The Asset Management Industry, Systemic Risk, and Macroprudential Policy

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Abstract

In the aftermath of the 2007-2008 financial crisis, new legislation and regulations have pressured banks and insurance companies to reduce their size, leverage, and riskier lines of business in order to avoid another too-big-to-fail debacle. Nonbank financial intermediaries have naturally taken up some of that slack, and, not surprisingly, regulatory scrutiny has turned toward these intermediaries to evaluate whether they could pose similar risks to financial stability that banks did pre-crisis. This article explores whether there is a demonstrable link between the asset management industry and systemic risk.

1 The article is a shorter version of the Milken Institute report titled "The asset management industry and systemic risk: is there a connection," co-authored with D. Markwardt and K. Savard.

In the aftermath of the 2007-2008 financial crisis, new legislation and regulations have pressured banks and insurance companies to reduce their size, leverage, and riskier lines of business in order to avoid another too-big-to-fail debacle. Nonbank financial intermediaries have naturally taken up some of that slack, and, not surprisingly, regulatory scrutiny has turned toward these intermediaries, especially asset managers, to evaluate whether they could pose similar risks to financial stability that banks did pre-crisis.

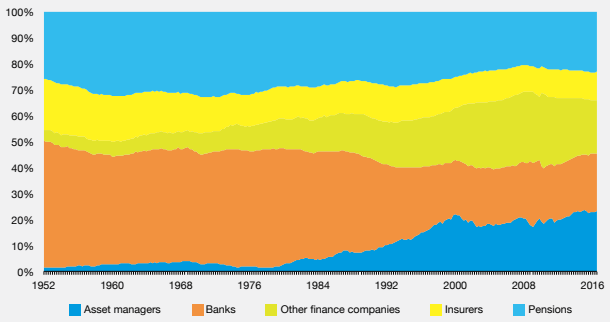
Yet, most of the existing literature and regulatory tools on financial stability focus on the banking system and overlook the fact that the asset management industry and its subsectors are different from that system and perform vastly different roles. The challenge is to define appropriate framework that would provide the appropriate safeguard when it comes to the asset management industry. As a result, the appropriate macroprudential framework would require a significant departure for the current one; because asset managers do not present the same risks as banks. Yet, as discussed in FSOC (2016), FSB (2016), and FSB (2017a), they might possess other dynamics that could contribute to the transmission of – or even amplification of – systemic risk.

This article analyzes and assesses the ways in which the asset management industry might act as a catalyst or contributor to systemic risk. It proceeds as follows: Section 1 recalls the definition of financial stability and systemic risk before turning to those risks specific to the asset management sector that are of concern from a macroprudential perspective; Section 2 discusses the pertinence of the current framework in regulating asset managers from a financial stability perspective; Section 3 explores the necessity of such a role, highlighting the differentiating factors between traditional targets of macroprudentialism (banks) and asset managers; and Section 4 concludes.

FINANCIAL STABILITY AND SYSTEMIC RISK

Reforms since the financial crisis have focused on financial stability and systemic-risk mitigation. While these two notions play a key role in the current regulatory environment, defining them in a tractable, time-sensitive, and relevant manner remains a challenge.

Financial stability often is defined in terms of "its ability to facilitate and enhance economic processes, manage risks, and absorb shocks" [Shinasi (2004)]. It is worth emphasizing that such a definition does not imply protecting badly run firms or creating a risk-free environment. Ensuring such stability is a complex, difficult task that requires identifying commonly agreed-upon objectives as well as their unintended consequences among regulators, firms, and clients/investors.



Source: updated Lopez et al. (2016)

Figure 1 – U.S. financial assets by industry

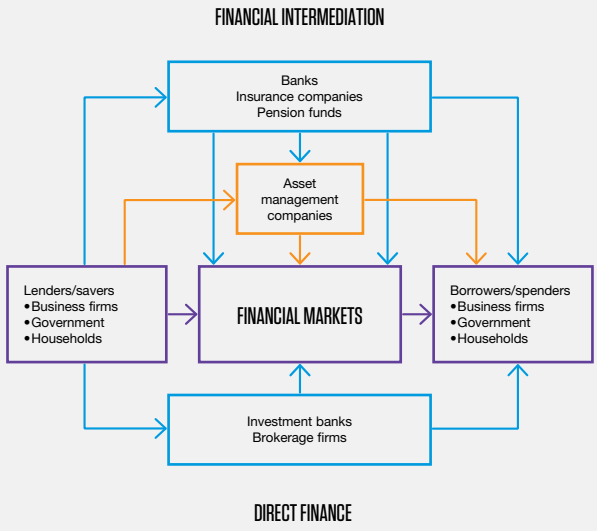
Conceptually, once agreed upon, these financial-stability objectives should be used to define, measure, and monitor the aspects of systemic risk deemed pertinent and "anticipatable."[2] Ultimately, the relevant mix of macroprudential and microprudential tools should be used to mitigate it. Unfortunately, there are no hard boundaries between systemic and nonsystemic risk, and the ever-evolving financial landscape requires regular assessment of both objectives and how to achieve them. In other words, monitoring systemic risk and operationalizing a policy response to it remain a challenge because only the outcome of the risk, not the risk itself, can be directly observed.

Asset management: a segmented industry

Figure 1 shows the increased importance of asset managers, as they now oversee nearly a quarter of domestic financial assets, up from less than 3% in 1980.

Broadly defined, asset managers provide investment services as fiduciary agents for their clients, using a wide variety of specific asset management models. A summary of the major fund families' characteristics and risk profiles can be found

2 Systemic risk is usually defined as a ''risk of disruption to financial services that is caused by an impairment of all or parts of the financial system and has the potential to have serious negative consequences for the real economy'' (IMF, FSB, BIS). Yet Reinhart and Rogoff (2009) suggest that more than 50% of the financial crises come from the real side of the economy.



Source: Delbecque (2012)

Figure 2 – Flow of funds in the financial system

in IMF (2015). They complement existing financial players in their function, as shown in Figure 2: these fund families service not only households, businesses, and governments, but also other categories of financial intermediaries, including banks, pension funds, and insurance companies.

Overall, asset managers are engaged in activities occurring either at the management-company level or at the fund level. Management-company activities include administration, centralized execution of trades, risk management, and market research, while fund-level activities include overall asset allocation, selection of specific securities, and liquidity management. Fund shareholders receive any profits or losses while the asset managers' primary source of revenue is from fees for services.[3] Furthermore, the separation between the custody and the management of assets protect investors from the risk of default of the asset manager.

From financial to systemic risk

The Basel III framework of financial reforms identifies two dimensions across which financial agents create or amplify systemic risk: either through exacerbating the extremes of the financial cycle (procyclical risk) or increasing fragility across financial sectors or institutions (contagion risk). Activities and incentives built into the asset management industry could transmit or potentially amplify risk across both these dimensions.

Theoretically, asset managers do not face the same risks as banks and insurers (other than operational risks). Yet, their fiduciary obligation exposes them to some financial risks. As a result, the question is whether the individual risks can become systemic and, if so, via which channels. This section provides a closer look at two types of risks – herding and liquidity risks – that stand out as specific to asset managers, particularly among the "plain vanilla" investment funds, such as mutual funds and ETFs.

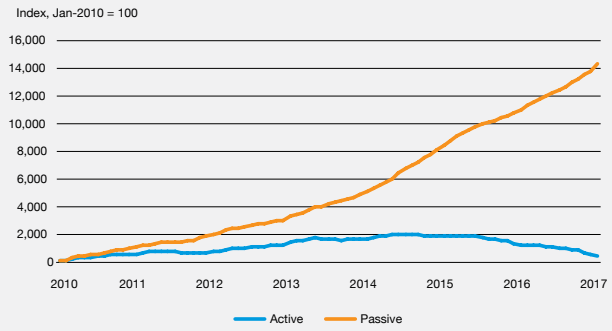
Herding and procyclical risk

The fund management industry has traditionally operated with managers actively selecting securities on behalf of their investors. Competing for clients based on relative performance, fund managers are measured against a comparable benchmark. For portfolio managers who are risk-averse or face career risk when falling in a lower percentile of performance, there are incentives to "herd" into positions similar to those of their peers and not stray too far from the benchmarks. This can create strong disincentives for a manager to take countercyclical positions, resulting in "chasing yield" during upswings in the financial cycle and herding to sell positions during cycle downswings, thus exacerbating financial bubbles and the devastation of their fallout [Feroli et al. (2014)]. The IMF's recent Global Financial Stability Report notes that U.S. mutual funds now exhibit significantly more herding behavior than in 2009, just after the crisis [IMF (2015)].

It is unclear to what extent these herding dynamics contribute to financial bubbles or if they are merely symptomatic. Equally unclear is what, if anything, can be done to mitigate these potentially destabilizing incentives. Figure 3 shows that both retail and institutional end investors appear to be moving toward cutting active managers out of the investment process and self-directing investment decisions using passive indexes.

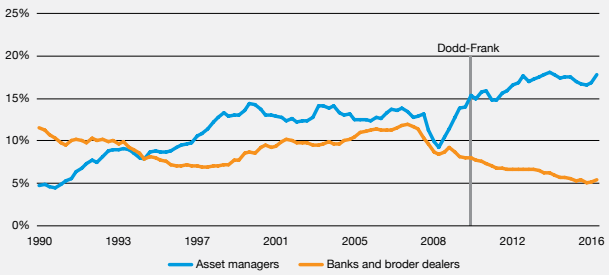
The rise of passively managed funds – those that track indexes without fund managers actively selecting securities – introduces new potential consequences for the financial cycle and stability. The majority of passive funds buy or sell securities based on the market capitalization weights of their respective indexes. This can lead to a "momentum bias" where fund managers must buy (or sell) the fastest-appreciating (or depreciating) index constituents, again exacerbating the highs and lows of financial asset price cycles [Jones (2015)].

3 Private funds, such as hedge funds, are a partial exception to this rule, as they are not subject to restrictions on receiving performance fees, which gives the management company a direct stake in the performance of the funds.



Source: Morningstar

Figure 3 – U.S. fund cumulative flows



Source: Federal Reserve
Note: A recent revision led to mutual fund holdings of debt securities to be reported at market value rather than at book value.

Figure 4 – Share of corporate and foreign bond ownership

While it generally is accepted that limits to arbitrage exist that could lead to unconstrained asset price bubbles, it is less obvious that anything could reasonably be done to mitigate these unmeasurable impacts. Potential reforms such as introducing alternative benchmarks or altering investor-manager contract designs with stronger emphasis on long-term performance appraisal are unlikely to be adopted by the industry en-masse and would be difficult to enforce on a regulatory basis. Regulatory attention instead is turning primarily toward the other major perceived risk emerging from the asset management industry: liquidity mismatches in investment funds.

Liquidity and contagion risk

The implementation of the Dodd-Frank Act following the financial crisis placed greater constraints on the ability of banks and dealers to engage in various risky activities, including warehousing bond risk on their inventories (Figure 4). The result has been a sharp decline in the ability of dealers to offer two-way quotes (an offer to buy or sell a given security). While bonds have always been more difficult to trade compared with equities, given their size and lack of standardized exchange, the diminishing role of dealers in the bond market has led many fund managers to complain that bonds – corporate bonds in particular – have become increasingly illiquid.

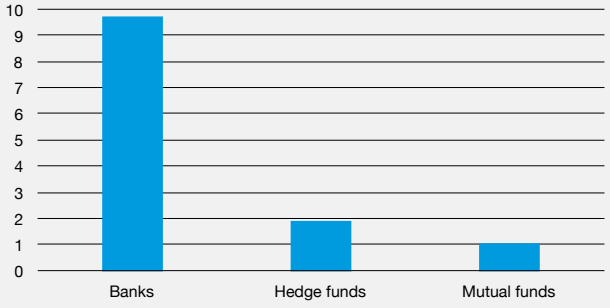
This refers to market liquidity, the ability to trade securities without creating adverse price movements. As bond market liquidity and broker-dealer bond inventories have declined, investment funds' ownership of corporate debt securities has risen substantially, in part displacing previous broker inventories but also in response to greater demand for corporate bond mutual funds and ETFs. Notably, as sluggish global growth and easy monetary policies have pushed interest rates to lows not witnessed in recent decades, there has been an increased appetite for higher-yielding instruments, such as emerging-market bonds, leveraged loan funds, and domestic high-yield corporate bonds.

While many of these higher-yielding securities have grown increasingly illiquid (and owe part of their additional yield to the illiquidity factor), the proliferation of mutual funds and ETFs providing exposure to these securities continues to offer end investors very liquid redemption terms: investors can easily buy and sell the funds on a daily basis without meaningful gates or fees. This contrast between highly liquid redemption terms and the illiquid underlying securities that the funds invest in creates a liquidity mismatch, a concern for regulators and many in the industry.

Liquidity mismatches on a large scale are of concern to financial-stability monitors because of their ability, in a worst-case scenario, to cause a "death spiral" of mass investor redemptions, causing fire-sale asset prices, which leads to further investor withdrawals. Studies find that funds investing in less-liquid corporate bonds experience disproportionately high outflows in response to bad performance and that these outflows can create destabilizing financial shocks even in the absence of significant leverage or actions by leveraged intermediaries [Goldstein et al. (2016); Feroli et al. (2014)]. Manconi et al. (2012) found that funds holding illiquid bonds during the market turmoil of the global financial crisis were forced to sell higher-quality investment-grade bonds to raise cash, thus "propagating the crisis" across the entire corporate bond sector, suggesting the potential for cross-sector contagion.

To some extent, this fire-sale scenario is analogous to countless historical examples of bank runs in which depositors rushed to withdraw their funds before the bank ran out of

money, or, more recently, the "breaking of the buck" in money market mutual funds that sparked extreme fears in the aftermath of Lehman Brothers' collapse. Unlike banks or money market funds, investment funds do not guarantee investor balances; rather, they float with the net asset value (NAV) that provides an up-to-date cash value of the fund's underlying investments. Nonetheless, they can still be vulnerable to redemption runs when investors have a "first-mover advantage," as is the case with mutual funds. Focusing on the high-yield sector, Lopez et al (2016) illustrates how major disruptions to the sector's funding environment could have a significant impact on the real economy.



Sources: Lopez et al (2016)
Note: Calculations for U.S. institutions; average liabilities to average assets for banks, gross assets to net assets for funds.

Figure 5 – Median leverage ratio (2016)

	Total assets (U.S.$ bln)	Financial leverage
JPMorgan Chase	2,423	10.7
Bank of America	2,185	9.2
Wells Fargo	1,788	10.6
Citigroup	1,731	8.5
U.S. Bancorp	422	10.4
	Assets under management (U.S.$ bln)	**Gross fund leverage**
BlackRock	4,652	1.1
Vanguard	3,148	1.1
State Street Global Advisors*	2,448	1.0
Fidelity Investments	1974	1.1
BNY Mellon Wealth Management*	1,710	n/a

Source: Lopez et al (2016)
* Asset managers that are divisions of SIFIs (insurers or banks)

Table 1 – Largest U.S. banks versus asset managers

THE CURRENT U.S. MACROPRUDENTIAL POLICY FRAMEWORK

The initial targets of the Basel III and Dodd-Frank reforms were banks or institutions presenting similar transmission channels in terms of systemic risk, mostly based on leverage. As discussed previously, this framework identifies two risk dimensions that may threaten the stability of the entire financial system: across institutions (contagion risk, mostly using the SIFI denomination) or across the financial cycle (procyclical risk). Both dimensions are closely linked and their problems often accumulate at the same time.[4] This section compares the current framework with the risks it should be assessing.

Systematically important financial institutions (SIFI)

The SIFI denomination relies on the size of an institution. This proxy seems adequate when assessing the amplitude of risk that banks can generate to the system. By contrast, most fund managers tend to have simpler funding mechanisms: Figure 5 shows that they incorporate little or no leverage, while Table 1 compares the potential solvency risks banks and asset managers might experience during crisis periods when asset prices fluctuate.[5] It also shows that some asset managers are divisions of institutions already identified as SIFIs.

If the definition of systemic risk focuses on the possibility of disruption to the real economy and the dislocation of markets, then the main concern related to the size of asset managers is the potential for direct wealth loss. However, this issue fades in importance when considered in conjunction with the interconnectedness and substitutability of an institution. Interconnectedness measures the potential of one firm to transmit financial distress to others. The more a firm is able to transmit distress, the greater potential impact its own distress can have.

4 While the size of the banks' balance sheet and degree of leverage have been identified as potential contagion risks, Shin and Shin (2011) and Lopez et al. (2015) have shown that looking at funding sources provides information regarding procyclical risk, especially banks' excessive reliance on "noncore" liabilities – short-term funding in particular.

5 Hedge funds often make use of short-term funding arrangements and achieve leverage synthetically through the use of derivatives, but on average they are not leveraged to the same extent as banks.

Substitutability focuses on the critical functions performed by an asset manager and the extent to which other firms could provide similar services at a similar price in a timely manner in the case of its failure. The asset management industry is an intensely competitive business with relatively low barriers to entry, hence substitutability from the perspective of investors in the market for investment management services is of limited concern. However, it is important to consider the degree to which the manager or its funds are a hard-to-replace source of financing for certain businesses or sectors of the economy. Due to both interconnectedness and substitutability, the effects of asset managers on the economy depend on the asset classes, while the channels of risk transmission (and their complexity) depend on the instruments used and how they are combined.[6]

Liquidity risks

The financial crisis has shown that a family of funds, such as money market funds, could lead to a systemic crisis via two channels: liquidity risk and connections between lightly regulated businesses and banks. As a direct response to the first issue, the Securities and Exchange Commission in 2014 adopted a set of rules that "require a floating net asset value (NAV) for institutional prime money market funds that allows the daily share prices to fluctuate with changes in the market-based value of fund assets and provide nongovernment money market fund boards new tools – liquidity fees and redemption gates – to address runs."[7] More recently, the SEC has proposed rules for mutual funds and ETFs to set up programs for managing liquidity risks and broaden disclosures about their liquidity and redemption practices. Furthermore, the Dodd-Frank Act requires the SEC to run stress-tests on asset managers with more than U.S.$10 billion in assets. Since, as previously discussed, banks' and asset managers' business models are significantly different, the methodology needs to be adjusted. So far there is no consensus on how to define and measure the concepts of liquidity and leverage that matter in the context of systemic-risk buildup within the asset management industry. In 2017, the Financial Stability Board (FSB) requested that the International Organization of Securities Commissions (IOSCO) provides appropriate measures for liquidity by the end of 2017 and for leverage by the end of 2018.

Dodd-Frank addresses the second issue by requiring central clearing of standardized derivatives transactions. The resulting strengthening of central clearing counterparties (CCP) or clearinghouses comes with a trade-off. It makes the credit chains more transparent, providing a foundation for centralized risk-management and data-processing operations. However, it also concentrates credit, liquidity, and operational risk within the CCPs. The Commodity Futures Trading Commission (CFTC) is also required to implement stress-tests on CCPs in order to monitor potential systemic-risk buildup, but it runs into difficulties similar to those at the SEC.

The challenges faced by the SEC and the CFTC led to the creation of a working group within the FSOC to investigate these issues, including counterparty exposures, margin investing, trading strategies, and possible standards for measuring leverage.[8] These discussions and consultations are part of a broader international program led by the FSB [FBS (2016), FSB (2017a, b)].

Herding

Basel III is, by design, unable to discourage herding behavior because it relies on the Asymptotic Single Risk Factor Model to compute capital requirements for the monitored institutions. The model assumes that all financial institutions have a diversified portfolio and are all exposed to the same single risk factor. Wagner (2010) discusses the trade-off between ensuring that they all have the same prudent behavior and encouraging heterogeneity in risk-taking: recent reforms could encourage more correlation across banks and financial institutions. Similar reasoning would hold for asset managers if stress tests were to assess their reaction to a common shock.

MACROPRUDENTIAL POLICY FOR ASSET MANAGEMENT?

The asset management industry encompasses a wide variety of business activities, ranging from traditional asset management to alternative investing and direct lending. In other words, it is a highly-segmented industry with minimal information available to regulators attempting to monitor it. Little is known about the importance of portfolio size compared with the possibilities of nonlinear and threshold effects given the strategic situations of the institutions involved. Furthermore, given the absence of clear regulatory leadership, designing a coherent body of rules would require a significant amount of coordination among the different institutions, such as the SEC and CFTC.

6 Roncalli and Weisang (2015) generate a set of simulation to illustrate this point.
7 SEC website
8 UCITS and European alternative investment funds have been subject to such requirements and have had access to a range of liquidity management tools for some years.

While asset managers have not been the primary focus of recently introduced macroprudential policy, they continue to be affected by it. Basel III and, for the U.S., Dodd-Frank moved riskier activities (proprietary trading) off banks and onto non-bank intermediaries. New regulations are still being implemented, including the Department of Labor's fiduciary rule and the "living wills" of large banks.[9] Furthermore, the regulatory and political momentum that followed the financial crisis is fading, leading to some questioning of the current framework and its potential expansion to the asset management industry.[10] So far, regulators seem mostly focused on identifying the largest potential sources of systemic risk rather than the likelihood of a systemic shock originating from a specific institution.[11] This approach captures the functional risk of banks where size is an appropriate proxy of importance when it comes to systemic risk. "However, in the case of asset managers, it would confuse large institutions with systemically strategic institutions, giving wealth loss too much importance over the potential for broader economic disruptions and market dislocations." [Roncalli and Weisang (2015)]

The noted segmentation of the asset management industry explains in large part the industry's resilience as a whole, as well as its usefulness to the real economy. It is, by business design (low cost of entry, fiduciary activity), a dynamic industry that evolves and adjusts to new conditions (direct or indirect regulations, technological progress, or very low interest rates) and passes all asset-value fluctuations to its clients. As a result, monitoring and regulating the asset management industry is quite challenging. One approach suggested by both market participants and regulators is to regulate specific type of activity that provides an economic function and which, if failing, would trigger systemic crises [BlackRock (2017); FSB (2017a); ESRB (2016)]. Then, the appropriate resolution strategies should be designed to avoid such chaos. This approach implies an iterative process or rounds of communication among all parties (regulators, firms, and their clients) to secure the buy-in of all sides. Cooperation among all parties is required to minimize unexpected consequences such as pushing risky activities into a more shadowy environment or generating unrealistic expectations among investors. It would also reduce the risk posed by layers of uncoordinated regulations due to the numerous institutions overseeing part of the same industry. The current setup of the FSOC could facilitate such a process as long as it remained politically independent and a lead institution was identified to oversee the asset management industry.

Moving forward in setting the regulatory agenda, the FSB identified in its latest report four aspects of asset management activities that could potentially threaten financial stability: liquidity mismatch, leverage within investment funds, operational risk and challenges under stress, and security lending activities. Most of the FSB's recommendations are at the fund level and rely on IOSCO to operationalize them. They suggest strengthening transparency and microprudential guidance by enhancing and standardizing data collection across jurisdictions, improving best practices, especially in terms of liquidity risk management, and stress testing at the fund level. In contrast, few recommendations focus on the stability of the financial system. They advocate for system-wide stress-tests and a risk management framework linked to asset managers' potential to disrupt the financial system. It is worth noting that these recommendations, while using Basel III's keywords stress test and orderly resolution, rely on a framework that is currently being developed while the financial system is still adjusting to sweeping post-crisis regulatory changes.

CONCLUSION

This article has highlighted the challenges of a system-wide monitoring of asset management and have questioned such an approach. The advocated alternative is to regulate by function, imposing similar regulations for institutions performing similar tasks (for example, depository institutions and money market funds) and setting requirements consistently across markets and institutions.[12]

Yet, it also seems necessary to take a step back and remind ourselves of the required, but not sufficient, elements for the successful use of prudential regulation in mitigating systemic risk. First and foremost, prudential policies are complements to – not substitutes for – proper macroeconomic policies (monetary, fiscal, structural). The current global monetary policy stance with pervasive low or negative interest rates and continued divergence among major central banks could generate financial instability that prudential policies would be unable to fix. Second, many financial markets and actors are

9 The Department of Labor's fiduciary rule is not part of the Dodd-Frank Act but an initiative competing with the SEC fiduciary rule.

10 Lopez and Saeidinezhad (2016) provide an assessment of the implementation of Dodd-Frank.

11 The SIFI denomination ignores whether the scenarios suggested in the stress-tests are likely or not.

12 See Richardson (2014): "If the risk of the underlying loans is the same, it should not matter how those loans are sliced and diced through securitization in terms of determining the required capital buffer of banking institutions."

international. As a result, successful toughening of prudential requirements necessitates international coordination, yet the political momentum for such efforts has significantly weakened in recent years.[13] Third, the financial world is highly complex, whether due to business models or extremely integrated activities across different industries. Therefore, it is rather unlikely that any datasets will provide a complete understanding or mapping of all the risk profiles. As a result, limitations should be clearly accounted for when designing regulations and their goals.

Looking ahead, it will be important for political decision-makers and regulators to realize that the nature of systemic risk will change with the evolution of the financial landscape. Hence, the rules or policies should be targeted sufficiently to strengthen resilience of the desirable economic functions (such as lending to firms) but simple enough to limit regulatory avoidance.

The center of power in finance is shifting to the buy-side. As assets under management rise toward U.S.$100 trillion by 2020 (according to some projections), the buy-side is poised to replace banks as the major source of funding for deals and underwriting. In the post-crisis world, regulators have as much, if not more, power as shareholders. Using this power wisely to simplify rules and minimize complex regulatory changes to the financial system, while providing the right incentives for the private sector to adopt proper governance and monitoring, seems to be the best way to achieve long-term financial stability and benefits to the real economy.

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13 Frankel (2016) provides several reasons why such coordination remains a challenge, as shown in recent G-20 and G-7 summits.