# Philip R Lane: A better understanding of the geography of risk will help us assess the financial stability implications of market-based financing

Address by Mr Philip R Lane, Governor of the Central Bank of Ireland, at the International Capital Market Association Conference, Dublin, 19 May 2016.

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### Introduction

I welcome the opportunity to speak at the 48th ICMA conference. A focus on capital markets is timely, given the widespread consensus that Europe would be better served by a more balanced financial system, in which financial markets play a larger role and provide alternative channels to banks in a range of financial intermediation activities (European Systemic Risk Board 2014). This basic message drives the agenda for Capital Markets Union (CMU) in Europe, which is supported by the central banking community (Central Bank of Ireland 2015, European Central Bank 2015). An enhanced role for market-based finance has the potential to foster greater risk diversification, while also enhancing financial stability by limiting the fallout from banking crises.

As a mechanism for individuals and institutions to obtain access to a diversified pool of financial assets and a key investor base for corporates seeking to obtain market-based funding, the investment funds sector plays an especially important role. In what follows, I focus on the role of investment funds in the intermediation of international financial flows.

Of course, the investment funds sector is extremely diverse. Among the key differences in the design and operation of funds are: equity versus debt; leveraged versus long-only; level of liquidity; ease of redemption; actively-managed versus passive index-based; geographic scope; maturity horizon (with money market funds focusing on the short end and infrastructure funds orientated at the long end); use of derivative products for funding and asset allocation; type of funding (retail; asset-backed securitisations); and ownership structure (hedge funds, mutual funds, special purpose vehicles). The facilitation of equity-type investments is critically important in view of the risks associated with an excessive reliance on debt funding. At the same time, market-based debt funding provides an important alternative to bank-based debt funding, with multiple funding channels a key element in the design of a resilient financial system.

It is also important to recognise the inter-connections between market-based and bankbased funding channels, with the banking sector itself dependent on financial markets to raise equity and different grades of bond funding, while also relying on securitisations to release tranches of performing and non-performing loans from its balance sheet. In addition, a banking group may include various financial entities that play central roles in the operation of securities markets.

Historically, the investment funds sector has been more lightly regulated than the banking sector. A basic reason for the enhanced regulation faced by banks is the importance of protecting retail depositors, in view of the deposit-based funding structure of banks and the inherent maturity mismatch between short-term deposit liabilities and long-term illiquid assets such as loans to corporates and households.

However, the scale of the non-bank financial sector and the scope for bank-like maturity and liquidity mismatches between the liabilities and assets of some types of investment funds has given rise to increased regulatory scrutiny in recent years.

Non-bank financing amounts to \$80 trillion globally. Given the importance of non-banking funding channels, the Financial Stability Board (FSB) has been working for a number of years to understand this sector and frame policies to address the financial stability risks related to non-bank funding. In addition, an annual monitoring exercise examines many jurisdictions that host significant non-bank debt funding activity, including Ireland.<sup>2</sup>

Potential risks to financial stability from non-bank funding can arise in many forms. The risk categories receiving the greatest attention in the international debate are: (i) the fragility caused by *leverage*; (ii) a range of *liquidity risks* related to the possibility that redemptions of more liquid or shorter-maturity liabilities may lead to defaults or forced assets sales that dislocate secondary markets (see, amongst others, Haldane 2009, Caruana 2010, International Monetary Fund 2015); and (iii) the *inter-linkages* with other sectors (banks, insurance companies and pension funds, non-financial corporates), typically arising from credit exposures.

It should be no surprise that these are key areas of focus. Indeed, during the global financial crisis, we witnessed a perfect storm whereby these elements combined to amplify shocks to the international financial system.

## The international policy debate

The FSB has led the way in developing a policy framework that groups different market finance activities according to their economic functions (Financial Stability Board 2012). However discussions around the choice of regulatory tools to mitigate financial stability risks have been challenging.

It is sometimes argued that the policy objective should be to ensure that all lending activity is subject to similar regulations. Rather, the purpose of regulation should be to mitigate the risks associated with these activities. In effect, regulation should be proportional to: (a) the impact of failure; and (b) the probability that such a failure would crystallise. In principle, regulation should be based on a solid understanding of the business models and an analysis of the detailed data on the assets and liabilities of the financial vehicles supporting these activities. For example, a closed-ended investment vehicle has a very different risk profile compared to a retail bank. Equally, an open-ended investment vehicle holding highly rated sovereign debt has a substantially different risk profile to a retail bank. A failure to meet redemption requests may have damaging consequences for an asset manager but it is quite unlike the type of default event that arises when a retail bank closes its doors to deposit withdrawals.

Let me highlight one other difference between market-based and bank-based funding that poses novel challenges to policy makers. Typically, bank loans are originated and held until maturity on the balance sheet. In contrast, the assets of market-based financing vehicles are

As measured by the activities of the Other Financial Institutions (OFI) sector. The OFI sector is the national accounts grouping of financial services providers that are not monetary financial institutions (MFIs) or insurance corporations and pensions funds (ICPFs).

FSB (2015). This monitoring report focuses on so-called shadow banking, using a range of definitions. The narrow measure of shadow banking is defined as the classification of non-bank financial entities into five economic functions through which non-bank credit intermediation may pose bank-like systemic risks to the financial system. The OFI measure of shadow banking is defined as all financial intermediaries that are not classified as banks, insurance companies, pension funds, public financial institutions, central banks, or financial auxiliaries. The broad measure of shadow banking is defined as the Monitoring Universe of Non-Bank Financial Intermediation (MUNFI), which includes Other Financial Intermediaries, Pension Funds and Insurance Companies. According to the narrow measure, shadow banking activity amounts to \$36 trillion (26 jurisdictions), while the OFI measure aggregates to \$80 trillion (20 jurisdictions and euro area) and the broad measure to \$137 trillion (20 jurisdictions and the euro area).

often tradable on secondary markets. The greater the liquidity of these assets, the less there is a mismatch – in terms of liquidity – between the assets and liabilities of these vehicles.

When loans are recalled or redemption requests made, assets may need to be sold on these secondary markets to meet these liabilities. So the question arises as to the liquidity of secondary markets in times of stress. Clearly, the answer depends on the assets in question and the performance of individual secondary markets under stress. For instance, there is a world of difference between the liquidity of markets for highly-rated sovereign debt and emerging market equities during periods of heightened financial stress. Equally, many of the assets held by certain financial vehicle corporations and special purpose vehicles may not benefit from active secondary markets.

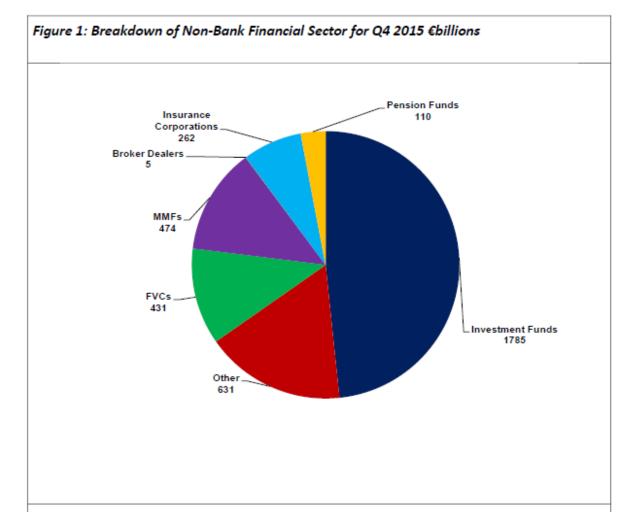
It follows that the judgements about the liquidity of assets should determine the liquidity management and redemption policies operated by these vehicles. Bearing this in mind, the challenge for international policy makers is to develop a proportionate regulatory framework that differentiates between investment vehicles based on the performance of the associated secondary markets.

It is also important to take into account the potential for indirect contagion by which adverse shocks can adversely affect a broad range of financial firms and markets through a variety of externality-generating mechanisms such as fire sales, liquidity spirals and information spillovers (Clerc et al 2016). The potential for indirect contagion may warrant a macroprudential policy framework for non-bank funding activities that varies regulations for liquidity, margins and haircuts over the financial cycle and provides a role for regulatory authorities in disclosing aggregated information during stressed episodes.

Beyond the policy discussions, much supervisory work needs to be done by financial authorities. There are national and international dimensions to this work. The cross-border nature of these activities means that national supervisors will struggle to gain a full picture of the risks without support from peers elsewhere. In Europe, the Alternative Investment Fund Managers Directive (AIFMD) already empowers financial authorities to limit leverage employed by alternative investment fund managers, although work is still ongoing to determine how that power should be used and in what circumstances. And of course, international bodies such as the FSB, IMF and ESRB rely on the input and insight from national authorities so as to be able to piece the jigsaw of activities together. All of this requires extensive dialogue, cooperation and data. The Central Bank of Ireland is active on all these fronts and is pressing for greater supervisory convergence in the measurement of risks associated with market-based financial intermediation.

### The Irish non-bank financial sector

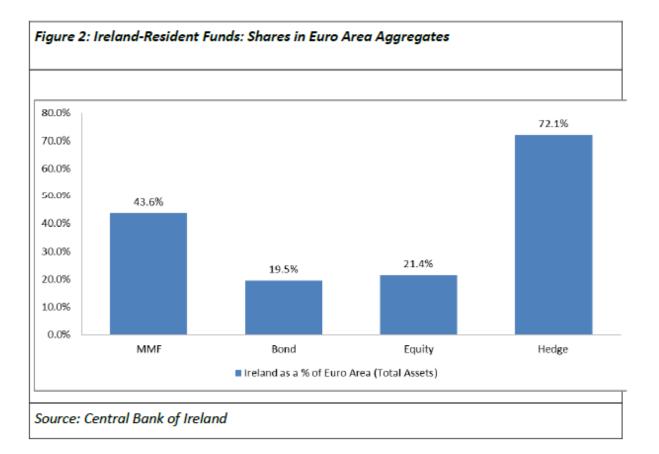
Figure 1 shows the sectoral composition of the Irish non-bank financial sector. In addition to significant insurance and pension fund sectors, Ireland hosts entities (mainly investment funds and securitisation vehicles) that support a large amount of non-bank financial intermediation (Moloney and Murphy 2013).



Source: Central Bank of Ireland

Note: This chart breaks out the Irish non-bank financial sector into entity based categories. Please note that MMFs refer to money market funds; FVCs are financial vehicle corporations (that is special purpose vehicles whose main activity is securitisation); the Other OFI sector refers to the balancing residual from the flow of funds data of other financial intermediaries (including treasury companies, holding companies, leasing companies and other special purpose vehicles (whose main activity is not securitisation). Memo item: 2015 GDP for Ireland is €203.5 billion.

Figure 2 shows that Irish-resident entities account for a sizeable proportion of funds activity in the euro area, such that Ireland plays an important role as an international financial centre for the investment funds industry.



From a domestic perspective, it is important to understand the linkages between the activities of these sectors and the domestic economy and any potential risks to the domestic jurisdiction. In fact, Figure 3 shows that Irish-resident collective investment vehicles: (i) have a proportionately low exposure to Irish-resident assets; and (ii) are owned by relatively few Irish-resident investors. Furthermore, these data overstate the ultimate exposure of Irish residents, since these include Irish-resident entities that are owned by foreign investors. Put another way, Irish-resident collective investment vehicles are largely invested in offshore assets and are mostly owned by foreign investors.

Ireland's role in global financial intermediation means that traditional interpretations of balance of payments flows are not too helpful and the patterns of ultimate ownership are quite different to those suggested by the residence of investment vehicles. Put differently, the geography of risk also matters. Contagion can travel across borders because of the international nature of their assets and liabilities. Stress arising elsewhere can affect Irish-resident investment vehicles, and vice versa. It follows that the Central Bank of Ireland has a role not only to understand linkages to the domestic economy but also to work with international peers in the oversight and supervision of non-bank financial intermediaries.

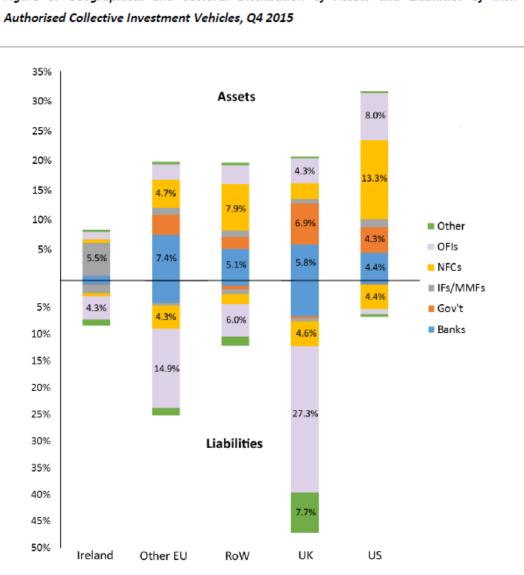
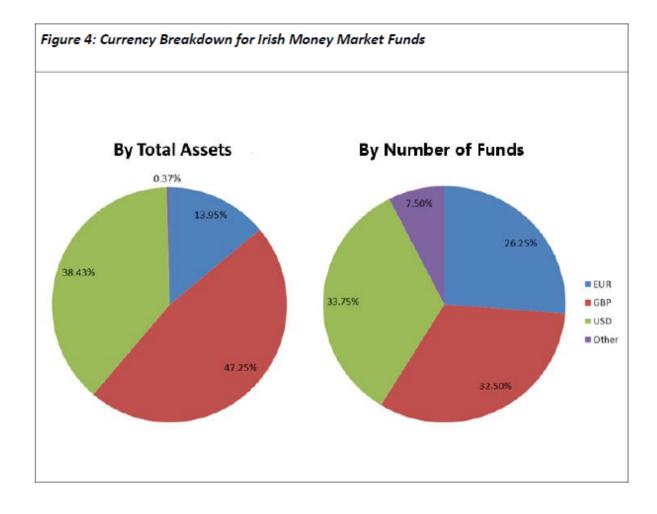


Figure 3: Geographical and Sectoral Distribution of Assets and Liabilities of Irish-

Source: Central Bank of Ireland

Note: Collective Investment Vehicles (CIVs) refer to investment funds and money market funds collectively. Each column represents a country or region (see bottom row). The colours correspond to the following sectors: other; Other Financial Intermediaries (OFI); Non-Financial Corporations (NFC); Investment Funds and Money Market Funds (IF/MMF); Governments and Banks. The sum of the holdings above the x-axis equals 100% of CIVs' assets, for example the largest asset position is the US NFC sector at 13.3%. The sum of the holdings below the x-axis equals 100% of CIVs' liabilities, for example the largest liability position is the UK OFI sector at 27.3%.

In related manner, Figure 4 shows the currency composition of the money market funds sector. This sector is dominated by sterling- and dollar-denominated funds, with only a minor share for euro-denominated funds. This pattern further underlines the international, crossborder nature of the Irish-resident funds sector.



Effective monitoring is a key pillar of good regulatory engagement (Moloney and Murphy 2013). The Central Bank of Ireland has led the way in collecting detailed data on collective investment vehicles and continues to prioritise initiatives that make data collection more efficient and effective (Godfrey et al 2015). This serves to inform international policy discussions and, more importantly, to support various Central Bank teams for risk analysis and supervisory purposes (Moloney and Murphy 2016).

Recent work includes extending the reporting requirements for financial vehicle corporates to all Irish special purpose vehicles, providing a more detailed picture of the international links based on the domicile of the consolidating entity (if any) and the country of the sponsoring entity. Figures 5 and 6 show the geographical composition.

I should also mention the Central Bank of Ireland's work programme to develop methods to analyse the risks of investment funds under stressed scenarios. The aim of this work is to empirically inform supervisory and policy priorities by providing various measures of the leverage, liquidity and interconnectedness risk factors discussed earlier. It will also set a standard for some of the risk analyses that we expect from asset managers.

## Conclusions

Vibrant capital markets are essential for a well-developed and stable financial system, offering important benefits for both savers and firms and governments that seek market-based funding.

At the same time, risks to financial stability require appropriate management, including by central banks. To this end, there needs to be a better understanding of the cross-border

nature of the assets and liabilities of non-banks to give us a better indication about how and where shocks might be transmitted the system.

In this regard, understanding the financial network requires effective engagement of regulatory authorities and this starts with good data collection. It is also the basis for better policy discussion and supervisory co-ordination.

It is why exercises such as the annual FSB Shadow Banking Monitoring Exercises are important. And why I support the further expansion by the FSB of the scope of coverage of this exercise to include all notable centres of market and non-bank financial activity.

Ultimately, a better understanding of the geography of risk will help us to assess properly the nature of the risks posed by market-based financing.

Continued progress needs to be made to forge closer cooperation among central banks and financial regulators. Such enhanced cooperation needs to be underpinned by an improved framework for collecting, managing and sharing data (Lane 2014). Ultimately, better data and closer cooperation will support more coordinated and decisive supervisory action, especially in times of market stress.

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