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EDITORIAL



This ninth edition of Risk and Trend Mapping is consistent with the fundamental aim of providing both the AMF and market participants with an overarching and organised view of the environment they operate in. Its publication comes at a pivotal time in the regulatory agenda. Most of the reforms launched in Europe in the aftermath of the financial crisis have been incorporated into law and are coming into effect. On the whole, the new regulations broaden the scope of supervision, enforce stricter transparency requirements, strengthen investor protection, govern the activities of financial intermediaries, and contribute to greater financial stability.

The time has now come to draw some initial conclusions from these new regulatory measures, analyse how they interact, and draw up a list of the issues still needing to be addressed or finalised in order to ensure clearer recognition of financial risks. High on the agenda are a better grasp of the risks involved in shadow banking and the security of clearing house operations, which now play a vital role in derivatives markets.

In preparing this list, we should remember that the macroeconomic context demands special attention. In recent months, economic activity in the euro area has been buoyed by external factors that may prove short-lived, including the depreciation of the single currency and the oil price decline. The situation of emerging countries, some of which are either slowing or in recession, is still putting a damper on global activity. As regards internal factors, support for Europe's economies is coming equally from a less restrictive fiscal policy and from monetary policy.

The non-conventional measures taken in early 2015 by the European Central Bank, which cut interest rates even further, have lifted markets. But there is still uncertainty about the ability of these markets to ensure the liquidity of some financial instruments, particularly bonds, about the possibility of higher volatility due to a sudden shift of expectations, and about political developments such as those in Greece.

Were the low interest rate environment to persist, it could affect banks' and insurance companies' business models. It might also spur a quest for returns that could entail excessive risk exposure, raising the question of how investors perceive risks. Financial markets are supposed to contribute to the efficient allocation of savings by pricing risk on a long-term basis, but this can be difficult when monetary policies muddy the interpretation of the corresponding premia.

In the medium term, if euro area interest rates normalise too suddenly or unexpectedly, asset prices could undergo a sharp correction, triggering higher volatility and weighing on financial institutions' balance sheets.

Further out, we need to pay attention to the financing of the French economy, at a time when a disintermediated model is emerging more assertively. Accordingly, the European plan for a Capital Markets Union will address the need to examine new tools, such as simple, transparent and standardised securitisation, and to foster a more effective allocation of resources by getting markets to play a greater role in funding economic activity, alongside regular bank financing.

Gérard Rameix,
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SUMMARY OF IDENTIFIED RISKS

Deflation risk in the euro area has decreased, but the economic recovery is tenuous and uncertain

Activity in the euro area has been underpinned by a combination of factors that are both external, including euro depreciation and cheaper oil, and internal, notably less restrictive fiscal policies and a more accommodative monetary stance. In particular, the ECB adopted a new policy¹ that brought interest rates to historic lows (in France, the 10-year treasury bond yield fell to 0.35% in April 2015). This helped the euro to depreciate, made debt more sustainable for governments, households and businesses, and encouraged the funding of longer-term and riskier investments for non-financial sector companies with projects that, in principle, drive long-term growth. However, the rise in asset prices that stemmed from this policy seems not to have buoyed household consumption through wealth effects, which are manifestly weak or even absent in Europe²; it has, however, increased the risk of financial bubbles. In addition, euro depreciation has had a positive effect by feeding inflation through higher import prices.

In first-quarter 2015, however, euro-area GDP grew just 1.0% year on year, and underlying inflation in May 2015 was only 0.9% y/y. Furthermore, an economic improvement is likely to be shaky unless investment recovers, marking the return of growth expectations and hence a genuine rebound. Exceptionally favourable corporate financing conditions, with bond yields close to zero in some cases, seem to have encouraged refinancing rather than gross fixed capital formation.

The first set of risks to a euro-area recovery concerns external support factors, which might go into reverse on a firmer euro and higher oil prices.

Movements in currency and commodity markets exhibit high volatility, which could lead to adverse conditions. The euro has already appreciated against the dollar, and the oil price rallied in spring 2015³. The international environment could also turn out to be less buoyant than expected. Although global GDP was expected to accelerate on the back of cheaper oil, it is actually slowing as emerging economies experience a sharp growth slowdown, essentially for structural reasons that are likely to persist. In addition, several of these countries are likely to suffer when US monetary policy normalises, as already witnessed in the market movements – huge capital outflows, currency depreciation, imported inflation, etc. – that took place after the Federal Reserve announced its tapering process in May 2013.

The second set of risks stems from internal factors within the euro area. Aside from Greece-related uncertainties, the main contingency is a change in the ECB's non-conventional monetary policy.

In view of the trajectory for public debt, the main risks are a sovereign credit event in the euro area, or an exit from the area. In the case of Greece, these risks are especially acute. The consequences of such an event are hard to estimate because there is little or no

¹ In September 2014 the ECB lowered its policy rate to 0.05% and took the deposit rate into negative territory at -0.20%. In January 2015 it announced a EUR 60 billion per month asset buying programme, launched in March and running to September 2016 at least.

² Unlike in the USA, where a rise in the market value of household wealth has been seen to boost consumption.

³ The euro fell from 1.39 against the dollar on 6 March 2014 to 1.05 on 13 March 2015, before rising back to 1.14 on 15 May 2015. Oil has also fluctuated wildly, from USD 114.29/bbl on 20 June 2014 to USD 46.44 on 23 January 2015, increasing to USD 65.01 on 8 May 2015.

historical precedent. If Greece were to default, the direct impact on markets may be limited in the first instance. Greek debt is equivalent to only 3.5% of euro-area GDP and is now held mainly by public entities, which could absorb any losses without directly impacting financial markets. Moreover, even if the private sector were affected, mechanisms are now in place at European level to contain financial contagion. Even so, the indirect implications for the medium term could be significant if expectations regarding the very survival of the euro area were called into question. In this case, the greatest risk would be a sharp rise in interest rates, hampering a euro-area recovery and casting doubt on the solvency of some member states' public finances. Nonetheless, the ECB has tools such as Outright Monetary Transactions to combat this type of occurrence.

Aside from extreme events related to Greece, there is a greater likelihood of two contrasting risks arising from the ECB's non-conventional monetary policy. First, persistently low interest rates and compressed risk and term premia create a danger that saving would be misallocated as savers struggle to price or measure risk. If this environment were to endure, it would also gradually erode the business models both of banks, via a decline in net interest margin and lower transformation profits, and of insurers, due to a difference in the returns on liabilities and assets. At the same time, asset managers might make large-scale reallocations in order to boost the returns they offer.

Conversely, a sudden or unexpected normalisation of euro area interest rates, resulting either from ECB policy or from the transmission of US monetary policy to the euro area, could result in a sharp repricing of assets, particularly fixed income instruments, with loss of value and possibly extensive reallocations. This might result, for instance, in huge outflows of funds, making it difficult to maintain liquidity. Furthermore, financing methods that have been popular in the past, such as contingent convertibles, may see a decline in demand, thus making it harder for banks that have used these bonds for prudential capital purposes to finance the economy.

For the time being, French banks have been able to maintain their profitability (net of exceptionals), helped by a substantial reduction in the cost of risk, while retail banking business has declined in favour of insurance and capital markets activities. Also, the cost-cutting policies implemented by the banking industry as a whole should alleviate some of the downward pressure on earnings. However, if this strategy were to be maintained, it would increase risk taking (e.g. operational risk if cost-cutting is too deep). Asset managers do not yet appear to have changed their allocations to any significant degree.

Insofar as asset prices can already deviate from fundamental values, volatility may increase if markets are insufficiently liquid. Fixed income warrants particular attention in this regard.

Sudden swings in volatility occurred in bond markets, both in Europe (on 29 April 2015 and 7 May 2015 on German treasuries) and in the USA (in October 2014). Yet there was apparently no fundamental information to warrant these movements. They could signal a decline in liquidity in secondary markets, made worse when market makers pulled out (market making would be less profitable in a low interest-rate environment and in view of banks' prudential constraints).

That is why financial regulators have been closely monitoring fixed income markets. Price movements are needed, but they may involve unwanted periods of overadjustment, such as excessive and temporary declines in bond prices during an interest rate upswing. For this reason, regulators need indicators to gauge the level of liquidity.

At present, financial markets have been able to cope with large swings, not only in bonds but also on the foreign exchange market (such as the steep 20% or so rise in the Swiss

franc in January 2015) and in commodities. (In particular, the oil price decline triggered a remeasurement of credit risk on non-conventional oil producers and doubled the amount of outstanding distressed bonds in the USA in the second half of 2014).

Even in the best-case scenario of euro-area monetary normalisation, the new regulatory environment will entail higher risks for long-term growth financing.

The ideal solution for exiting the crisis involves a slow, gradual lifting of the ECB's non-conventional policy in a manner that is both announced and expected. In particular, there should be a predictable rise in interest rates to coincide with the economic recovery⁴. Once this process is complete, it is important that the financial sector, with its new regulatory framework, should be able to finance growth. Significantly, bank disintermediation is likely to be a fundamental trend, influenced both by regulations that limit banks' capacity to provide financing, notably for the long term, and by the development of alternative funding methods via the European Capital Markets Union project.

Should these alternative methods prove unable to satisfy funding requirements when the economy picks up, long-term growth may be in jeopardy. In principle, the risk is particularly acute for small and medium-sized companies still dependent on bank financing. Alternative methods may not be sufficiently developed or entrenched enough to be effective substitutes for bank funding. It would therefore be useful in the near future to create simple, transparent and standardised securitisation that could contribute to bank refinancing and thus increase banks' financing offerings. Several pitfalls must be avoided in this regard: for example, collecting poor quality loans without savers being aware of the risks they are taking because they are inexperienced or lack objectivity.

Another long-term issue concerns greater transparency and better recognition of counterparty risk in the derivatives market. These changes will help make derivative trading less cyclical, but they could also bring new risks. Consequently, the implementation of reforms in the over-the-counter derivative markets will involve concentrating counterparty risk in central clearing houses. The European Market Infrastructure Regulation already requires clearing houses to adopt high standards of risk management, and the work currently underway focuses on minimising the consequences for financial stability if a clearing member defaults or a central counterparty (CCP) becomes insolvent. Building on work done by the Basel Committee, the International Organization of Securities Commissions and the Financial Stability Board, the European Commission intends to publish draft legislation on CCP recovery and resolution regimes in 2015.

More generally, disintermediation poses a risk that business may migrate to unregulated or under-regulated sectors. Thus, shadow banking carries risks associated with sudden capital withdrawal, tantamount to a bank run (for example, constant net asset value money market funds are susceptible to run risk), or with the procyclical nature of shadow bank financing and intermediation. For households, the risk can come from products whose risk or costs are misunderstood, as illustrated by the online supply of retail products on the foreign exchange market. At present, these online markets are negligible in size, but some forex products are extremely unsafe for retail investors.

⁴ In this regard, the normalisation timetable could play an important role on both sides of the Atlantic. Historically, US rate hikes have always spilled over to Europe and the rest of the world. In all probability, however, the fact that the economic climate is firmer in the USA than in the euro area would warrant a delayed rise in European rates. In this case, the ECB's ability to contain the rise of long-term rates in Europe would be vitally important.

From a macroeconomic viewpoint, the main risk for French household savings is an over-emphasis on low-risk products. This poses the danger that innovation, research and development, which are the pillars of long-term economic growth, could be underfunded.

	Risk description	Level mid-2015	Change 2015-2014	2016 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	Systemic	↗	→
	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	Systemic	→	→
	3. Lack of resilience among financial institutions exposed to a systemic shock, subsequently transmitted to other participants (banks, insurers, funds, infrastructures)	Significant	↘	→
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	Significant	↘	→
	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	→	→
	8. 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	↘	→
	9. 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	→	→

Risk level at mid-2015

-
 Systemic
-
 High
-
 Significant

Change since 2014 or 2016 outlook

-
 Lower
-
 Unchanged
-
 Higher

CHAPTER 1: FINANCING ECONOMIC ACTIVITY

The trends observed since the start of 2015 show that the economic and financial environment in developed countries has improved. This is due in particular to highly accommodative monetary policies, which have been maintained or stepped up, and to a firmer though tenuous growth outlook. The improvement is reflected in lesser pressures on the solvency of some economic agents, notably European states, as well as rising stock market valuations and buoyant activity both in primary markets and in mergers and acquisitions (M&A).

But despite this broadly positive backdrop, a number of risks warrant close attention:

- Low interest rates and compressed credit spreads may contribute to a misassessment of risks, distorting the structures used by economic agents to raise financing and investment. This is evidenced in greater risk-taking by yield-seeking investors and the formation and/or deflation of asset price bubbles;
- Keeping interest rates low for an extended period could undermine certain sectors, especially banking, via a decline in net interest margins, and insurance, affecting companies that previously guaranteed minimum returns well above the interest rates earned on their assets;
- Conversely, a sudden or unexpected normalisation of euro area interest rates could result in a sharp repricing of assets, particularly fixed income instruments. This, in turn, could stifle the economic recovery;
- Funding requirements may not be adequately met during the recovery phase, because financing sources other than bank credit are either underdeveloped or under-regulated, assuming that banks pursue their restrictive lending policies or that the securitisation market remains in the doldrums;
- New companies formed through cross-border M&A deals might decide to relocate their listing market and/or head office.

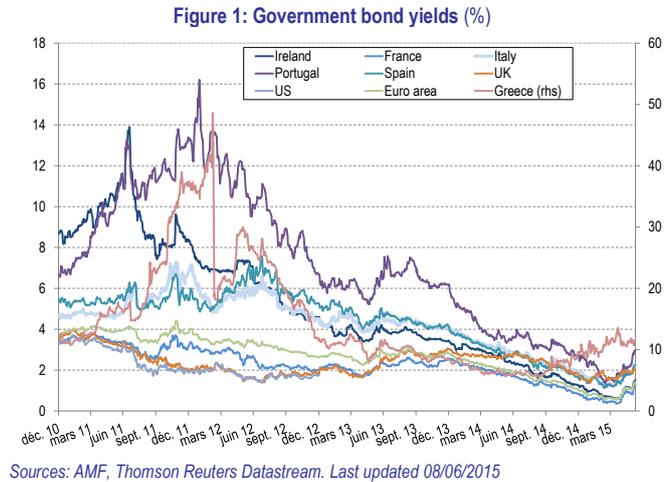
1.1. Financing costs at an all-time low

Amid moderate economic growth and low inflation, the main central banks maintained or stepped up their highly accommodative monetary policies in 2014 and early 2015, including in countries such as the USA and the UK, where a recovery had taken hold. In September 2014 the European Central Bank (ECB) reduced its policy rates to historically low levels, cutting the rate on its main refinancing operations and hence its targeted longer-term refinancing operations (TLTRO)⁵ to 0.05% and taking the deposit facility into negative territory at -0.20%. Further to that decision, in early 2015 the ECB launched an innovative large-scale quantitative easing (QE) programme that included EUR 60 billion in monthly purchases of corporate and public sector bonds, equivalent to a total EUR 1.14 trillion out to September 2016.

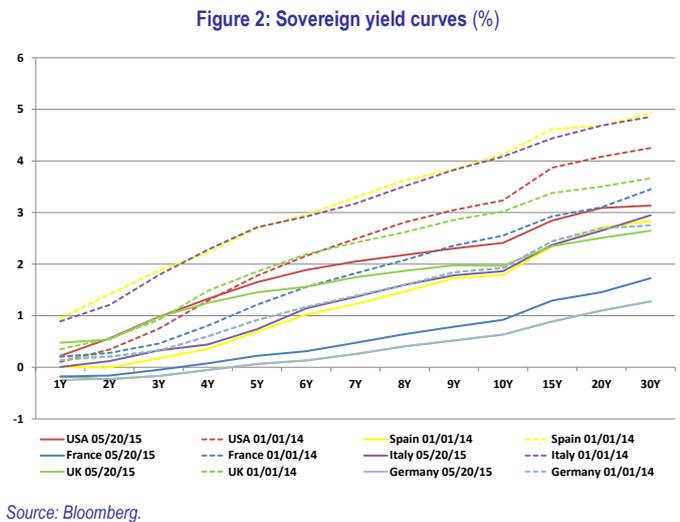
As a direct consequence of QE, nominal yields on government bonds converged at historically low levels across Europe. One notable exception was Greece, plagued since early 2015 by the uncertain outcome of talks with its creditors, the European Union and the International Monetary Fund, and by a steadily worsening economic and fiscal

⁵ TLTROs are quarterly longer-term refinancing operations (maturing September 2018) launched by the ECB in summer 2014. The financing granted to banks, at the same interest rate as that on principal refinancing operations, depends on lending to private-sector agents in the euro area (excluding home mortgages).

outlook. At end-May 2015 the yield on 10-year Greek bonds was hovering around 11%, compared with just 2%-3% in the rest of southern Europe, i.e. Italy, Spain and Portugal.



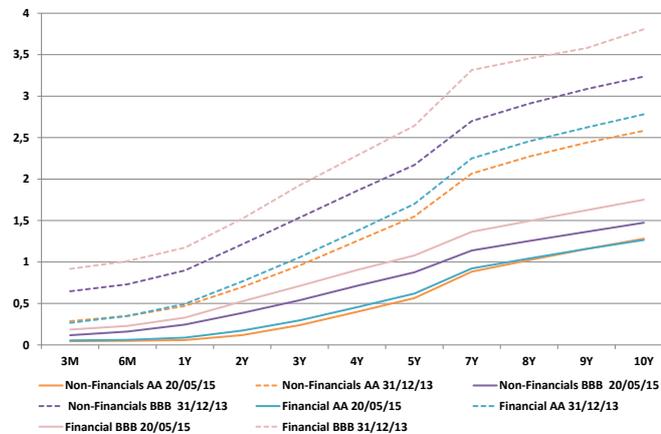
By that date countries such as Germany, Finland and France, whose debts are considered safer, had even managed to refinance at negative interest rates on 4- and even 5-year maturities. Note that despite heightened expectations of forthcoming monetary tightening, yields on US government bonds continued softening until late 2014 because their higher returns made them highly attractive to foreign investors, especially in Europe.



European private bond issuers also benefited from lower interest rates, with some 1- and 2-year issues yielding almost zero (Figure 3)⁶.

⁶ Some issuers, such as Nestlé, were able to issue bonds at negative interest rates in early 2015.

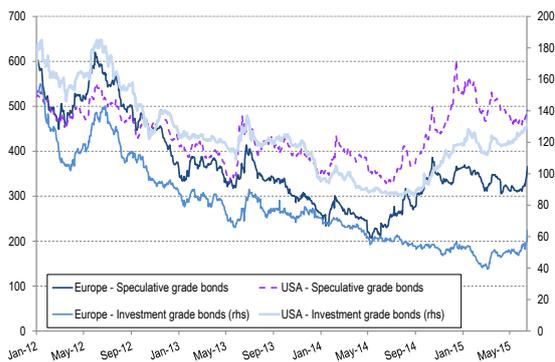
Figure 3: Corporate bond yield curve, by sector and rating (%)



Source: Bloomberg.

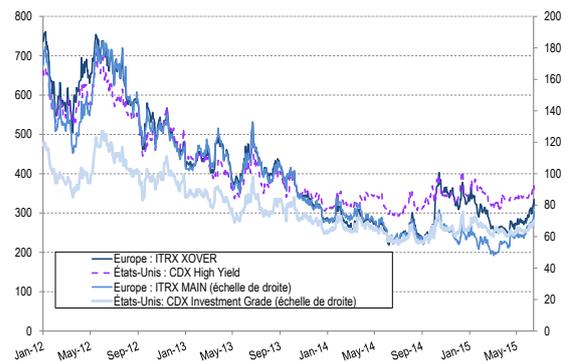
Nevertheless, financing conditions for corporate issuers deteriorated sharply in the second half of 2014. This was especially noticeable for risky US high-yield issues.

Figure 4: Corporate spreads, by rating category (basis points)



Source: Bloomberg. Last updated 15/06/2015

Figure 5: CDS indices on corporate issuers in Europe and the USA (basis points)



Source: Bloomberg. Last updated 15/06/2015

The downturn was mainly due to a sector effect, as credit risk on non-conventional oil producers was re-measured. These companies have built up substantial debts in recent years⁷ and many have been jeopardised by the summer 2014 oil price slump⁸. As a result, the amount outstanding in distressed bonds⁹ in the USA doubled to USD 300 billion in second-half 2014. However, the downward trend stopped in the second quarter of 2015 as prices climbed back to around USD 65 per barrel, more or less the breakeven point for US shale oil exploitation.

Rock-bottom interest rates and compressed credit spreads helped consequentially to ease solvency pressures on some economic agents, particularly governments, thus creating the

⁷ The leverage ratio (i.e. total liabilities over equity) of energy companies rated triple-C or lower reached 76% in December 2014, compared with 66% in 2009 (source: Bloomberg).

⁸ The price of Brent crude fell more than 61% between mid-June 2014 and mid-January 2015, from USD 115/bbl to USD 45/bbl. The decline posed a threat to oil producers, notably non-conventional producers, that use the costliest production techniques.

⁹ Distressed bonds are securities traded on TRACE over 5 days, with a yield more than 10% above government bonds. At end-2014 energy companies accounted for some 15% of the US high-yield bond market, equivalent to around USD 210 billion on a total of USD 1.4 trillion in high-yield debt.

danger that credit risk could be mis-measured. These same factors, combined with large-scale bond buying by central banks, particularly the ECB and the Bank of Japan, may also crimp the supply of some assets, especially corporate bonds, as portfolios are reallocated to non-bond assets not necessarily linked to fundamentals. This in turn could create a price bubble. Keeping a lid on interest rates may also contribute to undermining certain sectors, especially banking, via a decline in net interest margins¹⁰, and insurance, affecting companies that previously guaranteed minimum returns well above the interest rates earned on their assets.

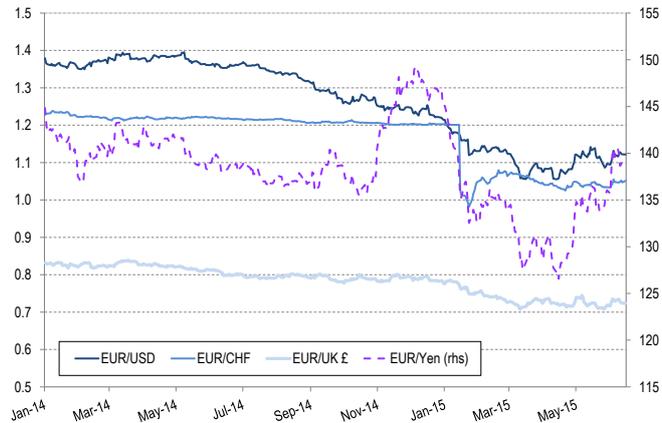
Monetary policies and interest rates aside, the credit market could also be unsettled by the deteriorating solvency of borrowers in the event of macroeconomic shock, such as a sharp slowdown in emerging economies. The resulting impact would be even harsher in countries with unbalanced current accounts and high USD debts (given the dollar's recent run-up and the prospect of a US rate hike) or those that have benefited recently from huge, and inherently volatile, inflows of foreign capital. A further oil price decline could also affect the solvency of resident economic agents in exporting countries that have high production costs (Canada and the USA) or that rely heavily on oil as a resource (Russia), as well as non-resident financial institutions with significant commitments in these markets.

In addition, a sudden or unexpected normalisation of euro area interest rates, resulting either from ECB policy or from the transmission of US monetary policy to the euro area, could result in a sharp repricing of assets, particularly fixed income instruments, with loss of value and possibly extensive reallocations.

The expectation and subsequent announcement of a euro-area QE programme also had a major impact on currency markets. The euro depreciated sharply until the beginning of second-quarter 2015 against key currencies such as the dollar, due to the persistently different economic and monetary outlooks on either side of the Atlantic, and also against the yen and Swiss franc (Figure 6). The latter appreciated sharply as from mid-January 2015 when the Swiss central bank announced it was abandoning the CHF 1.20 floor to the euro ahead of the QE announcement. The bank's decision took markets by surprise and triggered a correction, especially on exporters' stocks; it also increased the debt cost of investors in franc-denominated issues, notably Poland and, to a lesser extent, France.

¹⁰ See below.

Figure 6: Bilateral interest rates against the euro



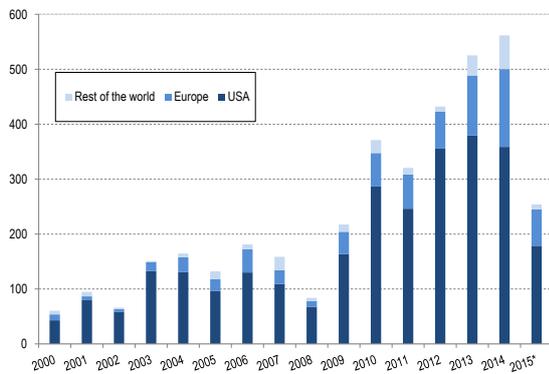
Source: Thomson Reuters Datastream. Last updated 15/06/2015

The quest for yield continued providing strong support for bond issuance in specific segments

1.2. Borrowing methods continued to diversify

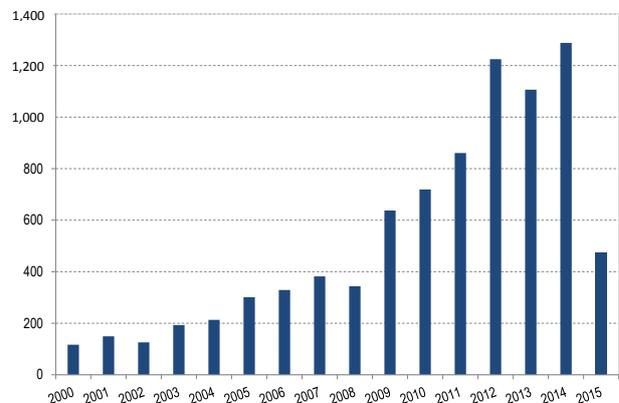
While lower funding costs continued to provide strong support for bond issuance, which stayed buoyant throughout 2014 and early 2015¹¹, the quest for yield was favourable mainly to risky bonds, except in the USA (Figure 7), and to emerging country bonds (Figure 8).

Figure 7: Debt issuance by speculative-rated companies (USD billion)



Source: Bloomberg. Note: Data at 31/05/2015

Figure 8: Corporate debt issuance in emerging countries (USD billion)

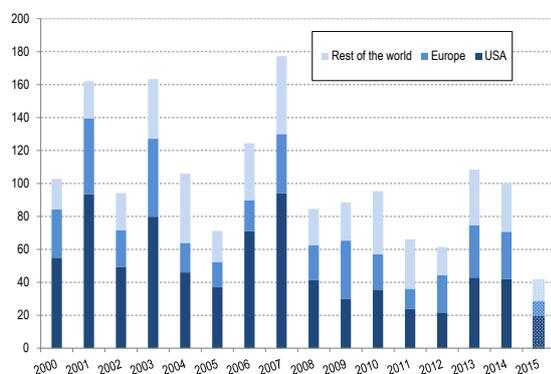


Source: Bloomberg. Note: Data at 31/05/2015

Low interest rates also encouraged non-financial companies to issue hybrid securities, with total issuance worldwide amounting to some USD 100 billion in 2014, close to the 2013 level (Figure 9). In the financial sector, heavy demand for regulatory capital continued to encourage the use of contingent convertible bonds, or CoCos. Issuance surged to EUR 75 billion globally in 2014, and the pace continued into the early months of 2015. Remarkably, the geographical origin of CoCo issuers diversified during the period under review with the arrival of banks from Asia, particularly China. Chinese banks originated 40% of the issues carried out in the first five months of 2015 (compared with 30% in 2014).

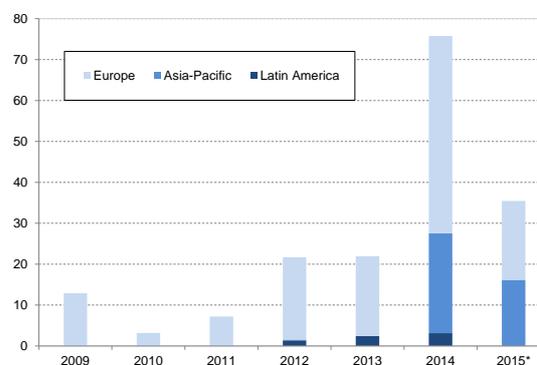
¹¹ These issues amounted to a total USD 4.4 trillion in 2014 for corporate issuers, up 9% on 2013, and remained on that buoyant trend in the early months of 2015.

Figure 9: Global issuance of convertible debt securities (USD billion)



Source: Bloomberg. Note*: Data at 03/06/2015

Figure 10: Global issuance of CoCos (EUR billion)



Source: Bloomberg. Note*: Data at 22/05/2015

European regulators have repeatedly warned investors about the risks of CoCos¹². In particular, the choice of a relative high trigger level can engender substantial risks for CoCo holders, especially when the loss absorption mechanism is based on a reduction in the nominal value. In this case, CoCo investors may incur losses well before the shareholders of the issuing bank do, even though it is the shareholders who should, in theory, be the first to bear such losses¹³. This risk seems to have subsided recently, since the proportion of CoCo issues with nominal-based loss absorption and a high trigger has trended downwards since early 2014.

Alternatives to bank financing continued to develop

By and large, major European countries continued to reorganise their borrowings, firstly by replacing bank debt with market-based debt and secondly by extending maturities. Although small, medium and mid-tier companies are structurally more dependent on banks, they kept up with this trend, notably through private placements. Primary issuance on the Euro PP¹⁴ market consolidated in 2014, with volumes remaining stable at EUR 3 billion. Although issuers vary in terms of size and market experience (i.e. there are regular and first-time issuers), most are mid-tier firms. In addition to bond issuance, other alternative financing sources to bank loans continued to develop in 2014 – for instance, crowdfunding – through loans and equity investment. For the time being, however, this fast-growing market involves relatively small amounts: EUR 152 million was raised in France in 2014, twice as much as in 2013, chiefly through loans¹⁵.

The recent trend toward bank disintermediation should be construed with caution because it is partly due to cyclical factors such as interest rate levels, corporate deleveraging and slacker demand in a gloomy economic environment. And, although bank credit has certainly contracted, it is still the main form of corporate debt in Europe. From this

¹² The AMF has addressed this issue regularly in its Risk and Trend Mapping publications since 2010. See also ESMA (2014): "Potential Risks Associated with Investing in Contingent Convertible Instruments". In addition, the UK Financial Conduct Authority announced in August 2014 that it was suspending sales of CoCos to private investors.

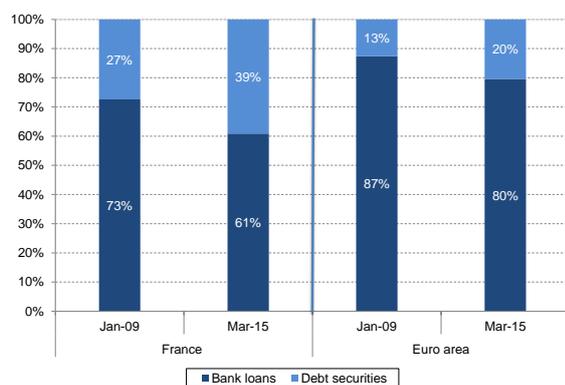
¹³ This situation may be central to potentially costly legal and/or financial clashes between CoCo holders and shareholders. The latter may have no incentive to issue equity securities as the trigger level approaches, preferring to leave CoCo holders to absorb the first losses (and thus dispossess them), at the risk of compromising the bank's recapitalisation and, ultimately, its survival (Demartini, Garrau and Rocamora (2014): "Recent developments on the contingent convertible bond market", AMF Economic and Financial Newsletter, 2014-3).

¹⁴ A Euro PP (Euro Private Placement) is a medium- or long-term financing arrangement between a listed or unlisted company and a small number of investors.

¹⁵ Source: *Association financement participatif France*, the French crowdfunding advocacy group. In 2014 a total of EUR 152 million was raised in France, 58% in the form of loans, 25% in donations and 17% in shares. At mid-June 2015 a total of 54 AMF- or ACPR-approved crowdfunding platforms were in operation, 38 of them authorised for loan-based project financing.

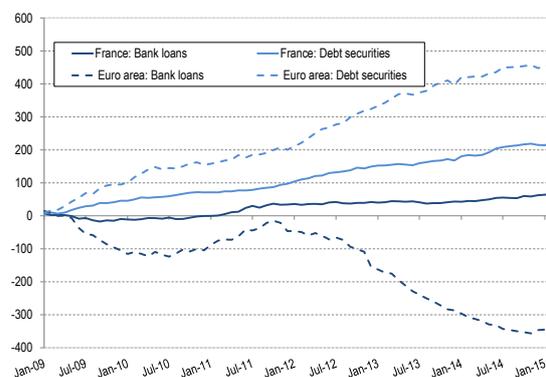
perspective, it is interesting to note the singular position of France, where bank intermediation has plummeted and non-financial companies still have a relatively high proportion of market-based debt (Figure 11). The situation is all the more remarkable since corporate bank debt has risen since early 2014, unlike in most other European countries (Figure 12).

Figure 11: Market-based debt compared with bank debt in the non-financial sector in France and the euro area (%)



Sources: ECB, Banque de France, AMF calculations.

Figure 12: Aggregate debt flows in the non-financial sector in France and the euro area (EUR billion)



Source: ECB, AMF calculations. Note: Last updated 2015

Nevertheless, business financing methods are bound to change significantly due to factors of a more structural nature, including prudential requirements for banking activities and the diversification of funding sources, one of the aims of the Capital Markets Union (CMU) project. The development of alternatives to bank credit may help improve access to alternative types of funding, especially for small and medium sized companies, chiefly by diversifying the sources of financing and lowering the related costs. But this trend will also entail a gradual and partial transfer of risk from banks to other market participants, notably savers, companies and non-bank financial institutions.

Attention should therefore be paid to two risks. The first is that funding requirements may not be adequately met during the recovery phase, because sources other than bank credit are either underdeveloped or under-regulated, assuming that banks pursue their restrictive lending policies or that the securitisation market remains in the doldrums. However, in light of recent surveys showing that banks seem to have substantially eased their lending requirements in early 2015 in the euro area¹⁶, this risk seems to be limited. The second risk is that spread compression and falling risk aversion in recent months may lead investors to underestimate the credit risk to which they are exposed. In any case, market regulators have a duty to keep abreast of the trend towards disintermediated financing, making sure it takes place in a balanced way within a framework that is safe and secure both for issuers and for investors. In particular, investors must be given proper protection, access to a diverse array of investment products and reliable advice so that saving is channelled into long-term projects and business financing. It is also necessary to ensure that small, medium and mid-tier companies have easier access to diversified, efficient capital markets at local level and, for that purpose, to encourage high-quality investment research and analysis. To that end, the public disclosures made when issuing securities have to be improved. One way of achieving this is to revisit the Prospectus Directive, focusing in particular on clarity, making sure regulatory requirements are tailored to an issuer's size, and simplifying the issuance process by adopting a streamlined regime for modest-sized

¹⁶ Source: ECB Bank Lending Survey, April 2015.

**New non-banking
firms make inroads
in lending to the
economy**

secondary issues by companies that are already listed and have a track record for disclosing high-quality information on a regular basis¹⁷.

That banks no longer play such a prominent role in credit origination does not necessarily mean they have forsaken this classic function; instead, they have changed the way they finance economic activity. Going forward they are likely to strengthen their presence as arrangers/structurers, advisers or investors in the fixed income market or in connection with credit funds, in concert with other non-bank financial institutions such as insurance companies¹⁸ and asset management funds¹⁹.

As regards lending, asset managers throughout Europe seem to have become more heavily involved in this activity in recent times. Although investment funds in France are not yet allowed to make loans in the narrow sense, this function may or is due to become permissible in other European Union member states²⁰, subject to regulatory requirements that vary considerably from one jurisdiction to another. At European level, this has resulted in the creation of categories of funds that are explicitly entitled to make loans, i.e. the European Venture Capital Fund, or EuVECA²¹, European Social Entrepreneurship Fund, or EuSEF²², and, in the near future, the European Long-Term Investment Fund (ELTIF)²³. Ongoing discussions on CMU, among other issues, could focus on how to align different countries' practices in this regard or even to create a specific category of funds for loan-issuing vehicles. These same developments may also contribute, at least partially, to meeting long-term financing requirements or satisfying the needs of small and medium sized companies. However, this activity needs to be regulated so as to mitigate the risk of regulatory arbitrage against banking activities subject to prudential requirements on credit intermediation. Other issues to be addressed include the expertise of managers (credit origination is an activity in and of itself), how to collect loan repayments and, more generally, how to manage credit and liquidity risks. For instance, since the assets concerned are usually and inherently long-term and illiquid, investment funds that make loans ought to be closed-end funds.

¹⁷ AMF response to the European Commission consultation on the reform of the Prospectus Directive, 13 May 2015.

¹⁸ Pursuant to the August 2013 reform of the French insurance code, insurers are now permitted to invest up to 5% of assets in companies, including listed or unlisted small and medium sized firms, either directly or through a special credit fund, *fonds de prêts à l'économie*. The decree of 17 December 2014 extended this authorisation to mutual insurers and employee benefit institutions, while broadening the range of the funds' investable underlying assets.

¹⁹ Note that asset management funds are permitted to invest in receivables, a possibility broadened when the AIFM Directive was transposed into French law. However, the regulatory framework depends on the fund category in question. For instance, retail investment funds can invest up to 10% of assets in receivables. Professional specialised investment funds may also invest in receivables and are not subject to the 10% cap; however, these funds may be sold to professional investors only.

²⁰ Belgium, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Germany, Ireland, Italy (government bill), Latvia, Luxembourg, Malta, Spain

²¹ EuVECAs are governed by Regulation (EU) 345/2013 of 17 April 2013.

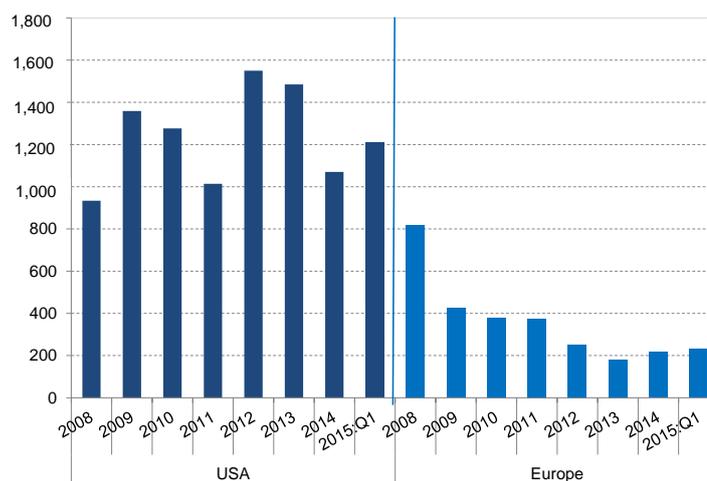
²² EuSEFs are governed by Regulation (EU) 346/2013 of 17 April 2013.

²³ The Council of the European Union adopted the ELTIF Regulation on 20 April 2015.

1.3. The European securitisation market is still flat

Securitisation activity accelerated in the USA in 2014, especially in asset-backed securities (ABS) and collateralised debt obligations, due to an upturn in the country's business cycle. In Europe, by contrast, securitisation remained flat overall, excepting a slight improvement in issuance of mortgage-backed securities (Figure 13).

Figure 13: Securitisation vehicle issuance in Europe and the USA
(annualised data in EUR billion)



Source: AFME.

Nonetheless, several factors may help put Europe's downtrend into reverse. Aside from a euro-area economic recovery and the ECB's Asset-Backed Securities Purchase Programme, underway since September 2014, the securitisation market could benefit in the near term from an easing of the prudential constraints that have so far weighed more heavily on this market than on other assets²⁴. In the medium term, ongoing international discussions at the Basel Committee and the International Organization of Securities Commissions (IOSCO), as well as in Europe in connection with CMU, are seeking to rebuild investor confidence by promoting simple, transparent and standardised (STS) securitisation. These efforts should also help revive the market. In a report put out for consultation in late 2014, a working group co-led by the Basel Committee and IOSCO recommended 14 criteria, pertaining to underlying assets, the securitisation vehicle itself and the accountability of market participants, which could serve as a basis for a European framework on securitisation²⁵.

The AMF took advantage of a European Commission consultation in February 2015 to set out its priorities.²⁶ First and foremost, it wants STS securitisation to be certified by an independent organisation – approved by the competent national authority – that would be responsible for sound governance of the securitisation vehicle. In this case, responsibility for verifying the retention of net economic interest could be assigned to the market participant responsible for the securitisation vehicle's governance or to the authority that certified its

²⁴ See Risk and Trend Mapping (2014) pp 25-26. The regulatory mismatch as regards high-quality securitised assets was narrowed by the late-2014 publication of the delegated acts for Solvency 2 and the Liquidity Coverage Ratio. See also the EBA Discussion Paper on simple standard and transparent securitisations, October 2014).

²⁵ Basel Committee on Banking Supervision and International Organization of Securities Commissions (2014): "Criteria for identifying simple, transparent and comparable securitisations", Consultative Document

²⁶ AMF response to the European Commission Green Paper: "Building a Capital Markets Union", 15 May 2015.

STS status²⁷. As a prerequisite for establishing a European passport, the eligibility criteria for receiving STS securitisation status should be determined on a harmonised basis and also be separate from the credit risk on the underlying assets. The certification process should not be overly restrictive so as not to hamper the recovery of the securitisation market and hence the financing of economic activity²⁸. More broadly, the definition of STS securitisation could be enshrined in a single set of Europe-wide regulations in order to make certain that the current geographical and sector-based regulations are less fragmented and also to foster fair competition among market participants in all member states.

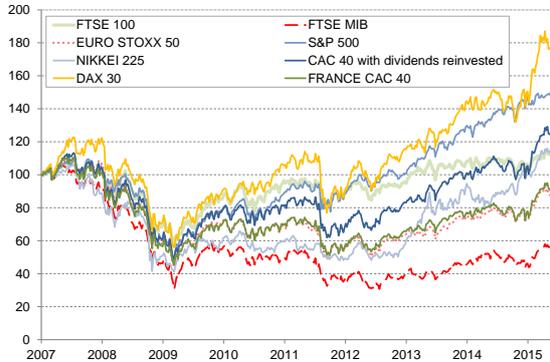
1.4. Remarkably buoyant equity markets

Spurred by a hunt for yield, investors moved into listed equity

Stock indices in developed countries rallied to fresh historic highs on the back of brighter economic prospects and accommodative monetary policies. Spurred by a hunt for yield and a decline in risk aversion, investors moved into equities. This movement needs to be monitored in view of the very real risk of mispricing that may arise in the absence of a correction, if the euro area struggles to recover or if the economic slowdown in emerging countries were to continue. This would create the risk of financial and economic cycles falling out of sync.

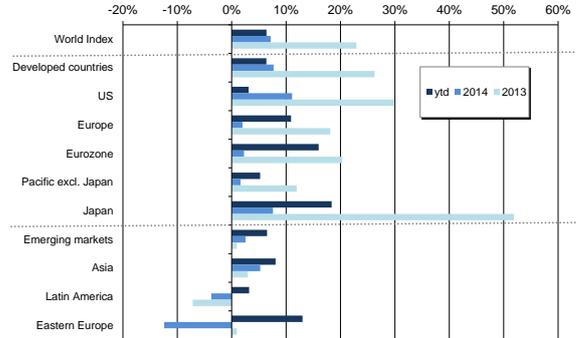
Euro-area stocks have been remarkably buoyant since the start of 2015, lifted by late January's QE announcement. In addition, the weaker euro has provided support for companies that are listed in euros but report their earnings in dollars.

Figure 14: Developed country stock indices
(1 January 2007 = 100)



Source: Thomson Reuters Datastream. Last updated: 15/06/2015

Figure 15: Main stock indices, by geographical area
(MSCI indices at 03/06/2015, %)



Source: Thomson Reuters Datastream, AMF calculations.

²⁷ Regulation (EU) No. 575/2013 (CRR) requires one of the parties to a securitisation transaction to retain a 5% net economic interest. The aim of this measure is to prevent a repetition of the excesses stemming from the uncontrolled spread of the originate-to-distribute model, which triggered the subprime crisis. At present, investors in a securitisation vehicle are required to ensure that the retention requirement has been satisfied before proceeding with their investment. In practice, however, this is very hard to verify, so investors rely on the declarations made by the entity responsible for the retention. The AMF's position on this matter differs from that of other regulators, including the EBA, which recommends that investors be responsible for ensuring compliance with the risk retention requirement, based on disclosures by the parties involved ("EBA report on securitisation risk retention, due diligence and disclosure", 22/12/2014).

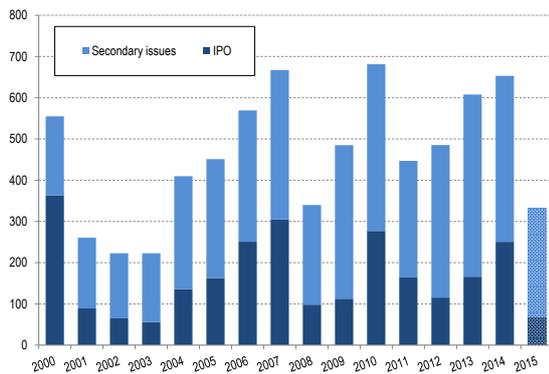
²⁸ The purpose of STS certification should be to make certain that, going forward, a maximum number of vehicles are organised on the basis of STS criteria, thus ensuring a sound basis for all securitisations. The AMF is firmly opposed to the position that STS securitisation should be confined solely to the highest-rated underlying assets. On the contrary, an STS securitisation should be permitted to include assets with varying degrees of risk, on condition that the vehicle is robust and that the securitised liabilities have been properly allocated.

In addition to substantially positive market performances, shareholders continued benefiting from companies' generous payout policies in 2014. According to Henderson Global Investors, total shareholder dividend income rose 10.5% to USD 1.167 trillion. In the USA, S&P 500 companies paid out USD 375 billion in 2014, up 15% on the previous year (source: Factset). And in France, dividends rose 25% to EUR 46 billion²⁹. At the same time, listed companies bought back their shares on a large scale. Buybacks by S&P 500 firms amounted to USD 565 billion, a rise of 18% on 2013 according to Factset. In France, gross share buybacks by CAC 40-listed companies amounted to some EUR 20 billion, some 25% more than in 2013 (source: AMF).

Record capital-raising on dynamic IPO activity

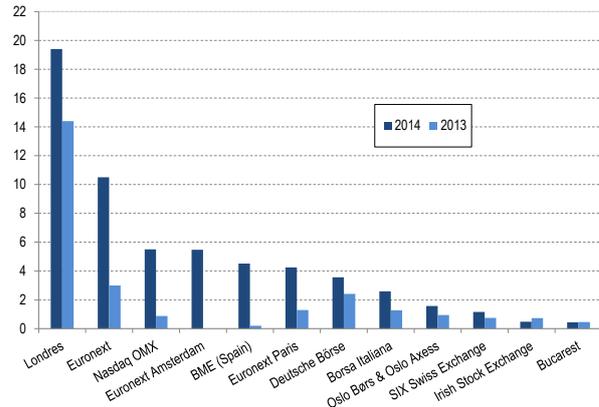
Buoyant equity markets encouraged new share issuance. Total capital-raising for the whole of 2014 grew by 7% to nearly USD 650 billion. This mainly reflects a dynamic trend in initial public offerings (IPOs), which rose 50% year-on-year to USD 250 billion across all geographical areas. As they did in 2014, private equity funds continued selling their assets into the market, accounting for almost half the capital raised during the year (source: Ernst&Young)³⁰. IPO volume in Europe reached EUR 50 billion in 2014, twice as much as in the previous year, with London accounting for 40%. However, 2014 saw a shift of balance between the UK and continental Europe, particularly on Euronext. In Paris, IPO capital raising tripled during the year, from EUR 1.4 billion in 2013 to EUR 4.3 billion in 2014, despite a marked second-half slowdown³¹.

Figure 16: Capital raised on global equity markets (USD billion)



Source: Bloomberg. Note*: Data at 03/06/2015

Figure 17: Capital raised through IPOs in Europe in 2014, by listing market (EUR billion)



Source: PwC IPO Watch Europe 2014

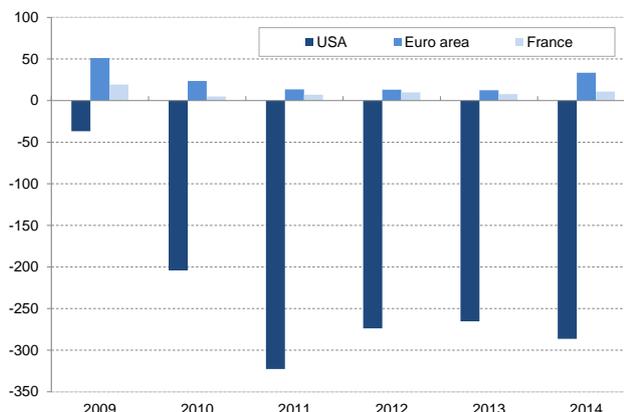
Be that as it may, the robust pace of equity capital raising should be viewed in light of the increase in share buybacks. In consequence, the relative importance of equity markets in net corporate financing is still small within the euro area and is deep in negative territory in the USA.

²⁹ Including EUR 6.5 billion from the distribution of Hermès shares by LVMH.

³⁰ "EY Global IPO Trends", 2014 Q4.

³¹ Nearly EUR 1 billion was raised on Euronext Paris in the first five months of 2015 (source: Euronext).

Figure 18: Net equity issuance (EUR billion)



Sources: US Federal Reserve, European Central Bank, Banque de France

M&A activity at highest level since 2007

M&A activity remained brisk in 2014 and the early months of 2015, reaching the highest level since the onset of the financial crisis. According to Dealogic, deal volume announced for first-quarter 2015 alone rose 24% year on year to exceed an estimated USD 900 billion (after USD 3.6 trillion for the whole of 2014). Activity was remarkably strong in the USA, as in 2013. In France, M&A volume is estimated to have doubled to nearly USD 250 billion in 2014 (source: Thomson Reuters).

Table 1: M&A deal rankings
(deals announced between 1 Jan 2014 and 31 May 2015, completed or still underway at 31 May 2014)

Announced	Deal status	Target (Country)	Value (USD billion)	Acquirer (Country)
04/08/2015	Underway	BG Group PLC (RU)	73.3	Royal Dutch Shell PLC (NL)
11/17/2014	Completed	Allergan Inc. (USA)	52.2	Actavis plc (USA)
03/25/2015	Underway	Kraft Foods Group Inc. (USA)	50.5	HJ Heinz Co (USA)
05/18/2014	Underway	DIRECTV (USA)	48.2	AT&T Inc (USA)
08/10/2014	Completed	Kinder Morgan Energy Partners LP (USA)	36.4	Kinder Morgan Inc (USA)
06/15/2014	Completed	Covidien PLC (USA)	34.1	Medtronic PLC (USA)
04/08/2015	Underway	Perrigo (USA)	32.2	Mylan (USA)
11/17/2014	Underway	Baker Hughes Inc (USA)	30.2	Halliburton Co (USA)
04/07/2014	Underway	Lafarge SA (France)	27.6	Holcim Ltd (SW)
07/17/2014	Underway	Lorillard Inc (USA)	19.5	Reynolds American Inc (USA)

Source: Bloomberg.

Another highlight is the apparent beginning of a consolidation phase in the oil sector, in response to the per-barrel price decline. For example, Royal Dutch Shell announced it was acquiring BG Group for USD 73 billion. In addition to a higher average deal size, recent trends have shown that cross-border M&A is buoyant, reflected in a global 54% year-on-year rise to USD 315 billion in first-quarter 2015. Euro-area companies have become key targets owing to the decline in the single currency since second-half 2014, raising the risk that the post-merger entities will relocate their listing market and/or head office³². Broadly, the volume of deals targeting European companies doubled to EUR 110 billion during the year to the first-quarter 2015.

³² This risk could materialise, for example, in the case of the Lafarge/Holcim merger, already discussed in the 2014 edition of Risk and Trend Mapping, or the acquisition of Alcatel Lucent by Nokia, announced in spring 2015.

1.5. The situation in the banking system

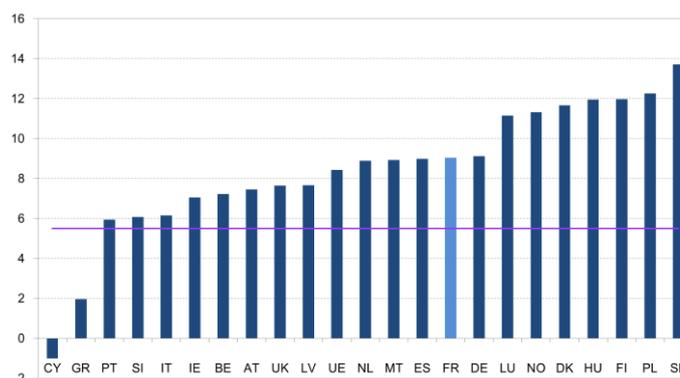
Macroprudential regulation and Europe's resilient banks

Banking Union came into force in Europe in 2014 on the back of an initiative launched in 2012. The union is based on three foundations: the Single Supervisory Mechanism (SSM), whereby the ECB is the prudential supervisor; the Single Resolution Mechanism (SRM), which establishes a formal basis for preventing and dealing with bank crises; and a harmonised Deposit Guarantee System. Before Banking Union came into being, the ECB made a comprehensive assessment of the consolidated balance sheets of the main euro-area banks³³, including 13 French banks³⁴. The assessment included a stress test initiated and coordinated by the European Banking Authority (EBA). The aim of this prudential exercise was to test the banks' ability to withstand a number of predefined macroeconomic risk scenarios.

The EBA devised the test methodology using twin scenarios: a baseline scenario developed by the European Commission, and an adverse scenario prepared by the European Systemic Risk Board (ESRB) in collaboration with the national competent authorities, the EBA and the ECB. Designing the adverse scenario involved weighing up the main threats to financial stability. Four main risks were selected: (i) emerging country risk, (ii) a further deterioration of credit quality in certain countries, (iii) the risk that stalling reforms would jeopardise the recovery of public finances, and (iv) the lack of necessary bank balance sheet repair. The adverse scenarios may differ from country to country, depending on individual weaknesses. Thus the scenario for France is based on slacker growth, with GDP falling 6.3% below baseline after three years, a 25% drop in property prices and a 140 bp upside shock to French sovereign yields. The target for bank capital is a Common Equity Tier 1 (CET1) ratio of 8% in the baseline scenario and 5.5% in the adverse scenario.

The overall results point to a degree of variance between countries. Under the adverse scenario out to 2016, Greek and Cypriot banks have CET1 ratios well below the requisite levels, while Portugal, Slovenia and Italy show signs of weakness (Figure 19).

Figure 19: Average CET 1 ratios, by country, in an adverse scenario (%)



Source: EBA.

³³ The assessment was based on accounting data at 31 December 2013 for 130 European banks, with assets accounting for 81.6% of total banking assets in the euro area.

³⁴ BNP Paribas, Société Générale, Groupe Crédit Agricole, BPCE, Groupe Crédit Mutuel, La Banque Postale, Banque Publique d'Investissement, Banque RCI, Banque PSA Finance, Société de Financement Local, Caisse de Refinancement Local, Banque Centrale de Compensation (LCH Clearnet) and HSBC France.

Balance-sheet stress tests show French banks are shock-resilient

The stress test results show that French banks prove resilient in the adverse scenario, maintaining a 9% CET1 ratio (the weighted average ratio for French banks). France is thus on a par with Spain and Germany and above the 8.4% European average.

Of the 13 French banks tested, 12 had sufficient CET1 ratios under the adverse scenario (Table 2). The only French bank to fall short was Caisse de Refinancement de l'Habitat (CRH). However, CRH increased its capital in 2014 and now complies with the requisite thresholds.

Table 2: CET1 ratios of French banks (%)

(en %)	2013	2016 adverse scenario	2016 baseline scenario
Banque PSA Finance	14.1	12.8	14.2
BPI France (Banque Publique d'Investissement)	30.4	30.7	32.9
C.R.H. - Caisse de Refinancement de l'Habitat	5.7	5.5	5.7
Groupe Crédit Mutuel	13.8	12.9	15.7
La Banque Postale	10.0	9.2	10.7
RCI Banque	11.7	9.1	12.1
Société de Financement Local	23.3	13.2	25.8
BNP Paribas	10.5	8.1	10.5
Groupe Crédit Agricole	10.8	8.8	11.9
Groupe BPCE	10.0	7.0	10.1
Société Générale	10.7	8.1	10.6
Total, French banks (weighted average)	11.3	9.0	11.8

Source: EBA

The CET1 ratio for the French banks covered by the ECB will continue to edge up, reaching 11.8% in 2016 under baseline scenario assumptions. If the adverse scenario were to materialise, the ratio would slip to 9% but still exceed the mandatory level.

The difference between the French banking sector's CET1 ratios in 2013 and in 2016 under the adverse scenario can be explained by both a decline in the numerator and a rise in the denominator. The numerator would fall because of the losses arising from credit risk and from the trading portfolio. At the same time, the denominator would rise on an increase in risk-weighted assets, due to a deterioration in regulatory risk parameters and weaker credit ratings.

Bank profitability amid unfavourable conditions

Banks had to cope with a number of regulatory and prudential constraints in 2014. In Europe, the fourth Capital Requirements Directive (CRD IV) and the Capital Requirements Regulation (CRR) were implemented on 1 January 2014 pursuant to new Basel III-based prudential regulations. From a macroprudential perspective, CRD IV sets a number of new mandatory capital requirements, including a countercyclical buffer and a systemic risk buffer. The CRR sets minimum capital requirements for credit, market and operational risks; it also lays down a short-term liquidity requirement, the Liquidity Coverage Ratio (LCR), effective 2015, and a structural long-term liquidity ratio, the Net Stable Funding Ratio (NSFR). While the Regulation does have the advantage of making the banking industry more resilient, banks may find themselves constrained in their core business of maturity transformation and long-term lending, which could prove more costly in terms of capital. These new constraints

pose two main questions: who will provide long-term financing, and how will banks adjust to the new prudential rules?

An additional consideration is that banks are currently doing business in a low interest rate environment. The ECB's decision to cut policy rates to negative levels and the subsequent adoption of quantitative easing have taken the euro area into the uncharted waters of ultra-low interest rates. The yield curve has flattened since the end of 2013, putting pressure on banks' net interest margins (Figure 20) and hence their profitability. Since transformation gives assets a longer maturity than liabilities, net interest margin is positively correlated with the spread between long-term and short-term interest rates. Consequently, a decline in long rates will incentivise clients to renegotiate their loans or switch banks in order to get a more advantageous interest rate. In parallel, the interest earned on deposits cannot fully adjust to the reduction in short rates. This means that banks have to offer attractive deposit rates on savings while granting long-term loans at competitive rates. Furthermore, the current macroeconomic situation is hampering banks' business insofar as weak economic growth has cramped credit demand from households and from businesses.



Sources: Consolidated financial statements of 4 banking groups, AMF.

Banks' net income under pressure, curtailed by exceptional expenses

Against this backdrop, French banks³⁵ reported an aggregate net profit of EUR 9.6 billion in 2014, down 30% on the previous year (Table 3). This decline should be seen in perspective, however, owing to exceptional charges that undermined profitability. Stripping out the EUR 6 billion³⁶ fine imposed on BNP Paribas as a result of litigation for dollar trading, the EUR 708 million charge taken by Crédit Agricole on its holding in Banco Espírito Santo, and the EUR 525 million write-down by Société Générale of the acquisition value of Rosbank, aggregate net profit amounted to EUR 16.9 billion. This represents a 15% rise on the prior year.

³⁵ Unless otherwise stated, the analysis concerns the four largest French banking groups: BNP Paribas, Société Générale, BPCE and Crédit Agricole SA.

³⁶ Under the terms of the settlement with the US authorities, BNP Paribas is to pay a total of USD 8.97 billion (EUR 6.55 billion). In view of the provisions that the bank has already set aside, the overall cost of settling the dispute amounted to EUR 6 billion for 2014.

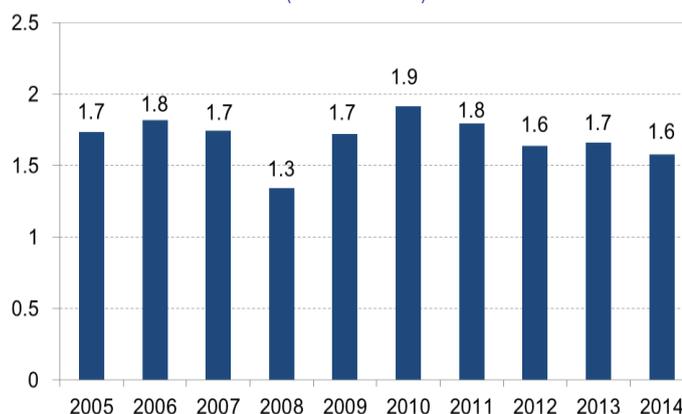
Table 3: Intermediate operating totals
(EUR billion)

	2014	2013	Change
Net banking income	101.8	98.2	3.7
Operating expenses	70.0	68.6	1.9
Gross operating income	31.9	29.6	7.7
Cost of risk	10.7	12.6	-15.7
Operating income	21.2	17.0	25.1
Other income (+) and expense (-)	-5.2	1.9	-376.8
<i>o/w exceptional items</i>	7.2	0.8	806.4
Pre-tax profit	16.0	18.8	-14.9
Tax	6.4	5.2	23.1
Net profit	9.6	13.7	-29.7
Net profit excluding exceptional expense	16.9	14.5	16.3

Sources: Consolidated financial statements of 4 banking groups, AMF.

The increase in earnings net of exceptionals was due mainly to higher revenues. Net banking income³⁷ rose 3.7% in value compared with 2013; however, as a percentage of total assets, it declined in the wake of a slight increase in 2013. Total assets grew by 9.4% between 2013 and 2014.

Figure 21 : Aggregate net banking income of 3 French banks³⁸
(% of total assets)



Sources: Consolidated financial statements of the 3 groups, AMF.

For 2014, net banking income was 1.6% of total assets, the lowest level since 2008 (Figure 21). The relative decline is partly due to the falls in net interest margin (Figure 20) and fee and commission income (Figure 22).

The contraction in net interest margin was clearly caused by the flatter yield curve, as discussed above. This movement may intensify if the current low interest-rate regime persists for a lengthy period. Moreover, fee and commission income is trending downwards, impacting net banking income even harder. Compared with major European banks³⁹, the French banking sector derives less of its income from intermediation and more from fees and commissions.

³⁷ Net banking income is the difference between banking income and operating expenses. More precisely, it is the sum of net interest margin, net fees and commissions, net gains on financial instruments and net income from other operations.

³⁸ BPCE was formed in 2009, so the analysis for the period prior to 2009 is based on aggregate data for the other three French groups: BNP Paribas, Société Générale and Crédit Agricole SA.

³⁹ Data taken from Key Risk Indicators published by the EBA in its risk dashboard.

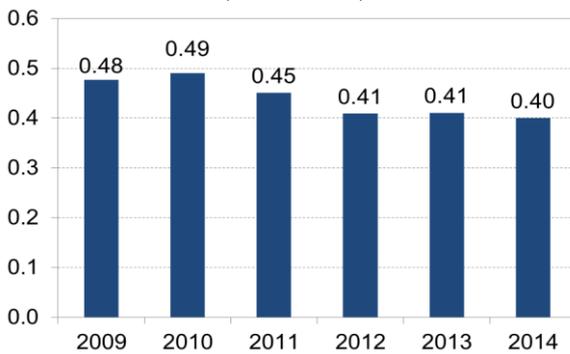
The proportional decline in net interest income, fees and commissions relative to total assets was partially offset by gains on financial assets. Net gains on these amounted to 0.36% of total assets for 2014, compared with 0.32% in 2013. Income from banks' other activities, such as real estate, have become marginally important, averaging just 0.02% of total assets in 2014 compared with 0.05% in 2013.

Higher net banking income, in value terms, offset the rise in general and administrative expenses, which increased by 1.9% between 2013 and 2014 (Table 3) even though banks introduced a number of cost-cutting programmes.

Steep fall in cost of risk in the French banking sector

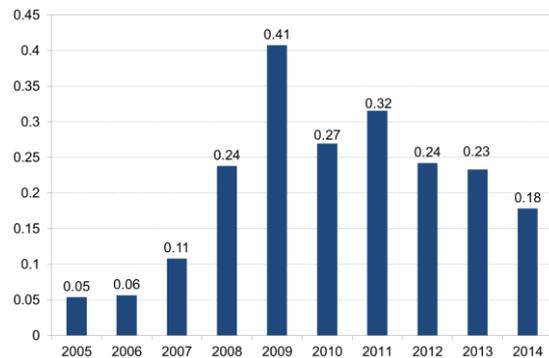
Net income was also lifted by a value-term increase in net banking income and above all by a sharp fall in risk-related cost⁴⁰ (Figure 23). For the four banks under review, the cost of risk declined by 15.7% to EUR 10.7 billion EUR in 2014. And as a percentage of total assets, it fell to the lowest level since 2008 (Figure 23) on a sharp drop in net impairment charges⁴¹.

Figure 22: Net fee and commission income (% of total assets)



Sources: Consolidated financial statements of the 4 groups, AMF

Figure 23: Aggregate cost of risk for three French banks⁴² (% of total assets)



Sources: Consolidated financial statements of the 3 groups, AMF.

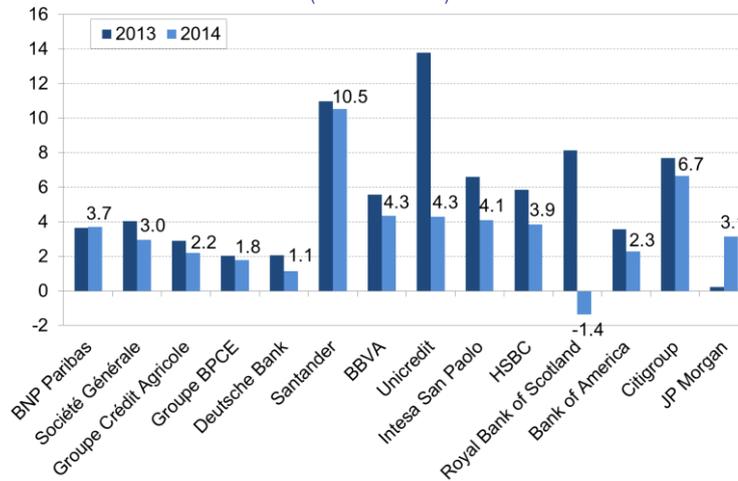
A closer analysis of the cost of risk shows the situation varying from bank to bank (Figure 24). BNP Paribas is the only French institution to report a slight increase in this item, caused by a rise in bad debts (EUR 686 million). The results of the other French banks are in line with those of their foreign counterparts, which, with the exception of JP Morgan, reported an across-the-board fall in the cost of risk. Accordingly, owing to the slight rise in net banking income in value terms and a steep fall in the cost of risk, French banks saw a 15% year-on-year rise in pre-exceptional net profit, despite a 23% jump in tax.

⁴⁰ Cost of risk is the difference between allocations to and reversals of provisions for banking risks (in particular, credit and market risks).

⁴¹ Cost of risk declined sharply between 2013 and 2014 on a reduction in payment risk provisions. This is because French banks had set aside substantial provisions ahead of the October 2014 AQR, some of which they subsequently reversed when the results of the stress tests proved satisfactory.

⁴² BPCE was formed in 2009, so the analysis for the period prior to 2009 is based on aggregate data for the other three French groups: BNP Paribas, Société Générale and Crédit Agricole SA.

Figure 24: Cost of risk for major international banks
(% of total assets)



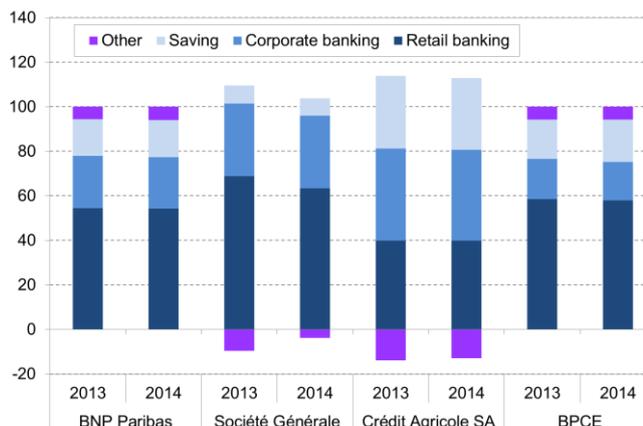
Sources: Bloomberg, consolidated financial statements of the 4 French groups

Banks refocus due to regulatory constraints and an unfavourable macroeconomic environment

Retail banking income under pressure, in contrast to higher income from asset management and CIB

In response to regulatory requirements, banks reshuffled their business activities, drastically reducing their held-for-trading financial instruments and increasing their central bank deposits. At the same time, they saw a rise in retail deposits and in claims on customers. This enabled them to reduce their total risk-weighted assets and ready themselves for the introduction of new liquidity ratios. In addition, the main French banks adopted sweeping cost-savings plans based on spin-offs, pooling arrangements and staff reductions. In sum, banks have refocused their business by relying more on retail banking and less on capital markets activities. But this trend seemed less intense in 2014. A combination of record-low interest rates and sluggish growth put pressure on retail banking income by curbing credit demand and dampening interest margins (net banking income from retail business contracted by 0.05% between 2013 and 2014). In consequence, banks sought different sources of income, notably from asset management, insurance, and corporate and investment banking (CIB) (Figure 25).

Figure 25: Net banking income, by business⁴³ (%)



(*) "Saving" includes asset management and insurance
Sources: Consolidated financial statement of 4 groups, AMF.

As a result, income from CIB and from insurance and asset management rose 1.3% and 3.5%, respectively, between 2013 and 2014. The uptrend gathered momentum in first-quarter 2015, with the four main French banks reporting an aggregate 9.1% rise compared with the same period in 2014 (despite paying their first contribution into the Single Resolution Fund⁴⁴), driven by CIB and record net sales of asset management products.

Banks thus seem to be on a sound footing: the sector's pre-exceptional profits are rising and the outcome of the stress tests shows it can withstand shocks, notwithstanding regulatory and cyclical constraints. That said, some risks and uncertainties remain:

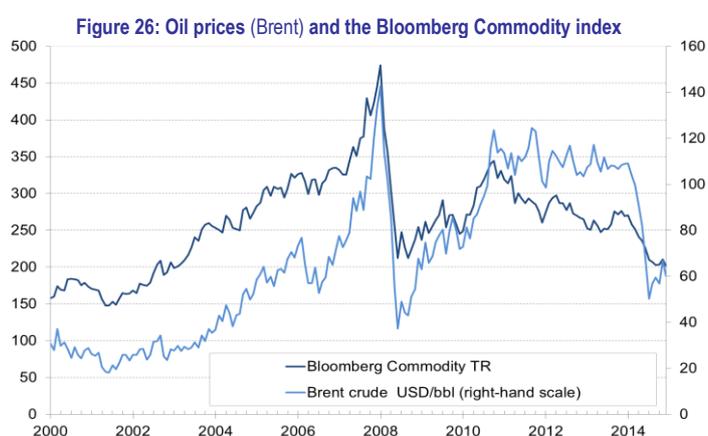
- ▶ If the low interest rate regime persists, it could jeopardise interest margins and thus long-term profitability. Spurred by competition, banks are offering loans at competitive rates while still paying attractive rates of interest on deposits, a situation that is likely to squeeze the amount of income earned from transformation. When interest rates do return to normal, banks' performances may come under additional pressure unless the higher rates can be passed through quickly to loans;
- ▶ Regulatory pressures are changing the structure and incentives of banks. Going forward, the industry may be less inclined to provide long-term financing, which could prove costly in terms of capital. As a result, reliance on market-based finance is likely to continue growing, but this source of funding will be more readily available to large companies than to small and mid-sized firms, which still rely heavily on banks. In addition, the growth of disintermediated financing may fuel the boom in shadow banking, with risks stemming from sectors that are loosely regulated or unregulated;
- ▶ Political pressures in some regions may affect banks' performances, as happened in 2014 (Société Générale suffered losses on its Russian subsidiary Rosbank).

⁴³ Major banking groups publish the financial results for each business line in their consolidated financial statements, but the information varies significantly from one bank to another. For consistency of presentation, some of the data here have been restated, so the figures may differ from those published by the banks.

⁴⁴ For the purposes of Banking Union, a Single Resolution Fund (SRF), financed by the banks, has been set up under the Single Resolution Mechanism. It will be funded on a gradual basis until it comprises the equivalent of 0.8% of covered deposits in Europe (EUR 55 billion). The aim is to ensure that taxpayers no longer bear the cost of bank bailouts.

1.6. Commodities: how the falling oil price affects financial markets

In commodity markets, physical product prices continued to fall in 2014. In particular, the oil price plummeted in the second half-year, from USD 115 to USD 45 per barrel between mid-June 2014 and mid-January 2015, before edging back to around USD 60/bbl in June 2015. This is the steepest fall since the one coinciding with the 2008 financial crisis (Figure 26). And it overlaps a downturn in demand, caused in particular by a slowing Chinese economy and significant changes in supply-side conditions, with global production expanding due to the exploitation of shale deposits. Gas and crude oil production in the USA has risen sharply since 2008, overtaking Russia and Saudi Arabia. To drive down prices, the latter announced at the November 2014 OPEC meeting that it would not cut production quotas, prompting a steep drop in the Brent price, in order to make non-conventional oil production less profitable in the USA, Canada and the Arctic Circle.



Source: Thomson Reuters Datastream. Last updated: 15/06/2015

The impact of the second-half 2014 price decline differed according to whether countries were consumers or producers and whether they taxed or subsidised oil. For importers, the decline had a positive but limited growth effect⁴⁵ by lowering consumer and production prices. By contrast, consumer countries suffered, especially those with the most cost-intensive production techniques, i.e. shale gas producers in the USA and Canada, and those that depend heavily on oil exports for their fiscal revenues (Russia, Venezuela). For the latter group, the main risks lie in huge capital outflows and currency depreciation, which generate a risk of imported inflation that could motivate the central bank to hike interest rates. One potential consequence of these hikes is a further deterioration in the economic outlook and hence in national solvency⁴⁶.

The oil price decline can affect stock markets in several ways:

- Valuations of listed companies will vary depending on their business. Naturally, oil and oil servicing companies have been hit hardest. Their earnings outlook has clouded, prompting them to rein in their investment and seriously undermining the yields on their shares (Figure 27). This downward movement has started to spur concentration in the sector as the weakest companies are taken over⁴⁷. Conversely,

⁴⁵ According to the ECB, euro area GDP increases by 0.2% over two years, following a 10% decline in the per-barrel price.

⁴⁶ The Russian central bank raised its policy rate by 650 basis points from 10.5% and 17% at end-2014, the biggest increase since 1998. In view of Russia's dwindling growth prospects and limited flexibility on monetary policy, Standard & Poor's lowered its sovereign debt rating to "speculative" on 26 January 2015.

⁴⁷ See above.

- energy-intensive sectors such as commodity chemicals and air transport have the most to gain from the lower oil price, which will bring down production costs;
- Risk in fixed income markets will be repriced, especially in the high-yield segment. This will affect non-conventional oil producers in particular because their debt burden has mushroomed in recent years;

Figure 27: Change in Eurostoxx50 / Eurostoxx Oil & Gas indices
(01/01/2014 = 100)



Source: Thomson Reuters Datastream. Last updated: 15/06/2015

- Defaults on loans to non-conventional producers will rise. The blow is likely to fall heaviest on mid-sized American regional banks, which have less sector diversification in terms of lending. Also, the US credit market seems to be heavily concentrated in the segment of leveraged loans in the energy sector;⁴⁸
- From a geographical perspective, banks in troubled oil exporting countries are also at greater risk than their peers. Looking at Russia in particular, foreign banks had USD 152 billion in outstanding loan exposures at the end of September 2014, down 15% on the previous quarter. It should be noted that French banks have significant exposure because they hold claims of some USD 45 billion, half of which through local subsidiaries (source: BIS).
- Regarding banks' exposure to derivatives markets, the risk is less acute because the market represents just 0.3% of notional amounts outstanding in over-the-counter derivatives (source: BIS).

⁴⁸ Wells Fargo, Bank of America, Citigroup and JPMorgan together account for nearly half of the loans granted in 2014 (source: Bloomberg).

**Box 1: Moving towards harmonised regulation
of Europe's financial commodities derivatives markets**

Reliance on commodity hedging instruments has surged since the onset of turbulence in 2007. Financial firms stepped up their role in these markets, before gradually pulling out of them. In light of these events, regulators started to rethink the way they deal with commodities markets, which play a specific role in the financial sector.

In 2014 European regulators focused their action on the Level 2 measures for the second Markets in Financial Instruments Directive⁴⁹ (MiFID II), as well as the Market Abuse Directive⁵⁰ (MAD) and the related Regulations. In addition to extending the pre- and post-trade transparency regime to all derivatives, along with the requirement to trade on organised platforms, MiFID II provides for a special regime for commodities. The measures include reporting and publication requirements as well as limits on the positions a final beneficiary may hold in commodity derivatives, including on the over-the-counter (OTC) market⁵¹. These new regulatory tools apply to all commodity derivatives, regardless of the underlying interest and whether contracts are cash-settled or physically delivered. However, an exception has been made in the case of physical delivery of wholesale energy products (gas and electricity) covered by REMIT⁵². This exemption may trigger widespread restructuring as the OTC market siphons off liquidity.

In addition, the review of MAD and the Market Abuse Regulation has significantly expanded European regulators' powers to oversee commodities markets. The main development consists in extending the notion of market abuse to behaviours affecting both commodity derivatives and the markets in the underlying physical commodities. The aim is to prevent firms from taking a dominant position and to ensure orderly delivery of underlyings⁵³.

IOSCO has also started analysing how storage and delivery of the physical commodities underlying a financial derivative can affect price formation on these markets. A questionnaire aimed at all market participants was published in summer 2014 in order to gain a better understanding of the link between this type of activity and price formation⁵⁴. Based on the findings of this analysis, IOSCO is expected to issue a regulation in 2016 to regulate the storage and delivery of the underlying commodities for financial derivatives.

⁴⁹ Directive No. 2014/65/EU on markets in financial instruments, and associated Regulation (EU) No. 648/2012, of 15 May 2014.

⁵⁰ Directive No. 2014/57/EU on criminal sanctions for market abuse, and Regulation (EU) No. 596/2014, of 16 April 2014.

⁵¹ Provided that the OTC-traded contract is economically equivalent (as regards, inter alia, price, quantity, and delivery venue and date) to a contract listed on a platform.

⁵² Regulation (EU) No. 1227/2011 of 25 October 2011 on wholesale energy market integrity and transparency

⁵³ France has already introduced comparable provisions for the agricultural commodities market via the Banking Regulation and Separation Act. Effective 1 July 2015, position limits apply to agricultural commodity derivatives traded on Euronext.

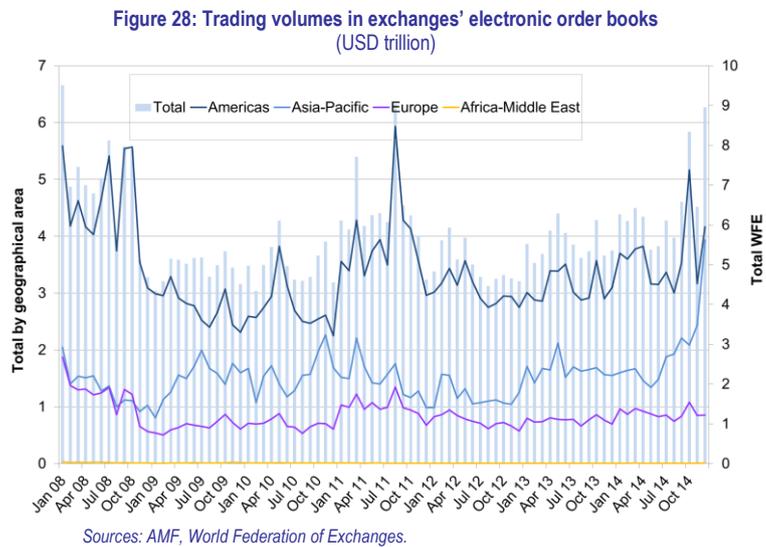
⁵⁴ Recent warehousing problems on the London Mercantile Exchange have highlighted the major impact that storage can have on price formation in commodity derivatives.

CHAPTER 2: MARKET ORGANISATION AND INTERMEDIATION

2.1. Equity markets: organisation, transparency, fragmentation and liquidity

2.1.1. Increased volumes on regulated markets

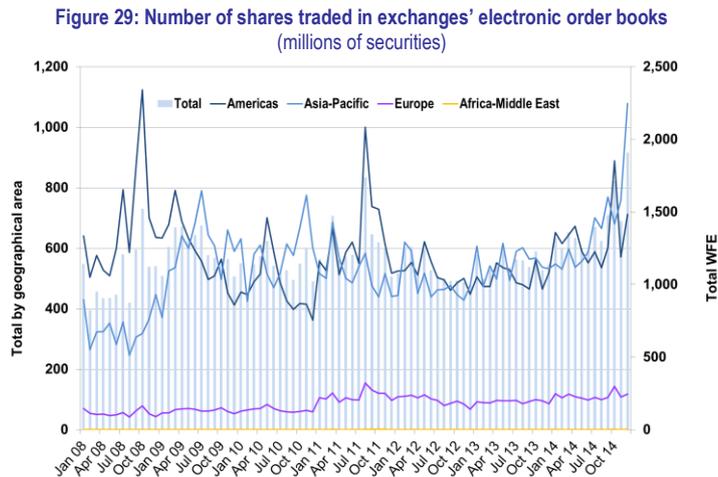
In 2014 trading volumes in the electronic order books of members of the World Federation of Exchanges⁵⁵ (WFE) rose by 17% compared with 2013 (Figure 28).



Trading volumes were higher on the most transparent markets

European markets echoed the global trend, as average monthly trading volumes in electronic order books rose by 16% from USD 770 billion to USD 895 billion. The growth in volumes, defined here as the number of shares traded multiplied by their market value, partly reflected higher valuations. Yet the number of shares traded on US and European exchanges also increased by 15% and 9% respectively in 2014, contrasting with the declines seen in 2012 and 2013 (Figure 29).

⁵⁵ The World Federation of Exchanges comprises 64 regulated markets with electronic order books. Equity-related data cover 62 markets.



Sources: AMF, World Federation of Exchanges.

Volumes reported by Euronext Paris also increased, climbing by 20% from EUR 827 billion to EUR 994 billion (Figure 30) as heightened volatility in the second half of 2014 translated into substantial trading volumes.

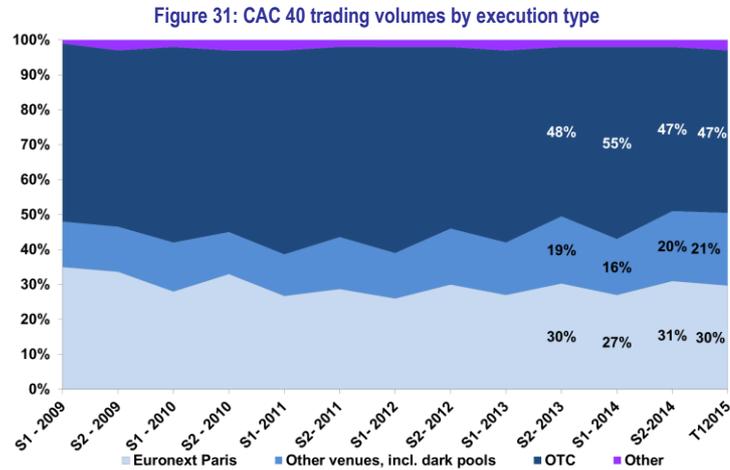


Sources: AMF, Euronext.

Volumes traded on the incumbent markets of WFE members give only a partial view of activity. However, these markets still act as a point of reference for price formation by virtue of their high level of pre-trade transparency – notwithstanding the fact that some multilateral facilities offer transparency on a par with that provided by Europe's regulated markets – their diverse population of participants, and their auction-based organisation, particularly at the close of trading. Moreover, the markets that deal in the largest volumes automatically tend to act as benchmarks for pricing and liquidity conditions, playing a role that is recognised from a regulatory perspective. Under European rules, the volumes on the markets on which a security is admitted to trading dictate which authority is in charge of supervising that security. Pursuant to the second Markets in Financial Instruments Directive (MiFID II), which comes into force in January 2017, the market with the largest trading volumes will act as the reference market when it comes to determining a security's liquidity and pre-trade transparency waivers (Box 2).

OTC trading volumes stabilised in France

A more complete picture of activity is obtained by including all on-exchange and over the counter (OTC) trading. Taking the example of CAC 40 securities, EUR 778 billion was traded on Euronext in 2014, EUR 494 billion on other venues (essentially multilateral trading facilities – MTFs) and EUR 1.363 trillion OTC. Over the year as a whole, OTC had a share of 51% (Figure 31), sharply down on 2012 (54%) and slightly down on 2013 (52%).



Source: AMF.

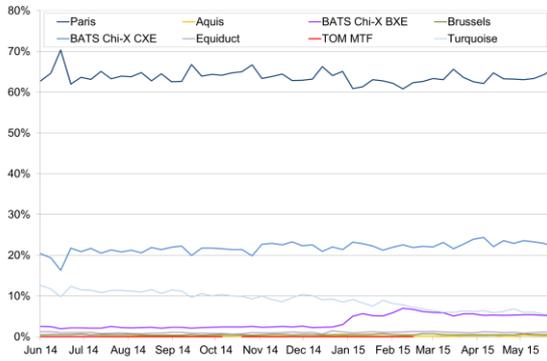
2.1.2. Little change in the fragmentation of the main European equity markets

The entry into force of MiFID I in 2007 spurred the development of equity trading venues offering an alternative to the incumbent operators, whose market shares subsequently plummeted. There are two dimensions to the fragmentation of the European trading landscape: first, fragmentation between execution approaches offering different levels of transparency (see section 2.1.3); second, "lit" market fragmentation between competing venues that meet pre-trade transparency requirements, i.e. regulated markets and MTFs.

Lit fragmentation increased considerably in Europe between 2008 and 2012. The market shares of Euronext Paris on the CAC 40, of the LSE on the FTSE 100 and of Deutsche Börse on the DAX shrank from virtually 100% in January 2008 to 60%, 50% and 65% respectively in January 2014⁵⁶, as MTFs established post-2008 built up their presence. Since that time, exchange operators have maintained stable overall market shares of lit volumes on the benchmark indices of the French, German and UK markets. This remained true between June 2014 and May 2015 (Figure 32 to Figure 34). Euronext's share inched up while those of Deutsche Börse and the London Stock Exchange contracted slightly, but these movements were in no way comparable to the massive redistribution of volumes between 2008 and 2012.

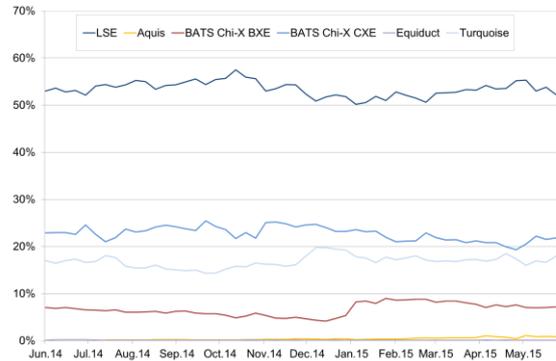
⁵⁶ Data: Thomson Reuters Equity Market Share Reporter. The provider closed down this service in late 2014.

Figure 32: CAC 40: Share of lit volumes (%)



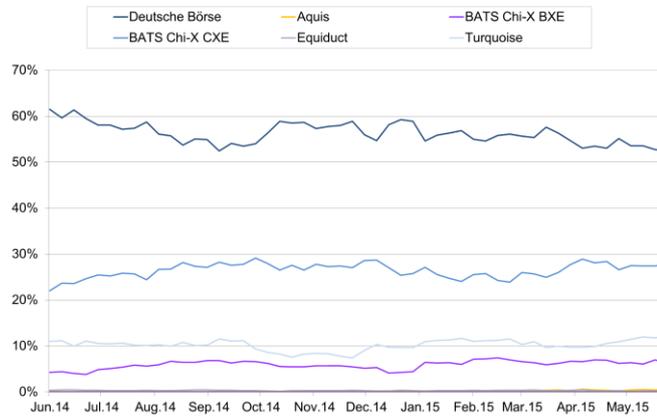
Sources: AMF, Fidessa. Most recent observation 31/05/2015.

Figure 33: FTSE 100: Share of lit volumes (%)



Sources: AMF, Fidessa. Most recent observation 31/05/2015.

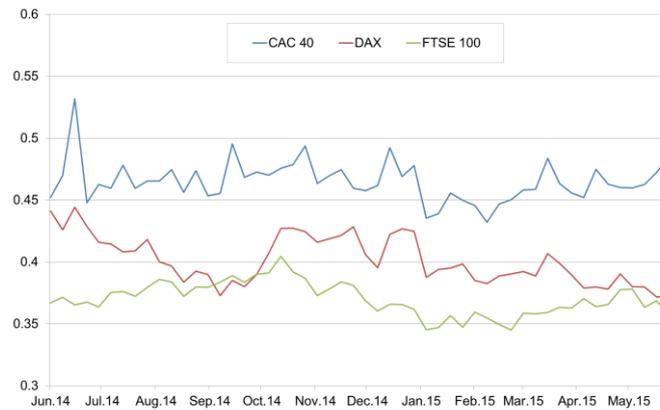
Figure 34: DAX: Share of lit volumes (%)



Sources: AMF, Fidessa. Most recent observation 31/05/2015.
 Note: venues with a share of less than 1% in May 2015 are excluded.

Herfindahl index-type market share concentration indicators reveal consistent patterns on these three markets, pointing to modest reconcentration on the French market and slightly increased dispersion, for German and UK indices (Figure 35). The competition between lit venues introduced by MiFID I appears to have stabilised in this sense. Changes to transparency obligations and dark trading restrictions under MiFID II could result in major adjustments to the distribution of market shares between lit venues.

Figure 35: Herfindahl index for CAC 40, DAX and FTSE 100



Sources: AMF, Fidessa.

Note: the index is calculating using the sum of the squared values of market shares. An increase denotes greater concentration.

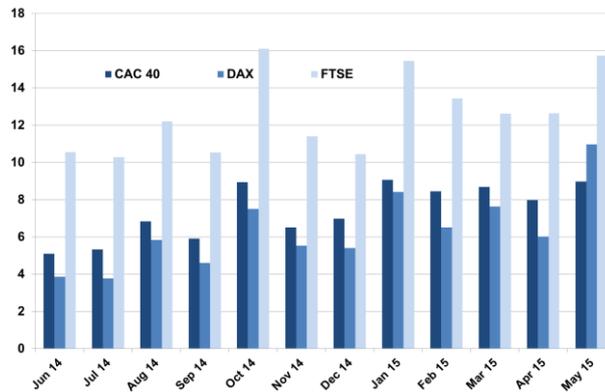
In principle, an increased number of venues provides various benefits in terms of market functioning by encouraging incumbents to lower their prices, offering investors a wider choice of execution solutions and introducing competition among liquidity providers. But it also brings risks, including:

- ▶ the risk of uneven access to best execution: the fact that liquidity is fragmented across multiple venues may lead to disparities between participants that trade on only one or a handful of venues and those that act based on the prices offered by all venues. In today's markets, high-frequency traders play a market reconsolidation role. Yet competition between venues and between liquidity providers does not guarantee that end investors will always have access to the best prices available across the entire market. In this sense, a high level of post-trade transparency, allowing customers to gauge the competitiveness of the prices at which they are able to trade relative to all prices available on the market, can usefully complement greater competition between trading venues;
- ▶ the risk of a deterioration in liquidity on reference markets: if a distinction is drawn between global liquidity (captured by trading volumes, quoted spreads and the depth of the aggregate order book) and local liquidity (measured for the order book of an individual venue), fragmentation might boost global liquidity but reduce the local liquidity available on the main market, potentially at the expense of investors placing orders solely on this market. Fragmentation may exacerbate differences in liquidity between blue chips and securities that are less liquid to start with, notably because liquidity consolidation by high-frequency traders across venues is less intense among mid caps;
- ▶ the risks of spillover and market disruption: it is more complicated to implement effective volatility management mechanisms such as circuit breakers in a fragmented environment, insofar as the question of coordinating the activation of these mechanisms and the resumption of trading across venues also has to be addressed.

2.1.3. Non-transparent equity markets: trading volumes continue to increase on dark venues

In addition to fragmentation between venues, recent years have also brought an upsurge in dark trading, i.e. trading under waivers to MiFID I pre-trade transparency requirements. Note that venues are allowed to offer transparent and non-transparent execution solutions at the same time. Dark trading volumes have increased swiftly and continuously in Europe since 2008. Information on trading volumes between June 2014 and May 2015 for the CAC 40, FTSE 100 and DAX indices reveals that this trend remains in place, although the pace has slackened (Figure 36).

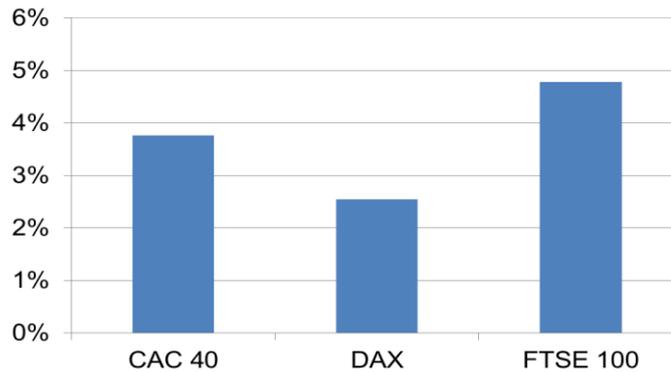
Figure 36: Trading volumes in dark pools, CAC 40, DAX and FTSE 100 (EUR billion)



Sources: AMF, Fidessa.

In absolute terms, however, volumes executed in dark pools remain modest. According to data from Fidessa, between June 2014 and May 2015, dark trading accounted for 2.5% of DAX trading volumes, 3.8% on the CAC 40 and 4.8% on the FTSE 100 (Figure 37).

Figure 37: Dark pool market shares, CAC 40, DAX and FTSE 100, May 2015



Sources: AMF, Fidessa.

Dark pools are designed to allow investors to engage in large trades without suffering the adverse selection that might occur in an environment featuring pre-trade transparency. In a lit order book, a participant seeking, for example, to sell a large amount of a security, not because of a directional view on asset value but to meet liquidity needs, might encounter worse price terms. The predictability of prices at which trades are actually executed, which dark pools can provide for this type of trade, is especially prized in markets where high-frequency traders have a forceful presence, as these traders may increase the risk of adverse selection on markets offering pre-trade transparency (see section 2.2) and make it harder for "slower" participants to predict the available liquidity when their orders enter the book (note that high-frequency traders were found to have a big presence on some dark pools in 2014, particularly in the USA). However, dark trading also poses a number of specific risks, including:

- ▶ the risk of a deterioration in the price formation process or liquidity on lit markets: this risk could materialise if volumes executed on lit markets decline, which does not appear to be the case on European markets, where dark trading's market shares remain modest. That said, it is hard to estimate the point beyond which dark trading might have a material impact on overall market quality. Growth in dark trading could also affect the business of liquidity providers if the most profitable orders are concentrated on non-transparent venues;
- ▶ the risk that dark pools could be diverted from their initial purpose: the primary role of these pools is to handle block securities trades that exceed standard market sizes. Yet the size of orders on European dark pools has declined sharply since 2009⁵⁷, and smaller bids consistent with the presence of high-frequency traders have increased. Regulators need to monitor this trend, insofar as the migration of standard-size trades off lit markets would present an additional risk of a deterioration in the price formation process.

In response to growth in dark trading, MiFID II (see Box 2) introduces caps on volumes executed under pre-trade transparency waivers. For a given security, no more than 4% of volumes may be executed on a given dark pool and no more than 8% of volumes for that security may be executed on all dark pools. Participants that fail to comply will have transparency waivers in relation to the security in question suspended for 6 months.

⁵⁷ See Fidessa (2013).

Box 2: Changes to transparency requirements for equity and non-equity instruments under MiFID II

The second Markets in Financial Instruments Directive (MiFID II) and the Markets in Financial Instruments Regulation (MiFIR) published in June 2014 are slated to come into effect in January 2017. They include a broad overhaul of pre- and post-trade transparency requirements both for equities and non-equity instruments, i.e. bonds and derivatives.

One of the major contributions made by MiFID II is the introduction of an obligation to trade equities on regulated markets or multilateral trading facilities (MTFs) or with systematic internalisers (SIs). The new requirement will limit the share of trades executed OTC. In fact, OTC execution of equity trades will be limited to non-systematic, ad hoc, occasional and infrequent trades and to trades between professionals and/or eligible counterparties that do not contribute to price formation.

As regards equity market transparency, MiFID II builds on MiFID I while clarifying and enhancing the applicable regime, with MiFIR specifying the content and limits of pre-trade transparency waivers as well as the content of post-trade disclosures. The equity regime has also been extended to equity-like instruments, including ETFs.

The Level I MiFID II legislation establishes a dual principle for non-equity instruments, namely derivatives, bonds, structured products and emission allowances, of real-time pre-trade transparency for venues and real-time post-trade transparency for on-exchange and OTC trades. The regime contains a number of elements in common with the equity transparency regime, such as pre-trade transparency waivers and authorisation to defer publication of large orders and trades. But it also includes a number of specific elements, including a general pre-trade transparency waiver and authorisation to defer post-trade publication for instruments that ESMA classifies as illiquid.

Specifically, there are four types of pre-trade transparency waiver and three types of authorisation for deferred post-trade disclosure, which are based on order characteristics, the liquidity of the traded assets and the trading approach.

MiFIR also defines a liquid market as a market in a financial instrument or a class of financial instruments where there are ready and willing buyers and sellers on a continuous basis, and where the market is assessed in accordance with the following criteria, taking into consideration the specific market structures of the particular financial instrument or of the particular class of financial instruments: average frequency and size of transactions, number and type of market participants, and average size of spreads.

2.2. Impact of high-frequency trading on equity market functioning

HFT helps to consolidate information in a fragmented environment

With advances in technology, equity trading is now largely done automatically using algorithms programmed to update orders based on market signals or macroeconomic information. Within the broad class of algorithmic trading, high-frequency trading (HFT) forms a sub-set whose participants can be characterised as trading on own account, holding assets for a very short period (and targeting a neutral position by the end of the trading session), cancelling a large proportion of orders shortly after placing them, and seeking to minimise market access latency. Although this is a generally acceptable description, regulatory definitions of HFT, where they exist, may differ. HFT developed swiftly from the 2000s on European markets, in step with the regulatory and technological changes that led to the emergence of the current environment, in which trading is fragmented across multiple competing venues and market participants make extensive use of algorithm-based automated execution solutions. In a situation where information and available liquidity are fragmented, HF traders help to reconsolidate the order book and intermediate the positions of counterparties that are dispersed over multiple markets. This facet of their business also helps to promote effective competition (including on prices) between venues offering services in the same security.

However, this environment could foster excessive growth in HFT

Insofar as the presence of HFT makes it possible to generate volume and strengthen immediately available liquidity, venues are individually motivated to offer pricing schemes that are appealing to HF traders. This may result in pricing structures that are excessively favourable, potentially driving HFT beyond the point where it is economically efficient. Growth in HFT might also be excessive if the negative externalities that HF traders generate for counterparties (in the shape of increased adverse selection costs for slower participants, for example) or market functioning generally (via increased technology investments or supervisory costs, for example) are not internalised or imperfectly internalised.

HFT's share of the CAC 40 rose in 2014.

Within the AMF's scope of supervision, which can be used to measure HF activity in the CAC 40, HFT market shares increased in 2014. In Q4 2014, "pure" HF traders, i.e. firms that self-identify as exclusively HF traders, had a 25% share of trading volumes, up from 22% at end-2013. The share of "mixed" HFT, which is attributable to investment banks' HFT desks, rose from 9% to 15%. Overall, HFT's market share rose from 31% at end-2013 to 40% at end-2014. Looking at orders rather than volumes, HFT has an even bigger presence because "pure" HFT alone accounts for 47% of orders. This reflects the fact that HFT strategies entail continuously updating order prices and volumes, with the result that HF traders frequently cancel orders and typically display higher order to trade ratios than other traders.

A significant footprint on European equity markets

Work done in 2014 by ESMA (see ESMA, 2014) marked a major advance in measuring HFT's footprint on EU equity markets. Data used to measure HFT activity were taken from eight European regulated markets and three key MTFs, and covered 100 stocks from nine different jurisdictions and displaying a wide range of characteristics, for the month of May 2013. Two approaches were used to identify HF traders. The direct approach was based on information provided by firms that identify HFT as their primary business. Because this method does not capture the HFT business of investment banks, it provides a lower bound for HFT volumes and estimates HFT to account for 24% of value traded, 30% of trades and 58% of orders. ESMA's study also used an alternative measure based on behaviour in terms of placing and cancelling orders, with firms treated as HF traders if 10% of their orders have a lifespan (the time between when an order is placed and cancelled) of less than 100 milliseconds. According to this definition, which also has its limits (market orders that are immediately executable are not taken into account; the identification criterion might lead some firms to be wrongly classified as HF traders), HFT was found to account for 43% of value traded, 49% of trades and 76% of orders, which corroborates the AMF's observations for the French market.

HFT is being closely monitored by financial market supervisors because of the risks that it could potentially generate, which include:

HFT's effects on market quality need to be closely monitored

- ▶ risks for market transparency: since they operate with a shorter latency, HF traders make the order book hard, if not impossible, for higher-latency firms to analyse, because new orders could have changed the book in the time between when non-HFT firms send their orders and when orders are actually entered in the book. This type of adverse effect can be exacerbated if HF traders use quote stuffing strategies, which consist in sending a large quantity of orders simultaneously in a bid to cloud the visibility of the order book, making it harder and more time-consuming for other traders (including HFT firms) to filter the relevant market information. Alternatively, because of the adverse selection costs that it imposes on counterparties, HFT could encourage other market-makers and end investors to turn to dark venues that are reckoned to be less favourable to HFT strategies because they do not offer pre-trade transparency. This would lead to a reduction in the share of transparently executed volumes, negatively impacting the price formation process;
- ▶ risks for market fairness: the soaring increase in HFT market shares stems in part from the fact that these firms are tapping into a competitive advantage that enables them to intermediate trades at lower cost. However, end customers do not benefit from this except to the extent that trading gains are at least partly shared between HF traders and their counterparties. In this sense, it is important that competition between HF traders, on the one hand, and between HF traders and "slower" firms on the other, should take place under fair conditions in terms of pricing and access to information and infrastructures. Even more importantly, maintaining fair markets entails effective supervision of manipulative practices that could potentially be used by HF traders;
- ▶ risks for liquidity quality: numerous research papers spanning a variety of markets have found an empirical correlation between HFT (or algorithmic trading) and narrower quote spreads (the most widely used indicator of liquidity). Yet the liquidity provided by HF traders is partly redundant because it is concentrated with the stocks that are the most liquid to start with. It does not appear to stand up to spells of increased volatility, becoming scarcer or vanishing altogether when it is most needed. Moreover, as with the order book in general, the liquidity provided by HF traders is hard for slower participants to predict;
- ▶ risks for financial stability: the HFT business model is inherently geared to support the instant transmission of price shocks between venues trading the same asset or between markets in assets with interconnected fundamentals. However, this can promote heightened volatility if trading venues lack coordinated volatility management mechanisms such as circuit breakers. The actions of HF traders can also cause shocks to be transmitted between instruments that are theoretically uncorrelated, for example if losses on one instrument prompt them to liquidate other assets to mitigate their risk. Moreover, the resilience of market infrastructures, particularly trading venues, could be adversely affected by the heavy operating load generated by the large number of messages sent and cancelled by HF traders.

There are questions over the quality of the liquidity provided by HF traders

Two mutually compatible approaches may be taken to address the risks generated by HFT. The first entails specific measures for HF traders, such as registration obligations or requirements to enhance the quality of risk control (new provisions to this effect feature in MiFID II). The second, which recognises the complementary relationship between the general organisation of trading and the development of HFT, recommends more global measures aimed at moving towards an environment in which the negative effects of HFT are less likely to occur. Market structure could be changed in a number of ways. Budish and al. (2015) propose an alternative to continuous order books based on frequent uniform-price auctions at given time intervals (every second or every 100 milliseconds), in which speed-based competition would disappear, leaving competition based solely on prices. Foucault (2015) suggests a solution that would be less disruptive to the current model. By delaying

the execution of market orders⁵⁸ for a very short random period (a couple of milliseconds), liquidity providers would have the choice of trading with an incoming market order or cancelling limit orders. This mechanism would protect non-HFT market providers against arbitrage techniques employed by HF firms.

MiFID II contains market structure reforms that seek to limit the potentially undesirable effects of HFT, notably by introducing a new regime for tick size (the minimum spread between two prices in the order book). The aim is to control order book viscosity, because if the minimum tick size is too small, it will promote faster aggressive orders, while if it is too large it will favour faster passive orders. The introduction of a harmonised minimum tick size regime is intended to ensure that price improvements are economically meaningful, to prevent tick sizes from being used as a tool for competition between venues, and to make sure that instruments with different liquidity have appropriate tick sizes while reducing disparities between instruments offering equivalent liquidity.

**MiFID II
substantially
strengthens the
rules for HFT**

In addition to changing tick sizes, MiFID II contains a series of provisions to strengthen the rules applicable to HFT and its supervision. HFT firms will have to register as investment services providers, which will subject them to enhanced requirements in terms of reporting to supervisors, internal control and risk management. Algorithms must be unambiguously identified. Rules will also cover the pricing structures offered by venues as well as the terms of access to co-location services.

2.3. Bond markets in a low interest rate environment

**Bond
market
activity in
2014**

New issuance and trading volumes increased on French bond markets in 2014. Including all French issuers, primary market activity rose by 15% in value terms from EUR 386 billion in 2013 to EUR 443 billion, with government issuance taken individually increasing 8% from EUR 168 billion in 2013 to EUR 181 billion⁵⁹. The increase partly reflected rollovers of maturing debt connected with corporate issues conducted in 2009 when the market re-opened after two challenging years. The upturn also lifted secondary market trading volumes, although the rise was smaller, at approximately 6%⁶⁰.

⁵⁸ In an order book, orders can be aggressive (most often "market orders" i.e. immediately executable at the best available price, or passive "limit" orders that specify a price (and volume) at which the party that issued the order is ready to trade on a deferred basis. Passive orders stay in the order book until they are executed (when an opposing order that satisfies the criteria appears in the book) or cancelled.

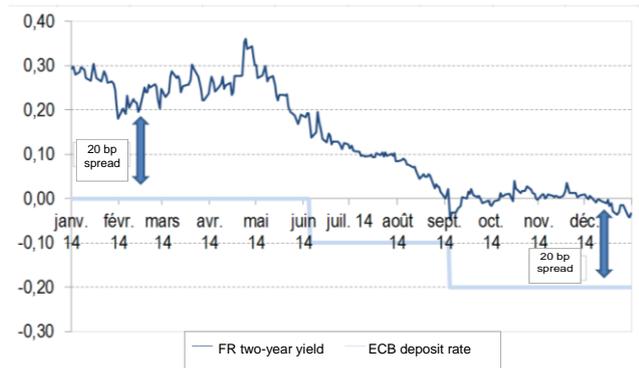
⁵⁹ Source: Dealogic.

⁶⁰ Estimate based on trade data from ISP reporting.

Unprecedented monetary policy in the euro area

French bond markets posted exceptional performances owing to the policy pursued by the European Central Bank (ECB), as interest rate reductions automatically increase the market value of previously issued bonds. From the middle of the year onwards, the unprecedented decision by the ECB to set its deposit rate below 0% translated into downside pressure on sovereign yields, causing the yield-to-maturity on French two-year government bonds to move into negative territory:

Figure 38: ECB deposit rate and French two-year yield



Source: Bloomberg.

Some firms tried to boost returns through longer maturities

Traders adjusted to the new environment of record low interest rates by adopting strategies geared to capture increased returns. One such strategy consisted in taking positions further along the yield curve, which explains why the spread between French ten-year and two-year yields narrowed by 141 basis points (Figure 39). The same movement was seen in all the major countries of the euro area, including Germany, Italy and Spain, and the Euro MTS 7-10 year index and the MTS France 7-10 index put on more than 15% in 2014. The flatter curve may encourage issuers to extend the maturity of their debt, ultimately creating refinancing risk when interest rates go back up.

Figure 39: Spread between French ten-year and two-year yields

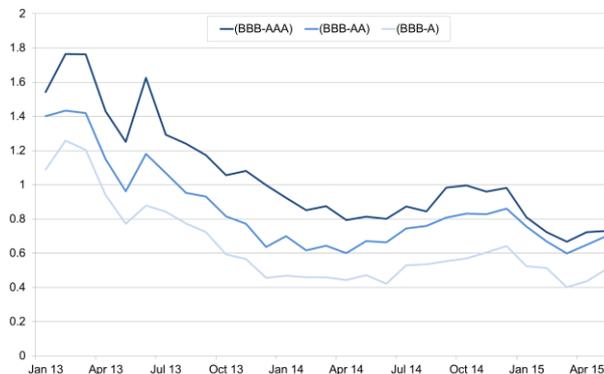


Source: Bloomberg.

Others sought to boost returns via increased credit risk

Other firms sought to capture additional yield on the bond market in a low interest rate setting by increasing their credit risk, notably by adding high-yield issuers to the initial investment universe. The issues conducted by Numéricable and Altice to fund the EUR 12 billion acquisition of SFR offer a good example: the record offering was six times oversubscribed by investors. Increased risk appetite was reflected in the compression of credit spreads between bonds issued by differently-rated non-financial companies (NFCs) in Europe (Figure 40).

Figure 40: Credit spreads on 7-10 year corporate debt



Sources: Datastream, iBoxx.

Amid mounting appetite for credit risk, investment grade issuers also issued riskier bonds. This was true in the banking segment, as European issues of contingent convertible bonds (CoCos, see Chapter 1) swelled from EUR 19.5 billion in 2013 to a record EUR 50.5 billion in 2014. French banks were part of the trend, issuing close to EUR 7 billion in CoCos. Ratings for these instruments are typically four or five notches below the issuer's initial rating, putting most of them in the high-yield category. They are complex products, which is why, although Europe has rules governing the marketing and valuation of financial instruments, several regulators have restricted access to these products for retail investors. These restrictions do not apply to indirect ownership, however, notably via collective investment products, and it is important for affected investors to be capable of understanding the risks incurred with this type of instrument. ESMA published a communication on the potential risks associated with CoCos⁶¹ in July 2014.

Companies from the non-financial sector also issued more hybrid corporate bonds, which, in return for higher returns, carry additional risk and are more deeply subordinated. In 2014 French NFCs, including Orange, Accor, Arkema, EDF and GDF, issued a combined EUR 14 billion in subordinate debt.

**Increased risk in
a less liquid
bond market**

The low rate environment is encouraging investors to put their money in riskier products to obtain superior returns. But the additional risk-taking is taking place precisely at a time when the overall level of liquidity on bond markets is probably lower than in the past and notably than before the 2007-2008 financial crisis.

Accordingly, the Bank for International Settlements (BIS) devoted a section of its March 2015 report⁶² to the link between market-making and bond market liquidity, which takes up the main ideas of an article issued in November 2014 by the Committee on the Global Financial System⁶³. Both publications argue that while the new rules have sought to reduce the risk borne by banks on their balance sheets, they have made it more expensive to carry assets. This in turn has curtailed market-makers' capacity and willingness to interpose their own accounts, which could result in increased market volatility in the event of a shock.

⁶¹http://www.esma.europa.eu/system/files/2014-944_statement_on_potential_risks_associated_with_investing_in_contingent_convertible_instruments.pdf

⁶² "BIS Quarterly Review – Shifting tides – market liquidity and market-making in fixed income instruments", BIS, March 2015

⁶³ Market-making and proprietary trading: industry trends, drivers and policy implications, CGFS No. 52, November 2014.

In Europe especially, where bank volumes and inventories⁶⁴ are less well known than in the USA, several publications are suggesting that a decline in liquidity similar to that observed on US markets may have occurred in recent years. According to a report by the International Capital Markets Association (ICMA) on the state of the European corporate bond market⁶⁵, which was based on a series of interviews, banks appear to have responded to the new prudential rules by trimming inventories of assets earmarked for market-making. At the same time, they seem to want to increase the rotation of remaining positions, which would lead to them concentrate on less risky segments.

On the French market, an analysis of trade data, coupled with other indicators including bid-ask spreads, also indicates that liquidity is becoming concentrated in the deepest and/or least risky segments, against a backdrop of major restrictions on market-making activities. Information on the overall liquidity situation suggests that the cost of liquidity is higher today than it was before the crisis, keeping in mind that the 2005-06 period may not be the most appropriate basis for comparison as it might reflect a situation where liquidity risk was underestimated because a bubble was forming.

There are several possible ways to stem the deterioration of liquidity on bond markets, at a time when this funding approach is likely to continue growing in Europe and when banks are less inclined to act as market-makers. The market share of electronic venues, notably request-for-quote systems such as Bloomberg, MarketAxess, EUROMTS and Tradeweb, has been increasing swiftly for a number of years, particularly in government bonds and to a lesser extent in investment grade and high-yield corporate notes. Venues organised around order books are seeing smaller growth. Better market connectivity would enable broader populations of counterparties to be in contact with each other, so contributing to increased liquidity under normal market conditions. Trading on these platforms, even where fragmented or involving small orders, also makes it possible to input price references to the market. By contrast, it is not a substitute for the traditional bilateral model in the case of large orders or illiquid securities, and even more so when it comes to absorbing market imbalances. The development of all-to-all venues where asset managers can also act as market-makers by making a portion of their assets available for sale might offer another way to provide these participants with additional flexibility

The limits on bond market transparency make it hard for participants to gauge the actual availability of liquidity. In this respect, modifications to the transparency regime for non-equity instruments under MiFID II represent a major shift (see Box 1). The provisions governing post-trade transparency will lead to wider publication of trade prices in real time for the most liquid securities and on a deferred basis for instruments that are classified as illiquid, so improving the ability of participants to assess price levels and available amounts at these levels. Meanwhile, pre-trade transparency, which will apply to on-exchange trading except where specific waivers exist, will help to make execution terms more predictable. With a view to preserving the operating conditions of market-makers, the waiver regime is calibrated based on the liquidity of the traded bond (instruments that ESMA classifies as illiquid will be excluded) and order size. The new transparency regime seeks to strike a balance between the needs of a diverse range of participants, securities and trading approaches, on the one hand, and the need to consolidate information so that market participants and supervisors can assess market liquidity, on the other.

⁶⁴ RBS's Liquid-O-Meter is based on the inventories of US banks and US trading volumes provided by the Securities Industry and Financial Markets Association (SIFMA).

⁶⁵ *The current state and future evolution of the European investment grade corporate bond secondary market: perspectives from the market*, ICMA, November 2014

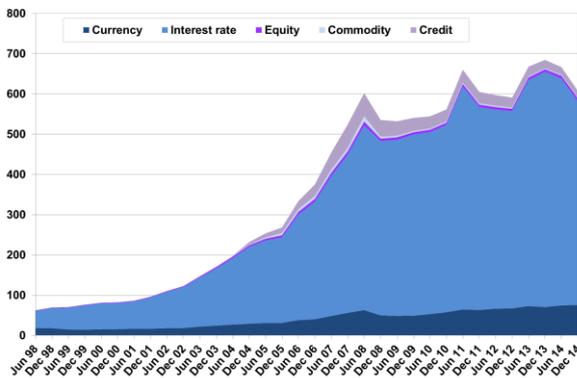
2.4. Derivatives markets

2.4.1. Activity on global derivatives markets: notional amounts declined but credit exposures increased in the second half of 2014

The notional amount of OTC derivatives worldwide fell 11 % in 2014

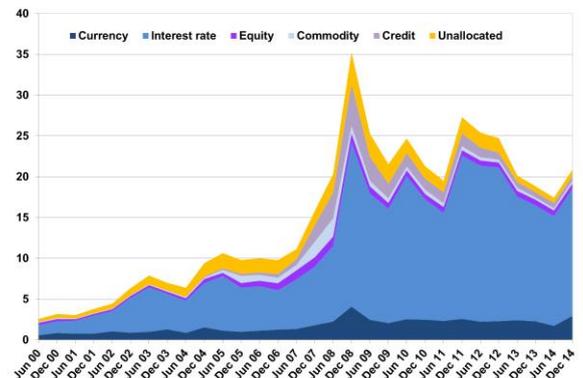
In 2014 the total gross notional amount⁶⁶ of OTC derivatives worldwide recorded by the BIS fell by 11% from USD 710 trillion to USD 630 trillion (Figure 41), as the notional amount of interest rate derivatives, which account for 80% of the total, declined from USD 584 trillion in December 2013 to USD 505 trillion in December 2014. Part of the decrease reflected increased use of portfolio compression techniques, which make it possible to reduce notional amounts of derivatives by eliminating opposite exposures between one or more counterparties and exposures that do not contribute to portfolio risk.

Figure 41: OTC derivatives: global notional amount (USD trillion)



Source: BIS.

Figure 42: Gross market value (USD trillion)



Source: BIS.

The notional amount of credit derivatives has also been falling steadily over the last few years. The trend is in evidence for CDS on French entities, whose net notional outstandings shrank from EUR 58 billion at end-2013 to EUR 36 billion at end-March 2015⁶⁷. Although this market may have generated risk (notably counterparty risk), its decline is no cause for rejoicing, as these instruments are primarily intended to provide hedges for the fixed income market, and a market's liquidity is generally supported by the presence of associated derivative products that allow participants to hedge their risk. The concentration of participants on this market, which was already high, also increased further⁶⁸.

Notional amounts do not however show the value for each of the counterparties to a derivative contract. The sum of the gross market values of derivative contracts, i.e. the market values of the derivative contracts of each reporting dealer without taking account of portfolio compression or bilateral cancellation of risk exposure (netting), gives a rough indication of the aggregate net asset value of derivative contracts and rose by 10% from USD 18.9 trillion to USD 20.9 trillion (Figure 42).

⁶⁶ The notional amount of a derivative corresponds to the value of the asset underlying the derivative contract.

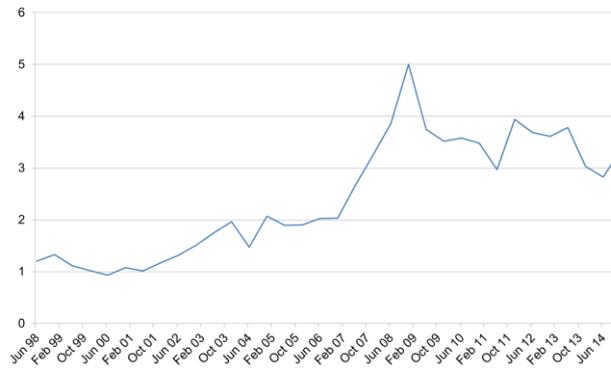
⁶⁷ Source: DTCC, AMF calculations.

⁶⁸ Source: DTCC, AMF calculations.

Gross credit exposure rose by 3% in 2014.

Gross credit exposure⁶⁹, which adjusts gross market values for cross exposures between financial institutions, is used to measure aggregate exposure to counterparty risk generated by derivatives positions. This exposure increased from USD 3 trillion in December 2013 to USD 3.35 trillion in December 2014 (Figure 43). Whether this trend continues remains to be seen.

Figure 43: Gross credit exposure (USD trillion)



Source: BIS

Overall, the decline in gross notional amounts did not translate into a comparable reduction in aggregate measures of risk connected with the derivatives activities of financial institutions

Increased collateralisation is playing a part in reducing counterparty risk

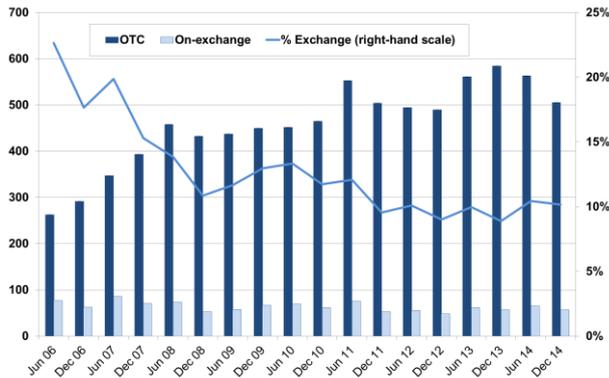
Effective associated counterparty risk needs to be measured after taking collateralisation of positions into account. According to data collected by ISDA⁷⁰, collateralisation of derivatives positions is growing rapidly, with 71% of trades collateralised in 2011 compared with 91% at end-2013. While this shift could generate undesirable effects linked to the overall increase in demand for collateral, it nonetheless helps to reduce the net counterparty risk associated with financial institutions' derivatives exposures.

Under MiFID II in Europe and the Dodd-Frank Act in the USA, obligations to trade eligible derivatives on organised venues are an incentive to migrate from bilateral to multilateral trading. Thus far, the proportion of instruments traded on-exchange has not increased significantly among interest rate, equity or currency derivatives (Figure 44 to Figure 46). In interest rate swaps, the share remains steady at around 10%. About half of all equity derivatives are traded on-exchange, while the proportion is negligible among currency derivatives.

⁶⁹ Here, "gross" means that the collateralised or non-collateralised nature of the exposure is not taken into account.

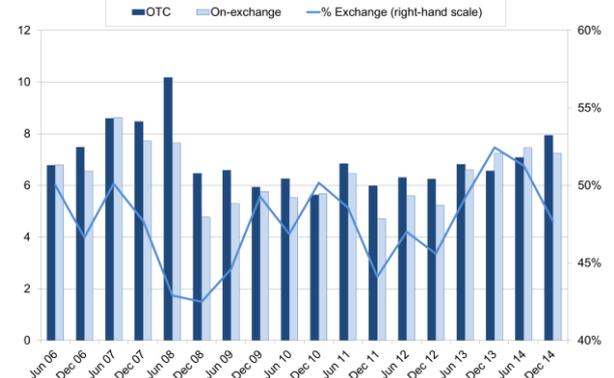
⁷⁰ See ISDA (2014).

Figure 44: Volumes and market shares, interest rate swaps (USD trillion)



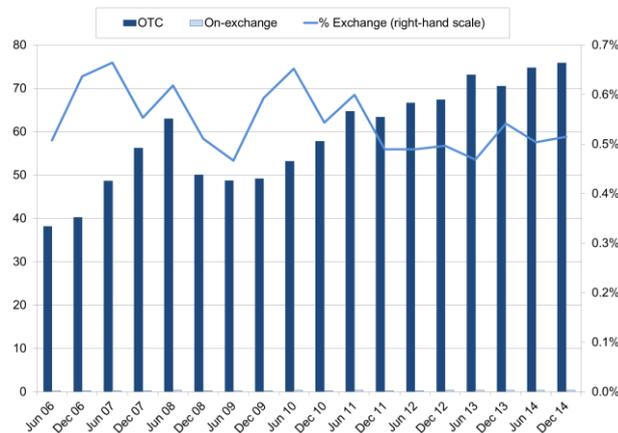
Source: BIS.

Figure 45: Volumes and market shares, equity derivatives (USD trillion)



Source: BIS.

Figure 46: Volumes and market shares, currency derivatives (USD trillion)



Source: BIS.

Growing use of central clearing

Central clearing of OTC derivatives has increased sharply since the end of the 2000s. ISDA (2013) estimates that the proportion of centrally cleared interest rate swaps doubled between 2009 and 2013. The trend has continued since then according to the latest available statistics. From 64% in December 2014, the share of centrally cleared OTC interest rate derivatives increased to 70% in June 2015. The growing use of central clearing over time and across derivatives reflects the sharp increase in the supply of central clearing services, notably following the completion of EMIR approval and re-approval phases in Europe. However, supply remains mixed at global level and across classes of derivatives.

2.4.2. The phasing-in of regulatory reforms is helping to mitigate systemic risk and make OTC derivatives trading more transparent

Positions in derivatives traded OTC under non-transparent conditions helped to spread and amplify financial stress during the 2008 crisis. Many of these positions turned out to be non-collateralised or inadequately collateralised, which generated losses for counterparties, magnifying the effects of the initial shock. The regulatory agenda adopted at the G20 Summit in Pittsburgh seeks to make derivatives activities more transparent and ensure that adequate provisions are set aside to cover the risks of loss:

The prudential treatment of banks' derivatives exposures has been finalised

▶ application of appropriate capital and margin requirements to OTC derivatives trades is helping to achieve better control over procyclicality and the leverage of derivatives exposures. As part of advances in prudential reforms, the capital requirements applicable to banks for trades in centrally cleared and non-centrally cleared derivatives were detailed in April 2014 with the release of the corresponding standards under Basel III⁷¹. The treatment of exposures to central counterparties was also finalised. The related requirements are already effective in most FSB jurisdictions. Furthermore, in March 2015 the Basel Committee and IOSCO published revised margin requirements for non-centrally cleared derivatives that are expected to come into force in December 2015;

Derivatives market transparency has increased as trade repositories have come onstream

▶ transparency objectives are being pursued through reporting to trade repositories, which is now effective in 16 of the 19 jurisdictions covered by the FSB⁷². In Europe, reporting to repositories that are approved and supervised by ESMA, which is required by EMIR, came into effect in February 2014. The reporting obligations apply to all OTC and listed derivatives. After technical work done in 2014 made reporting more reliable, the challenge now is to ensure that the very large amount of resulting data can be harnessed to improve supervision of trading and enhance oversight of systemic risk;

Central clearing services in Europe span all instrument classes

▶ migration of OTC trades to central clearing promotes enhanced market transparency and reduced counterparty risk. Central clearing obligations were at least partially effective in five FSB jurisdictions at the end of 2014 and should be effective in five others by the end of 2015. Under EMIR, the central clearing obligation applies to all derivatives that ESMA classifies as sufficiently liquid and standardised. In practice, the actual nature of the obligation depends on the availability of central clearing services and hence on progress in approving central counterparties under the new regulatory obligations. In Europe, by end-March 2015, 16 central counterparties (CCPs) had been authorised to offer services and do business in the Union in compliance with EMIR, and three had received extended authorisations. The services provided cover all the classes of derivatives considered by the FSB, including commodity, credit, equity, currency and interest rate products.

⁷¹ See Basel Committee on Banking Supervision (2014).

⁷² See FSB (2014).

2.4.3. Steps by participants to adjust to the regulatory setting are contributing to changes in operating models and risk on derivatives markets

While the overall goal of the regulatory reforms is to reduce the procyclicality of derivatives markets and lessen their contribution to systemic risk, measures taken by participants to adjust to the financial environment and the regulatory agenda are contributing to changes in the nature and location of risk in the financial system.

International divergences in regulatory procedures and timing could promote fragmentation of derivatives markets

Interactions between reform procedures and timetables across jurisdictions could generate inconsistencies, duplications and even regulatory vacuums. Businesses could relocate in an effort to optimise the regulatory cost of derivatives trading. There is a danger that derivatives markets could fragment along jurisdictional lines in a way that is harmful to the liquidity of these markets. This might happen if, for example, the classes of derivatives subject to central clearing or margin requirements are not the same across jurisdictions. Introduction of the obligation to trade OTC derivatives on-exchange (for those considered eligible in Europe) could also promote cross-border fragmentation. In February 2014, the obligation to trade benchmark interest rate swaps on organised swap execution facilities (SEFs) regulated by the CFTC came into effect in the USA. Pursuant to this requirement, any trading platform that may be used to access US persons must comply with the CFTC's rules. Although the rule contains some provisions allowing non-US banks to limit the necessary adjustments, it appears to have caused significant fragmentation of the interest rate swaps market. ISDA (2015) estimates that in the final quarter of 2014, 88% of the notional amount of interest rate swaps in euro was exclusively traded between European counterparties, up from 73% one year earlier. The volume of trading between European and US banks fell from a monthly average of USD 598 billion in the final quarter of 2013 to USD 264 billion in the final quarter of 2014.

Distortions affecting competition between participants and between jurisdictions must be closely monitored to prevent market fragmentation effects and to stop trading from migrating to the lightest regulated jurisdictions or to the least closely regulated and supervised participants within a given jurisdiction. In this regard, work done on derivatives use within shadow banking entities and activities can supplement reforms that deal specifically with derivatives markets.

Recognition of the cross-border nature of derivatives trading is crucial to the quality of infrastructure supervision. The competent authorities are currently engaged in work to improve the procedures for cooperating in the supervision of cross-border activities and entities (notably CCPs) to ensure uniform standards and supervisory practices among authorities.

Reforms to derivatives markets have given CCPs a pivotal role in mitigating systemic risk, but also make them a focal point for counterparty risk. The migration of derivatives clearing to CCPs streamlines and centralises the management of associated counterparty risk. CCPs interpose themselves as counterparties to all transactions conducted by their clearing members on their own account or for their clients, but unlike a bank in a bilateral trade, CCPs do not take directional positions. However, CCPs are exposed to the risk that clearing members could default. EMIR requires CCPs to mobilise several "lines of defence" in such cases to limit the repercussions of default, which include using margin posted by the defaulter or its contributions to the default fund, drawing on CCP capital earmarked for default management, or calling in contributions from non-defaulting members. In Europe, the EMIR approval process includes a systemic assessment of the risk management procedures implemented by CCPs. The procedures for calculating margins and default funds, criteria governing eligibility and collateral diversification, and procyclicality effects are subject to review by CCP Colleges of Supervisors, which are tasked with overseeing EMIR

CCPs must respond to risk concentration by adjusting their risk management arrangements

compliance. To anticipate the impact of periods of financial stress on CCP activities, stress tests are conducted based on parameters reviewed by regulators.

These provisions seek to prevent CCPs from defaulting in a broad range of stress scenarios. However, CCPs will be required to draw up recovery plans and resolution procedures to cope if such an event were to take place. The goal of these plans is to ensure swift, effective crisis management and to mitigate the impact on financial stability of a clearing house failure. Work by international regulators on these issues since 2012 culminated in October 2014 in a Basel Committee/IOSCO report on recovery and resolution procedures. The European Commission is expected to draw up legislative proposals based on this work in 2015.

2.5. Shadow banking: market trends and regulatory developments

2.5.1. According to the latest available global measures, the rise of shadow banking continues

Methodologies for measuring shadow banking are not yet stabilised

National authorities, including market regulators and macroprudential authorities, along with European and international competent authorities are developing quantitative indicators to build a functioning system for the forward-looking supervision of shadow banking risks. While work remains to be done to stabilise the methodologies and establish harmonised scopes across countries, the FSB has introduced a general framework⁷³ whose principle is to take a broad base capturing all activities and entities to calculate indicators of size (balance sheet for entities, positions for activities) maturity transformation, liquidity transformation, total leverage, credit intermediation, interconnectedness and complexity.

The FSB's annual report on shadow banking⁷⁴ applies this methodology at the global level, drawing on data gathered from member jurisdictions. The 2014 report highlights several trends, as well as advances and persistent limitations in terms of measuring the global size of the shadow banking industry.

The survey aggregates 2013 data from 20 jurisdictions, plus data for the euro area as a whole, and covers 80% of global GDP and 90% of the assets held by financial institutions. The first set of results use an inclusive measure. The Monitoring Universe of Non-Bank Financial Intermediation (MUNFI), which is based on flow of funds data, is a broad measure that aggregates the assets of other financial intermediaries (OFIs) that are not otherwise classified as banks, insurers, pension funds, public financial institutions, central banks or financial auxiliaries.

Total non-bank intermediation is estimated at USD 75 trillion

Total OFI assets came to USD 75 trillion at end-2013, up USD 5 trillion compared with 2012. Narrowing the scope slightly to 25 jurisdictions including five from the euro area (Germany, France, Italy, Netherlands and Spain), OFI assets amounted to USD 63 trillion. The overall increase reflects a combination of volume effects (growth in investment fund assets under management) and price effects linked to changes in the market value of assets. In 2013, for example, valuation effects boosted growth rates for equity funds, whose size increased by 27% in absolute terms and by 8% after stripping out valuation effects, while reducing those of bond funds, which increased by 7% in absolute terms but by 8% after adjusting for the 1% decline in the MSCI World Fixed Income Index. The major jurisdictions are the euro area and the USA with USD 25 trillion each, followed by the UK on USD 9.3 trillion and Japan with USD 4 trillion. The overall trend also masks substantial differences in growth rates,

⁷³ Financial Stability Board (2013), Strengthening Oversight and Regulation of Shadow Banking.

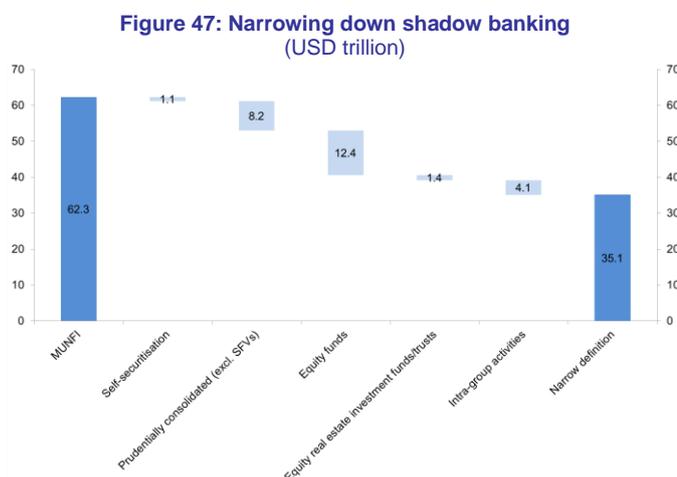
⁷⁴ Financial Stability Board (2014), Global Shadow Banking Monitoring Report 2014.

which ranged from -6% in Spain to +50% in Argentina. Emerging markets are seeing relatively sharper growth in shadow banking. Driven by a strong expansion since 2007, shadow banking in China now makes up 4% of the total (USD 3 trillion) compared with 1% in 2007.

The largest OFI sub-sectors from a quantitative perspective are other investment funds (USD 28.5 trillion), broker-dealers (USD 11.2 trillion), structured finance vehicles (USD 5 trillion), finance companies (USD 4.5 trillion) and money market funds (USD 4.5 trillion). The need to rely on commercial data (Hedge Fund Research) to estimate the global size of hedge funds at USD 2.6 trillion, owing to the non-participation of jurisdictions in which these funds are formally registered, underscores the persistent limitations on the availability of reliable reporting data.

Non-bank credit intermediation presenting bank-like systemic risks accounts for assets worth USD 35 trillion

While the broad measure has the advantage of making it possible to monitor trends beyond the prudential universe, it captures entities and activities that do not strictly meet the official definition given by the FSB. A second narrower measure of shadow banking considers only the assets of entities that are part of a credit intermediation chain, that are not consolidated for prudential purposes, and that exhibit risks linked to maturity or liquidity transformation or leverage. The goal is to move from a broad measure of non-bank intermediation to a narrower measure that is confined to entities and activities that engage in credit intermediation and present bank-like systemic risks. This measure seems more appropriate, notably when it comes to the treatment of equity funds that not only do not engage in credit intermediation but also present few if any mismatches between asset and liability liquidity for the most part. Accordingly (see Figure 47), this measure strips out the assets of structured finance vehicles held on the balance sheets of entities subject to prudential regulation, the assets held by subsidiaries of groups subject to prudential regulation, and the assets of funds that do not play a role in credit intermediation, particularly equity funds, closed real estate funds and intra-group activities, leaving a total of USD 35 trillion, compared with USD 62.3 trillion at the end of 2012.



Source: FSB; scope: 25 reporting jurisdictions including Germany, France, Italy, Netherlands and Spain for the euro area.

In France, shadow banking includes all financial intermediaries that are not credit institutions and that engage in credit intermediation. Measured this way, shadow banking assets make up approximately 15% of total banking sector assets⁷⁵ (EUR 1.144 trillion compared with EUR 7.77 trillion at end-September 2014). In France, finance companies are subject to

⁷⁵ Source: Haut Conseil de Stabilité Financière, 2014 Annual Report.

Basel III rules and are not therefore counted under shadow banking. Investment firms are included if they are not consolidated at the level of a bank group. Assets of investment firms included in shadow banking stand at EUR 26 billion. Structured finance vehicles included within the scope of bank consolidation are not treated as part of shadow banking either. Based on this criterion, EUR 75 billion in non-prudentially consolidated outstanding securitisations are counted with shadow banking. The main shadow banking entities in France are therefore money market funds (EUR 351 billion in outstandings in May 2015) and investment funds other than equity funds (including bond funds and balanced funds, with EUR 253 billion and EUR 342 billion respectively in May 2015). These entities must abide by rules governing liquidity and maturity transformation and leverage, which address the sources of risk associated with shadow banking.

2.5.2. Shadow banking poses specific risks to financial stability

Before applying regulatory measures to shadow banking, the risks need to be qualitatively assessed and quantitatively measured, a process complicated by the diverse and constantly developing range of activities and entities involved, their often international scope, and the lack of uniformity in legal classifications and data sources across jurisdictions. The shadow banking sector can generate risk endogenously or transmit exogenous financial shocks.

Some entities are exposed to runs.

Shadow banking entities and activities can generate risks to financial stability primarily because their funding sources can be abruptly withdrawn in situations akin to bank runs⁷⁶. In shadow banking, runs occur when secured funding (which investors treat as quasi-deposits) is withdrawn following a decline in the market value of assets posted as security. Unlike deposits, financing for shadow banking activities and entities is by definition not backed by a deposit guarantee and must therefore be renewed via money or repo markets.

The non-transparency of intermediation chains could be an aggravating factor.

A second source of risk in shadow banking involves the agency problems that arise in complex, insufficiently transparent intermediation chains featuring participants with different statuses, business models and incentives. Informational asymmetries in intermediation chains promote increased procyclicality. The complex securitisation structures seen before the financial crisis led to a relaxing of credit standards, imperfect credit risk transfers and the formation of leverage under conditions that were not transparent to counterparties and supervisors.

Use of leverage may contribute to the procyclicality of the financial system

The vulnerability of shadow banking entities and activities to cyclical reversals also stems from their use of balance sheet and synthetic leverage. When the value of the assets posted as collateral in secured financing transactions increases and the cost of managing and rolling over positions (initial margin and margin calls) is low, secured funding can be used to reach high levels of leverage. In the event of a reversal, the value of the collateral can drop suddenly while margins increase sharply, forcing counterparties to unwind their positions through fire sales, which may magnify the fall in asset prices. The question of the level of leverage, its transparency and procedures (via bank loans, derivatives exposures or securities transactions) is especially important for participants such as hedge funds and private equity funds.

Shadow banking could be a channel of contagion

Financial stress may be transmitted from the shadow banking sector to the wider financial system through direct or indirect linkages. Direct linkages correspond to the role of shadow banking in bank intermediation, to banks' holdings of securitisation vehicles or funds, to financing guarantees granted either explicitly or implicitly by banks, and to shadow banks' holdings of bank assets. Indirect ties also exist, in the shape of shared exposures to asset

⁷⁶ Gorton, G. and Metrick, A., Securitized Banking and the Run on Repo, Journal of Financial Economics, 2012.

classes or identical counterparties. Together, these connections form a channel that could spread or even amplify financial stress. The non-transparency and complexity of transactions, the illiquidity of assets provided as security, the scale of the operational risks and challenges in ensuring the orderly resolution of shadow banking entities are all factors that could amplify stress.

To gauge contagion risk, the FSB measures balance sheet interconnections between banks and shadow banking entities:

- ▶ credit risk for banks (proxied by bank claims on shadow banking OFIs divided by total assets) is estimated at between 1% and 5% of bank assets depending on the jurisdiction and fell overall between 2012 (USD 4.3 trillion) and 2013 (USD 3.9 trillion);
- ▶ financing risk for banks (proxied by the share of bank liabilities held by OFIs) rose overall in 2013;
- ▶ credit risk for OFIs (proxied by OFI claims on bank liabilities divided by their total assets) fell in most jurisdictions in 2013;
- ▶ financing risk for OFIs (proxied by the share of OFI liabilities held by banks) was also slightly lower.

Current work seeks to integrate shadow finance in the measurement of systemic risk

Overall, the risk associated with the interconnectedness of the two sectors looks relatively greater for shadow banking entities than for the banking sector. While this finding seems to be robust, detailed conclusions should be drawn with care because of persistent methodological limitations. Consistency between measures of size and measures of interconnectedness remains problematic insofar as the latter as calculated for all OFIs, whereas the narrower measure is the one that best fits the FSB definition. Furthermore, changes over time in the measure of interconnectedness are partly dictated by restatements of securitisations held on balance sheets.

Shadow banking's contribution to euro area systemic risk is stable

More sophisticated measures are already being used in some jurisdictions to capture shadow banking's contribution to overall systemic risk. The IMF⁷⁷ uses a measure of the marginal contribution to systemic risk. The financial system of a jurisdiction is represented as a portfolio of institutions whose balance sheet values are subject to common market factors. Overall systemic risk is measured using the expected shortfall, which represents the losses to the system that occurs with a probability of 1 percent or less, and each financial institution is assigned a specific contribution to the overall systemic risk. This approach shows that at the end of 2013, the largest contribution to systemic risk in the USA came from the insurance and pension funds sector (approx. 40%), with banking and shadow banking each contributing around 30%. Shadow banking's contribution has been rising sharply since 2009 however and is almost back to its pre-crisis level. In the euro area, where intermediation is much more bank-based, systemic risk remains concentrated with banks (approx. 65%), with insurance and pension funds accounting for around 20%. Shadow banking makes up approximately 15% and has not shown a marked tendency to increase.

2.5.3. Work is underway to make shadow banking entities and activities more transparent

Work is underway to increase the scope and quality of supervisory data...

The fact that the supervisory system for shadow banking risk is not yet fully operational is a reason for the regulatory community to extend its work on gathering and using data. The difficulty lies in the fact that risks need to be supervised on a cross-cutting basis, at the activity level, whereas the available data, regulations and supervisory practices are generally entity-based.

⁷⁷ International Monetary Fund (2014), Global Financial Stability Report, October 2014.

In this respect, international institutions are moving forwards with regulatory developments and initiatives that are expected to help to improve the transparency of some shadow banking entities and activities for investors and supervisors alike. On the activities side:

...both on the activities side...

- ▶ since February 2014, EMIR has required financial and non-financial entities to report transactions in derivative products to a trade repository approved by ESMA. This reporting contains information about trades and counterparties. Once these data are stabilised, supervisors will be able to use them to gain a better idea of the risks associated with derivatives trading, including for shadow banking entities;
- ▶ in August 2013, the FSB published a series of recommendations⁷⁸ aimed at limiting the risks (creation of leverage beyond the bounds of the prudential framework and increased procyclicality during episodes of market stress⁷⁹) and improving the transparency of securities lending and repos. The European Commission incorporated these recommendations in its draft European Regulation on Securities Financing Transactions (SFTR) in January 2014, which sets out obligations in terms of reporting to regulators (via trade repositories) and transparency towards investors. This work is expected to be finalised in 2015;
- ▶ following work by the Basel Committee-IOSCO and EBA aimed at outlining high-quality securitisation based on criteria of simplicity and transparency, the European Commission launched, in conjunction with its Capital Markets Union (CMU) initiative, a consultation on defining a European framework for simple, transparent and standardised securitisation⁸⁰.

On the entities side:

...and for entities

- ▶ the FSB's Workstream 3 (Other Shadow Banking Entities) has drawn up a classification of shadow banking entities based on economic function⁸¹, which will improve international consistency in identifying entities that exercise these economic functions;
- ▶ the AIFM Directive harmonises transparency requirements vis-à-vis AIF investors and supervisors. Some supervisors are already using these data to more effectively monitor participants' leverage and derivatives usage;
- ▶ the regulation on money market funds adopted by the European Parliament at first reading in March 2015 imposes enhanced requirements in terms of reporting to supervisors (at least quarterly), particularly on stress test results, asset and liability liquidity, and principal counterparties in derivatives trades;

2.5.4. A risk framework is being finalised at European and international level

In terms of preventing the risks associated with shadow banking, current reforms are aimed at moving towards a comprehensive body of rules that are consistent internationally (to prevent activities from transferring between jurisdictions) and between activities (to ensure

⁷⁸ Financial Stability Board (2013), Strengthening Oversight and Regulation of Shadow Banking, Policy Framework for Addressing Shadow Banking Risks in Securities Lending and Repos.

⁷⁹ AMF (2014), Risk and Trend Mapping for Financial Markets, Section 1.5.

⁸⁰ http://ec.europa.eu/finance/consultations/2015/securitisation/docs/consultation-document_en.pdf

⁸¹ The five functions are (i) Management of collective investment vehicles with features that make them susceptible to runs; (ii) Loan provision that is dependent on short-term funding; (iii) Intermediation of market activities that is dependent on short-term funding or on secured funding of client assets; (iv) Facilitation of credit creation; and (v) Securitisation-based credit intermediation and funding of financial entities.

Adjusting the regulatory framework based on identified risks and the prevailing legislation

that economically equivalent activities are treated equally). Work presently underway also has to consider how existing law treats risks associated with shadow banking to limit the threat of regulatory redundancies. In European collective investing, for example, the UCITS and AIFM directives already have specific provisions (a significant portion of which were recently updated) on managing asset/liability mismatch risk, restricting use of leverage and limiting exposure (see Chapter 4). Additional provisions that are not specific to asset management either already apply or will ultimately apply to activities by investment managers through regulations such as SFTR⁸² for securities transactions, MiFID II for trading in financial instruments, and EMIR for derivatives trading.

Regulatory reforms at international level cover the following aspects:

A framework for banking sector exposures to shadow finance entities and activities

› to reduce the risks linked to interactions between banks and shadow banking entities, the Basel Committee has finished updating its risk weightings for bank exposures to investment funds and completed the framework for measuring and supervising banks' large exposures. On the second point, the general framework published in April 2014 seeks to secure banks' exposures to their main counterparties and features a more inclusive definition of exposures to capture certain shadow banking entities more consistently;

Reforms to money market funds have still to be carried out

› make money market funds less sensitive to runs, the European Commission issued a proposal for a regulation that was adopted at first reading by the European Parliament in March 2015. The regulation contains provisions on asset diversification rules, one-day and one-week liquidity requirements, eligible assets and valuation methods;

Working towards safer, more transparent securitisation

› improve transparency and align incentives in securitisation activities, IOSCO is currently conducting a review of the measures taken by FSB member jurisdictions. The initial findings, based on data to June 2014, point to substantial progress in risk retention and transparency measures and standardisation. Discussions have been enhanced by an increased awareness of securitisation's role in financing the economy, as reflected in the European consultation on securitisation launched in conjunction with CMU;

› reduce procyclicality and other risks to financial stability from securities transactions such as repos and securities lending, the FSB published a regulatory framework in October 2014 for initial margin for non-centrally cleared securities transactions, aimed at limiting the formation of excessive leverage outside the banking system as well as the procyclicality of that leverage.

In France, work by the Haut Conseil de Stabilité Financière (HCSF) is helping to more effectively measure and monitor the risks associated with shadow banking. At this stage, the HCSF does not think that shadow banking poses a major risk to the French financial sector or to financing of the economy⁸³.

⁸² Securities Financing Transactions Regulation.

⁸³ Haut Conseil de Stabilité Financière, 2014 Annual Report.

CHAPTER 3: HOUSEHOLD SAVINGS

- Risky assets account for a minority share – less than 38% – of households' financial assets. This level of exposure limits principal risk but could constrain funding for business investment, affecting potential growth, notably when the economy is coming out of a crisis. Long-run growth in wealth per capita is driven by productivity gains, and these in turn are based on investment by non-financial companies, innovation and R&D, which are inherently risky activities.
- In a setting of historically low long-term interest rates, some low-risk assets held by households, such as bonds, could lose value if interest rates go up, eroding households' financial net worth.
- Online markets for risky products such as contracts for difference and forex instruments may not pose a macroeconomic threat, but remain a danger for households that trade in them. An AMF survey published in October 2014 on the investment performances of individual investors over 2009-2012 revealed that 75%-89% of customers sustained principal losses.
- Crowdfunding conducted through crowdfunding advisers (a newly created status) has a marginal presence. With just 16 registered platforms so far, crowdfunding does not, for the time being, raise major financial issues.
- The line dividing index and active investing is becoming increasingly blurred, raising questions about the transparency of index investment products and the risks that they pose.

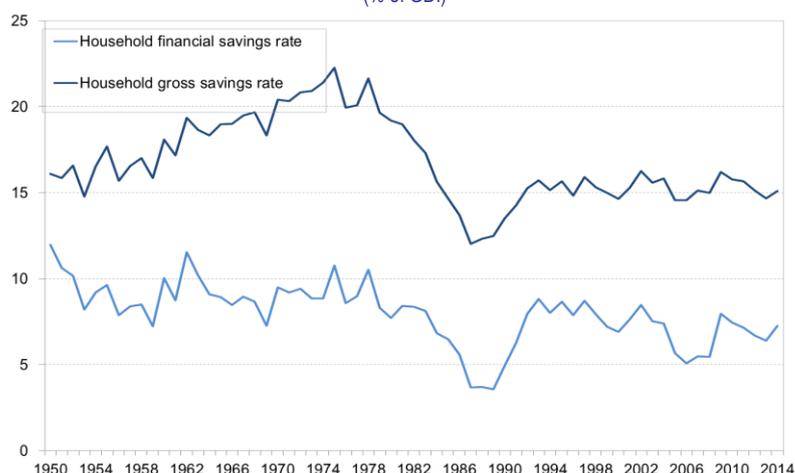
3.1. From the savings rate to financial net wealth

The national accounts define household savings flows as the portion of gross disposable income (GDI)⁸⁴ that is not used consumed. In 2014 French households saved EUR 203 billion of GDI worth EUR 1.342 trillion. Since the early 1990s their gross savings rate has fluctuated around 15% (Figure 48) and stood at 15.1% in 2014, which is consistent with the rates seen in previous years (14.7% in 2013 and 15.1% in 2012). The slight decrease of 154 bp⁸⁵ between 2009 and 2013 reflected continued consumer spending at a time of weak GDI growth, but also muted returns on savings and the impact of measures to consolidate government finances. The household financial savings rate measures the relationship between households' net lending and 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). The financial savings rate continues to stabilise and stood at 7.3% in 2014, after falling steeply between 2005 and 2008, when it averaged 5.4% a year.

⁸⁴ Household GDI comprises "all income from activity, investments and social benefits less direct taxes and social security charges" (INSEE).

⁸⁵ 1 basis point (bp) corresponds to a 0.01% change.

Figure 48: Household gross savings rate and financial savings rate
 (% of GDI)



Source: INSEE.

The gross savings rate among French households is similar, in terms of level, to the German rate, which stood at 16.3% in 2013 according to Eurostat. Both countries exhibit high savings rates compared with the rest of the euro area⁸⁶. Some countries, such as Spain and Italy, have mid-range savings rates, which have varied between 10% and 11% in recent years. Meanwhile, the UK has a relatively low savings rate – 6.4% in 2013 according to Eurostat – compared with European Union countries and the euro area.

Box 3: Data subject to revision

Data on household financial wealth are taken from the national financial accounts published by the Banque de France. These data are regularly revised: during year n+1, the data for the previous year (n) are published provisionally, those pertaining to year n-1 are revised and considered semi-final, while the data for n-2 are revised for the last time before being considered final. This partly explains changes to the data for a given year when it is subject to revision.

In addition, on 15 May 2014, financial accounts data began to be valued using 2010 as the base year, resulting in some different changes from those associated with regular data revisions. The definitions of some variables have been changed and the scope of certain aggregates has been modified relative to the 2005 base so some differences can be expected between the 2014 and 2015 analyses. For example, net flows into unit-linked life insurance were measured at EUR 3 billion in 2008 when 2005 was used as the base year, but this changed to EUR -7.6 billion for the same year when 2010 was applied (Figure 55). Similarly, households were considered to hold EUR 672 million in short-term debt securities in 2013 when 2005 was used as the base year, compared with EUR 18.483 billion when base 2010 was used.

These flows play a part in building the economic and financial wealth of households. At end-2013, the economic wealth of France's households came to EUR 10.238 trillion⁸⁷ (Table 4). Assets have been growing steadily over the years, although the pace is slowing, with annual growth averaging 3% between 2008 and 2013, compared with 11.4% for the 2002-2007 period, chiefly owing to flat growth in non-financial assets, which account for the bulk of total wealth (70% in 2013).

⁸⁶ The gross savings rate among euro area households was 12.7% in 2014 according to Eurostat.

⁸⁷ Because data on household non-financial assets in 2014 will not be available until summer 2015, after this report has gone to press, household non-financial wealth is described for 2013.

The sluggish performance by non-financial assets can be attributed to the large share represented by real estate (95%). Property is a preferred investment for French households and accounted for 66% of their total wealth in 2014 compared with 53% in 1998.

Table 4: Growth and composition of household economic and financial wealth

	2013		2014		Change				
	EUR billion	%	EUR billion		2002-07 annual avg. %	2008-13 annual avg. %	2011-12 %	2012-13 %	2013-14 %
Non-financial assets (NFA):	7,126	70	n.a.		13.2	1.9	-1.3	-0.1	n.a.
Land and buildings:	6,760	66	n.a.		13.9	2.0	-1.3	-0.1	n.a.
Dwellings	3,356	33	n.a.		7.2	2.9	2.8	1.6	n.a.
Developed land	3,084	30	n.a.		23.2	1.6	-4.8	-1.4	n.a.
Financial assets (FA):	4,465	44	4,599		7.8	4.8	4.8	4.7	3.0
Currency and deposits	1,246	12	1,269		3.5	3.2	3.9	2.2	1.9
Debt securities other than shares	81	0.8	76		-3.9	2.4	11.2	-4.9	-7.0
Loans	28	0.3	29		3.4	-1.6	2.5	3.5	3.5
Shares and collective investment schemes:	1,220	12	1,245		11.5	6.3	13.0	8.0	2.0
Shares:	926	9	962		13.7	7.6	13.4	8.6	3.9
Listed shares	181	2	192		12.7	10.6	15.0	18.8	5.9
Unlisted shares	386	4	398		15.6	7.2	19.1	17.0	3.1
Other equity interests	359	4	372		11.4	6.7	8.2	-3.1	3.9
Collective investment schemes:	295	3	283		5.7	2.8	11.7	5.9	-4.0
MMFs	11	0.1	9		2.1	-28.9	-35.7	-14.2	-21.3
Non-MMFs	284	3	274		6.4	7.6	15.8	6.9	-3.3
Insurance technical provisions:	1,630	16	1,694		10.3	4.8	3.3	3.8	3.9
Life insurance & pension funds	1,530	15	1,591		10.4	4.8	3.2	3.8	4.0
Other accounts receivable	259	3	286		3.9	7.9	-15.2	12.3	10.5
Total assets (A) = (NFA) + (FA)	11,591	113	n.a.		11.1	3.0	0.9	1.7	n.a.
Financial liabilities (FL):	1,353	13	1,369		8.5	2.6	-1.8	2.2	1.2
Currency and deposits	-	-	-		-	-	-	-	-
Debt securities other than shares	-	-	-		-	-	-	-	-
Loans	1,158	11	1,178		10.0	3.9	2.1	2.0	1.8
Shares and CIS (equity liabilities):	-	-	-		-	-	-	-	-
Insurance technical provisions:	-	-	-		-	-	-	-	-
Other accounts payable	195	2	191		3.8	-3.5	-20.3	3.0	-2.3
Financial net worth = (FA) - (FL)	3,112	30	3,230		7.6	5.8	8.0	5.9	3.8
Net worth = (A) - (FL)	10,238	100	n.a.		11.4	3.0	1.3	1.6	n.a.

Note: "-" indicates no holding and "n.a." means data were not available at the time of writing.

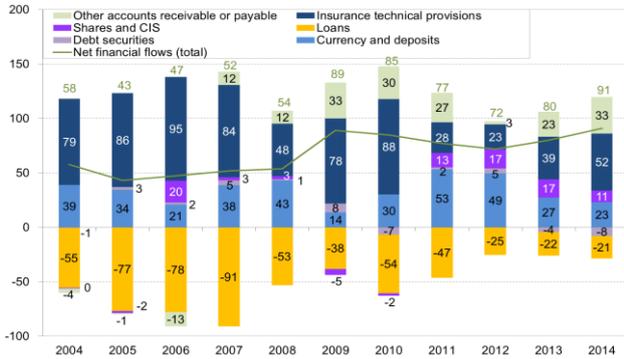
MMFs: Money market funds.

Sources: INSEE, Banque de France, National Accounts, base year 2010, AMF calculations.

Households' financial net worth, which totalled EUR 3.230 trillion in 2014, is equal to the difference between their holdings of financial assets and liabilities. This wealth is increasing annually, although the growth rate is easing (Table 4). Household net savings flows increased by EUR 11 billion between 2013 and 2014, rising from EUR 80 billion to EUR 91 billion (Figure 49). However, this was partly because of a decline in loan-related flows, which fell from EUR 54 billion in 2010 to EUR 21 billion in 2014. Figure 50 confirms this trend, showing that households' main financial investment flows contracted by EUR 2 billion between 2013 and 2014.

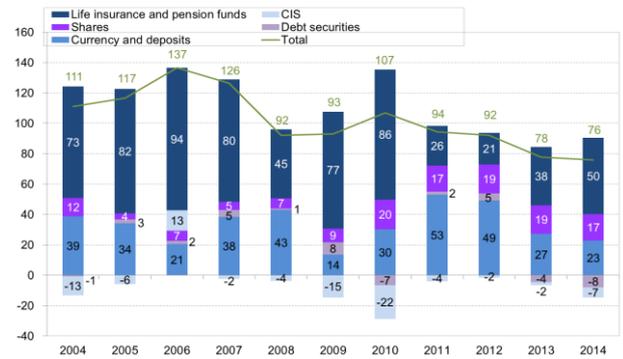
The increase in households' financial net worth (Figure 51) therefore owes more to valuation effects on financial assets than to increased investment volumes. Furthermore, French households continue to increase their debt by through bank loans, which amounted to EUR 1.149 trillion in 2014, or 35.6% of net financial assets, compared with 32.5% in 2007.

Figure 49: Households' net financial investments
 (net annual flows, EUR billion)



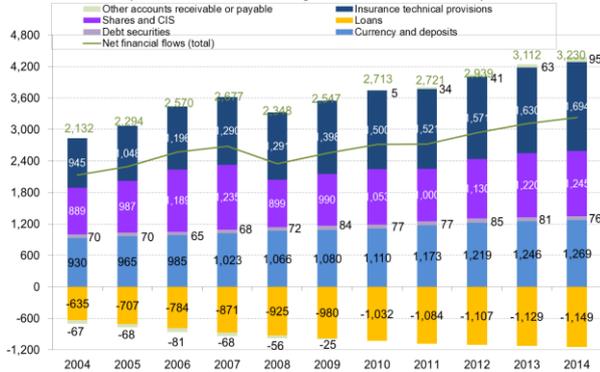
Sources: Banque de France, National Financial Accounts, base year 2010, AMF calculations.

Figure 50: Households' main net financial investments
 (net annual flows, EUR billion)



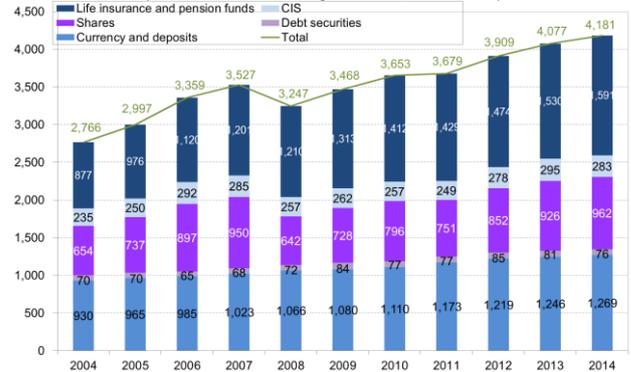
Sources: Banque de France, National Financial Accounts, base year 2010, AMF calculations.

Figure 51: Households' financial net worth
 (net annual outstanding amounts, EUR billion)



Sources: Banque de France, National Financial Accounts, base year 2010, AMF calculations.

Figure 52: Households' main net financial assets
 (net annual outstanding amounts, EUR billion)



Sources: Banque de France, National Financial Accounts, base year 2010, AMF calculations.

3.2. Household investment flows continued to be directed towards life insurance and bank deposits

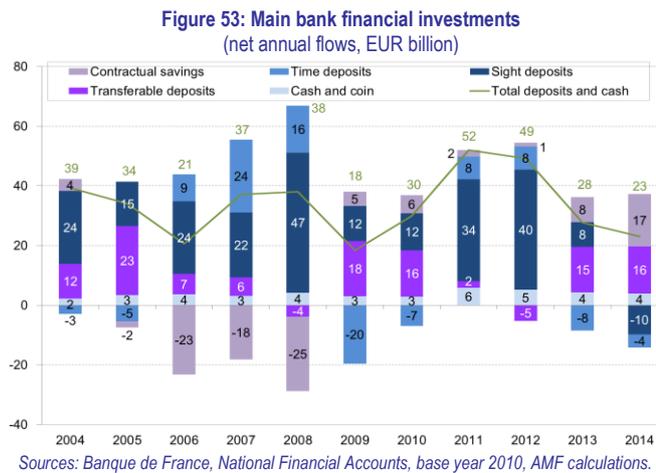
Household financial investment flows continued to decline

Households' main net financial investment flows have fallen since 2010 and stood at EUR 76 billion in 2014 (Figure 50), the lowest level since 2000 (EUR 68 billion). Although the financial savings rate was higher, net financial savings flows declined in 2014 owing to substantial outflows from debt securities and collective investment schemes (CIS). The net amounts invested by households have fallen steadily in recent years, while the structure of their net investment flows has changed. In the face of economic uncertainty, French households have adopted a cautious stance since the financial crisis, eschewing riskier assets in favour of safer ones. This has rekindled interest in life insurance products⁸⁸, particularly non-unit-linked instruments, and in bank savings products (regulated and contractual savings) notwithstanding a decline since 2012 in flows towards bank investments.

Increases to the maximum allowed investments in Livret A and sustainable development passbooks in 2011 and 2012 led to higher flows into regulated savings products and bank

⁸⁸ Life insurance is measured using a portion of insurance technical reserves, i.e. households' net entitlements to life-insurance and pension-fund net technical reserves.

investments generally. In 2013 the trend went into reverse following successive cuts to the return on regulated savings products, with Livret A passbooks earning a nominal 1%⁸⁹ at end-2014. The reduction in financial investment flows towards bank deposits was accompanied by substantial reallocations (Figure 53). Sight deposits, which mainly comprise regulated savings, experienced their steepest decline in three years, reported outflows of EUR 10 billion in 2014 after attracting net inflows of EUR 40 billion in 2012. Flows into contractual savings products, which chiefly comprise home savings plans (PELs), increased as their gross rate of return was held at 2.5% in 2014. Transferable deposits capture around 70% of the main bank financial investment flows and comprise all deposits that can be immediately converted to cash or that are transferable free of charge by cheque or credit transfer.



Sharp increase for life insurance products

Meanwhile, life insurance products, which attracted less interest in 2011 and 2012, saw sharply increased levels of new money compared with previous years. The low level of policy rates in the euro area (Figure 54) and the USA, and the increased rates of return on regulated savings products in 2011 and 2012 lessened the appeal of life insurance and financial investments such as debt securities and money market funds. Cuts to the rates of return for regulated savings in 2013 and 2014 sparked renewed interest in life insurance, as reflected by household investment flows. Since 2013, the share of these flows allocated to life insurance has risen and now exceeds the portion allocated to bank deposits. Together, these two categories accounted for 96% of households' net financial investment flows in 2014. Conversely, CIS and debt securities were subject to net disposals in 2014 (Table 4), in a repeat of 2013. The low interest rate environment is accelerating net outflows from these assets, especially money market funds, whose returns are weakening.

⁸⁹ With an inflation rate of 0.5% in 2014 according to INSEE, the real return on Livret A passbooks remains positive at 0.5%.

Figure 54: Nominal return on selected investments (%)



Sources: Banque de France, Datastream, AMF.

Furthermore, ten-year interest rates on French government bonds have now fallen below the return on Livret A passbooks. This environment of record low long-term interest rates may be a source of risk for insurers and banks. If interest rates remain low for a prolonged period, life insurers and banks could be faced with a mismatch between their liabilities, which are guaranteed (potentially for a very long period depending on the contract), and their assets, which could be earning extremely low rates of return. If interest rates go up, life insurers and banks might be unable to adjust their rates of return immediately and hence be exposed to the risk of net outflows. Historically low long-term interest rates could also generate a risk of principal loss for households, as some low-risk assets, such as bonds, might lose value if interest rates head higher.

Box 4: New products that appeared in 2014 are helping rekindle interest in life insurance

To direct more household savings towards financing the economy and driving long-term growth, France reformed its life insurance regime by creating two new products through a series of decrees and executive orders adopted between June and September 2014⁹⁰:

- ▶ *Eurocroissance* (eurogrowth) funds are invested in non-unit-linked and unit-linked vehicles. Capital can be placed in these funds, in which case it is 100% protected for an investment period of eight or more years. Alternatively it can be invested in a growth fund offering partial principal protection (at least 80%) over a period of eight or more years.
- ▶ *Vie-generation* (life generation) contracts are fully invested in unit-linked vehicles and at least 33% must be invested in financing for small and medium-sized enterprises and mid-tier firms, low-cost/affordable housing and the socially responsible sector.

Eurocroissance and *vie-generation* funds have had qualified success, however, attracting 35% and 20% of the life insurance market respectively.

Listed shares saw net inflows for the first time in three years

As regards riskier assets, flows into listed shares were positive for the first time in three years, at EUR 6.705 trillion in 2014, even though the CAC 40 index had a fairly flat 2014 (Figure 55). Unlisted shares and other equity interests also showed positive net inflows, although these were down compared with 2013, at EUR 3.414 trillion in 2014 compared with EUR 8.921 trillion in 2013 for unlisted shares and EUR 7.141 trillion in 2014 compared with EUR 14.646 trillion in 2013 for other equity interests⁹¹.

⁹⁰ Life insurance reforms were introduced by Executive Order 2014-696 of 26 June 2014 on promoting the contribution of life insurance towards financing the economy and by Decree 2014-1011 of 5 September 2014, which provides for the establishment of a new kind of unit-linked life insurance policy aimed at steering savings towards business financing (<http://www.economie.gouv.fr/cedef/assurance-vie>).

⁹¹ Other equity interests includes all types of interests in joint-stock companies other than shares, such as stakes in limited liability companies, limited partnerships, general partnerships, and civil, cooperative and mutual companies.

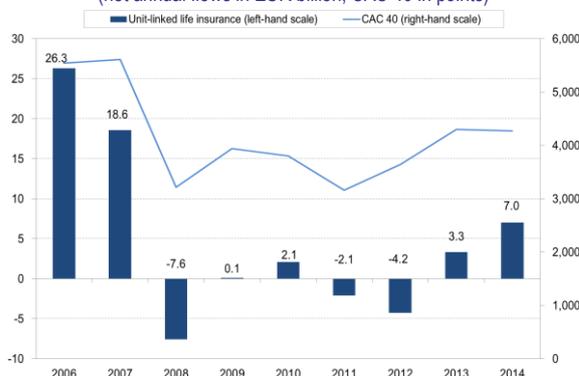
3.3 Household wealth is mainly made up of life insurance contracts and bank deposits

In 2014 the total net outstanding amount of French households' main investments came to EUR 4.181 trillion, compared with EUR 4.077 trillion in 2013, an increase of 2.6%. The structure of households' main investments has been unchanged since 2008 (Figure 52), highlighting the persistently strong appeal of life insurance and bank deposits. At the end of 2014, these two types of investments accounted for 68% of households' main net outstanding financial investments, with life insurance making up 38% and bank deposits the other 30%. Other types of investment (debt securities, shares and CIS) thus accounted for 32% of the total outstanding amounts.

Net new money in unit-linked life insurance more than doubled

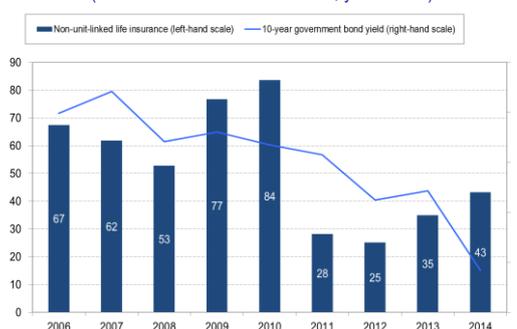
In life insurance, net inflows into unit-linked products increased once more, after three years during which flows were either negative (2011 and 2012) or weakly positive (2013) (Figure 55). In 2014 net investment flows into unit-linked products came to EUR 7 billion. Between 2008 and 2014, total flows into these products came to a negative EUR 1.4 billion, but the total outstanding amount of unit-linked life insurance rose by 22.7% over the same period owing to the pick-up in equity markets and valuation effects. Net inflows into non-unit-linked life insurance contracts also increased, to EUR 43 billion in 2014 (Figure 56), but remained off the level seen in 2010 (EUR 84 billion) as returns on non-unit-linked life insurance contracts continued to decline, averaging 2.5% in 2014 compared with 2.9% in 2013, according to the French Insurers Federation (FFSA).

Figure 55: Annual investment flows to unit-linked life insurance contracts and CAC 40 performance
 (net annual flows in EUR billion, CAC 40 in points)



Sources: Banque de France, National Financial Accounts, base year 2010, Datastream, AMF calculations.

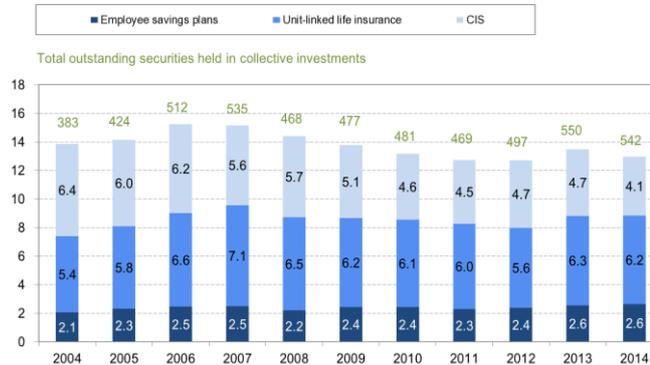
Figure 56: Annual investment flows to non-unit-linked life insurance contracts and 10-year government bond yield
 (net annual flows in EUR billion, yields in %)



Sources: Banque de France, National Financial Accounts, base year 2010, Datastream, AMF calculations.

At the end of 2014, net outstanding amounts in household collective investments, which include unit-linked life insurance contracts, directly held CIS units and employee savings plans, amounted to EUR 542 billion (Figure 57), or 13% of households' main net outstanding financial investments. This share has been relatively stable since the beginning of the 2000s, fluctuating around the 14% mark. Unit-linked life insurance accounts for 48% of these outstanding investments, directly held CIS for 32%, and employee savings plans for 20%. Following a sharp increase between 2012 and 2013, the share of unit-linked life insurance contracts appeared to settle between 2013 and 2014. The share of CIS decreased in connection with the outflows observed from these assets.

Figure 57: Share of selected collective investments in households' main outstanding financial investments
 (% share, net outstanding amounts in EUR billion)

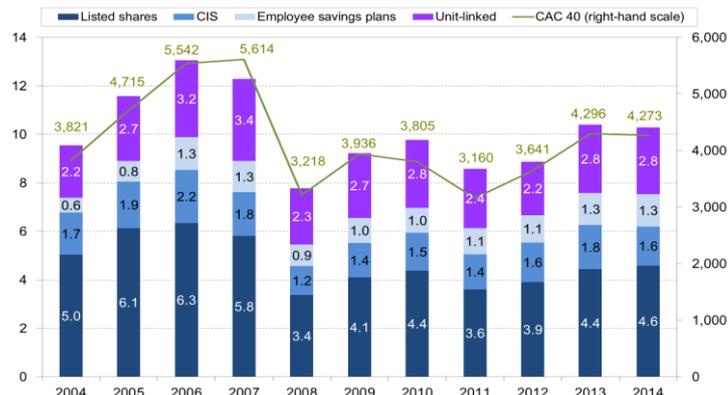


Sources: Banque de France, National Financial Accounts, base year 2010, AFG, FFSA and AMF calculations.

In 2014 total equity holdings, including shares owned directly (listed shares, unlisted shares and other equity interests) and indirectly (via employee savings plans, CIS and unit-linked life insurance), amounted to EUR 1.201 trillion, accounting for 28.7% of households' main net outstanding financial investments, the same as in 2013.

Stripping out unlisted shares and other equity interests⁹², total equity holdings amounted to just EUR 430.5 billion in 2014, or 10.3% of households' main net outstanding financial investments (Figure 58). The share of equities stabilised in 2014 after surging between 2012 and 2013 (EUR 77.5 billion).

Figure 58: Directly and indirectly held shares as a percentage of households' main net outstanding financial investments, by type
 (% share of net outstanding amounts in EUR billion)



Sources: Banque de France, National Financial Accounts, base year 2010, AFG and AMF calculations.

French households' equity holdings were more or less steady between 2013 and 2014. Since 2010, households' investment decisions have seemed less tied to stockmarket performances. Whereas between 2001 and 2009, households behaved procyclically⁹³, buying shares during cyclical upswings and selling them when indices were falling, this trend has no longer been in evidence since 2011.

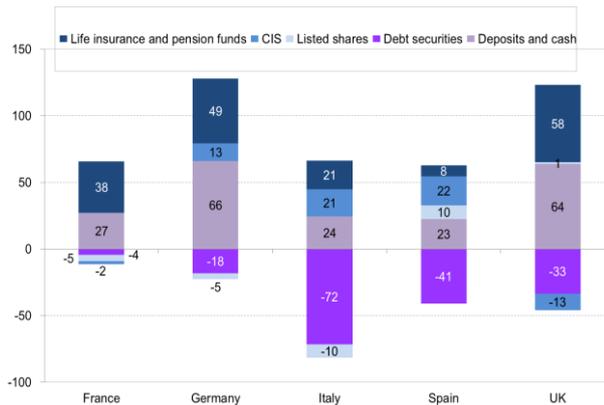
⁹² Because unlisted shares and other equity interests are not priced by a financial market, they are hard to value, which is why they are excluded from the detailed analysis.

⁹³ See Risk and Trend Mapping 2014.

3.4. International comparison of household behaviour

International comparisons reveal significant differences in household savings patterns, which carry over into the structure of savings flows and household financial assets in 2013⁹⁴. The structures of European households' investment flows vary widely (Figure 59). French, German and UK households devote a large share of their savings to life insurance and bank deposits, whereas Spanish and Italian households are more drawn to debt securities and CIS.

Figure 59: Main annual financial investments by households in selected European countries in 2013 (net annual flows, EUR billion)

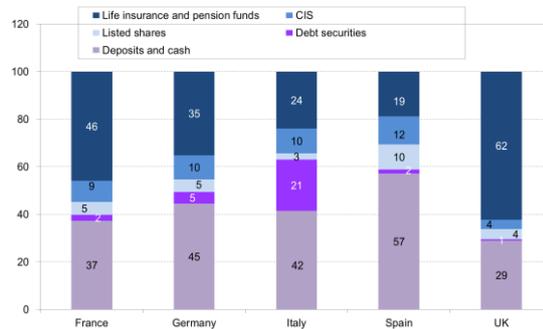


Sources: Banque de France, Bundesbank, ONS, Banco de España and Eurostat financial accounts for Italy, AMF calculations.

The appeal of debt securities to Spanish and Italian households reflects both a plentiful supply of bonds, especially government securities, and tax incentives. That being said, debt securities have also been sold on a large scale since 2012.

These cross-country differences in household saving flows are also found in net outstanding holdings (Figure 60). In France and Germany, life insurance⁹⁵ and bank deposits take a large share of households' main outstanding assets, while pension funds and bank deposits capture a substantial share in the UK. Pension funds occupy a particularly large place in the UK because the retirement system is based primarily on full funding.

Figure 60: Composition of households' main outstanding financial assets in selected European countries in 2013 (% of total outstandings)



Sources: Banque de France, Bundesbank, ONS, Banco de España and Eurostat, financial accounts, AMF calculations.

⁹⁴ Owing to the lack of some statistical data for 2014, the analysis uses data for 2013.

⁹⁵ Life insurance is measured using a portion of insurance technical reserves, i.e. households' net entitlements to life-insurance and pension-fund net technical reserves.

In Spain, bank deposits have the dominant share, reflecting the significant role played by traditional bank intermediation. Italy has the most even distribution, with bank deposits exercising slightly greater appeal. Despite selling off debt securities over the last three years, Italian households still hold a larger share of bonds than their European neighbours.

3.5. The share of risky assets held by households remains stable

Households' wealth is made up of a set of financial products with different characteristics in terms of liquidity, returns, tax treatment, holding costs, management complexity and principal risk. The last of these factors – principal risk – refers to the possibility of losing some or all of the value of the principal initially invested when the investment matures.

Depending on the financial asset⁹⁶, household exposure to principal risk varies between zero risk, where capital is fully guaranteed (the saver is assured of recouping the entire value of the principal amount invested when the investment matures) and maximum risk, where no guarantee exists and, in theory at least, the entire value of the capital invested could be lost. More generally, the degree of principal risk is measured by the volatility of the value of the principal recovered when the investment ends: the higher the volatility, the greater the risk (Box 5).

Box 5: Principal risk associated with households' holdings of financial assets

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:

- > **Currency and deposits:**
All financial products in this category carry some risk of capital loss. For example, deposit accounts and other savings products are covered by the French deposit insurance and resolution fund, FGDR, up to EUR 100,000 per person per bank.
- > **Debt securities:**
Debt securities such as bonds carry 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 life insurance contracts offer no principal guarantee; all principal risk is borne by the policyholder.
- > **CIS: exposure to risk varies with the underlying asset classes**
The degree of principal risk on CIS 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 shares 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 risks altogether or counted with other equity interests under illiquid risky assets.

Measuring households' exposure to principal risk based on their financial assets 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 CIS. Finer measurement of risk requires an accurate breakdown of this chain of intermediation. Such a breakdown is hard to make, however, because data are not available at the required level of disaggregation. Estimates must therefore be used, and the overall quality of the risk assessment depends on the precision of those estimates.

⁹⁶ See Box 5.

Two approaches to measuring households' exposure to principal risk are presented below; the second is intended to be more precise and seeks to break down the intermediation chains involved in wealth management.

Table 5: Composition of financial risk borne by households

	2013		2014		Change				
	EUR billion	%	EUR billion	%	2002-07 annual avg.	2008-14 annual avg.	2011-12 %	2012-13 %	2013-14 %
Liquid non-risky assets	970	23.8	978	23.4	5.3	2.5	3.4	2.7	0.8
Currency	61	1.5	65	1.6	6.7	7.0	2.8	7.5	6.5
Other*	8	0.2	8	0.2	3.1	-6.2	2.7	-5.1	-0.4
Sight deposits	303	7.4	319	7.6	6.7	7.0	-1.9	5.2	5.4
Passbook savings deposits	588	14.4	578	13.8	6.4	3.3	7.8	1.4	-1.7
MMFs	11	0.3	9	0.2	2.1	-27.7	-35.7	-14.2	-21.3
Other non-risky assets	1,561	38.3	1,631	39.0	6.7	4.1	3.6	1.2	4.5
Fixed-term accounts	65	1.6	61	1.5	6.3	-4.9	8.8	-11.5	-6.7
Contractual savings (PELs, PEPs)	221	5.4	239	5.7	-2.5	3.1	0.6	4.0	7.9
Non-unit-linked life insurance	1,275	31.3	1,332	31.9	9.8	4.9	3.9	1.5	4.5
Liquid risky assets	546	13.4	542	13.0	6.7	6.1	14.7	8.5	-0.8
Debt securities	81	2.0	76	1.8	-3.9	0.8	11.2	-4.9	-7.0
Listed shares:	181	4.4	192	4.6	12.7	9.8	15.0	18.8	5.9
French listed shares	167	4.1	176	4.2	12.5	9.9	15.5	19.7	5.1
Non-MMFs	284	7.0	274	6.6	6.4	5.7	15.8	6.9	-3.3
Other risky assets	1,000	24.5	1,030	24.6	13.7	5.6	9.5	8.9	3.0
Unlisted shares	386	9.5	398	9.5	15.6	6.5	19.1	17.0	3.1
Other equity interests	359	8.8	372	8.9	11.4	6.2	8.2	-3.1	3.9
Unit-linked life insurance	255	6.3	259	6.2	12.9	3.5	-0.5	16.7	1.6
Households' main net outstanding financial	4,077	100	4,181	100	8.8	2.4	6.2	4.3	2.6

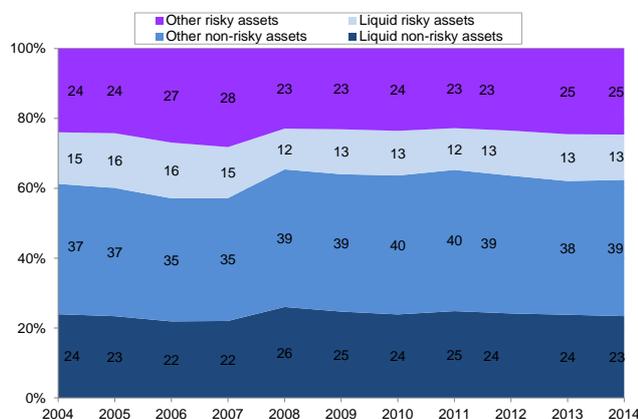
Notes: * Other includes accrued interest on deposits not yet credited and miscellaneous deposits and guarantees
MMFs: Money market funds.

Source: Banque de France, National Financial Accounts, base year 2010, AMF calculations

Households tend to hold relatively low-risk financial assets

An initial idea of households' exposure to principal risk can be obtained by classifying all assets held by their degree of liquidity and principal risk (Table 5). Going by this breakdown, households hold low-risk assets, with non-risky assets accounting for 62% of their main financial assets at end-2014. Non-risky assets have made up a relatively high proportion of the household financial portfolio for some years, with a steady share of between 62% and 65% since 2008 (Figure 61).

Figure 61: Composition of financial risk borne by households (as % of main net outstanding financial assets)



Source: Banque de France, National Financial Accounts, base year 2010, AMF calculations

The share of non-risky assets rebounded markedly between 2007 and 2008, climbing from 57% of the total to 65%, before decreasing slightly. Conversely, risky assets saw their share shrink in the wake of the financial crisis to 38% of outstanding amounts at the end of 2014 from 43% in 2007. Two factors played a part in this. Crises tend to be characterised by both a flight to quality and a flight to liquidity, which cause funds invested in risky assets to be withdrawn and put into safer assets. As demand for risky assets softens, while safe assets gain in appeal, the value of risky assets goes down, automatically boosting the share of non-risky assets, which are not subject to valuation effects. Among non-risky assets, the share of MMFs has been falling for a decade, contractual savings products have been stable, non-unit-linked life insurance has grown its share, while that of sight deposits has edged down.

Another view of principal risk can be obtained by using an estimated breakdown of the chain of intermediation behind securities held by households. In this view, financial assets held by households are classified according to their degree of risk, which is presented in ascending order by risk class (from 1 = lowest to 5 = highest) (Table 6).

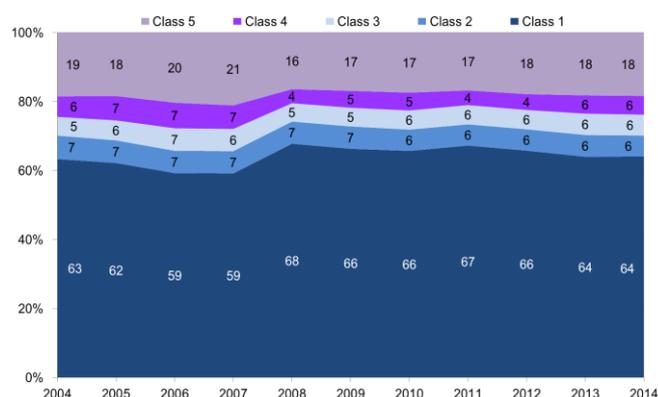
Table 6: Risk classes of financial assets

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 funds - Short-term debt securities held directly - Non-unit-linked life insurance
Class 2	- Bonds held directly - Bond funds - Structured and 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 interests - Unlisted shares

Source: AMF.

Dividing up households' main financial assets according to this grid of risk classes produces the following results (Figure 62).

Figure 62: Distribution of financial investments by risk class
 (as % of main outstanding financial assets)



Source: Banque de France, National Financial Accounts, base year 2010, AMF calculations

This second assessment corroborates the first analysis, finding that households hold relatively low-risk financial assets and that the trend is towards stability. The least risky assets made up 64% of savers' main financial investments at the end of 2014. Since 2007, when class 4 and 5 assets were offloaded in favour of class 1 assets, the distribution across

risk classes has been steady, although the class 1 share has been adjusted. This distribution indicates that households have low exposure to principal risk, but this could constrain funding for business investment, affecting potential growth, notably when the economy is coming out of a crisis. Long-run growth in wealth per capita is driven by productivity gains, and these in turn are based on investment by non-financial companies, innovation and R&D, which are inherently risky activities.

3.6. Dangers of online trading in speculative financial instruments

An exclusive study on the investment performance of individuals trading in CFDs and forex

In 2014 the AMF carried out a study to obtain the first-ever assessment of the financial results of investments by individuals in forex and contracts for difference (CfDs) with four approved service providers, three of which were of significant size⁹⁷. The sample covered around 15,000 individual investors who were customers of websites authorised to offer forex or CfD investments.

The results showed that over the study period (2009 to 2012), most of these investors sustained financial losses. Over one-year periods, the percentage of loss-making customers varied from 75% to 89% depending on the year and the provider.

The findings are instructive: between 2009 and 2012, almost nine out of ten customers trading in forex and CfDs sustained financial losses.

The main results over four years for the customers of surveyed providers were as follows:

- › the rate of customers who lost money exceeded 89%;
- › the average loss was around EUR 10,900 per customer;
- › the median loss was EUR 1,843 per person.

Over the four-year period 13,224 customers lost a combined total of close to EUR 175 million, for a loss of EUR 13,200 per loss-making customer. The 1,575 remaining customers earned a total of EUR 13.8 million, making a gain of EUR 8,800 per person.

The study also found that customers who placed the largest number of orders and the biggest orders sustained the heaviest losses. Investors who placed 250 or more orders over the four years lost EUR 18,741 on average, while those who placed 1,000 or more orders lost EUR 31,349 on average. Individuals who placed orders exceeding EUR 10,000 lost EUR 14,876 on average while those whose orders exceeded EUR 50,000 lost EUR 28,318 on average.

One other finding dispels the notion that it is possible to learn to trade more effectively with experience: perseverance did not pay off for the 1,881 customers who were active throughout the four-year period covered by the study, as their average losses increased over time (Table 7).

⁹⁷ <http://www.amf-france.org/Publications/Rapports-etudes-et-analyses/Epargne-et-prestataires.html?docId=workspace%3A%2F%2FSpacesStore%2F677d4221-e377-4804-9c10-752c94495b51>

Table 7: Results for customers who were active every year during 2009-2012.

Period	Number of customers	Share of customers losing money	Average performance
2009 only	1,881	82.51%	-4,989 €
2009-2010	1,881	85.49%	-10,183 €
2009-2011	1,881	85.06%	-16,386 €
2009-2012	1,881	87.56%	-26,745 €

The study, which looked only at regulated firms, confirmed the extremely high risk associated with these financial instruments, which are inappropriate for the overwhelming majority of individual investors.

Box 6: Recap of the main features of and risks associated with CfDs, binary options and forex

- ▶ A contract for difference (**CfD**) is a financial contract traded OTC that gives the investor the right to receive or the obligation to pay the difference between the price of an underlying asset, such as a currency pair, stock or stockmarket index, at the time of the CfD's sale and that asset's value at the purchase date. CfDs are risky products, notably because of their leverage, which can amplify gains and losses.
- ▶ A **binary option** is an OTC traded financial instrument that results in either a pre-determined profit or total loss of the invested amount depending on whether a specified condition is fulfilled. The investor has to take a position on the direction in which the price of the underlying asset, which could be a currency, stock, commodity or index, for example, will move before the option expires.
- ▶ **Forex** (contraction of FOReign EXchange) is a round-the-clock financial market on which 158 currencies, including the US dollar, the euro, and the Japanese yen, are traded. Exchange rates between different currencies are constantly moving. Trading is done OTC by professional firms such as banks and other financial institutions, central banks, large corporations and institutional investors. The market can be influenced by a wide range of indicators, whose impact on exchange rate fluctuations are hard to predict. Individuals can bet on forex movements via online trading platforms. They can choose from a range of derivative instruments, including:
 - CfDs on currency pairs
 - binary options on currency pairs
 - rolling spot forex instruments⁹⁸.

Investing in CfDs and forex trading entail a number of risks, such as:

- ▶ The risk that losses could exceed the amount deposited in the account: because of substantial leverage, investors could be exposed to changes in the value of an underlying asset of up to 400 times the original investment. Leverage can thus allow investors to boost their gains but also their losses, which can far exceed the amount deposited in the account;
- ▶ Liquidity risk: insofar as the investor deals in CfDs and forex with a market-maker, the product's liquidity will be limited to what is offered by the market-maker.
- ▶ Counterparty risk: the CfD/forex provider is the counterparty to the trade with the customer; if the provider defaults, counterparty risk will be generated. In this regard, before committing themselves, investors should obtain complete information about the systems in place to protect deposits in the event of the failure of a financial intermediary. Note that guarantee arrangements depend on the nationality of the financial intermediary.
- ▶ Risks linked to conflicts of interest: insofar as the investor may deal with a market-maker, the interests of the latter will be opposed to those of the investor.
- ▶ Execution risks associated with keeping an open position overnight:
 - If investors leave positions open overnight or over the weekend, they are exposed to a major risk that prices may be significantly different when trading resumes.
 - There is also an execution risk when trading platforms give investors the option of trading round-the-clock in CfDs on underlying assets whose market is only open during the daytime. In this case, the intermediary uses a theoretical price that is compiled from the prices of financial instruments or assets other than the underlying assets. If the substituted asset experiences significant overnight price swings and investors do not have sufficient funds in their accounts to meet the new margin requirements, the intermediary might have

⁹⁸ Rolling spot forex is a derivative financial instrument that may be used to bet on the future path of a currency pair, with leverage. The position is tacitly rolled over from day to day if not closed out by the investor.

to close out the position.

- ▶ There are also other risks relating to the execution or non-execution of orders:
 - An order is always subject to execution and non-execution risk, no matter which approach is used (not all providers offer the same procedures). The stop loss method, for example, consists in producing the equivalent of a market order once the price spread offered on the platform reaches the threshold set by the investor who placed the order. In some circumstances, such as a sudden change in prices or if the market in the underlying asset closes, the maximum potential loss with stop loss procedures cannot be determined⁹⁹. This is because the order is triggered when the price reaches the pre-determined threshold and has the same features as a market order, which means that the order could be executed at a much less favourable price than the desired stop loss level. There is no guarantee that execution will take place at the specified price threshold.
 - Certain events may cause trading in the underlying asset to be suspended before resuming at a price that is far removed from the pre-suspension levels. This market configuration may create a risk of non-execution of orders relating to an associated CfD whose limit was consistent with the prices in effect before the suspension but which has since become obsolete.

Online forex trading: "risk is just a click away"

The AMF conducted a campaign to raise public awareness about forex risks

The AMF engaged in monitoring and preventive activities to address the dangers posed by advertisements encouraging people to bet on the forex market. In 2014 it launched an original communication campaign to raise public awareness about the risks of online forex trading.

Advertisements with promises such as "Become a trader in just a few hours" and "Pocket quick gains" encourage people to try their hand at trading. To capture the attention of the online community in a light-hearted and off-beat way, the AMF created a false ad mimicking the style of these promotional messages, which it then posted on many widely-read internet sites for more than a month starting in October 2014.

People who clicked the link were taken to a special section of the AMF website on the dangers of forex. The same section can also be reached from the AMF's homepage and provides a wide range of information, including an entertaining video¹⁰⁰.

The wide variety of distribution channels now available, from printed media to TV, radio and the internet, coupled with the digitisation of traditional media and the growing use of mobile devices mean that information can be made accessible to an extremely wide audience. Companies selling speculative and highly risky instruments such as CfDs, forex and binary options are piggybacking on this trend as they seek to attract individual investors with online advertising banners, direct mail shots and email marketing. These ads do not comply with the principle of presenting a balanced view of risks and rewards, and consumers could be misled by their lack of clarity.

In 2014 more than 40% of all new investment advertisements¹⁰¹ encouraged individuals to use these risky financial instruments to trade in forex, indices, commodities and other products.

The consequences can be severe for investors who give in to temptation. In 2014 the number of complaints received by the AMF's Épargne Info Service consumer hotline rose by 23% overall, while complaints involving forex or binary options jumped by 94% compared with 2013. Binary options are the source of a growing share of complaints, while forex's share declined. AMF Épargne Info Service estimated the associated losses to be very high, at EUR 6.5 million for 185 complaints. Reported losses varied from EUR 100 to EUR 800,000 and averaged EUR 35,100.

⁹⁹ This is a type of order that consists in automatically closing a position when the price reaches a threshold set by the customer. The execution price is not known ahead of time.

¹⁰⁰ <http://www.amf-france.org/Epargne-Info-Service/Forex-l-AMF-se-mobilise/Trading-sur-le-Forex-de-quoi-parle-t-on.html>.

¹⁰¹ The survey of new ads covers all French media although in fact most of this advertising is online.

Box 7: Findings of the AMF's mystery shopping campaign targeting forex and binary options: a risky trading choice for retail investors

To better understand marketing practices and gain a fuller understanding of the pitfalls encountered by users of forex and binary option trading websites, the AMF asked a service provider to open some trading accounts, carry out some transactions and then try to withdraw what remained of the funds deposited.

Some 20 websites offering trading services to private investors were targeted in December 2014. This list included ten authorised sites, and 11 unauthorised sites, each with strong commercial operations in France, as reflected in the visibility of their adverts and the number of consumer complaints. First of all, the mystery shopper registered his contact details online, then waited to be contacted to finalise the account application, with instructions to transfer €400 and refuse to give his bank card details. In the end, nine accounts were opened, with one unauthorised website and eight websites authorised in Cyprus. The test was used to assess the different stages in the relationship.

1/ Opening an account can be surprisingly easy

Nine accounts could be opened directly on the website, with no supporting documentation required. Most often, the shopper simply completed a quick online form. In five cases, he was able to fund his account via a bank transfer without any specific verification and started to trade without proving his identity.

2/ The client questionnaire is less than rigorous

Very few questions were asked to find out more about our prospect's profile. The most frequent questions concerned his profession, income and trading experience. When these questions were asked, the answers provided were not taken into account. Whenever the shopper specified that he had no trading experience, no message warned him about the potential risks and no authorised website prevented him from trading as soon as his account was open.

3/ The "training" provided is often deceptive

Once the account is open, an "adviser" calls the shopper. This adviser introduces himself as an expert, highlights his experience and qualifications, and stresses how fortunate the shopper is to be speaking to him. Some reassuring explanations are given, suggesting that trading is easy and the user just needs to follow the instructions on the website. But on the whole, any explanations given are minimal and difficult for a novice user to follow.

4/ There are numerous encouragements to invest more

The sales pitch is impressive: rather than providing training, the advisers' main objective is to encourage the user to deposit more funds. Different arguments are used from one site to another. The one that comes up most often is the bonus, which is mentioned in numerous advertisements and which is obtained by making an additional deposit. Another argument put forward is the so-called security that comes from having a well-funded account: "if each trade represents a small proportion of the total amount invested, the risk is lower". For some advisers, adding more funds to the account also means receive better "assistance" can be provided.

5/ Withdrawing funds is hard, if not impossible

There are many hurdles to retrieving funds that have not been lost. The procedure given on the site is often hard to follow and lacks detail. The bonus, which was very attractive at the start, then justifies the blocking of funds. In this case, withdrawing funds is conditional upon a minimum number of trades or a period of trading activity with an amount to be traded each day. Several weeks after requesting a withdrawal, our web user had received funds, in full or partially, from just two sites.

3.7. Marketing of financial products to retail investors: practices and risks

AMF mystery shopping visits targeting banks

Mystery shopping by the AMF and the risks of mismarketing

In 2014 the AMF continued its mystery shopping campaigns targeting branches of the 11 main banking networks in France. It repeated its "risk-averse customer" and "risk-hungry customer" scenarios and added a "legal guardian" scenario, in which a recently appointed guardian wants to move the accounts of a dependent to another bank because the current bank is not providing advice, and additional income is needed to finance accommodation for an elderly dependent. These mystery visits seek to assess the quality of the questions put to the prospect and the appropriateness of the products and services offered.

Furthermore, as branch traffic in bricks-and-mortar banks declines and online banking gains ground, the AMF decided to carry out a series of internet mystery shopping visits to 17 firms representing online banks, regular banks and online brokers. To do this, it asked a consultancy firm to open and deposit money in a securities account and pose as a risk-averse customer without any financial knowledge or experience. Unlike the banks visits, these exercises were conducted from the customer angle rather than the prospect angle. Like the branch visits, however, they were designed to assess the quality of customer questionnaires, while also learning about the procedures for opening a securities account online and seeing what firms do when customers place orders that do not match their profile.

Findings in terms of mis-selling risks

The branch visits found that while questionnaires were not comprehensive, the products and services suggested by advisers in 2014 were suited to prospective customers' profiles. In other words, offers varied sharply depending on the scenario, with the risk-averse prospect being offered more bank savings products, such as passbooks, home savings plans and time deposits, and far fewer financial savings products than the risk-hungry prospect.

The "legal guardian" scenario revealed that advisers were ill-equipped to deal with this kind of situation. Even so, most made recommendations on the existing assets and tried to guide the guardian. These recommendations varied and were inappropriate in just a handful of cases. Currently, 800,000 people live under guardianship arrangements in France. This number is set to increase as the population ages, so it is important to provide this customer group with good support.

Box 8: Financial literacy among retail investors

A good level of financial literacy enables people to take properly informed investment decisions. Yet French retail investors suffer from gaps in their financial education.

In 2011, the AMF and the Institut pour l'éducation financière du public (IEFP) commissioned a survey of the basic financial literacy of people in France through CREDOC, a consumer research centre. An indicator of basic financial literacy was created using ten questions covering a range of subjects, including the risk level of an investment in a savings passbook, the risk level of an equity investment, the risk/reward trade-off, diversification, the definitions of a dividend, bond and investment fund, and financial calculations. Just one person out of two scored better than or equal to the average, and a mere 1% of respondents got 10/10.

In June 2014, as part of its task of proposing a national strategy for financial education, the Comité consultatif du secteur financier (CCSF) asked IPSOS, a polling firm, to survey the level of financial education of people in France using the model recommended by the OECD. The results, which were released in January 2015, may be used to track the change in some indicators relative to the 2011 CREDOC survey, but also to compare financial literacy in France against performances in other OECD countries. While on average French people have a better grasp than citizens of other OECD countries of the notions of the risk/reward trade-off, interest and diversification, France came bottom in many questions involving the practical application of financial concepts. For example, 94% of people surveyed in France understood the concept of an interest rate, which puts France in second place among countries that published their results for the questionnaire recommended by the OECD. But

just 58% of French people, when asked, could calculate the value after one year of a EUR 100 investment bearing 2% interest (51% got the right answer in the 2011 CREDOC survey).

In other words, the financial literacy of French retail investors can still be improved, particularly when it comes to practical applications. The AMF is helping to achieve this through educational initiatives by its Investor Relations Division. This issue is key to promoting controlled investing by households.

Online questionnaires do not always ask about the person's investment goals or horizon or investor profile, although AMF Position 2013-02 on gathering know-your-customer information requires this. Questionnaires do not truly assess customers' knowledge insofar as they are primarily reporting documents. By overstating their abilities or changing their profile, customers can gain access to unsuitable products, markets and services. In addition, questions are not always worded sufficiently clearly and understandably. This creates a risk of "wrong" answers that could lead to inappropriate outcomes for the customer.

Box 9: European Regulation on Packaged Retail and Insurance-based Investment Products (PRIIPs): providing retail investors with better information

In July 2012, the European Commission published a raft of legislative measures aimed at improving the protection of retail investors. These measures included a proposal for a regulation on PRIIPs¹⁰². Following an intense debate between the European Parliament and the Council of the European Union, Regulation 1286/2014 was published on 9 December 2014.

Its goal is to enable retail investors to easily compare different types of investment products offered to them at a point of sale and to understand their main features before investing. The approach used is to create a Key Investor Information Document (KIID). The new rules apply to investment products whose performance depends directly or indirectly, partially or totally, on market fluctuations. Investment funds (CIS and AIFs), derivative products, structured bonds, structured deposits and unit-linked life insurance contracts are all included in the scope of this cross-cutting regulation.

The information provided in the KIID must be exact, fair, clear and non-misleading. The KIID should be separate from the sales documentation and be written in easily understandable, non-technical language. The format should be harmonised and the presentation order standardised so that products can be compared. Information provided to investors should include guidance about the level of risk associated with the product and cost details.

This new cross-cutting instrument is expected to help promote better information for investors, who will be able to compare different categories of products directly and no longer have to rely solely on advisers' sales pitches.

After saying in the questionnaires that he had no financial knowledge or experience and did not want to take any risks, the online mystery shopper attempted to place orders involving equities for deferred settlement and warrants. Different firms responded differently, with some blocking the customer's attempts immediately and others issuing more or less explicit warnings, sometimes suggesting that the customer read datasheets on product features and risks. However, many of these warnings essentially sought to transfer responsibility for the order to the shopper rather than to provide guidance.

Box 10: Regulatory changes to cover investment offers involving unusual products

In recent years, the AMF has seen an upturn in investment offers as well as queries and/or complaints involving unusual investments, ranging from letters and manuscripts to wine, trees, solar panels and diamonds.

These new products are tempting because they promise high or even very high returns in a tough economic setting where low interest rates are a challenge for conventional bank and financial investments.

Until recently, the highly specific criteria used to categorise intermediation of miscellaneous assets meant that the existing regime failed to capture these products and was easily circumvented.

The Consumer Act of 17 March 2014, known as the Hamon Act, created a second category of intermediaries dealing in miscellaneous assets to regulate offers that do not meet the criteria governing

¹⁰² Packaged retail and insurance-based investment products

the existing category. Accordingly, the law now extends to atypical financial products such as letters and manuscripts, artworks, solar panels, wine and diamonds. The law covers promotional communications and authorises the AMF to make sure that offers involving these products comply with the provisions of the Monetary and Financial Code. Under the new arrangements, a second category of intermediaries in miscellaneous assets has been created that encompasses anyone who offers rights to one or more assets while highlighting expected returns. These intermediaries are subject to a less stringent regime:

- ▶ they are solely asked to ensure that their promotional communications comply with the rules customarily applied to savings products in the form of financial instruments, which would notably include providing balanced information and highlighting the risks;
- ▶ these promotional communications are not examined by the AMF beforehand, but will be reviewed ex post;
- ▶ these intermediaries are not subject to the AMF's inspection and sanction powers, but the AMF can impose injunctions, which may be made public, on intermediaries that fail to comply with the rules on promotional communications.

The AMF exercises its powers over promotional communications concerning these products without prejudice to the general inspection and sanction responsibilities of France's competition and fraud prevention authority (DGCCRF).

Developments relating to the status of crowdfunding advisers (CAs) and financial investment advisers (FIAs)

In May 2015 the ORIAS register included 4,848 FIAs, roughly the same since 2012. In addition to having FIA status, these wealth management professionals usually operate in other capacities, and notably as insurance or banking and payment services intermediaries. As at 6 May 2015, 83% of FIAs were also insurance intermediaries, and 58% were also registered both as insurance intermediaries and as banking and payment services intermediaries.

The new status of crowdfunding adviser (CA) was created in 2014¹⁰³. As a result, investors now have a regulated framework in which to support small and mid-sized companies, potentially in a local setting, while also seeking attractive levels of return or tax breaks. Numerous sectors are covered, from new technologies to sustainable development and energy, and activity is opening up to include regulated areas such as the real estate sector.

The AMF is responsible for the prior review of registration applications submitted by these participants. Because there is no approved association, the AMF is responsible for reviewing applications¹⁰⁴. Six CA platforms were registered in 2014 and a further ten between January and May 2015. Several other applications are currently under review.

In terms of organisational and conduct requirements, the regime applicable to these firms draws largely on tried and tested arrangements that already apply to FIAs. A virtually identical body of rules has been created with adjustments for website use. For example, access to offer information is reserved for potential investors who have provided contact details and who have familiarised themselves with and accepted the risks to which they are exposed.

Just like FIAs, CAs are subject to monitoring arrangements. These arrangements are set to be enhanced with the introduction of annual disclosure sheets¹⁰⁵, which will be used to gather information to gain a better idea of crowdfunding activities, including the number of

¹⁰³ Created by Executive Order 214-559 of 30 May 2014, with entry into force on 1 October 2014 following publication of Decree 2014-1053 of 16 September 2014.

¹⁰⁴ Just as for FIAs, the Monetary and Financial Code provides for the creation of an association for CAs (Article L547-4). However, this association has not yet been set up.

¹⁰⁵ Work is underway to draw up the annual disclosure sheets provided for in AMF Instruction 2014-11 Art. 3.

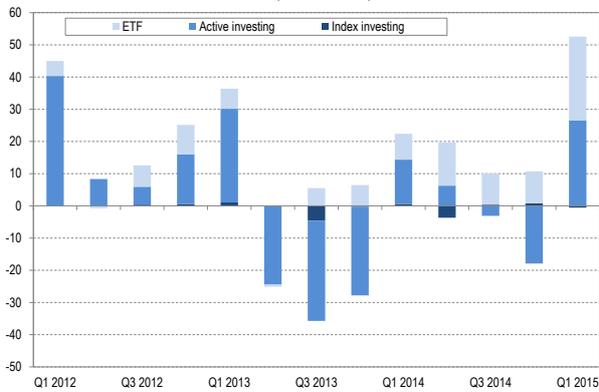
investors and the amounts invested, and assess the viability of their business model more effectively.

As crowdfunding platforms are registered, communications connected with companies looking for funding are increasing. Investor information needs to be harmonised and closely monitored to ensure that all commercial offers are exact, clear and non-misleading. The AMF has already noted some communications that omit some or all information on risk or costs that investors need to make properly informed investment decisions.

Active and passive management: models are developing, but must ensure proper information for investors

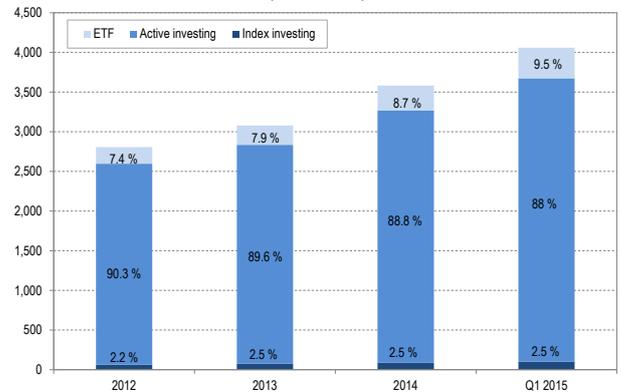
The market in exchange traded funds (ETFs), and index investing more generally, are expanding both globally and domestically. The following figures illustrate this for France.

Figure 63: Net flows into funds marketed in France (EUR billion)



Source: Lipper, AMF calculations

Figure 64: Assets under management of funds marketed in France (EUR billion)



Source: Lipper, AMF calculations

The relatively lower costs of index investing for what some have called similar performance levels appear to have encouraged investors to increase the share of their investments in index products. Yet the line separating active and passive management is blurring. Products can no longer be easily categorised, given the management expenses applied, and the transparency and complexity of products. Index investing, in particular, has evolved considerably in recent years¹⁰⁶.

The usual distinctions between active and passive management models, which are often based on just two criteria – price and performance – no longer offer the right way to get to grips with the features, limits and risks of these approaches.

Moreover, the markets have shown that index investing needs active management to be able to exist and grow, insofar as passive approaches seek to replicate target benchmarks. Index investing also needs a balance to be created between the two approaches, notably to limit the potentially systemic effects associated with the procyclical nature of index investing, its dysfunctional impact on the asset price formation process, and current performance levels.

In one particular category of products, index investing appears to be evolving towards a more active management approach. This is translating into portfolios in which assets are

¹⁰⁶ AGEFI, "La liquidité et la structure des ETF continuent à attirer l'attention des régulateurs".

reallocated more frequently, notably as part of new smart beta, alternative beta and advanced beta strategies¹⁰⁷.

Active and passive management models thus seem to be shifting. Their selling prices essentially reflect competition between professionals. But the features that are offered in the pre-contract phase for either of these investing approaches and the strategies that are actually applied by managers post-sale must match if investors are to be properly informed and protected. Insofar as these investing approaches are changing quickly and since it can be difficult to measure the type and frequency of managers' allocation decisions, it is important that investors should at no time be misled on the relationship between the management approach and the price initially advertised.

¹⁰⁷ These terms refer to a set of strategies that use alternative indices to those weighted by market capitalisation and whose purpose is to prevent large cap concentration bias. These include indices made up of assets selected for their low volatility or that are constructed based on criteria taken from academic research.

CHAPTER 4: COLLECTIVE INVESTMENT

In 2014 assets under management (AUM) in collective investment funds in Europe repeated the all-time high seen in 2013, as inflows hit record levels for the period since the 2008 financial crisis. This chapter reviews the trends for each asset class, certain fund types, and market segments experiencing noteworthy developments.

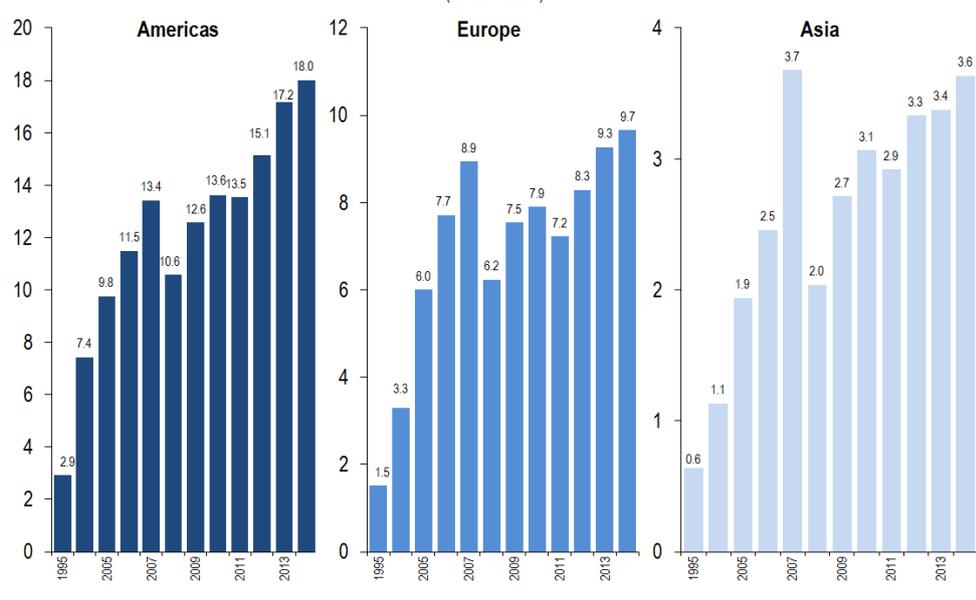
4.1 Net sales doubled in Europe and AUM hit record levels in 2014

After a year of growth following strong market performances, net sales hit record levels in 2014

After the shocks of 2008 and 2011 AUM kept step with upside market movements in 2013. Inflows were lifted in 2014 by strong fund performances and hit records both in the USA and Europe. Low interest rates in Europe did not depress the overall inflows, and European money market funds, which are the most exposed to this environment, staunchly the outward flow, reporting net sales of EUR -10 billion in 2014¹⁰⁸ compared with EUR -85 billion in 2013. US money market funds recorded more than USD 98 billion in net inflows in 2014. AUM in bond funds were stable across all geographical areas, supported by strong performances associated with lower interest rates.

It remains to be seen whether the strong inflows of 2014 and the seemingly good health of management companies will continue. Managers of European money market funds cut their management expenses in a bid to remain competitive, and some money market funds had to be shut down towards the end of the year because they were unprofitable. It will be interesting to track developments over 2015 and more generally to analyse the drivers used by management companies to maintain strong fund performances and stay financially healthy.

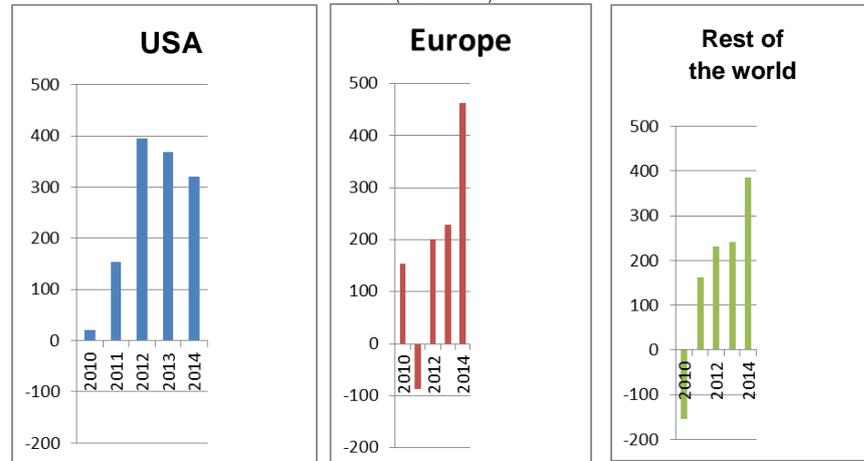
Figure 65: Total assets held in collective investment funds (USD trillion)



Sources: EFAMA, AMF.

¹⁰⁸http://www.efama.org/Publications/Statistics/International/Quarterly%20International/150402_International%20Statistical%20Release%202014%20Q4.pdf

Figure 66: Total net inflows into collective investment funds
(EUR billion)



Sources: EFAMA, AMF.

USA: Inflows were sustained again and AUM increased as equity markets went higher in 2014.

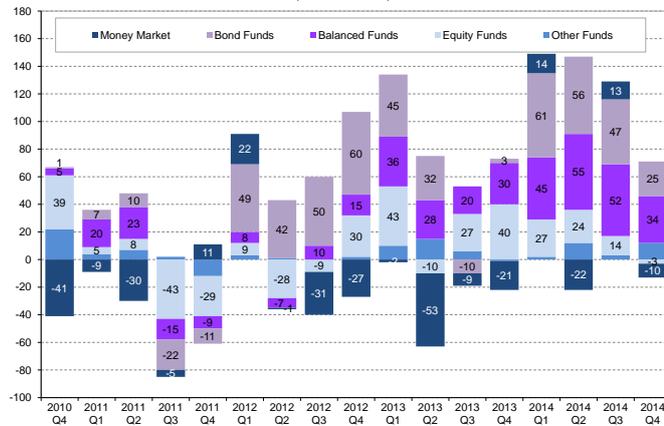
Europe: Global GDP growth drove the upturn in inflows within Europe. AUM climbed 15.7% in 2014 as net new money totalled EUR 463 billion. Total assets were close to EUR 10 trillion in 2014. The pace of inflows virtually doubled compared with 2013, with UCITS contributing slightly more than AIFs. Products invested in equities and interest rates benefited from the trend. The average asset allocation was 50% fixed income/50% equities.

France and Luxembourg were once again the two busiest markets in terms of creating new products (20% and 23% of European products respectively). Measured by AUM, Luxembourg's market is twice the size of France's, which is at the same level as the German market. A view based on fund domiciliation does not tell the whole story, however, as it does not reflect the effective location of management. Since the UCITS 4 and AIFM directives were implemented, it has been possible to manage Luxembourg products from France, for example, and French sponsors operating in Luxembourg look after EUR 220 billion in Luxembourg funds, which puts them sixth place with 3.5 times less than the USA. Luxembourg is the leader in international product distribution in Europe and the rest of the world and makes extensive use of the UCITS format (over 86% of Luxembourg funds).

In Europe, bond and balanced products accounted for the lion's share of net sales in 2014. Inflows to bond funds exceeded EUR 189 billion, undoubtedly linked to the decline in interest rates in 2014.

**Strong net sales
for bond funds in
Europe**

Figure 67: Net inflows in Europe by fund type
(EUR billion)



Sources: EFAMA, AMF.

4.2 The low interest rate environment could modify portfolio structures

Short- and long-term interest rates continued to fall in the euro area in 2014. The entire yield curve declined to historically low levels, as did credit premia on financial and non-financial obligations.

This low rate environment creates three types of risks for asset management in France:

- ▶ liquidity risk linked to potential reallocations by investors between funds from different asset classes;
- ▶ risk linked to possible deformation of managers' portfolio structures;
- ▶ valuation and liquidity risk for portfolios.

Liquidity risk linked to reallocations of investments between funds of different asset classes is the primary risk if interest rates remain low. It is conceivable, for example, that investments could be taken out of money market funds in a quest for returns from equity or real estate funds. Because of strong bond performances in 2014 driven by lower interest rates, significant movements have not yet been observed from one class of fund to another, but the AMF is alert to the potential for such reallocations, notably if interest rates remain extremely low or if they suddenly go significantly higher. Inflows to real estate investment funds (SCPIs), which leapt to a 15-year high of more than EUR 2.9 billion in 2014, could be an early sign of this process, although these amounts are dwarfed in absolute terms by the approximately EUR 1.4 trillion in assets managed (excluding under mandates) in France. Portfolio reallocations could create specific liquidity risks for asset managers if investor redemptions exceed the available liquidity for the fund's constituent assets. The risks are obviously greater if these reallocations happen at a time when financial markets are stressed.

Investors' attempts to secure higher returns could create a risk of deformation of portfolio structures. Asset managers might be tempted to adjust their portfolios to target higher risk premia, for example by extending the duration of their bond or money market portfolios, by picking lower-rated issuers, or by using more leverage through derivative products. Rate-cutting monetary policies are designed to support a shift towards riskier assets, with a view to lowering the cost of funding the non-financial sector and thus boosting investment in companies in the real sector of the economy. But this move towards riskier, and in some cases less liquid, assets, could be a major risk factor in the event of a market reversal, particularly if combined with the abovementioned reallocation risk. Asset managers might

**Marginal change
in investors' fund
choices**

Monitoring of manager portfolios does not reveal significant deformations in response to the low level of interest rates

find themselves facing redemption requests from investors at a time when their asset portfolios are less liquid than they used to be.

The AMF's supervisory approach, which is based on specific programmes of activity, can be used to observe these developments. Managers wishing to use new asset classes or management processes must inform the AMF of this ahead of time. Accordingly, in 2014, the AMF noted new interest among some managers in subordinate and contingent bonds. The introduction of closer monitoring arrangements for certain portfolios and overall monitoring through new portfolio reporting arrangements (including AIFM reporting) will make it possible to keep track of some of these developments.

The low interest rate environment presents a challenge to valuation and risk models

The fall in interest rates also increases portfolio valuation and liquidity risks. The new market levels raise questions about risk models that were calibrated using backward looking data that no longer reflect the current market situation. Value at Risk-type models and other models used to value instruments may find themselves called into question. The tolerance thresholds used to spot anomalies, take action and trigger model reviews might also be affected. Liquidity risk has also changed considerably with lower interest rates and the decline in banks' market-making activities. Banks have scaled back their securities inventories, and liquidity has declined for some securities.

As a result, management companies need to be extremely careful about how they set their investment ratios¹⁰⁹ for different securities and sectors in this new market setting.

4.3 Venture capital recovers in France

Development capital and LBOs buoyed the market

Private equity inflows recovered strongly in 2014, driven by a few large French funds. Fund-raising went past the EUR 10 billion mark and investments exceeded EUR 8 billion in 2014. Development capital and LBO themes accounted for almost 90% of the inflows, which were close to the annual average of EUR 10.5 billion over the 2005-2008 period. Business disposals hit a record in 2014 with over EUR 9.3 billion in sales measured at historical cost.

Innovation and turnaround capital themes captured marginal shares of inflows, with innovation capital down from EUR 1.375 billion in net sales in 2013 to EUR 828 million in 2014.

Two new initiatives relating to venture capital investment funds will undoubtedly help in developing new sources of financing for the economy:

- › European Long-Term Investment Funds (ELTIFs), which are dedicated to assets and projects necessitating long-term financing and which will be introduced in December 2015;
- › the new form for professional specialised funds, known as open partnership companies, *sociétés de libre partenariat* (SLPs).

Introduced as part of the Growth and Activity Act (also called the Macron Act), the SLP is a new type of structure with appropriate governance arrangements and flexible management rules that should make it easier to attract foreign investors.

¹⁰⁹ The investment ratio takes account of exposure, the investment's liquidity and the impact that investor movements could have on CIS management.

Risks linked to the transparency of management mandates invested in unlisted securities

Recent years have seen major growth in new offers involving management mandates invested in unlisted securities. These offers, which target individual investors, tap into the potential for increased wealth tax relief on direct investments in unlisted securities (EUR 45,000 max) as compared with investments in local or innovation funds (EUR 18,000). These offers pose specific risks, including issues of transparency concerning the direct costs charged by management companies and the indirect costs that management companies charge targets, i.e. SMEs selected for the mandates. The risk of misinformation on costs is exacerbated if the sales documentation excessively highlights the tax advantages on offer. Furthermore, these offers could generate specific conflict of interest risks if the specific interests of the management company and the investor are not aligned (e.g. high fees paid by targets could skew SME selection).

The new European fund labels – European Venture Capital Funds (EuVECA) and European Social Entrepreneurship Funds (EuSEF) – which have been in place since July 2013, have seen only marginal use in France. Just one AIF has received the EuVECA label and another has received the EuSEF label.

4.4 Introduction of the AIFM Directive in 2014 has made French asset management more robust

Systematic review of AIFM programmes of activity

The Alternative Investment Fund Managers Directive (AIFMD) was largely implemented during 2014. Between 22 July 2013 and 22 July 2014 entities managing AIFs were required to apply for approval to operate as asset management companies. Over 320 French management companies were approved. Of these, 40% were below the AUM thresholds requiring mandatory approval, meaning that they opted voluntarily to be subject to the new regime.

The process of approving AIFMs provided an opportunity to update and validate the programmes of activity of more than one-half of France's 630 asset managers.

More specifically, reviews of programmes of activity covered eight points:

- › liquidity management procedures and the introduction of stress tests;
- › valuation procedures;
- › procedures for delegating management company functions;
- › own funds;
- › alignment of risk-takers' remuneration with risks incurred by investors;
- › capacity to establish enhanced reporting vis-à-vis the regulator and investors;
- › introduction of skin in the game requirements for investments in securitisation positions;
- › update of enhanced depositary agreements.

The AIFM approval process involves inspecting the quality of risk management procedures

AIFMD transposition led to major changes in the French real estate fund universe

Application of the legislation transposing AIFMD had many and varied effects for real estate investment management. SCPIs had to convert themselves into asset management companies by 22 July 2014, when SCPI status was phased out. In a first for some, SCPIs were also required to appoint a depositary by the same deadline. The deliberately broad definition of AIFs brought a variety of investment vehicles not previously regulated by the AMF into the scope of AIFMD, including listed and civil real estate investment companies (SIICs and SCIs), and vineyard and agricultural property groups satisfying the definition in AMF Position DOC-2013-16.

**A safer framework
for real estate
management
vehicles**

Irrespective of their legal form, these “Other AIFs” must appoint a depositary, be registered with the AMF and be managed by an approved asset management company if they have at least one retail investor. These changes have created a safer framework for investors while at the same time limiting the risk of regulatory arbitrage between different real estate management vehicles. However, they also represent a challenge for the AMF, which now regulates vehicles with a wide range of legal forms and operating in areas that were previously outside its area of responsibility, including farms and forests.

The compliance requirements placed on management companies did not slow the development of SCPIs and real estate collective investment undertakings (OPCIs). OPCIs held approximately EUR 27 billion in net assets at 31 December 2014, or EUR 7 billion more than in the previous year. SCPIs kept up the pace too, posting net sales of EUR 2.9 billion¹¹⁰ in 2014, a 15-year high.

There were numerous OPCI approvals in 2014, with 51 new vehicles compared with 36 the previous year. Most of these new undertakings have higher maximum debt levels than before (around 80%). If reached, these levels would create a major risk for the vehicle in the event of a real estate market downturn. Recognising this fact, the AMF stepped up its scrutiny of OPCI debt. AIFM reporting data will be used to closely monitor the real debt levels of existing vehicles.

**Vibrant financial
innovation in the
real estate
investment
sector...**

The substantial growth enjoyed by professional OPCIs contrasts with the smaller place occupied by retail OPCIs in the real estate fund market. Just ten or so vehicles of this type have been approved to date. However, this segment may get a boost from an amendment to the Macron Act, adopted in March 2015, which increases the eligibility of such undertakings for inclusion in the assets of employee savings funds from 10% to 30% (within allocations also containing venture capital and innovation fund units). This amendment has also heightened the liquidity expectations for retail OPCIs. Because the period for settling redemption requests can be very short, managers have to take an extremely conservative approach to managing the liquidity of assets, as these are partly invested in property assets, which are inherently less liquid than the financial or cash assets making up the rest of the portfolio.

Another aspect of financial innovation in real estate investing is the emergence in 2014 of vehicles investing in property-related life annuities and bare ownership. The first SCPI invested exclusively in bare ownership of residential buildings was approved in October 2014 immediately following adoption of the Alur Act, which allowed SPCIs and OPCIs to acquire bare ownership of residential buildings whose rental management is entrusted to social housing landlords. While property-related life annuity products have been around for a while, the first offers targeting institutional investors appeared in 2014.

**...which is being
closely followed
by the AMF**

As these innovations are taken forward, great care must be exercised, particularly in valuation, liquidity management and marketing. An SCPI invested solely in bare ownership will pay few if any dividends (because it does not receive rents). But SCPIs are typically income-generating products. To prevent misunderstandings, investors must be alerted to this fact in the clearest possible terms. Investments in property-related life annuity products, meanwhile, pose unlimited risk of loss, since the term of such contracts is unknown. Moreover, valuing these types of investments entails actuarial calculations, meaning that a manager engaging in them must have demonstrated in-house expertise in the area.

A new regulatory regime for receivables management and securitisation vehicles was introduced in 2014 as part of AIFMD transposition.

¹¹⁰ Source ASPIM – IEIF.

Many new developments for receivables management and securitisation vehicles

Under the executive order transposing AIFMD, special purpose vehicles (*fonds communs de créances* – FCCs) and FCC managers no longer exist. FCCs have been converted into securitisation undertakings, and FCC managers need to be approved by the AMF as asset management companies to continue doing business. The rules for these management companies have been strengthened and clarified as part of their new status. During the approval process, managers took steps to bolster their programmes of activity and procedures for managing conflicts of interest and risk. France’s securitisation framework was thus made stronger in 2014.

The Decree of 14 November 2014 similarly seeks to provide additional clarity by setting down the criteria required for the manager of a securitisation undertaking to be fully subject to AIFM regulations, if:

- › the undertaking is more than 50% exposed to risks taking the form either of financial securities or any other asset not constituting exposure to insurance or credit risk, and
- › the said securities or assets are managed on a discretionary basis by the management company or take the form of financial contracts that are concluded, managed or cancelled on a discretionary basis by the management company

In other cases, the manager may use the waiver provided for securitisation by AIFMD.

Asset management companies whose programmes of activity allow them to invest in receivables have grown in number in recent years, from five in early 2010 to 29 at the end of 2013 and 36 in April 2015, reflecting a desire among banks to trim their balance sheets but also the development of new products such as special credit funds, *fonds de prêts à l’économie*.

Rise of fonds de prêts à l’économie

These funds, organised as securitisation undertakings or professional specialised funds, enjoyed strong growth in 2014 and 2015. To properly understand the types of risk associated with these products, it is important to know that they do not feature leverage and pursue buy and hold strategies. Investors in these funds acquire exposure to receivables or debt securities held by a portfolio covering one or more specific sectors through products that may vary widely in terms of diversification (number of investments or sectors).

These funds were created by Decree 2013-717 of 7 August 2013 “amending certain investment rules for insurers”, which opened up the possibility for insurance companies governed by the Insurance Code to hold debt securities and loans to unlisted SMEs and mid-tier funds made through *fonds de prêts à l’économie* (or direct loans) against their regulated liabilities. Decree 2014-1530 of 17 December 2014 expanded this option to providential institutions and mutual insurers. The Insurance Code, the Mutual Insurance Code and the Social Security Code were all amended so that these investors would receive favourable prudential treatment to enable them to finance the economy. The second decree also expanded the list of eligible assets for the funds by adding claims on moral entities carrying on an artisanal business, as well as claims on OPCIs and holding structures whose sole purpose is to hold moral entities that can benefit from these types of funding.

Outstanding securitisation increased by 2% to EUR 178 billion

The AMF did not observe an overall increase in outstanding securitisation in France over 2014 (apart from a marginal increase of 2% in outstanding amounts, which totalled EUR 178 billion for 247 securitisation undertakings) because the outstanding amounts in securitisation vehicles primarily reflect bank securitisations of securitised assets provided as collateral in ECB refinancing programmes.

Receivables management could also experience growth in the near future with the introduction of a new type of European Long-Term Investment Fund (ELTIF) exclusively for assets and projects that necessitate long-term funding. ELTIFs may be managed only by an EU manager that is duly approved under AIFMD. At least 70% of the capital of an ELTIF must be invested in long-term assets. In principle, ELTIFs must be closed to redemptions. However, the manager may offer fund investors limited redemption rights provided it

complies with the time requirements stipulated in the regulation and establishes an appropriate redemption and liquidity management policy.

These funds may be passported and sold in the EU to professional investors and, at the manager's initiative, to certain retail investors.

These new funds allow managers to issue new claims and hence to lend directly. Previously, securitisation undertakings and professional specialised funds were allowed only to purchase claims that had already been issued. The new risks associated with this technique will have to be specifically monitored and supervised.

The ELTIF Regulation, which was published on 19 May 2015, will come into force on 9 December 2015.

Europe also continued work to support the development of high-quality securitisation for a broad selection of investors, in an effort to get away from self-securitisation and heavy reliance on ECB refinancing. The results of a consultation on this topic, which were published in early 2015, could pave the way for a European initiative in the next two years, notably aimed at developing simple, transparent and standardised (STS) securitisation.

The first round of reporting data on the main positions and risks present in portfolios were gathered in 2014. Managers with the largest amounts of AUM or displaying significant leverage risks have to provide these reports quarterly.

Although much work still remains to be done on data quality to make them operationally reliable, these reports are a rich source of intelligence, providing more than 450 information items on each of the 7,900 reporting French AIFs.

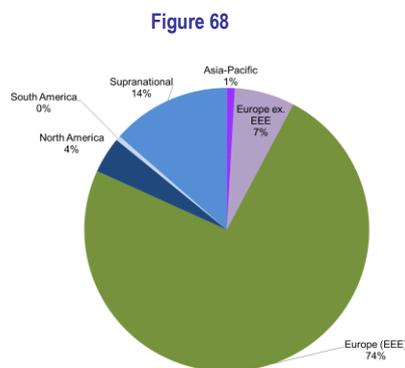
The initial analyses reveal a landscape at end-December 2014 in which:

- few French AIFs describe themselves as hedge funds, or around 120 funds out of 7,900;
- more than 50% of AIFs said that they targeted retail clients;
- most portfolios are invested in the euro area or Europe (less than 20% outside);
- the main currency exposures involve euro-area or European currencies;
- the main asset classes are the classic ones (equities, bonds, money market instruments) with less liquid and exotic assets (RMBS, emerging countries, single-name CDS) occupying a small share.

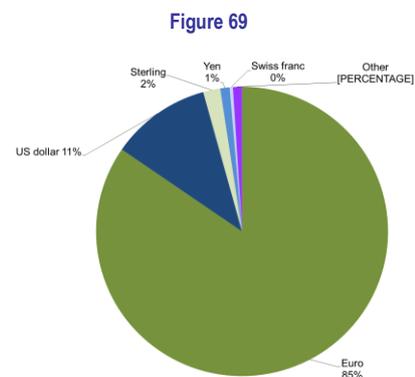
AIFM reporting: a new tool for supervising AIF management risks

At end-March 2015 reporting by the main AIFs, i.e. approximately 3,800 AIFs with over EUR 640 billion or 90% of the AUM of French AIFs, revealed that structures were similar to those seen in late December 2014 for the overall French AIF industry. The following figures summarise these funds' exposures by country and to the main currencies.

Exposures by country and main currency of funds subject to AIFM reporting (%)



Source: AMF.



Source: AMF.

Asset/liability analyses of these funds, based on the data reported by asset managers, are broadly reassuring in terms of the match between asset and liability liquidity, suggesting that funds can cope with redemption risks.

Additional work will also be done with asset managers on the specific topic of stress tests to promote methodologies and scenarios that will enable results for all French managers to be used consistently.

4.5 European work is continuing on money market funds

Reforms to money market funds were among the flagship measures instigated by the G20 to regulate shadow banking following the financial crisis. The 2008 crisis and the upheaval surrounding Primary Reserve Fund, a US money market fund, showed that this type of fund, and especially constant net asset value funds, posed a risk to the stability of the financial system.

CNAV money market funds pose specific liquidity risks

Money market funds play a vital role in providing short-term funding to the economy, particularly for banks. Generally seen as the lowest-risk vehicles, MMFs are sometimes wrongly considered by some investors to be equivalent to bank deposits. This confusion is exacerbated by the fact that some funds have a constant net asset value (CNAV), giving an artificial impression of stability. Insofar as the NAVs of such funds do not reflect the value of underlying assets, there is an increased risk that these NAVs could fall owing to a market or credit event. Because of this risk, experienced investors want to be among the first to exit to avoid losing value on their assets. Accordingly, CNAVs are exposed to the threat of large-scale redemptions.

On 29 April 2015 the European Parliament adopted at its first reading a position on a proposed European regulation on money market funds and amending a number of points contained in the proposed regulation published by the Commission in September 2013. The vote, which was a key moment in the European decision-making process, ended several months of intense discussions centred around the thorny question of how to treat CNAV funds.

The text adopted by the European Parliament, which appears to draw on US reforms adopted by the SEC in July 2014, provides for the creation of three new types of money market funds and does not take adequate account of the specific features of European money markets.

The European Parliament has proposed to establish three types of CNAV money market funds

The Parliament chose to restrict use of the CNAV model to three types of funds: (i) funds that invest predominately in European public debt instruments; (ii) funds that are intended to be sold to retail investors¹¹¹; (iii) low-volatility funds. Authorisation is given to use liquidity management tools to enhance the security of these products. The Parliament also proposed a number of changes to the general supervisory framework for money market funds including enhanced requirements on transparency and stress tests, a ban on sponsor support and calibration of liquidity buffers according to the method used to value securities.

Some of the proposals adopted by the Parliament could introduce new risks. This is particularly true for the new type of CNAV fund invested predominantly in European public debt, which raises questions about a range of issues, from the criteria governing the

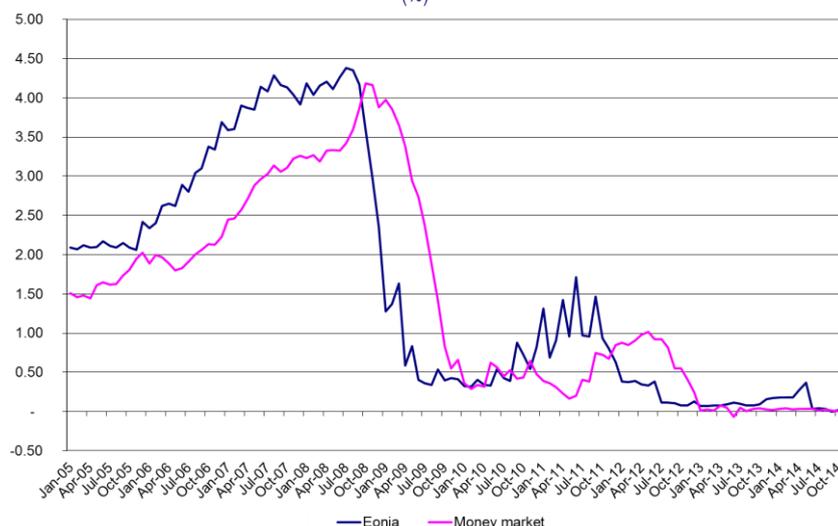
¹¹¹ Defined as charities, non-profits, public authorities and public foundations, and excluding the general public.

Reforms to money market funds are set to continue in 2015

eligibility of public debt instruments to be included in the assets of these funds, to the likelihood that these funds will be bailed out using public funds in the event of problems.

Reforms to money market funds in Europe are set to continue in 2015 through legislation drafted by the Latvian Presidency. These reforms are especially important because the low interest rate environment is creating challenges for some types of funds. Not only is it extremely hard for CNAV funds to maintain a constant NAV when interest rates are negative, but the new rules applicable to all money market investing could impact portfolio structures and prove hard to implement in an unfavourable market setting (for example because of insufficient liquidity or inadequate issuer diversity).

Figure 70: Performance of money market funds and EONIA (%)



Source: LIPPER.

4.6 Systemic risk in asset management

With reforms aimed at strengthening bank regulations now well advanced, the Financial Stability Board (FSB) has said that one of its priorities is to examine the vulnerabilities of financial markets and particularly asset management¹¹². To this end, it is pursuing its joint work with the International Organization of Securities Commissions (IOSCO) on methodologies for identifying NBNI G-SIFIs¹¹³. These efforts led to a second publication on 4 March 2015, which was opened up to consultation until 29 May 2015.

The goal is to prepare methodologies that may be used to identify non-bank non-insurer institutions that individually pose a systemic risk to the global financial system, i.e. that are too big to fail. While this second consultation concerned financial companies and broker-dealers, the main proposals target asset managers. The first consultation proposed a methodology that concentrated solely on investment funds. To develop a more inclusive approach and better assess the effective risks that could be generated by asset managers,

¹¹² In a letter to G20 Finance Ministers dated 4 February 2015, Mark Carney, head of the FSB, said: "(...) the FSB will prioritise work to understand and respond to vulnerabilities in capital market and asset management activities. It will examine the policy tools that could be applied to asset managers according to the activities they undertake with the aim of mitigating the systemic risk of fire sales and potential collapse of market liquidity".

¹¹³ NBNI G-SIFIs are defined in the consultation as "non-bank non-insurer financial institutions whose distress or disorderly failure, because of their size, complexity and systemic interconnectedness, would cause significant disruption to the wider financial system and economic activity at the global level or NBNI G-SIFIs in short".

Work is underway on a methodology for identifying systemically important non-bank entities a “dual” approach is proposed comprising two separate methodologies: one for investment funds only and the other for asset managers only.

The approach is consistent for all participant categories. It includes a materiality threshold to restrict the scope to entities that are relevant in terms of global systemic risk. It also defines a set of common impact factors¹¹⁴, with each methodology developing specific indicators for the group covered.

Work is thus continuing with the aim of defining a robust and forward-looking framework that can be used to identify the conditions under which one or more funds or management companies might be of global systemic importance. While still controversial¹¹⁵, this work is scheduled to finish before the end of the year.

Associated risks also need to be analysed at the overall industry level

At the same time, recent international initiatives reveal increasing support for an approach based on industry-level risks rather than an entity-based approach. The Financial Stability Oversight Council in the USA, in a consultation published in December 2014, explored four families of risk in asset management: (i) liquidity and redemptions, (ii) leverage, (iii) operational functions and (iv) resolution. During the same period, the Chair of the Securities and Exchange Commission announced a detailed programme of reforms for the asset management industry, which included enhanced data reporting, risk management and transition planning.

Particular attention is being paid to the issue of liquidity. In this regard, the growing share of illiquid assets, such as corporate debt securities, high-yield instruments and emerging country debt, in investment fund portfolios is raising concerns about the liquidity that funds should offer investors. These assets could help in the hunt for returns at a time when it is hard to make profits, especially in a low rate environment. But when markets are under strain, the risks in the event of large-scale redemptions could be significant, particularly for passive management, given its automatic nature, or for funds invested on the bond market and offering daily liquidity, notably if interest rates go higher.

The FSB is studying these issues to determine the extent to which the risks generated by the asset management industry should be taken into account and using what approach.

¹¹⁴ Size, interconnectedness, substitutability, complexity and global presence.

¹¹⁵ Following the first consultation, which ran to April 2014, there was criticism particularly of the specific methodology for asset management, which focused solely on investment funds. In particular, the size criterion was felt to be given too much emphasis, making the scope of funds covered less meaningful because of inadequate recognition of leverage as a discriminating factor. Some critics even questioned the point of a methodology for identifying funds that are individually of systemic importance.

Conclusion

The regulatory environment for asset management will be marked in the coming months by the introduction of key major directives and regulations that will strengthen the framework for management activities and fund distribution. As work is finalised on rolling out initiatives introduced by the European Commission in the aftermath of the financial crisis, new measures will address wide range of important issues, from derivatives (ongoing implementation of EMIR) to the standardised presentation of retail financial instruments (PRIIPS Regulation) and securities lending and repos (SFTR). Transposition of MiFID II will be a major project until 2017. This directive will play an important role in reducing the risks of mis-selling financial products, with, for example, a raft of new measures covering product governance and producer/distributor relations.

Specific risks linked to the new market setting of low interest rates are also a major feature of today's asset management environment and require adjustments to risk management methods and financial management processes.

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ABBREVIATIONS AND ACRONYMS

ABS	Asset backed securities	OPCI	<i>Organisme de placement collectif immobilier</i> / Real estate collective investment undertaking
ABSP	Asset backed securities purchase programme	ORIAS	<i>Organisme pour le registre des intermédiaires en assurance</i> / Organisation responsible for registering insurance intermediaries
ACPR	<i>Autorité de contrôle prudentiel et de résolution</i>	OTC	Over the counter
AFG	<i>Association française de la gestion</i> / French Asset Management Association	PRIPS	Packaged Retail Investment Products
AFME	Association for Financial Markets in Europe	PRIIPS	Packaged Retail and Insurance-Based Investment Products
AIF	Alternative investment fund	QE	Quantitative easing
AIFM	Alternative investment fund managers	Re-Remic	Resecurisation of real estate mortgage investment conduits
AMF	<i>Autorité des Marchés Financiers</i>	RMBS	Residential mortgage-backed security
BIS	Bank for International Settlements	SCPI	<i>Société civile de placement immobilier</i> / Real estate investment company
CCP	Central counterparty	SEC	Securities and Exchange Commission
CCSF	<i>Comité consultatif du secteur financier</i>	SEF	Swap execution facility
CDO	Collateralised debt obligation	SFTR	Securities Financing Transaction Regulation
CDS	Credit default swap	SIIC	<i>Société d'investissement immobilier cotée</i> / Listed real estate investment company
CET1	Common Equity Tier 1	SLP	<i>Société de libre partenariat</i> / Open partnership company
CfD	Contract for difference	TLRTO	Targeted Longer-Term Refinancing Operations
CFTC	Commodity Futures Trading Commission	UCITS	Undertakings for Collective Investments in Transferable Securities
CMU	Capital Markets Union	WFE	World Federation of Exchanges
CoCo	Contingent capital convertible instrument		
CRD	Capital Requirements Directive		
CREDOC	<i>Centre de recherche pour l'étude et l'observation des conditions de vie</i>		
CRR	Capital Requirements Regulation		
CSD	Central Securities Depository		
DTCC	Depository Trust and Clearing Corporation		
EBA	European Banking Authority (ABE)		
ECB	European Central Bank (ECB)		
EFAMA	European Fund and Asset Management Association		
ELTIF	European Long-Term Investment Fund		
EMIR	European Market Infrastructures Regulation		
ESMA	European Securities and Markets Authority		
ESRB	European Systemic Risk Board		
ETF	Exchange traded fund		
EU	European Union		
EuSEF	European Social Entrepreneurship Fund		
EuVECA	European Venture Capital Fund		
FFSA	<i>Fédération française des sociétés d'assurance</i> / French insurance federation		
FIP	<i>Fonds d'investissement de proximité</i> / Local fund		
FSB	Financial Stability Board		
GDP	Gross domestic product		
GNP	Gross national product		
HCSF	<i>Haut Conseil de Stabilité Financière</i> / High Council for Financial Stability		
HFT	High frequency trading		
ICMA	International Capital Market Association		
IEFP	<i>Institut pour l'éducation financière du public</i>		
IMF	International Monetary Fund		
IOSCO	International Organization of Securities Commissions		
ISDA	International Swaps and Derivatives Association		
LCR	Liquidity Coverage Ratio		
LSE	London Stock Exchange		
MAD	Market Abuse Directive		
MBS	Mortgage-backed security		
MiFID	Markets in Financial Instruments Directive		
SRM	Single Resolution Mechanism		
SSM	Single Supervision Mechanism		
MUNFI	Monitoring Universe of Non-Bank Financial Intermediation		
NFSR	Net Stable Funding Ratio		
OECD	Organisation for Economic Co-operation and Development		
OFI	Other financial intermediaries		

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