by a flight to quality during periods of market stress;
- ▶ Traded on an organised market;
- ▶ Legally available: the assets should be unencumbered, i.e. free from legal, regulatory or contractual restrictions on the bank's ability to liquidate them.

2/ Characteristics of the asset's market

- ▶ Deep and active, as demonstrated by high trading volumes, narrow bid-ask spreads, and a wide diversity and low concentration of participants;
- ▶ Low historical volatility for prices, volumes and spreads;
- ▶ Resilient, mainly due to the continuous presence of market makers.

These criteria should be tested regularly to ensure these assets maintain the ability to generate liquidity under stressed market conditions. The Basel Committee also specifies that eligibility for central bank funding would ideally be one of the main characteristics of HQLA. Under this definition, the HQLA stock consists primarily of sovereign bonds and cash.

A second definition includes all high-quality assets (HQA) that can be used as collateral for uncleared derivatives. This approach, used by the Basel Committee and IOSCO¹²⁵, includes the highest-rated corporate bonds and equities. The scope of assets under this definition is relevant to assessing the impact of the reform of the OTC derivatives markets and is likely to evolve based on cyclical factors and CCPs' eligibility policies.

Lastly, a broader definition, based on market participants' practices rather than on regulatory criteria, includes all assets accepted by participants in secured funding transactions. Debt (mainly mortgages) and debt portfolios used to secure asset- and mortgage-backed securities are therefore included.

The assets covered by the second and third definitions are more likely to change in parallel with market participants' risk aversion than those in the first definition.

¹²³ Level 2 assets may not represent more than 40% of HQLA used to calculate the LCR.

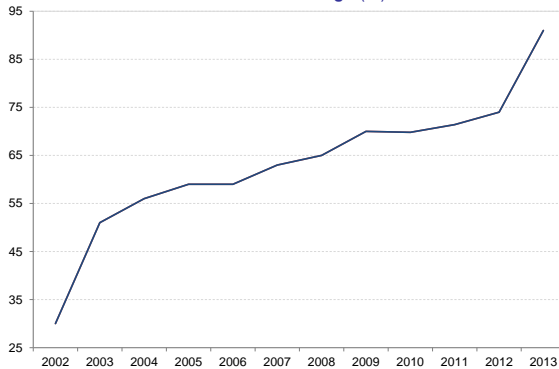
¹²⁴ Basel Committee on Banking Supervision (2013), *Basel III: the Liquidity Coverage Ratio and liquidity risk monitoring tools*.

¹²⁵ BCBS-IOSCO (2013), *Margin requirements for non-centrally cleared derivatives*.

Collateralisation of OTC derivatives transactions is now nearly universal

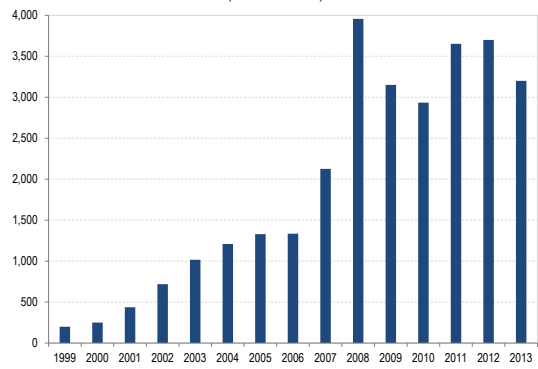
ISDA survey data (2012, 2013) confirm that collateralisation has been used increasingly in OTC derivative transactions since the financial crisis. The practice has become even more widespread in the last two years: 71% of transactions were collateralised in 2011 compared with 91% in 2013 (Figure 82). Conversely, between 2011 and 2013, the estimated amount of collateral outstanding fell from USD 3.65 trillion to USD 3.2 trillion (Figure 83). The most important factor behind this decline, according to ISDA, is the increasing share of centrally cleared derivative transactions, which automatically reduces the collateral mobilised for OTC transactions. That said, the composition of the collateral pool remains very stable: as in 2011 and 2012, a full 90% of collateral in 2013 was made up of cash (75%) and sovereign bonds (15%). The remaining 10% consisted mostly of equities (3.5%) and high credit quality corporate bonds (3%). Moreover, collateral is denominated in a limited number of currencies: 97% of the cash and 80% of the sovereign bonds received are in dollars, euros, sterling or yen. The Canadian dollar, Australian dollar and Swiss franc represent 80% of the remaining 3% of cash received, while Brazilian, Turkish, Canadian and South Korean bonds represent 90% of other bonds received.

Figure 82: Percentage of all OTC derivatives transactions involving collateral exchange (%)



Sources: AMF, ISDA. Note: exchanged under collateralisation contracts.

Figure 83: Estimated collateral in circulation. OTC derivatives (USD billion)



Sources: AMF, ISDA.

Regulation on rehypothecation is being finalised

The collateral pledged for derivatives transactions can be rehypothecated (or reused), either because the transaction includes an explicit title transfer or because the lender gives the borrower the right to re-lend the securities even though title is not transferred. ISDA states that 84% of bilateral agreements (excluding centrally cleared contracts) belong to one or the other of these categories. Reuse of collateral enables borrowers to fund long positions and hedge short positions and thus ease the constraints associated with blocking the assets. However, this approach can reintroduce a counterparty risk for the lender, especially when the conditions under which the reuse occurs are insufficiently transparent and the pledged assets are not segregated from the borrower's own assets. Nevertheless, the reduction in the percentage of collateral reused in OTC transactions levelled off in 2013. At 82%, it was virtually unchanged from 83% in 2011, after dropping sharply to 75% in 2012. The development of this practice is also likely to be heavily influenced in the short term by the finalisation of a number of regulatory projects in 2014. Market regulators (IOSCO) and prudential regulators (Basel Committee), which joined forces in the Working Group on Margin Requirements¹²⁶, therefore recommend that initial margins be exchanged on a gross rather than a net basis, and that the parties ensure the margins collected are freely available should the borrower default. Supervisors are also encouraged to examine their domestic law in anticipation of this requirement. The FSB, which is also addressing the issues of securities lending/borrowing and repos (in Workstream 5 "Securities Lending and Repos"), recommends greater transparency in rehypothecation practices with respect to the lender; it also recommends that the financing of proprietary activities should be banned as a rule and

¹²⁶ See BCBS-IOSCO Working Group on Margin Requirements (2013).

permitted only for entities subject to liquidity rules. Bringing all these different projects together will be a major issue in the coming months.

The additional demand for collateral resulting from regulatory projects will not lead to a shortage at the aggregate level

According to the IMF (2012), the theoretical supply of high-quality assets (HQA) at end-2011 was around EUR 55 trillion, well above estimated demand. In the euro area, EUR 14 trillion of this asset stock could be considered eligible (Coeuré, 2012); a comparison with the amount of collateral actually mobilised (around EUR 2.5 trillion) shows no shortfall, especially in the euro area financial system prior to the entry into force of the regulatory reforms affecting collateral demand. Several studies have attempted to estimate the additional demand resulting from these developments and the tensions that could arise on the collateral market. As regards derivatives market reforms (EMIR in the European Union and Dodd-Frank in the USA) and therefore demand for HQA (see Box 11), estimates are highly sensitive to assumptions for changes in the size of the market, use of central clearing, number of CCPs, scope of netting and extent of rehypothecation. BCBS-IOSCO (2013) estimates an additional need for collateral for initial margins on non-centrally cleared credit and interest rate instruments at about USD 900 billion, taking into account the EUR 50 million exemption threshold allowed under EMIR for non-financial companies. The IMF estimates the cost of collateral for central clearing at between USD 100 billion and USD 200 billion¹²⁷, plus between USD 100 billion and USD 600 billion for initial margins and contributions to CCPs' guarantee funds (based on assumptions for the number of CCPs and the scope of netting). The Bank of England¹²⁸ puts the total additional collateral (i.e. including margins contributed to CCPs, but excluding contributions to guarantee funds) resulting from the increase in initial margins at between USD 150 billion and USD 450 billion. The US Treasury¹²⁹ suggests a range of USD 800 billion to USD 2 trillion for all derivatives reforms worldwide.

Regarding prudential regulation, BCBS-IOSCO's quantitative impact study of the effects of the LCR based on bank data at end-2011 estimates the need for an additional USD 2.2 trillion in HQLA (see Box 11). This figure is an upper limit as the calculation does not factor in the subsequent expansion of the scope of eligible assets, which ESMA (2013) does include, suggesting an approximately USD 1.4 trillion impact. The Committee on the Global Financial System (CGFS)¹³⁰ has combined market developments with regulatory reforms and estimated the impact on demand for collateralisable assets (HQLA and HQA) associated with a variety of regulatory projects at USD 4 trillion. Including Solvency II, which the CGFS does not and which current studies estimate will have a USD 100-200 billion impact, does not fundamentally alter this order of magnitude.

These demand-side factors are not expected to result in a shortage of high-quality assets at the aggregate level, although greater scarcity is a possibility¹³¹. Any increase in supply would be influenced by both endogenous and exogenous factors. Public debt issues by the highest-rated sovereigns (AAA and AA) are an additional source of HQA supply that may be considered exogenous. Between 2007 and 2012, the increase in these countries' public debt far outweighed the impact of the overall deterioration in credit quality. The stock of sovereign debt rated AAA or AA therefore increased by USD 10.8 trillion between 2007 and 2012¹³². The stock of securitised corporate bond products rated A or higher increased by USD 500 billion over the same period. The total supply of HQA of HQLA, respectively, is estimated at USD 53 trillion and USD 48 trillion.

¹²⁷ See IMF (2012).

¹²⁸ See Bank of England (2012).

¹²⁹ See Office of Debt Management (2012).

¹³⁰ See Committee on the Global Financial System (2013).

¹³¹ See Coeuré (2012).

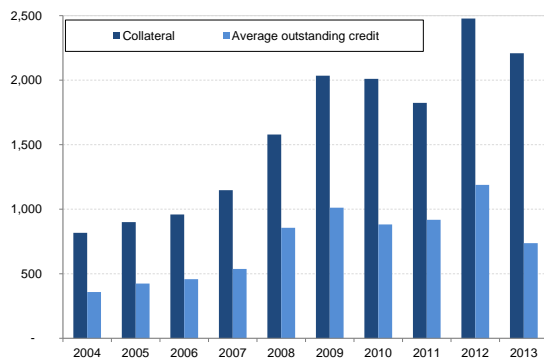
¹³² See Committee on the Global Financial System (2013).

Market adjustments and central bank responses can also address collateral supply pressures. Central banks can broaden the eligibility criteria for Committed Liquidity Facilities to include repo transactions and liquidity programmes, thus increasing their net supply of collateral. Moreover, the prices of private secured funding operations is likely to fall because collateral is increasingly scarce. That scarcity is also expected to increase incentives to implement effective collateral optimisation techniques, a trend that now appears to be underway (see section 2.4). Tranches of the highest-quality securitisation vehicles whose credit ratings have been upgraded may also be eligible for derivative collateralisation or refinancing operations.

However, local tensions cannot be ruled out

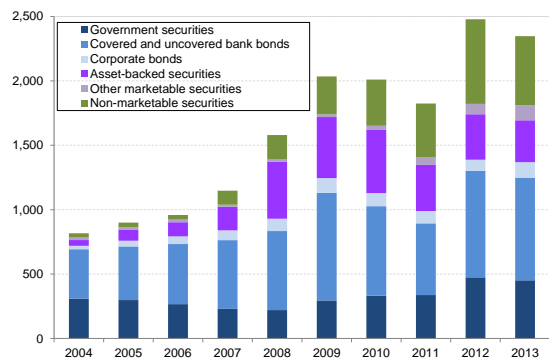
Larger shortages of collateral at local level are a possibility, but their consequences should not be overestimated. The change in the spread between the collateralised repo rates on French and German bonds in 2011 showed that lengthy episodes of increased scarcity of high-quality euro-denominated collateral might occur (see Committee on the Global Financial System (2013)), at least until the ECB started to provide medium- and long-term supply from early 2012 (Figure 84). However, the liquidity of the assets held as collateral by the Eurosystem is uneven and decreasing (Figure 85). Moreover, certain participants in particular could bear the cost of an increased scarcity of euro collateral, including banks adjusting to the LCR (see section 2.7).

Figure 84: Outstanding credit provided by the ECB to banks and Eurosystem collateral (EUR billion)



Sources: AMF, ECB.

Figure 85: Securities posted as Eurosystem collateral (EUR billion)



Sources: AMF, ECB.

The risks of regulation-related procyclicality will need to be monitored

Furthermore, aside from changes in stocks, questions have arisen about how market participants will react in times of market stress, and about the resulting collateral reallocations and haircut adjustments¹³³. Accordingly, given the risk of a procyclical collateral market, the scope of eligible assets needs to be monitored continuously, not just by central banks but also by CCPs. These institutions could therefore be prompted to broaden their eligibility criteria, within the limits set by the CPSS-IOSCO principles¹³⁴.

Transparency in collateral management practices must be maintained

Amid the ongoing adjustments, regulators are actively working on projects relating to transparency, legal certainty and risk management in the collateral rehypothecation and transformation activities. At the very least, identifying counterparty risk and pricing it properly requires transparency on whether assets are freely available if a counterparty defaults. Thus, as derivatives migrate to central clearing, mechanisms are needed to segregate clearing members' assets from those of their clients. The effects of these measures on the collateral rehypothecation rate¹³⁵ will also have to be monitored.

¹³³ See Gorton (2009).

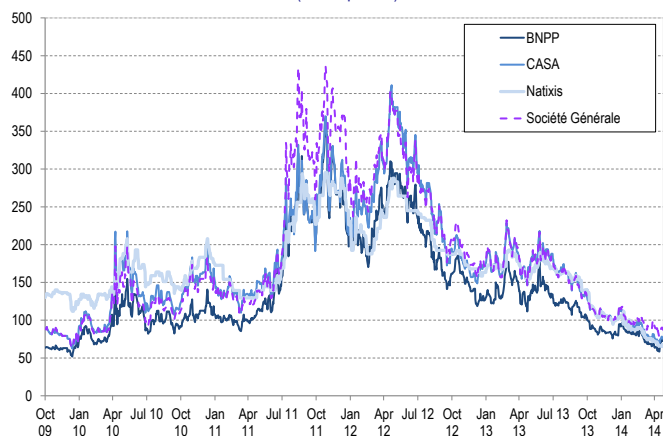
¹³⁴ See CPSS-IOSCO (2012).

¹³⁵ See Singh (2013).

2.7. Market intermediaries continue to adjust their business amid a still fragile environment and stiffer regulatory requirements

The macroeconomic environment in the euro area is bleak for financial intermediaries. GDP contracted in 2013 for the second year in a row and the recovery expected in 2014 is likely to be a slight 1.2% according to the IMF. The regulatory framework is also becoming more demanding with, inter alia, the ECB's launch of the Single Supervisory Mechanism in November 2014. This has led euro area banks, with their highly specific national characteristics (particularly in weakened peripheral European countries¹³⁶), to continue adjusting their balance sheets and business models, particularly for corporate and investment banking. They are making increasing use of issues eligible for the Basel solvency ratios and are selling securities that could potentially influence the ECB's judgment. In this European context, market access conditions improved for the four major French banks despite a number of changes to their financing methods and businesses¹³⁷, as reflected in a sharp decline in their five-year CDS spreads since mid-2013.

Figure 86: Banks' five-year CDS spreads
(basis points)



Sources: AMF, Datastream.

An ever-evolving European regulatory environment

Since the crisis began in 2008, the European Commission has proposed nearly 30 new instruments to regulate, monitor and govern the financial sector more effectively and thus lift the burden from taxpayers in future crises and minimise ties between sovereigns and banks, which led to the fragmentation of the euro area. The key pieces of the puzzle still being finalised are: 1) strengthened capital and liquidity requirements for bank; 2) a single rulebook including rules on pay; 3) an effective resolution regime to protect depositors; 4) more effective bank oversight and supervision; 5) ending too-big-to-fail banks¹³⁸; 6) safer and transparent financial markets; 7) reduced reliance on credit ratings; 8) addressing the risks posed by shadow banking; and 9) more effective prevention and punishment of market abuse.

¹³⁶ Economic weakness in southern Europe continues to have an adverse impact on the quality and performance of loan portfolios (especially exposures to Italy and Spain).

¹³⁷ Debt (including subordinated debt) represented only 15% of French banks' liabilities at end-2013, a percentage that has remained very stable since mid-2007 (compared with customer deposits at nearly 40%).

¹³⁸ The IMF estimates that the implicit subsidy or funding cost advantage arising from government support of too-big-to-fail banks would rise to USD 70 billion for the USA and nearly USD 300 billion for the euro area, which is a factor in both systemic risk and competitive distortion for the smallest banks.

**The three pillars
of the banking
union**

- **Banking union¹³⁹: the ECB will supervise approximately 6,000 banks, 128 of them directly**

Banking union is an initiative launched in June 2012 to supplement Economic and Monetary Union and respond to market fragmentation. It aims to reduce interdependence between sovereigns and banks, protect depositors and establish a recovery and resolution framework for failing banks. The initiative is the Commission's blueprint for closer integration of banking systems, particularly among countries that share the euro. Banking union is structured around three pillars (see below) that seek first to ward off future crises by ensuring that banks are better capitalised and supervised; and then, in the event of a crisis, to determine a common recovery and resolution framework¹⁴⁰ to be implemented gradually from 2014:

1. The single rulebook for the 8,300 financial institutions in the Union's 28 Member States is the foundation of the banking union. In particular, it establishes new rules for better bank capitalisation¹⁴¹ and more effective risk control. Safer banks will thus help prevent bank crises.
2. The Single Supervisory Mechanism (SSM) establishes an integrated banking system as from November 2014¹⁴². It will make the ECB the central prudential supervisor for all 6,000 or so banks in the euro area, and for banks in other European countries that may wish to participate in the SSM. The ECB will directly supervise 128 euro area banks¹⁴³, while the national authorities will continue to supervise the smallest banks, in close cooperation with the ECB within an integrated system.
3. The European Resolution Mechanism ensures that the supervisory authorities will intervene at an early stage if a bank's financial position deteriorates (recovery plans, to remain viable) and formalises bank crisis management (resolution plans¹⁴⁴, to organise an orderly winding down if the institution is no longer viable, under the authority of the ECB and following a decision by the European Council). This includes organising the dismantling or closure of troubled entities. The Bank Recovery and Resolution Directive (BRRD)¹⁴⁵ thus gives Europe an array of crisis management tools to ensure

¹³⁹ Banking union: restoring financial stability in the Eurozone, Memo 14/294, European Commission, 15 April 2014. http://ec.europa.eu/internal_market/finances/docs/banking-union/banking-union-memo_fr.pdf

¹⁴⁰ Bank Recovery and Resolution Directive, proposed in June 2012 by the European Commission and adopted by the European Parliament on 15 April 2014

http://ec.europa.eu/internal_market/bank/crisis_management/index_fr.htm#maincontentSec1

¹⁴¹ The so-called CRD IV package covering capital requirements for banks transposes the new international bank capital standards (Basel III) into the Union's legal framework. It came into force on 1 January 2014 and requires that banks hold sufficient capital, both qualitatively and quantitatively.

¹⁴² The legal framework for the SSM was clarified in the framework regulation published in early February 2014 and covers:

- assessments of each bank's significance to determine whether the ECB will subject it to direct or indirect prudential supervision;
- the ECB's supervision of the entire system;
- cooperation between the ECB and the competent national authorities to ensure the effective functioning of the SSM;
- linguistic arrangements for the various SSM processes;
- general principles governing the ECB's conduct of prudential supervision procedures;
- procedures relating to the SSM's micro-prudential and macro-prudential tasks;
- arrangements for close cooperation with countries whose currency is not the euro; and
- administrative penalties for breaches of the relevant legislation.

¹⁴³ The ECB's role has therefore been strengthened post-crisis, with its powers expanded and its mandate enhanced (illustrated by quantitative easing), beyond its initial status as controller of inflation.

¹⁴⁴ The single resolution mechanism relies on a strong single resolution board, composed of permanent members and representatives of the Commission, Council, ECB and national resolution authorities. Most often, when a euro area bank or a bank established in a Member State participating in the banking union needs to be resolved, the ECB will notify the single resolution board, the Commission and the relevant national resolution authorities. The decision-making procedures are such that a decision on whether or not to initiate a resolution procedure can be made in **less than two days**.

¹⁴⁵ http://europa.eu/rapid/press-release_MEMO-14-297_en.htm

that taxpayers and depositors do not have to bear the cost of future bank crises¹⁴⁶. In particular, it is worth mentioning the creation of the bail-in, i.e. the orderly liquidation of failing institutions, involving various stakeholders (shareholders, lenders, certain investors), as opposed to the bailout, which relies on taxpayer contributions.

The BRRD provides, inter alia, for the creation of a European Resolution Fund and for guarantees of bank deposits of up to EUR 100,000 per depositor per bank. In 2016, banking union member states will start contributing to this fund, which will represent 0.8% of covered deposits (or EUR 55 billion) by 2024. The banks themselves will gradually finance this amount over a 10-year period. Each bank's contribution will be based on two variables: a flat component, size, which covers balance sheet liabilities (excluding capital and guaranteed deposits), and risk-adjusted component consisting of each bank's specific risk¹⁴⁷. Furthermore, all institutions, regardless of their size, will contribute. A decision on their respective weightings will be made based on the conclusions of the ECB's bank asset quality review. The objectives are to reassure depositors by establishing a formal safety net and to harmonise and simplify depositor protection.

In mid-2014, prompted by important national considerations, members of the European Parliament decided that an agreement on contributions to the future resolution fund would not be a prerequisite for adopting the legislative package creating the European Resolution Mechanism. The BRRD was therefore adopted in mid-April¹⁴⁸ and the resolution rules under the directive are due to come into force on 1 January 2015. States have not yet reached a consensus on preventive recapitalisation of banks and use of public funds. In principle, there will be no recapitalisation before a creditor and shareholder bail-in amounting to 8% of the capital. However, some states argue that, under certain circumstances, such as the bank's inability to access the markets or the impossibility of selling assets to finance the recapitalisation, an injection of public capital may be warranted before a bail-in, as the use of this tool could interfere with property rights for prudential reasons. Conversely, the Commission, with other governments in agreement, has maintained that the very fact of having to recapitalise means the entity is almost insolvent and requires creditor and shareholder involvement.

**Bank asset
review underway**

Ahead of the launch of the SSM, the ECB began collaborating with the competent national authorities, including the ACPR in France, on an in-depth review covering at least 50% of the balance sheets of 128 large banks¹⁴⁹ in the fourth quarter of 2013. The review has the following four key objectives, which must be reached so that the ECB can establish the credibility of its direct banking supervision:

- Increasing transparency on banks' health, which requires improvements in the quality and uniformity of the information available on their financial position;
- Repairing banks' financial health, if need be, by identifying and implementing the necessary corrective measures based on the institutions' valuations and risk provisioning;
- Building market confidence with sound, trustworthy banks, by assuring all stakeholders that the financial position of banks, which the ECB will supervise directly, are fundamentally sound and trustworthy;

¹⁴⁶ The Commission estimates that EUR 592 billion in state aid (recapitalisation and asset relief measures) was approved between October 2008 and December 2012, representing 4.6% of the Union's GDP in 2012. Total aid, including all guarantees provided, reportedly represents 13% of GDP for the 2008-2010 period alone (EUR 1.6 trillion).

¹⁴⁷ Several criteria will be used to define the composite risk indicator: risk-weighted assets (RWA) to total balance sheet; leverage, 30-day liquidity and loan-to-deposit ratios; business profitability; amounts of public aid received in the last five years; complexity of the entity; proportion of assets to GDP of the country of origin, etc.

¹⁴⁸ After the package was adopted, on 30 May 2014, Moody's rating agency lowered the outlook on the ratings of 82 European banks (10 of them French, including BNP Paribas, BPCE, CASA and Société Générale) from stable to negative. https://www.moody.com/research/Moodys-changes-outlooks-to-negative-on-82-long-term-European-PR_300582

¹⁴⁹ See section 1.7 for details.

- Harmonising European supervision practices on a cross-segment basis ahead of SSM implementation.

For the major French banking groups in particular, it is also worth mentioning the specific characteristics of the mortgage lending model (the stock of mortgages in France stood at EUR 814 billion at end-March 2014, 85% of which at fixed rates). French banks tend to rely more than other European institutions do on borrowers' income and repayment capacity and less on the security provided by the financed asset. The ECB's conclusions could affect French banks in particular since, in the EBA's stressed scenario (see box below), French real estate would be harder hit than the euro area average, with a cumulative price correction of 28% between 2014 and 2016 (versus -2% in a baseline scenario), compared with an average of -15% (and -9% in Spain, where the real-estate bubble has already drastically deflated). Another issue countries are monitoring closely is how the stress tests will treat sovereign debt, as outstandings are particularly high in peripheral countries. Lastly, some intermediaries have highlighted the financial risks that could arise as the ECB takes on more and more tasks¹⁵⁰.

Box 12: Macroeconomic scenarios for 2014-2016 stress tests

1/ Assumptions used by the Commission, EBA and ESRB¹⁵¹

The stress test scenario is based on the European Commission's baseline scenario, for both macroeconomic assumptions (GDP growth, inflation, unemployment) and market assumptions (interest rates, inflation, stock prices). It reflects the four main systemic risk factors for stability in the banking sector, as identified by the European Systemic Risk Board (ESRB):

- ▶ An overall increase in bond yields, heightened by a sudden sharp reversal in risk assessment, especially towards emerging markets and certain other segments of market liquidity;
- ▶ A further deterioration of credit quality in countries with low overall demand, weak fundamentals and still-vulnerable banking sectors;
- ▶ A halt in reforms, raising doubts about the sustainability of public finances;
- ▶ The lack of necessary balance sheet repair to maintain affordable market funding.

Consequently, a broad range of risks are factored in, ranging from credit, market and sovereign risk to securitisation and the cost of bank refinancing.

With this in mind, the proposed scenario is as follows: investors' increased risk aversion regarding long-term sovereign bonds has an impact on all assets and therefore on related sales. In particular, US long rates are pushed up (by 100bp in Q1 2014 in the short term relative to the baseline scenario, then by 250bp in Q4 2014), with an upward effect on all rates, causing yield curves to steepen again and affecting emerging markets, especially those that are already fragile, such as South Africa, Brazil, India, Indonesia and Turkey.

This financial stress hurts the outlook for the real economy, particularly in emerging countries suffering from sizeable capital outflows in conjunction with a collapse in domestic demand. The outlook for exports to emerging markets therefore deteriorates, in particular for Europe, and this contributes negatively to growth.

In addition, given Europe's structural weaknesses, depressed growth will lead to a re-differentiation of European yields combined with perceptions of systemic risk and banks' refinancing difficulties, due to fresh tensions on the money market.

¹⁵⁰ As such, it should be noted that the ECB launched a consultation at end-May (<http://www.ecb.europa.eu/press/pr/date/2014/html/pr140527.fr.html>), running through 11 July, to set the annual fee billed to euro area central banks for its direct or indirect bank supervision. The ECB estimates its costs for 2015 at around EUR 260 million, to be borne by the 128 largest banks based on balance sheet size, for individual contributions ranging from EUR 150,000 to EUR 15 million (in most cases, from EUR 700,000 to EUR 2 million). In addition, 75% of the 6,000 other smaller banks will be asked to pay EUR 2,000 to EUR 7,000 and the larger banks in this category will be charged EUR 200,000, to cover the costs of indirect supervision.

¹⁵¹ EBA/SSM stress test: The macroeconomic adverse scenario, 17 April 2014 https://www.eba.europa.eu/documents/10180/669262/2014-04-29_ESRB_Adverse_macroecomic_scenario_-_specification_and_results_final_version.pdf.

2/ Details of the proposed bank stress test scenarios

Table 10 : Stress test scenario assumptions for the euro area and France

		2014	2015	2016
Baseline scenario	Real growth	1.2%	1.8%	1.7%
	Inflation	1.0%	1.25%	1.5%
	Unemployment	12.0%	11.7%	11.3%
	10-year yield	2.8%	3.1%	3.2%
France	Residential real estate	-0.2%	2.1%	3.8%
	Real growth	1.0%	1.7%	2.3%
	10-year yield (baseline)	2.4%	2.7%	2.8%
	Residential real estate	-1.6%	-1.0%	0.5%
Adverse scenario	Real growth	-0.7%	-1.4%	0.0%
	Inflation	1.0%	0.6%	0.3%
	Unemployment	12.3%	12.9%	13.5%
	10-year yield	4.3%	4.2%	4.3%
France	Residential real estate	-8.0%	-5.7%	-1.5%
	Real growth	-0.4%	-1.1%	0.4%
	10-year yield	3.8%	3.7%	3.8%
	Residential real estate	-12.8%	-12.4%	-5.9%

Sources: AMF, ECB, European Commission, EBA, ESRB.

First impacts of structural reforms, negotiations are ongoing

► **Structural reforms underway to ring-fence speculative activities and promote central clearing and greater transparency**

Structural reforms continue on both sides of the Atlantic, but their coordination is a subject of debate, particularly the Volcker rule in the USA, the Vickers Report in the UK and the Liikanen Report for the EU (applied in France through the Banking Separation and Regulation Act of 26 July 2013¹⁵²) as regards regulation of capital market activities. The objectives are not exactly the same, which can entail geographic and/or regulatory arbitrage risks, with the risk that some activities will be offshored. With the Dodd-Frank Act, the USA has shown its preference for reform that restricts proprietary market activities. The UK wants primarily to protect taxpayers in the wake of the bailout of several banks. Europe is looking to rein in overly speculative activities. In particular, France's legislation is also intended to "put finance back at the service of the economy" by "separating activities that are useful to financing the economy from speculative activities".

Following up on the Liikanen recommendations, several European reforms are now being finalised and will have a significant impact on the banking sector in Europe generally and in France in particular. These include the ban on proprietary trading (excluding market making) and the potential ring-fencing of market activities for entities whose balance sheet exceeds EUR 30 billion for three consecutive years and whose trading assets or liabilities exceed EUR 70 billion or 10% of the balance sheet (including foreign subsidiaries). However, the timing of the European structural reform project has been put back due to the European political agenda and complex national issues. National regulators will need considerable flexibility to calibrate their rules. The European Commission is not likely to adopt legislation before December 2015, for implementation after 2017 and a separation of risky activities in 2019. This would leave banks enough time to adjust.

At end-June 2014, the IMF also expressed concerns about the slow pace of reform and the absence of a sea change in industry behaviour with regard to factors such as short-termism bonus policies and countless financial scandals. In the IMF's view, the delay stems from strong resistance by the industry and possible apathy from regulators. The IMF also noted at that time that "the true role of the financial sector is to serve, not rule, the economy". The AMF is also paying close attention to implementation of structural reforms that aim to

¹⁵² <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000027754539>

change industry behaviour, in particular by lengthening decision-making timelines and changing compensation policies.

**More flexibility
introduced into
Basel rules**

‣ **Relaxation of Basel rules on capital and liquidity**

The Basel Committee on Banking Supervision (BCBS) continues its work on the transition from Basel 2.5 to Basel III, grounded in the prudential lessons learned from the crisis. Its objectives are threefold: 1) strengthen banks' financial soundness, 2) reduce the risks of contagion and 3) limit systemic risks. In practice, to achieve these goals, banks will be subject to tougher prudential rules, with a solvency ratio, liquidity constraints (with short- and long-term liquidity ratios, respectively the Liquidity Coverage Ratio and Net Stable Funding Ratio) and a leverage ratio. The latter will be set at a minimum of 3%, with an observation period beginning in early 2014, mandatory publication from 2015, and entry into force in 2018; the calibration will be fine-tuned in 2017. Aside from the positive medium-term impacts expected from these reforms, a number of questions may arise concerning the possibility of higher short-term borrowing costs and the increasing demand for collateral, for example.

One positive trend, however, is the relaxation of liquidity constraints since 2014, through the joint efforts of the BCBS and the European Commission. First, in early 2014, the BCBS revised the leverage ratio¹⁵³ to be more industry-friendly: while the ratio calculation (Tier 1 capital as a percentage of non-risk weighted assets) remains unchanged and has been maintained at 3%, netting of positions with the same counterparty is now allowed in secured transactions (repos), as was already the case in the USA. Banks may use collateral (under the variable margin requirement) to reduce their derivatives exposure. The method for calculating the size of their off-balance sheet activities will also be more flexible, with a cap on credit derivatives exposure in terms of maximum potential loss, expanded hedging opportunities and measures to avoid any double counting of these transactions. Banks will have to disclose this ratio as from 2015; it which may be adjusted through 2017 for enforcement in 2018.

Second, the European Commission is considering expanding the scope of securities eligible for the LCR beyond the BCBS's recommendations, so as to include covered bonds (depending on their rating) as Level 1 or Level 2 assets, in light of their liquidity. Consequently, bonds rated A- to A+ could represent 40% of assets eligible for the ratio and those with higher ratings 70%. The Commission is also proposing that lower haircuts be applied to the market value of covered bonds than those published by the BCBS (7% versus the previous 15%). Lastly, proposals have been made to simplify cross-border rules for managing non-domestic collateral, which represents some 25% of guarantees deposited with Eurosystem central banks, as from May 2014. Collateral should therefore be managed more smoothly and cost-effectively. Additionally, depositories will be able to further develop their collateral management services.

However, two trends seem to be taking shape:

- First, possible one-upmanship between financial institutions to comply with prudential ratios as quickly as possible and more closely than proposed in the regulators' recommendations, in part under pressure from investors who are calling for tougher rules. However, international comparisons should be made with caution given the significant differences in estimates and calculation methods¹⁵⁴;
- Second, a desire on the part of certain regulators to gold-plate the requirements specified in international legislation, which could undermine the credibility of the levels set internationally and put pressure on other jurisdictions. For example,

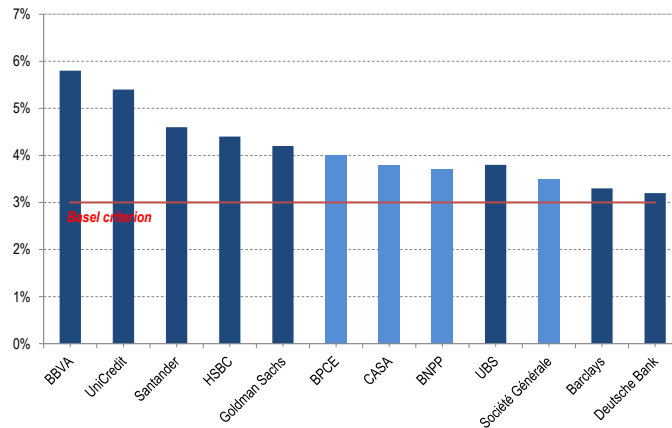
¹⁵³ The leverage ratio is defined as Tier 1 capital to the bank's total adjusted assets (the adjustments aim to reduce any disparities resulting from different accounting frameworks).

¹⁵⁴ For example, the ECB estimated in February 2014 that a 5% or 6% leverage ratio in the USA would be equivalent to a 3% ratio under the Basel standard.

regarding the minimum Basel leverage ratio of 3%, regulators have tended to be more demanding in terms of levels¹⁵⁵ or deadlines¹⁵⁶. All major banks, including in France, say they now exceed the 3% level.

For the medium term, however, it should also be acknowledged that both these trends will make the institutions in question more sound and improve the stability of the financial system as a whole.

Figure 87: Liquidity ratios in Europe in Q1 2014 (%)



Sources: AMF, Company reports.

Box 13: Impact of France's financial transaction tax (FTT) and the challenges of the European FTT

The main characteristics of the tax on share purchases, which came into force in France on 1 August 2012, are as follows:

- ▶ A tax is levied on purchases of French shares of companies with a market capitalisation above EUR 1 billion at 31 December of the previous year;
- ▶ The tax is owed no matter where the transaction is executed (regulated markets, multilateral trading facilities, OTC);
- ▶ Marketing-making transactions are exempt.

The AMF compared all trading volumes, before and after implementation of the French FTT, on *lit* markets, i.e. regulated markets and multilateral trading facilities, after accounting for other explanatory variables such as market volatility and volumes on other European markets. It found that *lit* volumes fell by about 10% in the long term. The transitional impact, in the first few weeks after the tax was implemented, was much higher, with volumes down by about 20%, due in part to the temporary withdrawal of certain high-frequency traders because of the uncertainty resulting from the tax. This adjustment phase was also marked by a significant deterioration in liquidity indicators such as spreads and best-limit depth.

The estimates put forward by the ECB (Colliard and Hoffman (2013)), which also factor in OTC trading volumes, point to a reduction in larger-scale transactions in favour of average-size transactions. The tax is thought to have caused an approximately 40% decline in OTC volumes.

The French FTT does not appear to have triggered a significant substitution between transactions on shares in the tax base and transactions on substitute derivatives such as swaps and contracts for difference, which would allow both the intermediary and the end investor to avoid the tax.

Other than the strong negative impact in the first few days following the introduction of the FTT, it is difficult to identify a long-term impact on other liquidity indicators such as spreads and the quantities available at best limits. This is because these indicators relate mainly to market-making activity,

¹⁵⁵ For example, regulators in the USA adopted a leverage ratio of 5% in April 2014 for the eight systemic institutions and 6% for their FDIC-insured deposit-taking subsidiaries (versus 3% recommended by the BCBS). In Switzerland, the ratios to be complied with as from 2019 will be 4% for Crédit Suisse and 4.6% for UBS. Lastly, in the Netherlands, the central bank (DNB) assessed, at end-April 2014, the requirements for financial institutions at 4%, but has not yet set a level.

¹⁵⁶ The PRA made provision for the leverage ratio for the six major British banks to apply in January 2014. In Canada, this will be the case as from 2015.

which is exempt from the tax. In revenue terms, the tax generated some EUR 700 million in the first year of application.

The French framework, like the one introduced in Italy in 2013, will eventually be replaced by a European FTT established under a 10-country enhanced cooperation procedure. At the conclusion of negotiations between stakeholder countries based on the European Commission's January 2013 proposed directive, the European FTT could initially cover equities and a limited number of derivatives — still to be specified at this stage — as from 1 January 2016, before any subsequent expansion. As announced in May 2014, revenues of EUR 5 billion to EUR 6 billion are expected. While the exact terms and conditions have yet to be defined, the estimate of revenue from equities, which is in line with the figure in the January 2013 proposal, suggests that the main characteristics of the proposal could be maintained, namely:

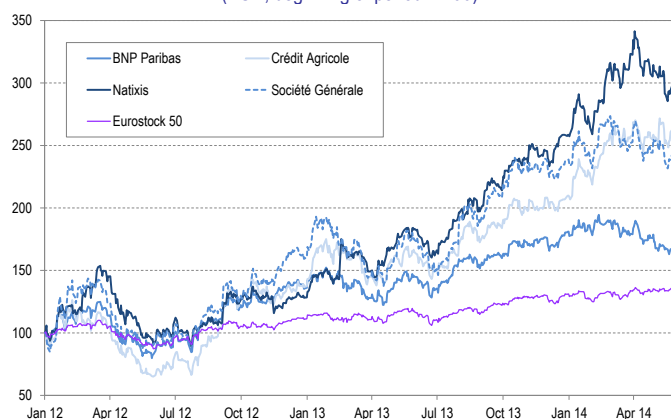
- ▶ Rates of 0.1% on equities and 0.01% on derivatives;
- ▶ Chargeability based on the dual principle of residence and issuance (trades in financial instruments issued in jurisdictions that have introduced the FTT will be taxable transactions) and of residence of the financial institution that is party to the transaction;
- ▶ A uniform taxable base, consisting of few or no exemptions for market making and a tax on intraday trades;
- ▶ General anti-abuse clauses (any artificial scheme or arrangement whose purpose is to avoid taxation will be void, as only the economic substance will be considered) and specific anti-abuse clauses (any issue of certificates of deposit or similar securities carried out to evade taxation will also be considered void).

Owing to significant differences between the French law and the tax under consideration at the European level, the lessons drawn from the first cannot be universally applied to the second. The European FTT could have a much stronger impact on volumes if, on the equities side, the lack of a specific treatment for market-making, hedging and repo transactions, as well as for the redemption of fund units, is upheld, potentially leading to a tax cascade. With respect to derivatives, specific issues associated with charging the same rate on transactions with highly variable maturities could have major impacts on the market.

Changes in French banks' market-based financing, for regulatory reasons

For French banks the post-crisis period was complex, mainly because of the increasing shortage of dollar liquidity triggered by outflows from US money market funds and heightened risk aversion. By contrast, investors have recently shown renewed interest in core European-country bank stocks, as reflected in lower refinancing costs and higher stock prices. The ECB also continues to make exceptional financing available, bringing some relief to the most fragile banks, particularly in the European periphery. Lastly, banks have sharply increased their liquid assets since end-2011 and are using market-based financing mechanisms that meet tougher prudential requirements.

Figure 88: Share prices of major French banks
(EUR, beginning of period = 100)



Sources: AMF, Datastream.

Whereas in 2012-2013, analysts were focused mostly on euro area banks' exposure to peripheral sovereign debt, since end-2013 they have also been concerned about European and global regulatory issues and the risk of regulatory inconsistency (introduction of new

ratios, demand for high-quality collateral, etc.), against the backdrop of the launch of the banking union discussed above. Euro area banks therefore logically sought to anticipate these requirements or possible recommendations from the ECB in light of the Asset Quality Review by improving their liquidity and provisioning levels at end-2013, the closing date of the financial statements analysed by the central bank. European banks have therefore already made the following adjustments or are in the process of doing so:

- Balance sheet adjustments, often in connection with cost-cutting plans launched in 2012, and efforts to increase provisioning at end-2013;
- Capital increases, illustrated by the record-setting rights issue of some EUR 8.5 billion launched in mid-May by Deutsche Bank, which also refocused its business activities and strengthened its balance sheet; and by the series of recapitalisations at Monte Paschi di Siena (EUR 1 billion, EUR 3 billion and EUR 5 billion);
- Hybrid debt¹⁵⁷ issues compliant with the bail-in procedure established by the European authorities, eligible for the Basel leverage ratios (for additional Tier 1 securities) and used to diversify the investor base by proposing non-euro currencies. This trend started in mid-2013 after the European Banking Authority published technical standards on the CRD IV directive, which transposes Basel III in Europe. In particular, contingent convertible bond issues (CoCos) have become increasingly popular. CoCos rank anywhere from senior to subordinated within the bank's capital structure and can be converted into equity or take a haircut if the issuer's core capital level (core Tier 1 ratio) falls below a pre-defined minimum threshold. The trend continued in 2014, lifting the amount outstanding in hybrid debt to more than EUR 75 billion at the end of first quarter 2014.¹⁵⁸

In addition, the specific structural features of the French market help show that French banks are somewhat reliant on market-based financing. Two types of products attract a substantial portion of French investments, although these funds are largely used to refinance bank debt: 1) tax-sheltered passbook accounts¹⁵⁹, with outstandings of EUR 419 billion at end-2013, up 22% since end-2011 due, among other reasons, to two consecutive increases in the Livret A passbook ceiling¹⁶⁰, representing 14% of household financial wealth, and first and foremost 2) life insurance, with outstandings of EUR 1.358 trillion at end-2013, up 6.4% since end-2011, representing 46% of household financial wealth. In mid-2014, the newly created Paris Marketplace Committee 2020 will begin to explore the issues of savings and their use, and will likely make proposals so as to learn from these structural features of the French market.

French bank reorganisations continue

Banks continue to implement their adjustment plans announced in 2011-2012 in an effort to comply with Basel III rules and improve their profitability. They have focused on two main areas:

- 1) exiting highly capital-intensive activities (long-term financing, such as infrastructure and ships, etc.) and selling healthy (mainly trading) or illiquid loan portfolios to lighten balance sheets and reduce RWA¹⁶¹; deleveraging therefore continues, but at a slower pace (EUR 10-20 billion in assets per month, versus EUR 300-400 billion in early 2013); and

¹⁵⁷ Hybrid debt consists of bonds subordinated to senior debt with a higher rank than equities within the capital structure. It is therefore considered capital.

¹⁵⁸ The main banks that have issued hybrid debt since 2013 are:

- Additional Tier 1: in 2013, Barclays, Société Générale, Crédit Suisse, Nationwide and Banco Popular, inter alia; in 2014, Crédit Agricole (USD 1.75 billion, EUR 1 billion and GBP 0.5 billion issued between January and April 2014) and Deutsche Bank (EUR 1.5 billion announced in April);
- Additional Tier 2: BNP Paribas, BPCE (EUR 1.5 billion in January 2014, Crédit Agricole, Société Générale (EUR 1 billion in January 2014), Unicredit, Rabobank, KBC, UBS, Svenska (EUR 1.5 billion in 2014).

¹⁵⁹ Tax-free passbook accounts cover regulated savings accounts, i.e. Livret A, Livret bleu, Livret Jeune, Livret Développement Durable (sustainable development) and Livret d'Épargne Populaire.

¹⁶⁰ At end-2012, the ceiling for the Livret A rose from EUR 15,300 to EUR 19,125 and then to EUR 22,950 in January 2013. This represents a 50% increase in the ceiling.

¹⁶¹ Risk-weighted assets.

- 2) implementing massive cost-cutting plans. For example, Crédit Agricole has set a target of EUR 650 million in savings in 2012-2016, of which 60% had already been achieved at the end of first quarter 2014. Similarly, BNP Paribas launched a 2014-16 development plan based, inter alia, on cost-cutting and internal transformation programmes.

For this reason, French corporate and investment banks, like their counterparts around the world, have adjusted their organisational models and are now increasingly likely to outsource back office and IT services functions (intra-group outsourcing being the first step in that direction) at a time when:

- Back offices have already undertaken efforts to rationalise, mainly through mergers and acquisitions. A wave of back-office outsourcing is now underway, for example, at end-May LCL outsourced its cheque book production and document digitisation activities as part of the reorganisation of its processing centres, as outlined in its strategic plan;
- Rapidly changing regulations and increasingly demanding reporting and transparency requirements may prompt banks, both large and small, to seek cost savings by industrialising and subcontracting certain tasks in order to remain competitive and limit non-compliance risks;
- Plain vanilla products can be outsourced amid reduced interest in complex products and structures.
- Another example is Société Générale's decision to outsource its investment bank's securities processing operations (i.e. post-trade and pre-depository activities) to Accenture. This initiative, launched at end-2013, was driven by the quest for profitability, as these businesses are relatively standardised and likely to become more so due to new European post-trade rules, including EMIR for reporting and clearing, and a strengthened framework for settlement.

OTD models are gradually being implemented

For banking groups, another consequence of the crisis is the gradual implementation of new models, such as distribute-to-originate¹⁶² at Crédit Agricole SA and originate-to-distribute (OTD) at BNP Paribas, Société Générale and BPCE. Originally based on securitisation, these models take their name from the traditional banking method, originate-to-hold, where loans are held on the bank's balance sheet until they mature.

However, it will be impossible to apply this model under the same conditions as before the crisis, because the regulatory and prudential frameworks have been tightened both for investors (insurance companies, asset managers and pension funds) and for issuing institutions (EMIR, Dodd-Frank, French and European financial transaction taxes, Basel III and Solvency II). Accordingly, investors will surely demand collaboration based on transparency about borrowers, characteristics of financed assets (with minimum retention of originated and structured loans on balance sheets and product standardisation) and risks incurred, in line with the recommendations on securitisation adopted by the FSB and IOSCO in their work on shadow banking.

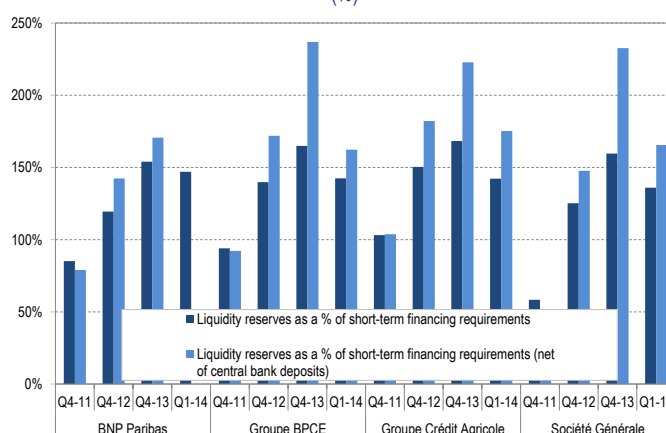
The change in model could be a source of risk, making it necessary to deal with the systemic effects of portfolio transfers; avoid revenue loss in a very low rate environment; promote price adjustments; recognise weak demand for certain complex products and the difficulty in originating certain transactions because of the slow recovery of the securitisation market, despite a number of government initiatives; and cope with competition from non-banks. However, the change may also create opportunities. Some banks could choose to specialise, scaling back or eliminating other businesses but generating a higher return on allocated equity.

¹⁶² The idea being to consider possible solutions for distributing loans prior to their origination.

Improved balance sheet structure

In 2013, as in 2012, banks strengthened their balance sheet structure by continuing to sell assets¹⁶³ while increasing their stable funding relative to long-term liabilities. All the large French banks also reported significant excess liquidity relative to their short-term refinancing needs. First, the four major French banks increased their liquidity reserves by an additional 14% year on year in the first quarter of 2014. Second, they cut their short-term debt by a further 7% compared with end-2012, reducing it from EUR 548 billion to EUR 508 billion at end-2013. Consequently, they not only have considerable liquidity reserves but are also more resilient. BNP Paribas has a significant liquidity buffer (EUR 262 billion in the first quarter of 2014), which represents more than one year of margin relative to market funds (i.e. 147% of short-term refinancing needs), while BPCE, Crédit Agricole and Société Générale have significant liquidity reserves of a respective EUR 113 billion, EUR 246 billion and EUR 160 billion, covering 142%, 142% and 136% of their short-term refinancing needs.

Figure 89: Liquidity reserves/outstanding short-term refinancing (%)



Notes: Reserves include central bank deposits as well as available central-bank eligible assets (after haircut). The Crédit Agricole Group includes 100% of the Regional Banks (25% accounted for by the equity method in Crédit Agricole SA). Sources: Company reports, AMF calculations.

The banks are also once again enjoying full market access under very favourable conditions due to the historically low rate environment and a quest for profitability by various market participants. As a result, at the end of first quarter, they had already largely covered the medium- and long-term funding programmes they had planned for 2014: four-fifths for BNP Paribas, 58% for BPCE, and 45% for Crédit Agricole and Société Générale. These four banks' medium- and long-term funding programmes were more than 100% complete in 2013¹⁶⁴, enabling them to get an early start on their 2014 programmes.

Differing cost-of-risk trends

The major French banks' ratio of doubtful loans¹⁶⁵ continued to rise in 2013 (4.7% at end-2013, versus 4.4% at end-2012, according to the ACPR¹⁶⁶) due to a scissor effect that affected all French banks, with a decline in healthy loans and an increase in doubtful loans to corporate and, to a lesser extent, retail customers. In Q1 2014, the Crédit Agricole group reported doubtful debt ratios of 2.5% for its national network and 3.8% for Crédit Agricole SA while Société Générale and BNP Paribas reported higher ratios, of 4.5% and 4.3%, respectively, at the group level. The average French doubtful loan ratio nevertheless remains below the European median of just above 6% at end-2013.

¹⁶³ RBS estimates that asset sales continued but slowed in early 2014, contracting in Europe by EUR 400 billion in January and EUR 150 billion in February and March, versus EUR 900 billion in December 2013. One reason is the ECB's asset review.

¹⁶⁴ Medium- and long-term funding programme completion rates in 2013 were 123% for BNP Paribas, 153% for BPCE, 129% for Crédit Agricole and 144% for Société Générale.

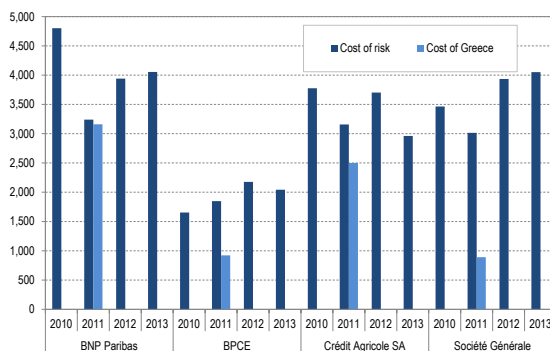
¹⁶⁵ Defined as the ratio of gross impaired loans and advances to the total gross amount of loans and advances.

¹⁶⁶ French banks performance in 2013, *Analyses et Synthèses* No. 29, ACPR, May 2014.

The scope of this report covers: BNP Paribas, BPCE, Groupe Crédit Agricole, Groupe Crédit Mutuel, La Banque Postale and Société Générale.

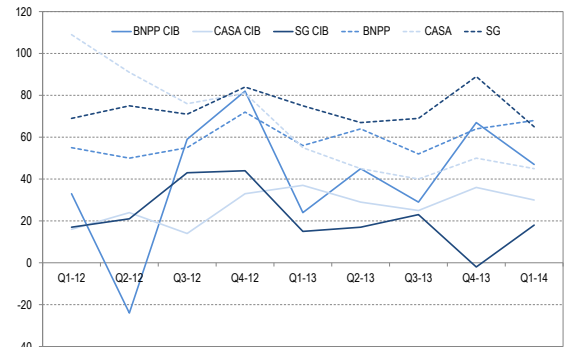
On average, cost of risk remained stable in 2013, according to the ACPR. It was considerably higher than its pre-crisis level but down sharply from the 2009 peak (cost of risk represented 0.23% of the balance sheet in 2013, versus 0.41% in 2009). However, a finer-grained analysis shows that cost-of-risk trends differed at end-2013 (Figure 90), based on the banks' business models and the respective regions in which they operate, whereas in 2012 their cost of risk increased across the board. This cost rose modestly for BNP Paribas and Société Générale compared with 2012, due to securities and brokerage businesses at their corporate and investment banks (CIBs), provisions for litigation, and underperformances in Eastern Europe. By contrast, cost of risk declined at Crédit Agricole and, to a lesser extent, BPCE, reflecting the moderate pick-up in the economic environment.

Figure 90: Cost of risk (EUR million)



Sources: Bank financial reporting, AMF calculations

Figure 91: Cost of risk over outstanding loans, CIB and Group (basis points)



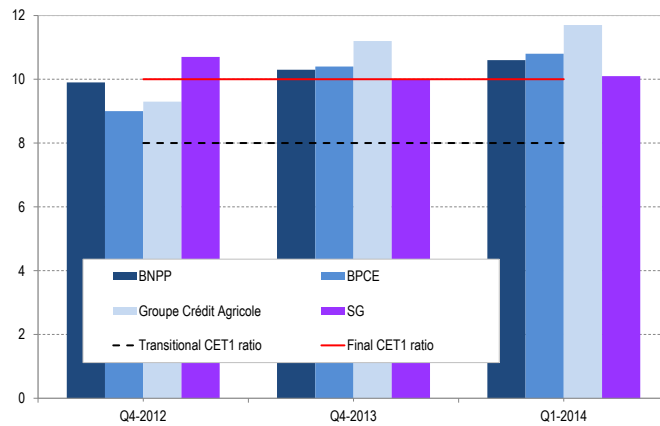
Sources: AMF, Bank financial reporting

Solvency continues to strengthen

French banks continue to strengthen their capital with an average common equity Tier 1¹⁶⁷ (CET1) ratio of 10.8% at the end of the first quarter of 2014, calculated according to Basel III rules (CRD IV; the ratio comes into force in 2019 but all the major banks are already reporting it), a 1.1-point improvement since end-2012. This increase stemmed from earnings generation, but also from steps taken by the banks to 1) dispose of portions of the CIB loan portfolios, 2) optimise portfolios of assets managed in run-off mode and 3) strengthen the previously discussed capital base in 2013-14, especially Basel Tier 1 capital. These initial estimates show that the targets set when the adjustment plans were launched have already been reached or exceeded: BNP Paribas had a CET1 ratio of 10.6%; BPCE, 10.8%; Crédit Agricole, 11.7%; and Société Générale, 10.1% in the first quarter of 2014. These figures need to be treated with caution, particularly in terms of comparisons between banks, since they are published on a voluntary basis and have not yet been harmonised.

¹⁶⁷ Basel CET1 is defined as higher-quality core capital (share capital, related issue premiums, reserves, retained earnings and the fund for general banking risks).

Figure 92: Solvency ratio (Common Equity Tier 1, Basel III full CET1) (%)

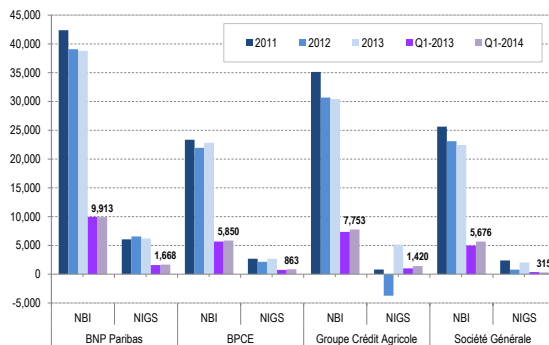


Sources: AMF, Company reports.

Profitability under pressure, with CIBs still under pressure

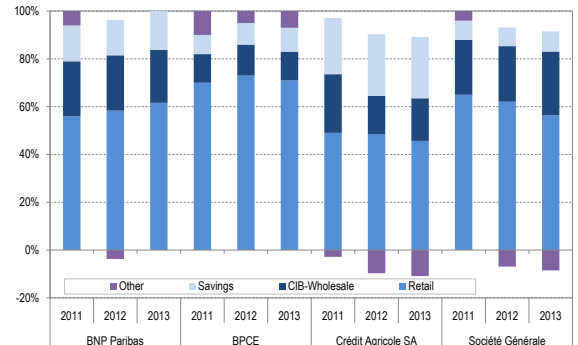
Despite unfavourable but normalising economic conditions in Europe, revenues in this mature industry have proven resilient and are tending to stabilise, after plummeting in 2012. A number of factors are at work. These include robust retail banking business with strong performances from domestic commercial networks, driven by significant growth in deposits, declines in outstanding loans due to depressed demand¹⁶⁸, low interest rates and currency effects. Other positive factors include targeted commercial development in high-growth countries as well as a very gradual recovery in peripheral Europe, as in Italy, Eastern Europe and Turkey (Figure 93 and Figure 94). Nonetheless, larger provisions had to be recorded to prepare for the ECB's balance-sheet review.

Figure 93: Net banking income (NBI) and Net income, Group share (NIGS) (EUR million)



Sources: AMF, Company reports.

Figure 94: Net banking income by business area (%)



Sources: AMF, Company reports.

CIB revenues contracted significantly in an unfavourable environment both for securities-related businesses (bonds in particular, but also interest rates, currencies and commodities), where returns were at an all-time low, and for brokerage. This environment has been particularly detrimental to French universal banks. It bears repeating that, as a result of the EBA's key risk indicators¹⁶⁹, these banks now derive a larger share of revenues from commissions than from lending margins (50% in France, versus a median of 60% on average in Europe).

¹⁶⁸ Which caused a moderate decline in the loan-to-deposit ratio in 2013 at an average of 116%, according to the ACPR, i.e. slightly higher than the European median (112%).

¹⁶⁹ Risk assessment of the European banking system, Risk dashboard Q1 2014, EBA

However, since 2013 yield-seeking investors have regained some risk appetite. This is reflected in better performances by the equities, treasury and securitisation businesses. Corporate and investment banking has therefore continued to shift towards a more customer-centred model, with a better-managed risk profile and more judicious consumption of scarce resources. Nonetheless, the net earnings of major French banks rose in 2013, with the exception of BNP Paribas, which set aside an extraordinary provision for Eastern Europe. This goes to show that the cost-cutting plans are starting to pay off, and banks will continue refocusing in the coming years.

Banks are facing challenges and opportunities

In sum, banks have reported solid earnings, while continuing to make structural adjustments to their business models and implement massive cost-cutting and optimisation plans. French banks have also further reduced their trading and solvency risks by exiting risky and capital-intensive businesses, launching successive waves of recapitalisations and increasing their provisions. However, a number of risks also present opportunities for longer-term growth and, should they materialise, could delay the profitability recovery.

- ▶ First, market risks, and interest rate risks in particular, will hamper banks' performance once monetary policies normalise. An S&P study¹⁷⁰ of the trading risk of 15 major European banks (including BNP Paribas and Société Générale, whose trading activities represent a smaller share than the sample average) showed that this risk remains significant and could destabilise banks that are unable to manage it properly. S&P nevertheless observed fewer Level 3 assets outstanding (i.e. assets that are less liquid and therefore the hardest to price), less volatile one-day trading revenue, fewer unprofitable trading days or VaR limit breaches and fewer back-testing exceptions. It should be noted that the BCBS is undertaking an initiative to more closely regulate interest rate risk.
- ▶ Like some markets, such as commodities and fixed income, global banking groups are highly exposed to political risk, especially if their geographic presence is concentrated in specific inter-related geographic regions or countries. For example, in the last two quarters, there has been a steep rise in cost of risk for banks exposed to Ukraine and Russia¹⁷¹. This has led to higher provisioning, which creates earnings volatility (particularly for the bond, foreign-exchange and commodity businesses) and can affect solvency ratios. At the same time, the risk on peripheral Europe has eased somewhat, with Ireland and Portugal exiting their bailout programmes in 2014 and some recovery in economic activity.
- ▶ Banks are exposed to regulatory issues, with tough prudential requirements intended to strengthen loss-absorption capacity (through short- and long-term liquidity ratios and leverage ratios, etc.) and the system's resilience. However, these requirements could affect the short-term availability of credit¹⁷², especially for small and mid-sized firms. The AQR exercise, part of a necessary but unprecedented transition, creates uncertainty for banks as they await the ECB's conclusions, while the establishment of the SSM is only the first step in reducing financial fragmentation in the euro area. A PwC report¹⁷³ on 24 banks published in early 2014 nevertheless shows they are unlikely to revise their business plans in response to the results of the ECB's stress test. The burden will largely fall on governments to restore their public finances, while not undermining the economic outlook, so as to weaken the link between bank and sovereign risks. However, banks play a larger role in financing the economy in Europe than in the USA¹⁷⁴.

¹⁷⁰ *Delving deeper into global trading banks' risks and rewards: a study of public disclosure*, S&P Ratings, May 2014

¹⁷¹ For example, Société Générale had to lower its return-on-equity target (10% in 2016, versus its previous 15% in 2015) due to its high exposure to the country.

¹⁷² Private credit outstanding is growing slowly in France (up 1% year on year on a nominal basis in April 2014, according to the Banque de France) but at a much faster pace than in the euro area where, according to the ECB, lending to non-financial firms shrank 3% year on year in the first quarter of 2014 while lending to households stagnated.

¹⁷³ *Passing the stress test, PwC survey on regulatory stress testing in banks*, PricewaterhouseCoopers, January 2014.

¹⁷⁴ The Scientific Committee of the European Systemic Risk Board (ESRB), which operates under the ECB, even referred in its June 2014 report (*Is Europe overbanked?*) to an overexpansion of European banks, given the much faster growth in bank

- › The issue of the supply of high-quality collateral is also worth mentioning. A number of factors are behind the increased demand for high-quality collateral: the Basel short-term liquidity ratio, which encourages banks to keep a large quantity of highly liquid assets (weighted at 0%) on their balance sheet, and EMIR, which directs eligible OTC derivatives to clearing houses, driving up collateralisation and margin calls, while the FSB's ongoing work on securities financing transactions will have similar effects. However, the supply of better-quality sovereign collateral fell steeply following the downgrades of core European country sovereign ratings on the grounds of their weakened public finances and growth outlook. In addition, more generally, the sovereign debt crisis also prompts questions about the concept of the "risk-free asset", which has traditionally referred to the highest-rated sovereign bonds. Regulators will have to consider the rationale for the zero weighting of sovereign collateral, as is currently the case under the Basel framework.
- › Lastly, legal risk has also risen because several regulators have hardened their positions and imposed a series of sanctions, heeding the lessons of the past crisis. This results in more lawsuits, more settlements and higher provisions for litigation.

Box 14: Benchmark index reform

Following reports of alleged manipulation of certain indices used as benchmarks for financial instruments, IOSCO published in July 2013 a set of principles to guide the design and provision of benchmarks. These principles, which were endorsed by the Financial Stability Board (FSB) and subsequently by the G-20 at the September 2013 Saint Petersburg summit, cover four areas: governance of the index administrator, index quality, the quality of the underlying methodology for the index, and issues relating to the accountability of the index administrator. In Europe, in June 2013 the European Securities and Markets Authority (ESMA) and the European Banking Authority (EBA) also published principles prepared in conjunction with the national authorities, with the intention of developing a European reference framework until the legislative framework comes into force. In this regard, the European Commission published on 18 September 2013 a proposed regulation to strengthen benchmark integrity. This initiative supplements the European Commission's 2012 proposal to amend European legislation on market abuse in order to punish manipulation of financial indices. In France, under the Banking Separation and Regulation Act of 26 July 2013, criminal and administrative penalties will also apply to financial index manipulation.

As a result of the alleged manipulations reported since 2012 and the work done since then at international level, the different types of risks that may arise during the construction, calculation, provision or use of benchmarks have been identified as follows:

- › **Risk to benchmark integrity:** inadequate governance and control procedures for each step in the construction, calculation and provision of benchmarks could undermine their integrity in the event of errors or conflicts of interest, or if opportunities for manipulation exist when underlying data are contributed to the indices, particularly if these inputs are partial or biased, or when data are aggregated for the purpose of calculating benchmarks.
- › **Risk to benchmark reliability or quality:** the question arises as to whether the benchmarks are representative of the underlying markets they are intended to measure. This leads to a preference for use of transaction data and to regulation of the use of expert judgments in the absence of sufficient transaction data. From a methodological standpoint, the origin of the data and the methods used to calculate the benchmarks must be able to adequately reflect the state of the underlying markets, which can be particularly challenging in the event of extreme volatility or of sharply lower or temporarily non-existent activity on certain markets.
- › **Risk of suspension of benchmark provision:** the suspension of a benchmark is a particularly high risk as the index is mostly used to reference financial instruments. Aside from suspensions due to operational issues, this risk can also arise if the number of data contributors is too low to calculate the index, for example, in case contributors withdraw from a panel, or if the absence of trading means the data needed to calculate the index are temporarily or permanently unavailable.

balance sheet size between 1995 and 2011 than in household wealth, based on a sample of some 50 banks. The ESRB takes this even further with its expectation that the banking sector's contribution to growth will be nil or even negative, due to the excessive volume of bank loans, the proportion of mortgages to households, the diversion of young graduates to other industries, etc. According to the ESRB, this may be due to the universal bank model, government support, the desire to create national champions, etc.

- ▶ **Legal risk:** if a benchmark's continuity is threatened by specific events, changing the characteristics of the index or replacing it with a substitute index poses a legal risk associated with the continuity of the financial instruments referenced by the index.

Although certain issues deserve special attention in the European Parliament and Council negotiations, the proposed regulation published by the European Commission is a major milestone in European benchmark regulation and supervision and is consistent with the principles developed at international level. As such, it will help strengthen benchmark integrity and improve regulation of identified risks.

Lastly, as regards interbank rate indices more specifically, several projects are underway to examine the feasibility of creating alternative benchmarks that would comply with the principles developed internationally and be based primarily on transaction data. While the outcome of these projects is unknown at this stage, several interbank rate indices could eventually coexist.

2.8. Summary of Chapter 2

Some of the trends observed in recent years have stabilised in the past 12 months:

- ▶ Fragmentation on the principal European equity markets remains at an all-time high;
- ▶ In 2013, the proportion of dark trading in equities on European markets rose in line with previous years;
- ▶ The impact of HFT on the equity markets also seems to have stabilised, although market shares remain volatile and it is difficult to isolate “pure” HFT players;
- ▶ The trend toward consolidation of stock exchange ownership continued with, inter alia, the finalisation of ICE's takeover of NYSE Euronext;
- ▶ In France, market participants, including suppliers of liquidity, seem to have absorbed the impacts of the country's financial transaction tax.

Other trends in 2013 were more pronounced:

- ▶ A number of participants continued to optimise their business models, partly ahead of the forthcoming finalisation of regulatory standards. This applies in particular to management of derivatives exposure costs and collateral transformation practices;
- ▶ ISDA statistics on derivatives markets point to recent sharp growth in the use of central clearing and in the collateralisation of OTC transactions. The migration of derivatives business to organised trading facilities nevertheless remains fairly limited;
- ▶ With respect to bank funding, demand for hybrid debt issues, especially Basel ratio-eligible CoCos, has been strong since 2013. This has enabled banks to diversify their investor base.

While it is unclear whether these trends will be sustained, a number of uncertainties associated with regulatory developments have been resolved in recent months and significant progress has been made on various reform projects:

- ▶ The Level 1 text for the revised MiFID has been adopted, bringing major advances on market fragmentation, transparency, HFT regulation and investor protection. The next step is for regulators to carefully calibrate the Level 2 measures to ensure the principles of the reform are actually implemented.
- ▶ On the derivatives market, the first set of EMIR requirements has already come into force, mainly with respect to dispute management, portfolio compression and central repository reporting. Against this backdrop, several important issues will be clarified in the coming months, including the convergence of regulations between jurisdictions and the calibration of margining for OTC derivatives.
- ▶ The gradual establishment of the banking union since end-2013, with the ECB as guarantor of bank soundness, should help minimise the ties between banks and sovereigns while also offering savers better protection through recovery and resolution frameworks. Growth financing will not resume without it.

- ▶ The structural reforms launched post-crisis with the Liikanen report will continue, but the timetable in Europe has been set back due to election schedules.

Given the above, financial markets face several sources of risk:

- ▶ The transparency of certain market segments and certain activities remains insufficient or problematic. In particular, the mechanics of collateral intermediation remain fairly opaque, making it hard for regulators and participants to gauge the true implications of a shock to the value of assets in terms of financial stability, as well as participants' possible responses;
- ▶ Moderate but steady growth in dark trading is spilling over to transparent markets, and research suggests the effects are highly non-linear. Consequently, the impact of this type of trading on aggregate liquidity and, more generally, the quality of the market as a whole requires continuous monitoring. In particular, details on the calibration of the forthcoming measures in the MiFID II technical standards regarding pre-trade transparency exemptions on equity markets will have to ensure that dark trading is limited to large-scale transactions;
- ▶ High-frequency traders' sphere of action could evolve significantly in tandem with regulatory developments. First, the MiFID II provisions establish a general framework for their activity. Second, on derivatives markets, if the trends towards standardisation and, in particular, migration to electronic order books were to intensify, they would enable high-frequency traders to further penetrate these markets. Measures intended to improve pre- and post-trade transparency on these markets should be leveraged to monitor the development of high-frequency trading and analyse its impacts;
- ▶ Depending on the final details, which are still uncertain, the introduction of a financial transaction tax in the enhanced-cooperation countries could not only jeopardise the functioning or even long-term future of certain hedging and market-making activities; it would also have a major impact on certain market segments, including repos;
- ▶ The future organisation of the post-trade industry, where businesses are being transformed by regulatory developments, is one area of uncertainty. As such, regulators need to promote business models that allow for fair competition among service providers without fragmenting liquidity;
- ▶ Operational risks in post-trade infrastructures must be managed more effectively because, in the new regulatory environment, post-trade infrastructures, especially CCPs, are focal point of risk concentration. While the systemic nature of these participants is not in doubt, it will be important to prevent the creation of too-big-to-fail or too-interconnected-to-fail participants.
- ▶ More generally, market intermediaries are exposed to a wide variety of risks, ranging from market and interest rate risks to higher political risks in a tense international context); they are also subject to tighter requirements, for example at prudential level, and increasing legal risks, reflected in higher provisions for litigation.

CHAPTER 3: HOUSEHOLD SAVINGS

This chapter deals with household savings¹⁷⁵ in France. It describes the main trends in households' net investment in financial assets and in the composition of their wealth. The aim is to put these domestic trends in perspective with those observed internationally and to identify the main risks incurred by savers.

First, it provides a global overview of household savings¹⁷⁶: it tracks changes in aggregate savings rates, situates households' financial savings within their economic wealth and tracks changes in the composition of households' net financial wealth over the last ten years.

Before identifying the financial risks borne by households through their savings, the main changes in households' net financial flows and levels are presented. Flows are analysed first, before the level dimension of these balance sheets, in order to identify the tendencies in households' savings behaviour without interference from the valuation phenomena that must be taken into account when analysing the levels of financial assets and liabilities.

An overall assessment of the financial risks borne by households is then performed, using two approaches to measuring the exposure of their financial wealth to principal risk. The second measurement is based on a breakdown of the chains of intermediation behind wealth management. This overall assessment is then supplemented with specific focus on products or activities that could be a source of risk, such as structured products offered to retail investors, financial investment advisory services and advertising for speculative products.

From savings rate to household financial wealth

Households' savings flows are the portion of their gross disposable income (GDI)¹⁷⁷ that is not used for final consumption expenditure. Household savings are therefore affected by gross domestic product (GDP). However, the trend of the households' savings does not merely replicate that of economic activity. The trade-off between consumption and savings dampens the effect of swings in GDP, while other factors (retirement savings, precautionary savings, estate planning, etc.) affect the households' savings flows. In 2013, households saved EUR 212 billion of the EUR 1.396 trillion in GDI derived from EUR 2.061 trillion in GDP (according to the system of national accounts based on the year 2005)¹⁷⁸.

Since 2007 households have responded to the difficult economic environment by saving more for precautionary reasons: their gross savings rate¹⁷⁹ increased from 14.5% in 2006 to 16% in 2009¹⁸⁰. Since then, except in 2011, this rate has been exhibiting a slightly declining trend (Figure 95): between 2011 and 2012 it lost 0.5 point to stand at 15.2%. Apart from the apparent year-on-year stagnation in 2013, this small downward trend seems to have

¹⁷⁵ Unless otherwise indicated, the household category means sole proprietorships as well as non-profit institutions serving households (NPISH), which produce non-marketed goods and services for the benefit of households.

¹⁷⁶ This chapter does not address the distribution of wealth within the population, unlike Arrondel *et al.* (2012 and 2013).

¹⁷⁷ Households' GDI is the portion of household income available for consumption and savings after taxes and social charges have been deducted.

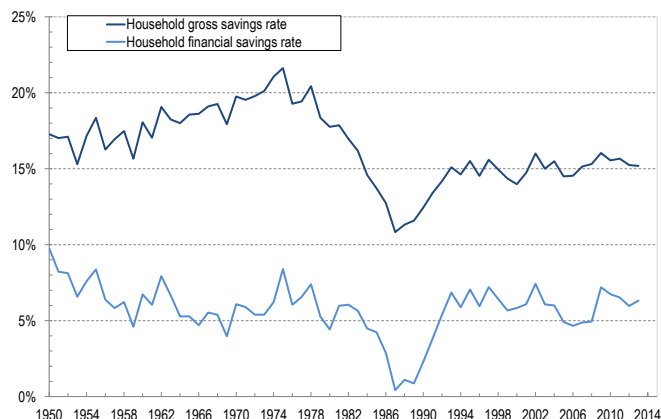
¹⁷⁸ GDP was EUR 2.114 trillion in 2013, according to the last European System of Accounts based on the year 2010 (ESA 2010) (Besson *et al.* (2014)). See also Box 15.

¹⁷⁹ The household savings rate, also referred to as the gross savings rate, is the ratio of household savings to household GDI while the household financial savings rate is calculated as the net balance of acquisitions of financial assets and the change in debt (also known as the balance of flows of assets and liabilities) divided by GDI. The financial savings rate can also be calculated using non-financial accounts, in which case it is the ratio of the net lending of households to GDI. Households' net lending is equal to savings plus net capital transfers minus expenses made for accumulation purposes (mainly in non-financial assets such as dwellings and land).

¹⁸⁰ In the past, the gross savings rate of households including NPISH was above 16% from 1949 to 1982, except in 1953 and 1959, and reached a peak of 21.6% in 1975 (Figure 95).

intensified at end-2013, as the household gross savings rate edged down to 14.7% in the last quarter of 2013 (Table 11).

Figure 95: Household gross savings rate and financial savings rate (%)



Sources: Insee, AMF calculations.

Although slightly lower than the savings rate in Germany in 2012 (16.4%), the French gross savings rate remains relatively high, both compared with previous years and compared with household savings rates in 2012 in the UK (7.3%) and the euro area (13%) (Eurostat (2014))¹⁸¹.

Table 11: Household savings rate (%)

	2006	2007	2008	2009	2010	2011	2012	2013	2013 Q1	2013 Q2	2013 Q3	2013 Q4
Households excluding NPISH												
Gross savings rate	14.8	15.5	15.6	16.4	15.9	16.1	15.6	15.6	15.7	15.9	15.7	15.2
Financial savings rate	4.8	5.1	5.0	7.4	7.0	6.8	6.2	6.6	6.5	6.9	6.8	6.2
Households including NPISH												
Gross savings rate	14.5	15.1	15.3	16.0	15.6	15.7	15.2	15.2	15.3	15.4	15.3	14.7
Financial savings rate	4.7	4.9	4.9	7.2	6.7	6.5	6.0	6.3	6.2	6.6	6.5	5.9

Note: The households category includes sole proprietorships.

Sources: AMF, Insee, Quarterly National Accounts, base year 2005, data as at 31/04/2014.

At end-2012¹⁸² household economic wealth was EUR 10.473 trillion, or 7.6 times GDI¹⁸³ (Table 12). Growth in household economic wealth has slowed sharply since 2010, with the annual rate of increase falling from 7.9% in 2010 to 1.6% in 2012. This slowdown stems from the virtual stagnation in non-financial wealth (-0.3% in 2012) which, because of its weight in the composition of household economic wealth, dampened growth despite the sharp rise in household financial wealth (7.4% in 2012). At end-2012, the breakdown of household economic wealth was 73% non-financial assets and 27% net financial assets.

¹⁸¹ The savings rate in the euro area was unchanged at 13% in 2013: it continued to rise in Italy, was flat in Germany and fell again in the UK and Spain (Eurostat (2014)).

For the USA, only the household financial savings rate (personal saving as percentage of disposable personal income) is available. It was 5.6% in 2012 and 4.5% in 2013 according to the National Income and Product Accounts put out by the Bureau of Economic Analysis (2014) in April. See also Arce *et al.* (2013) for details on Spanish household financial savings.

¹⁸² Because data on household non-financial assets in 2013 is not expected to be available until end-2014, household economic wealth is described for 2012.

¹⁸³ Except for 2001, the ratio of household economic wealth to household gross disposable income rose gradually from 1996 to 2007, increasing from 4.5 to 7.6. After contracting in 2008 and 2009, this ratio rebounded sharply in 2010. It has continued to rise since then, albeit at a slower pace (1% in 2011 and 2012 compared with 6% in 2010).

Non-financial assets, or gross fixed capital formation (GFCF) of the household sector, consist of their investments: purchase of housing or land, major repairs, machinery and equipment. Land and buildings have increased sharply in recent years, rising from 55% of household economic wealth in 1996 to 69% in 2012. This is largely a valuation phenomenon (price effect) stemming from persistent disequilibrium in the supply and demand for housing.

Non-financial wealth stagnated in 2012 due to flat land and buildings wealth (-0.2% in 2012), driven by a slowdown in new housing starts and the slump in existing home prices in 2012 (Bachelier and Mauro (2013)). This decline in housing activity is also reflected in slower growth in bank loans (2.1% in 2012 after 5.2% in 2011) on the liabilities side of household financial balance sheet (Table 12 and Figure 97).

Post-crisis, the allocation of savings between non-financial and financial assets has favoured financial savings: the financial savings rate rose from 4.9% in 2008 to 7.2% in 2009. The rate has tended to decline since then, but was still close to 6.3% on average during 2013 (Table 11).

Table 12: Growth and composition of household wealth

	2012		2013	Change			
	EUR billion	%	EUR billion	2002-06 annual avg. %	2007-12 annual avg. %	11-12 %	12-13 %
Non-financial assets (NFA)	7,697	73	n.a.	14.4	2.1	-0.3	n.a.
Land and buildings	7,175	69	n.a.	15.2	2.1	-0.2	n.a.
Dwellings	3,611	34	n.a.	7.1	4.2	2.8	n.a.
Developed land	3,410	33	n.a.	26.1	0.1	-3.4	n.a.
Financial assets (FA)	4,234	40	4,429	8.2	2.8	5.1	4.6
Currency and deposits	1,274	12	1,306	3.5	3.9	4.7	2.5
Debt securities other than shares	66	1	60	-6.6	1.7	10.4	-9.1
Loans	32	0.3	32	3.9	8.4	2.0	0.4
Shares and other equity	985	9	1,082	12.8	-2.2	11.0	9.8
Equities	694	7	782	16.2	-2.3	11.8	12.7
Listed shares	145	1	172	16.6	-7.3	11.0	17.9
Unlisted shares	355	3	417	17.0	-3.4	14.3	17.3
Other equity	193	2	193	13.3	6.2	8.2	0.4
Mutual funds units	291	3	300	6.8	-1.8	9.1	3.0
MMFs	23	0.2	18	-1.4	-17.3	-26.1	-23.8
Other than MMFs	268	3	282	8.5	0.7	13.8	5.3
Insurance and pension schemes	1,573	15	1,637	10.1	4.1	3.2	4.1
Life insurance & pension funds	1,476	14	1,538	10.4	4.8	3.1	4.2
Other accounts receivable	304	3	312	8.4	12.2	-1.7	2.5
Total assets (A) = (NFA) + (FA)	11,931	114	-	12.0	2.3	1.5	-
Financial liabilities (FL)	1,458	14	1,471	9.0	5.9	1.0	0.9
Currency and deposits	-	-	-	-	-	-	-
Debt securities other than shares	-	-	-	-	-	-	-
Loans	1,153	11	1,180	9.6	4.9	2.1	2.3
Shares and other equity	8	0.1	8	4.9	4.2	5.2	4.9
Insurance and pension schemes	-	-	-	-	-	-	-
Other accounts payable	297	3	283	6.6	10.4	-3.2	-4.9
Financial net worth = (FA) - (FL)	2,776	27	2,958	7.8	1.4	7.4	6.6
Economic net worth = (A) - (FL)	10,473	100	n.a.	12.3	1.9	1.6	n.a.

Note: "-" indicates no holding and "n.a." means data were not available at the reporting date.

MMFs: Money-market mutual funds units.

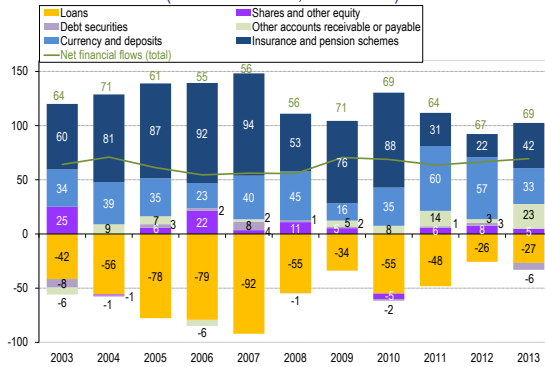
Sources: INSEE for non-financial assets; Banque de France, National Financial Accounts, base year 2005 (revised data as of 25/04/2014) for financial assets, AMF calculations.

Household financial wealth or net financial savings, worth EUR 2.958 trillion in 2013, represents the difference between the financial assets (EUR 4.429 trillion) and liabilities (EUR 1.471 trillion) they hold. The household financial wealth rose significantly in both 2013 (up 6.6%) and 2012 (up 7.4%), generating a sharp rebound in financial savings after the 3.2% decline¹⁸⁴ in 2011 (Table 12 and Figure 97).

¹⁸⁴ Household financial savings were EUR 2.585 trillion in 2011 versus EUR 2.670 trillion in 2010, i.e., a 3.2% decline.

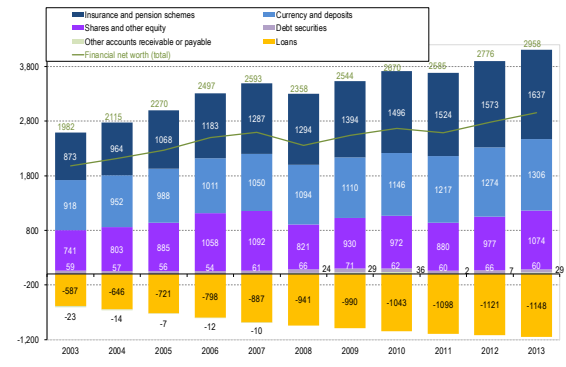
This increase is mainly due to a financial asset price effect,¹⁸⁵ but not to an increase in savings flows. Although household annual net savings flows have risen in the last two years, from EUR 64 billion in 2011 to EUR 69 billion in 2013, this improvement stems in part from the decline in new borrowings, which fell from EUR 48 billion in 2011 to EUR 27 billion in 2013 (Figure 96). Focusing on households' main net financial flows (Figure 98) it becomes clear that savings flows have weakened: since 2011 they have fallen from EUR 96 billion to EUR 71 billion in 2013.

Figure 96: Household's total net financial savings flows (net annual flows, EUR billion)



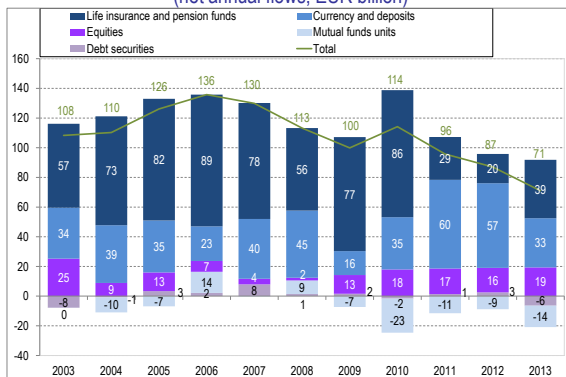
Sources: AMF, Banque de France, National Financial Accounts, base year 2005.

Figure 97: Households' financial net worth (net annual levels, EUR billion)



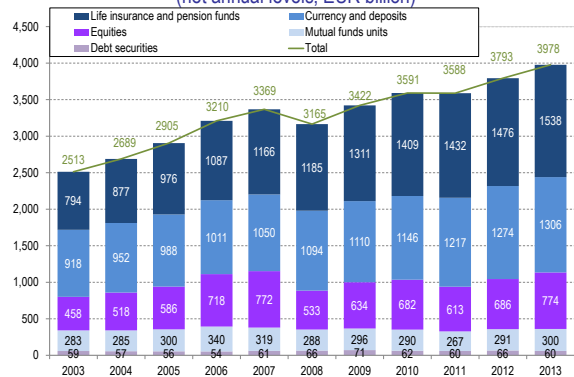
Sources: AMF, Banque de France, National Financial Accounts, base year 2005.

Figure 98: Households' main net financial savings flows (net annual flows, EUR billion)



Sources: AMF, Banque de France, National Financial Accounts, base year 2005.

Figure 99: Households' main net financial assets (net annual levels, EUR billion)



Sources: AMF, Banque de France, National Financial Accounts, base year 2005.

Despite higher rates of gross savings and financial savings, the increase in households' net financial wealth slowed between 2007 and 2012. After expanding by an annual average rate of 7.8% between 2002 and 2006, households' net financial wealth grew at an annual average rate of only 1.4% between 2007 and 2012 (Table 12).

Although French households have not reduced their debt, unlike their US and Spanish counterparts,¹⁸⁶ the increase in households' bank borrowing, mainly to finance real estate

¹⁸⁵ After falling 17% in 2011, the CAC 40 index rose by more than 15% in 2012 and nearly 18% in 2013.

¹⁸⁶ According to the Eurosystem Household Finance and Consumption Survey, household debt relative to income in 2010 ranged from 22.7% in Slovakia to 194.5% in the Netherlands (Arrondel et al. (2013)).

OECD data on the non-financial accounts and non-consolidated financial balance sheets of households and non-profit institutions serving households give the following figures. US households' outstanding debt (loans recorded as financial liabilities) as a ratio of their gross disposable income fell from 130% in 2007 to 104% in 2012. In Spain, net household debt fell from EUR 913 billion to EUR 789 billion, or 13.6%, between end-2008 and end-2013. In the UK, net household debt rose from EUR 1.419 trillion to GBP 1.457 trillion, or 2.7%, between end-2008 and end-2013. In Italy, net household debt decreased by 1.1% between 2011 and 2012, ending the upward trend observed previously. In Germany, household debt contracted by 2.5% between 2004 and 2009 and then expanded by 2.1% between 2009 and 2012.

acquisitions, slowed by 2.3% in 2013 and by 2.1% in 2012, after 5% in 2009, 2010 and 2011 (Table 12). The trend in household financial wealth clearly shows a pattern of increasing debt, which in 2013 totalled EUR 1.148 trillion (Figure 97), representing 39% of households' financial wealth and 82.2% of their gross disposable income (GDI),¹⁸⁷ compared with 66.8% of GDI in 2006 and 52.9% of GDI in 2002. Households' overall vulnerability to economic and financial risk has thus increased.¹⁸⁸

To evaluate the risk of capital loss incurred by households through their financial savings, it is necessary to examine their main net financial savings flows and levels (Box 15). Flow movements are analysed first in order to identify trends in savings behaviour without interference from valuation phenomena, which come into play when analysing the structure of financial wealth.

Box 15: Data and methodology

1/ Data : frequency of updates and revisions

The data on household financial wealth presented in this chapter mostly come from national financial accounts, such as those published by the Banque de France. These annual and quarterly data are regularly revised and updated: in the course of a year (n+1), data for the previous year (n) are published on a provisional basis, data for two years previously (n-1) are revised and considered semi-final, and data for three years previously (n-2) are revised for the last time before being considered final. Thus in 2014, data for 2011 and earlier years are considered final whereas those for 2012 and 2013 may change upon revision. Therefore, the most recent data should be treated cautiously.

The data from the financial accounts shown here have the year 2005 as the base year. On 15 May 2014, the national accounts began using the year 2010 as the base year,¹⁸⁹ which may affect the definition of some data and the size of some aggregates. The data published in this chapter could therefore change more substantially over the next few quarters as a result of regular data revisions, owing to the change in the base year.

Lastly, subdividing life insurance flows and levels into unit-linked and non-unit-linked policies is a complex task. This was done indirectly using different allocation formulae for flows and levels, based on aggregate data on household savings in pension funds and in non-unit-linked life insurance.¹⁹⁰

2/ Understanding data compilation: total versus main flows or levels:

The composition of households' main net savings levels (also called the households' main net financial assets) differs from that of their financial net worth, as shown in Figure 100. The same distinction applies for the savings flows.

Unlike their financial net worth, households' main net financial savings assets (levels) do not include:

- ▶ Provisions for unearned premiums and outstanding claims used to calculate insurance and pension schemes alongside households' net life insurance entitlements and pension entitlements;
- ▶ credit;
- ▶ other accounts receivable (assets) or payable (liabilities), consisting of commercial loans, trade credit and accounting lags.

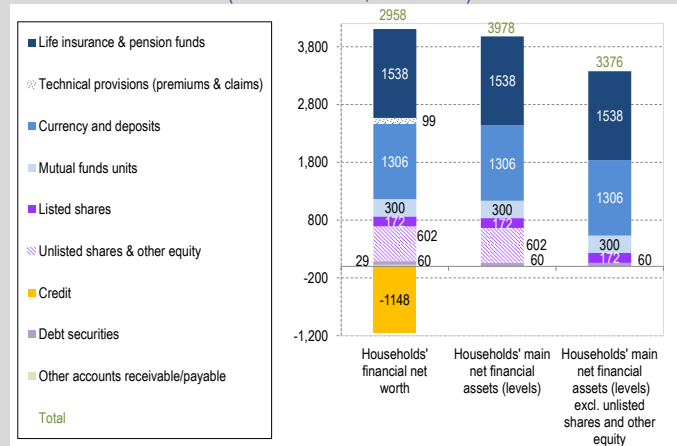
¹⁸⁷ Like Germany, France is below the euro area average (97.6% in third quarter 2013). Household debt to gross disposable income in third quarter 2013 was: 65% in Italy, 83.8% in Germany, 118.7% in Spain, 129.9% in the UK, and 136.8% in the USA, according to data published by the Banque de France.

¹⁸⁸ By comparing the financial commitments of households with their ability to repay, the ratios of household debt (their main financial liability) to assets and income are two indicators of their vulnerability to economic and financial risk (Arrondel et al. (2013)).

¹⁸⁹ The base year was changed to 2010 for the new version of the European System of Accounts, the ESA 2010. The new system introduces also major conceptual innovations, relating mainly to the scope of investment (particularly recognition of intangible investments) and the measurement of insurance services. It will come into force for all European countries in September 2014.

¹⁹⁰ These keys were determined on the basis of a data series on households' net claims on non-unit-linked life insurance technical reserves including retirement savings. Differences between the data published by the Banque de France and the FFSA can be attributed to a lack of data on households' net claims on non-unit-linked life insurance technical reserves only.

Figure 100: Households' net financial worth versus main net financial assets in 2013
(annual net levels, EUR billion)



Sources: AMF, Banque de France, National Financial Accounts, base year 2005.

In 2013, the main households' net financial assets (levels) as described above were EUR 1.019 trillion higher (Figure 99) than households' net financial worth (Figure 97 and Figure 100) and the main households' net financial savings flows analysed in the rest of this chapter (Figure 98) were EUR 2 billion higher than the total savings flows (Figure 96).

3/ Unlisted shares

The net amount (levels) in unlisted shares totalled almost EUR 417 billion in 2013. Unlisted shares accounted for almost 54% of all equity (including all forms of equity in corporations which are not listed or unlisted shares), compared with 22% for listed shares. Given their financial importance, unlisted shares are always included in this chapter, unless otherwise stated, despite the difficulty of valuing unlisted shares and interpreting them in terms of portfolio optimisation.

However, the international comparisons in this chapter exclude unlisted shares and other equity from net flows and net assets (levels), which reduced the main households' net financial assets (levels) by EUR 602 billion in 2013 (Figure 100 and Figure 122).

3.1. Life insurance and bank deposits still attractive to households, despite an overall decline in net financial investment flows

Households' financial savings flows fell sharply in 2013

As a result of the financial crisis, households' main net financial savings flows (Figure 101 and Table 14) declined for three consecutive years, from EUR 136 billion in 2006 to EUR 100 billion in 2009. After picking up in 2010, these main financial savings flows declined amid economic uncertainty, higher taxes and social security contributions¹⁹¹ and low returns on the main financial investments.

In 2013, households' main net financial savings flows, the so-called main net financial investment flows hereafter, amounted to EUR 71 billion, an 18.4% decline on 2012. That volume is particularly low: over the period from 2001 to 2010, net annual financial savings flows averaged EUR 115 billion. Since 1996, only the year 2000 has seen a lower annual net savings flow (EUR 66 billion) than 2013. The quarterly breakdown of flows highlights the decline in net financial savings flows in each quarter of 2013 compared with the same quarter in 2012 (Figure 102).

¹⁹¹ On 1 July 2012, compulsory transfers, mainly the general social contribution (CSG) and the contribution to repayment of social security debt (CRDS), increased from 13.5% to 15.5%. The ratio of compulsory transfers (taxes and social contributions paid to the state) to GDP rose from 43.7% in 2011 to 45% in 2012. It was 46.0% in 2013 according to data published by INSEE. See also Artus et al. (2013) on taxation of capital income.

Figure 101: Households' main financial investments
2003-2013
(net annual flows, EUR billion)

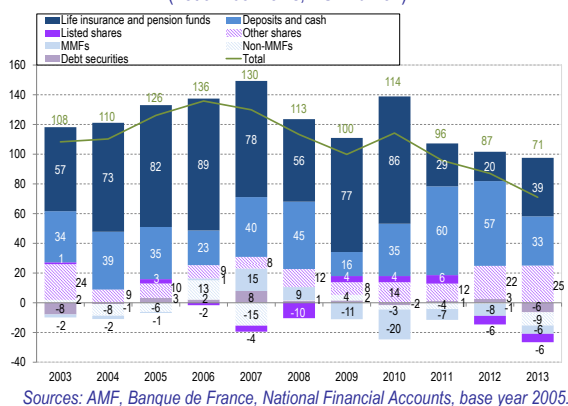
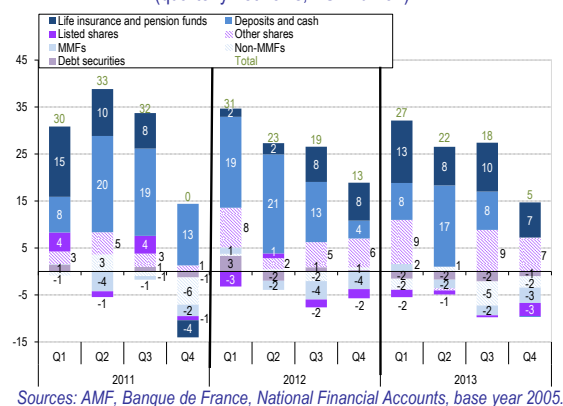


Figure 102: Households' main financial investments
2011-2013
(quarterly net flows, EUR billion)



Sources: AMF, Banque de France, National Financial Accounts, base year 2005.

Sources: AMF, Banque de France, National Financial Accounts, base year 2005.

In addition to the downward trend in households' main net financial savings flows, the structure of these investment flows changed dramatically in 2011 and more gradually since then.

Faced with a difficult economic environment and reforms to regulated savings and life insurance products,¹⁹² households were cautious in 2013 (see also Box 2 on mystery shopping by the AMF). Since 2010, the reallocation of households' financial portfolios has mainly affected flows of financial savings into life insurance and pension funds as well as into bank savings products (deposits and cash). When the maximum investment limits on the passbook savings accounts A (*Livret A*) and the sustainable development passbook savings accounts (*Livret de Développement Durable (LDD)*) were raised in October 2012 and January 2013, households reallocated their bank savings, which boosted the levels in regulated savings, even though the interest rates on those savings accounts were lowered in February and August 2013 (Box 18). These reallocations reflect households' responsiveness to the changing characteristics of regulated bank savings (Feller (2013)).

At the same time, the life insurance market, which had been neglected in 2012, stabilised in early 2013 and posted inflows again over the full year, although volumes were smaller than before 2010. In 2013, life insurance and pension funds again accounted for a larger share of household investment flows than did bank deposits (EUR 39 billion versus EUR 33 billion). Those two components, which have rarely been so similar in the past,¹⁹³ continue to make up the bulk of net flows of household financial investments, together representing 102% of total main net investment flows.

Otherwise, except for investments in unlisted shares and in other equity, all of the other household financial investments recorded net outflows in 2013, as households withdrew their savings from listed shares, collective investment schemes (also called mutual funds units) and, unlike in 2012, debt securities (Figure 101).

¹⁹² The report on regulated savings (Duchesne (2012)) released in September 2012 and the report on financial savings and financing needs (Berger and Lefebvre (2013)) released in April 2013 led to reforms that affected regulated savings and life insurance but made no changes to the taxation of financial savings.

¹⁹³ In 2006, life insurance and pension funds accounted for 49% of household investment flows, and bank savings (deposits and cash) accounted for 40%. In 2013, life insurance and pension funds accounted for 55.4% of household investment flows, and bank savings (deposits and cash) accounted for 46.6%.

Box 16: Findings of the AMF's campaigns of mystery shopping visits

Since 2010, the AMF has organised mystery shopping campaigns that visit the 11 main banking networks in France. Based on a scenario drafted by the AMF, the campaigns are conducted by a consultancy, whose investigators visit the networks' branches posing as prospective customers. The AMF has conducted a total of eight campaigns, amounting to 880 mystery visits.

The mystery visits enable the AMF to:

- ▶ find out how financial products are sold at bank branches;
- ▶ gain a better understanding of good and bad sales practices;
- ▶ dialogue with the banks concerned to improve the quality of advice given to savers.

The AMF has two flagship scenarios, which it reuses every year: a "risk-averse" scenario (a conservative prospect who prefers security to return on investment), and a "high-risk" scenario (a prospect with a dynamic profile, willing to take risks).

In 2013, the AMF also tested a new scenario called "young high-potential earner" (a prospect interested in the stock market and willing to take risks to improve his/her financial situation).

The eight mystery visit campaigns conducted to date have led to the following findings (AMF (2013b)):

- ▶ Banks should get to know prospects better. While customer advisers ask prospects about their plans, financial savings and investment horizon in general, they take much less interest in their risk appetite, financial situation (incomings and outgoings) and knowledge of finance.
- ▶ Customer advisers do not always take the needs expressed by prospects into account. For example, "risk-seeking" prospects are often offered low-risk products. The 2013 campaign of mystery visits, introducing the scenario of "young high-potential earner", was a good illustration. Even though this scenario was clearly suited to investments in shares, customer advisers primarily offered these prospects bank savings and life insurance policies, in roughly equal measure. Those two products represented three proposals out of four. Financial investments (securities and collective investment schemes) accounted for only one-quarter of recommendations. Prospects were advised to open a share savings plan (PEA) in only four cases out of ten. Savers, who are naturally "risk-averse", are thus encouraged to be even more reluctant by customer advisers who are themselves risk-averse.
- ▶ Banks distribute financial products in accordance with their profitability targets and prudential requirements. By reusing the same "risk-averse" and "risk-seeking" scenarios over three years, the mystery visitors have received different investment advice from one year to the next. In 2011, all the banks recommended life insurance, regardless of the prospect's risk profile. In 2012, bank savings predominated, chiefly because of Basel III capital requirements. In 2013, advice was better balanced on the whole and paid closer attention to the prospects' profiles.
- ▶ Investment products are often presented in an incomplete and unbalanced manner. Customer advisers do not give a full enough explanation of the fees and disadvantages associated with their products.

To sum up, investors are mostly advised to invest in life insurance and low-risk investments. Long-term investments are rarely recommended.

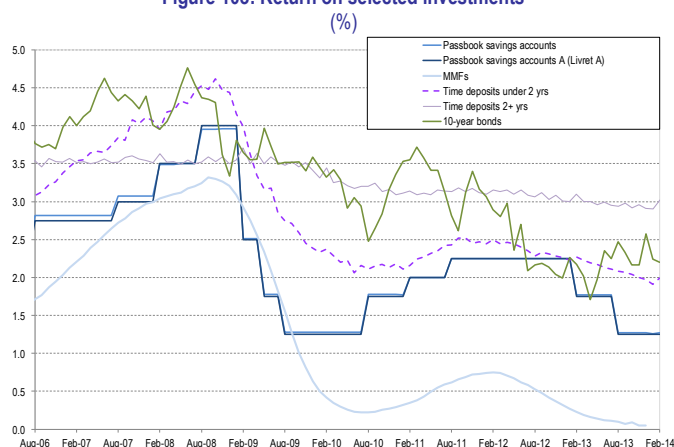
Net flows to life insurance were positive again in 2013 but low

Between 2010 and 2012, households drastically reduced their **savings flows to life insurance and pension funds**.¹⁹⁴ Over those three years, these flows dropped from EUR 86 billion to EUR 20 billion, accounting for only 23% of households' main financial investment flows in 2012, compared with 77% in 2009. The downtrend ended in 2013: investment flows to insurance and pension funds totalled EUR 39.4 billion, of which EUR 27.5 billion to life insurance.

After net outflows amounting to EUR 6 billion in 2012, life insurance attracted net inflows of EUR 11 billion in 2013, according to estimates published by the French insurers' federation (*Fédération Française des Sociétés d'Assurances* FFSA (2014a)). However, monthly data indicate that flows are still fairly volatile, varying from net inflows of EUR 3.6 billion in January 2013 to net outflows of EUR 1.6 billion in December 2013.

¹⁹⁴ Life insurance is measured here as households' net life insurance entitlements (EUR 27.5 billion in 2013) and households' pension entitlements (EUR 11.9 billion in 2013), and excludes technical provisions for unearned premiums and outstanding claims (see Box 15).

Figure 103: Return on selected investments



Sources: AMF, Banque de France and Datastream.

Low interest rates in Europe and the USA are contributing to lower returns on financial investments, particularly banking products, debt and money-market securities and life insurance (Figure 103). At the same time, successive increases in the interest rates on regulated bank savings between August 2010 and August 2011, which then remained stable until January 2013, brought the returns on those investments into line with the return on other financial products, making life insurance even less attractive (Feller (2013)). Conversely, cuts to the interest rates on regulated bank savings in February and August 2013 boosted life insurance again, as shown by high net inflows into non-unit-linked life insurance products (EUR 26.7 billion in 2013 compared with EUR 18.3 billion in 2012 (Table 14)).

These movements¹⁹⁵ nevertheless seem unlikely to present an imminent challenge to the trend observed over the recent period, namely that low interest rates are discouraging investment in life insurance. This environment mainly impacts the return on non-unit-linked life insurance policies compared with other more liquid investments, which may offer a more attractive return.

Changes are expected after the introduction of new life insurance products – “euro-growth” (*euro-croissance*) funds and “life generation” (*vie génération*) policies (Box 17) – scheduled for the second half of 2014.

**Box 17: New products due in 2014
after the reform of the life insurance sector**

To attract more household savings that can be used to finance growth economic activity, the life insurance reform, approved by the French parliament on 19 December 2013, whose enabling decrees are expected in mid-2014,¹⁹⁶ provides for the introduction of two new products:

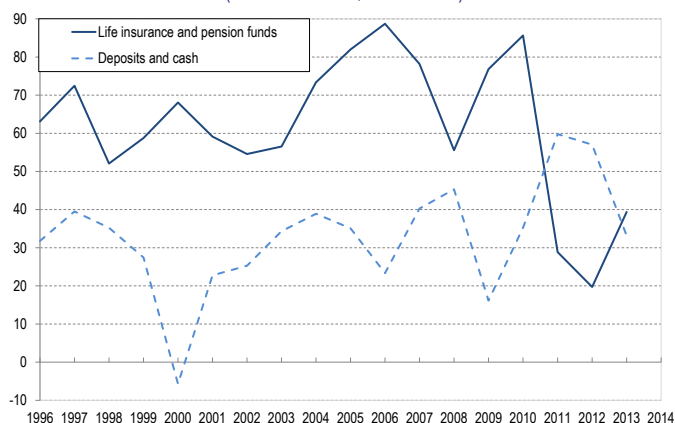
- ▶ “Euro-growth” (*euro-croissance*) funds
Designed as a new type of life insurance policy alongside non-unit-linked and unit-linked funds, euro-growth funds will offer policyholders a principal guarantee if they remain invested for at least eight years.
- ▶ “Life generation” (*vie génération*) policies should qualify for special inheritance tax treatment if at least 33% is invested in assets such as shares in small and medium-sized enterprises, social and intermediate housing, and third-sector enterprises.

In 2011 and 2012, net annual flows into life insurance and pension funds were at historically low levels, lower than net annual flows to bank deposits for the first time since 1996 (Figure 104).

¹⁹⁵ Over the first three months of 2014, net inflows into life insurance were an estimated EUR 6.1 billion (FFSA (2014b)), compared with EUR 6.4 billion over the same period in 2013.

¹⁹⁶ See Amended 2013 Budget of 29 December 2013.

Figure 104: Bank deposits and life insurance
(net annual flows, EUR billion)



Sources: AMF, Banque de France, National Financial Accounts, base year 2005.

Buoyed by relatively attractive returns and higher maximum investment limits on the main tax-exempt passbook savings accounts, net investment flows to bank deposits and cash (EUR 57 billion in 2013) exceeded net flows to life insurance policies and pension funds by EUR 37 billion in 2012. The trend reversed in 2013: flows to life insurance policies and pension funds stopped declining in mid-2012, then gradually increased, while flows to deposits and cash holdings declined. In 2013, flows to life insurance policies and pension funds (EUR 39 billion) exceeded flows to bank investments (EUR 33 billion) by EUR 6 billion. However, like all household net financial investment flows, the sum of those two flows followed a downward path, falling from EUR 121 billion in 2010 to EUR 72.5 billion in 2013.

Table 13: Structure of households' bank investments
(net annual flows, EUR billion and as a %)

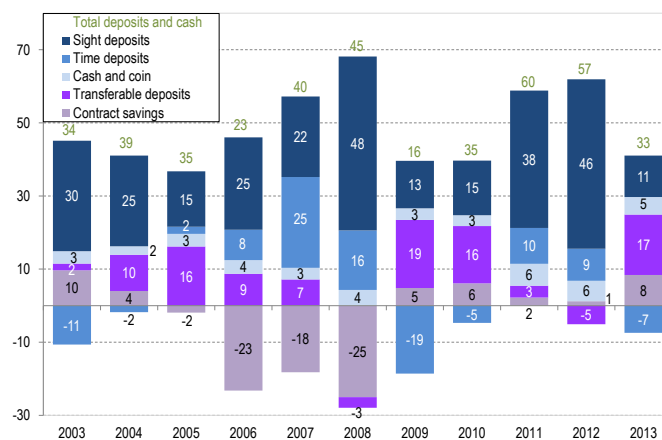
	2012		2013	
	EUR billion	%	EUR billion	%
Cash and deposits	57	100	33	100
Transferable deposits	-5	-9	17	50
Sight deposits (or passbook savings accounts), o/w:	46	81	11	34
<i>A</i> Passbook savings accounts (<i>Livret A</i>)	30	53	15	44
Blue Passbook savings accounts (<i>Livret Bleu</i>)	2	3	1	3
Sustainable development passbook savings accounts (<i>LDD</i>)	22	39	9	26
Youth passbook savings accounts (<i>Livret Jeune</i>)	0	0	0	0
Popular passbook savings accounts (<i>Livret d'Épargne Populaire</i>)	-1	-2	-2	-5
Home saver account	-1	-1	-3	-10
Taxable passbook account	-2	-4	-6	-18
Contractual savings account	1	2	8	25
Cash and coin	6	10	5	14
Interest accrued but not yet due on deposits	1	1	1	2
Time deposits	9	15	-7	-22

Note: The figure for total flows to passbook accounts published in the monetary statistics differs from total sight deposits published in the national accounts.

Sources: AMF, Banque de France, monetary statistics and National Financial Accounts, base year 2005.

Flows to bank investments declined in 2013 Net flows to bank investments (cash and deposits) fell from EUR 60 billion in 2011 to EUR 33 billion in 2013 (Table 13). At the same time, reallocations within those flows were extensive (Figure 105).

Figure 105: Main bank financial investments
(net annual flows, EUR billion)



Sources: AMF, Banque de France, National Financial Accounts, base year 2005.

Stimulated by higher maximum investment limits and buoyed by higher returns on regulated bank savings (Figure 103), sight deposits, which consist mainly of regulated savings (notably Livret A and LDD passbook accounts), expanded strongly in 2011 and 2012 before following interest rates downwards in February and August 2013 (Box 18).

**Box 18: Trend in bank savings
after the French regulated savings reform in October 2012**

1/ Specific features of bank savings

Bank savings products consist chiefly of:

► Regulated bank savings:

- A and blue passbook savings accounts (*Livret A & Livret Bleu*);
The only difference between the A¹⁹⁷ and blue passbook savings accounts is the identity of the distributor: since 2009, when the European Commission ordered the breakup of Banque Postale and Caisse d'Épargne's duopoly over the distribution of the A passbook savings accounts, any bank has been able to distribute these passbooks, while the blue passbook savings accounts, authorised since 1975, is distributed solely by Crédit Mutuel.¹⁹⁸
 - Sustainable development passbook savings accounts (SDPSA) (*Livret de Développement Durable (LDD)*): this sustainable development passbook savings account was formerly called the industrial development account (*Compte de Développement Industriel (CODEVI)*);
 - youth passbook savings account (*Livret Jeune*);
The youth passbook savings account is reserved for residents in France aged 12-25.¹⁹⁹
 - Popular passbook savings accounts (*Livret d'Épargne Populaire (LEP)*); introduced in 1982, the popular passbook savings account is guaranteed by the state and reserved for savers on low incomes.
- Taxable passbook accounts;
- Home saver accounts (*Compte épargne-logement (CEL)*).

Regulated passbook savings accounts differ from other savings accounts in that their technical and financial characteristics are set by the state, which determines their interest rate and other parameters, particularly eligibility and maximum investment limits.²⁰⁰ These passbook savings accounts are exempt from income tax and social security contributions on the interest earned.

A percentage of the deposits in regulated passbook savings accounts is transferred to Caisse des Dépôts et Consignations (CDC), which uses them to finance general interest policies, such as social housing, urban revitalisation, infrastructure and local public investment (Duquesne (2012), and Berger and Lefebvre (2013)).

Three main factors affect flows to bank savings: household savings capacity, the interest rates offered to savers, and banks' sales policies (see Box 16 and Box 24).

¹⁹⁷ Aimed at overcoming the financial crisis left by the Napoleonic wars, the A passbook savings account (*Livret A*), originally called Livret d'Épargne then Livret de Série A, was created on 22 May 1818 at the Caisse d'Épargne de Paris.

¹⁹⁸ A blue passbook savings account (*Livret Bleu*) may be held concurrently with a A passbook savings account if the blue passbook savings account was opened prior to 1 September 1979.

¹⁹⁹ Banks are free to set the interest rate on the youth passbook savings account (*Livret Jeune*), as long as it does not fall below a minimum rate set by the state (aligned on the interest rate on the A passbook savings account).

²⁰⁰ Each type of passbook savings account is limited to one per person.

2/ Households' responsiveness in allocating their bank savings

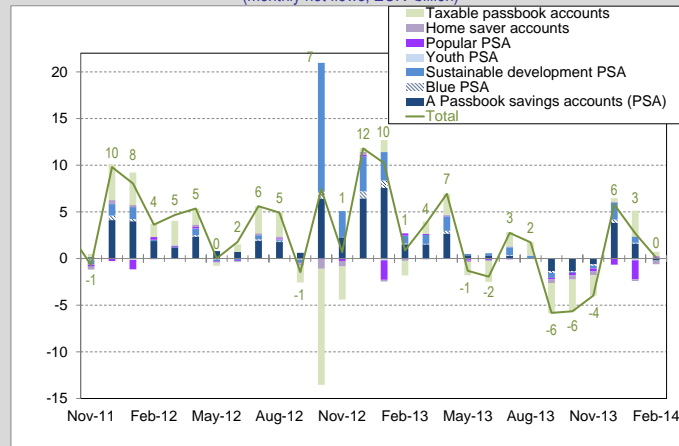
Amid falling returns on non-unit-linked life insurance policies from mid-2009 to end-2012,²⁰¹ increases to the interest rate offered on A passbook savings accounts (*Livret A*) between August 2010 and August 2011 (Figure 103), passed through to taxable passbook accounts, increased the attractiveness of these two liquid, low-risk savings products for households, thus generating robust inflows.

In accordance with the recommendations of the Duquesne Report (2012), in October 2012 the maximum investment limit on the A passbook savings accounts (*Livret A*) was raised by 25% and the maximum investment on the Sustainable development passbook savings accounts (SDPSA) was doubled. In January 2013, the maximum A passbook savings accounts limit²⁰² was raised by a further 25%. These increases made tax-exempt passbook accounts more attractive to households: in the space of four months, net inflows to these accounts reached the exceptional level of EUR 46 billion (Figure 7).

These strong inflows to A passbook savings accounts and SDPSA passbooks came at the expense of taxable passbook accounts, which posted net outflows of EUR 15.5 billion in the fourth quarter of 2012. This explains the EUR 2 billion in net outflows for full-year 2012 (Figure 107).

Since 2012, low inflation²⁰³ prompted two 50 basis point cuts to the interest rate²⁰⁴ on tax-exempt passbook accounts, in February and August 2013, making them less attractive. As a result, net inflows to A and blue passbook savings accounts and SDPSA fell to EUR 24 billion in 2013 (Figure 107).

Figure 106: Monthly trend in sight deposits
(monthly net flows, EUR billion)



Sources: AMF, Banque de France, National Financial Accounts, base year 2005.

Net flows to all bank passbook accounts totalled EUR 13 billion in 2013, in view of net outflows from other passbook accounts, particularly those that are taxable (net outflows of EUR 6 billion). Boosted by flows and, to a lesser extent, accrued interest, the amount outstanding in bank passbook savings accounts increased at an average annual rate of more than 6% between 2007 and 2013. A passbook savings accounts level grew at an average annual rate of 11.9% over the same period, compared with 8% for SDPSA.

It is worth noting that the 15.8% increase in A passbook savings accounts level in 2012 was only slightly higher than in 2008 and 2009 (15.6% in each of those two years), during the financial crisis.

²⁰¹ The average adjustment rate for non-unit-linked life insurance policies decreased from 3.65% in 2009, to 3.4% in 2010 and 3% in 2011, and has been below 3% since 2012 (Feller (2013)).

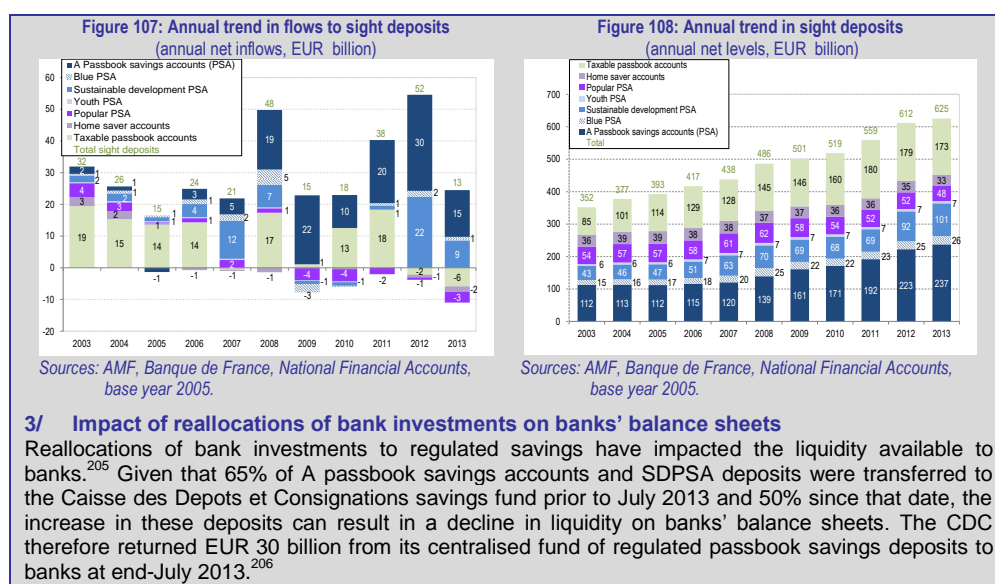
²⁰² The maximum investment limit on A passbook savings accounts (*Livret A*) was raised from EUR 15,300 in September 2012 to EUR 19,125 in October 2012 and EUR 22,950 in January 2013.

²⁰³ Theoretically, the interest rate on A passbook savings accounts (*Livret A*) and blue passbook savings accounts (*Livret Bleu*) is the index, rounded up to the nearest quarter point, between:

- > inflation of the past 12 months, measured by the change over the last known 12 months in the INSEE consumer price index for all households, augmented by a quarter point, and
- > the arithmetic mean between inflation of the last 12 months and half of the sum of the monthly average of the 3-month Euribor and the monthly average of EONIA (for the last month known).

Since August 2013, this rate has been kept by ministerial decision at its historic low of 1.25%, which is higher than the rate resulting from the index calculation.

²⁰⁴ The interest rate on A passbook savings accounts (*Livret A*), 2.25% since August 2011, was lowered to 1.75% on 1 February 2013 then to 1.25%, a historic low, on 1 August 2013.



3/ Impact of reallocations of bank investments on banks' balance sheets

Reallocations of bank investments to regulated savings have impacted the liquidity available to banks.²⁰⁵ Given that 65% of A passbook savings accounts and SDPSA deposits were transferred to the Caisse des Dépôts et Consignations savings fund prior to July 2013 and 50% since that date, the increase in these deposits can result in a decline in liquidity on banks' balance sheets. The CDC therefore returned EUR 30 billion from its centralised fund of regulated passbook savings deposits to banks at end-July 2013.²⁰⁶

Sight deposits have since returned to more modest levels. In total, over the full year of 2013, they totalled EUR 11 billion, down 76% on 2012 (Figure 105). Sight deposits accounted for only 34% of all bank deposits, compared with 81% in 2012 (Table 13). These reallocations show that households were quick to react to changes in the characteristics of regulated bank savings.

In addition, the steep fall in sight deposits in 2013 was accompanied by an increase in net flows to contractual savings accounts (EUR 8.4 billion), mainly consisting of home saver accounts (PELs)²⁰⁷ (EUR 7.7 billion according to the Banque de France (2014b)) and transferable deposits (EUR 17 billion) (Table 13). Transferable deposits are all deposits that can be immediately converted to cash or that are transferable free of charge by cheque or debit, i.e. liquid savings. The increase in households' investment flows to transferable deposits in 2013 can be seen as a sign that households were seeking flexibility, pending a decision to reallocate either to higher-yielding investments or to consumption.²⁰⁸

Table 14: Trend in main household investments (net annual flows, EUR billion)

	2006	2007	2008	2009	2010	2011	2012	2013
Deposits and cash	23	40	45	16	35	60	57	33
Life insurance and pension funds, o/w:	89	78	56	77	86	29	20	39
Life insurance policies, o/w:	79	65	48	68	79	27	15	28
Non-unit-linked life policies	56	58	45	68	77	29	18	27
Unit-linked life policies	23	7	3	0	2	-2	-3	1
Pension funds contracts	10	13	7	9	7	2	5	12
Equities, o/w:	7	4	2	13	18	17	16	19
Listed	-2	-4	-10	4	4	6	-6	-6
Unlisted	0	0	7	-2	6	1	9	10
Other equity	9	8	6	10	7	11	13	15
Mutual funds units, o/w:	14	0	9	-7	-23	-11	-9	-14
MMFs	1	15	9	-11	-20	-7	-8	-6
non-MMFs	13	-15	0	4	-3	-4	-1	-9
Debt securities	2	8	1	2	-2	1	3	-6
Total	136	130	113	100	114	96	87	71

Note: MMFs: Money-market mutual funds units

Sources: AMF, Banque de France, National Financial Accounts, base year 2005.

²⁰⁵ Anticipating the implementation of Basel III liquidity coverage ratios and the ensuing liquidity requirements, since November 2010 banks have promoted savings products that remain on their balance sheets, particularly taxable passbook accounts.

²⁰⁶ In return for this increase in liquidity, intended to enable banks to increase lending to the economy, banks will lower their commission from 0.5% to 0.4%.

²⁰⁷ Although these products are very different from each other, the resumption of investment flows to home saver accounts might have been triggered by the cut to the interest rate on regulated savings passbooks.

²⁰⁸ Households may draw on their most liquid savings to finance consumption. This explanation is supported by the sharp contraction of flows to the main household financial investments.

**Net redemptions
of mutual funds
units
continued in 2013**

Regarding **collective investments** (Table 14), the trend towards net redemptions of securities held in mutual funds units, which began in 2009, continued in 2013. The pace of these redemptions was halfway between the rates recorded for 2011 and 2010 (net redemptions of EUR 14 billion in 2013 compared with EUR 11 billion in 2011 and EUR 23 billion in 2010) but higher than in 2012 (net redemptions of EUR 9 billion). Net outflows from mutual funds units have been relatively stable for the past three years. However, unlike previous years, in 2013 net disposals of securities in non-money-market mutual funds units (EUR 9 billion) outpaced those in money-market mutual funds units (MMFs) (EUR 6 billion). Outflows of household savings from MMFs can be attributed to the low interest rate environment, which depresses returns, whereas net outflows from non-MMFs reflects reinvestments based on market trends.

**Slowdown in
inflows to directly
owned securities
in 2013**

Reallocations by households of **directly owned securities** (debt securities, listed shares, unlisted shares and other equity) increased in 2013. Listed shares showed net redemptions of EUR 6 billion, the same as in 2012. After net inflows of EUR 3 billion in 2012, directly owned debt securities showed net redemptions of EUR 6 billion in 2013. Only unlisted shares and other equity investments increased, rising 12% to EUR 25 billion in 2013. Overall, the net annual flows to securities directly owned by households contracted by 32% to around EUR 13 billion, compared with more than EUR 19 billion in 2012.

3.2. Household portfolios consist mainly of life insurance and bank deposits

The trend in households' main net financial savings flows described above goes some way to explaining the pattern of households' net financial assets (levels), which confirms some stylised facts highlighted in the presentation of households' net financial wealth.

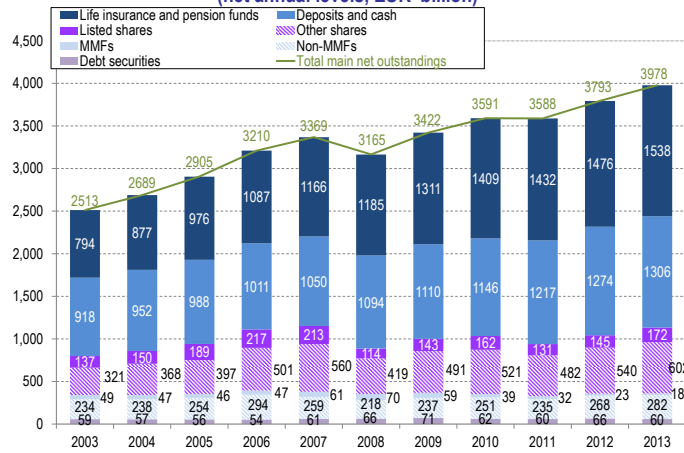
In 2013, total net levels in the main investments that make up household financial worth totalled EUR 3.978 trillion, compared with EUR 3.793 trillion the previous year, an increase of 4.9% (Figure 109). Like the trend in households' financial net worth, the annual average increase in the Households' main net financial assets (levels) has slowed sharply, from 8.2% between 2002 and 2006 to 2.4% between 2007 and 2012 (Table 12).

Since 2008, the structure of these main net financial assets has been relatively stable and is clearly polarised around bank deposits and life insurance, which together accounted for 71% of households' main net financial balance sheets (Figure 109).

Despite changes affecting households' net investment flows, households' financial savings outstandings are still mainly invested in life insurance. At end-2013, the levels in life insurance and pension funds accounted for 39% of the main net financial assets under review, while bank deposits accounted for 33% of household savings, one percentage point lower than in 2012.

Levels in life insurance policies and pension funds grew by 4.2% in 2013 as a result of higher net inflows to life insurance policies (EUR 28 billion in 2013 compared with EUR 15 billion in 2012), despite lower returns since 2009. According to the French insurers' federation FFSA's life insurance results for 2013 (FFSA 2014a), the return on non-unit-linked life insurance policies fell from an annual average of 3.6% in 2009 to 2.8% in 2013, and the return on unit-linked life insurance policies fell from 14.4% in 2009 to 10.7% in 2013, after 11.3% in 2012 and a negative 7% in 2011.

Figure 109:
Households' main net financial assets
(net annual levels, EUR billion)



Sources: AMF, Banque de France, National Financial Accounts, base year 2005.

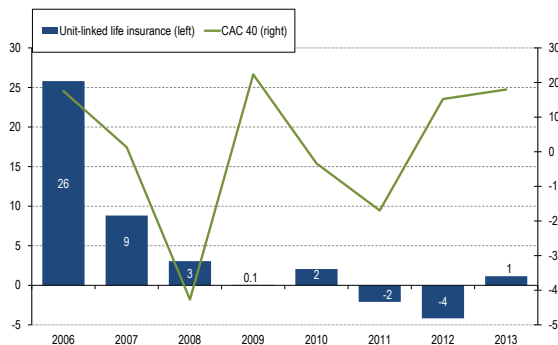
Other types of investment (debt securities, shares, and mutual funds units) accounted for 28.5% of households' main net financial assets (levels) in 2013, up one percentage point on 2012. The 11% increase in 2013 in household assets in the form of equity shares and mutual funds units securities can be attributed largely to the bull market that pushed up the value of holdings. The CAC 40 index gained 18% in 2013.

Levels in securities held directly by households (debt securities and shares, excluding mutual funds units) totalled EUR 834 billion at end-2013, including EUR 417 billion in unlisted shares, which accounted for 54% of all shares (including other equity than listed and unlisted shares), compared with 22% for listed shares, or EUR 172 billion at end-2013.

Net inflows to life insurance policies in 2013

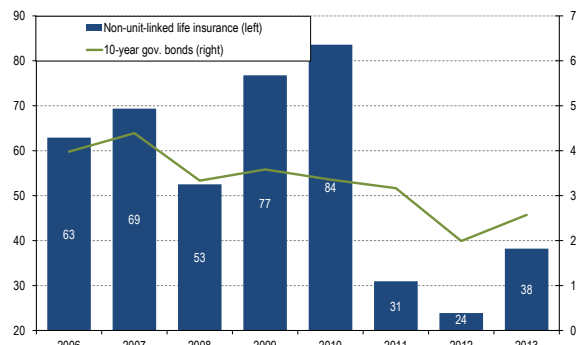
Regarding **life insurance**, after two years of net outflows, unit-linked policies attracted net inflows in 2013 although these remained low at EUR 1 billion. While the limited appeal of these products for households was consistent with the poor performance of the CAC 40 index in 2011, when it lost 17%, this was no longer a factor in 2012 and 2013, when the CAC 40 gained 15% and 18% respectively (Figure 110).

Figure 110: Annual investment flows to unit-linked life insurance policies
(net annual flows in EUR billion and CAC 40 annual % increase)



Sources: AMF, Banque de France, National Financial Accounts, base year 2005, and Datastream.

Figure 111: Annual investment flows to non-unit-linked life insurance policies
(net annual flows in EUR billion and 10-year government bond yields)



Sources: AMF, Banque de France, National Financial Accounts, base year 2005, and Datastream.

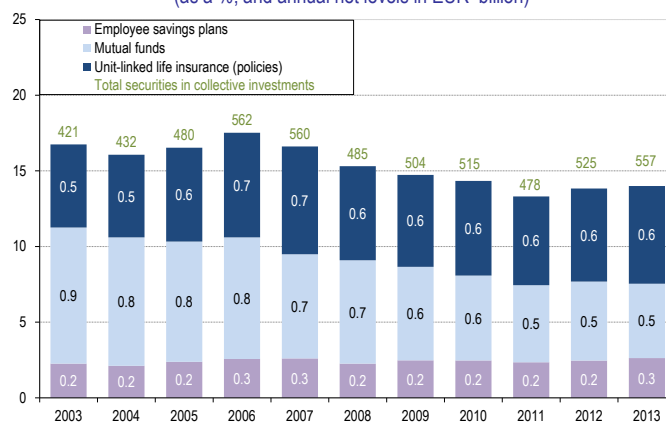
As pointed out in the analysis of financial flows, net inflows to non-unit-linked life insurance slowed sharply in 2011 and 2012, contracting from EUR 84 billion in 2010 to EUR 34 billion at end-2012, a decrease of 71% over two years (Figure 111). In 2013, net inflows to non-unit-linked life insurance policies totalled more than EUR 38 billion, despite lower returns²⁰⁹ offered by insurers and higher long-term government bond yields.²¹⁰ However, the volume of these flows was low compared with those prior to 2011.

The share of collective investments in total levels expanded in 2013

At end-2013, net levels in household collective investments (unit-linked life insurance policies, mutual funds units held directly and employee savings plans (*fonds commun de placement d'entreprise (FCPE)*)) amounted to EUR 557 billion. The structure of these investments is dominated by unit-linked life insurance (46% of collective investments levels) and mutual funds units held directly (35%) (Figure 112).

Having contracted until 2011, the share of collective investments in households' main financial balance sheets expanded in 2012 and 2013: after shrinking from 17.5% in 2006 to 13.3% by end-2011, it rose to 14% in 2013. That increase was driven mainly by growth in unit-linked life insurance policies, whose share in households' main net financial assets (levels) rose from 5.9% in 2011 to 6.5% in 2013, as the level in unit-linked life insurance policies grew by 10.8% in 2012 and 10% in 2013. The share of collective investments was also boosted by an increase in employee savings plans, whose level grew by 10.5% in 2012 and 12% in 2013. Conversely, individual investors' loss of interest in directly held CIS securities, which fell by 1.3% in 2013, held back the increase in mutual funds units. Investment in employee savings plans remains marginal: its share in households' main net financial assets (levels) has oscillated between 2% and 2.6% for the past 10 years.

Figure 112: Securities of collective investments in households' main net financial assets (levels)
(as a %, and annual net levels in EUR billion)



Note: Total annual equity in collective investments is written in green above each bar.
Sources: AMF, Banque de France, National Financial Accounts, base year 2005, AFG and FFSA.

Total equity in shares grew in 2013

In 2013, total levels in equity shares, including shares owned directly (listed shares, unlisted shares and other equity) and indirectly (via employee savings plans, mutual funds units and unit-linked life insurance policies) amounted to EUR 1.016 trillion, accounting for 25.6% of households' main net financial assets (levels).

Excluding unlisted shares and other equity, total holdings of directly and indirectly held shares²¹¹ was only EUR 414 billion in 2013, accounting for 10.4% of households' main net

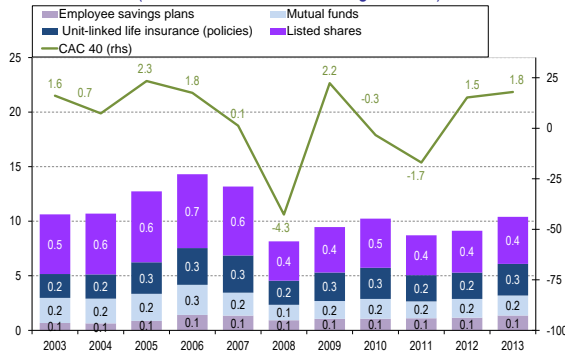
²⁰⁹ According to the life insurance results 2013 published by the French insurers' federation FFSA (2014a), the return on non-unit-linked life insurance policies fell from an annual average of 2.9% in 2012 to 2.8% in 2013.

²¹⁰ The yield on 10-year French government bonds rose from 1.99% at 31 December 2012 to 2.57% at 31 December 2013.

²¹¹ These are listed shares owned directly and shares owned indirectly via mutual funds units, employee savings plans and unit-linked life insurance policies.

financial assets outstanding (Figure 113). Overall holdings of shares have nevertheless increased by 32% since 2010 from EUR 312.5 billion. Total holdings of directly and indirectly owned shares increased 19.5% or EUR 68 billion in 2013, mainly because of the bull equity market. Breaking down the annual change in the overall stock of shares (which rose EUR 67.6 billion in 2013), estimated from the annual change in the CAC 40 index, reveals that total inflows were low (EUR 5.4 billion in 2013) but offset by a strongly positive price effect (EUR 62.2 billion in 2013) (Figure 114).

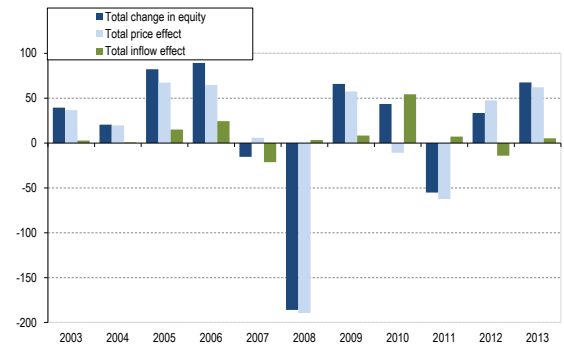
Figure 113: Directly and indirectly held shares as a percentage of households' main net financial assets (levels), by type (% and CAC 40 annual change as a %)



Note: excluding unlisted shares and other equity.

Sources: Banque de France, National Financial Accounts, base year 2005, AGF, Datastream, AMF calculations.

Figure 114: Change in households' holdings of shares (all vehicles) (EUR billion)

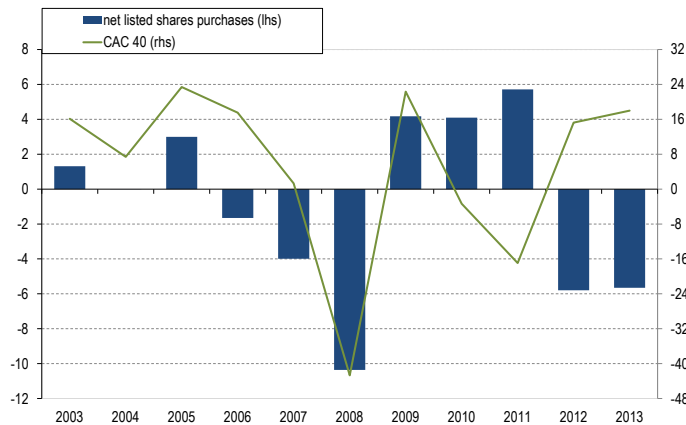


Note: excluding unlisted shares and other equity.

Sources: Banque de France, National Financial Accounts, base year 2005, AGF, Datastream, AMF calculations.

The percentage of listed shares in households' financial portfolio suggests that their investment decisions are procyclical, i.e. their net purchases of listed shares coincide with rising share prices and vice versa. To determine whether household flows to shares are procyclical, net inflows to listed shares owned directly by households are compared with the annual change in the CAC 40 index (Figure 115).

Figure 115: Net purchases of listed shares and movements in the CAC 40 index (net annual flows in EUR billion and annual change in CAC 40 as a %)



Sources: Banque de France, National Financial Accounts, base year 2005, Datastream, AMF calculations.

This comparison seems to indicate that, between 2001 and 2009, households tended to buy shares at the top of the market cycle and sell them during turbulent periods, but that since 2010 net purchases of shares have not been procyclical. Indeed, net inflows to listed shares expanded in 2010 and 2011, when the CAC 40 fell by 3.3% and 17.7% respectively. Conversely, net inflows to listed shares decreased in 2012 and 2013, when the CAC 40 rose by 15% and 18% respectively.

Box 19: Contribution of household savings to long-term investment

Long-term investment is specific in nature. Consisting of tangible assets (e.g. technological innovations, computer hardware and software, infrastructure) and intangible assets (e.g. education, research and development), long-term investment is essential to a country's long-term growth trend because of its impact on future productivity and competitiveness.

In addition to their impact on economic growth, long-term assets are characterised by an extended timeframe – usually more than five years – between the date when capital is raised for the investment and the date on which the assets generate cash flows. Long-term investment therefore often depends on external financing and thus on access to long-term financing capacity. This, of course, depends on the viability of the project and on companies' financial position. But it also depends on the ability of the economy to provide financing for long-term investments, by enabling long-term investors to access capital, chiefly household savings. That access may be indirect through banks, insurers and pension funds, or direct through the capital markets.

Financing the economy requires overcoming the theoretical mismatch between the structure of supply and demand:

- ▶ Supply of financing, chiefly households, prefer liquidity and security, and their financial assets consequently mainly consist of short-term, low-risk investments;
- ▶ Demand for financing is mainly for long-term, high-risk investments. Moreover, households also mainly borrow long-term to finance real-estate acquisitions.

But what happens in practice?

1/ Long-term investment account for the majority of household financial wealth

A comparison of the structure of household financial assets and liabilities reveals the following (Table 15):²¹²

- ▶ Households generate positive net financial value: households had a net financing capacity of EUR 2.958 trillion in 2013;
- ▶ Households are net short-term lenders (EUR 1.289 trillion) and net long-term lenders (EUR 1.645 trillion), and their contribution to long-term financing of the economy is almost 28% higher than their contribution to short-term financing;
- ▶ As might be expected, household debt is mainly long-term (EUR 1.108 trillion), with a total value 30 times higher than their short-term borrowings (EUR 36 billion), as households mainly take out home loans.

Table 15: Maturity of equity in household financial wealth in 2013
(annual net levels, EUR billion)

	Assets	Liabilities	Net total
Total short-term investments	1,325	36	1,289
Cash and deposits	1,306	0	1,306
Short-term debt securities	1		1
Short-term loans	0	36	-36
MMFs	18		18
Total long-term investments	2,793	1 148	1,645
Long-term debt securities	60		60
Long-term loans	32	1 140	-1,108
Listed shares	172		172
Unlisted shares	417		417
Other equity	193	8	185
Non-MMFs	282		282
Insurance and pension schemes	1,637		1,637
Other	312	287	25
Total investments	4,429	1,471	2,958

Notes: MMFs: Money-market mutual funds units

Sources: AMF, Banque de France, National Financial Accounts, base year 2005

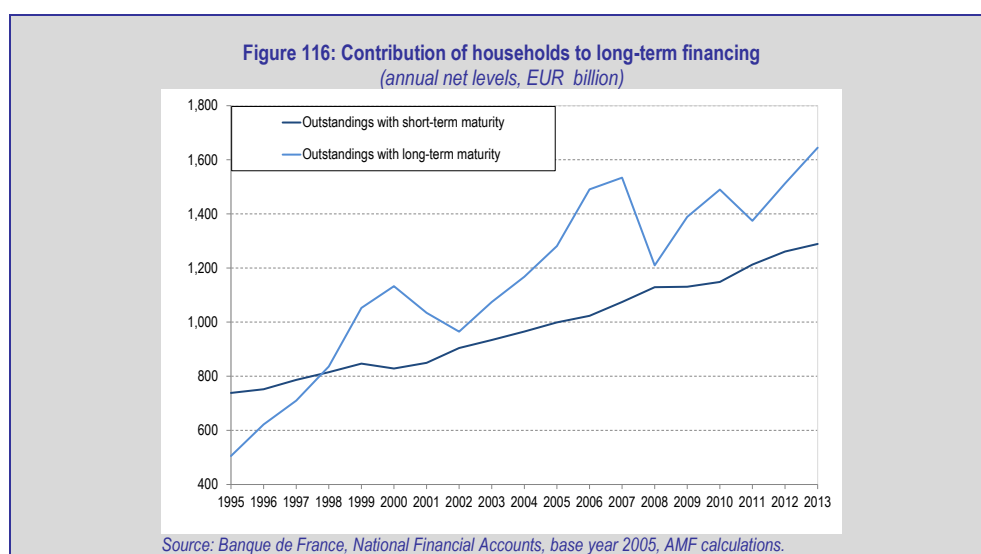
2/ Households' contribution to long-term financing

The breakdown of household financial wealth by the maturity of their investment (levels) between 1995 and 2013 reveals that, since 1998, households have contributed more to long-term financing of the economy than to short-term financing.

Although the financial crisis reduced households' contribution to long-term financing by 21% in 2009, the decline did not reverse the trend: households continued to contribute more to long-term than to short-term financing. Although the contribution to long-term financing contracted by 7% in 2011, it rose again by 10% in 2012 and by 9% in 2013.

Lastly, the size of households' short-term investments (EUR 1.289 billion at end-2013) indicates a potential for an increase in long-term savings needed for economic growth and future investment.

²¹² A breakdown of the aggregate balance sheet of resident non-financial agents by maturity of equity is proposed for 2009 in Garnier (2012).



3.3. Long-term returns on assets held by households: shares are the most profitable long-term investment

In recent years, investors' confidence in the financial markets has dwindled, owing mainly to the steep losses on equity markets in the 2000s. This may have discouraged long-term, high-risk investment, and households are investing less and less in transferable securities (shares, equity, mutual funds units, etc.).

An average annual real return of 6.17% on listed shares held from 1988 to end-2013

The AMF's analyses²¹³ show, however, that an investment in French shares made in 1988 and held until end-2013 generated an average real return of 6.17% p.a., if dividends were reinvested and adjusted for inflation. Only an investment in 10-year government bonds could compete with the return on shares, although the average return was lower (5.87% p.a.). Half of the return on shares is generated by dividends paid and reinvested.²¹⁴ Performance also depends on the period and length of the investment.

Listed shares generated comparable real returns in the UK, Germany and the United States

Investments over shorter periods, such as 10 years, did not always generate positive returns. Extending the investment horizon and diversifying are appropriate responses to the risk involved in shares. Extending the investment horizon can iron out the wide fluctuations in annual returns on shares and enable investors to profit from the markets' long-term bull trend. Similarly, diversification in shares offers investors a potentially attractive long-term return. When dividends are reinvested, investments in US, German and UK shares generated similar returns to investments in French shares over the period from 1988 to 2013.

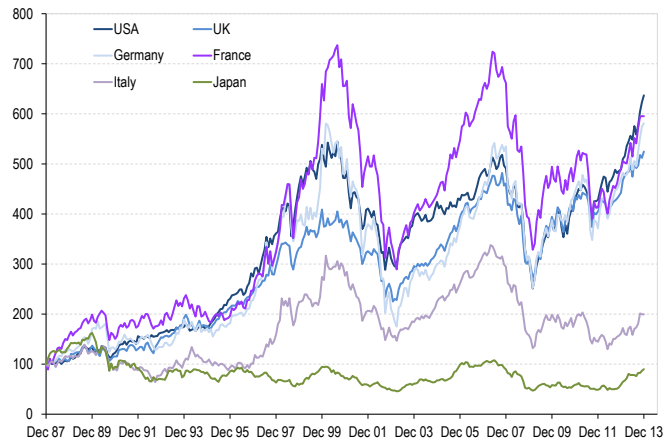
However, the reference period is crucial to determining the real return on an investment, which depends not only on the asset but also on inflation and interest rates. Therefore it is sometimes necessary to invest for a long period in order to generate a positive return.²¹⁵

²¹³ See AMF (2013a) and Bluet (2013) for an initial analysis of a different period (1988-June 2013).

²¹⁴ Note that in August 2013, Euronext presented the CAC 40 GR (*Gross Return*) index, which is the CAC 40 with reinvested gross dividends.

²¹⁵ See the report (2009), "Épargner à long terme et maîtriser les risques financiers" by Olivier Garnier and David Thesmar for the Conseil d'Analyse Economique: <http://www.cae-eco.fr/IMG/pdf/086.pdf>

Figure 117: Comparative returns on listed shares, with reinvested dividends and restated for inflation, 1988-2013
(31 December 1987 = 100)



Note: The indices used for the markets are: France: CAC 40; Germany: Dax 30; Italy: Datastream broad market index; UK: FTSE; USA: S&P 500; Japan: TOPIX.

Sources: Thomson Reuters, Datastream, AMF calculations.

Historic returns on French investments

The AMF compared the return on the following investments in France over the past 25 years (1988-2013):

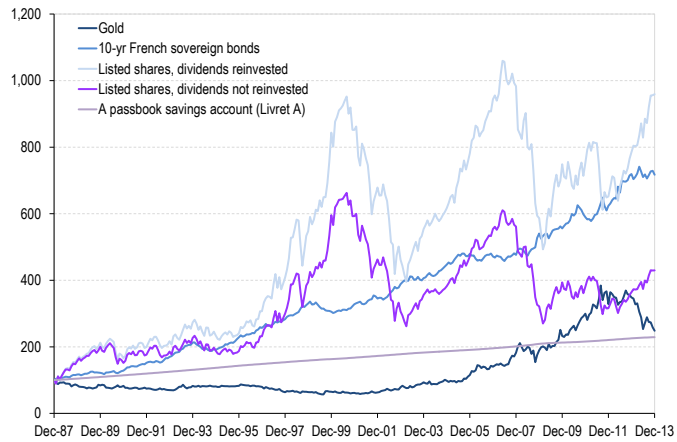
- A passbook savings account (*Livret A*);
- listed shares (CAC 40);
- 10-year French sovereign bonds;
- Paris real estate;
- gold.

Figure 118 shows the change in a single investment initiated in January 1988 and held continuously until end-2013. To account for the possible loss in purchasing power of these investments, the change was adjusted for inflation (the “real return”). A 25-year investment in shares held since 1988, with dividends reinvested, was the most profitable investment, despite the steep market losses in the 2000s, just ahead of investments in sovereign bonds. From 1988 to 2013, the amounts invested in French shares grew by a factor of more than 5.5. That increase corresponds to an average annual real return of 6.17%. If dividends are not reinvested, the return is halved: the initial capital grew by a factor of only 2.6, giving an average annual return of 2.94%.

The return on sovereign bonds over the same period was close to the return on shares (with reinvested dividends). The average annual real return on French government bonds was 5.87%. This can be attributed to the almost continuous decline in long-term interest rates over the period, combined with relatively low, stable inflation since the 1990s. By contrast, gold and Paris real estate were less profitable than French shares over 25 years. An investment in residential real estate in Paris held for 25 years generated a lower return than shares and bonds because French house prices fell in the 1990s. However, this result does not take rental income into account and therefore underestimates the return on real estate, since owner-occupiers can invest elsewhere the money they save on rent. Therefore the result for real estate needs to be qualified, since the overall return is likely to be higher. The return on investments in gold was negative until the mid-2000s.

Over more than 25 years (from January 1988 to December 2013), an investment in real estate multiplied the initial capital by a factor of 2.81, while an investment in gold multiplied the initial capital by a factor of 1.54 (versus 2.17 over the period from 1988 to 2012).

Figure 118: Comparison of real returns on the main financial assets, 1988-2013 in France
 (31 December 1987 = 100)

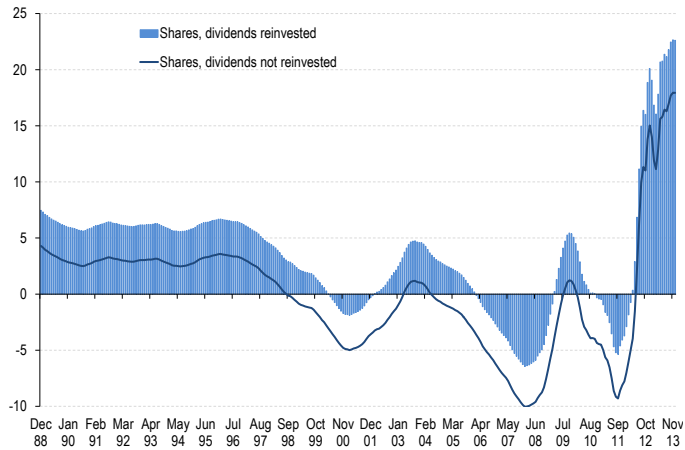


Sources: Thomson Reuters, AMF calculations.

The risk of an investment in shares decreases with the length of the investment horizon

As Figure 119 shows, extending the length of the investment is a solution to the risk associated with an investment in shares. A longer investment horizon can even out the strong fluctuations in annual returns and enable investors to profit from the markets' long-term rise (based on the long-term trend in dividend payouts). For investments held between 1988 and 1996, the gains generated were high enough to offset the losses caused by the two main market crashes of the 2000s.

Figure 119: Average annual real returns at end-2013 by year of initial investment
 (geometric mean as a %)



Sources: AMF, Thomson Reuters, AMF calculations.

3.4. International comparison of savings behaviour

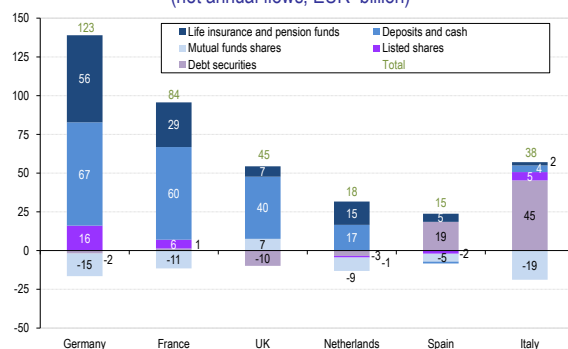
International comparisons²¹⁶ (Figure 121 and Figure 122) reveal a diversity of household savings behaviours, which appears again in the structure of flows of household savings and household financial nettt worth in 2012.²¹⁷ This diversity reflects differences between individuals (age, household composition, risk profile) and between countries, such as social protection systems (particularly pension system, unemployment insurance and health insurance), and tax breaks or other regulatory incentives.

Savings behaviour in Europe still varied between countries

Trends in household financial investment flows varied between European countries in 2011 and 2012, increasing in the Netherlands, Germany and to a lesser extent the UK, but contracting in France, Spain and Italy (Figure 120 and Figure 121). The diversity of savings behaviour between European countries observed in recent years persisted in 2012 (Figure 121). A comparison between the structure of French households' investment flows and that in the main European countries in 2012 reveals two distinct groups:

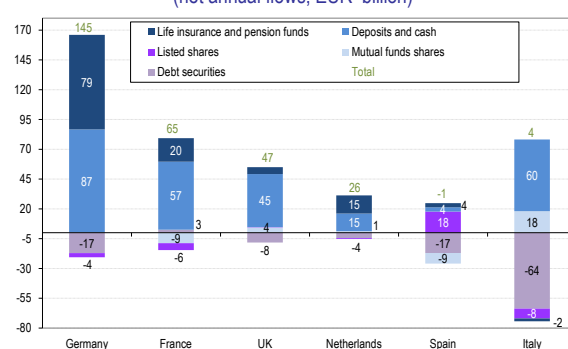
- ▶ The first group, consisting of France, Germany, the Netherlands and the UK, where flows to bank deposits and life insurance and pension funds (when these exist) made up the bulk of total financial flows under review;
- ▶ The second group, consisting of Italy and Spain, where the market in life insurance and pension funds is not as developed and where strong movements on investments in debt securities have occurred.

Figure 120: Main net annual financial investments by households in selected European countries in 2011 (net annual flows, EUR billion)



Note: Excludes other shares (unlisted shares and other equity).²¹⁸
Sources: AMF, national central banks and OECD for Italy and the Netherlands.²¹⁹

Figure 121: Main net annual financial investments by households in selected European countries in 2012 (net annual flows, EUR billion)



Italian and, to a lesser degree, Spanish households stand out from households in the other group of countries because they invest heavily in government bonds. This behaviour reflects a long-term trend resulting from several factors: a plentiful supply of bonds associated with persistent public deficits and a policy of tax incentives that favour such investments, notably by exempting bond holdings from inheritance tax.

Unlike in 2011, Italian and Spanish households sold their debt securities in 2012. While Italian households have traditionally invested heavily in bank bonds²²⁰, they have shifted out of many of these products and into passbook savings accounts and term deposits, owing to

²¹⁶ See Arrondel et al. (2013) and de Bonis et al. (2012) for an international comparison of household assets in the main OECD countries updated for the period 1980-2011.

²¹⁷ For a lack of statistical data for some countries in 2013 at the time of writing, the analysis uses data for 2012.

²¹⁸ The differences in identification and valuations of unlisted shares from country to country makes comparisons of national data problematic.

²¹⁹ Banque de France for France (<http://www.banque-france.fr>), Bundesbank for Germany (<http://www.bundesbank.de>), Banco de España for Spain (<http://www.bde.es>), Office for National Statistics for the UK (<http://www.ons.gov.uk>) and the OECD (<http://stats.oecd.org>) for Italy and the Netherlands.

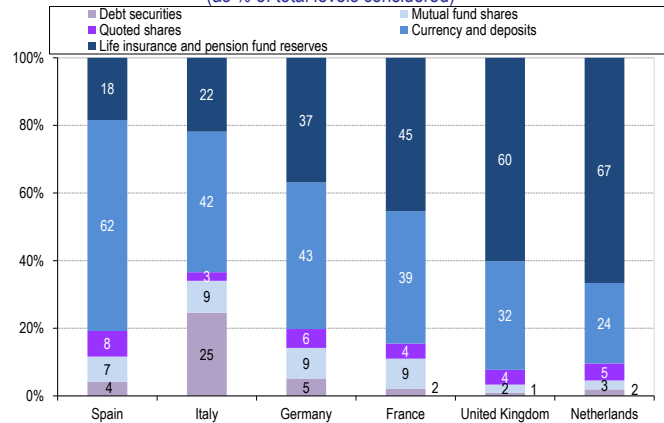
²²⁰ According to the OEE, the decline in bonds only concerns bank bonds and not government bonds.

the attractive interest rates offered by banks in Italy, where returns are higher than in other countries.

The international differences observed in household savings flows reappear in large part in the relative proportions of the main financial assets held by households in each country. Thus, Spain is characterised by a very high concentration of household savings in bank deposits (62% of the total considered), reflecting the significant role of traditional bank intermediation in that country. The proportion of savings invested in life insurance and pension funds (18%) is particularly modest in comparison with other European countries. Italy presents similar characteristics, although to a lesser degree than Spain. It stands out in Europe for the very high proportion of household savings invested in debt securities and more specifically in sovereign bonds: 25% of the main financial assets held by Italian households. To grow their deposits, Spanish banks also raised interest rates on new term deposits from 2.32% to 3.01% in the May to November 2012 period. These interest rates then fell to 1.38% in August 2013 before rising slightly to 1.42% in September, according to the latest data available at the reporting date.

The UK and Netherlands stand out for high proportions of households' main net financial assets invested in life insurance and pension funds. In this regard, the Dutch are a special case: life insurance contracts and pension funds make up 67% of the main financial assets held by Dutch households. In both countries, the substantial share of household savings going into pension funds is attributable to retirement systems based primarily on full funding.

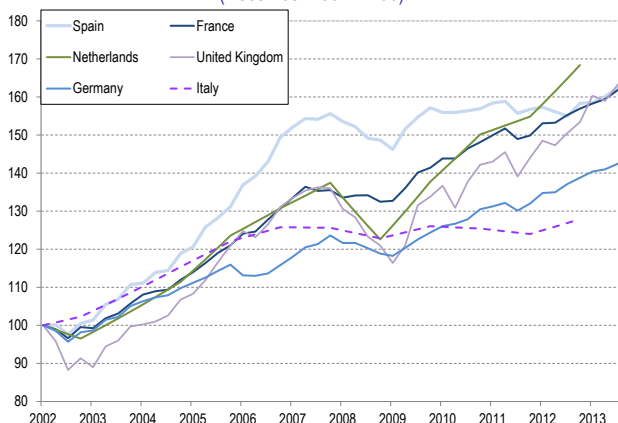
Figure 122: Composition of households' main net financial assets in several European countries in 2012
 (as % of total levels considered)



Sources: AMF, national central banks, OECD for Italy and the Netherlands.

Set against the patterns of savings behaviour seen in neighbouring countries, the composition of French households' main net financial assets is intermediate between that seen in Spain, Italy or Germany and that seen in the UK or the Netherlands. As in Italy and Germany, bank deposits make up a high proportion of households' main net financial assets in France. At the same time, the substantial share of life insurance in French households' financial portfolios makes them look more like their British and Dutch counterparts.

Figure 123: Households' main net financial assets in several European countries, 2002-2013
(December 2002 = 100)



Sources: AMF, national central banks, OECD for Italy and the Netherlands.

A look back over a longer period (2002-2013) clearly brings out the impact of the last financial crisis on the financial wealth of European households. In every country, the average annual growth rate of the combined main components of households' main net financial assets was sharply lower in the 2007-2012 period than in the earlier 2002-2006 period²²¹. In France this growth rate dropped from 7% to 2%. The slowdown was even more pronounced in Spain and the UK, where the annual growth rate dropped from 10.4% to 0.1% and from 9.5% to 1.1% respectively. In Germany, though, it was less pronounced: from 4.2% (2002-2006) to 1.3% (2007-2012). Over the entire 2002-2012 period, however, household financial wealth in France rose by 59%. Like Spain, this growth was lower than in the Netherlands (74%) and the UK (68%) but greater than in Germany (41%) and Italy (25%).

3.5. Household exposure to principal risk is low but on the rise

Households' financial net worth consists of a set of financial products with different characteristics in terms of liquidity, average return, tax treatment, costs of holding or complexity of managing and, importantly, risk of principal loss. This refers to the eventuality of losing all or part of the value of the principal initially invested.

Depending on the financial assets considered²²², the household's degree of exposure to principal risk varies between total absence of risk, where the value of principal is guaranteed in full (the saver is sure to recover the entire value of the principal amount invested) and maximum risk, where there is no guarantee at all and, at least in theory, the entire value of the principal invested could be lost. More generally, the degree of principal risk is measured by the volatility of the value of principal recovered when the investment is ended: the higher the volatility, the greater the risk (Box 20).

Box 20: Principal risk associated with household financial asset holdings

Households' financial net worth consists of a set of assets with differing characteristics in terms of principal risk, which refers to the possibility of losing all or part of the value of the principal initially invested.

The degrees of principal risk associated with the main categories of financial assets making up households financial net worth, ranked in ascending order, are as follows:

²²¹ The periods considered are each four years long: from 31 December 2002 to 31 December 2006 and from 31 December 2007 to 31 December 2012.

²²² See Box 20.

- ▶ **Currency and deposits:**
All financial products in this category carry some risk of capital loss. For example, the amount of deposit accounts and other savings products covered by the the French deposit insurance and resolution fund (*Fonds de Garantie des Dépôts et de Résolution (FGDR)*) is EUR 100,000 per person per bank.
- ▶ **Debt securities:**
Debt securities such as bonds carry substantial principal risk because the issuer (company, bank or public authority) may be unable to honour its repayment obligation upon maturity. Bondholders face an additional risk when they wish to resell their securities before maturity, as bond prices fluctuate over time.
- ▶ **Life insurance: exposure to risk varies with the type of contract**
Unlike non unit-linked life insurance, unit-linked insurance contracts offer no principal guarantee; all principal risk is borne by the policyholder.
- ▶ **Mutual funds units: exposure to risk varies with the underlying asset classes**
The degree of principal risk on mutual funds units varies according to the asset class(es) in which the portfolio is invested and the proportions of the classes held.
- ▶ **Equities:**
Equities are considered risky financial assets because in theory, the entire value of principal invested in equity instruments can be lost if no one is willing to buy those instruments when the investor wants to sell them. Listed equities are among the riskiest because their value (share price) can be subject to sharp swings over time resulting from trades on the stock exchange. The principal risk of unlisted equities is difficult to measure because there is no active financial market to establish a valuation. For this reason, unlisted equities are sometimes left out of the assessment of investment risks altogether or counted with other equity interests in the illiquid risk asset class.

Measuring households' exposure to principal risk has become more complicated as multiple layers of intermediation have become more common. For example, an investment in life insurance will typically be invested in mutual funds units. Finer measurement of risk requires an accurate breakdown of this chain of intermediation. Such a breakdown is hard to make. Data at the required level of disaggregation are not available. Estimates must therefore be used, and the overall quality of the risk assessment depends on the precision of those estimates.

Two approaches to measuring household savings' degree of exposure to principal risk are presented; the second attempts to provide a more accurate breakdown of the chains of intermediation behind wealth management.

Table 16: Composition of financial risk borne by households
(as % of the total of net main financial assets)

	2012		2013		Change				
	EUR billion	%	EUR billion	%	2002-06 annual avg.	2007-12 annual avg.	10-11 %	11-12 %	12-13 %
Liquid non-risk assets	1,001	26	1,027	26	5.1	5.2	5.0	4.2	2.6
Currency	62	2	67	2	6.7	11.6	11.8	9.9	7.7
Other*	9	0	8	0	1.3	5.3	12.4	2.6	-5.1
Sight deposits	307	8	323	8	3.8	2.8	2.1	-1.6	5.2
Passbook savings deposits	600	16	611	15	6.8	8.3	7.8	8.7	1.9
MMFs	23	1	18	0	-1.4	-21.2	-18.7	-26.1	-23.8
Other non-risk assets	1,538	41	1,578	40	6.2	6.0	3.7	2.0	2.6
Fixed-term accounts	83	2	76	2	-0.7	4.7	24.1	9.1	-8.9
Contractual savings	213	6	221	6	-1.2	-1.2	1.0	0.6	4.0
Non unit-linked life insurance	1,243	33	1,281	32	9.4	7.6	3.1	1.8	3.1
Liquid risk assets	480	13	514	13	9.0	-2.6	-10.2	12.5	7.1
Debt securities	66	2	60	2	-6.6	2.1	-3.6	10.4	-9.1
Listed shares:	145	4	172	4	16.6	-9.1	-19.0	11.0	17.9
<i>French listed shares</i>	132	3	157	4	15.8	-9.6	-19.9	11.3	19.0
Other than MMFs	268	7	282	7	8.5	0.9	-6.2	13.8	5.3
Other risk assets	774	20	859	22	15.8	-0.8	-7.1	11.8	11.0
Unlisted shares	355	9	417	10	17.0	-4.3	-11.9	14.3	17.3
Other equity	185	5	185	5	13.7	7.9	1.8	8.3	0.2
Unit-linked life insurance	233	6	257	6	15.0	-0.7	-6.3	10.9	10.0
Households' total main net financial assets	3,793	100	3,978	100	8.2	3.0	-0.1	5.7	4.9

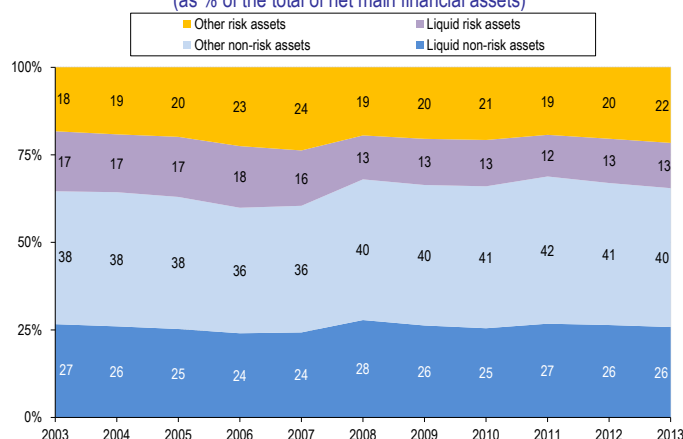
Notes: * Other includes accrued interest on deposits not yet credited and miscellaneous deposits and guarantees
MMFs: Money-market mutual funds units

Sources: Banque de France, National Financial Accounts, base year 2005, AMF calculations.

A rough idea of households' exposure to principal risk can be obtained by simply classifying²²³ all assets held by degree of liquidity²²⁴ and principal risk, without trying to make any finer breakdown according to the chains of intermediation involved in managing their financial wealth (Table 16).

Going by this breakdown, household financial net worth in France is moderately risky overall: at end-2013, non-risk assets accounted for 66% of households' main financial assets. For a decade, non-risk assets have always made up a relatively high proportion of the household financial portfolio: their share has ranged between 60% and 69% over the past ten years.

Figure 124: Composition of financial risk borne by households
(as % of the total of net main financial assets)



Sources: Banque de France, National Financial Accounts, base year 2005, AMF calculations.

This proportion declined from 2003 to 2006, falling from 66% in 2002 to 60% in 2006. It held at 60% in 2007, rose to 68% in 2008 and has fluctuated since between 66% and 68%. The share of risk assets moved inversely. It rose gradually from 34% to 40% in 2006, held at 40% in 2007, and then fell back to lower levels, oscillating between 32% and 34% since 2008. In 2013, the share of risk assets increased by 1.5 points from 2012, mainly due to the increase in holdings of unlisted shares (Figure 124).

The simple presentation of principal risks (Table 16) shows that, among risk assets, only the proportions of debt securities, non-money-market mutual funds units and other equity interests increased between 2007 and 2012.

Among non-risk assets, money-market mutual funds holdings dropped sharply, both during the 2007-2012 period (average annual growth rate of -21.2%) and in 2013 (annual average of -23.8%). Amounts held in contractual savings plans also declined, but not as sharply, thereby prolonging the downtrend observed in the 2002-2006 period.

Another view of principal risk can be obtained using an estimated breakdown of the chain of intermediation behind securities held by households. In this view, financial assets held by households are classified²²⁵ according to the degree of risk, which is presented in ascending order by risk class (from 1 = lowest to 5 = highest) (Table 17): risk class 1 is the low-risk assets and risk class 5 is the highest-risk assets.

²²³ This classification is the one used in the Banque de France's quarterly dashboard reports on household savings (2014a).

²²⁴ While the classification of assets by degree of liquidity used is not the relevant one for analysing risks to the value of principal invested, the degree of liquidity can be relevant, however, for analysing the real value of financial assets when inflation is present.

²²⁵ For want of available data, the breakdown of financial asset categories used here is based on an estimated distribution of non-money-market mutual funds units holdings by underlying asset class. This estimate is based on the use of an allocation formula computed from series used as approximations.

Table 17: Risk classes of financial assets

Degree of risk	Composition
Class 1	- Currency and deposits, including cash and savings held at banks (sight deposits, passbook savings accounts, fixed-term deposits, PELs, PEPs) - Money-market mutual funds units, - Short-term debt securities held directly, - Non unit-linked life insurance
Class 2	- Longer-term debt securities (bonds) held directly, - Bond funds, - Structured guaranteed funds
Class 3	- Equity funds, - Balanced and alternative investment funds
Class 4	- Listed shares held directly - Listed shares held in employee savings plans
Class 5	- Other equity than listed and unlisted shares, - Unlisted shares.

Source: AMF.

Dividing up households' main financial assets according to this grid of risk classes produces the following results (Table 18).

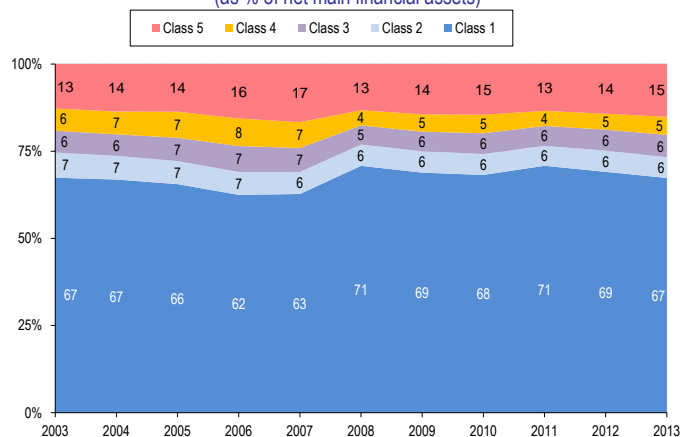
Table 18: Distribution of main household financial assets by risk class
(proportions in % and changes in percentage points)

Degree of risk	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Change 2007-2013
Class 1	68.1	67.4	66.9	65.6	62.5	62.7	70.8	68.9	68.2	70.8	69.1	67.3	4.6
Class 2	7.8	7.2	6.8	6.6	6.6	6.3	6.1	6.1	6.0	5.7	6.1	6.0	-0.4
Class 3	6.1	6.3	6.2	6.7	7.4	6.9	5.5	5.6	5.9	5.7	6.0	6.4	-0.5
Class 4	6.3	6.4	6.5	7.5	7.9	7.4	4.3	5.0	5.3	4.3	4.6	5.2	-2.2
Class 5	11.7	12.8	13.6	13.7	15.6	16.6	13.3	14.4	14.5	13.4	14.2	15.1	-1.5

Sources: Banque de France, AMF calculations.

As in the first measurement, household financial net worth in France is seen to be little exposed to principal risk. According to this estimate of the financial risks borne by households using a disaggregation of the chain of intermediation behind their securities holdings, households' exposure to principal risk has decreased significantly since 2007 and has been relatively stable in recent years. On this classification, the least risky assets accounted for slightly more than 67% of savers' total financial assets in 2013.

Figure 125: Shares of household financial assets by risk class, 2003-2013
(as % of net main financial assets)



Sources: Banque de France, AMF calculations.

The risk class that has seen the sharpest relative decline between 2006 and 2011 is listed equities (class 4). This class's share of the total fell from 7.9% in 2006 to 4.3% in 2011, reflecting households' increasing distrust of stock market investments. Buoyed by strong share price performances in 2012 and 2013, this risk class's share has risen steadily to stand at 5.2% in 2013.

Not counting unlisted shares and other equity, the proportion of investments with a high equity content remains very much the same in 2013 as in 2010, ranging in 2013 from 10.6% in the second measurement to 10.8% in the first.

Box 21: How will the future crowdfunding regulatory framework protect investors who subscribe securities?

The French Financial Market Authority (AMF) and the French Prudential Supervisory and Resolution Authority (*Autorité de Contrôle Prudentiel et de Résolution (ACPR)*), in conjunction with the French Ministry of the Economy and Finance, have drafted a new regulatory framework to develop crowdfunding while ensuring sufficient investor protection.

Act no 2014-1 of 2 January 2014 authorises the government to make life easier and more secure for companies to encourage the safe development of crowdfunding. The order of 30 May establishing this new regulatory framework was published on 31 May 2014. It is expected to come into force on 1 October 2014, after the decrees are published.

The main provisions affecting crowdfunding platforms through which investors can subscribe securities provide for:

- The creation of the new crowdfunding adviser status, enabling these businesses to start up with no regulatory capital requirement. On the other hand, this exclusive status authorises only simple securities trades. It may, however, be combined with the new crowdfunding intermediary status available to interest-bearing loan platforms;
- The ACPR/AMF's draft joint doctrine clarifying the definition of non-guaranteed investment service states that websites that bring together issuers whose securities are not admitted to trading on a market can be considered as not providing non-guaranteed investment services as long as these securities subscription platforms offer:
 - Restricted access to details about the offers available on the website. Interested investors are required to answer two questions so the platform can be sure they acknowledge the risks associated with this type of investment (full or partial loss of principal invested and illiquidity) and understand and accept them before accessing the details of the offers;
 - A choice of several business projects that have undergone due diligence;
 - Pre-subscription suitability tests.

The platform must make subscription contingent on responses to other questions about the investor's family and professional status and assets, his or her experience and knowledge of finance, and his or her objectives. These questions will confirm that the investment the investor has selected from the available projects is or is not appropriate for his or her profile.

Additionally, these platforms cannot actively seek subscribers for a specific transaction and they must be authorised to provide investment advice as an investment services provider or as a crowdfunding adviser.

Public offerings of securities, including securities of *sociétés par actions simplifiées* (simplified joint stock companies) that meet a number of regulatory requirements, made via a restricted-access website will be exempt from the prospectus requirement under certain conditions:

- the total amount of the offering calculated over 12 months may not exceed, for a single issuer, an amount set by law (EUR 1 million announced by the Minister Delegate with responsibility for Small and Medium-sized Enterprises, Innovation and the Digital Economy, Fleur Pellerin, 14 February 2014);
- investors must be given simple, clear and balanced information about the project's specifics and about investments (including the risks and costs associated with such investments).

3.6. Development of the supply of structured products marketed to retail investors

The last 20 years have seen the emergence in Europe of a market in structured products intended for retail investors. In France, these products are most often sold directly as structured collective investment schemes (CIS) or Euro Medium Term Notes (EMTN) in life

insurance contracts. This offering gives investors exposure to many asset classes through implementation of a highly varied and opaque set of strategies. At the same time, it enables retail investors to invest in fully (or partially) guaranteed products, in that all (or part) of the initially invested principal must ultimately be paid back.

These products are viewed as an alternative to investing in traditional bank products that are indexed directly to interest rates (which have been at an all-time low for several years) and as a response to individual savers' growing disaffection for the equity markets. While this financial offering has helped meet the needs of savers seeking products tailored to their liquidity, risk and return profiles, the trade-off has been increased complexity. Ultimately, these products are difficult to understand due to a lack of appropriate reporting and transparency for non-professional investors. However, the complexity of these products increases further when it becomes a differentiating factor allowing for competition among participants.

It is hard to make an overall statistical analysis of French savers' holdings of structured products because uniformity is lacking and there is still no clear and precise definition of these products. As a consequence, the subject is often approached using a series of criteria, in a way that makes stable boundaries difficult to draw. However, the review of the Markets in Financial Instruments Directive (MiFID)²²⁶ and the work underway at the European and international level should help clarify the concept of complexity as it relates to these financial instruments.

**The
concept of
complexity
is taking
shape at
the
European
level**

The concept of investment product complexity, while frequently cited in a variety of regulatory contexts, has no clear legal value. It is seen in EU laws but also in the policy positions of certain states such as France. It applies to different contexts: how financial products are marketed, the suitability and appropriateness of a product or service for a retail customer's profile.

While MiFID I and II approach the concept of financial instruments' complexity from a "definition by exclusion" perspective²²⁷, i.e., by merely defining non-complex instruments through criteria and suppositions without ever using the term "complex products", the AMF follows the French Prudential Supervisory and Resolution Authority (ACPR) recommendation on the marketing of unit-linked life insurance contracts made up of complex financial instruments and sets four criteria for determining whether a financial instruments present a significant likelihood that retail customers will misperceive the investment risks and misunderstand the financial instrument. These concern, in particular, structured mutual funds and AIFs as well as complex debt securities such as complex EMTNs (Figure 127). Products must be offered based on the investor's risk profile, knowledge and experience, in accordance with the provisions of MiFID.

The initial purpose of the proposed PRIIPS regulation²²⁸ was to standardise the pre-contractual information provided to retail investors for financial products whose performance depends on other assets, i.e., packaged products (structured bonds, structured mutual funds, structured deposits, unit-linked life insurance, etc.), by means of a Key Investor Information Document (KIID)²²⁹. When the regulation was adopted in 2012²³⁰, this

²²⁶ Directive 2004/39/EC.

²²⁷ Article 19§6 of Directive 2004/39/EC and Article 38 of Directive 2006/73/EC: definition of non-complex products, that is, products that can be sold on an execution-only basis, whereby the professional is not required to request information on the customer's investment knowledge and experience in advance.

²²⁸ Consultation on financial products distributed to retail investors (26/11/2010).

²²⁹ This clear and concise document, comprising several sections, should give individual investors basic information to facilitate their understanding of the product, be it an insurance, bank or financial product, and enable them to compare different packaged products.

²³⁰ On 3 July 2012 the Commission adopted a proposal for a regulation to create a key information document that investment product manufacturers will have to prepare and provide to retail investors when they wish to buy these products:

http://ec.europa.eu/internal_market/finservices-retail/investment_products/index_fr.htm

objective was enhanced through additional provisions that go beyond the stringent pre-contractual information. These provisions, some of which were inspired by MiFID II, specify rules for product governance, intervention by European and national authorities and the creation of a “complex” label. To achieve greater complementarity and improve investor protection, the regulation’s proposals now also target product governance at all stages in the life cycle (manufacture-management-distribution)²³¹, including a suitability test.

For statistical purposes, two different approaches can be used to present data about structured products supplied to retail investors.

Favoured approach based on when and how sold

- ▶ a marketing approach, focusing on investment products sold to retail investors during a fixed period. These products, also known as tranche products, include structured funds and EMTNs, inter alia²³²; this approach will be favoured in the statistical analysis presented in this section;
- ▶ a direct offering on the market approach, focusing on listed structured products. These products, also known as continuous products, include such things as flow products (bonus with maximum threshold, discount certificates), options (warrants, turbos)²³³ and contracts for difference (CFD). The second approach takes in a broader scope of products than the first but the proportion held by retail investors is more difficult to discern.

Supply still attractive at the European level

According to data from *StructuredRetailProducts.com*, the supply of structured products in Europe has been trending down since its 2007 peak of EUR 250 billion. It was EUR 104 billion in 2013, down 11% from 2012 (Figure 126). Sales of equity-linked products increased by EUR 68 billion, as opposed to interest rate-linked products, which were down by EUR 11 billion from 2012. By contrast, the number of structured products offered to European retail investors continued to increase, rising from 14,000 to 19,000 in just one year. This shows that the supply side is still quite active and that the average total amount collected per product is rising (from EUR 121 million to EUR 164 million between 2012 and 2013). The European structured products market also exhibits heterogeneity in development at international level: these products have been highly successful in countries such as Switzerland and Germany, which supply no equivalents to mutual funds (Figure 127).

Thus far, the impact of new offerings in 2013 has had only a small impact on total levels of structured products in circulation, estimated at EUR 706 billion at end-2013 compared with EUR 766 billion at end-2012, i.e., down 8% in one year.

The Council of the European Union and the European Parliament held negotiations on this text and passed it on 15 April 2014.

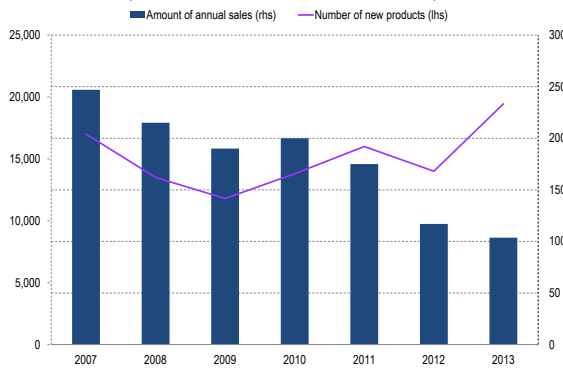
²³¹ A report published by the International Organization of Securities Commissions (IOSCO) highlights these governance concerns by issuing a set of measures for each step in the life cycle of a financial product: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD434.pdf>.

²³² A retail structured product has:

- ▶ a specific maturity: the investment horizon for this product is limited;
- ▶ a set formula: return at maturity or coupons are calculated automatically using an ex-ante formula which is ordinarily structured using options and other derivatives;
- ▶ one or more underlyings: the formula is based on financial indices or listed shares.

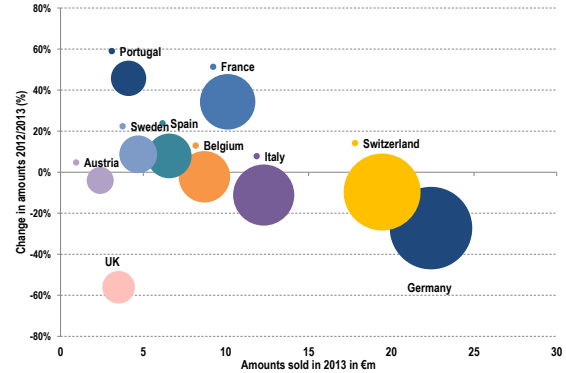
²³³ For information, 21,769 certificates and warrants are listed in Paris and 9,982 were issued on Euronext Paris during 2013 alone.

Figure 126: Annual amounts sold and number of new structured products marketed in Europe, 2008-2013 (annual flows, EUR billion and numbers)



Sources: AMF, StructuredRetailProducts.com.

Figure 127: Amounts sold and change in amounts sold between 2013 and 2014, by European country (annual flows, EUR billion and %)



Sources: AMF, StructuredRetailProducts.com.

The French market for structured products is still small compared with other European countries: it accounts for less than 2% of the European market. Given its still marginal proportion, the French market does not pose a systemic risk at this time. The main concern lies with investor protection, given the wide variety of products available and the large number of distribution channels.

Is the trend reversing in France?

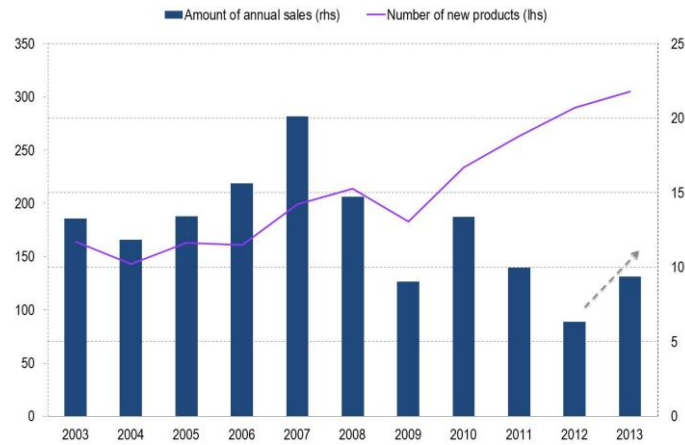
In 2013, the French market diverged from the trend in the European market: while the aggregate supply of structured products to French retail investors has not returned to its pre-crisis level²³⁴, the upward trend in sales has intensified in the last year, rising from EUR 6.3 billion to EUR 9.3 billion (Figure 128). The one-year rise in volumes can be attributed to several factors. First, investors' confidence in these products has been restored now that the authorities are regulating the conditions in which they are marketed. Second, investors appear to be once again seeking market exposure while protecting their principal in a more favourable market environment (these products benefited from strong equity index returns in 2013) and in a less attractive environment for bank savings products, including passbook savings accounts paying regulated interest rates, but also given the low returns offered on non unit-linked life insurance (Figure 105 and Table 12). However, a recent analysis by ESMA, based on a sample of 76 structured products supplied to retail investors, showed that structured products are sold, on average, with a significant issuance premium, estimated at approximately 4.6% of the issue price and as high as 5.5% when the issuer's credit risk is included (ESMA (2013))²³⁵.

²³⁴ Nearly EUR 120 billion sold in 2007 alone.

²³⁵ The report compares 600 alternative CIS and 2,750 structured products with capital protection sold in the EU to consumers in 2007-2012. It shows that average returns for both products were relatively low, at 3% for alternative CIS and 2.5% for structured products.

http://www.esma.europa.eu/system/files/2013-326_economic_report_-_retailisation_in_the_eu_0.pdf

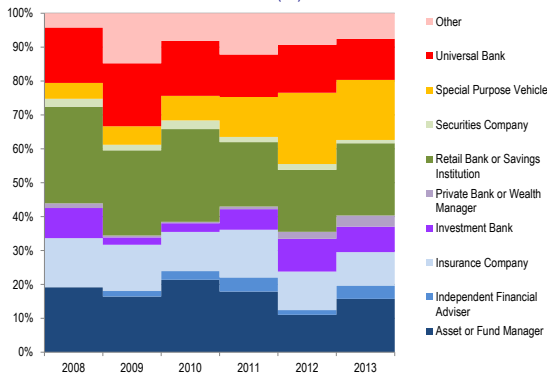
Figure 128: Annual amounts sold and number of new structured products marketed in France since 2003
(annual flows, EUR billion and numbers)



Sources: AMF, StructuredRetailProducts.com.

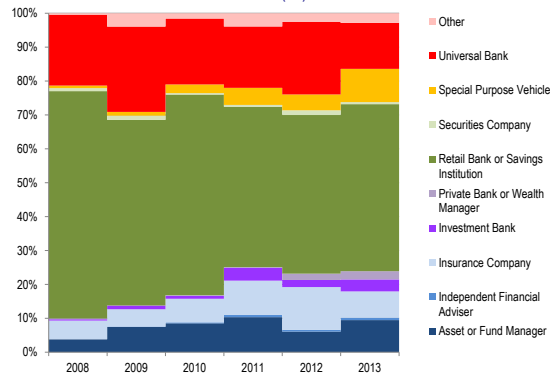
Similarly, the number of products supplied to French private investors continues to rise, from 290 to 305 year on year, reflecting robust supply-side activity. Inflows per product are also on the rise, up from EUR 22 million to EUR 30 million between 2012 and 2013 (Figure 128). Structured products sold to French households represented 2.5% of their financial holdings, or EUR 77.3 billion in 2013 compared with EUR 78.8 billion in 2012. In France, there are two main channels for distributing structured products, each targeting one specific client segments with different levels of wealth and financial sophistication. The first channel comprises retail and commercial banks (with around 62% of the total level of structured products hold), which primarily serve middle-income households. The second is composed of private banks and wealth managers (with around 25% of the total level of structured products hold).

Figure 129: Share of principal distributors by number of products sold (%)



Source: StructuredRetailProducts.com, AMF calculations.

Figure 130: Share of principal distributors by value of products sold (%)

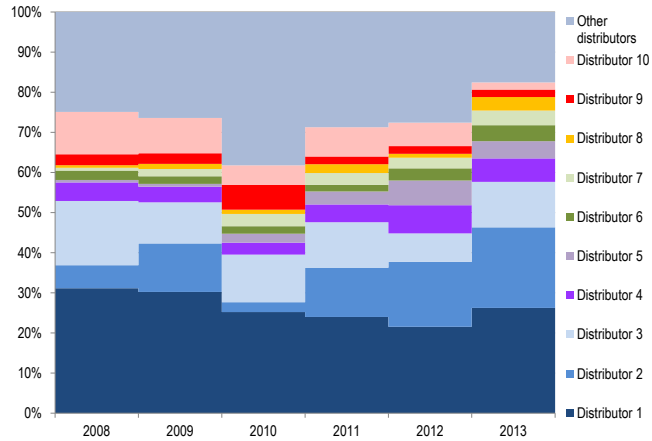


Source: StructuredRetailProducts.com, AMF calculations.

Sector concentration continues

The French market is split between some 60 participants. Sector concentration continues: the top five names (all of which are French) have a combined market share of more than 70%. Unlike in 2012, the top five saw a significant increase in volumes (Figure 131).

Figure 131: Market shares of the top ten distributors since 2008, by value (%)

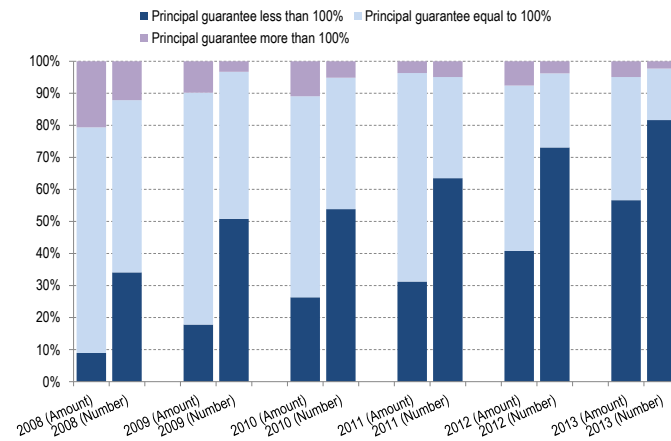


Source: StructuredRetailProducts.com, AMF calculations.

Products offer fewer and fewer guarantees

Even though the volume of structured products sold in France is low relative to households' total investment flows, there are still good reasons to be vigilant from an investor protection standpoint, notably with respect to principal guarantees. The share of products with no principal guarantee or only a partial guarantee is trending upward, reaching 82% of products launched in 2013 compared with 72% in 2012 (Figure 132). Globally, nearly 57% of sales to French private investors by value in 2013 present the risk of a loss of principal, an increase over 2012.

Figure 132: Breakdown of products sold by level of principal guarantee (%)



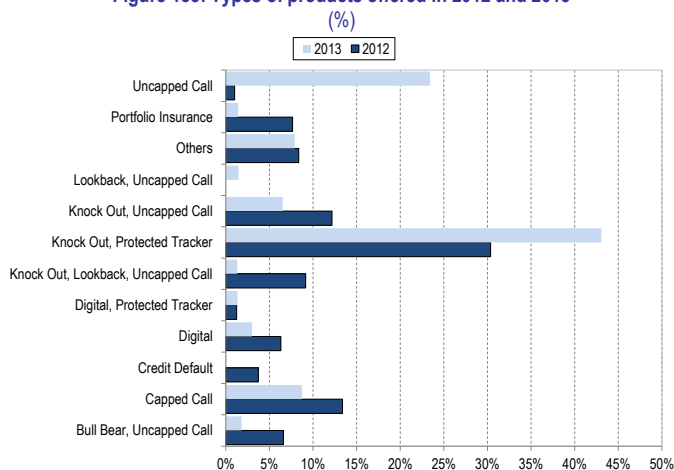
Source: StructuredRetailProducts.com, AMF calculations.

Ultimately, only a few products (2% in 2013 compared with 5% in 2012) offer a guarantee of more than 100%. These products account for 5% of the amount sold in 2013²³⁶. This is partly due to low interest rate levels, which are forcing issuers to adjust the characteristics of

²³⁶ Example of a payout profile where more than 100% of principal is guaranteed at maturity: For the first two years, the product posts an annual return of 6.5%. Each year thereafter, including the year leading up to maturity, the product posts an annual return of 6.5% if the index at that date is equal to or greater than its initial level, or 0% if it is not. At maturity, the product returns 100% of invested principal plus the sum of all the annual returns. The minimum return on principal invested is therefore 113.4%.

capital guarantees²³⁷ in a highly competitive market. Securing 100% of capital is costly in a context of rock-bottom interest rates²³⁸. Economic conditions aside, the tax advantages associated with life insurance policies have led issuers to supply structured products with longer maturities: three-quarters of new products issued in 2013 had a maturity of over six years compared with 50% in 2012. At the same time, these products are also riskier, featuring payment mechanisms such as an auto-call or kick-out feature, where a coupon may not be paid on a given date but might still be paid subsequently²³⁹.

Figure 133: Types of products offered in 2012 and 2013



Sources: AMF, StructuredRetailProducts.com.

As in 2012, the majority of products on sale pay coupons annually rather than having their final performance pegged to movements in an underlying instrument. Structured products with knock-out barriers²⁴⁰ still dominate the market. These products gained appeal in 2013 because they allow issuers to create long-term products without giving up the possibility of an early redemption. The amounts devoted to this type of redemption have doubled over the past two years, from 21% of sales by value in 2011 to 43% in 2013. Furthermore, demand has also driven distributors to offer products with a payout profile that is easier to understand by the general public, since these products give rise to payments that may or may not have an upper limit (e.g. capped and uncapped call/put).²⁴¹ For example, certain products are capped and the investor does not benefit from gains by the underlying instrument until they reach a certain threshold.

²³⁷ To ensure the investment guarantee, part of the principal is invested in a fixed income product with a more or less long maturity, and the derivative component determines the structured product's sensitivity to movements in the underlying instrument, as well as setting the product's value at maturity or the payment of intermediate coupons: the structurers will, depending upon the cost of the guarantee, choose between two components to ultimately ensure the promised return.

²³⁸ Low interest rate conditions reduce structured products' ability to finance the economy, an ability that is furthermore already a decreasing function of the share of capital guaranteed.

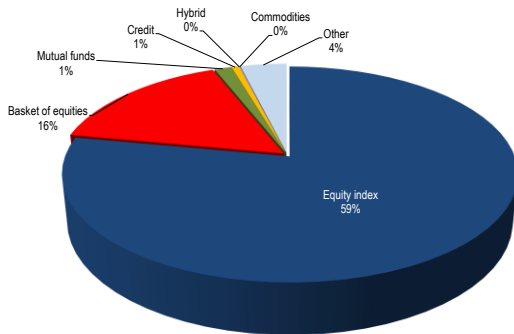
²³⁹ This date is contractually defined and is generally proposed by the product's issuer.

²⁴⁰ Example of a knock out payout profile: on each annual observation date, including at maturity, if the level of the share is greater than or equal to its starting level, the product pays a coupon of 8% for that year and is terminated, whereas if the level of the share is below its starting level, no coupon is paid for that period. At maturity, if the final level of the share is more than 50% below its starting level, the product offers a 100% return on investment minus the decline in the share over the investment period.

²⁴¹ Example of a capped payout profile: if the final level of this index is greater than or equal to its starting level, the product offers a minimum return on invested capital at maturity of 100%, plus 100% of the index's gains over the investment period, subject to a maximum return on invested capital of 140%. If the final level of the index is below its starting level, but greater than or equal to 50% of the starting level, the product offers a return on invested capital at maturity of 100%. If the index's final level is less than 50% of its starting level, the product offers a return on invested capital at maturity of 100%, provided the index reached at least 125% of its initial level on one of the daily observation dates during the investment period. Otherwise, the product offers a return on invested capital at maturity of 100%, minus the index's decline over the investment period.

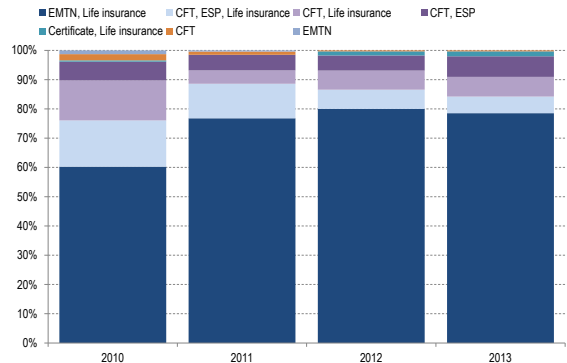
Another trend is a return to straightforward, well-understood underlyings such as stock indices, notably the Euro Stoxx: 72% of structured products based on an equity index were linked to a Euro Stoxx index. The Euro Stoxx 50 has an attractive dividend yield and a volatility level that makes it a favourite with issuers, because it allows them to create products that do not offer full principal protection. It is worth noting that nearly two-thirds of sales by value and 80% of the number of products are packaged in life insurance-type tax wrappers. Furthermore, the growth seen in offerings of products like EMTNs has partly come at the expense of structured funds.

Figure 134: Breakdown by underlying instrument (2013)
(% by amounts sold)



Source: StructuredRetailProducts.com, AMF calculations.

Figure 135: Distribution by instrument and tax wrapper since 2010
(number of products sold)

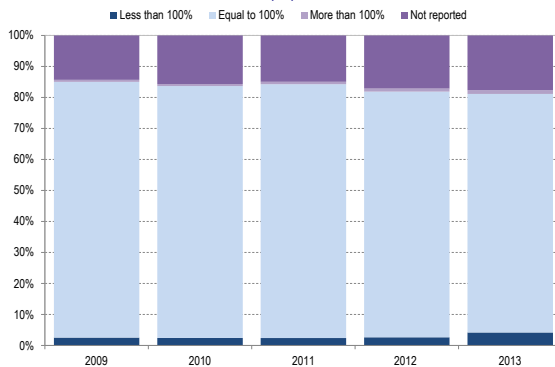


Notes: CFT common fund type (Fond commun de placement FCP)
ESP Equity Savings Plan (Plan d'Epargne en Actions (PEA))
Source: StructuredRetailProducts.com, AMF calculations.

The appeal of French structured funds continued to decline in 2013

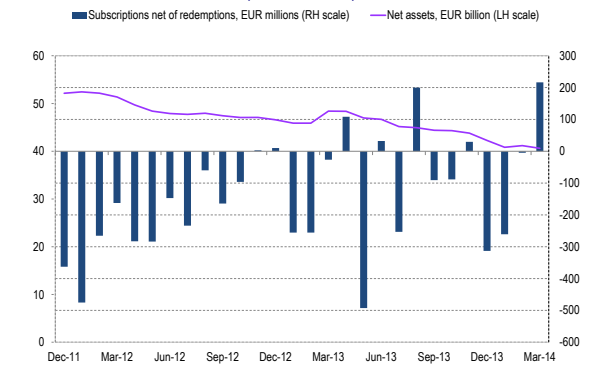
Assets invested in structured funds sold in France and identified as “complex” fell yet again in 2013, dropping EUR 4 billion, from EUR 46 billion at end-2012 to EUR 42 billion at end-2013. Nearly two-thirds of them offered a 100% principal guarantee.

Figure 136: Breakdown of products sold by level of guarantee
(%)



Sources: AMF, Lipper.

Figure 137: Change in net monthly inflows into structured funds by level of guarantee
(EUR billions)



Source: AMF.

As a result, structured funds represent only 2.5% of total outstandings in France, compared with 3.8% a year earlier. This stems from the funds' dwindling appeal, with net redemptions of EUR 1.4 billion in 2013 after EUR 2.2 billion in 2012. These investment vehicles' reduced appeal was partly offset by an increase in the amounts invested in other vehicles, such as structured bonds, notably EMTNs, which have lower apparent management fees.

Table 19: Total expense ratio of French structured funds

Total expense ratio (TER) ²⁴²	2009	2010	2011	2012	2013
Maximum	1,85	1,84	3,35	3,97	3,97
Average	1,40	1,18	1,32	1,27	1,25
Minimum	0,88	0,58	0,10	-	-

Source: AMF.

In sum, the essential risk of structured products is the likelihood that savers will have a poor grasp of how they work and therefore be unable to compare them in terms of performance and associated risk. In this respect, contracts for difference are openly positioned as alternatives to complex structured products and are widely and actively marketed online.

Marketing practices of this kind raise the question of how a regulator can monitor these products when they are based on unregulated markets such as the foreign exchange market (USD 5.3 billion was traded daily in 2013²⁴³, a 30% increase over 2010). This point was recently underscored by the EBA and ESMA in a joint statement in which the two authorities expressed their concerns about the consequences of low interest rates. "During the current period of low investment returns, inexperienced retail investors across the EU are being tempted to invest in complex financial products" (EBA ESMA (2013))²⁴⁴.

Box 22: AMF doctrine on the marketing of complex financial instruments

1/ AMF policy on the marketing of complex financial instruments, issued in 2010, renewed in 2013

Faced with an increase in the number of disputes, the AMF revised its General Regulation in 2010. It adopted a position on structured funds and EMTNs marketed to retail customers, stating that when the formula is deemed overly complicated, the prospectus must mention the fact that the AMF considers the product too complex to be sold to non-professional investors, and this must be made known to the public. These regulatory changes took place at a time of falling interest rates, which made it more difficult for managers to guarantee principal while still offering attractive returns. As a result, they spurred the industry to adopt new practices.

On 15 October 2010, the French Prudential Supervisory Authority (ACP), since renamed the French Prudential Supervisory and Resolution Authority (ACPR), and the AMF each published documents in their area of jurisdiction. The AMF released a position paper²⁴⁵ and the ACP issued a recommendation on the marketing of complex financial instruments to the general public.

As a reminder, these positions were motivated by the realisation that structured financial instruments at great risk of being mis-sold were being increasingly marketed to the public. This observation led the two authorities to announce a policy that:

- clarified its scope of application by limiting the marketing in France of collective investment schemes, particularly structured funds and those containing complex debt securities (notably EMTNs), to non-professional clients;
- emphasises that the distributor is responsible for choosing the financial instruments it sells;
- draws attention to the fact that certain structured or complex financial instruments inherently present a high risk that they will fail to comply with applicable laws and regulations on

²⁴² The total expense ratio (TER) measures all the costs associated with managing and running a CIS. These costs include principally management fees such as performance fees, but also expenses such as trading costs, administrative costs and valuation fees. The TER is a useful measure for investors because it helps them understand the overall costs of the CIS and compare them across funds more easily.

²⁴³ BIS 2013 Triennial Survey.

²⁴⁴ http://www.eba.europa.eu/documents/10180/598396/Investor-warning--CFDs--ESMA_2013_00070000_FR_COR.pdf.

²⁴⁵ AMF Position No. 2010-05 of 15 October 2010:

http://www.amf-france.org/Actualites/Communiqués-de-presse/AMF/annee_2010.html?docId=workspace%3A%2F%2FSpacesStore%2Fbc4e37aa-7945-45b1-b5e2-94be0b95591a

marketing (the “enhanced vigilance” approach);

- sets out the criteria the AMF will use to identify financial instruments that clearly present this risk. In this respect, the AMF position distinguishes two types of mis-selling risks:
 - a risk that the client will not understand the financial risks involved owing to a poor written or spoken presentation of the risks and/or the products potential for gains/losses (criterion 1), the targeted non-professional client’s lack of familiarity with the product’s underlying instrument(s) (criterion 2), or the fact that the product’s payoff depends upon the simultaneous occurrence of several conditions involving a variety of asset classes (criterion 3)
 - and a risk that clients will not understand the product offered owing to the number of mechanisms in the formula for calculating the financial instrument’s payoff (criterion 4).

The AMF has decided that for these types of product, it will be particularly difficult for financial marketers, financial investment advisers (FIAs), and investment services providers (ISPs) to respect the applicable laws and regulations on marketing. If these products are offered to the public or admitted to trading on a regulated market, any related advertising or promotional materials must bear the following warning (“enhanced vigilance” approach):

*“The AMF deems this product to be **too complex to be sold to non-professional investors** and has therefore not examined its marketing materials”*

With this position and its **deterrent** on marketers, FIAs and ISPs wanting to sell the above products, the AMF has sought to protect savers from an abundance of indecipherable investment vehicles and to protect product distributors from the risk of not fulfilling their professional duties. This strategy was in some ways inspired by anti-smoking laws, which do not outlaw sale of the product but require warnings, such as “Smoking kills”, to be printed on the packaging.

To prevent the risk of mis-selling structured financial instruments to retail investors, the AMF expanded its policy in 2013 with the release of a new position paper, No. 2013-12,²⁴⁶ in September 2013. It aims to make these products safer. AMF position No. 2013-12 deals with the need to offer a guarantee (on the structure and/or on the principal, as the case may be) when marketing to the public shares or units in structured UCITS and alternative investment funds (AIFs), guaranteed UCITS and AIFs, and structured debt securities with similar characteristics issued by special purpose entities.

2/ Positive initial results for the AMF

When the position came into force, it had a positive impact on the presentation of the marketing materials for complex debt securities and structured products examined by the AMF. This was true regardless of the medium (brochures, web banners, emails to clients) and concerned some 150 documents per quarter. The main focal points were poor presentation of products’ risk/return profiles and/or the number of mechanisms included in the gain or loss formula for the financial instrument. Based on this analysis, the AMF called on issuers and producers to:

- make substantive improvements in the way they present products’ risk/return profiles in marketing materials;
- restructure products at the design stage and simplify them by ensuring that the formula used to compute the gain or loss on a financial instrument entails no more than three mechanisms.

The improvement in marketing material presentation that resulted from the position should be viewed in tandem with the regular publication of AMF Best-Practice Guides. Taken together, these documents encourage issuers and services providers to use standard notices and disclaimers, which are now found on all marketing materials. Aside from references to the recommended investment period or product eligibility, which are now customary, the new notices include *ab initio* warnings that the product in question involves a risk of capital loss, is exposed to the risk that the issuer will default or go out of business, or is an alternative to a risky investment in equities, for example. Since 2010, only one product has been subject to the vigilance approach.

3.7. FIAs: new projects aim at improving oversight

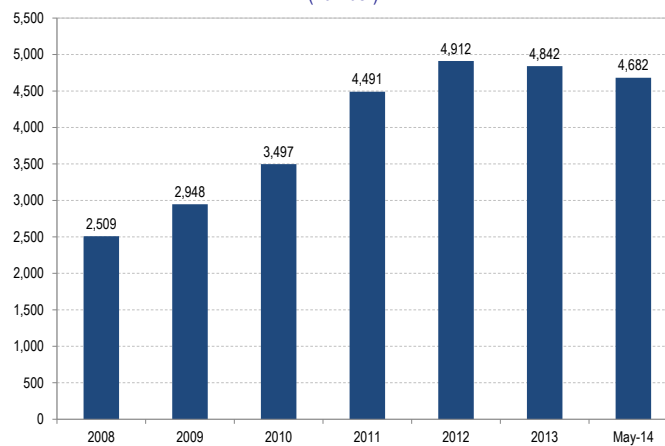
The status of financial investment adviser (FIA) was introduced by the French Financial Security Act (2003-706) of 1 August 2003 to ensure better investor protection. FIAs provide advice on investments, investment services and transactions in financial and other kinds of assets. As from 15 January 2013, before they can practise, FIAs must be registered with ORIAS, which keeps a single registry for banking, insurance and financial intermediaries. ORIAS verifies that FIAs and their managers meet a number of conditions as to age, good reputation and professional competencies, and that they belong to an AMF-approved

²⁴⁶ <http://www.amf-france.org/Reglementation/Doctrine/Doctrine-list/Doctrine.html?category=IV+-+Commercialisation+-+Relation+client&docId=workspace%3A%2F%2FSpacesStore%2Fbbbeb382-0bca-4489-b5f2-30737a182272>

professional association (of which there are now five). The ORIAS website has a directory showing the date from which a given FIA, whether an individual or a company, has been validly registered to practise as a financial investment adviser. The site also contains information on the other professions required to register with ORIAS (insurance intermediaries and intermediaries in banking transactions and payment services). From that date onward, the AMF is no longer required to keep an updated directory of FIAs, which is published each year using information supplied by the associations.

Several statuses covered In May 2014, a total of 4,682 FIAs were registered with ORIAS, the first decline following a steady upwards trend since 2003.

Figure 138: Number of registered FIAs in France, 2008 to May 2014
(number)



Sources: AMF, ORIAS.

FIAs perform a wide variety of services covering every aspect of wealth management advice, which sometimes marginalises FIAs' financial investment advisory activities relative to other services. Performing these services requires a specific status, notably that of insurance intermediary or intermediary in banking transactions and payment services. This imposes two-fold vigilance on FIAs, who must qualify each of the services they are called upon to provide and also ensure compliance with the regulations of each status, even though since 15 January 2013 a single entity, ORIAS, is responsible for registering all these professionals. In April 2014, 83% of FIAs were also insurance intermediaries and 49% were insurance intermediaries and intermediaries in banking transactions and payment services. In the previous year, 85% had both FIA and insurance intermediary status. The decrease could be attributable in part to the lower number of FIAs, since those only marginally involved in this activity may have ceased their involvement in light of economic conditions.

Legal and regulatory changes expected in 2014 Several proposed changes to the laws and regulations that apply to FIAs and their professional associations, crafted with their assistance, will be presented in 2014. These proposals are in keeping with the goal set in the AMF's 2013-2016 strategic plan of promoting reliable financial intermediation of a high quality. They are likely to require greater oversight of FIAs by their associations and tracking information on individual FIAs in order to obtain macroeconomic data on this group, which has been identified as a key channel for marketing financial products.

3.8. Advertisements for investment products and services

Internet is the preferred method for advertising short-term speculative trading on financial markets

With an eye on the quality of the information targeted at investors, the AMF continues to pay close attention to the content of advertising and marketing materials produced by banking and financial institutions. Advertisements for investment products and services are everywhere, particularly on the internet. Internet banner ads are commonly used for speculative trading products such as binary options, FX and even CFDs (Table 20).

Table 20: Number of advertisements by product family and by target audience in 2013

Products/targets	General public	Savers	Investors
Foreign exchange (FX), contracts for difference (CFD), binary options*	472 (64%)	81 (11%)	182 (25%)
Corporate bonds (direct sale of single bonds or bond baskets)	20	1	2
Collective investment schemes	90 (54%)	38 (23%)	40 (24%)
Assistance / advice / analysis	90	20	3
Investment services	57 (34%)	34 (20%)	78 (46%)
Other (property, tax-sheltered vehicles, employee savings plans, etc.)	26	8	5
TOTAL	755	182	310
Part (%)	60%	15%	25%

Sources: Kantar Média, AMF DREP.

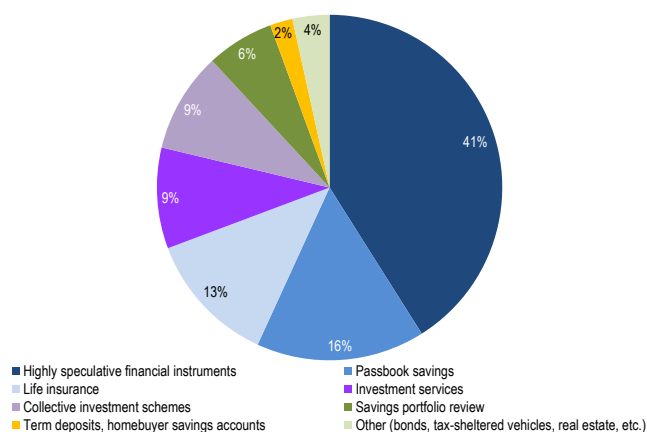
(*) Notes : 1) FX: Foreign exchange.

2) CFD: Contract for difference. Traded as an unlisted over-the-counter derivative, a CFD is an agreement between two parties (buyer and seller) under which the seller will pay the buyer the difference between the current price of an underlying asset (shares, stock market indices, commodities) and that asset's value at a specified future date. Purchasing a CFD is similar to taking a naked short position: generally, the buyer is betting on a bull market scenario for the underlying.

3) Binary option: derivative instrument that generates either a profit or a loss, depending on whether a specified condition is fulfilled when the option expires. The investor has to take a position on the direction in which the price of the underlying asset (stock, index, etc.) will move before the option expiry date. If he thinks the price of the asset will rise, he will buy a call option; if he thinks it will fall, he buys a put option.

In 2013, 90% of advertisements promoting trading were posted online, allowing advertisers to reach a large and varied audience. Despite a relative decline, ads for these offerings remain abundant: they represented four new advertisements out of ten in 2013 (41%, see Figure 139), compared with one out of every two in 2012 (AMF, 2014).

Figure 139: Topics of new advertisements reviewed by the AMF in 2013



Source: Kantar Média, AMF DREP calculations

The companies promoting speculation in highly risky financial instruments are not always authorised to operate or market their activities in France. They entice the French public with tempting advertisements that tout the potential for “large, rapid” gains while downplaying the risk of a loss of principal which, because of leverage, can even exceed the amount initially invested. As a result, the AMF continues its efforts to warn savers about these investment

practices. It is notably working with the ACPR and regularly issues press releases²⁴⁷ listing the companies unauthorised to offer currency market trading services. The AMF also publishes a list of companies that are not authorised to invest in binary options²⁴⁸.

Furthermore, to strengthen advertising regulations on financial products, on 18 May 2011 the AMF signed a partnership with ARPP, the advertising regulator. Faced with a growing number of dubious advertisements, notably online, the two authorities combined their expertise to strengthen and disseminate best practices to the professionals in question. Building on this effort, in 2013 the AMF collaborated with ARPP to raise professionals' awareness as to what constitutes honest, accurate advertising that is in the best interests of consumers and the public. ARPP issued on 28 January 2014 a recommendation on advertising financial and investment products and related services (Box 23).

**Box 23: ARPP Recommendation
on advertising financial and investment products and related services
issued 28 January 2014**

This recommendation (ARPP, 2014) lays out:

- ▶ the broad guidelines for advertising financial and investment products and related services,
- ▶ specific rules for financial products that use leverage and expose buyers to Forex markets, equity indices, commodity prices and binary options, as well as specific rules for so-called alternative investments (gold, wine, forestry, etc.).

These ads must respect the following general criteria. They must:

- identify themselves as advertisements, and state the identity of the advertiser and the type of product or service being advertised;
- present an interest rate;
- state the period for which any promotional offers are valid;
- contain statements that are legible, audible and intelligible;
- be socially responsible;
- protect minors;
- present the level of risk and past performance.

By setting specific rules for “leveraged financial products and [...] alternative investments”, the ARPP recommendation has created a framework for advertising messages that promise strong gains, which inherently entail the risk of large losses. The claims made in these advertisements have to be balanced.

The purpose of the action taken by the AMF and its partners is to educate savers and inform them of the risks linked to these products. There are more and more of these savers, and they frequently contact the AMF's savings briefing platform, Epargne Info Service, to ask for information or file complaints. In 2013 this platform, which is open to the public, responded to more than 800 information requests and nearly 600 complaints about speculative products.

**Box 24: Changes in the configuration of bank branches
and possible effects on the quality of advice to savers**

Two recent studies described some of the difficulties encountered by French bank branches:

- ▶ according to ECB data (ECB (2013)), more than 1,000 branches closed in France between 2008 and 2012;
- ▶ the IFOP survey on the image of banks (*l'Observatoire de l'opinion sur l'image des banques*, IFOP (2013)) finds that visits to branches are becoming less and less frequent: only 17% of people go to their banks at least monthly, compared with more than 50% three years ago.

At the same time, banks increasingly base their sales strategies on greater use of the internet (so-called “multi-channel” banking). They have to meet the needs of new, young and tech-savvy

²⁴⁷ The AMF and ACPR have alerted the public to several websites and entities offering Forex investments without authorisation: <http://www.amf-france.org/Epargne-Info-Service/Mise-en-garde/Par-date.html?docId=workspace%3A%2F%2FSpacesStore%2F796b1686-119d-42e1-aa11-71ebc88e9eaf>.

²⁴⁸ The AMF keeps an updated list of unauthorised websites offering binary options trading: <http://www.amf-france.org/Epargne-Info-Service/Mise-en-garde/Par-date.html?docId=workspace%3A%2F%2FSpacesStore%2F682722f-89e9-46ba-b84a-a162564b393d>.

customers, though these are still in the minority.
In particular, younger savers are becoming less likely to buy or invest in financial products at a branch. They find it more natural to make decisions online (and not only on banks' websites; they sometimes use sites where information is unreliable).

In view of the considerable investment banks have made to enter the digital age, the trend of remote investment in financial products with no prior physical meeting with an adviser will probably gather momentum. This poses the question of whether the quality of financial advice will suffer as a result.

High-quality financial advice that starts with the adviser answering customers' in-depth questions, knowing their objectives and financial position, and giving them time to read appropriate pre-contractual information may grow scarce or even disappear.

To protect savings, the AMF has always supported the practice of providing quality financial advice in a face-to-face meeting between a bank representative and a saver. Therefore, the changing conditions require the AMF to exercise greater vigilance. It will adapt its efforts to inform and protect investors against possible poor choices arising from use of the internet.

3.9. Summary of Chapter 3

In a difficult economic environment, households saved little in 2013. The savings rate held up only because they borrowed less: during the year, net inflows to their main financial investments declined by 18% to EUR 71 billion. Households remained cautious in their financial investments, favouring life insurance and banks' savings products. Moreover, excluding unlisted equities and similar investments, households were net sellers of all other financial investment in 2013. They withdrew from bonds, funds and listed equities, despite the stock market recovery that began in the summer of 2012. Having only limited exposure to the equity market, they benefit only modestly from the run-up.

Overall, households' 2013 financial wealth was EUR 2,958 billion, still consisting mainly of life insurance policies and bank savings, with little risk-taking involved. Investments with a large equity component (except unlisted equities and similar investments) had almost exactly the same weighting as in 2010: depending on the measurement criteria used, the 2013 figure varies from 10.6% to 10.8%. However, structured products tend to occupy a larger place in French households' portfolio than in 2012. In a low-interest rate environment, structured products can be a source of higher returns. In France, the figure rose from EUR 6.3 billion in 2012 to EUR 9.3 billion in 2013. The French market is still small, accounting for less than 2% of the overall European market. However, thanks to active marketing and distribution policies targeted on a broad constituency, its offering is an integral part of the range of investments available to individual investors. In terms of investor protection, therefore, this is a good reason for vigilance.

Globally, households' recent behaviour with regard to financial investments analysed in this chapter point to a number of risks:

- ▶ low diversification of households' portfolios and the scale of bank savings in the mix do not favour long-term savings products. Although households' financial investments that provide long-term financing exceed those serving as short-term financing, the scale of short-term products (EUR 1,289 billion at end-2013) suggests the potential for developing long-term savings. This would entail assisting investors and helping them direct their savings toward measured risk, with a medium-to-long-term time horizon. Although the reforms policymakers introduced in 2013 (especially life insurance and PEA-PME accounts) should boost long-term savings, it is important to monitor the reallocation effects these changes may produce. Moreover, the changes in 2012 and 2013 arouse fear that savers may repeat the counter-cyclical behaviour of investing in equities at the top of the stock market cycle. This exposes the need for greater efforts to improve financial education;

- › Meanwhile, it is vital to remain vigilant on structured financial products. They carry potential risks, are readily available and may become more attractive as global interest rates remain low. They may encourage people to take on debt, thus creating the risk of a bubble, for example on the bond market, followed by a sharp correction or even a crash. Similarly, considering that structured products are once being marketed again and offer less of a principal guarantee, it is important to be sure that investors receive financial information to help make them fully aware of what they are choosing. Naturally, investor protection goes beyond the savings products themselves. It includes the ways they are sold, and thus means strengthening uniform protective rules for the business of financial investment advice;

- › significant efforts have been or are being made to enhance knowledge of financial markets, based on statistical data covering a broader, fuller spectrum than before. Precise monitoring of risks borne by savers should gradually reflect the more detailed breakdown of data available from the institutions responsible for collecting it. This is particularly true for collective investment schemes, Equity Savings Plan (PEA), unit-linked life insurance policies and structured products. From this standpoint, the plan introduced as part of life insurance reforms to create a central policy database by 2016 should help improve knowledge and monitoring of households' savings behaviour with respect to life insurance products. The particular focus will be on levels and flows in unit-linked and non-unit linked policies, which are currently dealt with indirectly. Although the broader scope of data collected is helpful for monitoring and understanding financial risks, this must not be achieved at the expense of data quality, availability of long historical series, or methodological transparency.

Availability of finely disaggregated data will make it possible to monitor structural changes in savings more effectively, not only as regards the risks households take but also their contribution to funding long-term investment.

CHAPTER 4: COLLECTIVE INVESTMENT

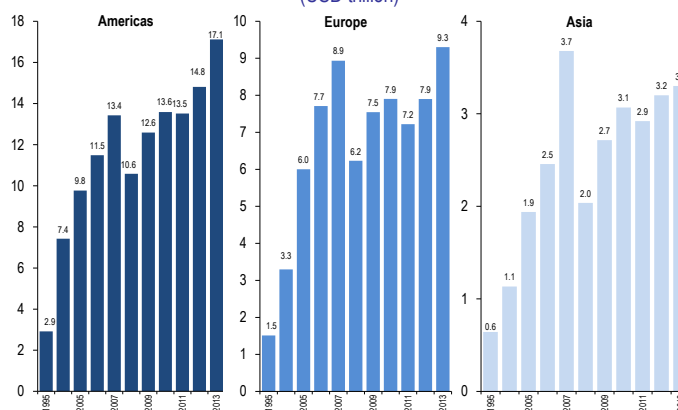
After a rise of just 9% in assets under management (AUM) in 2012, the pace picked up in 2013, and the amounts outstanding across all regions combined reached a record high. This chapter reviews the salient trends for each asset class and certain product types, as well as for market segments experiencing developments that depart from the regular business cycle.

4.1. The global rebound that began in 2012 gained traction in 2013

Strong market performances and positive inflows drive AUM to all-time highs

The rebound that began in 2012 continued and accelerated in 2013 on a strong performance by equity markets. The Americas and Europe zones grew 15% and 17% respectively over the year, while Asia lagged at 3%. Asia aside, the Americas and Europe reached all-time highs at end-2013. Europe topped its 2006 peak, with a substantial 30% growth rate over the past two years (Figure 140). The strong equity market performance, which ranged between 15% and 20% in 2012 and 2013 depending on the country, was the main reason for the steep rise in AUM. And the pick-up was fuelled by a procyclical trend in net inflows in 2013.

Figure 140: Change in asset under management (USD trillion)



Sources: AMF, EFAMA.

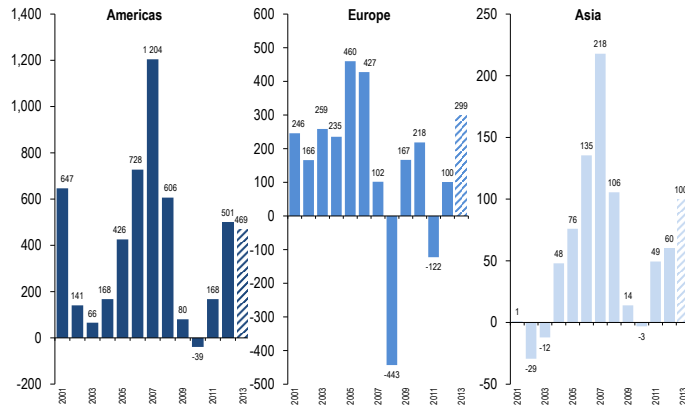
USA: AUM reached an all-time high of USD 17.1 trillion in 2013, up USD 2.3 trillion on the previous, already record-breaking year. One of the main reasons for the increase was a strong equity market performance, since nearly a third of total AUM is in shares. Another reason for the 2013 equity performance was the high level of inflows, which was nonetheless 6% down on the previous year. The low interest rate environment had no effect on money market funds, which attracted a further USD 14 billion and did not experience the outflows seen in the other geographical areas.

Asia: AUM rose a slight 3%, despite a sharp 66% rise in inflows.

Europe: Europe mirrored the USA in terms of collective investment, with strong growth during 2013. Europe was the more buoyant region, posting 17% growth and increasing its share of global AUM from 53% to 54%. Unlike the USA, where inflows levelled off, Europe saw a threefold increase, from USD 100 billion to USD 299 billion. All asset classes excepting cash were in positive territory. Money market funds underwent a difficult phase owing to low interest rate levels. The most dynamic financial centres were Luxembourg, Ireland and the UK. France did not benefit from the overall rise – it gained just 0.5% –

because asset allocations are closely correlated with interest rates, and because money market funds account for the biggest share of collective investment.

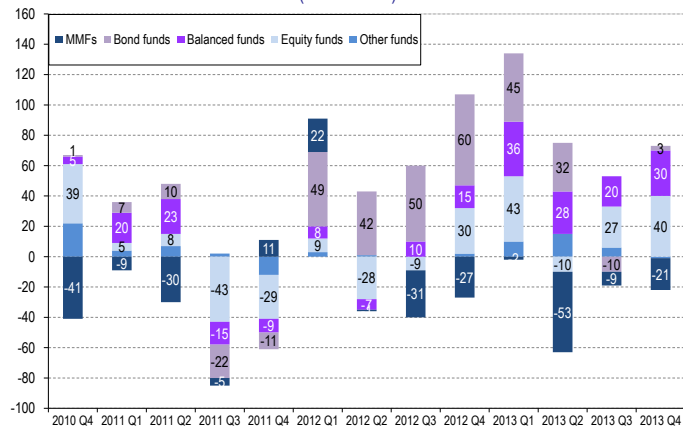
Figure 141: Investment inflows (USD billion)



Sources: AMF, EFAMA.

Equity and balanced products, which usually have more than 50% exposure to equity markets, accounted for the bulk of inflows throughout the year. Bond funds attracted inflows solely in the first two quarters. And money market funds experienced heavy outflows in the second and fourth quarters, i.e. the most heavily impacted periods of their particular cycle.

Figure 142: Change in inflows (USD billion)



Sources: AMF, EFAMA.

Inflows in the French asset management market grew by just 0.5% in 2013, remaining above USD 1.2 trillion in AUM but bucking the broader European uptrend mainly because of heavy exposure to fixed income markets and less exposure to equities. The reasons why equity exposure is lower in France than in other countries, with very small inflows relative to the rest of Europe, are well-known. They include discernible risk aversion among private clients, competition from bank balance sheet products and, specifically for institutional investors, a decline in the reserves of superannuation funds and some mutual institutions. These specific features of the French market spared it from the full impact of the crisis by acting as a shock-absorber, but they also lulled investors into inertia when equity markets began to pick up again.

Although the French collective investment market grew hardly at all in 2013, activity was buoyant, with range revamps and extensive product creation. The supply of French UCITS

grew strongly compared with other types of funds. The first cross-border structures, such as master-feeder funds, were put in place. And major groups put the emphasis on their UCITS rather than other types of investment funds. With the implementation of the Alternative Investment Fund Managers Directive (AIFMD), product ranges were reorganised to eliminate alternative investment funds (i.e. non-UCITS funds) and to switch AUM into UCITS.

4.2. ESMA, AIFMD and UCITS

Two major pieces of regulation introduced in Europe over the past 12 months, the AIFMD and new ESMA guidelines on UCITS²⁴⁹, have strengthened the framework for collective investment. The ESMA guidelines address the rules UCITS are required to follow when using over-the-counter financial derivatives; it also sets out efficient portfolio management techniques, with restrictive rules for reinvesting cash collateral received by UCITS. The guidelines also specify mandatory criteria for the financial indices that UCITS invest in. Taken together, these new rules will make these funds more secure.

Implemented from July 2013 onwards, the AIFMD also enhances the security of European products. The tighter, harmonised rules will be phased in for AIF managers. In France, the AIFMD-based rule enhancements concern more than 350 management companies and more than 9,000 funds on a total of 12,000 collective investment products. The main rules deal with the supervision of alternative investment firms (any entity managing an AIF has to be authorised), the role of depositaries (their duties have been harmonised and their liability if they lose a financial instrument under custody has been clarified), own funds (additional own funds are now required), risk management (through stress testing procedures) remuneration (firms must operate a policy aligning remuneration with investors' interests) and risk monitoring (all firms have to report their main exposures and counterparties).

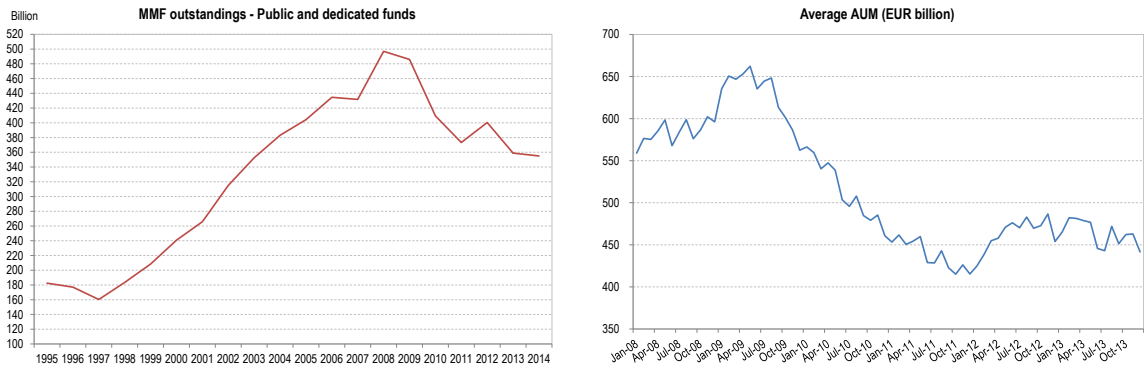
Concerning forthcoming regulatory measures applicable to UCITS, the European Parliament adopted the UCITS 5 Directive on 15 April 2014. The new directive will come in to force in 2016, focusing entirely on three issues for which a harmonised European framework is being put in place. First, it provides for stricter rules and greater liability for depositaries via a regime that is almost identical to the one in the AIFMD. Second, it provides for better supervision and tightens penalties for non-compliance with its provisions. Third, it focuses on transparency, subjecting UCITS managers to rules equivalent to those in the AIFMD.

4.3. Difficult conditions for money market funds

Persistently low interest rates worldwide have seriously affected the performance, and hence the AUM, of money market funds (MMFs). Over a five-year period in France, AUM has fallen by EUR 120 billion. In Europe, Luxembourg has also seen losses on its MMFs. The number of funds with at least one negative daily performance in a month reached a high of 17% in early 2013 and seems to have stabilised since then. That said, performances are still weak, which may explain the high level of redemptions.

²⁴⁹ <http://www.esma.europa.eu/content/Guidelines-ETFs-and-other-UCITS-issues>

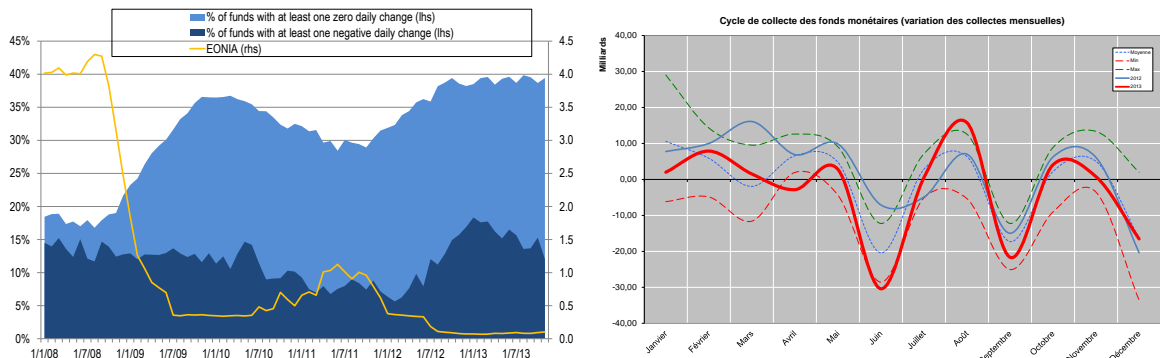
Figure 143 & Figure 144: Total and average AUM of MMFs



Source: AMF.

It is worth noting that the highly cyclical behaviour of MMFs and the heavy outflows seen at the beginning of the year could skew a proper analysis unless the movements during the course of the year are put into perspective. The funds' cyclical behaviour, due mainly to institutional investors such as insurers, superannuation funds and pension funds, seriously complicates any analysis of subscriptions and redemptions. It may skew the medium-term trends that can be used to analyse market tendencies or risks. In this type of cycle it is hard to detect signals such as high corporate cash balances and the equilibrium or imbalance in superannuation funds' or insurers' assets and liabilities.

Figure 145 & Figure 146: Money market fund performance and cyclical behaviour



Source: AMF.

Outflows from MMFs need to be monitored closely because these vehicles help finance businesses and economic activity, especially in the euro area.

Accordingly, the European Commission published on 4 September 2013 a draft regulation on MMFs. This is one of the critical elements of the legislative roadmap for regulating shadow banking. The Commission's broad objective is to make European MMFs more robust and resistant to the risks of an investor run, which were thrown into stark relief in the USA by the 2008 crisis.

The AMF is particularly committed to the MMF Regulation in view of the importance of money market funds to the French asset management industry, their market share (around 20%) in France and in Europe and the vital role they play in raising short-term funding for euro-area issuers, including banks and sovereigns. The AMF is lobbying to ensure that the recommendations made by IOSCO and the European Systemic Risk Board (ESRB), both of which it contributes to, are taken into account at European level. It should be remembered that IOSCO and the ESRB had recommended lawmakers to demand the conversion of

constant net asset value (CNAV) to variable net asset value (VNAV). The reason for the recommendation is that CNAV funds are considered more susceptible to run risk, particularly since they use methods such as straight-line accounting and penny rounding that create an artificial impression of stability and wrongly portray these funds as the riskless equivalent of bank deposits.

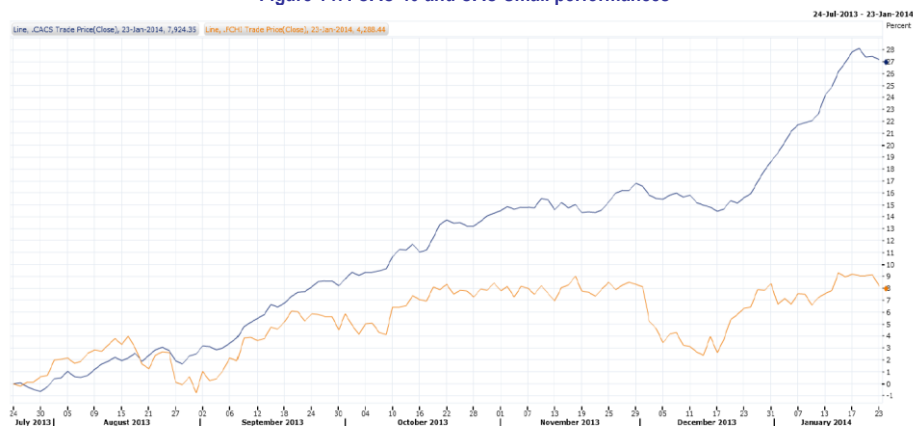
The Commission's draft regulation also proposes to regulate European MMFs through detailed rules on aspects such as asset eligibility, portfolio diversification, liquidity management and transparency. Regarding the credit quality of portfolio securities, references to credit agency ratings would be eliminated and MMF management companies would have to adopt an internal procedure for assessing credit quality risk. Above all, CNAV funds would be required to establish and constantly maintain a capital buffer, or NAV buffer, equivalent to 3% of the total value of their net assets in order to compensate for the difference between their "market" NAV and their constant NAV. The CNAV fund's sponsor would be responsible for funding the capital buffer. Thus far, the draft regulation has not been discussed in the European Council; it is due to be negotiated by the newly constituted European Parliament elected in May 2014.

As regards MMF investors, the quest for higher returns is reflected in a trend among institutional investors to shun these funds in favour of riskier or less liquid investments. They may focus, for example, on real estate investment companies offering higher yields of some 5.5% annually, even though this means seeing a change in the risk/reward payoff, accepting longer maturities, and relinquishing open-ended funds. Likewise, some institutional investors that eschew MMFs may turn to guaranteed investment contracts, typically less liquid bond-based life insurance, which involves a change of maturity on the underlying assets.

4.4. Equity savings plans invested in SMEs

In mid-May the government announced the launch of the PEA-PME, a tax-sheltered equity savings plan investing in the listed or unlisted equity of small and medium-sized enterprises. By the end of 2013, the amounts attracted by funds investing in listed equity qualifying for the PEA-PME scheme had risen sharply. Some investors certainly anticipated those inflows during the course of 2013 and took positions in these markets. As a result, the performance gap between the CAC 40 and CAC Mid & Small Caps indices widened in the last quarter of 2013. The situation returned to normal in early 2014 as the differential between the two indices narrowed to a non-significant level.

Figure 147: CAC 40 and CAC Small performances



Notes de lecture : Performance de l'indice Cac Small (bleu) et du CAC 40(orange) entre le 24/07/13 et le 23/01/14.
Sources: AMF, Bloomberg.

These inflows to the PEA-PME could pose a threat to performance if investors were to redeem in large numbers, because the listed shares eligible for this scheme have very low liquidity. These risks mainly concern private clients who, paradoxically, have not bought into large cap funds but have been encouraged by banking networks to subscribe for PEA-PME schemes, which are riskier and which rose substantially in terms of valuation even before they came to market.

However, given the difficulty of analysing stocks for PEA-PME eligibility, some French distributors turned to a collective investment framework because they wanted the managers themselves to analyse the criteria. Some banks did not want to open the PEA-PME to directly held stocks but only to funds. This may partly explain why initial observations show buoyant inflows to these funds.

4.5. Development of securitisation and receivables management

In 2013, management companies continued to develop receivables-based asset management solutions. In addition to the four management companies that have always managed securitisation funds, more than 20 other companies had a programme of operations for investing in receivables.

Two initiatives – one legislative, the other regulatory – have made these solutions easier to develop. First, with the transposition of the AIFMD in July 2013, AIFs aimed at professional and non-professional investors were permitted to invest in receivables for diversification purposes. Previously forbidden as direct holdings for general purpose investment funds, receivables are now eligible for up to 10% of their assets. In addition the government's initiative to set up the new category of Loan Funds for the Economy (FPE) means that some specialised professional funds (formerly known as contractual funds) and some securitisation vehicles investing in receivables are now eligible to insurers. Also, the French requirement for securitisation funds to be credit-rated when admitted to listing was eliminated when the AIFMD was transposed. Further to AIFMD transposition, and to ensure that the various securitisation firms and media are easier to identify, the categories of "securitisation fund" and "securitisation fund management company" will be scrapped on 22 July 2014. Going forward, the former will become securitisation vehicles and the latter will be securitisation fund management companies.

These initiatives all contribute to the expansion of the securitisation market in France. The number of participants authorised to use receivables rose from 20 at end-2012 to 29 at end-2013. In 2013, efforts to develop securitisation were focused mainly on funding for corporates, particularly mid-tier companies and SMEs. Several initiatives, such as the Novo fund, merit attention because they allow institutional investors to invest in non-leveraged securitisation funds that finance SMEs.

For management companies, this new business requires highly specialised resources and personnel to deal with the risks involved in receivables management. These skills are far removed from those needed to manage fixed income. Moreover, despite being promising for management companies, the activity has got off to a slow start in France and the amounts under management are still modest.

4.6. Specialised investment: real estate and private equity

› Real estate

As a result of the AIFMD, the operating environment for real estate and private equity has started to change slightly. Some market participants that were previously unregulated because they did not manage investment funds will have to obtain authorisation before 22

July 2014 if they manage a vehicle compliant with the AIFMD definition. The directive defines real estate investment funds very broadly, going beyond the standard list of real estate investment vehicles contained in the Monetary and Financial Code. The new AIFMD definition of alternative investment funds has been broadly framed to cover all investment media found in the various jurisdictions and to apply a uniform set of rules to their managers. The new definition refers to any type of vehicle intending to raise capital from a number of investors, with a view to investing it in accordance with a defined investment policy. Accordingly, the AIF category applies to most regulated collective investment vehicles, which are now listed in Article L.214-24 of France's Monetary and Financial Code. Consequently, the following automatically qualify as AIFs: real estate collective investment undertakings (OPCI), professional real-estate collective investment undertakings (OPPCI), real estate investment funds (SCPI) and forestry investment companies (SEF).

Moreover, under the new AIFMD definition, vehicles that have so far been unregulated may also be categorised as AIFs. In France this is the case, for example, with some real estate partnerships (SCI), listed real estate investment companies (SIIC), forestry groupings, and winegrowing groupings that meet the AIFMD definition and have the characteristics listed in AMF Position 2013-16. Many market participants currently manage vehicles meeting this definition, meaning that several billion euros of additional real estate assets are likely to come under AIFMD regulation.

Among the new and major guarantees introduced by the AIFMD for the purposes of investor protection and systemic risk prevention is the role of the depositary. The directive brings in new requirements for appointing a real estate fund depositary, who has several duties. In addition to its custody duties, the depositary's supervisory remit has been strengthened and clarified. The depositary checks that both the manager and the fund are abiding by the laws applicable to them. It is also responsible for cash monitoring, custody of financial instruments and safe-keeping of other assets. Regarding real estate assets, the depositary's role is to verify that the AIF or the asset management company acting on its behalf actually owns the assets. To that end, it keeps a record of those assets and examines information and documents confirming the right of ownership. In sum, the role of the depositary encompasses a broad spectrum of inspections that enhance investor protection.

Another feature of 2013 was the steady development of SCPIs. Inflows came close to an all-time high, rising 4.8% on 2012 to EUR 3.03 billion. SCPI capitalisation at end-2013 was nearly EUR 30 billion, up 9.1%. Despite an increase in secondary market transactions in 2013, the overall transaction rate in this segment is low because SCPI are closed-end products with a long investment horizon. One new development in 2013 came when some vehicles set up a "primary" market, where units can be purchased in the event of redemption by another investor. However, the SCPI primary market is very different from funds' usual primary market because the possibility of an exit cannot be taken for granted. Introducing this type of market mechanism might create the illusion of liquidity. So far, SCPIs have focused on the regular secondary markets, where buyers and sellers sell units through the order book. The success of these vehicles is undoubtedly due to the fact that they offer high returns relative to the riskless rate, despite a dip in 2013.

New investors, whether retail or institutional clients, should not overlook the risk of a lack of liquidity in these investment vehicles, which are closed-ended. One particular danger can arise when some small institutional investors switch assets out of MMFs, where returns are almost flat, and into the SCPI asset class.

Innovations in other real estate investments were seen in 2013, notably funds seeking to invest using techniques based on beneficial interest and bare ownership. Although these techniques can be used to gain exposure to the real estate market while tying up less capital than with other methods, they entail additional risks, particularly in terms of fair value measurement at inception, during the asset lifetime and upon resale.

» **Private equity**

Private equity had mixed results in 2013. The amounts raised were significant, totalling EUR 8.2 billion overall, with some exceptional exercises at the end of year. Total fundraising reached a five-year high and, for the first time, outstripped investments. Even so, it was still lower than the average for the period 2005-2008. And it may still be insufficient to meet the equity financing requirements of French firms. Also, compared with the USA, the amounts raised by innovation funds were small.

Some management companies are still experiencing difficulties with tax-advantaged funds for retail investors because they are unable to reach the right audience. The low level of inflows could be a risk factor if the fund is too small to offer investors sufficient diversification or to meet fixed costs.

To tackle that risk, the legislator empowered the AMF at end-2013 not to authorise tax-advantaged private equity funds presented by a management company if the amounts invested in each of the innovation funds and local investment funds set up by the company in previous years are below a threshold set by decree and also if the AUM in private equity funds is lower than a regulatory threshold.

4.7. Summary of Chapter 4

The salient features of 2013 and 2014 are a solid equity market performance and extremely low interest rates. This configuration enabled asset managers in almost every geographical area to attract AUM. Moreover, 2013 was the second year of rebound after the 2008-2012 financial crisis.

Against this backdrop the development of new products, including proposals to invest in real assets such as wine, art and other atypical holdings, calls for vigilance. Reallocations from conventional asset classes into these media could create new risks for investors.

The regulatory and tax environment is still a key area of focus in the sphere of asset management. Going forward, many of the new European directives and regulations that are being drawn up, including UCITS 5, Long-Term Investment Funds and MiFID 2, could have a major influence on AUM. Aspects related to taxation, in particular the tax on financial transactions and FATCA²⁵⁰, also command attention because they can rapidly trigger asset reallocations.

Asset managers in France continue to introduce new and significant constraints to mitigate systemic risk. For example, the industry is in the process of implementing the AIFMD, the last building-blocks of which will be the full reporting statements to be submitted to regulators in the last quarter of 2014, and the provisions on remuneration, which will come into effect for most managers in 2015. Implementing EMIR will be another key challenge in 2014 for asset managers, who will have to amend their contracts and modify their operating procedures both for listed and for OTC derivatives.

Regulators will continue to pay special attention to asset management companies insofar as some of them provide non-banking forms of financial intermediation, some of which may entail systemic risk. In this respect the AMF, is anxious to ensure that the original status of asset management is properly recognised. Admittedly, asset management is a component of shadow banking, but the participants and products in this market are already heavily regulated and thus play an essential and beneficial role in financing economic activity.

²⁵⁰ Foreign Account Tax Compliance Act.

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ABBREVIATIONS AND ACRONYMS

ACPR	Autorité du Contrôle Prudentiel et de Résolution	IASB	International Accounting Standards Board
AFG	Association française de la gestion / French Asset Management Association	IBOs	Initial Bond Offerings
AFME	Association for Financial Markets in Europe	IEA	International Energy Agency
AIF	Alternative investment fund	ICE	IntercontinentalExchange
AIFMD	Alternative Investment Fund Managers Directive	IFRS	International Financial Reporting Standards
AMF	Autorité des Marchés Financiers	IMF	International Monetary Fund
ANC	Autorité des Normes Comptables	IMMFA	Institutional Money Market Funds Association
AQR	Asset Quality Review	INSEE	Institut National de la Statistique et des Études Économiques / National Institute for Statistics and Economic Studies
ARPP	Autorité de Régulation Professionnelle de la Publicité	IOSCO	International Organization of Securities Commission
BCBS	Basel Committee on Banking Supervision	IPO	Initial public offering
BIS	Bank for International Settlements (BRI)	IRS	Interest rate swap
bp	Basis point	ISDA	International Swaps and Derivatives Association
CBRC	China Banking Regulatory Commission	JODI	Joint Organisation Data Initiative
CCP	Central counterparty	LCR	Liquidity Coverage Ratio
CDO	Collateralised debt obligation	LME	London Metal Exchange
CDS	Credit default swap	LMEX	London Metals Index
CFD	Contracts for Difference	LSE	London Stock Exchange
CET1	Common Equity Tier 1	LTRO	Long-term Refinancing Operation
CFTC	Commodity Futures Trading Commission	MBS	Mortgage-backed security
CIB	Corporate and investment banking	MiFID	Markets in Financial Instruments Directive
CGFS	Committee on Global Financial System	MMFs	Money market funds
CMBS	Commercial mortgage-backed security	NAV	Net asset value
CNAV	Constant net asset value	NSFR	Net Stable Funding Ratio
CoCos	Contingent capital convertible	OEE	Observatoire de l'Épargne Européenne
COREPER	Committee of Permanent Representatives	OJEU	Official Journal of the European Union
CPB	Covered Bond Purchase Programme	OMT	Outright Monetary Transactions
CPSS	Committee on Payment and Settlement Systems	OPEC	Organization of Petroleum Exporting Countries
CRD	Capital Requirements Directive	ORIAS	Organisme pour le Registre des Intermédiaires en Assurance/Organisation responsible for registering insurance intermediaries
CRR	Capital Requirement Regulation	OTC	Over the counter
CSD	Central Securities Depository	OTF	Organised Trading Facility
CSDR	Central Securities Depository Regulation	PBOC	People's Bank of China
DREP	Direction des relations avec les épargnants /Retail Investor Relations Directorate (AMF)	PCAOB	Public Company Accounting Oversight Board
DFA	Dodd-Frank Act	PCS	Prime Collateralised Security
EBA	European Banking Authority	PEA	Plan épargne en actions/Equity savings plan
ECB	European Central Bank	PRIPs	Packaged Retail Investments Products
EFAMA	European Fund and Asset Management Association	QE	Quantitative easing
EFRAG	European Financial Reporting Advisory Group	REIT	Real Estate Investment Trust
EFSF	European Financial Stability Facility	Re-REMIC	Resecurisation of real estate mortgage investment conduits
EGAOB	European Group of Auditors' Oversight Bodies	RWAs	Risk-weighted Assets
EIOPA	European Insurance and Occupational Pensions Authority	SEC	Securities and Exchange Commission
EMEA	Europe, Middle East, Africa	SFT	Securities financing transaction
EMIR	European Market Infrastructures Regulation	SIFI	Systemically Important Financial Institution
EMTN	Euro Medium Term Notes	SMEs	Small and medium-sized enterprises
ESM	European Stability Mechanism	SRM	Single Resolution Mechanism
ESMA	European Securities and Markets Authority	SSM	Single Supervisory Mechanism
ESNI	Euro Secured Notes Issuer	TR	Trade Repository
ESRB	European Systemic Risk Board	TSF	Total Social Financing
ETF	Exchange Traded Fund	UCITS	Undertakings for Collective Investments in Transferable Securities
ETP	Exchange Traded Product	US GAAP	United States Generally Accepted Accounting Principles
EU	European Union	VLTRO	Very Long Term Refinancing Operation
FAO	Food and Agriculture Organization	VNAV	Variable net asset value
FATCA	Foreign Account Tax Compliance Act	WFE	World Federation of Exchanges
FFSA	Fédération Française des Sociétés d'Assurance	WMP	Wealth Management Product
FSB	Financial Stability Board		
FSOC	Financial Stability Oversight Council		
G3	European Central Bank, US Federal Reserve, Bank of Japan		
G-20	Group of 20 (19 countries + EU)		
GDP	Gross domestic product		
GFMS	Gold Fields Mineral Services		
GLAC	Gone-Concern Loss Absorption Capacity		
HCSF	High Council for Financial Stability		
HFT	High frequency trading		
HQLA	High-quality liquid assets		

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