

BLACKROCK

April 4, 2014

**Secretariat of the Financial Stability Board
c/o Bank for International Settlements
CH-4002
Basel, Switzerland**

Submitted via email to: fsb@bis.org

RE: Comments on the Consultative Document of Assessment Methodologies for Identifying Non-Bank Non-Insurer Global Systemically Important Financial Institutions

BlackRock, Inc. (together with its affiliates, "BlackRock")¹ is pleased to have the opportunity to review and comment on the Consultative Document of Assessment Methodologies for Identifying Non-Bank Non-Insurer Global Systemically Important Financial Institutions (the "Consultation") and to provide our views on the issues raised. We recognize that there may be systemic risks in capital markets that require regulatory focus. BlackRock is interested in pursuing solutions that improve market stability and soundness, and we are supportive of additional reforms that address systemic risks.

We agree with the concept of screening investment funds as a means to identify potential systemic risk, as set forth in the Consultation. As described in more detail in our response, we recommend that regulators use leverage as the initial screen to identify funds that should be evaluated further for their potential to present systemic risk based on factors such as liquidity, redemption provisions, counterparty relationships and volatility. As discussed in our response, we believe that "size" is not an appropriate initial screen, as often the size of an investment fund is not indicative of risk, and the use of size is likely to identify funds that do not present risk while also overlooking funds that may. Importantly, we also believe that many risks are not specific to one investment fund or one asset manager, but rather result from common practices undertaken across all market participants. We recommend that the FSB identify the products and practices that create systemic risks and then work with national regulators to create a globally harmonized regulatory framework to address these concerns.

In connection with the issues raised by the Consultation, we provide comments on the points immediately set forth below.

Asset managers are not a source of systemic risk

Given the agent business model, asset managers are neither the owner of the assets under their management nor the counterparty to trades or derivative transactions undertaken on behalf of clients. Clients regularly change managers with no impact on the capital markets; typically, the

¹ BlackRock is one of the world's leading asset management firms, managing approximately \$4.3 trillion (as of December 31, 2013) on behalf of institutional and individual clients worldwide, across equity, fixed income, liquidity, real estate, alternatives, and multi-asset strategies. Our client base includes pension plans, endowments, foundations, charities, official institutions, insurance companies and other financial institutions, as well as individuals around the world.

assets will continue to reside at the same custodian regardless of whom the owner of the assets appoints as manager. In the unlikely event a manager went out of business, clients would move the asset management to one of many competitors. Asset managers do not control entity-level asset allocation decisions, so any concerns about "herding" would need to be addressed with "asset owners" rather than with their agents, the asset managers.

Using "size" to screen funds will generate false positives and false negatives, and screening fund "families" introduces complexities without added value

The size of a fund is not indicative of systemic risk, and most of the largest funds today are unlikely to pose systemic risk issues. Meanwhile, families of funds managed by a firm or within the same legal structure typically represent a diverse set of strategies, and as a result there is no obvious meaningful way to aggregate across funds. "Leverage" is a better measure for screening funds. Funds with substantial leverage could be subjected to a more detailed review. Additional factors such as size, liquidity, redemption provisions, counterparty relationships and volatility could then be considered.

Separate accounts are owned by individual clients and the asset manager must manage them in compliance with each client's investment guidelines

Separate accounts are better thought of as "funds for one" with no first mover advantage. These portfolios are subject both to asset management regulation (e.g., SEC and CFTC in the US, FCA in the UK, FSA in Japan) and to each client's specific regulation (e.g., local pension and insurance regulation). In our experience, typical separate accounts are managed very conservatively. Most of these portfolios use no leverage, and those that do use a modest amount. Likewise, separate accounts are not typically invested in large concentrations of illiquid securities.

It is important to define what a "systemic fund" designation would mean

A "systemically important fund" is clearly not the same as a "systemically important financial institution." While increased reporting requirements might be warranted, capital or other fundamental changes to such funds are not. Investors can move money from one fund to another, so fundamental changes to individual funds will simply cause one fund to shrink and another to grow. Importantly, any potential remedies should be subject to a robust public consultation process.

We recommend making improvements to the financial ecosystem rather than focusing on individual funds or firms

While we understand this is outside the primary focus of the Consultation, we recommend setting global standards that would apply to all market participants. Specific areas where we have proposed solutions include:

- Cash management products
- Securities financing transactions
- ETFs
- Global harmonization of data reporting
- Central clearing counterparty (CCP) resolution
- Market liquidity
- Asset flows into and out of funds

We follow our discussion of these points with responses to the specific questions raised in the Consultation.

Asset managers are not a source of systemic risk

Consistent with the Consultation's focus on investment funds, we believe that designating individual asset managers as systemically important is the wrong approach, because asset managers do not present systemic risk at the company level. The asset management business model is an "agency" model which is fundamentally different than that of other financial institutions that act as principals. Asset managers transact on behalf of clients rather than managing assets on their own balance sheet. As a result, asset managers are neither the owner of the assets that they manage nor the counterparty to trades or derivative transactions. For that reason, asset managers are dramatically less susceptible to financial distress than banks, broker-dealers or insurers, making asset managers highly unlikely to "fail" in the sense of a bank failure. Asset managers also do not fund their business using the short-term credit markets, and therefore they are not exposed to the type of liquidity squeeze that banks and broker-dealers may encounter. Likewise, asset managers' revenue is generated principally from fees on assets under management and asset managers have the ability to significantly adjust expenses if revenues decline. Larger asset managers are further protected because their revenues tend to be diversified by some combination of product, asset type, client type, and geography making them less susceptible to adverse events. Importantly, even if an asset manager does go out of business, as described below, the resolution process is straightforward, because clients can readily reassign their assets to another manager, and the remaining assets and liabilities of the manager itself can be resolved easily. Like most other service organizations, asset managers go out of business regularly with no systemic implications.

Asset managers differ from other financial institutions in fundamental ways

While part of the financial services sector, asset managers are characterized by a business model that is fundamentally different than that of other financial institutions such as commercial banks, investment banks, insurance companies and government-sponsored entities. Asset managers are different than most other financial firms in that they act as advisors or agents on behalf of their clients; asset managers are not investing on their own behalf.² Asset managers do not act as lenders or otherwise provide credit to individuals or corporations, nor do they perform clearance, custody or related functions. In addition, asset managers do not act as counterparties in derivatives, financing or securities transactions, nor do they cross-hold debt or equity with their funds or other institutions. When an asset manager transacts in the market on behalf of its clients, the obligations under the trade (e.g., settlement, posting of margin) belong to the manager's client and are not obligations of the asset manager itself. In short, the asset manager is an agent, not a principal in its transactions.

Contrast this with banks, broker-dealers and insurance companies. Although they promise the return of their customers' funds and assets, these entities *expose customer assets to risk in the ordinary conduct of their businesses for their direct benefit*.³ The need to protect customers from a complete loss when these entities fail has led in some countries to specialized protection regimes (e.g., bank deposit insurance or protection up to specified amounts; loss protection under the auspices of the Securities Investment Protection Corporation for U.S. brokerage customers; state guaranty funds for customers of U.S. insurers). In addition, the need to untangle these

² Asset managers may co-invest with clients or seed strategies as part of the launch of new funds.

³ U.S. and certain foreign country securities regulations require segregation of client assets from the assets of the broker-dealer, but permit the use of those assets in certain circumstances, such as when the client uses margin accounts or otherwise becomes a borrower from the broker-dealer.

customer assets from the claims of other general creditors with lesser priorities has led to the creation of specific bankruptcy and insolvency schemes for banks, broker-dealers and insurers.

The balance sheet assets of an asset manager and its assets under management (“AUM”) are often conflated. There is a difference between the size of an asset manager measured by its balance sheet versus the client assets it manages. As explained above, AUM belong to clients and are not part of the asset manager’s balance sheet. Those client assets are held by the custodian in the name of the client. Therefore, the AUM, or client assets, are not part of any liquidation or potential bankruptcy process associated with an asset manager and its creditors.

For these reasons, asset managers – unlike banks, thrifts and U.S. federal credit unions – do not have government insured or guaranteed deposits, nor do they have access to the U.S. Federal Reserve discount window. Banks accept deposits that, in the U.S., are then insured by the Federal Deposit Insurance Corporation and, in the European Union, are obliged to participate in national Deposit Guarantee Schemes. Asset managers, meanwhile, clearly disclose to clients that investment performance is not guaranteed by the manager, the government, or any other party. This distinction was critically important in shielding asset management firms from much of the turmoil that occurred during the financial crisis of 2008.

Because asset management firms are not direct market participants, and do not invest for their own account, they do not assume high levels of balance sheet risk. Conversely, other financial companies typically engage in activities involving the creation of balance sheet risk. For example, investment banks act as principal in trading, market-making and prime brokerage; finance companies access the capital markets for funds and essentially re-lend these monies; and insurance companies provide long-term financing for real estate and other hard assets as part of their asset-liability management. In contrast, the tangible balance sheet of an asset management firm comprises:

- working capital
- an investment portfolio created to facilitate
 - seed investments in new funds to be offered to clients
 - co-investment capital invested side-by-side with clients to demonstrate “skin in the game”
- property, premises and equipment

Given this business model, asset managers require only a modest amount of capital relative to the AUM managed on behalf of clients. An asset manager’s balance sheet is therefore very small compared with that of a bank and its balance sheet is not highly leveraged. As a result, if an asset manager were to go out of business, the resolution of the assets and liabilities of the firm would be straightforward and would have no impact on client assets or on broader financial markets.

Importantly, the clients of an asset manager bear the risk of adverse market movements, not the asset manager itself. Investors that hire asset managers or invest in funds understand and accept that they are exposed to the risk of their assets falling in value. While asset managers strive to generate positive performance on behalf of their clients, negative returns in a given fund or client account has little direct impact on the asset manager.

Asset managers go out of business, but they do not “fail” like other financial institutions⁴

Asset managers enter and exit the business on a regular basis, just as do other service companies. Although asset management is a regulated business, the barriers to entry are relatively low. It is not uncommon for an experienced portfolio manager that has established a successful investment record to leave his or her employer to start a new firm.⁵ Similarly, firms with established records and a client base are sometimes acquired, causing the firm to “exit” due to acquisition. Exhibit A highlights the robust environment for mergers and acquisitions in the asset management industry. As with all businesses, many asset management start-ups fail to attract a sufficient client base and eventually go out of business.⁶

We have undertaken an analysis of asset management firms that have experienced significant problems over the past twenty-five years. Exhibit B includes a summary of these situations. In most of these cases, a reputational event caused clients to lose confidence in a specific product line or in the firm as a whole. In each of these cases, clients moved their assets without market disruption.

Long Term Capital Management (“LTCM”) and the Reserve Funds are the two outliers on the list. In the case of LTCM, its master fund, Long Term Capital Portfolio LP, was extremely levered, resulting in a fund with significant levered exposures. After the fund became distressed, its counterparties injected capital at the urging of the Federal Reserve Bank of New York to prevent a potentially disorderly unwinding of the fund. Likewise, in the case of Reserve Primary Fund, the Reserve Management Company Inc. was taking elevated risk in the fund it managed. While each of these situations was extremely disruptive to the markets and required government intervention, both situations reflected financial distress at the fund level rather than at the manager level.

While most asset managers that go out of business do so in a prolonged manner over the course of years, on occasion an idiosyncratic event can trigger a more sudden substantial client exodus, so that the asset management firm will no longer have sufficient AUM to sustain itself and will look for a buyer or begin a wind-down of its business. In nearly all of the situations noted in Exhibit B, the unwinding of the client assets and the manager itself was orderly. Even in the two cases where direct or indirect regulatory intervention occurred in relation to a fund—Long Term Capital Portfolio LP and Reserve Primary Fund—the asset manager itself was wound down in an orderly fashion.⁷ As noted previously, the assets managed by asset managers belong to the

⁴ For a more detailed examination of the resolution of asset managers, please see our supplemental response to the Office of Financial Research Asset Management and Financial Stability report dated March 14, 2014, available at <<http://www.sec.gov/comments/am-1/am1-35.pdf>>.

⁵ See, e.g., “Adam Bernstein, Fund Manager at Highbridge, Plans to Start New Hedge Fund,” Wall Street Journal, March 10, 2014; “Elite Hedge Fund Alums Flood Market with Start-ups,” Wall Street Journal, February 24, 2014; “Former T. Rowe Price Portfolio Manager Kris Jenner to Start Hedge Fund in Baltimore,” Baltimore Business Journal, April 16, 2013; “Ex-Citadel Portfolio Manager Scherer to Start New Fund” Bloomberg Businessweek, October 23, 2012.

⁶ One example of such a firm is Pivotal Investments Ltd., which returned all capital to investors in 2012 reporting that it had struggled to raise funds. See, <<https://www.vestment.com/news-events/industry-news/2012/09/28/hedge-fund-closures-in-2012-what's-the-reason>>.

⁷ LTCM did not enter bankruptcy, but rather continued operations after the master fund was recapitalized. Both LTCM and its master fund were wound up in 2000. With the exception of the Reserve Primary Fund, the other cash funds for which Reserve Management Company was the investment adviser were wound down in an orderly fashion. The orderly wind-down of Reserve Management Company continues, pending the final disposition of various litigation matters. See, SEC v RMCI, 09-Civ-4346 (PGG) (USDC SDNY), Amended Judgment (January 13, 2014); Reserve Primary Fund Securities & Derivative Class Action Litigation, 08-cv-08060 (USDC SDNY), Order and Final Judgment (January 13, 2014).

clients and are not part of the asset manager's balance sheet; therefore, these client assets are not subject to any liquidation or potential bankruptcy process of an asset manager and are outside the reach of the asset manager's creditors.

Even though asset management firms enter and exit the business routinely, the evidence indicates that larger diversified firms are more likely to be resilient and survive challenges. One reason for this is that larger firms tend to have more diverse sources of revenue which strengthens the overall platform. This diversification may be along any of three dimensions: by product or investment strategy, by client type or by geography. Different products will perform differently under market stresses or disruptions. Therefore, if clients decide to exit a particular investment strategy, the revenues of a large asset management firm with a diverse product lineup and client base will be more resilient.⁸ In many cases one type of client will be reallocating out of a sector or investment style (e.g., from active to passive) while another group of clients may be increasing their allocation. For example, "retail" flows often can offset "institutional" flows and vice versa. In contrast, established profitable firms that narrowly focus on only one investment strategy are exposed to the potential for significant redemptions, such as when a founder or a well-known portfolio manager retires or leaves, or when a core strategy falls out of favor.⁹ A larger, more diversified firm is more likely to be able to withstand these types of changes, which is one reason the largest firms have been the most stable.¹⁰

Experience shows that when clients lose faith in a manager, they will take independent action to remove trading control from that manager and put their assets under the control of either a replacement manager or an interim manager who is given a "stewardship mandate." The process for transitioning between managers differs slightly between separate accounts and commingled funds. Separate account assets are owned directly by the client and the client has a direct contractual relationship with the custodian. Under the investment management agreement, the client retains the right to terminate the manager's discretion without penalty and with little or no notice. As a result, clients can, and do, terminate managers and hire new managers very quickly when they want to reassign the management of their assets. For commingled vehicles, clients may request redemptions either in cash or in-kind, consistent with the redemption terms established by the fund.¹¹ Clients can then invest the cash or deliver the securities in-kind into a similar fund with another asset manager. Transitions of client assets between asset managers occur regularly in the ordinary course of the asset management business.¹²

⁸ Two examples of large asset management firms that experienced substantial fund outflows and managed through the situation are Capital Group, which manages the American Funds, and FMR LLC, the parent of investment adviser Fidelity Management and Research Co. In 2011, the American Funds experienced outflows of \$82 billion, nearly 9% of their AUM. In the case of Fidelity, the Magellan Fund reached its peak of \$110 billion in 2000 and then experienced outflows bringing the fund to \$15 billion by year-end 2013. Both Capital Group, and FMR LLC continue to be recognized as leading asset managers today.

⁹ For example, an investment strategy based on investing principally in internet companies was successful in 1998 but by 2002 much less so. In that regard, Van Wagoner Emerging Growth Fund whose strategy was focused on "dotcom" companies, went from \$189 million in assets in 1999 to \$1.5 billion in early 2002 but had declined to less than \$100 million AUM by the end of 2002.

¹⁰ Consistent with that statement, of the seventeen asset management firm closures listed on Exhibit B, only three had AUM over \$100 billion.

¹¹ As discussed later in our response, private funds that invest in less liquid assets have redemption notice periods, less frequent redemption dates and other structural factors to allow the asset manager to effectively manage the liquidity of the portfolio. Clients, which in these types of funds are institutional or sophisticated high net worth investors, understand that transitioning such mandates may take longer.

¹² The frequency of transitions also means that clients, managers and custodians have well- established processes which can be rapidly instituted if needed in times of manager or fund stress.

Following the widespread termination and replacement of an asset manager of separate account assets or the redemption of commingled fund assets as described above, a struggling asset manager itself may ultimately be wound down in either a standard corporate liquidation process or, if the manager itself were insolvent, through a judicial bankruptcy or insolvency process. As the asset manager is separate from the assets it manages, the focus of any liquidation or insolvency proceeding will be limited to the assets and liabilities of the asset manager itself, without regard to the assets and liabilities of its clients, including funds and separate accounts.

It is also instructive to note that when a bank or broker-dealer that has encountered its own difficulties has an asset management subsidiary, it has been possible to sell the asset management business intact, with the asset manager retaining a significant percentage of the client assets that it managed. Two recent examples from the financial crisis are the sale of Neuberger Berman out of the Lehman bankruptcy estate in 2008 and the 2009 sale of Barclays Global Investors by Barclays PLC as part of its efforts to increase its capital base.¹³

Using "size" to screen funds will generate false positives and false negatives, and screening fund "families" introduces complexities without added value

As noted in the Consultation, we recognize that a materiality threshold is useful in limiting the pool of potential NBNI G-SIFIs to a manageable number. However, with respect to investment funds, we strongly believe that the size of a portfolio, as measured by AUM, is not the appropriate metric for the materiality threshold. First, very large funds that follow traditional, long-only or passive strategies do not present systemic risk, therefore using size as a materiality threshold will subject numerous such funds to unnecessary additional scrutiny without enhancing financial stability. Second, using size as a materiality threshold could potentially miss funds that have systemic impact, particularly funds that are highly levered. Given these considerations, we believe a materiality threshold based on leverage would be much more effective in identifying investment funds that may present systemic risk.

Arguments against screening by size

Investment funds typically follow a number of different strategies that invest in numerous types of securities and other financial instruments. Some strategies involve borrowing money or using derivatives to create leverage, while many others involve only an unlevered, "long-only" portfolio of highly liquid individual stocks or bonds. Other strategies use derivatives only for hedging or other limited purposes. Many strategies call for the replication of an index, creating significant transparency around the fund's portfolio and investment activities.

Funds that hold a long-only portfolio of liquid securities do not present systemic risk, even at sizes well in excess of \$100 billion. Initially screening funds of all kinds by size alone overlooks these important differences in strategy. For example, when reviewing the list of the largest U.S. registered mutual funds, attached as Exhibit C, of the 12 funds greater than \$100 billion, five are index funds and three are money market funds. In addition, all of these funds are subject to the SEC's rules limiting both leverage and investments in illiquid securities as all of them are U.S.-registered mutual funds.

Mutual funds regularly experience high volumes of redemptions with little market impact. For example, in 2013, the market saw record redemptions from registered bond funds, including traditional bond funds, municipal bond funds, high yield funds, and emerging market funds, in

¹³ Another example is the sale of Equitec-Siebel Fund Group to SunAmerica in 1991 following the bankruptcy of parent company Equitec Financial Group.

each case without significant impact to trading in capital markets. Traditional U.S. active bond mutual funds¹⁴ experienced net outflows of over \$80 billion in 2013, with more than \$40 billion of these net outflows occurring in the third quarter. Within this category, one large bond fund experienced net outflows of \$42 billion in 2013, with over \$20 billion of these net outflows occurring in the third quarter.¹⁵ Overall, total subscriptions into long-term U.S. mutual funds in 2013 totaled \$3.2 trillion, while redemptions totaled \$2.9 trillion.¹⁶ These significant amounts were flowing in and out of funds throughout 2013 without any impact approaching “significant disruption to the global financial system and economic activity across jurisdictions.”

Using size as a materiality threshold also risks missing smaller AUM funds that could have systemic impact. For instance, the distress of the Reserve Management Company created significant market disruption at the time when it “broke the buck” in 2008 due to its investments in Lehman Brothers Inc. debt securities. Reserve Management Company had less than \$100 billion in assets under management across all of the funds it managed for clients, ranking it 81st among U.S. asset managers overall as of December 31, 2007,¹⁷ and ranking 14th against managers of U.S. money market mutual funds as of that same time.¹⁸

In addition to our concerns about size as an indicator of systemic risk, we also believe that size as a materiality threshold would be a very difficult metric to implement, and could cause unintended consequences. Managers could avoid designation by closing funds to new subscriptions as they approach the materiality threshold, potentially creating an industry of funds just below the threshold. Because we do not believe that size alone is indicative of systemic risk, such a scenario would likely fail to address funds that may present such risks, and at the same time investors will lose the benefits of economies of scale that could accrue to them from larger pools of capital. Conversely, it is possible that a G-SIFI designation could be viewed favorably by investors, causing increased flows of capital to the fund. This could lead to the perverse result of creating a small number of very large funds, potentially limiting competition and dis-incentivizing future responsible innovation.

Finally, we would note that if funds are to be screened for size, to be logically consistent, the FSB would also need to look at the largest non-fund asset owners, such as family offices, sovereign wealth funds, pension funds, endowments, and foundations. As highlighted in the table attached as Exhibit D, the largest foundations, endowments, pension funds and sovereign wealth funds control over \$10 trillion of assets.¹⁹ In addition to controlling allocations to specific managers and specific products, many of these investors manage a significant portion of their assets directly without the use of an external asset manager. Thus, the regulation of large pools of investable capital would need to factor in a broad range of end-investors in addition to investment funds sponsored by asset management firms.

¹⁴ Represents net outflows in active Intermediate-Term Bond mutual funds as classified by Morningstar.

¹⁵ Redemptions from these types of traditional bond funds spiked in response to interest rates rising on expectations that the Federal Reserve would start to unwind its policy of quantitative easing by scaling back its monthly bond purchases. Simfund Global Database, as of December 31, 2013, available at <<http://www.sionline.com/simresources/>>. Represents U.S. active mutual fund net flows; does not include index mutual funds or funds of funds.

¹⁶ Investment Company Institute, available at <<http://www.ici.org/research/stats>>.

¹⁷ *Pensions & Investments, Money Manager Overview*, December 31, 2007.

¹⁸ iMoneyNet, as of December 31, 2007, available at <<http://www.imoney.net.com/>>.

¹⁹ *aiGlobal 500*, available at <<http://ai-cio.com/aiGlobal500.aspx?id=3100>>.

“Families of funds” introduce complexity without providing any clarity on systemic risk

The Consultation suggests that the methodology for funds could be broadened to include “families” of funds that follow the same or similar investment strategy. We think such a methodology would introduce significant complexity without providing any clarity around potential systemic risks. The funds managed by a firm or that constitute a “family” represent a highly diverse set of independent strategies and exposures. For example, at BlackRock, we have multiple independent investment teams operating globally that manage over 100 different investment approaches. The picture is no less complicated if we look only to the funds and accounts managed by the same portfolio management team pursuant to the same general strategy. Strategies often have variations within them (e.g., different risk levels, asset classes, concentrations), making it difficult to determine which are truly “similar.”²⁰ Furthermore, individual funds following the same “strategy” are managed to comply with regulations in specific jurisdictions, which can create differences both in the implementation of the strategy (e.g., limitations on the use of derivatives, leverage restrictions, concentration and illiquid asset limits) and the liquidity profile of the fund (e.g., redemption frequency). Finally, separate accounts established for specific investors may follow strategies that are similar to commingled funds, however these portfolios are generally subject to unique guidelines and restrictions based on the preferences of a specific client.

These complexities would make designation of fund families very difficult at best, and potentially arbitrary and inconsistent across institutions at worst. Given our concerns regarding size as a metric, we do not believe there is value in this approach. Instead, as discussed below, we believe focusing on leverage at the individual fund level would be the most appropriate and operationally practical metric.

Leverage is a better metric to screen for potential risk

Rather than size, we believe leverage is a more appropriate metric for the initial materiality screen for systemic importance. Without substantial leverage, we believe there is little chance that an investment fund could present systemic risk, as most financial failures – whether commercial enterprises, banks or investment funds – are the result of excessive leverage. Therefore, we recommend an initial screen for leverage combined with a second-tier analysis which should include, among other factors, size, liquidity, redemption provisions, counterparty relationships and volatility.

As noted in the Consultation, the potential for forced liquidations and market distortions are amplified by the use of leverage. Where a fund has no leverage, to the extent the fund receives redemption requests, it must simply sell down its assets on a one-to-one basis to meet the redemptions. Liquid assets can be sold quickly; less liquid assets generally take longer to sell, which is why funds that offer frequent liquidity (e.g., daily) will usually limit the amount of illiquid assets in their portfolio or establish credit facilities to help meet redemptions. Funds that offer less frequent liquidity can own a greater amount of illiquid assets, while closed-end funds (e.g., private equity funds) can invest entirely in such assets.²¹ Without leverage, an asset manager only becomes forced to sell assets to pay out redemptions, which can be managed through redemption restrictions and by maintaining appropriate fund-level liquidity.

²⁰ For example, would a global macro fund with a volatility target of 5% be “similar” to a fund managed in accordance to the same strategy but with a 15% volatility target?

²¹ See our more detailed discussion of asset flows into and out of funds on page 22 below.

When leverage is present, however, another factor is introduced that could force a manager to sell assets on behalf of a fund – changes in market value. Funds generally borrow money on a secured basis, meaning they post collateral against the money borrowed. When the ratio of leverage to asset value increases, counterparties demand more collateral. A simple example is a margin loan, where equity is purchased with borrowed funds, secured by the value of the equity. When equity values fall, the margin lender requires more collateral to be posted, or the size of the loan to be reduced through asset sales.

Initial leverage screen

We recognize the practical difficulty in choosing the right metric to measure leverage for purposes of screening potential systemic impact. The right leverage metric needs to balance fit-to-purpose accuracy with the ability to be applied consistently across funds. Also, we recognize the strong preference for a metric that is based on existing regulatory reporting. “Gross notional exposure” (“GNE”) is the starting point in much existing reporting, and was also proposed in the Consultation as an additional screen for hedge funds. We do not believe that GNE meets the standard of fit-to-purpose accuracy. In the simplest cases, GNE will identify which funds have the most borrowing, but because GNE does not take hedges or offsetting positions into account in any way, in many realistic cases it can be highly inaccurate and profoundly misleading. GNE does not necessarily measure, and is poorly correlated with, the risk of a portfolio for the end investor, or the systemic risk that a fund may pose. We fear that GNE is being used as a shorthand for concepts such as liquidity risk, counterparty risk and volatility but unfortunately GNE is a highly misleading proxy for these three important risks and too crude a measure to achieve the worthwhile aims set out for it.

We would instead propose using the “commitment approach” currently reported under the Alternative Investment Fund Managers Directive (“AIFMD”).²² Under the commitment approach, funds report leverage after statutorily prescribed netting of certain matching positions. We do not believe this method is the most accurate or germane way to measure leverage, as we have pointed out during the AIFMD rulemaking process.²³ However, we believe that it may provide the best balance of accuracy, existing acceptance and therefore ease of use. Because it takes into account many, but not all, explicitly offsetting positions, it is much more accurate than GNE. And while it is not necessarily as accurate as other methodologies that may require more subjective application of judgment or complex models,²⁴ it is capable of being applied on a relatively consistent basis across funds. Furthermore, because it is currently required as part of reporting under AIFMD, it is already being reported to regulators for funds offered into the EU, and there is expertise in the industry around its calculation.

Under the AIFMD, if a fund’s exposure exceeds three times its net asset value (“NAV”) using the commitment approach, it is considered to be employing leverage on a “substantial basis,” and may become subject to additional reporting requirements and other restrictions.²⁵ As a starting point for consideration, and in order to create consistency across regulatory requirements, we propose that same leverage threshold could also be used to create a materiality screen for purposes of identifying systemically important funds. More specifically, we would recommend

²² Commission Delegated Regulation (EU) No 231/2013 of 19 December 2012 supplementing Directive 2011/61/EU.

²³ BlackRock comment letter to ESMA on implementing measures under AIFMD – 13 September 2011.

²⁴ BlackRock comment letter to ESMA on implementing measures under AIFMD – 13 September 2011. Not all hedging strategies fall within the definition of hedging or netting allowed in the commitment approach such as, for example, offsetting the currency risk of one geographical market by taking a position in another market.

²⁵ Article 111 AIFMD Level 2 Regulation of 19 December 2012.

combining this leverage multiple with the \$100 billion NAV proposal in the Consultation to determine a leverage threshold amount to use for screening purposes. A \$100 billion NAV fund at three times leverage would have a gross exposure of \$300 billion, made up of \$100 billion of NAV and \$200 billion of leverage, which we will refer to as the “net leverage.” Based on this calculation, and since we believe the absolute amount of leverage (as opposed to gross exposure) is the most salient factor, we propose a materiality threshold of \$200 billion of net leverage.²⁶ In other words, we recommend screening for funds that have net leverage of \$200 billion calculated based on the commitment approach. The identified group of funds can then be subjected to a more detailed review of other factors.

We believe such a process will provide an initial group of funds that have sufficient leverage to potentially create systemic issues, without creating the numerous false positives that would occur using \$100 billion NAV and/or a test based on gross notional exposure. Such an approach also has the benefit of being consistent with an existing regulatory leverage threshold that was subject to extensive review and comment during the AIFMD rulemaking process. We recognize that other leverage multiples and amounts of levered exposure may also create suitable threshold levels; we offer our recommendations as a starting point for a discussion, and to describe a framework that we believe will be more effective at identifying systemically important funds. We would welcome the opportunity to work with FSB and IOSCO to consider and refine this methodology.

We recognize that Form PF in the United States does not require private funds to report a net leverage number similar to AIFMD’s commitment approach, nor is it possible to derive such a figure from the other leverage data collected on Form PF. However, we believe it is imperative to utilize a leverage figure that includes hedges and offsets for the purpose of screening for systemically important funds. The screening process is simply too important to use a blunt instrument like AUM or GNE. In screening private funds in the U.S., national regulators could start with gross leverage figures reported through Form PF. Because leverage calculated under the commitment approach would always be less than or equal to GNE, funds with net leverage of less than \$200 billion calculated using GNE minus NAV could be excluded. For funds with greater leverage, U.S. regulators could request managers submit leverage calculated on a commitment basis. A similar process could be undertaken in other jurisdictions where only gross leverage numbers are available. Because most large managers are likely to be doing business in Europe, they would be subject to or familiar with the AIFMD reporting process, or would have access to service providers who could assist in calculating committed leverage. In addition, in certain circumstances, funds that are offered in both the EU and the U.S. may be providing reporting for both Form PF and the AIFMD.

Interestingly, by choosing an initial screen based on leverage as set forth above, regulators may be able to effectively mitigate potential systemic risks without actually having to designate any funds as systemically important. We expect that managers will give serious consideration before establishing or managing funds that could breach the threshold, and in light of the intense regulatory scrutiny that would result it is possible that managers would not allow such funds to arise. That is why choosing the right metric and threshold is so important. It must measure the risk created by leverage reasonably, taking into account directly offsetting positions and exposures, and the threshold must be set at a level where there is a real likelihood of potential

²⁶ We considered a threshold based on gross levered exposure (e.g., \$300 billion), but we believe focusing on the amount of leverage above NAV is more indicative of potential systemic risk. A gross leverage threshold would exclude some smaller funds with very high net leverage that exceeds the net leverage of larger funds captured by the test, which seemed to us an incorrect result.

systemic impacts. Such an approach is likely to lead to self-correcting behavior, which would also reduce the burden on regulators.

Second-tier analyses

Funds that are identified pursuant to the foregoing leverage analysis would be subject to more rigorous review by regulators for secondary potential indicators of systemic risk. Consistent with the Consultation, we strongly believe that a more detailed, fund specific second-tier analysis is required in connection with any potential designation. In addition to a more thorough review of the fund's leverage, we think that analysis should also address, among other factors, size, liquidity, redemption provisions, counterparty relationships and volatility. We believe these factors mainly have relevance where significant leverage is already present.

The amount and nature of a fund's leverage deserves a much closer look in a second tier analysis. First, the amount of leverage to NAV, leverage ratio, would be a key consideration, because the greater the ratio, the greater potential that a fund is unable to meet its obligations in a time of stress. While the leverage ratio based on the commitment approach would be instructive in this regard, we believe leverage must be analyzed much more carefully in the second stage. The investment program of each fund is unique, and may include exposures that increase or decrease risk in a manner not captured by the commitment approach.

Size is an appropriate consideration in a second tier analysis. Size is a factor in the net leverage test described above, and we believe once that threshold is met a closer look at size is appropriate as a second tier factor. The larger the levered fund, the greater the potential that its distress could impact the broader financial system.

The liquidity of the fund would be one of the most significant considerations in undertaking a more comprehensive analysis. This would encompass both an examination of the liquidity of the assets held by the fund, as well as the liquidity rights of fund investors.²⁷ As noted above, excessive leverage can lead to forced sales due to margin calls and collateral requests, which can be significantly exacerbated by redemption requests. A levered fund with less frequent, or no, redemption rights, and the ability to suspend redemptions if necessary, would be better equipped to withstand a significant drop in asset values than a fund with more frequent liquidity provisions. This is one reason the use of leverage in retail products that offer regular liquidity is already subject to extensive regulation. U.S. mutual funds, which offer daily liquidity to investors, are subject to specific leverage limitations, both in connection with borrowing²⁸ and the use of derivatives.²⁹ UCITS funds, which must offer investors liquidity at least bi-weekly but typically on a daily basis, also provide for limits on borrowings³⁰ and leverage.³¹

²⁷ Both of these metrics are already collected by the EU's AIFMD reporting form and the U.S.'s Form PF.

²⁸ Among other things, section 18 of the Investment Company Act of 1940 imposes various requirements on the capital structure of registered open-end investment companies, including, limitations on borrowings and the issuance of senior securities.

²⁹ Use of Derivatives by Investment Companies under the Investment Company Act of 1940; see also 76 Fed. Reg. 55,237 (Sept. 7, 2011) (concept release; request for comments).

³⁰ UCITS directive 2009/65 limits borrowings to 10% of NAV on a temporary basis (Article 83).

³¹ CESR's Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS – 28 July 2010. This provides for one of two caps on leverage: either 200% of NAV using the commitment approach or a maximum VaR using either relative or absolute VaR depending on the investment strategy used; available at <http://www.esma.europa.eu/system/files/10_788.pdf>.

With respect to private funds, recent evidence suggests that the liquidity profile of hedge funds varies based on the amount of leverage used by the fund. Last year in the U.S., the SEC issued a report to Congress based on the data collected from hedge fund managers through Form PF. The report included data from 832 hedge funds with assets greater than \$500 million. The funds reported \$1.47 trillion in net assets against \$1.06 trillion in aggregate debt, not a significant amount of leverage at the industry level. More importantly, liquidity at the asset and fund level was generally aligned. Twenty-seven percent of their \$1.47 trillion in net assets could be divested within a day, 53% of the net assets could be liquidated in a week or less, and 71% would take no more than a month to sell. Fifteen percent of assets would take more than six months to liquidate. At the fund level, 7% of the net assets could be withdrawn by investors in a day, 24% could be redeemed within a month, and 59% could be redeemed within 180 days.³² In summary, funds with leverage had more liquid assets, whereas funds with illiquid assets used little leverage.

We also believe that a more detailed review of counterparty relationships is a worthwhile exercise for funds that pass the initial leverage screen. A fund with significant leverage generates that leverage through counterparty agreements of some kind. Understanding exactly who those counterparties are, how diversified and stable they are, and how much exposure each counterparty has to the fund will be critical in understanding any potential systemic impact. In particular, we believe that undercollateralized counterparty exposures and collateral quality are appropriate measures of counterparty risk in a second tier analysis:³³

- Exchange traded derivatives typically have frequently collateralized margins specifically to mitigate this risk; additionally, the exchange represents a central clearing counterparty which further mitigates systemic linkages between participants.
- Over-the-counter derivatives typically use bi-lateral collateralization to mitigate this risk and are increasingly moving to central clearing counterparties.
- In the event of a counterparty event, the collateral serves to make whole the fund; if the collateral is either less than the exposure (undercollateralization) or is of insufficient quality to recover the lost value, counterparty risk has not been sufficiently mitigated.

Volatility is also worth consideration as a secondary review criterion. We would suggest that volatility, realized drawdown and value-at-risk (VaR) may be helpful in understanding volatility in a portfolio and the risk that the investor may lose capital due to market moves, or a failure of alpha. Form PF collects VaR information from large private fund advisers that calculate it, and ESMA allows EU national regulators to collect VaR calculations from managers although this is not a mandatory field.

Separate accounts are owned by individual clients and are managed in compliance with each client's investment guidelines

While there have been suggestions in recent studies that there could be significant separate account assets with “bespoke strategies” and highly illiquid or highly levered investments, this suggestion is contrary to our first hand observations over the last 25 years. Separate accounts do not present systemic risk. Whereas it is worth analyzing the redemption characteristics of commingled vehicles,³⁴ separate accounts have no first-mover advantage, as one client owns all

³² U.S. Securities and Exchange Commission, Annual Staff Report Relating to the Use of Data Collected from Private Fund Systemic Risk Reports, July 25, 2013, available at <<http://www.sec.gov/news/studies/2013/im-annualreport-072513.pdf>>.

³³ Again both the AIFMD reporting form and Form PF collect the details of principal counterparty exposure.

³⁴ Redemption issues are often significantly mitigated by the liquidity tools discussed herein, such as limitations on illiquid assets, notice periods, periodic redemptions, redemptions-in-kind, and suspension powers.

of the assets in any separate account. In addition, in our experience, most separate account assets follow traditional, long-only strategies, which do not utilize investment activities entailing significant leverage. Recent data on separate accounts supports our findings. In response to the Consultation and the OFR Study on Asset Management, SIFMA's Asset Management Group recently produced a report on separate accounts managed by certain of their members based on a survey that SIFMA administered.³⁵ Of the separate accounts with AUM greater than \$75 million,³⁶ 99% of the AUM were invested in long-only strategies, and the majority of the AUM were passively managed. Less than 2% of the accounts held illiquid securities.³⁷ Less than 4% of the accounts employed leverage,³⁸ and when leverage was reported, the amounts were modest (averaging 1.35x).

Separate accounts are also subject to extensive regulation. In the U.S., the SEC oversees the activities of asset managers broadly, including in connection with their activities as advisor to separate accounts, under the aegis of the Investment Advisers Act of 1940. A large number of separate accounts are managed on behalf of private pension clients subject to rules promulgated by the Department of Labor. Furthermore, a large number of separate accounts are managed on behalf of insurance clients which are subject to the rules of the relevant state insurance commissioners. Separate accounts are also subject to extensive regulation globally, such as by the FCA in the UK, the EU Markets in Financial Instruments Directive ("MiFID") in the EU, and the FSA in Japan. MiFID provides a comprehensive framework for the management of discretionary accounts on behalf of both institutional and retail clients across the EU. These pan-European rules may be supplemented by additional national rules from national regulatory authorities directed at managers and/or clients, including pension and insurance clients, such as the FCA or The Pensions Regulator in the UK, IVASS in Italy, BaFIN in Germany, and the Dutch Central Bank. According to the SIFMA Separate Account Report, approximately 35% and 15% of the accounts surveyed are owned by pension funds and insurance companies, respectively, and 10% are subject to other forms of regulatory oversight.³⁹ In addition to these regulations, any separate accounts that use derivatives are subject to the rules of the CFTC and potentially the SEC, depending on the instruments used. Also, many separate accounts for U.S. tax-exempt clients avoid certain types of leverage that can create negative tax consequences for these clients.⁴⁰

In addition to regulatory oversight by the various authorities discussed above, the SIFMA Separate Account Report also confirmed that 100% of surveyed managers monitor counterparty

³⁵ Letter from SIFMA – Asset Management Group to the Secretariat of the Financial Stability Board and the Securities and Exchange Commission Re “Assessment Methodologies for Identifying Non-Bank Non-Insurer Global Systemically Important Financial Institutions”; “Asset Management and Financial Stability Study by the Office of Financial Research” on April 4, 2014 (the “SIFMA Separate Account Report”). The report detailed the separate account data of 9 managers with aggregate AUM of \$11.2 trillion, \$3.96 trillion of which was separate account AUM.

³⁶ SIFMA's survey asked firms to report information about their separate accounts, including the number and associated AUM of their separate accounts. The survey asked respondents to focus on separate accounts with AUM greater than \$75 million (which represented approximately 97% of the respondents' total separate account AUM) in answering questions about asset class and investment style, as well as leverage, securities lending, and investment in illiquid securities.

³⁷ Illiquid securities were defined as tradeable securities that cannot be sold in 30 days or less at the price the security is current valued at.

³⁸ Leverage was defined as the following: long market value that exceeds NAV for equity or gross market exposure minus margin for derivatives

³⁹ SIFMA Separate Account Report.

⁴⁰ Certain kinds of leverage can generate unrelated business taxable income (“UBTI”), which is taxed at a corporate tax rate despite the tax-exempt status of the client.

risk for their separate accounts and employ robust risk management procedures. As a primary measure, counterparty selection is a multi-departmental process with a strict evaluation of potential brokers based on factors ranging from their credit rating, pricing, regulatory oversight, and trading capacity. After the selection process, firms continue to monitor counterparties on a daily basis and particularly focus on their exposures (both current and potential future exposure) and any change in the counterparty's credit. Firms also monitor a number of other risk metrics in the course of separate account management, such as traditional portfolio risk measures, including duration, convexity, volatility, concentration risk, and liquidity risk. Many firms also reported using stress test analyses to observe the sensitivities of portfolios to particular factors, as well as value-at-risk models. These tests may be done by a variety of disciplines, including the portfolio management, risk management, and compliance teams to ensure risk is managed appropriately and accounts adhere to their mandates.⁴¹

Finally, the termination of a separate account results in little impact on capital markets because investors can hire another firm to manage their assets quickly and easily. Separate account clients initiate and terminate investment management agreements regularly for a variety of reasons, including changes in their asset allocation, poor performance, poor client service, and administrative consolidation. Such changes can be implemented on short notice, sometimes in as little as 24 hours, with no noticeable market impact.⁴² While a typical search for a new manager usually takes longer, when clients want to move quickly, they can and do. At BlackRock, there have been numerous situations where we assisted a client by taking on management responsibility for a separate account on extremely short notice. Substitutability of asset managers can be achieved quickly because client assets are held with custodians; clients can simply re-direct the management of an existing portfolio of securities to another manager without moving the assets at all.⁴³ As a result, termination of a separate account is often accomplished without liquidating assets, and therefore has no impact to the capital markets.

It is important to define what a "systemic fund" designation would mean

While the Consultation suggests several screens to capture relevant investment funds, the Consultation does not describe the consequences of being designated an NBNI G-SIFI. We question the prudence of this approach, and note that this uncertainty creates a risk of significant unintended consequences. We believe that better decisions would result from a process where specific risks are identified first, and then proposed regulatory responses follow.

We strongly believe that designating funds as systemic and subjecting them to the same regulation as systemic banks, such as capital requirements, leverage limits or other prudential requirements, is a flawed approach. As noted throughout this response, investors – not the asset manager – bear the risk of decreasing asset values. Capital requirements and leverage limitations are designed to protect depositors and taxpayers from losses based on the business activities of banks. Funds, on the other hand, are designed to provide investment exposures to investors, who receive significant disclosure regarding the investment program and any attendant risks. By investing in a fund, investors are mandating and expect that fund assets will be

⁴¹ SIFMA Separate Account Report.

⁴² We believe that the transition of separate accounts from one manager to another is typically no more difficult or impactful than transitions of other types of accounts or pooled vehicles. In some cases, asset sales may be directed by the client as part of the transition, but based on our experience, this would apply to a very limited amount of separate account assets, and it is difficult to see how these issues would contribute to systemic risk.

⁴³ In fact, there is a specialized business referred to as “transition management,” where firms have developed expertise in the process of facilitating the transition from one asset manager to another.

managed in accordance with the investment strategy set forth in the fund's governing documents, whether that is a simple "long only" strategy or a more complex strategy utilizing leverage and derivatives. Asset managers and fund directors have fiduciary obligations to investors to ensure the stated mandate is carried out. Imposing prudential requirements would be contrary to the agreement between a manager and its investors, and could significantly disrupt the investment program.

In addition, if a specific investment fund is subject to regulation that is contrary to investor expectations, investors can move their assets elsewhere with relative speed and ease. As a result, regulating certain funds over others may simply shift capital away from systemically regulated funds to unregulated ones. Alternatively, a designation of "systemically important" could imply that a fund is "too big to fail," and therefore could attract investors and result in increased concentration in the industry.

We recommend that the FSB request information from a broad group of asset managers, asset owners and large investors asking them to identify areas of concern and suggestions for addressing these concerns. The FSB should also consider arranging a public roundtable that includes a diverse group of asset management firms (e.g., large, small, diversified, alternative) and other industry participants to facilitate public discussion around these issues. Regulators could also request increased reporting from designated funds to help assess whether such funds pose any systemic risk, and liaise directly with managers to determine whether real risks exist and consider mitigants on a case-by-case basis. In taking a consultative approach, regulators can avoid the unintended consequences of imposing regulation on funds or asset managers before adequately assessing the whether systemic risks exist and what the appropriate remedies should be.

We recommend making improvements to the financial ecosystem rather than focusing on individual firms or funds

The financial crisis highlighted a number of risks and, in response, over the past several years, many changes to global regulation and market practices have occurred which reduce systemic risk. These changes range from an increased emphasis on risk management to improvements in liquidity management, enhanced collateral management and counterparty limits, increased transparency, deleveraging of banks and increased capital standards, as well as detailed reporting on private funds, derivatives and other security transactions. Some of these changes are due to broad legislative initiatives such as the Dodd-Frank Act and EMIR, some are the result of targeted regulations and the remainder reflects changes due to market forces. As an asset manager, BlackRock supports those changes that have resulted in a sounder financial system, and we are supportive of additional reforms that address systemic risks.

Though beyond the primary focus of the Consultation, we have identified several areas where regulators can use current powers and tools to improve the financial ecosystem: cash management products, securities financing transactions, exchange traded funds ("ETFs"), central counterparty resolution, global harmonization of data reporting, liquidity in fixed income markets and flows into and out of funds. These areas are discussed in further detail below. We believe solutions should be developed in these areas that can be applied consistently across market participants in all regions; otherwise, activity will simply shift from one market participant to another without actually addressing the issue under consideration.

Cash Management Products

Money market funds ("MMFs") have been a topic of discussion among policy makers and market participants since the 2008 financial crisis and historic "breaking of the buck" by the Reserve

Primary Fund. The result has been a series of reforms that tightened standards and enhanced protections for MMF investors, including the SEC's Rule 2a-7 reforms in 2010, the ESMA "Guidelines on a Common Definition of European Money Market Funds" in 2010 and OCC reforms for short term investment funds ("STIFs") in 2012. These reforms introduced more conservative maturity and liquidity requirements, stress testing, and greater transparency and disclosure, among other requirements. Policymakers are pursuing further structural reforms in the belief that additional changes are necessary to protect the financial system. The SEC issued its proposal for further reforms in June 2013 and the European Commission issued its proposed Money Market Fund Regulation ("MMFR") in September 2013.

BlackRock has also actively engaged with European regulators and international standard setters such as IOSCO on money market fund reforms. We have called for consistency in approach at a global level between the U.S. and the EU. We supported ESMA's reforms in 2010 for improved quality, shorter maturities and increased liquidity. With respect to the present European Commission MMF proposal, we support provisions which are similar to the 2010 SEC reforms on liquidity, credit quality and diversification. We note, however, that the capital buffer has the same effect as mandatory conversion to variable-NAV MMF and that this would apply to all MMF in Europe, no exemptions for government liquidity MMF for example. We have also expressed concern about other areas where the proposal goes further than the SEC, for example, the provisions on fund level ratings, internal credit process and asset-backed commercial paper.

BlackRock has been actively engaged in the dialogue on MMF reform for several years. Throughout, BlackRock has been a proponent of a solution that preserves the benefits of MMFs for investors and provides a mechanism for managing mass client redemptions and minimizing the risk that a "run" on a single fund triggers a systemic run. MMFs play a unique role in the economy by providing short-term funding to commercial and municipal borrowers through purchases of commercial paper and other short-term debt while providing short-term investments and liquidity to a broad array of institutional and retail investors. Subsequent to the SEC proposal, we surveyed MMF investors and provided feedback on the various proposals and open questions.⁴⁴ We also participated in a letter that was submitted to the SEC jointly by nine MMF managers regarding a proposed alternative definition for "retail" MMFs.⁴⁵

We believe the optimal outcome of these proposed reforms will be an even playing field across comparable products that are regulated by separate regulators. For example, in the U.S., while the SEC and OCC have implemented the reforms noted, changes to the investment standards and rules applicable to cash funds managed by state chartered institutions are yet to be enacted at either the Federal or state level. In this case, we would encourage the FSOC to work with the FDIC, the Federal Reserve and state bank regulators to create a more harmonized environment. As this example shows, harmonization across comparable cash products would protect investors and prevent regulatory arbitrage. We encourage regulators to consider global harmonization of final rules wherever possible.

⁴⁴ Letter from Barbara Novick to Elizabeth M. Murphy, "Feedback on OFR Study on Asset Management and Financial Stability," on Nov. 1, 2013, available at <<http://www.sec.gov/comments/am-1/am1-14.pdf>>.

⁴⁵ Letter from BlackRock, Inc., Fidelity Investments, Invesco Ltd., Legg Mason & Co, LLC and Western Asset Management Company, Northern Trust Corporation, T. Rowe Price Associates, Inc., Vanguard, and Wells Fargo Funds Management, LLC to Elizabeth M. Murphy, "Money Market Fund Reform; Amendments to Form PF (Release No. IC-30551; File No. S7-03-13) on Oct. 31, 2013, available at <<http://www.blackrock.com/corporate/en-us/literature/publication/mmf-retail-definition-joint-letter-sec-103113.pdf>>.

Securities Financing Transactions

Securities finance is an overarching term that includes securities lending and borrowing, repo and reverse repo. Securities lending specifically is an established practice in global financial markets that provides liquidity to markets while also generating additional returns to investors who lend securities.⁴⁶ The availability of securities through lending arrangements is widely viewed as providing liquidity to the markets.⁴⁷ The extra return is a function of the “intrinsic value” of the securities, which factors into what a borrower is willing to pay to borrow the securities, as well as (primarily in the U.S. market) by reinvestment of any cash collateral received, resulting in enhanced returns to investors.

Securities lending involves a loan of securities to a third party, the borrower, who gives the lender collateral in the form of cash, shares or bonds in an amount equal to the value of the loaned securities plus an additional margin above that amount. The borrower compensates the lender for the securities loan either through a payment or allowing the lender to keep part of the collateral reinvestment return. The lender receives at a minimum the same economic exposure to a security on loan, including any dividends or distributions, as if the loan had not occurred, although the lender must recall shares in order to vote proxies. The market for securities lending is driven by demand from large banks and broker-dealers and their clients, including hedge funds. Investors are, directly or indirectly, the lenders of securities and they lend securities to achieve enhanced returns on their portfolios. Lenders are typically large institutional investors, including pension funds, foundations and endowments, sovereign wealth funds, mutual funds, bank maintained collective trust funds, UCITS funds and similar investment funds. Borrowers are typically large financial institutions, such as broker-dealers, investment banks, and market makers, including those who act as prime brokers. While hedge funds are among the largest end-borrowers of securities, they generally borrow from their prime brokers rather than directly from the investors or their agents. The processes associated with securities lending are managed by a lending agent, who is generally compensated by the lender by receiving a percentage of the return generated from the transaction. Most custodian banks offer lending agent services.

Like any investment activity, securities lending entails risks that must be managed. Key risks include counterparty credit risk, cash collateral reinvestment risk, non-cash collateral risk and operational risk. During the financial crisis, issues surfaced related to cash collateral reinvestment strategies which have triggered increased scrutiny of securities lending by the SEC, ESMA and others. Each of the potential risks associated with securities lending can and should be addressed and monitored in a well-managed securities lending program.⁴⁸

For regulatory reasons, cash collateral is the predominant form of collateral in the US market. When the lender receives cash as collateral, this cash is reinvested. The lender’s objective is to generate income. However, the lender is also exposed to investment risk including the potential

⁴⁶ In May, 2012, BlackRock published a ViewPoint entitled Securities Lending: Balancing Risks and Rewards. In this publication, we explained the benefits of securities lending to markets and to investors while also highlighting the risks associated with this investment practice and offered several recommendations for the enhanced regulation of securities lending. This publication is available at <<http://www.blackrock.com/corporate/en-us/literature/whitepaper/balancing-risks-and-rewards-may-2012.pdf>>.

⁴⁷ See, e.g., Dreff, Nadja, “The Role of Securities Lending in Market Liquidity”, Financial System Review Bank of Canada (June 2010); Dive, Matthew, “Developments in the Global Securities Lending Market,” *Quarterly Bulletin*, Bank of England (3rd Quarter 2011).

⁴⁸ “ViewPoint Securities Lending: Balancing Risks and Rewards,” BlackRock, May 2012, available at <<http://www.blackrock.com/corporate/en-us/literature/whitepaper/balancing-risks-and-rewards-may-2012.pdf>>.

loss of principal. Concerns regarding cash collateral reinvestment have been raised by several bodies, including the OFR. The management of cash collateral pools in securities lending provides an excellent example of how regulators can create a harmonized regulatory environment to address investment products or practices that may present risks. The management of cash pools is already subject to oversight by multiple regulatory bodies who are working independently to address a variety of concerns arising from the financial crisis, including the guidelines that apply to stable NAV cash funds. As described above, the SEC issued reforms for Rule 2a-7 MMFs in 2010 and the OCC issued reforms for STIFs in 2012 – both sets of reforms enhanced liquidity and maturity requirements. We believe these reforms have gone a long way to address the concerns of policy makers. However, as noted earlier, we would encourage the harmonization of investment standards and rules regarding cash management applicable to state chartered institutions, including custodians that engage in securities lending.

Regulators could also require disclosure in the form of non-public reporting by lenders and borrowers in order to monitor the markets. The exact information to be gathered, the frequency, the format of the information and the audience should be agreed between regulators and the industry globally to make the information most useful to regulators and the process workable for the industry. We believe this to be consistent with the FSB's position, as the FSB expressly notes that that existing templates and infrastructure should be leveraged for future reporting of securities finance transactions.

Finally, securities lending risks need to be actively monitored and addressed by both the lenders and their lending agents. Given the global nature of securities lending and the interest by regulators in multiple jurisdictions, we recommend an internationally coordinated approach to establishing standards and regulations and are therefore supportive of ongoing FSB work in this area. In considering new regulations for securities lending, regulators need to balance the benefits to the markets and to investors with the need to mitigate risks. It is also critical to understand that the securities lending market includes multiple participants, including lenders, borrowers, custodial and non-custodial lending agents, tri-party collateral agents, prime brokers and exchanges. Asset managers act as lending agent for a small subset of the total volume of securities lending transactions; most securities lending activity is conducted by custodial lending agents. As a result, regulating selected market participants, rather than seeking to change practices across all market participant engaging in securities lending activities will not address potential systemic risks associated with securities lending.

Exchange Traded Funds

As exchange traded funds (“ETFs”) and other exchange traded products (“ETPs”) have grown significantly over the past several years, more attention has been focused on these products. As an ETF sponsor, BlackRock has been an active participant in discussions related to ETFs focusing on both explaining the mechanics of ETFs and recommending specific areas for regulatory reform.⁴⁹ Key benefits that distinguish well-structured ETFs from open-end mutual funds include enhanced liquidity, a high degree of transparency, lower vulnerability to market timing and the ability to trade in and out of positions intraday. The benefits of index-based ETFs include low administrative expenses, low trading overhead, cost-efficient and convenient access

⁴⁹ “ViewPoint Exchange Traded Products: Overview, Benefits and Myths,” BlackRock, June 2013, available at <<https://www.blackrock.com/corporate/en-us/literature/whitepaper/viewpoint-etps-overview-benefits-myths-062013.pdf>>; “ETFs: A Call for Greater Transparency and Consistent Regulation,” BlackRock iShares, October 2011, available at <<http://www.blackrock.com/corporate/en-us/literature/whitepaper/transparency-and-consistent-regulation-oct-2011.pdf>>.

to a variety of markets (both liquid and less liquid markets) and the ability to replicate exposure to various broad market benchmarks via a single vehicle.

ETFs are a still relatively small market compared to mutual fund universes, which presents a potential opportunity to introduce reforms that both protect investors and introduce structural improvements to foster growth and innovation without significantly disrupting existing markets. The following are specific recommendations for regulatory reform in this area:

- Improve the liquidity of underlying markets (e.g., fixed income) by standardizing issues and encouraging trading on exchanges where feasible, as opposed to over-the-counter trading;
- Ensure ETF/ETP sponsors are judicious in their selection of reference indices and rigorous in performing due diligence around index providers' calculations and data quality;
- Mandate clear labeling of product structure and investment objectives;
- Engage multiple firms that create and redeem ETF shares wherever possible to diversify risk and enhance liquidity;
- Promote transparency around the multi-dimensional value proposition of ETF ownership rather than focusing solely on total expense ratios; and
- Promote highly disciplined processes in respect of risk management, collateralization, the selection of multiple counterparties and detailed disclosure to investors.

Since our publication in 2011 recommending reforms, we have seen some improvements in market practices; however, we welcome the opportunity for continued improvement as we believe ETFs will continue to grow. As with our recommendations on other investment products, we recommend that regulators consider global harmonization of rules for ETFs.

Central Clearing Counterparty (CCP) Resolution

CCPs were created to reduce systemic risk by requiring central clearing of swaps and mandating collateralized transactions while increasing transparency and investor protection. The idea, promoted by the G-20 beginning at their Pittsburgh Summit in September 2009,⁵⁰ is good in concept, as it increases transparency for regulators and market participants, and eliminates many of the counterparty risks inherent in bilateral over-the-counter transactions. However, in this process, risk has been concentrated in CCPs by moving these bilateral risks into a handful of CCPs, and this risk needs to be addressed.⁵¹ As policy makers increase their focus on the concentration risk created by central clearing, a number of questions have been raised. Do CCPs present a new systemic risk? Are CCPs "too big to fail"? Or should a CCP be allowed to fail? What protections should be put in place to protect the system and investors from a potential

⁵⁰ Statement from the Group of Twenty Finance Ministers and Central Bank Governors, Leader's Statement from the Pittsburgh Summit, September 24, 2009.

⁵¹ FSOC designated six clearing agencies as systemically important in 2012. In doing so, either the SEC or CFTC, depending on the CCP, became the supervisory agency for these CCPs under Title VIII of the Dodd-Frank Act.

failure? In the event a CCP experiences distress, what resources should be applied to absorb losses to resolve the situation and in what order of priority?⁵²

Some market participants have argued for the “recovery” of a failing CCP; others are advocating for a clearer approach to “resolution”. BlackRock is supportive of central clearing and believes it is crucial to implement measures that mitigate the risk of a potential CCP failure. Financial stability is best served by a regime where any entity, including a CCP, has a recovery and resolution plan that will prevent its failure from impacting market stability. In order to protect against systemic risk, policy makers should address the need to strengthen the defenses of a CCP in the event of a default by one or more of their clearing members (CMs). This approach starts with requiring CCPs to both maintain adequate capital and to employ a rigorous approach to risk management with each of its counterparties. In the event of financial distress of the CCP, the “default waterfall” which specifies the order of the resources available to a CCP for recovery and resolution and the order in which they are used, would start with the defaulted counterparty’s margin and guaranty fund contributions, supplemented by the capital of the CCP and the CCP guaranty fund *before* tapping the funds of any non-defaulting clearing member customer.

All market participants, including CCPs, should be allowed to fail while ensuring protections are in place to avoid systemic risk and to protect end-investors. A resolution plan that focuses on a rapid and complete wind down of the failing CCP’s positions, along with a timely and orderly repayment of margin monies is preferable to a recovery plan that uses customer margin to extend the state of a failed or failing CCP. A rapid liquidation and return of margin would minimize end-user losses and would allow CMs and their clients the option to establish replacement positions in the most efficient manner. In order to affect this result, we recommend that a product not be subject to mandatory clearing until at least two CCPs can offer clearing for that product.

By definition, the failure of a CCP reflects a flawed risk management process which in turn will impact customer confidence in the abilities of the CCP on a forward-looking basis. As such, BlackRock believes customers would prefer a rapid liquidation of positions to close-out the clearing business very quickly and to return margin provided by non-defaulting clearing members and non-defaulting clients with minimum market loss. The resolution plan could be followed by a timely recapitalization of the CCP if authorities deem that desirable.⁵³

Global Harmonization of Data Reporting

Several new regulations require managers to report data on products that they manage. For example, private fund reporting is found in AIFMD and in regulations resulting from the Dodd-Frank Act. The data requested on Form PF and CFTC Form PQR as well as the data requested for AIFMD is often similar but is requested in a slightly different manner on each form. The result is large amounts of fragmented data. Standardization would enable regulators to aggregate data and analyze data sets, and would facilitate comparisons. Swaps data, threshold reporting and securities lending are other obvious areas where consistency of data reporting would benefit regulators by providing “information”, not just raw data.

⁵² CPSS/IOSCO consultative report, “Recovery of financial market infrastructures”, August 12, 2013; Financial Stability Board consultative document “Application of the Key Attributes of Effective Resolution Regimes to Non-Bank Financial Institutions”, August 12, 2013. See also, CFTC final rule “Enhanced Risk Management Standards for Systemically Important Clearing Organizations”, August 15, 2013; SEC Proposed Rule, “Standards for Covered Clearing Agencies”, March 12, 2014.

⁵³ To be effective, a recapitalization would need to be “next business day” which then as a necessity requires a pre-funding of the capital needed to re-establish CCP operations and replenish the guaranty fund.

Liquidity in Fixed Income Markets

We believe that a structural shift is underway in the corporate bond market. The cumulative impacts of regulation, including bank capital rules like Basel III, have reduced banks' appetites for using their balance sheet to take on risk. As a result, as of February 2014, primary dealers' inventories of US corporate bonds have plummeted 73% from a high of \$235 billion in 2007.⁵⁴ In addition, dealers currently hold just 0.25% of the total investment grade debt outstanding.⁵⁵ The impact of the dynamic on secondary market liquidity has been somewhat obscured by record issuance levels and positive price performance. However, we believe it is important to address this issue as reduced liquidity translates to wider spreads, higher transaction costs and ultimately diminished returns for investors.

The corporate bond market is highly fragmented as corporations issue various bonds over time with different maturities, different coupons and other features. This is largely resulting from companies issuing bonds whenever financing or refinancing at attractive rates is needed, or to buy back stock. The fragmentation in the market requires bond investors to sift through thousands of issues even for the top ten corporate issuers, as Figure 1 shows. The pattern of issuance means that the corporate bond market is virtually transformed every year compared to the corporate equity market.

We believe a more standardized corporate bond market would result in enhanced market liquidity. Similar to the U.S. Treasury issuances of T-Bills, corporations would issue bonds at set maturity intervals by reopening benchmark issues to cut down the number of individual bond issues. In connection with standard intervals, issuers can standardize issuance amounts and timing. This approach would create a liquid curve for large and frequent issuers. In parallel, the standardization of derivative markets (for example, aligning maturity dates with centrally cleared swaps) would lower the overall cost of hedging for these issuers. This could serve as a model for standardization in other markets. In most of Europe and Japan, bank lending still dominates the corporate finance market, though this is slowly starting to change with corporate issuers increasingly looking to capital markets.

⁵⁴ Data available at the Federal Reserve Bank of New York website, available at <http://www.newyorkfed.org/markets/gsds/search.html>.

⁵⁵ "Setting New Standards: The Liquidity Challenge" BlackRock Investment Institute, May 2013, available at <http://www.blackrock.com/corporate/en-us/literature/whitepaper/setting-new-standards-us-version.pdf>.

Figure 1:

Bonds and Shares Outstanding of Top US Investment Grade Bond Issuers⁵⁶

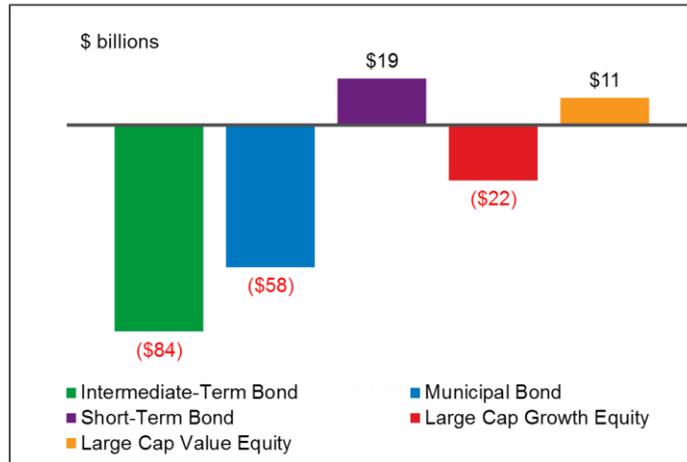
Issuer	Bonds in Barclays US Corporate Index	Share of Dollar Amount Outstanding	Total Bonds Outstanding	Common Equity Securities	Preferred Equity Securities
GE	44	31.2%	1,014	1	4
J.P. Morgan	32	34.1%	1,645	1	13
Goldman Sachs	25	38.4%	1,242	1	8
Citigroup	39	35.8%	1,965	1	12
Morgan Stanley	29	40.1%	1,316	1	12
Bank of America	30	28.2%	1,544	1	39
AT&T	29	62.6%	74	1	0
Wal-Mart	26	71.6%	50	1	0
Verizon	26	60.8%	71	1	0
Wells Fargo	15	26.2%	274	1	8

Asset Flows Into and Out of Funds

Recent discussions by policy makers have focused on “herding” and “run risk.” These are two sides of the same discussion and reflect the ability of clients, sometimes referred to as “end-investors,” to reallocate their capital. Clients change asset allocations for many reasons on a regular basis. This can cause a shift of client money from one asset class to another or from one investment strategy to another. Client subscriptions represent clients’ decisions to allocate additional assets; client redemptions represent their decision to reallocate assets to other products or strategies. Such decisions impact asset flows substantially more than asset managers’ discretionary allocation decisions because asset managers can only allocate within investment guidelines of a specific client mandate whereas clients have total control of their assets. Figures 2 and 3 below highlight client-driven flows in U.S. active mutual funds and in U.S. ETPs in 2013. Any discussions on regulating client flows across sectors or in and out of specific funds need to recognize that end-investors control these asset allocation decisions.

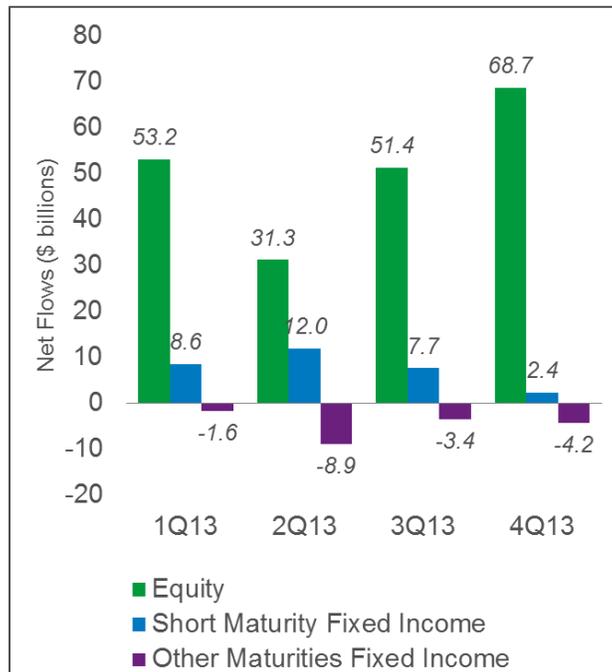
⁵⁶ Ibid.

Figure 2
US Active Mutual Fund Net Flows in 2013



Source: Simfund. As of December 2013. Excludes fund of funds to avoid double counting. Excludes money market funds and index funds. Reflects Morningstar categorization.

Figure 3
US ETP 2013 Quarterly Net Flows



Source: BlackRock, provider website, fund prospectuses, provider press releases, provider surveys, Bloomberg, the National Stock Exchange. As of 31 December 2013.

Regulation of commingled investment vehicles should seek to protect investors while at the same time avoiding circumstances that could lead to “runs” or other behavior that could present systemic issues. As a starting premise, clients in a fund should not be disadvantaged by the asset allocation decisions of other clients. A well-structured fund will not create a “first mover advantage” in which one client has an incentive to leave a fund before other clients. Importantly, this approach protects all investors while also mitigating the potential for systemic risk by avoiding “accelerants” related to redemptions. We manage funds that are subject to different regulatory oversight, and we note that regulators have developed different regulatory regimes for funds in their jurisdictions that address these issues.⁵⁷

Each set of commingled vehicles is subject to rules or practices addressing the structure of the fund and the underlying portfolio characteristics. Key areas addressed include (i) pricing methodologies for subscriptions and redemptions; (ii) redemption provisions, including powers granted to the trustees or directors of a fund, (iii) limitations, if any, on leverage and illiquid securities and (iv) disclosure. Taken together, regulations and market practices in these areas enable fund managers to manage redemption requests and align interests of remaining and redeeming investors. Figure 4 provides some examples:

Figure 4

Tools to Manage Clients Flows Into and Out of Funds
<p><u>Subscription / Redemption Pricing</u></p> <ul style="list-style-type: none"> • Allocating transaction costs to transacting client(s) • Dual pricing • Swing pricing • Dilution levies
<p><u>Redemption Provisions</u></p> <ul style="list-style-type: none"> • Ability to redeem in-kind • Ability to suspend redemptions • Explicit redemption fees • Frequent trading policies
<p><u>Liquidity, Leverage & Risk Management</u></p> <ul style="list-style-type: none"> • Leverage limits • Limits on amount of illiquid securities • Limits on the use of derivatives • Stress testing • Risk monitoring and risk management
<p><u>Disclosure</u></p> <ul style="list-style-type: none"> • Disclosure in fund constituent documents of circumstances when tools can be used • Communication with clients during and after liquidity event occurs

⁵⁷ For example, U.S. mutual funds (including ETFs) are subject to extensive regulation by the SEC under the Investment Company Act of 1940. In the EU, Undertakings for Collective Investment in Transferable Securities (UCITS) are regulated both in the individual EU jurisdictions where they are formed and also by the common regulatory framework drawn up by ESMA. In Australia, Registered Management Investment Schemes (MIS) are regulated by the Australian Securities and Investment Commission (ASIC).

Given the current policy discussions around “herding” and “run risk”, policy makers should consider a comprehensive review of the current landscape for fund pricing methodologies, liquidity provisions and board power, and also consider asset pool liquidity and fund leverage rules. Certain common principles can be used to establish global standards which can then be translated into national securities regulations tailored to different products. Both the FSB and IOSCO have already begun to explore potential best practices and have recommended a global framework relating to collective investment schemes.⁵⁸ This work should be reviewed in the context of this Consultation as a framework for considering potential improvements to strengthen regulatory regimes around asset flows.

* * * * *

We thank the FSB and IOSCO for providing BlackRock the opportunity to express its views on the Consultation, and we are prepared to assist both organizations in any way we can. Please contact the undersigned if you have any questions or comments regarding BlackRock’s views.

Sincerely,

Barbara Novick
Vice Chairman

⁵⁸ See “Strengthening Oversight and Regulation of Shadow Banking,” Financial Stability Board, August 29, 2013; “Principles for the Valuation of Collective Investment Schemes Final Report,” International Organization of Securities Commissions, May 2013; “Principles for Liquidity Risk Management for Collective Investment Schemes Final Report,” International Organization of Securities Commissions, March 2013; and “Principles for Suspensions of Redemptions in Collective Investment Schemes Final Report,” International Organization of Securities Commissions, January 2012.

Answers to Specific Questions in the Consultation

Section 1: Systemic Risk and Transmission Mechanisms

Q1-1. In your view, are the three transmission channels identified above most likely to be the ones transmitting financial distress of an NBNI financial entity to other financial firms and markets? Are there additional channels that need to be considered?

With respect to investment funds, we believe the counterparty channel is the most likely to transmit financial distress of an investment fund. However, as discussed in our response to the Consultation, we believe only a fund with significant levered exposure is capable of creating material distress for other market participants.

We take issue with the other transmission channels listed in the Consultation. Substitutability may be a factor in certain unique circumstances, but overall, as noted in our response, the asset management industry is highly competitive across asset classes, and there are numerous firms ready to step into the shoes of managers exiting the business and numerous clients with experience in re-deploying their assets into other funds. With respect to the market channel, we recognize that forced liquidations could cause market distortions, which is why we believe a focus on highly leveraged funds is appropriate. Also, as discussed above, we note that investment funds have liquidity management tools that allow them to better withstand subscriptions and redemptions. These tools comprise regulation of subscriptions and redemptions, regulation of portfolio level liquidity, side-pocketing powers, “soft” gates in the form of redemption fees and the ability to provide in kind redemptions. However, we stress that clients, not asset managers or investment funds, make asset allocation decisions that drive capital flows. Therefore, regulation of such activity would need to focus on large asset owners who control how capital is allocated.

Section 2: High-level Framework for Identifying NBNI G-SIFIs

Q2-1. Does the high-level framework for identifying NBNI G-SIFIs (including the five basic impact factors) adequately capture how failure of NBNI financial entities could cause significant disruption to the wider financial system and economic activity? Are there any other impact factors that should be considered in addition to those currently proposed or should any of them be removed? If so, why?

We recognize the challenges in creating a framework that adequately addresses the risks associated with such a wide range of financial entities. Overall, the high-level framework for identifying NBNI G-SIFI was thoughtful, but we agree that more detailed indicators specific to each sector and a greater reliance on supervisory judgment will be essential in creating a fair and effective process. As discussed above, with respect to investment funds, we believe that leverage, as opposed to size, is the most important indicator of potential systemic risk.

Q2-2. Is the initial focus on (i) finance companies, (ii) market intermediaries, and (iii) investment funds in developing sector-specific methodologies appropriate? Are there other NBNI financial entity types that the FSB should focus on? If so, why?

As set forth in our response to the Consultation, we believe that systemic risk may exist as a result of a particular practice that is undertaken across the market by many different types of market participants. We believe that regulators should focus on improvements to the financial ecosystem by setting global standards that would apply to all market participants. In certain circumstances, as described in our response, a focus on investment funds may be appropriate.

Section 3: Operational Framework for NBNI G-SIFI Methodologies

Q3-1. Is the proposed scope of assessment outlined above appropriate for operationalising the high-level framework for identifying NBNI G-SIFIs? Are there any practical difficulties associated with the proposed scope of assessment?

We think the proposed scope of assessment outlined in Section 3.1 of the Consultation is reasonable. We reiterate, as noted in our response above, that asset managers should not be the focus of any assessment methodology, whereas we believe a focus on certain investment funds utilizing a high degree of leverage may be appropriate.

Q3-2. In your view, are the above proposed materiality thresholds (including the level) for the NBNI financial entity types appropriate for providing an initial filter of the NBNI financial universe and limiting the pool of firms for which more detailed data will be collected and to which the sector-specific methodology will be applied? If not, please provide alternative proposals for a more appropriate initial filter (with quantitative data to back-up such proposals).

No. As set forth in our response, with respect to investment funds, we do not believe that size is the appropriate metric, but instead recommend a materiality threshold based on leverage. Please see our detailed response above starting on page 7.

Q3-3. Are there any practical difficulties in applying the materiality thresholds?

Yes. Please see our detailed response above regarding the challenges associated with size as a materiality threshold and why we believe leverage is a more appropriate indicator of potential systemic risk. We note that the leverage metric that we have proposed is based on existing regulatory reporting requirements, which we believe significantly mitigates any practical difficulties in applying the threshold.

Q3-4. In your view, what is the appropriate threshold level, taking into account the range given above (USD 400-600 billion in GNE), for hedge funds? Please also provide reasons with data to back it up.

We propose screening all investment funds, not just hedge funds, for net leverage of \$200 billion calculated based on the “commitment approach” from the AIFMD. Please see our detailed discussion above beginning on page 9. We do not believe that GNE is an accurate enough measure of leverage for these purposes.

Q3-5. Do you think that it would be beneficial to set additional materiality thresholds based on “global activity”? If so, please explain the possible indicator and the level on which materiality thresholds should be set (with reasons for selecting such indicator, the level and any practical challenges).

Not with respect to investment funds. We do not believe that global activity in and of itself is indicative of systemic risk. An investment fund may invest or operate in multiple jurisdictions without posing systemic risk. For example, long-only international equity funds may invest globally but would not pose systemic risk due to the absence of leverage.

We note that the “global activity” of investment funds is different from that of banks and broker-dealers, particularly with respect to the applicability of local insolvency laws. Large banks and broker-dealers operate through international affiliates that hold collateral and deal with clients directly in those countries, which makes the resolution of such entities challenging. For example, the presence of international affiliates created significant complications in the insolvency of

Lehman Brothers, as each affiliate went through its own bankruptcy process, and creditors with purported claims over assets outside their jurisdiction had to await the results of the local insolvency proceeding. Funds, on the other hand, are typically domiciled in one jurisdiction, which is where the insolvency would proceed, with one trustee sorting through claims of all investors and counterparties. Therefore, while a fund may have assets and obligations in multiple jurisdictions, we would expect its resolution to be more straightforward.

Section 6: Sector-specific Methodologies (3): Investment Funds

Q6-1. In your view, does the proposed definition of investment funds provide a practical basis for applying the specific methodology (i.e. indicators) to assess the systemic importance of NBNI financial entities that fall under the definition?

Yes, we believe the proposed definition of investment funds, which covers open-end and closed-end collective investment schemes, provides a practical basis for applying a methodology for assessing systemic risk. As discussed in detail in our response, we do not believe separate accounts pose systemic risks.

Q6-2. Does the above description of systemic importance of asset management entities adequately capture potential systemic risks associated with their financial distress or disorderly failure at the global level?

As we noted in our response to Question 1-1, we believe the counterparty channel is the most likely to transmit financial distress of an investment fund. With respect to the market channel, we recognize that forced liquidations could cause market distortions, which is why we believe a focus on highly leveraged funds is appropriate. However, we stress that clients, not asset managers or investment funds, make asset allocation decisions that drive capital flows. Therefore, regulation of such activity would need to focus on large asset owners who control how capital is allocated.

Consistent with our response, we agree with the observation in the Consultation that the risk profiles of investment funds are very different from those of other financial entities, because investors are knowingly exposed to the potential gains and losses of a fund's investment portfolio. We also agree that this acts as a "shock absorber" from a systemic perspective, as fund investors absorb the negative effects that might be caused by the distress or even the default of a fund.

Q6-3. Which of the following four levels of focus is appropriate for assessing the systemic importance of asset management entities: (i) individual investment funds; (ii) family of funds; (iii) asset managers on a stand-alone entity basis; and (iv) asset managers and their funds collectively? Please also explain the reasons why you think the chosen level of focus is more appropriate than others.

As noted in detail in our response, we do not believe that asset managers are a source of systemic risk, and therefore we do not believe focus at the asset manager level is appropriate. As we also noted in our response, we believe that screening fund families introduces complexities without added value. Therefore, we believe focusing on individual investment funds is most appropriate, with an initial screen for materiality based on leverage.

Q6-4. Should the methodology be designed to focus on whether particular activities or groups of activities pose systemic risks? If so, please explain the reason why and how such a methodology should be designed.

Yes. As noted in our response above, we believe that in many circumstances, it would be more effective to identify risks associated with products and practices, and craft solutions that can be applied consistently across market participants in all regions; otherwise, activity will simply shift

from one market participant to another without actually addressing the issue under consideration. We identified several areas where regulators can use current powers and tools to improve the financial ecosystem:

- Cash management products
- Securities financing transactions
- ETFs
- Global harmonization of data reporting
- Central counterparty (CCP) resolution
- Market liquidity
- Asset flows into and out of funds

Q6-5 Are the proposed indicators appropriate for assessing the relevant impact factors? If not, please provide alternative indicators and the reasons why such measures are more appropriate.

As set forth in our response, we do not think an investment fund could pose systemic risk without substantial leverage. We have set forth our views of each of the indicators below, in each case assuming the indicator is applied to an investment fund that has already met the materiality threshold of substantial leverage.

6.3.1 Size

As set forth in our response to the Consultation, we do not believe that size is the appropriate materiality threshold, but is relevant in a second tier analysis. Please see our detailed discussion related to size starting above on page 7.

6.3.2 Interconnectedness

As noted, we believe that leverage should be the initial screen for investment funds, not a secondary indicator. We propose an initial screening threshold of \$200 billion of net leverage based on the “commitment approach” reported under the AIFMD. Please see our detailed discussion above starting on page nine. We believe the precise leverage ratio (Indicator 2-1) would be a key consideration in a secondary analysis, because the greater the ratio, the greater potential that a fund is unable to meet its obligations in a time of stress. While the leverage ratio based on the commitment approach would be instructive in this regard, we believe leverage must be analyzed much more carefully in the second stage. The investment program of each fund is unique, and may include exposures that increase or decrease risk in a manner not captured by the commitment approach.

Indicators 2-2 (counterparty exposure ratio) or Indicator 2-3 (intra-financial system liabilities) may be helpful in assessing global systemic risk, because uncovered exposures would create counterparty losses in an event of default. However, we expect the uncovered exposures of investment funds to be relatively low given current market practices and recent reforms. Counterparty exposure was fundamentally improved by the introduction of central clearing and is closely analyzed and tightly controlled by financial institutions. In addition, US and EU regulators are expected to adopt rules regarding the level and types of collateral required for non-centrally cleared transactions, following the development of BCBS–IOSCO standards. EMIR and Dodd-Frank rules are also expected to address the levels of capital required in connection with uncollateralized swap trades.

6.3.3 Substitutability

We do not believe substitutability is an important risk indicator for investment funds. The investment management industry is deep and highly competitive. As noted in our response, funds open and close and asset managers enter new asset classes rapidly in response to investor demand. For example, Indicator 3-3 seeks to identify investment strategies with fewer than ten providers globally. If an investment strategy exists today with fewer than ten providers, then next month there may be fifteen or fifty asset managers assuming there is sufficient investor demand.

We note that Indicator 3-1 (turnover of the fund related to a specific asset/daily volume traded regarding the same asset) seems more relevant as a liquidity measure than a substitutability measure. If a fund's trading makes up a significant percentage of the daily trading volume for a security, that may indicate limited liquidity in that market. As noted in our response, we believe liquidity is a very important consideration in a second tier analysis.

We have particular concerns with Indicator 3-2 (total fund turnover vs. total turnover of funds in the same category/classification), and specifically the statement that the higher the ratio of fund turnover to total turnover of funds in the same category, the higher the potential systemic risk of the fund. We are not aware of any empirical evidence showing that there is a correlation between greater turnover in a fund and greater global systemic risk.

6.3.4 Complexity

We believe that Indicators 4-1, 4-2, 4-4 and 4-5 may be instructive second tier indicators for funds with significant leverage. Consistent with our response to the Consultation, we think liquidity is a key second tier consideration, and therefore we believe measuring portfolio liquidity against investor liquidity (Indicator 4-4) is particularly relevant. We also believe that in the absence of robust counterparty risk management, a fund possessing a high percentage of collateral that it has re-hypothecated (Indicator 4-2) increases exposure risks for counterparties. We therefore are engaging actively with the FSB's ongoing work on identifying possible areas of risk that may arise from or be transmitted through securities lending and finance transactions. We particularly applaud efforts to improve the regulators data set in this area in line with globally agreed principles and standards.

In terms of Indicator 4-3, BlackRock opposes predatory high frequency trading ("HFT") practices or strategies which seek to manipulate the market. These constitute market abuse and should be treated as such in law. We therefore welcome the provisions of MiFID 2 on HFT and support policy maker's further consideration of HFT practices across capital markets. However, we note that various reports into HFT, such as IOSCO's October 2011 report,⁵⁹ did not establish that HFT introduces market risk and results in disorderly markets as assumed by the Consultation. We strongly believe that Indicator 4-3 is premature with regard to investment funds and urge FSB-IOSCO to exercise caution in this regard. No evidence exists to our knowledge linking funds using HFT with systemic risk.

More fundamentally, the indicator risks confusing algorithmic trading and electronic trading with HFT. Although both may have characteristics that mimic HFT, they are a legitimate part of the asset manager's toolkit to achieve best execution for clients and do not pose systemic risk to the financial system. Algorithmic trading is an important client order execution technology for buy-

⁵⁹ "IOSCO's Report on Regulatory Issues Raised by the Impact of Technological Changes on Market Integrity and Efficiency," October 2011, available at <<http://www.iosco.org/library/pubdocs/pdf/IOSCOPD361.pdf>>.

side institutions to interact with the current fragmented market structure. Finally, electronic market making has shifted largely from traditional broker-dealers to HFT due to the material requirements in terms of technology, capacity and speed to carry out that business. Since end-investors ultimately benefit from market making and intermediation between buyers and sellers to provide immediacy of execution, the potential for unintended consequences of regulation and indicators in this area is high.

6.3.5 Cross-jurisdictional activities (Global activity)

As noted in our response to the Consultation, an analysis of cross-jurisdictional activities is only relevant once the initial screen for leverage is performed. While some of the indicators may then be relevant for highly-levered funds in certain circumstances, we believe diversification both as to invested assets and investor base mitigates risk rather than increasing it. Furthermore, we do not believe that the number of jurisdictions where a fund invests is a valid indicator of systemic risk.

For Indicator 5-1, the statement that “funds that invest globally may have a larger global impact than funds that invest in only a few jurisdictions” is flawed. In fact, an investment fund that has a diversified portfolio (in this case, across countries or regions) is likely to present less risk than a fund which concentrates its investment strategy. For example, a highly levered fund which invests only in its domestic market could experience significant stress if asset values in that market were to experience a significant decline, but if sufficiently diversified across countries or regions that are not strongly correlated will be better able to manage the asset value declines in a particular country.

For Indicator 5-2 (number of jurisdictions in which the fund is sold/listed), we believe that the fact that a fund is sold or listed in multiple jurisdictions is not a relevant indicator of systemic risk. Diversification of investors is likely to reduce risk, as investors from different jurisdictions are less likely than investors from a single jurisdiction to either invest or redeem at the same time as their investment objectives are informed by differing economies. Multiple listings may also permit different types of investors (e.g., institutional, retail, pension funds, corporate treasurers) to invest in the fund. As noted earlier, various groups of investors are likely to make different asset allocation decisions and their decisions may offset each other. It is also possible that selling and/or listing in multiple jurisdictions reduces risk by subjecting the fund to oversight by multiple regulatory entities.

With respect to the impact of global activities on a the resolution of a fund, please see our response to Question 3-5 above. When a fund liquidates, the principle domicile of the fund will govern its closure and liquidation, not the location of its investors, counterparties or listing venues. It is important to not conflate the “global activities” of investment funds with the issues faced by banks and similar balance sheet lenders who have international operating affiliates and capital invested across borders that would be subject to local insolvency proceedings in multiple jurisdictions.

Q6-6. For “cross-jurisdictional activities”, should “the fund’s use of service providers in other jurisdictions (e.g. custody assets with service providers in jurisdictions other than where its primary regulator is based)” be used?

No, we do not believe that an investment fund’s use of service providers in multiple jurisdictions is indicative of systemic risk. To the contrary, we believe transacting in multiple jurisdictions would be more likely to decrease the potential systemic impact of an investment fund, because the funds activities would be more diversified across markets and counterparties.

It is common practice to have a fund established in one jurisdiction and use key service providers (e.g., custodians, administrators) from a different jurisdiction to take advantage of the quality and

depth of service providers in certain locations. In certain circumstances, existing law addresses this fact by setting a baseline standard across service providers. For example, under the AIFMD, service providers of certain funds offered into the EU will be subject to higher standards under the “depository lite” regime and in time will require full compliance with the strict liability regime for fund depositaries if the fund chooses to opt into the pan-European marketing passport.

Q6-7. Is the definition of “net AUM” and “GNE” appropriate for assessing the “size” (indicators 1-1 and 1-2)?

As set forth in our response to the Consultation, we recognize that a materiality threshold is useful in limiting the pool of potential NBNI G-SIFIs to a manageable number. However, with respect to investment funds, we strongly believe that size, as measured by AUM, is not the appropriate metric for the materiality threshold. As discussed in our response above, we believe a materiality threshold based on leverage would be much more effective in identifying investment funds that may present systemic risk.

We do believe that size is an appropriate consideration in a second tier analysis. AUM is an important starting point for any size analysis, and we agree that where a fund utilizes leverage, it is important to measure the impact of size on the fund’s total exposures. However, as noted in our response, we do not believe that gross notional exposure, or “GNE,” is appropriate for measuring the amount of leverage used by a fund in order to assess systemic risk. Because gross notional exposure does not take hedges or offsetting positions into account in any way, it can be significantly inaccurate and misleading. Gross notional exposure does not measure, and is poorly correlated with, the risk of a portfolio for the end-investor, or the systemic risk that a fund may pose.

Q6-8. Is the definition of “investment strategies” sufficiently clear for assessing the “substitutability” (indicator 3-3)?

The Consultation did not provide a definition of “investment strategy.” As set forth in our response to the Consultation and in these questions, we do not believe that substitutability is a material indicator for transmission of systemic risk, as the asset management market is large and diverse, and there exist a number of competitors in the space that can easily assume obligations with respect to the contracts. Clients regularly change asset managers for both fund and separate account assets with no impact on the capital markets. In the unlikely event a manager went out of business, clients would move to one of many competitors.

Q6-9. Would collecting or providing any of the information included in the indicators present any practical problems? If so, please clarify which items, the practical problems, and possible proxies that could be collected or provided instead.

Regulators will face challenges collating consistent data across jurisdictions and different fund types for the interconnectedness and substitutability indicators. We believe that the data exists to calculate the counterparty exposure ratio (Indicator 2-2), but will be extremely challenging to aggregate across the large number of trade repositories collating this data. We question whether the cost in assimilating this data is justifiable given tight control of exposures by market participants and regulatory reform in this area. In addition, it will be exceedingly difficult to gather turnover data (Indicator 3-2) both at the fund level and even more for globally aggregated investment strategies. Finally, collating consistent data across jurisdictions to determine whether fewer than ten providers exist for any investment strategies (Indicator 3-3) will be difficult in the extreme. We doubt the insight that such an indicator might bring will outweigh the costs of collation. Given our concerns about the relevance of substitutability factors we question whether collecting this data would be a worthwhile endeavor.

Q6-10. Are there additional indicators that should be considered for assessing the relevant impact factors? For example, should “the fund’s dominance in a particular strategy (as measured by its percentage of net AUM as compared to the total AUM)” also be considered for “substitutability”? Similarly, should “leverage” or “structure” of a fund also be considered for assessing “complexity”? Please explain the possible indicators and the reasons why they should be considered.

After applying an initial screen for leverage, we believe that indicators such as size, liquidity, redemption provisions, counterparty relationships and volatility may be considered to determine whether a fund poses systemic risk. Certain of these indicators are consistent with those proposed in the Consultation. As set forth in our response to the Consultation, we have outlined the various steps that have been taken and could be taken to harmonize redemption terms and asset pool liquidity across product types.

Q6-11. Should certain indicators (or impact factors) be prioritised in assessing the systemic importance of investment funds? If so, please explain which indicator(s) and the reasons for prioritisation.

Yes. As discussed in more detail in our response, we believe that leverage should be prioritized as the initial screen for systemic importance followed by other indicators as described through our responses to these questions.

EXHIBIT A

Review of Mergers & Acquisitions in Asset Management Industry

Total Number of Asset Management M&A Transactions and Acquired AUM

(deals with reported AUM >\$500 Million)

Year	# of Deals	Transacted AUM (\$ billion)
2013	120	\$1,821
2012	137	\$1,357
2011	112	\$1,276
2010	120	\$691
2009	99	\$4,678
2008	138	\$1,671
2007	123	\$1,371

Source: Freeman & Co., LLC. All transaction statistics reflect deals with reported AUM > \$500 mm.

Top 10 M&A Transactions: 2012 and 2013

AUM in \$ billions

2013				
#	Target	Acquirer	% Acquired	AUM
1	Robeco Groep	ORIX Corp	90%	\$251.0
2	Scottish Windows Investment Partnership	Aberdeen Asset Management	100%	\$220.4
3	Santander Asset Management	Warburg Pincus & General Atlantic	50%	\$198.0
4	Investec Asset Management	Management	15%	\$105.0
5	Dexia Asset Management	New York Life Investment Management	100%	\$100.0
6	Ares Management	Alleghany Corporation	6%	\$66.0
7	St. James Place	Public Equity	15%	\$61.2
8	RidgeWorth Investments	Lightyear Capital	100%	\$50.6
9	AlpInvest Partners	Carlyle Group	40%	\$49.3
10	China Asset Management	CITIC Securities	10%	\$49.0
2012				
1	Janus Capital	Dai-ichi Life	20%	\$152.4
2	TCW Group	The Carlyle Group & TCW Management	100%	\$130.0
3	Bridgewater Associates	Texas Teacher Pension	Minority	\$120.0
4	Dexia Asset Management	GCS Capital	100%	\$105.0
5	Merrill Lynch International Wealth Management	Julius Baer	100%	\$84.0
6	Pareto Investment Management	Insight Investment Management	100%	\$43.4
7	Dwight Asset Management	Goldman Sachs Asset Management	100%	\$42.0
8	Toyota Asset Management	Mitsui Sumitomo Insurance	50%	\$35.0
9	Rockefeller Financial Services	RIT Capital Partners	37%	\$34.0
10	Clifton Group Asset Management	Eaton Vance	100%	\$33.4

Source: Freeman & Co., LLC.

EXHIBIT B

Firm and Fund Closures and Related Events in the Asset Management Industry over the Past 25 Years

Name	Event	Year	Resolution	AUM year of event, (if known)	AUM after event (if known)
Barlow Clowes	Investment losses Fraud	1988	<ul style="list-style-type: none"> Firm closed, funds liquidated, UK government made ex gratis payment to investors UK Government repaid from trustees GBP120mn of GBP153mn payment-2011 	GBP 188mn	GBP 30mn
Hyperion (Term Trusts 1997,99,03)	Investment losses- MBS	1993	<ul style="list-style-type: none"> Civil litigation Regulatory fines for fund marketers 	USD 1.5bn	USD1.2bn
Piper Jaffrey/ Institutional Government Bond Fund	Investment losses- MBS	1994	<ul style="list-style-type: none"> Fund closed to new investors - assets run off Civil litigation. Parent of manager sells stake to ITT insurance 1997 	Fund: USD 750mn	Initial drop to USD 590mn then run off to zero.
TCW/Term Trusts 2000 & 2003	Investment losses- MBS	1994	<ul style="list-style-type: none"> Civil litigation Regulatory fines for fund marketers Manager firm ownership change 1996 	Two trusts: USD 1.5mn	Initial drop to USD 1.0mn Trusts liquidate at term end
Community Bankers MMF	Investment losses in structured notes	1994	<ul style="list-style-type: none"> Fund liquidated September 1994 	USD 82mn	None
LTCM	Investment losses	1998	<ul style="list-style-type: none"> Creditor investments to avoid loss Firm closed Creditors make small profits when unwind completed 	USD 5bn	USD 60mn Creditors made whole
Advanced Investments Management	Breach of client guidelines (all separate accounts)	2002	<ul style="list-style-type: none"> Firm closes 2002 Civil litigation Regulatory fines 	USD 5.5bn	USD 15mn
Canary Capital Partners	Market timing Late trading	2003	<ul style="list-style-type: none"> Fines Principal receives 10 year bar 	USD 500mn	Not known

Janus Capital Management	Market timing	2003	<ul style="list-style-type: none"> Fines Management changes 	USD 149bn	USD 151bn (outflows of \$3.2b from August 31 to September 30, 2003, increase in AUM attributed to market appreciation)
Pilgrim Baxter	Market timing	2003	<ul style="list-style-type: none"> Principals barred Old Mutual (owner since 2000) closes some funds; rebrands 	US 7bn	US 5.4b (20% decline from September 30, 2003 to December 31, 2003)
Putnam	Market timing	2003	<ul style="list-style-type: none"> Management changes Fines Sold to Great West Life in 2007 	USD 277bn	USD 263bn \$14bn (5%) decline in first week of November 2003; USD 141bn at 9/30/2013
Strong Capital	Market timing	2003	<ul style="list-style-type: none"> Principal barred Asset sale to Wells Fargo in January 2005 	USD 34bn	USD 29bn
Absolute Capital Management	Securities fraud	2007	<ul style="list-style-type: none"> Founder criminally charged Multiple enforcement actions Civil suits 	USD 3bn	USD 885mn
Reserve Primary Fund	Investment losses	2008	<ul style="list-style-type: none"> Fund in liquidation Firm in liquidation 	USD 65 bn in fund USD 125bn in total AUM	De minimis
Galleon Group	Insider trading	2009	<ul style="list-style-type: none"> Firm closed Founder criminally convicted Funds liquidated 2009 	USD 7bn	None
Gartmore Group	"Star" manager departures	2010	<ul style="list-style-type: none"> Sold to Henderson 2011 	GBP 22bn	GBP 16bn
SAC Capital Management	Allegations of insider trading by portfolio managers	2008-2012	<ul style="list-style-type: none"> Firm to convert to internal management (per media reports) 	USD 15bn	USD 9bn

EXHIBIT C

Top 25 Largest Registered Funds

	Fund	Total Net Assets (\$ billions)	Domicile	Asset Class	Active or Index
1	Vanguard Total Stock Market Index Fund	268.2	USA	Equity	Index
2	PIMCO Total Return Fund	237.3	USA	Fixed Income	Active
3	SPDR S&P 500 ETF Trust	174.9	USA	Equity	Index
4	Vanguard Institutional Index Fund	162.8	USA	Equity	Index
5	Vanguard 500 Index Fund	144.8	USA	Equity	Index
6	American Funds - Growth Fund of America	138.9	USA	Equity	Active
7	Vanguard Prime Money Market Fund	131.8	USA	Cash	-
8	American Funds - Europacific Growth Fund	122.6	USA	Equity	Active
9	Fidelity Cash Reserves Fund	119.2	USA	Cash	-
10	JP Morgan Prime Money Market Fund	117.8	USA	Cash	-
11	Vanguard Total International Stock Index Fund	111.2	USA	Equity	Index
12	Fidelity Contrafund Fund	111.1	USA	Equity	Active
13	Vanguard Total Bond Market Index Fund	90.5	USA	Fixed Income	Index
14	American Funds - Capital Income Builder Fund	90.3	USA	Equity	Active
15	American Funds - Income Fund of America	88.8	USA	Balanced	Active
16	Franklin Income Fund	86.5	USA	Balanced	Active
17	American Funds - Capital World Growth & Income Fund	85.2	USA	Equity	Active
18	Vanguard Wellington Fund	80.3	USA	Balanced	Active
19	Vanguard Total Bond Market II Index Fund	72.6	USA	Fixed Income	Index
20	Fidelity IMM: Money Market Portfolio	72.0	USA	Cash	-
21	Templeton Global Bond Fund	71.0	USA	Fixed Income	Active
22	American Funds – American Balanced Fund	70.9	USA	Balanced	Active
23	American Funds – Washington Mutual Investors	70.6	USA	Equity	Active
24	American Funds – Investment Company of America	69.9	USA	Equity	Active
25	Fidelity Spartan 500 Index Fund	69.5	USA	Equity	Index

Source: Simfund as of December 2013.

EXHIBIT D

Top 25 Pension Plans, Sovereign Wealth Funds and Foundations / Endowments⁶⁰

Top 25 Pension Plans

Rank	Name	Country	Total Assets (\$ Billions)
Pension Plans			
1	Government Pension Investment Fund	Japan	\$1,394.3
2	General Organization for Social Insurance (GOSI)	Saudi Arabia	\$448.0
3	Pensioenfond ABP	Netherlands	\$338.8
4	Korean National Pension Scheme	Korea	\$288.1
5	Federal Retirement Thrift Investment Board	U.S.	\$281.0
6	California Public Employees Retirement System	U.S.	\$233.6
7	Florida State Board Administration	U.S.	\$156.5
8	California State Teachers' Retirement System	U.S.	\$155.5
9	Canada Pension Plan	Canada	\$152.8
10	Caisse De Dépôt Et Placement Du Québec (CDPQ)	Canada	\$152.0
11	Employees Provident Fund	Malaysia	\$148.7
12	Central Provident Fund Scheme	Singapore	\$146.4
13	Pension Fund Association for Local Government Officials	Japan	\$145.6
14	Stichting Pensioenfond Zorg en Welzijn (PFZW)	Netherlands	\$142.3
15	New York State Common Retirement Fund	U.S.	\$140.6
16	ATP	Denmark	\$136.6
17	Public Investment Corporation	South Africa	\$134.5
18	Postal Savings Fund	Taiwan	\$130.4
19	National Social Security Fund	China	\$127.4
20	Pension Fund Association	Japan	\$120.9
21	Ontario Teachers Pension Plan	Canada	\$107.7
22	General Motors	U.S.	\$105.9
23	Teacher Retirement System of Texas	U.S.	\$95.7
24	Employees Provident Fund Organization	India	\$94.7
25	Previ	Brazil	\$92.2

⁶⁰ Source: aiCIO. <http://ai-cio.com/aiGlobal500.aspx?id=3100>. Single family and multifamily offices have significant assets, however, high-quality family office data is not publically available.

Top 25 Sovereign Wealth Funds

Rank	Name	Country	Total Assets (\$ Billions)
Sovereign Wealth Funds			
1	Abu Dhabi Investment Authority	UAE	\$841.1
2	Government Pension Fund Global	Norway	\$574.3
3	SAMA Foreign Holdings	Saudi Arabia	\$464.8
4	China Investment Corporation	China	\$372.3
5	SAFE Investment Company	China	\$368.9
6	Government of Singapore Investment Corporation	Singapore	\$323.4
7	Hong Kong Monetary Authority Investment Portfolio	Hong Kong	\$301.7
8	Kuwait Investment Authority	Kuwait	\$253.6
9	Temasek Holdings	Singapore	\$153.1
10	National Wealth Fund	Russia	\$92.6
11	Investment Corporation of Dubai	UAE	\$91.8
12	Qatar Investment Authority	Qatar	\$85.0
13	Australian Future Fund	Australia	\$77.1
14	Caisse des Depots et Consignations	France	\$66.1
15	Libyan Investment Authority	Libya	\$64.0
16	Revenue Regulation Fund	Algeria	\$57.0
17	Alaska Permanent Fund	U.S.	\$41.8
18	Khazanah Nasional	Malaysia	\$36.7
19	Korea Investment Corporation	South Korea	\$36.2
20	Kazakhstan National Fund	Kazakhstan	\$34.2
21	Brunei Investment Agency	Brunei	\$33.6
22	Strategic Investment Fund	France	\$29.1
23	Reserve Fund	Russia	\$26.6
24	State Oil Fund	Azerbaijan	\$25.8
25	Government Pension Fund Norway	Norway	\$23.1

Top 25 Foundations / Endowments

Rank	Name	Country	Total Assets (\$ Billions)
Foundations / Endowments			
1	Bill and Melinda Gates Foundation & Foundation Trust	U.S.	\$37.4
2	Harvard Management Company	U.S.	\$32.0
3	Stanford Management Company	U.S.	\$19.5
4	Yale University	U.S.	\$19.4
5	University of Texas Investment Management Company	U.S.	\$17.2
6	Princeton University Investment Company	U.S.	\$17.1
7	Ford Foundation	U.S.	\$10.7
8	The Robert Wood Johnson Foundation	U.S.	\$10.1
9	Massachusetts Institute of Technology Investment Management Company	U.S.	\$8.0
10	The William and Flora Hewlett Foundation	U.S.	\$7.4
11	W. K. Kellogg Foundation	U.S.	\$6.7
12	University of Michigan	U.S.	\$6.6
13	University of Pennsylvania	U.S.	\$6.6
14	Columbia Investment Management Company	U.S.	\$6.5
15	The David and Lucile Packard Foundation	U.S.	\$6.4
16	Northwestern University	U.S.	\$6.2
17	University of Notre Dame	U.S.	\$6.1
18	John D. and Catherine T. MacArthur Foundation	U.S.	\$6.0
19	Duke University	U.S.	\$5.7
20	University of Chicago	U.S.	\$5.7
21	Gordon and Betty Moore Foundation	U.S.	\$5.5
22	Lilly Endowment Inc.	U.S.	\$5.3
23	Cornell University	U.S.	\$5.3
24	Tulsa Community Foundation	U.S.	\$5.2
25	University of Virginia Investment Management Company	U.S.	\$5.2