Assessing risks from UK non-bank financial sectors

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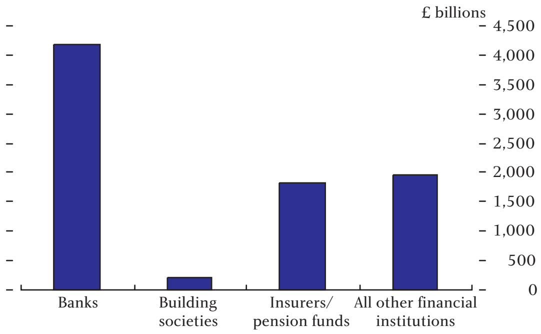
The assessment of the robustness of the UK financial system in each *Financial Stability Review* focuses primarily on the banking system, reflecting the importance of this sector for the maintenance of financial stability. But there are many other types of financial institution resident in the United Kingdom, and these non-bank financial sectors may also have the potential to affect financial stability – both through their direct role as providers of financial services and through their links to other participants in the financial system. This article sets out the framework we follow for assessing the risks to financial stability from UK-resident non-bank financial sectors. In focusing on UK-resident sectors, this article does not cover non-UK institutions that may also pose risks to UK financial stability.

MUCH OF THE DISCUSSION of the UK financial system in the *Review* concentrates on the domestic banking sector, but there are many other financial institutions owned or operating in the UK. Some engage in activities that are different to commercial banking, such as general insurance companies, which provide insurance for a range of risks; pension funds, which support long-term saving; and securities dealers, active in wholesale financial markets. Others, such as credit unions and building societies, are quite similar to small domestically focused banks. These varied sectors play a significant role in the economy, reflected in part by the scale of their financial liabilities (Chart 1).

Chart 1
Unconsolidated financial liabilities of UK-resident financial institutions, 2004 Q2



Source: ONS.

Most domestically owned banks focus primarily on retail banking, providing a range of services, such as savings products and loans or intermediation in payment systems, which are important for households and corporations. They are also a potential conduit for the transmission of financial stresses through the financial system to the rest of the economy. Banks have significant direct links to one another through interbank lending, and they have a key role in the operation of payment systems. Moreover, banks are indirectly connected too. Their role as monetary intermediaries – transforming deposits into illiquid loans – leaves them vulnerable to liquidity risk if there is a loss of confidence in the sector. As such, while individual institutions might not be systemically important, the banking sector as a whole clearly is. And, given that disorder in the banking sector is typically manifested in pressures on the liquidity of individual institutions and the system, central banks' role as liquidity providers means that they have a key part to play in dealing with such problems.

While the potential knock-on effects of bank failures are reasonably clear, the wider disruption arising from the failure of non-banks is less obvious. The potential for customers to withdraw their investments quickly is typically more limited, reducing the opportunities for strains in one non-bank to be quickly transmitted to other institutions in the sector. This means that the failure of one institution is less likely to disrupt a sector's provision of financial services. But there is still the potential for problems in non-bank sectors to threaten systemic financial stability. Previous *Reviews* have discussed specific threats. For example, in 2001 and 2002, falling UK and global equity prices reduced the solvency margins of the UK-resident life insurers. The *Review* noted the potential threat posed by the industry's response to lower solvency levels, discussed the regulator's response and highlighted links between insurers and banks.

That episode also illustrated the potential for global financial markets to affect UK financial institutions adversely, and hence UK financial stability. Global markets are, in turn, affected by non-UK financial institutions. Foreign non-bank financial institutions have significant roles in capital markets, either as investors or as traders, where disruption to their activity could have a sufficiently large adverse impact on market functioning to threaten financial stability. In addition to the links through markets in which UK-resident institutions are participants, some individual foreign institutions, such as securities dealers or reinsurers, may have counterparty links to UK-owned banks which could have implications for domestic systemic stability. Chapter two of the assessment article therefore discusses risks to and from these institutions and global financial markets more broadly.

This article presents a framework for assessing which non-bank financial sectors have the greatest potential to threaten the stability of the UK financial system as a whole. It focuses on UK-resident non-bank financial sectors, and so does not consider the risks to financial stability from non-UK financial institutions or international capital markets.

Financial stability in theory and in practice

A well functioning financial system should allow individuals to smooth their consumption across time or states of nature, and allow the efficient financing of investment projects with saved resources.[1] And a financial system is stable if its capacity to fulfil these functions is robust to shocks to individual institutions' balance sheets.

Financial instability can arise when a shock does sufficient damage to the operations of an institution (or group of similar institutions) to cause substantial disruption to the functioning of the financial system. This can either be a direct result of the affected institution's failure to provide services, or the result of links within the financial system, which spread disruption beyond the originally affected institution and thus indirectly inhibit the functioning of the whole system.

Direct transmission through provision of financial services

The UK-resident non-bank financial sectors provide a wide range of services, such as the provision of lending, asset management services, or insurance. The loss of these services could have a significant direct impact on the wider economy. But this depends on two factors. First, the service must play an important role in the economy. This may be in terms of households' and corporations' holdings of financial assets or in their ability to undertake certain activities (for example, some activities require compulsory insurance under health and safety and other legislation). Second, the failure of an individual non-bank must cause significant disruption to the provision of a financial service by other firms in that sector or other sectors. Or the concentration of the sector and barriers to entry must be sufficient to make it difficult for other economic agents to arrange replacement provision of the affected financial services.

Applying these criteria to banks, it is clear they meet the first criterion through their role as monetary intermediators and the use of bank deposits as stores of wealth and a means of payment. Some banks might also meet the second criterion, depending, of course, on their size, the business they undertake and their links to other banks and capital markets. Households and corporations use banks as intermediaries in the payment system, and so the failure of a bank could also disrupt the ability of its customers to make payments.

The failure of a non-bank may also meet the criteria above, but the case is often less clear cut.
For example, the failure of a general insurer usually results in a limited direct loss: unless a claim has been lodged, a policyholder only loses the cover they had purchased. The main disruption is the effect on individuals'/institutions' activities as a result of a loss of insurance cover. But the barriers to entry to the general insurance market are likely to be low, allowing substitute provision to be provided relatively quickly.

The loss from the failure of a life insurer could be significant because of the large amount of wealth managed by such institutions. However, because insurance contracts restrict policyholders' ability to withdraw their investments quickly, problems in this

(1) Haldane, A, Saporta, V, Hall, S and Tanaka, M (2004), 'Financial stability and macroeconomic models', Bank of England *Financial Stability Review*, June.

sector usually develop over a long period of time. By giving consumers and markets longer to adjust, the impact of any problem is spread over time, reducing the potential for spill-over effects.

Links to other financial sectors

Even if disruption to a non-bank sector's provision of financial services is unlikely to pose a direct threat to the financial system, such disruption may still have financial stability consequences through transmission to other financial sectors/markets that *are* systemically important. There are three channels by which stresses from one financial sector could be transmitted through the rest of the financial system: counterparty exposures; links through markets; and effects on confidence.

Counterparty exposures between firms expose them to a risk of default. These exposures may arise through a variety of channels, such as banks' lending to non-bank financial institutions or reinsurance provided to general and life insurers. Financial conglomerates may also be exposed through their own participation in non-bank financial markets as owners of non-bank subsidiaries or as intermediaries selling third-party services. In the event of a shock, a subsidiary may call on funds or capital from its parent. So, for example, banks' exposures to the life insurance sector through their ownership of life subsidiaries have been discussed in previous *Reviews*.

In *capital markets*, sudden large asset sales by one financial institution, or the unwinding of major derivative positions, could, at least temporarily, distort asset prices and lead to a significant decline in market liquidity. Sharp falls in asset prices could also affect other financial institutions by lowering the value of their assets (hence eroding their capital) or limiting their ability to hedge risks in capital markets.

Confidence in financial service providers is an additional indirect connection between financial institutions. Concerns that problems in one financial institution might be symptomatic of problems in a wider group of firms may lead households or corporations to reallocate their investments or reduce their take-up of financial services – resulting in wider disruption to other institutions. This is a key externality in the failure of a bank. Because banks have liquid liabilities, they are vulnerable to bank runs resulting from a loss of confidence, so problems in one institution may spread quickly to others. Shocks to consumer confidence may also affect non-bank sectors. For example, sales of long-term savings products have fallen in recent years as a result of problems in the life insurance industry. However, the less liquid nature of insurers' liabilities means that this is unlikely to lead to a rapid withdrawal of funds.

An assessment of UK-resident non-bank financial sectors' potential threat to UK financial stability

In gauging the potential for disorder in a UK-resident non-bank financial sector to spread through various channels and threaten financial stability, this article splits non-banks into nine distinct sectors, grouped into three broad categories by type of activity:

1. Credit grantors – building societies, credit unions, and 'other finance providers';

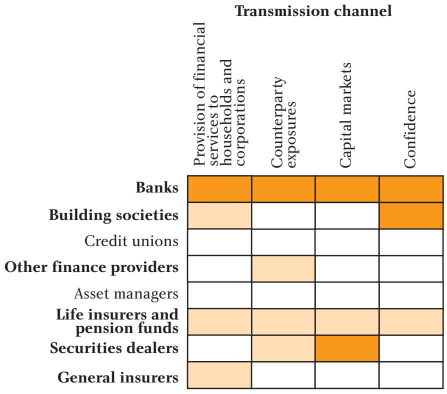
2. Investment institutions – life insurers and pension funds, asset managers, securities dealers, and hedge funds; and

3. Non-life insurers – general insurers, and reinsurers.

The variety of activities undertaken within the domestic non-bank financial sectors is reflected in the differences in the structure of the sectors and the source of the risks to which they are exposed. For example, UK credit unions operate almost entirely in the United Kingdom, and are mainly exposed to purely domestic risks. Other types of UK-resident financial institution, such as life insurers, operate in the United Kingdom, but are exposed to global risks through their investments in international capital markets. And hedge funds, securities dealers and reinsurers operate in global markets and are thus exposed to global risks. These varied domestic and global risks are discussed regularly in the assessment article in the *Review*.

The significance of each financial sector's links to the financial system is assessed using the framework set out above. The materiality of the risks to financial stability from a sector can be assessed by considering both the number of potential channels of contagion and the possible extent of financial stability risk for each channel. Using this method, five UK non-bank financial sectors appear to warrant regular surveillance (Chart 2). Other non-bank sectors, such as hedge funds, may also be relevant to UK financial stability and are regularly discussed in the assessment article in the *Review*. But, as they are mainly domiciled and operated outside the United Kingdom, they largely fall outside the scope of this article.

Chart 2
Summary assessment of UK-resident financial sectors' potential threat to UK systemic financial stability[a][b]



(a) The potential disruption to financial stability is indicated by the shading: the greater the potential for disruption, the darker the shading.

(b) Reinsurers and hedge funds are not included in this table as they are predominantly foreign-owned and operated, and therefore largely fall outside the scope of this article.

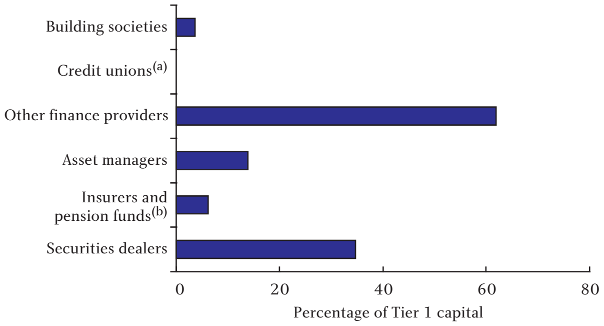
The impact on financial stability is not uniform. For example, the focus on banks is warranted by the materiality of their role in the financial sector across all four channels. In contrast, 'other finance providers' have more limited connections to the rest of the financial system (through their association with banks). And, while life insurers and pension funds also have links to the financial sector through all possible channels, these channels of contagion are not likely to be as significant as those for the banking sector. So, while regulators will want to ensure that consumers are treated fairly and their investments are protected, from a systemic financial stability viewpoint life insurers and pension funds are unlikely to be as critical as banks.

Credit grantors

Building societies

Building societies' activities are similar to domestically focused banks, accepting deposits and providing lending (primarily mortgages). They are, however, typically much smaller than banks, as indicated by the difference in the scale of their financial liabilities – UK-resident banks' liabilities exceed £4.1 trillion, compared with just under £220 billion for building societies (Chart 1). And banks' direct exposures to the sector are small, with lending to building societies equivalent to less than 4% of Tier 1 capital (Chart 3).

Chart 3
Large UK-owned banks' lending to UK-resident non-bank financial sectors, 2004 Q2



Source: Bank of England.

(a) Lending to credit unions is less than 0.001% of Tier 1 capital.

(b) Includes lending to both life insurers and general insurers.

Nevertheless, building societies have significant links to households through both lending and deposit taking. For example, they provided around 16% of secured lending during the first half of 2004 (Chart 4). Moreover, the failure of a major building society may have confidence effects that could spread to the banking sector.

Credit unions

Credit unions are another form of deposit taker, but they are universally small in size. At end-2002, the sector as a whole had total assets of less than £320 million, and the majority of credit unions have assets of less than £100,000. Bank lending to such institutions is negligible, and the mutual ownership of credit unions means that there are no ownership links with the banking or non-bank financial sectors. As a result, disruption to the sector is unlikely to pose a threat to the financial system more broadly.

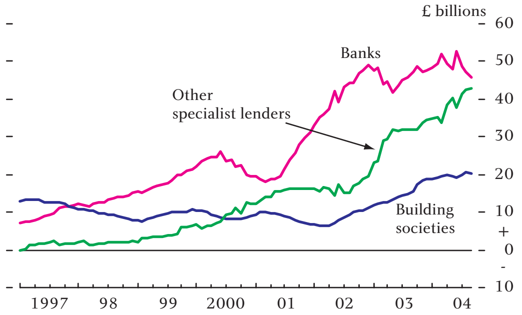
'Other finance providers' (OFPs)

This sector is composed of non-deposit-taking institutions that provide credit to households and corporations. It includes financial leasing corporations, non-bank credit grantors and housing credit corporations. OFPs have potentially important links to non-financial corporations and households as providers of credit. In the first half of 2004, 'other specialist lenders' (a subset of OFPs) accounted for around 17% of unsecured lending and 44% of secured lending (Chart 4). The sector also has significant links to banks through on-balance-sheet exposures and ownership links. Loans to OFPs are equivalent to over 60% of the large UK-owned banks'

Tier 1 capital (Chart 3), and all the large UK-owned banks own at least one OFP. Because banks and OFPs both engage in domestic lending, the two sectors' credit risk exposures are likely to be correlated. So it is likely that any default by OFPs would occur at a time when banks' domestic lending portfolios were themselves under strain, magnifying the impact on banks' robustness.

OFPs may therefore affect financial stability adversely because of their links to banks and their provision of lending to non-financial corporations and households. However, because alternative sources of credit are readily available – limiting the potential for the failure of an individual OFP to disrupt any particular market – it is sensible for surveillance of this sector to focus on the links between OFPs and banks.

Chart 4
Net lending secured on UK residential property[(a)(b)]



Source: Bank of England.

(a) Rolling twelve-month total.

(b) Includes transfers and securitisations.

Investment institutions

Investment institutions are firms whose prime activity is trading or investing in financial assets. This covers a range of institutions. At one end of the spectrum are asset managers, who manage assets on behalf of other institutions/individuals and do not carry any market risk on their own books. Life insurers and pension funds also manage assets on behalf of others, but they carry at least some of the market risk associated with these investments. And at the other extreme are securities dealers which, in addition to trading on behalf of others, also trade on their own behalf and carry any of the unhedged market risk from their investments.

Asset managers

The asset management sector covers a range of activities from managing assets for retail investors, to managing hedge funds. But differences in the investment strategies of hedge funds, compared with other asset managers, may present different financial stability risks. So hedge funds are considered separately.

Although asset managers manage a large proportion of the asset holdings of life insurers, pension funds and individuals, they have limited asset holdings on their own balance sheet. Their ability to initiate disruptive changes to asset holdings is limited by the terms of management contracts and their accountability to trustees, who define the range of asset classes in which they can invest. Any disruption to financial markets caused by asset managers' activities is therefore likely to be a result of a change in mandates received from clients. And this will be driven by factors affecting the client rather than the asset manager. Some banks and insurers own asset managers, but there is little risk of contagion through this channel as asset managers do not take market risks on their own book (reflecting the agency nature of the business). So such subsidiaries pose little immediate risk to their parents' solvency.

Life insurers and pension funds

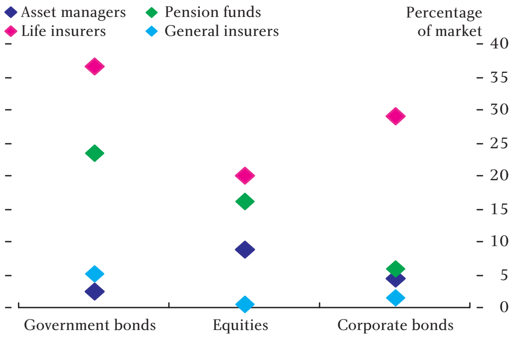
Life insurers and pension funds are considered together as they have similar characteristics. Both manage assets on behalf of others, and have significant freedom over their investment strategy. And both often hold at least some market risk on their books (rather than passing it onto the end investor). This is particularly the case for defined-benefit pension schemes and with-profits products, where guaranteed payments and the smoothing of investment returns mean that the value of an institution's assets and its liabilities to policyholders may not always be equal.

There are, however, some significant differences between life insurers and pension funds. The most important is their capital base. While life insurers have their own capital, defined-benefit pension funds' deficits are a liability on their parent corporation's balance sheet. This adds to the leverage of the parent and is therefore an important part of any analysis of corporate balance sheets.

Both UK-resident life insurers and pension funds have substantial holdings of marketable assets: at end-2003, they had asset holdings of £972 billion and £693 billion respectively. Together they hold approximately 35% of UK shares and 60% of gilts

(Chart 5). The large scale of the sector's asset holdings means that an asset reallocation by life insurers and pension funds may have the potential to affect asset prices, at least temporarily, if large asset reallocations are made over a short period of time.

Chart 5
Invested assets of UK-resident financial sectors as a proportion of the UK market, end-2002



Sources: ONS, Bank for International Settlements, Debt Management Office and Bank calculations.

In addition to their involvement in capital markets, life insurers and pension funds also have an important role as managers of long-term savings. The sector manages around 50% of UK households' financial assets. It is also a provider of annuities – which are a legal requirement of private pension saving. And the failure of a large life insurer has the potential to disrupt the annuity market.

The sector also has some links to banks. UK-owned banks' lending to life insurers and pension funds is limited (at less than 7% of Tier 1 capital), but there are significant ownership links between life insurers and the UK banking sector. Six of the large UK-owned banks have life insurance subsidiaries, with some accounting for over 10% of total group assets.

Given the sector's involvement in capital markets, links to banks, and the service they provide to households and corporations, life insurers and pension funds may have the potential to threaten UK financial stability. But the recovery in equity markets over the past year has alleviated the immediate solvency pressure on insurance companies – reducing the risk from the sector.

Securities dealers

Banks may operate in wholesale markets, making transactions across their balance sheets, but there are also non-bank institutions which operate as stand-alone investment firms. These institutions assist in the financing of investment though their management and underwriting of firms' equity and debt issues, and through provision of consultancy services in mergers and acquisitions. Securities dealers are also at the heart of many wholesale markets, both acting as market makers and trading on their own account. In their proprietary trading, securities dealers take material positions and often follow trading strategies similar to hedge funds. Disruption to these activities could affect market liquidity or price volatility, inhibiting the efficient operation of markets.

In addition to their involvement in markets, the sector also has significant links to UK-owned banks through on-balance-sheet exposures. Lending to the sector is equivalent to over 30% of the ten large UK-owned banks' Tier 1 capital, although much of this lending is likely to be collateralised.

Given their substantial role in capital markets and strong links to banks, the sector may have the potential to pose a threat to financial stability and so warrant close surveillance. The UK-resident sector is dominated by the activities of US securities dealers. While the US Securities and Exchange Commission has recently announced plans to introduce consolidated supervision of the US securities dealers, the current lack of consolidated supervision leaves a need for monitoring of the UK-resident sector over and above reviews of global market robustness.

Hedge funds

Like other asset managers and life insurers, hedge funds also manage assets on behalf of others. But, like securities dealers, they typically take greater risks and trade over shorter time horizons – giving them the potential to amplify capital market volatility. And, by using leverage, hedge funds are more vulnerable to shocks to the market. This may force them to close out positions quickly, potentially creating market instability if their positions are large relative to the size of the underlying markets.

Although there is no hard-and-fast definition of what differentiates a hedge fund from other asset managers, surveys indicate that global hedge funds' assets under management worldwide are small relative to UK-resident life insurers – managing investments of approximately £480 billion ($870 billion) worldwide in mid-2004. However, globally active hedge funds have been growing rapidly in recent years, with around £45 billion ($80 billion) flowing into hedge funds worldwide in the first half of 2004. And hedge funds' leverage – which may result from various trading activities, including borrowing, short selling, and derivatives – allows them to take positions that are far larger than their capital subscriptions. They also usually trade more actively than other asset managers, so they typically account for a much greater proportion of market activity than their assets under management suggest. And they often take similar positions, and chapter two of the assessment article in the *Review* routinely discusses the potential for such 'crowded trades' to cause disruption in specific global markets.

Aside from their investment in international markets, hedge funds also have counterparty links to other financial sectors. UK-owned banks' direct exposure to hedge funds is limited. But hedge funds have growing links to other non-bank financial sectors. Securities dealers are the main providers of 'prime brokerage' to hedge funds.[1] And an increasing number of life insurers and pension funds are investing in hedge funds, although the sums involved are usually only a small percentage of the investing funds' total assets.

While a significant minority of hedge funds are managed in the United Kingdom, they are active in global (rather than specifically UK) markets and are mainly domiciled in offshore financial centres to take advantage of lower levels of tax and regulation. As a result, despite their potential relevance to UK financial stability, they largely fall outside the scope of this article.

Non-life insurers

General insurers

General insurers have an important role as providers of insurance to households and corporations (eg employer's liability insurance). But, while general insurers have significant links to non-financial corporations and households, risks via the other transmission channels are limited. Most UK banks' have little exposure to the sector (Chart 3), and the potential for UK-resident general insurers to disrupt capital markets is also limited. The sector's asset holdings are much smaller than those of life insurers and pension funds, with non-life insurers owning less than 1% of UK equities and 5% of gilts (Chart 5).

Some insurers, known as monolines, specialise in writing financial guarantee insurance, such as insuring PFI-backed bonds in the United Kingdom.[2] But monolines are mainly US-owned insurers, and much of their business is in the United States, underwriting US municipal debt. The activity of the UK-resident monolines is relatively limited and unlikely to pose a systemic threat to the UK financial system.

The UK-resident reinsurance industry

Reinsurers enable life and general insurers to lay off some of the risks they underwrite so risks can be dispersed more widely. The UK-resident reinsurance industry is dominated by Lloyd's of London. In 2003, Lloyd's underwrote net reinsurance premiums of over £4.3 billion – nearly 60% of the total UK reinsurance market.[3] The sector has links to other non-bank financial sectors, particularly other insurers. For example, UK reinsurers provide reinsurance to life and general insurance sectors. And some UK insurers conduct a limited amount of reinsurance business in the United Kingdom. The sector also has some involvment in capital markets through its ownership of assets, but the link is limited. UK reinsurers' asset holdings are less than a third of UK general insurers' assets.

The UK-resident sector is only part of an international reinsurance industry, where insurers can obtain reinsurance from providers around the globe. And the UK-resident sector is only a relatively small proportion of the global market: in 2000, the London Market accounted for less than 10% of global reinsurance premiums written. But the global industry may have the potential to threaten financial stability through its effects on international capital markets.

(1) 'Prime brokerage' covers a variety of activities, but most commonly refers to lending to hedge funds against a portfolio of securities.

(2) Private Finance Initiative: arrangements where risks associated with public service projects are transferred to the private sector in part or in full in return for a long-term contract to supply services to the public sector.

(3) Where institutions, such a Lloyd's of London, engage in both general and reinsurance business, the assessment of the financial stability risks from the different activities are considered separately. The general insurance business of Lloyd's is assessed as part of the assessment of the UK-resident general insurance sector.

Conclusion

The most likely sources of risks to UK financial stability in the UK-resident financial system lie in the banking system and in five non-bank sectors: securities dealers, building societies, life insurers and pension funds, 'other finance providers', and general insurers. The risks arising from these non-bank sectors will be covered in the assessment section of future *Reviews* when the situation warrants it.