## Recent Developments in Asset Management

## Fiona Price and Carl Schwartz\*

The global asset management industry has grown rapidly following the global financial crisis. International standard-setting bodies and national regulators are working to better understand and, if necessary, address potential financial stability risks from this industry. A particular concern is that, in the event of a significant negative shock to current favourable conditions, some funds may experience substantial redemptions, and so be forced to engage in asset 'fire sales' that could be destabilising for the financial system. This article provides background on international developments, as well as some Australian context.

## Introduction

Asset managers invest funds on behalf of clients through collective investment vehicles ('investment funds') or separate accounts. Asset managers act as agents rather than principals, providing investment services to clients for a fee. The clients bear all credit, market and liquidity risks and share any losses or gains made by the investment fund or separate account.<sup>1</sup> In this sense, investments with asset managers differ from deposits with banks which can be redeemed at par.

The asset management industry offers potential benefits to financial stability by diversifying risks across a large range of market participants and providing an alternative to banks as a source of funding for the real economy. However, asset managers can also give rise to risks of their own: the risks posed by leveraged hedge funds and bank-like money market funds (MMFs) have been demonstrated in past episodes internationally.<sup>2</sup> A particular concern in the current environment is that if market conditions deteriorated sharply, some funds may experience bank-like 'runs' and engage

in asset 'fire sales' that could be destabilising for the financial system. This concern reflects strong growth in the asset management industry in recent years as investors search for yield, at the same time as liquidity has declined in some markets due to banks reducing their market-making activities in line with their lower appetite for risk and tighter financial regulation. In recent years, international standard-setting bodies and national regulators have taken steps to enhance monitoring and regulation to address the potential for this industry to pose risks to financial stability.

### **Industry Characteristics**

#### Size and growth

Asset managers are estimated to have had around US\$76 trillion in assets under management (AUM) globally at the end of 2013 (Graph 1).<sup>3</sup> While the figures are not directly comparable, this is equivalent to more than half of global banking assets.<sup>4</sup> Total global AUM more than doubled in size over the past decade or so. In particular, growth has been strong for North American asset managers (Graph 2)

<sup>\*</sup> The authors are from Financial Stability Department.

<sup>1</sup> For investment funds, clients are equity shareholders in the fund. For separate accounts, a single institutional investor has direct ownership of the assets in the separate account.

<sup>2</sup> See Edwards (1999) for discussion on the collapse of Long-Term Capital Management's highly leveraged hedge fund and IOSCO (2012a) for coverage of the events in the US MMF industry during the global financial crisis.

<sup>3</sup> This estimate, taken from IMF (2015), is based on the AUM of the world's top 500 asset managers at the end of 2013. However, it will include double counting due to cross-investment among asset managers.

<sup>4</sup> Global banking system assets are the aggregate of banking system assets in 20 jurisdictions plus the euro area (FSB 2014). Banking system assets across jurisdictions are subject to definitional differences.







and, more recently, among bond funds in a range of jurisdictions. Growth in AUM in the post-crisis period has been assisted by the low interest rate environment, which has supported growth in asset values and prompted investors to search for yield. At the same time, regulatory reforms and balance sheet repair by banks in some countries – both in response to the crisis – have encouraged non-intermediated debt funding (Graph 3).



Sources: European Central Bank; Office for National Statistics; RBA Statistics Canada; Thomson Reuters

#### Concentration

Available data suggest that AUM in the asset management industry are more concentrated than assets in the banking industry, with nearly 20 per cent of AUM managed by the five largest asset managers at the end of 2013 compared with around 10 per cent of banking assets in the five largest banks (Table 1). The data show that AUM of the largest asset manager are bigger than assets of the largest banks both in dollar terms and as a share of the industry.

#### Types of clients and funds

Clients of asset managers can either be retail investors (individuals) or institutional investors (e.g. pension funds, insurance companies, mutual funds and hedge funds). Generally, around two-thirds to three-quarters of asset managers' client base by value are institutional investors.<sup>5</sup>

Asset managers' investment funds can either be public or private, with public funds accessible to both retail and institutional investors, and private

<sup>5</sup> Around three-quarters of European asset managers' client base were institutional investors in 2014 (EFAMA 2014). In Australia, an estimated two-thirds of AUM were sourced from institutional investors in 2009 (Australian Trade Commission 2010); this proportion has likely increased more recently due to the 2013 and 2014 increases in the superannuation guarantee boosting superannuation fund balances.

Asset manager	AUM	Per cent of total AUM	Bank		Per cent of total assets
	US\$b	Per cent		US\$b	Per cent
BlackRock	4 324	5.7	Industrial and Commercial	3 1 2 5	2.2
			Bank of China		
Vanguard Group	2 753	3.6	HSBC Holdings	2 671	1.9
Allianz Group	2 393	3.1	China Construction Bank	2 538	1.8
State Street Global	2 345	3.1	BNP Paribas	2 495	1.8
Fidelity Investments	2 160	2.8	Mitsubishi UFJ Financial	2 489	1.8
J.P. Morgan Chase & Co.	1 602	2.1	J.P. Morgan Chase & Co.	2 416	1.7
Bank of New York Mellon	1 583	2.1	Agricultural Bank of China	2 405	1.7
AXA Group	1 532	2.0	Bank of China	2 292	1.6
Capital Group	1 339	1.8	Barclays	2 225	1.6
BNP Paribas	1 325	1.7	Deutsche Bank	2 220	1.6
Тор 10	21 355	27.9	Тор 10	24 875	17.9

#### Table 1: Largest Asset Managers and Banks<sup>(a)</sup> End December 2013

(a) Since some asset managers' funds will be institutional investors in the funds of other asset managers, there will likely be double counting in the AUM

Sources: FSB; RBA; SNL Financial; Towers Watson

funds (and separate accounts) only accessible to institutional investors. Investment funds are generally open-ended, closed-ended or exchange-traded.

- Open-ended funds allow investors to redeem their shares directly from the fund on a continuous or periodic basis (e.g. daily, monthly or quarterly). Many open-ended funds offer daily liquidity (IMF 2015). The number of a fund's shares varies over time and the share price is generally determined by the fund's net asset value (NAV).
- Closed-ended funds have a fixed number of • shares that are traded among investors on stock exchanges. The share price is determined by demand and supply rather than the fund's NAV.
- Exchange-traded funds (ETFs) have characteristics of both open-ended and closed-ended funds, though they are typically referred to as open-ended funds.<sup>6</sup> The number of an ETF's shares can vary over time. The ETF's shares are traded between the ETF and authorised participants (usually broker-dealers) in the primary market. Authorised participants

can trade these shares with investors in the secondary market, and these shares can then be traded among investors on stock exchanges. Authorised participants can engage in arbitrage trading, which usually results in the ETF's share price being close to the fund's NAV.

Pension funds and funds of life insurance corporations perform similar functions to investment funds, though these funds have a long-term liability to pay the beneficiaries (i.e. pension and life insurance claims). While this feature lowers redemption risk, these funds could still pose financial stability risks through channels such as asset fire sales or their interconnections with other financial institutions (CGFS 2011).

#### **Investment strategies**

Open-ended mutual funds (excluding MMFs) are the largest type of fund and are estimated to have held 41 per cent of total global AUM at the end of 2013 (IMF 2015). These funds generally invest in either bonds, equities, or a mixture of bonds and equities; within this type of fund, equity funds hold the largest share of AUM (Graph 4). Separate accounts, which

<sup>6 &#</sup>x27;Box A: How Do ETFs Work?' in Kosev and Williams (2011) provides more information on the structure of ETFs.

manage the cash of single institutional investors, are not shown in Graph 4. These accounts are estimated to have held 36 per cent of total global AUM at the end of 2013 (IMF 2015). Less is known about their asset allocation since their investment strategies vary depending on the client's mandate. However, the Securities Industry and Financial Markets Association notes that the large separate accounts managed by surveyed asset managers have limited leverage and limited holdings of illiquid securities (SIFMA 2014).

#### Graph 4 Global Assets Under Management By collective investment vehicle type



Sources: IMF; Investment Company Institute; RBA

In recent years, the AUM of funds investing in less liquid asset classes and pursuing more complex investment strategies has increased, which is likely to reflect investors' search for yield. At the same time, banks have reduced their market-making activities in less liquid markets due to regulatory reforms and their decreased risk appetite, which has contributed to reduced liquidity in these markets (CGFS 2014; Cheshire 2015). However, the strong investor demand for less liquid assets may have masked any structural decline in liquidity, so market participants might be overestimating liquidity. According to CGFS (2014), there is little evidence to suggest that asset managers have adjusted their investment funds' liquidity buffers or redemption terms to reflect any changes in the liquidity risks associated with their bond holdings.

## Asset Management and Systemic Risk

Asset managers and their funds may have certain characteristics or engage in activities that create or amplify risk. They often undertake maturity and liquidity transformation, sometimes with leverage. Relative to banks, the financial stability concern is less about whether these characteristics or activities result in significant losses, since a broad range of clients will share these losses among themselves and, unlike claims on a bank, clients should be prepared to accept losses on their investment fund claims. Rather, the focus is on whether asset managers and their funds can spread distress to other parts of the financial system and to the real economy through the behaviour of asset managers and their clients.

The literature tends to focus on two main channels through which asset managers or their funds could transmit risk to the rest of the financial system: the market channel and the counterparty channel (see, for example, OFR (2013)).<sup>7</sup>

#### The market channel

Asset managers could potentially cause destabilising falls in asset prices if forced to liquidate assets to meet redemptions, particularly if this involves less liquid asset positions. This could arise, for example, if a fund or an asset manager faced an adverse shock that led to a loss of confidence. Open-ended funds that offer daily redemptions are susceptible to bank-like runs.<sup>8</sup>

If clients consider the fund to have insufficient liquid assets to meet its future redemptions without considerably affecting the fund's NAV, they may quickly try to redeem their funds. Depending on

<sup>7</sup> In their methodologies for identifying non-bank non-insurer global systemically important financial institutions, the FSB and IOSCO also identified the substitutability transmission channel. This is where the distress or failure of an asset manager or a fund that provides a critical function or service could spread distress to market participants that heavily rely on this function or service, particularly if there are limited ready substitutes available in the market (FSB and IOSCO 2015).

<sup>8</sup> ETFs are generally considered likely to have lower redemption risk than open-ended funds that offer daily liquidity due to their structure. IMF (2015) provides some discussion on redemption risk at ETFs.

the fund's liquidity portfolio, run-like conditions may force an asset fire sale and, depending on the pace and scale of the ensuing price adjustment, spread distress to other financial institutions holding these assets or similar assets. Even in the absence of run-like conditions, asset fire sales may still arise if a highly leveraged fund becomes subject to margin calls and liquidity constraints, or if asset managers quickly 'herd' out of an asset class.

#### The counterparty channel

Risks can also be transmitted through large exposures among asset managers and between asset managers and other financial institutions. The asset management industry has direct connections with many other financial institutions, including those that provide services to asset managers (e.g. broker-dealers and banks) and those that serve as counterparties for derivative contracts and portfolio investments (e.g. banks and insurance companies). In the United States, the Office of Financial Research (OFR) contends that asset managers and their funds have become increasingly connected to other financial institutions over the past decade or so (OFR 2013).

Banks in particular provide a large range of services to the asset management industry, including brokerdealer services, custodial services and the provision of credit. Some of the services provided by banks may involve asset managers giving collateral to banks that can be used for the banks' own purposes. This is referred to as the *re-use* of collateral or the *rehypothecation* of collateral.<sup>9</sup> While this re-usable collateral offers benefits to the financial system, such as enhancing liquidity, it can also transmit counterparty risks.

 Collateral re-use can lead to the build-up of leverage-like 'collateral chains' between banks and asset managers, increasing the risk of contagion (Singh 2011). Fischer (2015) notes that chains of interconnections based on marketvalued collateral are vulnerable to distress and that longer chains of interconnections make it difficult for firms within the chain to fully understand their counterparty risks.

If an asset manager or its broker-dealer were to experience distress, or an asset manager became concerned about the extent to which its assets had been rehypothecated, it might recall those rehypothecated assets. The broker-dealer would then have to return the equivalent amount of securities provided by the asset manager, which could put it into distress (FSB 2013a). If a brokerdealer were to fail, asset managers might have limited access to their rehypothecated assets. This could have implications for their fund's solvency if leverage has been obtained. For example, Aragon and Strahan (2012) found that hedge funds using Lehman Brothers as a brokerdealer were more likely to fail than otherwise similar funds following the Lehman bankruptcy.

As well as through exposures to other financial institutions, risks can also be transmitted through intragroup exposures. Exposures among entities within the same financial conglomerate increase the risk of contagion (The Joint Forum 1999). Even if the other entities within the group are relatively isolated from a distressed entity, potential exists for damage to that institution's brand. More than half of the largest 25 asset managers are owned by banks or insurance companies (IMF 2015). In fact, Table 1 shows that some of the largest asset managers are in the same conglomerate as the largest banks.

# Recent International Regulatory Developments

International standard-setting bodies, international organisations and national regulators have taken steps to enhance monitoring and regulation of the asset management industry. This includes the package of post-crisis reforms that address 'shadow banking' more generally and, more recently, further work that builds on this in line with the

<sup>9</sup> FSB (2013a) defines the 're-use' of collateral as any use of securities delivered in one transaction in order to collateralise another transaction and the 'rehypothecation' of collateral as the re-use of *client* assets (i.e. where the intermediary has an obligation to safeguard its client's assets).

industry's strong growth amid the low interest rate environment. For example:

- In response to the vulnerabilities in MMFs and the gaps in their regulation exposed by the global financial crisis, the International Organization of Securities Commissions (IOSCO) released policy recommendations for MMFs in 2012 (IOSCO 2012b). In the United States, the Securities and Exchange Commission recently adopted major changes to the regulation of its large MMF sector (SEC 2014). Institutional prime MMFs, considered to be the most susceptible to runs, are required to more clearly differentiate their product from bank deposits by floating their NAV rather than setting it at 'the buck'.10 All non-government MMFs have been provided with new tools to address the risk of runs, including liquidity fees and the temporary suspension of redemptions.
- In 2012 and 2013, IOSCO released principles relating to liquidity risk management practices in collective investment schemes, including specific principles for the suspension of redemptions and the valuation of assets (IOSCO 2012c; IOSCO 2013a; IOSCO 2013b).
- The Financial Stability Board (FSB) issued its policy framework for shadow banking entities in 2013, which included policy tools designed to mitigate risks posed by investment funds that are susceptible to runs, such as those involved in credit intermediation with maturity and liquidity transformation and/or leverage (FSB 2013b). These tools included: redemption gates; the suspension of redemptions; redemption fees or restrictions; side pockets;<sup>11</sup> illiquid investment limits; liquidity buffers; concentration limits; leverage limits; and restrictions on the maturity portfolio of assets.

- An FSB and IOSCO workstream is continuing to develop methodologies for identifying non-bank non-insurer global systemically important financial institutions. In its second consultative document, this workstream focused on developing separate methodologies for investment funds and asset managers, as activities undertaken at both the asset manager and investment fund level were considered to potentially pose systemic risks (FSB and IOSCO 2015).
- In 2013, the OFR released a report commissioned by the US Financial Stability Oversight Council (FSOC) which included a discussion on the potential financial stability risks posed by the asset management industry (OFR 2013). And in December 2014, the FSOC sought public comments on the potential risks to US financial stability from asset management products and activities, particularly risks associated with liquidity and redemptions, leverage, operational functions and resolution (FSOC 2014).
- Inits April 2015 Global Financial Stability Report, the International Monetary Fund suggested several improvements for the oversight of the asset management industry, including: enhancing microprudential supervision; incorporating a macroprudential perspective into the oversight of the industry; improving liquidity regulations; considering tools that effectively price-in the cost of liquidity, including minimum redemption fees since funds' redemption fees have declined over the past decade due to competitive pressures; and accounting for the products and activities of an asset manager or investment fund when determining its systemic importance (IMF 2015).
- The FSB is currently undertaking work focusing on the potential financial stability risks posed by current market liquidity issues, including those associated with asset management activities, as well as the potential longer-term financial stability risks posed by asset management activities (FSB 2015).

<sup>10</sup> Institutional prime MMFs are only accessible to institutional investors and invest primarily in commercial paper issued by financial institutions. In the United States, these MMFs are now required to sell and redeem their shares based on the current market-based value of their underlying assets (i.e. have a floating NAV) rather than maintain a stable NAV, which is generally set at US\$1 (i.e. 'the buck').

<sup>11</sup> Side pockets are the legal separation of the impaired or illiquid portion of a fund's portfolio.

## Australian Asset Management Industry

The Australian asset management industry is estimated to have had A\$2.6 trillion AUM at the end of March 2015 (Table 2). This is equivalent to around 3 per cent of global AUM and around 75 per cent of the total financial assets of Australian authorised deposit-taking institutions (ADIs). Superannuation funds and funds of life insurance corporations accounted for almost 70 per cent of total AUM, while investment funds accounted for 12 per cent of total AUM.<sup>12</sup> The remaining AUM was sourced from funds placed with investment managers by other domestic institutions and overseas investors. The industry's AUM has more than doubled over the past decade, largely driven by the strong growth in superannuation fund balances. Conditions for the Australian asset management industry are importantly linked to global markets, given interlinkages between markets and more direct exposures, including through funds outsourced to global asset managers.

Superannuation funds are the largest sector of the Australian managed funds industry and are prudentially regulated and supervised by the Australian Prudential Regulation Authority (APRA), except for self-managed superannuation funds (SMSFs), which are overseen by the Australian Taxation Office. The FSB and IOSCO consider that pension funds pose a low risk to global financial stability (FSB and IOSCO 2015), and there are a number of features also present in the Australian superannuation industry to limit systemic risk.

Table	2: Australian	Assets	under	Management <sup>(a)</sup>
	Ei	nd March	2015	-

	Consolidated assets A\$ billion	<b>Share of total AUM</b> Per cent of total consolidated assets
Superannuation funds	1 509	58
Life insurance corporations <sup>(b)</sup>	254	10
Investment funds	311	12
of which:		
– public unit trusts <sup>(c)</sup>	276	11
– cash management trusts <sup>(d)</sup>	25	1
All managed funds institutions	2 073	79
Other funds placed with investment managers <sup>(e)</sup>	546	21
Total	2 619	100
Memo item:		
- ADIs <sup>(f)</sup>	3 341	na

(a) Wholesale trusts are captured to the extent that managed funds institutions and other funds placed with investment managers are invested in wholesale trusts; components may not add up due to rounding

(b) Includes superannuation funds held in statutory funds of life insurance corporations

(c) Public unit trusts are investment funds that are open to the general public and allow investors to either redeem their units directly from the trust or dispose of their units on a secondary market

(d) Cash management trusts are broadly equivalent to MMFs in other advanced economies

(e) Includes the funds of other domestic institutions, such as government bodies and general insurers, and overseas investors

(f) At end December 2014; total financial assets of Australian banks and other depository corporations

Sources: ABS; RBA

12 Superannuation funds outsource a large part of their asset management, including 'effective outsourcing' to independent asset managers and 'nominal outsourcing' to affiliated asset managers (Liu and Arnold 2010).

- Superannuation funds have lower liquidity risk since superannuation is compulsory and investors cannot access their superannuation until they retire and reach the preservation age (currently between 55 and 60 years old). Also, there is limited evidence of switching between funds, which is likely to be due to investor disengagement (Industry Super Network 2010). While some funds delayed processing switching requests during the global financial crisis due to insufficient liquid assets, there was no evidence of large-scale switching between funds or investment strategies.
- The majority of superannuation funds' liabilities have little or no direct leverage.
- Available data suggest a low degree of concentration and interconnectedness among superannuation funds.
- The majority of superannuation fund assets are held in defined contribution funds, which potentially have less incentive to search for yield compared with defined benefit funds since they do not offer a guaranteed income stream (Antolin, Schich and Yermo 2011).

That said, the superannuation industry's relatively large size warrants ongoing attention to potential risks. Because they make similar investment decisions and are exposed to common shocks, superannuation funds could contribute to procyclicality. Also, these funds and their (less-regulated) service providers are highly interconnected and there is a high degree of concentration among some of their service providers (Donald *et al* 2014). While liquidity risk is currently somewhat limited by the preservation rules and investor disengagement, there is potential for it to become more pronounced as a larger proportion of fund members move from the contribution phase to the drawdown phase.

In addition to the industry being mostly represented by superannuation funds, other features of the Australian asset management industry should serve to lower systemic risk relative to the asset management industries in other advanced economies.

- Under the *Corporations Act 2001*, retail funds are required to suspend withdrawals if their 'liquid assets' are less than 80 per cent of total assets, limiting fire-sale pressure.<sup>13</sup> This feature was demonstrated during the financial crisis: many mortgage funds suspended redemptions in the face of increased redemption demand, limiting the need to liquidate assets.<sup>14</sup> While some other advanced economies allow funds or the regulator to suspend redemptions, a fund may be reluctant to take this action without the legal requirement and the regulator may not have sufficient information to suspend redemptions in a timely manner.
- The hedge fund sector is relatively small. In a 2013 review, the Australian Securities and Investments Commission (ASIC) found the sector to have low levels of leverage and concluded that these funds do not pose significant systemic risk to the Australian financial system (ASIC 2013). In recent years, ASIC has improved disclosure requirements for hedge funds open to retail investors.

## Conclusion

While the asset management industry provides benefits to the financial system and the real economy, it also poses potential risks to financial stability. Since the global financial crisis, international standardsetting bodies and national regulators have taken steps to better understand and, where necessary, address the risks posed by the asset management industry. This includes steps taken in response to the crisis to address 'shadow banking' activities, and further attention in recent years in line with industry growth associated with the rise in investors' search for yield. These efforts are ongoing.

<sup>13</sup> Assets that are considered to be 'liquid' include cash, bills, marketable securities, property of a prescribed kind or other property that the responsible entity reasonably considers able to be realised for its market value within the period provided for in the scheme's constitution for satisfying withdrawal requests. Under certain conditions, a non-liquid fund can offer withdrawals out of available cash or particular assets. For more information, see sections 601KA and 601KB of Chapter 5C of the Corporations Act.

<sup>14</sup> Lowe (2015) discusses two episodes of redemption pressure on Australian property-related trusts.

There are a number of features of the Australian asset management industry that should serve to limit systemic risk. Nonetheless, the Australian authorities will continue to engage internationally and domestically to better understand and, if appropriate, address the risks posed by the industry.

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