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Ponzi Scheme Detection: How the SEC Can Catch the Next Thief

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The views expressed in this paper are those of the author and do not necessarily represent the views of NERA Economic Consulting or any other NERA consultant.



How does \$64.8 billion in assets purportedly under management go missing? That is the combined account value that Bernard L. Madoff Investment Securities LLC (BMIS) reported to clients on their November 2008 statements. Virtually none was real, as the world learned days later, when the biggest-ever Ponzi scheme came to light.

The US Securities and Exchange Commission (SEC) has been taking deserved heat for failing to detect Mr. Madoff's massive and long-running scam, which defrauded thousands of investors,² 150 charities among them,³ over a period measured in decades. The official report has yet to be issued on how the watchdog agency allowed itself to be fooled by Mr. Madoff's machinations despite the many "red flags" that whistle-blower Harry Markopolos brought to its attention beginning in 2000. Whether the explanation ultimately turns out to be insufficient resources, inadequate systems, insufficiently savvy staff, misplaced priorities, or willful blindness, the do-nothing option—under which investors would remain highly vulnerable to frauds of this magnitude and duration—is not acceptable. We need a better way.

¹ Dr. Mayer is a Senior Vice President with NERA Economic Consulting. She would like to thank her NERA colleagues Mark Berenblut, Jan Larsen, and Dr. David Tabak, Good Harvest Financial Group and www.Madoff-Help.com founder Ron Stein, and Schiff Hardin attorneys Howard Kramer and Andrew Klein for their constructive comments as this proposal took shape, and NERA Analyst Chaya Barber for research assistance.

² Irving H. Picard, the trustee overseeing the consolidated liquidation proceeding of BMIS and Bernard L. Madoff, identified 8,095 non-administrative investment advisory accounts at the firm, of which 4,903 were active as of 11 December 2008, when the fraud was revealed. By 2 July 2009, the claims bar date, Picard had received over 15,400 customer claims, multiple claims having been filed for many accounts. *Trustee's First Interim Report for the Period December 11, 2008 through June 30, 2009*, filed 9 July 2009 with United States Bankruptcy Court, Southern District of New York, 20–21. Picard's account tallies are limited to direct investors in Mr. Madoff's scheme. The ranks of those defrauded also include individuals and organizations who invested in BMIS indirectly, through so-called feeder-funds.

³ "Study Ties Madoff Loss to Charity's Board Size," *The New York Times*, 24 June 2009.

The current regulatory regime falls short on three counts

Most hedge fund investment advisers are not required to register with the SEC.⁴ Because the law exempts advisers with fewer than 15 clients and each fund advisee counts as only one for registration purposes, even some of the largest hedge fund advisers are exempt.⁵ While some advisers register voluntarily, others that are required to register get away with not doing so; until 2006, BMIS was among the latter.⁶ Unregistered investment advisers are subject to the same anti-fraud statutes as their registered counterparts but the former receive less scrutiny from regulators. The registration shortfall is thus problem number one.

SEC registration as currently constituted would make life more difficult for Ponzi operators but would hardly be a game-ender. That only 14% of registered investment advisers were examined by the SEC or an SRO (e.g., one of the exchanges) during the year ended September 2008—including routine examinations, cause inspections to follow up on tips and complaints, and limited-scope special inspections to probe emerging risk areas⁷—is among the unfortunate facts making registration not necessarily incompatible with continued operation of a Ponzi scheme. Another is that a fraudulent adviser may hoodwink the examiners, as BMIS apparently did in its 2006 pre-registration investigation.⁸ That Mr. Madoff's firm was duly registered as an investment adviser for the last 28 months of its existence is perhaps the clearest evidence that registration alone is not enough.



25	14.05	9.21
26	18.55	12.21
27	13.88	8.48
28	13.25	8.48
29	22.85	12.85
30	23.85	28.75
31	75.25	13.98
32	75.85	13.41



33	22.21	21.85
34	18.45	14.20
35	11.15	12.51
36	14.25	12.51
37	22.85	28.75
38	24.20	22.51
39	75.15	12.51

⁴ In 2003, the SEC estimated that approximately two-thirds of hedge fund advisers were unregistered. Staff Report To The United States Securities And Exchange Commission, *Implications of The Growth of Hedge Funds*, (Sept. 2003), at 22, available at <http://www.sec.gov/news/studies/hedgefunds0903.pdf>.

⁵ The 15 client minimum is from Section 203(b)(4) of the Investment Advisers Act of 1940. In December 2004, the SEC—which previously did not consider hedge fund investors to be clients of hedge fund advisers—directed a new interpretation of this provision (the Hedge Fund Rule) under which hedge fund investors, not just the funds themselves, would be counted. The more stringent registration requirement was in effect from February 2006 until June 2006, when the D.C. Circuit Court of Appeals rejected it in *Goldstein v. SEC*, 451 F.3d 873, 883 (D.C. Cir. 2006). According to SEC estimates, about half of the hedge fund advisers registered as of June 2006 became so only after the Hedge Fund Rule was enacted. See Zaun, Todd, “Goldstein v. Securities and Exchange Commission,” *Business, Entrepreneurship & the Law*, 1:1, 111, 114, citing Christopher Cox, Chairman, US Sec. & Exch. Comm’n, Testimony Concerning the Regulation of Hedge Funds Before the US Senate Committee on Banking, Housing, and Urban Affairs (25 July 2006), available at <http://www.sec.gov/news/tesimony/2006/ts072506cc.htm>. Under Goldstein, many of these recent registrants are free to de-register.

⁶ BMIS Form ADV filed 6 August 2006. The ADV-SEC DRP page identifies this as an initial application for registration.

⁷ *US SEC 2008 Performance and Accountability Report*, p. 29.

⁸ In recent Congressional testimony, FINRA Interim CEO Stephen Luparello observed, “It is worth noting that in 2006, when the SEC examined Mr. Madoff’s advisory business, the only violation that it apparently found was the firm’s failure to register.” Testimony Before the Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises, Committee on Financial Services, US House of Representatives, 4 February 2009, available at <http://www.finra.org/Newsroom/Speeches/Luparello/P117784>.

One way BMIS evaded detection while functioning as a registered adviser was by blatantly lying on its investment adviser disclosure forms. Registered investment advisers must report their assets under management and their client count and composition. On its last annual Form ADV, filed in January 2008, BMIS reported \$17.1 billion in assets under management and 23 customers, “11 to 25%” of whom (i.e., three to five) were high net worth individuals and “under 10%” of whom (i.e., one to two) were charities.⁹ The asserted dollar amount was almost \$48 billion below what the firm reported to clients just months later (*after* the market collapse) and about \$17 billion above what it actually held on their behalf, yet the baseless claim stood. The asserted customer tally was less than 0.5% of the actual number of active accounts when the clock stopped for BMIS on 11 December 2008, but again, no alarm sounded within the SEC; perhaps the greater wonder is why none went off at the Palm Beach Country Club. Another Form ADV entry whose falsity should have been obvious in wealthy circles the world over, if anyone were looking, is that BMIS used no outsiders to solicit advisory clients on its behalf.¹⁰ That the SEC has no ready way to confirm the figures reported to it by registrants is problem number two.



15.00	5.51	Normal
11.25	8.04	Normal
17.25	13.55	Normal
25.00	20.67	Normal
35.00	33.00	Normal
45.00	41.15	Normal
54.00	51	Normal
60.25	60.60	Normal

Mr. Madoff not only reported fraudulently to the SEC, as he did to his investors, but *differently* to those two constituencies. Perhaps the reason he did not provide the SEC with a truthful customer count and at least a consistent misrepresentation of assets under management is that he suspected the much larger numbers would have invited closer scrutiny of his operation. He may also have supposed the Commission to be more motivated to protect thousands of investors with an average holding of \$13 million (i.e., \$64.8 billion/4,903) than a couple of dozen with an average holding of \$743 million (i.e., \$17.1 billion/23), as the latter could be presumed to be truly sophisticated and capable of conducting their own due diligence.

That many huge investment advisers are exempt from SEC registration, and that advisers who do register can disclose fraudulently and get away with it, are not the only ways the current regulatory regime leaves investors at risk of Ponzi schemes. A third problem is that there is no requirement for investment advisers, even those that are registered, to use an independent custodian. The role of a custodian—ordinarily assumed by a major bank—is to safeguard client assets. BMIS truthfully disclosed on its 2008 Form ADV that it had no independent custodian, but rather provided self-custody.¹¹ By permitting advisers to act as their own custodians, the current regulatory regime facilitates misrepresentations about assets under management.

⁹ BMIS Form ADV filed 7 January 2008, pp 8-9. The Form specifies the alternative percentage ranges that the adviser is to select from for each investor type.

¹⁰ BMIS Form ADV filed 7 January 2008, p 7.

¹¹ BMIS Form ADV filed 7 January 2008, p 13.

The Obama Administration's reform bill and the SEC's custody proposal vastly improve on the current regulatory landscape but fall short of what is required

The Private Fund Investment Advisers Registration Act of 2009, which the Obama Administration brought to Capitol Hill on 15 July, would require the advisers of hedge funds, private equity funds, venture capital funds, and other private pools of capital to register with the SEC if they managed at least \$30 million of assets. The objectives of the bill are three-fold: to reduce fraud, to improve transparency, and to enable regulators to better assess risks to the financial system as a whole. Trading and investment positions, leverage, and off-balance sheet exposure are among the items it would require registrants to disclose.

Custodian arrangements are not addressed by the draft legislation but they are the subject of an SEC proposal announced 14 May 2009. Under the proposed regulations, if an adviser or affiliate maintained custody, a PCAOB-registered and inspected accountant would have to perform an annual custody control exam and prepare an annual report on custody controls (Type II SAS 70). Additionally, advisers would have to engage an independent public accountant to conduct an annual "surprise exam" to verify assets.¹² The SEC proposal would effectively require a qualified independent custodian.

Each of these proposed changes is a marked improvement over the current regulatory regime from the standpoint of Ponzi scheme detection but, even together, they do not go far enough.

- **Custody arrangements.** If an adviser's custodian is in fact independent and "sees" all customer monies and securities coming in and going out, that would do much to curtail the problem of misappropriated assets, both by serving as a disincentive to bad behavior and by detecting asset disappearances that did occur. The caveats are critical, however. One concern is that a supposedly independent custodian (and the supposedly independent accountant retained to check up on it) might be complicit with a scheming adviser. Another is that such an adviser might direct incoming customer funds in such a way that they never appeared in the custodian's line of sight.
- **Registration of investment advisers.** While fund advisers are covered by the Administration's bill, advisers with investment discretion over non-pooled monies are not. Notably, BMIS did not operate a hedge fund nor even pretend to do so; rather, it purported to invest on behalf of account holders individually. Registration requirements should be broadened to encompass these sorts of advisers as well.
- **Disclosure required of registrants.** If a custodian is deceived or complicit, the task of asset validation falls to the SEC itself. The position disclosures called for under the Administration bill can *help* the Commission do a better job of confirming the assets reported by an adviser, as explained below, but they will not by themselves solve the asset verification problem.

¹² SEC press release dated 14 May 2009.

Multiple-source reporting of account-level assets would make it much harder for advisers to get away with overstating client assets

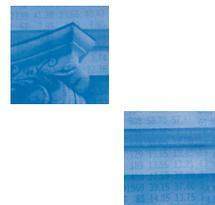
If Congress and the SEC are serious about wanting to protect investors from Ponzi schemes, they need look no further than the Internal Revenue Service (IRS) for an approach that is both simple and well-tested: multiple-source reporting of entity-specific data.

Rather than accept at face value the earnings, dividends, interest income, Social Security payments, trust distributions, and other income items that taxpayers report on their Forms 1040, the IRS *routinely and comprehensively* cross-checks these claimed amounts against the W-2s, 1099s, and K-1s submitted by employers, financial institutions, the Social Security Administration, trustees, and other payers. When discrepancies are identified, the Agency may contact one or more of the parties in an effort to reconcile the numbers. This process of cross-checking improves the accuracy of the final numbers not only by correcting errors but by motivating honest reporting in the first instance. The SEC must be similarly empowered to readily and cost-effectively validate the data that it needs to effectively police investment advisers.

Instead of the SEC getting its routine information on an investment adviser's assets under management from the most self-interested party only (i.e., the adviser) and on an aggregated annual basis only, I propose a system under which three organizations would be required, and individual investors encouraged, to give the SEC periodic (in most cases, quarterly) data about an adviser's managed assets and (in most cases) their components (see Figure 1):

- **Investment advisers** would be required to report *quarter-end* assets under management *by account* (identified by name, tax ID, and account number). All advisers with at least \$30 million under management would have to comply with this requirement.
- **Custodians** would be required to report *quarter-end* assets under management for each of their adviser clients, *by position*. For each position, both size (e.g., shares or face value) and market value would be reported. To give teeth to this mandate, advisers would be required to use an independent custodian to safeguard their assets.¹³
- The **IRS** would be required to report the number of Forms 1099 that it received from an investment adviser and their *year-end combined* asset values. To enable the latter report, the 1099s filed by investment advisers—which now have segments calling for dividends, interest, and sale proceeds—would be augmented to include year-end assets under management and account number. Advisers would be required to file a Form 1099 for all clients, US or foreign, including those with no investment income.

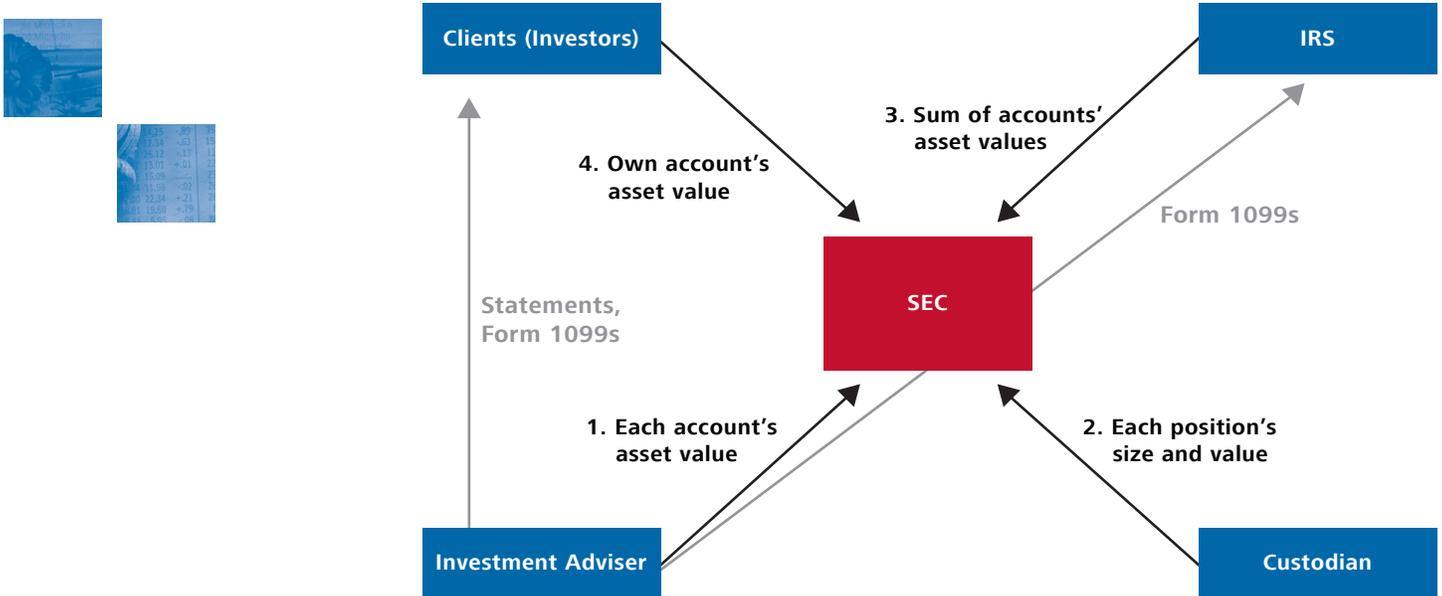
¹³ It is already the case that registered investment companies—as distinct from investment advisers and hedge funds—must use an independent custodian. See 15 U.S.C. § 80a-17(f)(1). In testimony before the US Senate Committee on Banking, Housing and Urban Affairs, 27 January 2009, Professor John C. Coffee Jr. underscored the importance of this requirement from the standpoint of Ponzi scheme prevention. (“In the nearly seventy years since the passage of the Investment Company Act of 1940, frauds have occurred in connection with mutual funds, but not true Ponzi schemes. Admittedly, a truly predatory investment adviser might find ways to circumvent the custodian requirement, but most Ponzi schemes appear to develop as acts of desperation as investment managers that have incurred losses struggle to hide them and “borrow” some of the funds from new investors in order to pay the promised return to the original investors. Their desperate hope is that they can eventually recoup their losses (indeed, this appears to have been the Bayou experience). Section 17(f) eliminates both this opportunity and incentive.”)



- Finally, **investors** would be invited—though not required—to report to the SEC on a new stand-alone schedule their quarter-end assets under management, by adviser and account.

These data would feed into computers programmed to make the requisite comparisons quickly, efficiently, and routinely. Automated systems would produce “exception reports” detailing any disparities. If these were large, numerous, or persistent for a particular adviser, a well-focused SEC inquiry would ensue to determine whether any claimed assets were unaccounted for.

Figure 1. **Multiple Source Reporting Would Help the SEC Verify an Investment Adviser’s Reported Assets Under Management**



For each adviser, the SEC would have its new systems *routinely* perform two sets of comparisons: one aggregate in nature, the other disaggregated. (1) **Total assets under management** would be obtained quarterly from the adviser (the sum of asset values reported for each account) and its custodian (the sum of asset values reported for each position), and annually from the IRS (the sum of asset values on the adviser’s Form 1099s). For any given date and adviser, the totals should agree. (2) **Account-level assets under management** would be obtained quarterly from the adviser and participating investors (relying on their quarter-end account statements or, at year-end, Forms 1099). For any given date, adviser, and account, the amounts should agree.

The involvement of individual investors is the linchpin of this plan. Even with a custodian that was truly independent, an adviser could run a Ponzi scheme by having some (potentially most) investment funds deposited into an account that the custodian and supervising auditor were unaware of; those undisclosed inflows could fund a Ponzi scheme whose victims were the investors making those fraudulently misdirected deposits, even as the firm ran a legitimate operation with assets that the custodian saw and safeguarded. An adviser engaged in such asset diversion would report to the SEC only those assets under management that its custodian knew about. If the SEC had no ready means of learning that the adviser was reporting additional assets under management to its investors, the scheme might go undetected.

That is where investor reporting comes in. What an asset-diverting adviser could not protect itself from, under my plan, is a *random investor* reporting his or her account's asset value to the SEC. Unless the adviser informed the SEC of *all* account-level assets, any one investor report could trip it up. Because advisers would be required to provide the SEC with assets under management *on an account-level basis*, they would be at risk of detection if *just one* of their deceived customers elected to report.

Why would investors cooperate? As things now stand, they would have two self-interested reasons to participate: to learn whether their own assets were acknowledged by their advisers (the SEC would notify investors of unresolved discrepancies), and to motivate their advisers to report honestly. If Congress were to grant participating investors a greater claim to damages in fraud-related litigation and recoveries in fraud-related bankruptcy, as would be warranted given their role in fraud detection, investors' incentive to participate would be greater still.

I would not have investor participation be compulsory, as this would likely engender tremendous opposition to the plan and pose enforcement burdens of its own. Mandatory investor participation is also unnecessary, as the risk of detection need not be anywhere near 100% for advisers to fear it enough to report truthfully. However, I would like to see compulsory quarter-end reporting of own-account assets by any private investment fund (e.g., hedge fund, private equity fund, or venture capital fund) that is itself the client of an investment advisor, as that would afford a protection to the fund's own clients, who are the adviser's indirect customers.

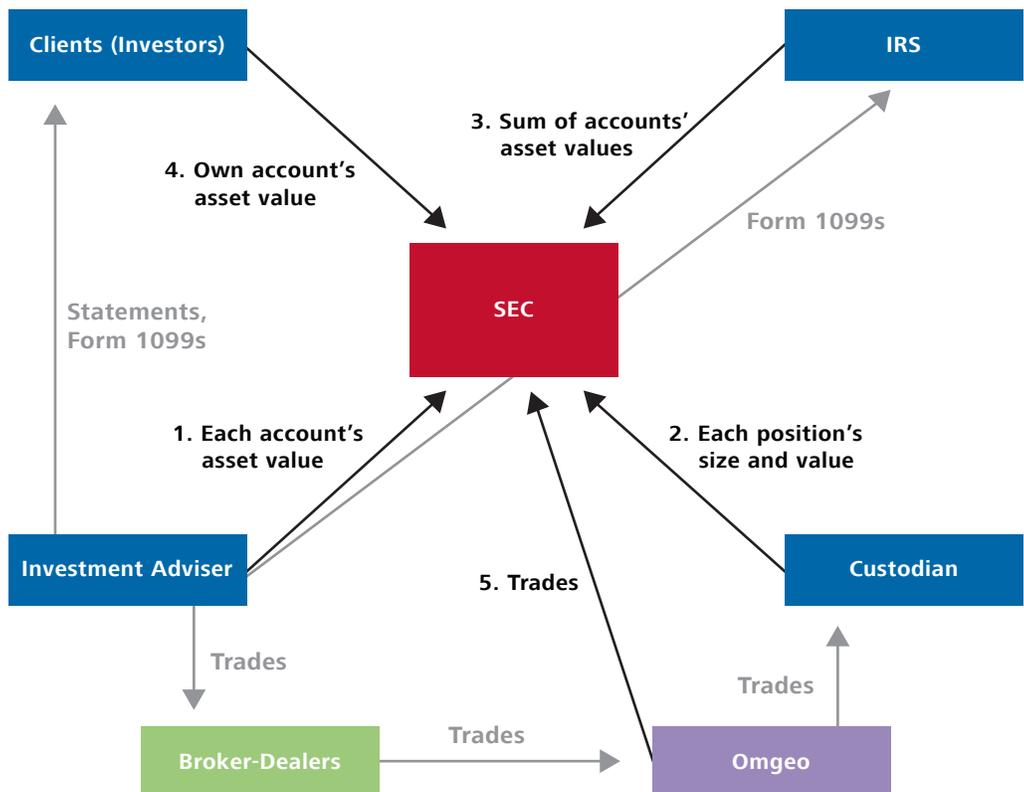


Multiple-source reporting of trade and position data would further enhance the SEC's arsenal of tools for detecting asset overstatements

As described thus far, the data validation system that I am proposing would *routinely and automatically* cross-check data from *every adviser every quarter*. Comparisons of total assets under management would be run each quarter between the adviser and its custodian and, at year end, between these two and the IRS; account-level asset comparisons between the adviser and its customers would be run on each quarterly report that a participating investor filed with the SEC. Its numerous cross-checks notwithstanding, even this system would be unable to detect a Ponzi scheme if the custodian were complicit. So long as the custodian endorsed the too-high asset values that an adviser reported on client account statements, Form 1099s, and account-level reports to the SEC, asset overstatements could escape detection.

To guard against the complicit custodian problem, I would add a second layer of reporting and comparison to the system, one focused on the composition of an adviser's assets under management. In the interests of cost control and to minimize disruption to the additional organization whose cooperation would be required, I would have these data be gathered and analyzed on a sample basis rather than for every position of every adviser every quarter (see Figure 2).

Figure 2. **Position Audits Would Provide Further Reality Checks on Assets Under Management**



15.90	0.51	Netted
11.25	0.40	Netted
11.25	11.25	Netted
09.00	0.07	Netted
20.25	15.00	Netted
9.00	11.91	Netted
6.00	0.1	Netted
10.00	19.00	Netted

In this supplemental round of cross-checking, the SEC would compare data from two sources on the randomly chosen positions (e.g., a particular stock, bond, index option, or futures contract) of randomly chosen advisers between successive quarter-ends. From the (supposedly independent) custodian, the Commission would have already obtained (during the universal first round) data on the size of every position at each quarter-end. To validate the quarterly change in a particular position of a particular adviser implied by the custodian's successive reports for an adviser, the SEC would subpoena Omgeo for a record of the adviser's trades in the security during the quarter.¹⁴

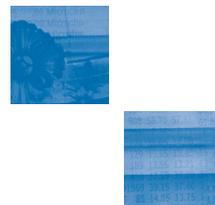
By virtue of its central location in the trading world—at the hub of interactions among investment managers, the broker-dealers who execute trades on their behalf, and the custodians entrusted with their customers' assets—and its sophisticated data-processing operations, Omgeo is ideally situated to deliver the sort of information that would allow the SEC to test a custodian's claims. If an investment adviser's aggregate net purchases (i.e., purchases less sales) of a security during a quarter, as indicated by Omgeo trade records, did not match the net position change implied by the custodian's start-of-quarter and end-of-quarter position reports, the SEC would have cause to investigate. Without such second-round spot-checking, a Ponzi-scheming adviser with a complicit custodian might escape detection in first-round cross-checking. With position change testing added to the automated data verification protocol, an adviser who did not have the Omgeo trade history to back up its claims about managed assets and was unable to provide a satisfactory explanation for that would risk detection (when the target of an automated position audit) even if it had a cooperative custodian.

Privacy considerations

Both investors and investment advisers might be wary of this proposal on privacy grounds. To allay understandable concerns in this regard, I would have neither account-level assets (to be reported by advisers and participating investors) nor adviser-level positions (to be reported by advisers and custodians) publicly disclosed under the program. Account-level assets should be as confidential when filed with the SEC as tax return data already are when filed with the IRS, particularly as no compelling purpose would be served by their disclosure. Adviser-specific positions should remain non-public because they contain proprietary information about trading strategies.

With one possible exception, I would also have client identities remain non-public. The possible exception is for an adviser's fund clients. Many so-called "feeder fund" investors claim to have been unaware that they had any exposure to BMIS. Which outside advisers a private fund uses certainly is information that the fund's investors have a right to know, if not the general public.

¹⁴ A joint venture of Thomas Reuters and the Depository Trust Clearing Corporation, Omgeo performs post-trade processing for the vast majority of trades by institutional investors in a wide range of securities. Its scope is international as well as domestic.



Cost considerations

I would not expect the program outlined above to be terribly costly to maintain once the basic structure were put in place. Regardless, it would be equitable for program-related costs to be largely if not entirely borne by the program's beneficiaries: investment advisory clients, a group that, as it happens, is exceptionally able to pay. Towards that end, I would have the program funded by a fee levied on registered investment advisers: one that was an increasing function of assets under management and number of customer accounts.

Side benefit

When investment assets go missing, embezzlers and unwitting Ponzi scheme investors making redemptions are not the only constituencies that stand to gain; terrorists are another group to whom such assets may be misdirected. National security thus joins fraud prevention as a secondary benefit of the asset-monitoring proposal described herein.

Conclusion

In the end, Ponzi scheme prevention and detection is all about keeping close watch on the assets that investors are told they possess. Left to themselves, fraudsters may skim and otherwise misdirect such assets at will. If investors' self-interest can be harnessed to motivate at least some advisory clients to report the value of their managed assets to the SEC, and investment advisers can be made to fund the sort of data validation system that I am proposing, the SEC can address the Ponzi problem quickly, effectively, and at minimal cost to taxpayers.





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