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Breaking Bucks in Money Market Funds

William Birdthistle

BREAKING BUCKS IN MONEY MARKET FUNDS

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This Article argues that the Securities and Exchange Commission's first and most significant response to the economic crisis *increases* rather than decreases the likelihood of future failures in money market funds and the broader capital markets. In newly promulgated regulations addressing the "breaking of the buck" in the \$3 trillion money market—a debacle at the fulcrum of the 2008 financial meltdown—the SEC endorses practices that obfuscate rather than illuminate the capital markets, including fixed pricing for money market funds, potentially riskier portfolio requirements, and the continued use of discredited ratings agencies. These policies, premised implicitly upon doubt in the ability of markets to process information effectively, obscure the true perils of money market funds. Rather than swaddling investment risks in misleading regulatory padding, the SEC should illuminate the possible menace of these funds. This Article offers transparent solutions to alleviate moral hazard and systemic risk in the broader market and to end the regulatory subsidy of these specific investments.

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[T]he tenets that define a money market fund: sanctity of principal, immediate liquidity, a reasonable rate of return—all while living under the overarching rubric of boring investors into a sound sleep.

—Bruce R. Bent, Chairman and CEO, The Reserve¹

[The Reserve] didn't just break the buck, they shattered it.

—Don Phillips, Managing Director, Morningstar²

INTRODUCTION

The menace of the 2008 financial crisis grew most alarming not with the failure of exotic derivatives but with the malfunction of far more mundane and reliable financial instruments: money market mutual funds, sanctuary to more than \$3 trillion dollars of America's most conservative investments.³

1. Letter from Bruce R. Bent, Chairman & CEO, The Reserve, to Investors (Jan. 25, 2008), available at http://www.sec.gov/Archives/edgar/data/83335/000110465908008455/a08-1786_1ncsrs.htm; see also, Floyd Norris, *Pride Goeth Before a Fall*, N.Y. TIMES (Sept. 16, 2008, 8:24 PM), <http://norris.blogs.nytimes.com/2008/09/16/pride-goeth-before-a-fall/?emc=eta1> (stating that “[w]hat is most amazing is the way bragging goes before a fall” and quoting parts of Bent’s aphorism present in two letters Bent sent to Reserve shareholders directly before the breaking of the buck in the Reserve’s Primary Fund).

2. Sam Mamudi & Jonathan Burton, *Money Market Breaks the Buck, Freezes Redemptions*, MARKETWATCH (Sept. 17, 2008, 9:11 AM), <http://www.marketwatch.com/story/money-market-fund-breaks-the-buck-freezes-redemptions> (“The size and speed of the withdrawals was stunning. At 3 p.m. on Tuesday, Primary Fund’s assets stood at \$23 billion, a \$40 billion hit from the \$62.6 billion in the fund on Friday . . .”).

3. See INV. CO. INST., 2010 INVESTMENT COMPANY FACT BOOK 160 tbl.37 (50th ed. 2010) [*hereinafter* ICI FACT BOOK] (listing total net assets of all U.S. money market funds as \$3,316,196,000,000 as of 2009).

Subprime mortgage stresses metastasized into systemic threats on September 16, 2008,⁴ when one of the nation's oldest and largest money market funds—the Reserve Primary Fund⁵—broke the buck.⁶ For only the second time in history,⁷ a money market fund failed to return one hundred cents on the dollar to its investors. To investors who considered these funds as safe as bank savings accounts, this startling breach of faith triggered dramatic exit, prompting a run of hundreds of billions of dollars not just on the Primary Fund, but also across the entire money market industry.⁸ Dysfunction in money market funds cascaded into credit markets, as funds liquidated their holdings and deprived corporations of lenders willing to extend vital credit for day-to-day business operations.⁹ Within days, the U.S. Department of the Treasury and the Federal Reserve intervened to thaw the frozen fund industry, credit markets, and broader capital markets by announcing that the United States of America would temporarily guarantee all eight hundred money market funds against losses of up to \$50 billion per fund.¹⁰ One year later, on

4. See HENRY M. PAULSON, JR., *ON THE BRINK* 228–37 (2010) (“I [then-Treasury Secretary Hank Paulson] feared the start of a run on the \$3.5 trillion industry . . .”).

5. See Press Release, The Reserve (Sept. 16, 2008). (“[T]he NAV of the Primary Fund, effective as of 4:00PM, is \$0.97 per share.”).

6. See Diya Gullapalli et al., *Money Fund, Hurt by Debt Tied to Lehman, Breaks the Buck*, WALL ST. J., Sept. 17, 2008, at C1 (noting that the “huge money-market fund, the Reserve Primary Fund,” had broken the buck, marking “the first time one of these conservative funds has had a loss in 14 years”).

7. In 1994, the Community Bankers U.S. Government Fund—an institutional, non-retail fund—became the first money market fund to break the buck, returning ninety-six cents per share. David Evans, *Unsafe Havens*, BLOOMBERG MARKETS (Oct. 2007), http://bloomberg.com/apps/news?pid=nw&pname=mm_1007_story2.html; John Waggoner, *Billions Stream into Ultrasafe Government Funds*, USA TODAY, Aug. 22, 2007, at 9A (opining that the fund was “tiny” and that “[m]ost analysts suggest that worries about money funds . . . are unfounded”).

8. See LAWRENCE G. McDONALD WITH PATRICK ROBINSON, *A COLOSSAL FAILURE OF COMMON SENSE: THE INSIDE STORY OF THE COLLAPSE OF LEHMAN BROTHERS* 325 (2009) (noting the demise of Lehman Brothers and the resulting decisions that “would obliterate the world’s economy”).

9. See generally RICHARD A. POSNER, *THE CRISIS OF CAPITALIST DEMOCRACY* 42–47 (2010). On the interaction of money market funds and the credit markets generally, see MATTHEW P. FINK, *THE RISE OF MUTUAL FUNDS: AN INSIDER’S VIEW* 77–94 (2008); MARCIA STIGUM & ANTHONY CRESCENZI, *STIGUM’S MONEY MARKET* 1110–15 (4th ed., 2007).

10. See Press Release, U.S. Dep’t of the Treasury, Treasury Announces Guaranty Program for Money Market Funds (Sept. 19, 2008), available at <http://www.ustreas.gov/press/releases/hp1147.htm> (announcing the authorization of “the assets of the Exchange Stabilization Fund for up to \$50 billion to guarantee” each money market fund).

September 18, 2009,¹¹ the government terminated this guarantee. In its place, the Securities and Exchange Commission (SEC) promulgated a new set of rules¹² in February 2010 intended to “strengthen the resiliency of money market funds.”¹³

The SEC’s new money market rules are important both because they dramatically affect a broad and important swath of credit and capital markets, and because they may serve as a portent for extensive new SEC rulemaking to come. The money market regulations were among the SEC’s first significant reactions to the financial crisis of 2008; the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010¹⁴ will require scores of new SEC rules across the entire financial landscape.

Yet the SEC’s regulatory response to the misadventures in money market funds is troubling for several reasons and warrants careful attention. First, the SEC’s approach embodies a conception of financial regulation almost entirely at odds with leading economic and legal theory. Rather than remain agnostic as to the merit of specific investments (as neoclassical economic theory would require)¹⁵ or privilege the choice of socially optimal investments (as behavioral theory would encourage),¹⁶ the SEC appears instead to have picked the money market fund—an increasingly problematic and vulnerable investment mechanism—as the specific winner in this marketplace. Second, the SEC’s new rules fundamentally misapprehend the operational dynamics of money market funds, credit markets, and the sensitive interaction of the two. By reducing and thus accelerating the required maturity of portfolio holdings in money market funds and mandating the industry’s

11. See Press Release, U.S. Dep’t of the Treasury, Treasury Announces Expiration of Guaranty Program for Money Market Funds (Sept. 18, 2009), *available at* <http://www.ustreas.gov/press/releases/tg293.htm>.

12. See Money Market Fund Reform Final Rule, 75 Fed. Reg. 10,060 (Mar. 4, 2010) (to be codified at 17 C.F.R. pts. 270, 274).

13. Mary Schapiro, Chairman, SEC, Statement on Money Market Funds Before the Open Commission Meeting, Jan. 27, 2010, *available at* <http://www.sec.gov/news/speech/2010/spch012710mls-mmfm.htm>.

14. Pub. L. No. 111-203, 124 Stat. 1376 (2010).

15. See generally FRANK H. EASTERBROOK & DANIEL R. FISCHEL, *THE ECONOMIC STRUCTURE OF CORPORATE LAW* (1991); RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* (7th ed. 2007); Ronald J. Gilson & Reinier H. Kraakman, *The Mechanisms of Market Efficiency*, 70 VA. L. REV. 549 (1984).

16. See generally David Hirshleifer, *The Blind Leading the Blind: Social Influence, Fads, and Information Cascades*, in *THE NEW ECONOMICS OF HUMAN BEHAVIOR* 188 (Mariano Tonmasi & Kathryn Ierulli eds., 1995); Amos Tversky & Daniel Kahneman, *Introduction to JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES* (Daniel Kahneman, Paul Slovic & Amos Tversky eds., 1982); Christine Jolls & Cass R. Sunstein, *Debiasing Through Law*, 35 J. LEGAL STUD. 199 (2006); Dan M. Kahan & Donald Braman, *Cultural Cognition and Public Policy*, 24 YALE L. & POL’Y REV. 149 (2006).

continued reliance upon ratings agencies whose abysmal performance has been widely condemned, the new rules *increase* rather than decrease the likelihood of future runs on money market funds and consequential failures of the credit markets. Third, notwithstanding the widely unpopular fact that the rescue of failures of these instruments required pledges of billions of dollars of public money, regulators failed to adopt any insurance facility—public or private—to underwrite future emergencies in this field.¹⁷ As a response to the recent failure of money market funds, the SEC's action is inadequate; as a prophylaxis against their future dysfunction, it may indeed be counterproductive.

To appreciate the ramifications of the SEC's decisions, one must begin with an appreciation for the operations of money market funds. Internally, and at their most fundamental, money market funds are simply a species of investment fund like any other collective investment vehicle.¹⁸ While hedge funds, private equity funds, venture capital funds, and certain mutual funds regularly invest in high-risk, high-reward securities for their portfolios, money market funds are characterized by their comparative conservatism. Indeed, the managers of these funds specifically promote them as low-risk, low-reward financial havens—cash equivalents even—and often build portfolios of only the safest and most highly rated securities issued by governments and large corporations.¹⁹ Nevertheless, as the failure of the Primary Fund demonstrated so vividly, money market funds are neither risk-free nor insured against loss.²⁰ Moreover, in light of the government's rapid and massive bailout, the absence of salutary modifications to these funds is likely to increase moral hazard and future systemic risk in this investing arena.

When regulating a potentially dangerous investment, financial authorities may choose from an array of neoclassical, behavioral, or prudential approaches. That is, they may: (a) offer neither encouragement nor discouragement of the particular investment but require issuers to disclose clearly the dangers to the investing public, thereby allowing market mechanisms to reward or punish the investment (the neoclassical approach);²¹ (b) promote to investors alternative, ideally more socially beneficial, investments while permitting sophisticated, fully informed investors to select riskier investments if they so choose

17. See Money Market Fund Reform Final Rule, 75 Fed. Reg. at 10,061–62.

18. See Money Market Fund Reform Proposed Rule, 74 Fed. Reg. 32,688, 32,688–89 (July 8, 2009) (to be codified at 17 C.F.R. pts. 270, 274). See generally JOSEPH NOCERA, A PIECE OF THE ACTION: HOW THE MIDDLE CLASS JOINED THE MONEY CLASS 75–88 (1994).

19. See Money Market Fund Reform Proposed Rule, 74 Fed. Reg. at 32,688.

20. See *id.* at 32,688–90.

21. See, e.g., POSNER, *supra* note 15, at 480–86.

(the behavioral approach);²² or (c) require the issuer to modify the investment to eliminate its dangers as much as possible (the prudential approach). In the United States, the neoclassical approach is the model most closely associated with our securities laws and regulations. Increasingly though, legislators have adopted the behavioral approach. The prudential, or merit-based, approach is rare in the field of U.S. securities regulation but employed in other market sectors, such as food and drugs, and other countries governed with greater regulatory command and control.

Unusual everywhere is the approach the SEC has adopted in the case of money market funds, in which it has helped to promote a potentially dangerous investment by permitting its sponsors to downplay rather than to disclose or eliminate inherent risks.

With its regulatory support, the SEC has collaborated in the creation of an appearance that these investments are as safe as bank deposits while as lucrative as mutual funds. The chief source of this similitude is the pricing system of money market funds—permitted in no other kind of investment fund—which closely resembles that of bank accounts.²³ The price of a typical mutual fund, known as its net asset value (NAV), is a function of the value of its portfolio securities. As the values of underlying investments held by a fund continually change, the fund's NAV will typically fluctuate also.²⁴ When money market funds first became available in the early 1970s, they too featured this “floating NAV.”²⁵ In the late 1970s, however, financial advisors who managed these funds persuaded the SEC to permit the use of a fixed NAV.²⁶ By employing a method for calculating NAV that does not rely on the daily value of portfolio securities (mark-to-market accounting), but instead permits the use of values that assume portfolio securities will be held to maturity and then fully paid (amortized cost accounting), money market funds can maintain a stable NAV of one dollar per share.²⁷ When this

22. See, e.g., Jolls & Sunstein, *supra* note 16, at 208–16.

23. See Money Market Fund Reform Proposed Rule, 74 Fed. Reg. at 32,688. See generally Viktoria Baklanova, Money Market Funds: An Introduction to the Literature (Jan. 26, 2010) (unpublished manuscript), available at <http://www.ssrn.com/abstract=1542983>.

24. William A. Birdthistle, *Compensating Power: An Analysis of Rents and Rewards in the Mutual Fund Industry*, 80 TUL. L. REV. 1401, 1421 (2006).

25. See, e.g., Valuation of Debt Instruments and Computation of Current Price by Certain Open-End Investment Companies (Money Market Funds), 48 Fed. Reg. 32,555 (July 18, 1983) (adopting reforms that permitted money market funds to move from floating to fixed NAVs).

26. See Money Market Fund Reform Proposed Rule, 74 Fed. Reg. at 32,690.

27. See Money Market Fund Reform Final Rule, 75 Fed. Reg. 10,060, 10,060–61 (Mar. 4, 2010) (to be codified at 17 C.F.R. pts. 270, 274).

pricing scheme is combined with check-writing and ATM privileges,²⁸ money market funds look and feel a great deal more like bank savings accounts than the mutual funds they are.

Through an infelicitous side effect of misguided regulation in the related field of banking law, savings accounts in the late 1970s and early 1980s were forbidden by Regulation Q²⁹ of the Federal Reserve Act³⁰ from offering an interest rate of greater than 5.25 percent.³¹ Money market funds could and did offer much higher returns, while projecting the appearance of possessing an equivalent degree of security as bank accounts, and thereby attracted massive inflows from investors. Were these funds required to use the same pricing system as every other mutual fund or to contribute the same deposit insurance premia as bank accounts, they would either look a great deal less like those bank accounts or generate materially lower but more risk-appropriate yields. In essence, without a coherent theoretical justification, the SEC is furnishing one particular species of investment with a regulatory subsidy that enables these funds to win market share from bank accounts and short-term mutual funds by generating higher rewards than the former while falsely appearing to carry less risk than the latter.

In addition to the effect that such obfuscation has on investors *within* money market funds, the SEC's newest regulations also possess potentially deleterious effects on credit and capital markets *outside* these funds. The new rules are likely to exacerbate the same forces that previously conspired to break the buck in money market funds. Declining to mitigate the risk in these funds by returning either to a floating NAV or to deposit insurance, the SEC has looked elsewhere for "risk-limiting conditions" to ensure the safety of the fund's investments.³² The SEC has chosen instead to limit the portfolios of money market funds to only, or predominantly, securities with maturities of very short duration on the theory that shorter-term investments are generally less risky than longer-term ones.³³ Simultaneously, the SEC has reiterated its requirement that funds invest only in securities awarded high ratings from four-credit rating agencies on the theory that such a system will eliminate the least risky investments.³⁴

28. See Money Market Fund Reform Proposed Rule, 74 Fed. Reg. at 32,688 ("Commonly offered features, such as check-writing privileges, exchange privileges, and near-immediate liquidity, have contributed to the popularity of money market funds.").

29. 12 C.F.R. § 225.3 (2009).

30. 12 U.S.C. § 371a (2006).

31. See generally R. Alton Gilbert, *Requiem for Regulation Q: What It Did and Why It Passed Away*, 68 FED. RES. BANK ST. LOUIS REV. 22 (1986).

32. See Money Market Fund Reform Final Rule, 75 Fed. Reg. at 10,060–62.

33. See *id.* at 32,690.

34. See *id.* at 32,690 n.27.

Both of these suppositions are ill-founded. On the question of investment maturity, Professor Jeffrey Gordon argues persuasively that shorter maturations will only accelerate future defaults in the event of market stresses.³⁵ If borrowers have several weeks to repay loans, the market will have more time to react to any developments with those loans; if, instead, borrowers must repay or default within only a few days, a cascade of defaults may come in a quicker flurry with less time for rational reflection and intervention. On the question of ratings agencies, Professor Frank Partnoy has extensively catalogued the problems of financial systems that rely on misleading credit ratings, which have been shown to enhance a false sense of security rather than to convey accurate information.³⁶ The new money market rules are thus likely to make future, external effects of money market funds on capital markets worse, not better.

A compelling alternative fortification for this system would be the establishment of a public or private insurance pool to guarantee the holdings in money market funds. As Federal Deposit Insurance Corporation (FDIC) insurance has demonstrated, insurance can be an effective mechanism for circumventing bank runs.³⁷ All insurance costs money, of course, and any premia paid to support future money market funds that threaten to break the buck would almost certainly be drawn from assets in those funds, thereby reducing their yield and net investment returns. When these funds needed insurance during the 2008 debacle, the federal government provided it free of charge, thus rewarding the fund sponsors' apathy.³⁸ Unless changes are adopted now, fund sponsors may reasonably believe that implicit governmental insurance will support future failures in money market funds as well. The market is thus likely to suffer from the moral hazard of fund sponsors who aggressively pursue ever-higher returns without internalizing the costs of such risky management.³⁹

In Part I of this Article, I discuss the economic and legal development of money market funds in the United States, the specific *internal* financial dynamics of money market funds that precipitated the

35. Comment Letter from Jeffrey N. Gordon, Professor, Columbia Law School, to Elizabeth M. Murphy, Secretary, SEC (Sept. 9, 2009), *available at* <http://www.sec.gov/> (select "Search", search "Gordon" and "comment letter").

36. Frank Partnoy, *The Siskel and Ebert of Financial Markets?: Two Thumbs Down for the Credit Rating Agencies*, 77 WASH. U. L.Q. 619, 654–79 (1999) [hereinafter Partnoy, *Siskel and Ebert*].

37. See generally Christian A. Johnson, *Justice and the Administrative State: The FDIC and the Superior Bank Failure*, 36 LOY. U. CHI. L.J. 483 (2005).

38. See Press Release, U.S. Treasury, *supra* note 10 (announcing the guaranty of money market funds by the U.S. Treasury and the Federal Reserve).

39. See generally Karl S. Okamoto, *After the Bailout: Regulating Systemic Moral Hazard*, 57 UCLA L. REV. 183 (2009).

breaking of the buck in the Reserve Primary Fund and the broader *external* ramifications of that failure upon credit and capital markets in the United States.

In Part II, I analyze the new rules and rationales adopted by the SEC in the wake of the financial crisis, particularly those amending maturity and liquidity requirements, perpetuating the reliance upon credit rating agencies, and retaining the use of a fixed NAV in money market funds. Specifically, I examine the degree to which these rules will—or will not—effectively address the recent internal problems for investors in money market funds and the external problems of future credit crises for corporate borrowers from money market funds.

In Part III, I propose and critique an array of possible solutions intended to address specific issues within money market funds as well as their broader economic impact, including the return to a floating NAV, the use of a dual-tier investment structure for retail and institutional investors, and the establishment of some system of obligatory public, mutual, or private deposit insurance.

I. THE GROWTH AND REGULATION OF MONEY MARKET FUNDS

In four short decades, the assets managed by money market funds in the United States have soared from zero cents to more than three trillion dollars.⁴⁰ Today nearly thirty cents of every dollar that Americans invest in mutual funds flow into a money market fund.⁴¹ The story of this astonishing success turns on two critical developments involving regulatory interventions: one that limited the investment returns of the greatest competitor of money market funds, viz. bank savings accounts; and another that liberated money market funds to emulate the appearance of those bank savings accounts.⁴² As soon as investors believed that they could receive higher performance without sacrificing safety, they redirected huge amounts of their savings away from bank accounts and into money market funds.⁴³ But when the financial crisis of 2008 exposed the structural vulnerabilities of money market funds and reminded the market that these funds are, in fact, far riskier than bank accounts, investors immediately redeemed hundreds of billions of dollars.⁴⁴ Thus the remarkable success—and recent suspicion—of money

40. See ICI FACT BOOK, *supra* note 3, at 160 tbl.37.

41. See *id.* at 22, 23 fig.2.1.

42. See generally Daniel E. Levin, *Breaking the Buck: The End for Money Market Mutual Funds as We Know Them*, 28 REV. BANKING & FIN. L. 747 (2009).

43. See TAMAR FRANKEL & CLIFFORD E. KIRSCH, INVESTMENT MANAGEMENT REGULATION 463–64 (3d ed. 2005).

44. See Diana B. Henriques, *The Buck Broke. So How To Retool Money Funds?*, N.Y. TIMES, Oct. 11, 2009, at BU13.

market funds has long been closely entwined with their regulatory and economic structure.⁴⁵

A. Mutual Funds and Floating NAVs

Less than forty years ago, a privately held investment advisory company named The Reserve brought to market a new mutual fund called the Reserve Fund.⁴⁶ The investment strategy of this novel investment—the nation’s first money market fund—concentrated on the extremely conservative end of the investing spectrum: the fund invested only in securities offered by the United States government or the largest and safest corporate issuers, and only in those securities that offered very short-term maturities. For investors who wished to avoid the perils of equity investments and longer-term debt offerings or the unpredictability of a volatile stock market, a fund such as this could serve as a relatively safe haven while still providing positive, albeit modest returns. This simple idea would win almost universal appeal amongst both retail and institutional investors, as soon as money market funds could modify their pricing mechanism.⁴⁷

As do all mutual funds and indeed most collective investment vehicles, a money market fund gathers assets by persuading investors to invest cash in the fund through the purchase of shares in the fund. The fund’s investment advisor then uses this collective pool of cash to assemble an investment portfolio by purchasing securities offered by other companies or governments. To the extent the advisor makes wise investment decisions, the fund’s portfolio will grow in value and thus generate a beneficial return for all the fund’s shareholders.⁴⁸ Although an investor could, of course, bypass the services of a fund and its advisor by directly acquiring a similar portfolio of underlying securities, millions of American individuals and institutions choose to pay funds—or, more

45. For an excellent overview of the financial literature studying the economic dynamics and performance of money market funds over the past four decades, see Baklanova, *supra* note 23 (surveying “studies related to funds’ investment management practices”).

46. FINK, *supra* note 9, at 80–81; *see also* Revisions to Rules Regulating Money Market Funds, 55 Fed. Reg. 30,239 (Jul. 25, 1990) (to be codified in 17 C.F.R. 230, 239, 270, 274).

47. *See* Timothy Q. Cook & Jeremy G. Duffield, *Money Market Mutual Funds and Other Short-Term Investment Pools*, in *INSTRUMENTS OF THE MONEY MARKET* 156, 164–65 (Timothy Q. Cook & Robert K. Laroche eds., 7th ed. 1993).

48. Note that any growth in assets under management that accrue merely as a function of new investors joining a fund does not increase returns to existing shareholders. Indeed, this phenomenon generally benefits only the fund sponsor. *See* Birdthistle, *supra* note 24, at 1425–26.

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precisely, those funds' advisors—billions of dollars each year⁴⁹ to serve as intermediaries to manage twelve trillion dollars in mutual fund holdings.⁵⁰ In return, these investors gain access to the advisors' investment expertise, instant financial diversification, and the ready ability to redeem their investments for cash.⁵¹

1. MARK-TO-MARKET ACCOUNTING

The Investment Company Act of 1940⁵² and rules promulgated thereunder by the SEC⁵³ govern the general operation of money market funds and, indeed, all registered investment companies (as mutual funds are statutorily defined).⁵⁴ This body of law provides specific guidance on the accounting method that advisors must use for calculating the price that every shareholder pays for his or her shares in a mutual fund, known as the fund's net asset value (NAV). The standard accounting system for mutual funds—set forth in § 2(a)(41) of the Company Act⁵⁵ in conjunction with rules 2a-4⁵⁶ and 22c-1⁵⁷—is known as “mark-to-market accounting.”⁵⁸ Mark-to-market accounting requires that the value of a mutual fund's portfolio reflect the regular fluctuations in the value of a fund's underlying securities, thereby causing the fund's NAV also to oscillate—or to float.⁵⁹

Specifically, mark-to-market accounting requires that a fund's advisor value the fund's portfolio securities using market quotations when the fund's NAV is calculated at the close of business each day.⁶⁰

49. See Baklanova, *supra* note 23, at 5 n.6 (discussing the array and magnitude of fees associated with the management and operation of money market funds).

50. See ICI FACT BOOK, *supra* note 3, at 200 n.2 (reporting total mutual fund assets under management of more than \$12 trillion in 2009).

51. Worldwide holdings in money market funds reached a peak of \$5.7 trillion in 2009. See INV. CO. INST., WORLDWIDE MUTUAL FUND ASSETS AND FLOWS SUPPLEMENTARY TABLES, SECOND QUARTER 2009 tbl.S4 (Oct. 29, 2009).

52. Investment Company Act of 1940, 15 U.S.C. § 80(a)-51 (2006).

53. 17 C.F.R. §§ 270.2a-7, 270.22c-1 (2010).

54. More specifically, money market funds are “open-end management investment companies that are registered under the Investment Company Act and regulated under rule 2a-7 under the Act.” Money Market Fund Reform Proposed Rule, 74 Fed. Reg. 32,688, 32,688 (July 8, 2009) (to be codified at 17 C.F.R. pts. 270, 274).

55. 15 U.S.C. § 80a-2(a)(41).

56. 17 C.F.R. § 270.2a-7.

57. § 270.22c-1.

58. See Money Market Fund Reform Proposed Rule, 74 Fed. Reg. at 32,690 (describing the rules and requirements for using the “mark-to-market” accounting method).

59. See *id.*

60. William A. Birdthistle, *The Fortunes and Foibles of Exchange-Traded Funds: A Positive Market Response to the Problems of Mutual Funds*, 33 DEL. J. CORP.

To illustrate a simple example, picture a fund whose entire portfolio consists only of shares in ExxonMobil. At the close of business, the advisor would multiply the closing value of the ExxonMobil share price by the number of the fund's ExxonMobil shares to determine the value of the fund's portfolio holdings. For fund investments that trade on public exchanges, such a computation is easily and instantaneously made.⁶¹

With securities for which no market quotation is readily available—such as illiquid investments in private companies, foreign markets, or other rarely traded sectors—the valuation process is somewhat more complicated. The fund's board of trustees must make a good faith determination of the portfolio securities' fair value, which it typically does in consultation with a third-party vendor that specializes in valuing such illiquid investments.⁶²

The goal of the mark-to-market accounting system is to compute an accurate and timely value of the fund's portfolio.⁶³ If a fund fails to update the value of an outdated and illiquid holding, it will under or (as is more likely, given the financial incentives) overvalue the total worth of its portfolio. Because advisors are compensated via fees calculated as a percentage of fund assets under their management, fund investors will overpay if a fund's portfolio is inaccurately overvalued. A classic example of this kind of problem with fair valuation involves a fund's investment in a private company—for whose stock there is no publicly traded price or regular valuation event—which has lost much of its value but has not been updated in the fund's overall NAV calculation. Consider, for instance, a start-up venture whose stock costs \$50 dollars per share on January 1. If, one month later, the company were sued very credibly for patent infringement, the value of the company's stock would almost certainly drop well below \$50 per share, even if no publicly traded market reflected that decline. If mutual funds investing in that company did not lower the value of their investments accordingly, they would in effect be overcharging their fund shareholders.⁶⁴ Mark-to-market accounting attempts to ensure that mutual funds are regularly

L. 69, 86–87 (2008) [hereinafter Birdthistle, *Fortunes and Foibles*] (describing the use of “forward pricing” in mutual funds, which results in the calculation of a price only once a day, rather than constantly as with an exchange-traded financial product).

61. See *id.*

62. *Id.* at 103–04 (analyzing situations in which funds have engaged in unfair valuations of their portfolios).

63. See Money Market Fund Reform Proposed Rule, 74 Fed. Reg. at 32,690.

64. See Stephen Choi & Marcel Kahan, *The Market Penalty for Mutual Fund Scandals*, 87 B.U. L. REV. 1021 (2007) (analyzing investor flows related to claims of market-timing and other alleged malfeasance in mutual funds).

reporting the most accurate valuation of their portfolios, primarily to protect the fees that fund shareholders pay.⁶⁵

In addition to holdings that are difficult to value, the calculation of NAV also must include other, simpler computations. A fund's cash holdings, for instance, must also be counted, in addition to liabilities such as administrative expenses, legal fees, and the investment advisory fee, which must be subtracted. When the grand total is determined, that amount is then divided by the total number of shares outstanding to calculate a price per each fund share.⁶⁶

In the first few years of their existence, money market funds such as the Reserve Primary Fund used this mark-to-market accounting system and, accordingly, came with what is known as a floating NAV.⁶⁷

2. THE CONSEQUENCES OF REDEMPTION

The pricing mechanism of mutual funds is relevant not only when investors buy fund shares but even more when they choose to sell them. Importantly, the fact that mutual fund NAVs float makes these funds, by definition, immune from that most devastating problem in the universe of financial withdrawals: runs on the bank.⁶⁸ The disposition of mutual fund shares is unique in the capital markets because all mutual fund shareholders—including money market investors—redeem, rather than trade, their shares.⁶⁹ That is to say, when a shareholder elects to exit a fund, he does not trade his shares on a stock exchange to some other willing investor. Instead, the shareholder puts the shares back into the mutual fund directly, which then pays the investor whatever the price of the NAV happens to be at the close of business that day. This redemption mechanism is not simply a technical trivium; it has enormous consequences for the entire governance and operational dynamics of mutual funds.⁷⁰

By way of contrast, consider that shares in ordinary operating companies trade between investors on a secondary stock exchange. Thus each of those investors buys or sells corporate shares for whatever price the market of supply and demand produces. None of these investors is

65. See Birdthistle, *Fortunes and Foibles*, *supra* note 60, at 103–04.

66. See FRANKEL & KIRSCH, *supra* note 43, at 302.

67. See Money Market Fund Reform Proposed Rule, 74 Fed. Reg. at 32,716–17; see also Dale L. Domian & William Reichenstein, *Performance and Persistence in Money Market Fund Returns*, 6 FIN. SERVS. REV. 169, 171–72 (1997).

68. See generally *Presentment of Check During Run on Bank*, 49 BANKING L.J. 173 (John Edson Brady ed., 1932) (reviewing legal principles of liability attaching to various parties in the event of a run on the bank).

69. See Birdthistle, *Fortunes and Foibles*, *supra* note 60, at 90.

70. See ICI FACT BOOK, *supra* note 3, at 42–44.

guaranteed access to their actual monetary investment in the corporation. Ordinary corporations, unlike mutual funds, accordingly feature what is known as “capital lock-in.”⁷¹ Once early investors commit their investment to the corporation through an initial public offering or other stock offering, the only ways in which capital may subsequently flow out of the corporation back to its investors are through dividends—which are authorized by the board of directors, not the shareholders—or liquidations upon the bankruptcy or dissolution of a corporation.⁷² What subsequent buyers of these shares are willing to pay thus turns largely upon what they believe the future prospects of a corporation are and how those prospects affect the net present value of shares today.⁷³ These trading dynamics, when coupled with the ability to sell corporate shares short and to separate economic and voting rights of shares, contribute to the creation of a market for corporate control with control premia in typical corporations.⁷⁴ Redemption at NAV in mutual funds, by contrast, virtually eliminates such governance mechanisms in those funds.⁷⁵

But in both corporations and mutual funds (and, formerly, money market funds), the fact that their share prices or NAVs float immediately places all investors on notice that the value of their investment can also rise or fall.⁷⁶ Indeed, each trading day of the year, the value of their investment almost certainly will rise or fall, either a few basis points or even multiple percentage points.⁷⁷ Thus the risk of loss—indeed, even of total loss—is a real and omnipresent feature of these investments, engineered into their most salient feature: their price.

71. See generally Lynn Stout, *On the Nature of Corporations*, 2005 U. ILL. L. REV. 253 (describing and discussing “capital lock-in”).

72. See *id.* at 255–58.

73. See *id.* at 265; Levin, *supra* note 42, at 749.

74. See Anupam Chandar, *Corporate Law’s Distributive Design*, 118 YALE L.J. POCKET PART 82 (2008), <http://thepocketpart.org/2008/10/28/chanderresponse.html>.

75. See John Morley & Quinn Curtis, *Taking Exit Rights Seriously: Why Governance and Fee Litigation Don’t Work in Mutual Funds*, YALE L.J. (forthcoming 2010), available at <http://www.ssrn.com/abstract=1547162> (arguing that redemption eliminates the need for and efficacy of other standard corporate governance mechanisms in mutual funds).

76. See Press Release, President’s Working Grp. on Fin. Mkts., Money Market Fund Reform Options 19–23 (Oct. 2010) (“By making gains and losses a regular occurrence, as they are in other mutual funds, a floating NAV could alter investor expectations and make clear that MMFs are not risk-free vehicles.”).

77. See *id.*

3. THE PHENOMENON OF RUNS

Because of their floating prices, however, one risk that was not historically present in either corporate or mutual fund investments was that of a run. A run on a financial institution requires, as a prerequisite, some sort of promise by the institution of a guaranteed return to its counterparties.⁷⁸ A run then occurs when counterparties of the promising institution fear that the institution no longer holds assets sufficient to fulfill all of its obligations.⁷⁹ In such a circumstance, the first parties to divest from the institution are the most likely to receive their entire deposit, while laggards may receive nothing at all.⁸⁰ The dynamics of this situation thus encourage counterparties to rush with as much haste as possible to withdraw their monies before the institution runs completely dry.⁸¹ In a mutual fund, such a phenomenon is structurally impossible, because the fund never makes the initial promise to pay out anything more than each share's pro rata portion of the fund's total assets.⁸²

If a fund's NAV were to drop by 10 percent overnight, for example, the consequences would be identical whether one investor redeemed or every investor redeemed. Each investor in the fund would receive 90 percent of the original value. In an institution that guaranteed full payment, however, the dynamics would be quite different. The first 90 percent of investors to withdraw would receive 100 percent of their deposits, while the last 10 percent would receive nothing. Not wishing to be one of the latter, every investor with time and knowledge will hurry to be one of the former, exacerbating the velocity of the run.⁸³ When money market funds used to operate with floating NAVs, such runs were neither possible nor appeared to be so because investors could readily appreciate the fact that they were guaranteed nothing more than their portion of the fund's inconstant total. Once money market funds adopted fixed NAVs, however, money market investors could then misconstrue the constant price—\$1.00 per share—as an implicit guarantee that their investment was steadfast. And thus with a switch from floating to fixed pricing was

78. See Charles K. Whitehead, *Reframing Financial Regulation*, 90 B.U. L. REV. 1, 21–25 (2010) (stating that “the drop below one dollar per share” in the Reserve’s breaking of the buck “raised the same concerns that spark a bank run – a loss of confidence over financial stability, fueled by uncertainty over the value of the [money market fund’s] assets, causing widespread redemptions across the industry”); Richard McAdams, *Beyond the Prisoner’s Dilemma: Coordination, Game Theory, and Law*, 82 S. CAL. L. REV. 209, 216 (2009) (discussing whether “[b]ank runs represent a classic prisoner’s dilemma”).

79. Whitehead, *supra* note 78, at 21.

80. *Id.* at 13.

81. *Id.*

82. See FRANKEL & KIRSCH, *supra* note 43, at 301–02.

83. See McAdams, *supra* note 78, at 216–17.

laid the foundation of the massive run on money market funds that occurred during the 2008 financial crisis.⁸⁴

B. Regulation Q and Limits on Interest in Bank Accounts

Bank accounts are perhaps the archetypical example of a financial instrument with a fixed obligation. Unlike corporate securities and typical fund investments, bank accounts guarantee deposits with returns certain.⁸⁵ For investors seeking safety, banks are often the option of first resort. Of course, most investors would wish, in addition to that downside protection, for their deposits at least to keep pace with inflation and not merely to remain static over time. To that end, banks offer savings accounts that guarantee more than just the safety of deposits. Although the dangers of banks promising more interest than they can deliver are easy to imagine, the original sin of banks vis-à-vis money market funds was quite the opposite: their failure to promise enough.

1. GUARANTEED RETURNS, RATINGS AND INSURANCE

Banks offer certainty to their depositors through contractual guarantees to repay, not by merely chancing their pricing process to market performance.⁸⁶ As long as a bank remains solvent, the bank is contractually obliged to make all of its depositors whole. Poor performance in the market generally, or of the bank's investments specifically, has no legal bearing on the bank's obligations to its depositors.⁸⁷

How then might a bank fulfill its promise to honor deposits? There are two principal ways. The easiest would be for the bank simply to leave the depositors' money intact in a vault and not to touch it at all. All funds would then be waiting for depositors whenever they wished to withdraw them. Of course, such a system is far from how banks operate. Instead, banks attempt to put their depositors' funds to work by lending or investing the money in search of a positive return. To the extent a bank makes a successful return on those investments—which can be done through very conservative and comparatively safe investments—the bank can both preserve the integrity of its account-holders' deposits while also making a profit for itself. Indeed, in savings accounts, banks will go

84. See Henriques, *supra* note 44, at BU 13.

85. See Levin, *supra* note 42, at 750 (“The contractual terms of the deposit agreement, not market factors, govern the obligation of the bank to pay the depositor her principal.”).

86. *Id.*

87. *Id.*

further by promising not simply to return 100 percent of deposits but to supplement that amount by an additional rate of modest interest.

Of course, the greater the magnitude of return a bank promises its depositors, the riskier its use of the depositors' funds may become.⁸⁸ To generate modest returns, a bank might lend funds only to lenders with outstanding credit scores, large equity cushions, and strong collateral guarantees. This sort of lending is precisely what occurs when a bank "buys" or "invests" in a Treasury bill—the bank is lending its depositors' money to the U.S. government, the institution with the strongest credit and collateral in the world, at the moment.⁸⁹ Of course, the safer and stronger the borrower, the less the borrower will pay to borrow money, so the return on Treasury bills is comparatively low. To increase returns, a bank could lend to large private institutions such as publicly traded corporations, which do not wield the full faith and credit of a sovereign power, but have historically boasted of excellent credit-worthiness.⁹⁰ Because these corporations do not have the supporting resources of the U.S. government, they must entice lenders by offering higher rates of interest. For banks seeking a return, the trade-off between risk and return is clear. As they seek increasingly higher interest rates for their depositors, or higher profits for themselves, they must lend funds to borrowers with ever-higher risks.⁹¹

Assessing the risk of borrowers is thus a primary concern of the credit markets.⁹² A bank might perform extensive due diligence on each potential counterparty to assess its credit risk, but such a process would be expensive, time-consuming, and duplicative. Instead, institutions called Nationally Recognized Statistical Rating Organizations (NRSROs)⁹³—better known as credit ratings agencies, such as Standard & Poor's, Moody's, and Fitch⁹⁴—serve as informational intermediaries by evaluating the creditworthiness of most major borrowers in the markets and assigning them grades that are readily interpreted by a wide universe of potential lenders.⁹⁵ A bank, and indeed any lender, can thus

88. See generally NOCERA, *supra* note 18 (discussing how middle class investors became more willing to acquire debt and accept risk through their growing participation in stocks, mutual funds, and money market accounts).

89. See *id.* at 77–80.

90. See FINK, *supra* note 9.

91. See Levin, *supra* note 42, at 763–65.

92. See generally Niall Ferguson, Remarks at the Carnegie Council Global Ethics Forum: The Ascent of Money: A Financial History of the World (Nov. 20, 2008), available at <http://www.carnegiecouncil.org/resources/video/data/000094>.

93. See Money Market Reform Proposed Rule, 74 Fed. Reg. 32,688, 32,724 (July 8, 2009) (to be codified at 17 C.F.R. pts. 270, 274).

94. See Partnoy, *supra* note 36, at 639.

95. *Id.* at 621–22.

conform the degree of risk and reward it is willing to pursue by lending only to institutions with certain credit ratings.⁹⁶ Extremely conservative institutions highly concerned with the safety of their investments, such as banks, might permit loans only to governments or corporate issuers with the highest ratings.⁹⁷

Notwithstanding a conservative investment approach marked by scrupulous reliance upon independent ratings, a bank's loan may still fail of course. If a borrower defaults or goes bankrupt, the bank's loan is likely to become worthless quickly. The bank may then hold insufficient assets to honor contractual guarantees to its own depositors. As we have seen, these are the circumstances that very easily may spark a run on the bank.⁹⁸

Because of this risk—and hard-learned experience—bank accounts are now insured against loss by the FDIC, an independent government agency created by the U.S. Congress to “maintain stability and public confidence in the nation’s financial system[] by insuring deposits [in banks].”⁹⁹ The FDIC insures each depositor up to at least \$250,000 per institution.¹⁰⁰ Not only does this facility reimburse significant potential losses, its presence forestalls runs on banks.¹⁰¹ Because deposits are guaranteed, individual depositors have no need or incentive to sprint to withdraw their funds in the event of a bank failure. The FDIC has worked remarkably well at both preserving deposits and preventing runs.¹⁰² Of course, no insurance comes without a premium, and every penny paid to insure a bank account comes directly out of the potential interest returns on that account.

2. THE RISE AND DEMISE OF REGULATION Q

But deposit insurance has not been the only source of friction to drag the returns of bank accounts lower than comparable investments free from insurance and its premia. The most important historical limitation on the interest rates of bank accounts was a regulatory

96. *See id.* at 629–30.

97. *Id.* at 622 n.12

98. *See* Steven L. Schwarcz, *Systemic Risk*, 97 GEO. L.J. 193, 199 (2008) (describing bank runs and their dynamics as classic examples of systemic risk).

99. *FDIC Mission, Vision, and Values*, FEDERAL DEPOSIT INSURANCE CORPORATION, <http://www.fdic.gov/about/mission/index.html>.

100. Press Release, Fed. Deposit Ins. Corp., Basic FDIC Insurance Coverage Permanently Increased to \$250,000 Per Depositor (Jul. 21, 2010), <http://www.fdic.gov/news/news/press/2010/pr10161.html>.

101. *See id.*

102. *See* Schwarcz, *supra* note 98, at 211 (noting the salutary effects of the creation of the FDIC).

restriction: Regulation Q.¹⁰³ For more than half a century, from 1933 until 1986, Regulation Q imposed a ceiling on the rates that banks could pay on savings deposits.¹⁰⁴

Through the Banking Acts of 1933 and 1935, Congress enacted Regulation Q to authorize the Federal Reserve to set the permissible rates of interest that banks would be allowed to pay their customers.¹⁰⁵ These price ceilings had multiple purposes: “[T]o encourage country banks to lend more in their local communities rather than hold balances with larger banks in financial centers,”¹⁰⁶ to improve liquidity in the banking system; and “to increase bank profits by limiting the competition for deposits” because “competition for deposits not only reduced bank profits by raising interest expenses, but also might cause banks to acquire riskier assets with higher expected returns in attempts to limit the erosion of their profits.”¹⁰⁷

In the 1970s, policymakers wielded Regulation Q to impose ceiling rates that rested below market rates of interest, a decision with quick and powerful consequences.¹⁰⁸ Throughout the late 1960s and all of the 1970s, the ceiling rate under Regulation Q never rose above 6 percent. During the same period, however, the three-month Treasury bill offered interest rates almost always significantly higher, even spiking above 14 percent at times.¹⁰⁹ Investors seeking returns could obviously do far better by investing their money outside rather than inside bank accounts.¹¹⁰ Predictably, investors eagerly sought out investment vehicles that were not restricted by Regulation Q’s limits on interest.¹¹¹ The newly introduced Primary Reserve Fund and its ilk were just such investments.

C. Money Market Funds and Fixed NAVs

As we have seen, money market funds in their earliest incarnations—like all other mutual funds—originally featured a floating

103. See generally Gilbert, *supra* note 31 (reviewing the history, administration, and goals of Regulation Q).

104. See *id.* at 22.

105. *Id.*

106. *Id.*

107. *Id.* at 23.

108. See Joseph A. DiNuzzo, *The Depository Institutions Deregulation Committee: Did It Achieve the Goal?*, 101 BANKING L.J. 100, 100–01 (1984).

109. See Gilbert, *supra* note 31, at 29 fig.3.

110. See Kenneth T. Rosen & Larry Katz, *Money Market Mutual Funds: An Experiment in Ad Hoc Deregulation*, 36 J. FIN. 1011, 1011, 1015 (1983).

111. See Gilbert, *supra* note 31, at 29–30.

NAV that differed markedly from the fixed return of bank accounts.¹¹² But throughout the 1970s, sponsors of mutual funds petitioned the SEC for, and received, exemptions to use an alternative to the mark-to-market accounting technique.¹¹³ By using a method known as amortized-cost accounting,¹¹⁴ money market funds could maintain a stable NAV that looks much more like the valuation of a bank deposit, thus dramatically closing the gap in appearances between the two instruments. This pricing change occurred just as Regulation Q was artificially suppressing bank interest rates far lower than market interest rates. Thus by looking like a bank account, yet offering far higher yields, money market funds became tremendously popular.¹¹⁵

1. AMORTIZED-COST ACCOUNTING

In its June 2009 release proposing new regulations for money market funds, the SEC describes the operation and consequences of amortized-cost method of valuation as follows:

Under the amortized cost method, portfolio securities are valued at cost plus any amortization of premium or accumulation of discount (“amortized cost”). The basic premise underlying money market funds’ use of the amortized cost method of valuation is that high-quality, short-term debt securities held until maturity will eventually return to the amortized cost value, regardless of any current disparity between the amortized cost value and market value, and would not ordinarily be expected to fluctuate significantly in value.¹¹⁶

In exchange for promising to invest only in “high-quality, short-term debt securities,”¹¹⁷ the SEC permitted money market funds to use this method of accounting. Indeed, after numerous fund sponsors made identical petitions and promises, the SEC amended Rule 2a-7 to permit all money market funds to use this method.¹¹⁸ As a consequence, all money market funds gained the ability to maintain a stable NAV of

112. See *supra* text accompanying notes 24–25.

113. See *supra* text accompanying notes 25–27.

114. See Money Market Fund Reform Proposed Rule, 74 Fed. Reg. 32,688, 32,688 (July 8, 2009) (to be codified at 17 C.F.R. pts. 270, 274).

115. See *Gilbert*, *supra* note 30, at 31, 32–33; Levin, *supra* note 42, at 752–53.

116. Money Market Fund Reform Proposed Rule, 74 Fed. Reg. at 32,690.

117. *Id.*

118. See *id.*

\$1.00 per share.¹¹⁹ In effect, they now look extremely similar to bank accounts with guaranteed returns.¹²⁰

The similarity to bank accounts was heightened by money market funds' adoption of several additional bank-like features. First, money market funds adopted a penny-rounding method of pricing, in which "the current net asset value per share is rounded to the nearest one percent" when calculating NAV for the "purposes of distribution, redemption and repurchase."¹²¹ Once the price of money market funds was thus stabilized, other features that rely upon pricing predictability became common, such as "check-writing privileges, exchange privileges, and near-immediate liquidity."¹²²

Once money market funds began to enjoy early success, the resemblance to bank accounts was made complete with a misjudgment by banks themselves.¹²³ Witnessing their customers flee bank accounts for the higher returns of money market funds, banks fought back first by lobbying for the elimination of Regulation Q and then by offering something they called "money market deposit accounts."¹²⁴ The name of this novel product was simply a marketing tactic, albeit a poor one. This kind of new bank account had no "relationship to the money market other than via the name of its nemesis, the money market mutual fund."¹²⁵ Instead, it was simply "a deposit account product designed to make consumers believe that it was the same as the money market mutual funds that those consumers had come to love."¹²⁶ But increasing the level of confusion did not help banks—money market funds continued to grow, and investors increasingly came to assume they possessed bank-like security.¹²⁷ Indeed, with the two similarly named instruments now competing head-to-head, the money market mutual funds would prevail because they did not carry insurance and thus did not deduct insurance premia from their returns. Compared to an FDIC-insured instrument, like money market deposit accounts, they would always bring greater returns—as well as greater risk.

119. See *id.* at 32,688, 32,690.

120. See, e.g., Richard A. Booth, *Things Happen*, 55 VILL. L. REV. 57, 64 (2010) ("Consumers developed unrealistic expectations about money market funds (MMFs). Consumers came to assume that MMFs were equivalent to an insured checking account that paid interest.").

121. Money Market Fund Reform Proposed Rule, 74 Fed. Reg. at 32,690 n.23.

122. *Id.* at 32688.

123. See Levin, *supra* note 42, at 753–54.

124. *Id.* at 752–53, 756.

125. *Id.* at 756.

126. *Id.* at 757.

127. See ICI FACT BOOK, *supra* note 3, at 160 tbl.37.

2. THE GROWTH OF MONEY MARKET FUNDS

The fact that money market funds quickly took on the appearance of bank accounts, while offering far higher rates of return—because they were not restricted by Regulation Q and not subject to insurance premia—triggered tremendous growth in these investments.¹²⁸ From 1970, when they contained no money whatsoever, until their peak in 2008, money market funds accumulated almost \$4 trillion in assets under management.¹²⁹ During that time, they grew from zero funds to more than one thousand at their peak in 1999.¹³⁰

Currently, more than seven hundred and fifty money market funds are registered with the SEC. In aggregate, they hold more than \$3.2 trillion, which represents approximately 30 percent of all assets invested in the entire mutual fund industry.¹³¹ The money market field has also specialized to a significant degree, and now features prime funds, government funds, and tax-exempt funds.¹³² Prime funds typically hold an assortment of “taxable short-term obligations issued by corporations and banks, as well as repurchase agreements and asset backed commercial paper secured by pools of assets.”¹³³ Government funds “principally hold obligations of the U.S. Government, including obligations of the U.S. Treasury and federal agencies and instrumentalities, as well as repurchase agreements collateralized by Government securities.”¹³⁴ Investing in the private sector is generally considered riskier than investing in government securities, so prime funds usually offer a higher rate of return, while government funds offer greater safety. Tax-exempt funds “primarily hold obligations of state and local governments and their instrumentalities, and pay interest that is generally exempt from federal income taxes.”¹³⁵

Perhaps the major development of money market funds in recent years concerns the nature of the shareholders who purchase shares in the funds. Initially, money market funds sought investment from individuals. Today, institutional investors—such as corporations, hedge funds, pension funds, and governmental entities—use money market funds to

128. *See id.*

129. *See id.* at 126 tbl.3.

130. *See id.* at 128 tbl.5.

131. *See id.* at 22, 126; Money Market Fund Reform Proposed Rule, 74 Fed. Reg. 32,688, 32,688–89 (July 8, 2009) (to be codified at 17 C.F.R. pts. 270, 274).

132. *See* Money Market Fund Reform Proposed Rule, 74 Fed. Reg. at 32,689.

133. *Id.*

134. *Id.*

135. *Id.*

“outsource[]” their cash management operations.¹³⁶ Institutional investors now own approximately 66 percent of assets in these funds.¹³⁷

But the impact of money market funds is not confined simply to the internal dynamics of funds and their investors. This enormous investment pool also interacts importantly with the broader money and credit markets, in which money market funds use their \$3 trillion to buy and sell short-term investments.¹³⁸ Those external affairs of money market funds played a significant role in the financial crisis of 2008.¹³⁹

D. Breaking the Buck and Financial Crisis

Stresses in the U.S. financial system that had built up throughout 2008 reached a critical point in mid-September of that year when Lehman Brothers Holdings Inc. declared bankruptcy.¹⁴⁰ The bankruptcy of Lehman Brothers caused the Reserve Primary Fund first to break its buck and then to experience a run by its shareholders.¹⁴¹ The Primary Fund held \$63 billion in assets under management, of which it had invested \$785 million—or more than 1.2 percent of its portfolio—in commercial paper issued by Lehman Brothers.¹⁴² When Lehman Brothers went bankrupt, the value of its commercial paper plummeted to zero. Thus, the Primary Fund instantly lost \$785 million in value, which dropped its NAV per share from \$1.00 to \$0.97¹⁴³ and thereby broke its buck.¹⁴⁴

Although that loss may not appear substantial, when applied to large investment holdings, shareholders stood to lose hundreds of millions of dollars that they had assumed were rock solid. More importantly, the loss triggered a run on the fund that threatened to impose far greater losses on

136. *Id.*

137. *See id.*

138. *See id.*

139. *See* PAULSON, *supra* note 4, at 234–38.

140. *See* McDONALD, *supra* note 8, at 324–25; Steven M. Davidoff & David Zaring, *Regulation by Deal: The Government’s Response to the Financial Crisis*, 61 ADMIN. L. REV. 463, 504–08 (2009) (noting the role of money market funds and the Reserve’s breaking of the buck in the cascade of events culminating in the financial crisis of 2008); Edward R. Morrison, *Is the Bankruptcy Code an Adequate Mechanism for Resolving the Distress of Systemically Important Institutions?*, 82 TEMP. L. REV. 449, 451 (2009).

141. *See* Mamudi & Burton, *supra* note 2.

142. *See id.*

143. *Id.*

144. *See* Mercer E. Bullard, *Federally-Insured Money Market Funds and Narrow Banks: The Path of Least Insurance*, (March 2, 2009) (unpublished article), *available at* <http://ssrn.com/abstract=1351987> (“An [money market fund] is permitted to maintain a \$1.00 per share NAV only as long as the per share market value of its holdings does not drop below \$0.995.”).

the last investors remaining in the fund.¹⁴⁵ When large institutional investors learned that the Primary Fund was writing down its Lehman holdings to zero, they immediately attempted to redeem their shares.¹⁴⁶ If the Reserve honored its commitment to these shareholders, it would have had to pay the departing institutional investors \$1.00 for every redeemed share. As each early investor left the fund with fully intact redemptions, the \$785 million loss would grow into an ever-increasing percentage of loss for the stragglers. Just as in a classic bank run, the first depositors out the door might exit with their entire holdings until the bank's reserves are exhausted, at which point remaining depositors would receive nothing.¹⁴⁷ To avoid this outcome, smaller investors in the fund sued to enjoin all redemptions until a federal court could oversee an orderly liquidation of the entire fund on a pro rata basis.¹⁴⁸

In addition to these internal dynamics among the money market fund, its sponsor, and its investors, the failure of the Primary Fund dramatically illustrated the interdependence between money market funds and the capital markets. When shareholders in the fund first demanded redemptions, the Primary Fund quickly paid out its available cash reserves to satisfy those requests.¹⁴⁹ Once all of the fund's cash had been redeemed, the only way the fund could satisfy additional redemptions was to sell portfolio holdings.¹⁵⁰ Just like widespread

145. See Kenneth Ayotte & David A. Skeel, Jr., *Bankruptcy or Bailouts?*, 35 J. CORP. L. 469, 488–90 (2010).

While causality is difficult to establish, most observers believe that the fear resulting from the Lehman filing and the implications for Reserve Primary Fund spilled over into redemption requests at other money market funds, many of which had negligible exposure to Lehman. Systemic concerns were substantial, because many corporate borrowers rely on the commercial paper market to fund their short-term operations, and a run on money market funds takes needed capital out of this market.

Id. at 489.

146. See Henriques, *supra* note 44.

147. See Press Release, President's Working Grp. on Fin. Mkts., *supra* note 76, at 11–13 (discussing the run on the Reserve Primary Fund); Andrew B. Lyon, *Money Market Funds and Shareholder Dilution*, 39 J. FIN. 1011 (1984).

148. See Kara McGuire, *Ameriprise Sues Managers of Troubled Money Fund*, MINN. STAR-TRIB., Sept. 19, 2008, at D1, D2 (“With billions of dollars of client money at stake, Minneapolis broker-dealer Ameriprise Financial Inc. on Friday sued New York fund manager the Reserve Management Co., alleging it tipped off big institutional investors about its troubled money market fund, the Primary Fund, but not smaller investors.”); see also *In the Matter of The Reserve Fund, Investment Company Act*, 73 Fed. Reg. 55,572, 55,572 (Sept. 25, 2008) (in which the SEC issued an order permitting the suspension of redemptions in certain Reserve funds to permit their orderly liquidation).

149. See Money Market Fund Reform Proposed Rule, 74 Fed. Reg. 32,688, 32,691 (July 8, 2009) (to be codified at 17 C.F.R. pts. 270, 274).

150. *Id.*

margin calls in a bear market, the fund's rapid sale of its holdings further depressed the market valuations of those securities. As shareholders in other money market funds witnessed the collapse of Lehman Brothers' commercial paper, the potential bankruptcy of similar financial borrowers, the run on the Primary Fund, and the downward pressure on prices by rapid liquidations in the credit markets, they too sought redemptions and thus precipitated runs on other money market funds.¹⁵¹

Of course, money market funds had suffered losses in their portfolios previously—the collapse of Lehman Brothers paper was dramatic but certainly not the first time an investment held by a money market fund had unexpectedly declined in value. Indeed, once previously—though only once—a money market fund had broken its buck.¹⁵² But well over a dozen times previously, losses in a money market fund's portfolio had threatened to break the buck.¹⁵³ In each of those other cases, however, the investment advisor managing the fund had itself stepped in to prevent the buck from breaking.¹⁵⁴ To do so, the advisor or one of its affiliates paid full price for whatever holding in the fund's portfolio had fallen in value and threatened the integrity of the fund's price.¹⁵⁵ Thus, the fund was made whole, the advisor absorbed the loss, and the fund shareholders might never have known the difference. Of course, for an advisor to absorb these losses, it must have sufficient resources to do so. Many fund advisors are affiliates of major financial institutions, with large pools of capital at their disposal, and have proven capable of engineering these internal bailouts.¹⁵⁶ The Reserve, however, is a much smaller and independently owned operation. And, in the case of its Lehman Brothers losses, it simply did not have the financial wherewithal to pump \$785 million into the fund.¹⁵⁷

Immediately after the Primary Fund broke its buck, investors redeemed approximately \$300 billion from other prime funds.¹⁵⁸ Bracing themselves for runs on their own funds, other advisors of money market

151. See *id.* at 32,691–92.

152. In 1994, the Community Bankers U.S. Government Fund became the first money market fund to break the buck, when its price per share fell four cents short of the \$1.00 level. See Mamudi & Burton, *supra* note 2.

153. *Id.*

154. See Bullard, *supra* note 144, at 10 (“On occasions when [money market funds’] share values have declined below or have come close to declining below \$0.995, their sponsors have purchased the impaired portfolio securities at their face value, injected cash into the fund, or taken other steps to prevent the fund’s price from dropping below \$1.00 per share.”).

155. See Money Market Fund Reform Proposed Rule, 74 Fed. Reg. at 32,690–91.

156. See *id.*

157. See *id.* at 32,691.

158. See *id.* at 32,691–92.

funds retained their cash positions rather than continue to invest as normal in money market securities.¹⁵⁹ With this complete cessation of new investment in short-term debt instruments, the money market consequently “seized up” and thus “impair[ed] access to credit in short-term private debt markets.”¹⁶⁰ That is to say, the nation’s large operating companies immediately lost access to huge sources of loans that they used continually to manage their daily operations.

To halt the spread of this credit debacle across the broader economy, the U.S. government announced massive and immediate measures. On September 19, 2008, the Treasury and the Federal Reserve announced a Temporary Guarantee Program for Money Market Funds, “an unprecedented market intervention by the federal government in order to stabilize and provide liquidity to the short-term markets”¹⁶¹ by insuring each of the country’s money market funds against losses of up to \$50 billion per fund.¹⁶²

Soporific money market funds no longer bored their investors into a sound sleep, as the head of the Reserve, Bruce Bent, had previously suggested.¹⁶³ On the contrary, their failures had precipitated a potentially calamitous failure of the U.S. economy and triggered massive and unprecedented government intervention.

II. A CRITIQUE OF THE NEW REGULATIONS AND RATIONALES

Almost a year and a half after the breaking of the Primary Fund’s buck and its collateral damage, the SEC finalized new rules that attempt to grapple with the failures of money market funds.¹⁶⁴ While the Federal Reserve and the Treasury Department wielded both the monies and the authority to play a more immediate and prominent role in addressing the financial crisis, the SEC’s reaction to those events is only now becoming clear through its more deliberate regulatory response. But the SEC’s new revisions to Rule 2a-7—which tinker with permissible portfolio holdings, perpetuate the use of discredited ratings agencies, and cling to the fixed NAV¹⁶⁵—are a deeply disappointing response to money market funds specifically. As a portent of the SEC’s broad swath of future rulemaking

159. *See id.* at 32,692.

160. *Id.*

161. *Id.*

162. Diana B. Henriques, *Rescue Plan for Funds Will Come at a Price*, N.Y. TIMES, Sept. 20, 2008, at C1.

163. *See* Norris, *supra* note 1.

164. *See* Money Market Fund Reform Final Rule, 75 Fed. Reg. 10,060, 10,060 (Mar. 4, 2010) (to be codified at 17 C.F.R. pts. 270, 274).

165. *See id.* at 10,060–63.

under the Dodd-Frank legislation in response to the financial crisis,¹⁶⁶ these money market rules are particularly troubling.

The SEC's new approach exhibits a conception of financial regulation remarkably inconsistent with widely accepted economic and legal theory. While neoclassical economic theory counsels regulators to remain detached as to the merit of specific investments,¹⁶⁷ and behavioral theory permits the privileging of certain, socially optimal investments,¹⁶⁸ the SEC has chosen an altogether different path. The SEC has instead extended a policy of providing a regulatory subsidy to one specific investment vehicle, money market funds, at the expense of others. That is, rather than establishing a neutral ground on which bank deposits, short-term bond funds, and other investment vehicles compete evenly against one another, the SEC has picked a winner by tilting the field towards money market funds, which have just demonstrated their profound weaknesses and vulnerability.

In conducting a post-mortem of the dynamics of money market funds during the recent crisis, analysts and regulators must identify the most salient defect and then the most relevant solutions. The most important failure of the Reserve Fund was not the unfortunate roiling of its *internal* shareholders by a run on the fund but, instead, the widespread and deleterious *external* effects on the credit and capital markets. After all, the particular investors of the Reserve Fund, after the orderly judicial liquidation of the fund, ultimately lost only one cent on the dollar.¹⁶⁹ As Professor Richard Booth states, "it is arguable that breaking the buck is no big deal. Plenty of depositors would have taken some risk for a little return on their checking accounts."¹⁷⁰ But the effects of money market malfunction on the broader marketplace were far more serious, both in terms of the billions of dollars required to forestall them and the millions of companies and citizens stymied by the resulting loss of credit. Yet the regulations passed by the SEC do not appear to target these more worrisome systemic vulnerabilities.

166. See generally Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010).

167. See generally POSNER, *supra* note 15.

168. See RICHARD H. THALER & CASS R. SUNSTEIN, NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS 104 (2008).

169. See *S.E.C. Plan to Distribute Money Fund Is Accepted*, N.Y. TIMES, Nov. 25, 2009, at B3 ("The estimated \$3.5 billion remaining assets of the Reserve Primary Fund should be distributed on a prorated basis to shareholders, a federal judge ruled on Wednesday in response to lawsuits filed after the fund's value dropped below \$1 a share in September 2008. . . . In a ruling that largely accepts a distribution plan proposed by the Securities and Exchange Commission, the judge said that regulators and the fund's trustees estimated that investors would recover 99 cents a share if remaining assets were distributed pro rata.").

170. Booth, *supra* note 120, at 65.

A. Shorter Maturity and Greater Liquidity

The most serious technical deficiency of the SEC's new rules is the agency's mistaken view of the ways in which money market funds interact with the broader credit markets.¹⁷¹ This misapprehension is manifest in the SEC's new requirements that the composition of portfolios in money market funds consist of investments of shorter maturity and greater liquidity.¹⁷² Generally speaking, investments with shorter maturity and greater liquidity carry less risk to the investors who hold them but, as Professor Gordon illuminates, the SEC's new rules actually increase risk to the broader financial system.¹⁷³ Inasmuch as investors in even the broken Reserve Fund lost only 1 percent of their holdings,¹⁷⁴ the systemic effects of the broken buck are clearly far more important.

In its revisions to Rule 2a-7, the SEC has reduced the average weighted maturity of permissible money market investments from ninety days to sixty days.¹⁷⁵ Similarly, the weighted average life of these permissible investments is now limited to one hundred and twenty days.¹⁷⁶ The SEC argues that these shorter time horizons decrease a fund's exposure to interest-rate risk, decrease the amplification of credit and interest-rate spreads on a fund, and reduce liquidity risk because a greater percentage of a fund's investments will mature on a daily or weekly basis.¹⁷⁷ While these arguments are relatively uncontroversial, they apply only to the *internal* dynamics of funds. That is, they are intended to protect money market funds from the dangers of their own portfolio investments.

But, as Gordon argues, the SEC's attempt to limit risks within money market funds "adds systemic risk to financial intermediation by heightening the pressure on short-term money markets," a "flaw" that is "fundamental and requires a rethinking of the general [money market fund] framework."¹⁷⁸

The premise of the SEC's tightening of portfolio requirements in money market funds rests upon the SEC's earlier decision to permit fixed NAVs. That is, in order to ensure that funds with fixed NAVs never

171. See Money Market Fund Reform Final Rule, 75 Fed. Reg. 10,060, 10,099 (Mar. 4, 2010) (to be codified at 17 C.F.R. pts. 270, 274).

172. See *id.* at 10,070–78.

173. See Letter from Jeffrey N. Gordon to Elizabeth M. Murphy, *supra* note 35, at 3.

174. See *S.E.C. Plan to Distribute Money Fund is Accepted*, *supra* note 169.

175. See Money Market Fund Reform Final Rule, 75 Fed. Reg. at 10,070.

176. *Id.*

177. *Id.*

178. Letter from Jeffrey N. Gordon to Elizabeth M. Murphy, *supra* note 35, at 2.

experience precipitous or dramatic declines in their portfolios—a step necessary to ensure that these funds do not experience runs like those in 2008—the SEC has elected to place substantive constraints on the kinds of portfolio securities in which these funds may invest.¹⁷⁹ And if short maturities are relatively riskless, the thinking appears to go, then even shorter maturities must be safer still. But the relatively minor improvement in the quantum of risk experienced by fund investors when the maturity is reduced from ninety to sixty days is vastly outweighed by the comparatively major increase in the systemic risk. As Gordon notes, “by shortening maturities the SEC proposal [now rule] will increase rather [than] reduce the fragility of these markets because it makes it easier for [money market funds] to ‘run’ at a time of financial distress.”¹⁸⁰

Gordon’s argument becomes clearer when one considers the interests of counterparties to money market funds. Money market funds buy short-term debt—that is, they lend money to the issuers of that debt—from corporations who need funds to pay for daily operations such as payroll and trade vendors.¹⁸¹ Any solvent corporation could, of course, choose not to borrow money for these mundane and predictable purposes. A large enterprise such as General Electric, for example, could simply ensure that it maintained a cash reserve large enough to cover daily or weekly expenditures. But in order to do so, General Electric would need to pay very close attention to its cash flow and, to avoid miscalculating, would need to include a conservative buffer of more cash than it ever actually needed.¹⁸² Devoting resources to the careful and conservative management of cash flow necessarily depletes resources that could be used to expand General Electric’s more profitable enterprises.¹⁸³ Perhaps it cannot build a new and more efficient plant because those funds would deplete cash reserves too much, so the company persists with outdated facilities. If, instead, General Electric could simply borrow at short notice and little cost whatever funds it needed to cover daily outlays, and then repay those loans right away, the corporation could operate far more leanly and efficiently.¹⁸⁴ And, given the overall size and soundness of its operations, the creditworthy corporation could certainly obtain an extremely short-term loan for very

179. Money Market Fund Reform Final Rule, 75 Fed. Reg. at 10,070.

180. Letter from Jeffrey N. Gordon to Elizabeth M. Murphy, *supra* note 35, at 3.

181. *See* STIGUM & CRESCENZI, *supra* note 9, at 51–53.

182. *See id.*

183. *See id.*

184. *See id.*

low prices. This process, writ large, drives much of the money market in the United States.¹⁸⁵

But now imagine the effect of the new SEC rules. If every money market fund reduces the average maturity of its holdings from ninety days to sixty days, borrowers such as General Electric will have, on average, that much less time to repay their loans. Normally, this abbreviated schedule should not be a problem for a company like General Electric. But at moments of great stress in the economy—such as we experienced recently—many corporations may experience cash-flow strains simultaneously.¹⁸⁶ If those companies now have less, not more, time to repay their loans, the chances of default will necessarily increase.

One or two defaults may not necessarily pose a serious threat. But as we saw with Lehman Brothers in 2008,¹⁸⁷ even a single default can trigger market-wide problems if large investors react precipitously. If all money market loans have shorter maturities, then any defaults will come faster and more quickly—precisely the sort of cascade that will accelerate and exacerbate widespread panics.

The SEC should be seeking to lengthen the potential time for greater reflection and intervention, by both private parties and regulators, in future moments of financial stress. But these new maturity requirements do the opposite. In essence, the SEC appears to have purchased a minor reduction in risk to the shareholders of money market funds with a major increase in risk to the entire system of credit.

B. The Continued Use of Credit Ratings Agencies

Perhaps the most curious decision of the SEC in response to all that has occurred in the past two years is its renewed endorsement of the credit ratings agencies.¹⁸⁸ In its newest rules, the SEC continues to limit a money market fund's investments only to securities that have been rated—and rated highly—by NRSROs.¹⁸⁹ If there is widespread consensus on the profound failure of any single component of the U.S.

185. *See id.*

186. *See* PAULSON, *supra* note 4, at 235.

187. *See* McDONALD, *supra* note 8.

188. *See* Money Market Fund Reform Final Rule, 75 Fed. Reg. 10,060, 10,068–69 (Mar. 4, 2010) (to be codified at 17 C.F.R. pts. 270, 274); Frank Partnoy, *Historical Perspectives on the Financial Crisis: Ivar Kreuger, the Credit-Rating Agencies, and Two Theories about the Function, and Dysfunction, of Markets*, 26 YALE J. ON REG. 431, 442 (2009) [hereinafter Partnoy, *Historical Perspectives*] (“Over time, private use of credit ratings grew to mimic regulatory use. . . . Instead of using judgment to assess credit risk or even looking to key measures of credit risk—especially probability of default—private actors simply relied on ratings.”).

189. *See* Money Market Fund Reform Final Rule, 75 Fed. Reg. at 10,068.

financial system during the recent crisis, surely it is with these ratings agencies that continued to assign their highest ratings to securitized bundles of ultimately worthless subprime mortgages.¹⁹⁰ Yet when regulations require the use of such agencies, these agencies will continue to operate and, very likely, to continue to mislead investors with false assurances as to the safety of investments. Rather than attempting to swaddle the dangers of money market investments with misleading credit ratings, the SEC should be doing all it can to inform investors that the risks of these funds are real and potentially expensive. No regulation—by the SEC or any other financial regulator—should continue to rely on these privileged and prodigal NRSROs.

The SEC argues for the continued use of these agencies as a “screen on credit quality.”¹⁹¹ But the SEC has also been quick to emphasize that the advisors of money market funds are legally obliged to “perform an independent credit analysis of every security purchased.”¹⁹²

In light of this requirement of an independent credit analysis by the fund’s sponsor, the continued use of the agencies remains truly perplexing. As Professor Partnoy and many others argue, the credit agencies suffer from serious and irredeemable capture.¹⁹³ That is, agencies rate only the securities of issuers who pay them for precisely that service. Naturally, issuers who seek high ratings will migrate their business to agencies that offer favorable ratings, leading to systemic grade inflation by all agencies that wish to remain in business.¹⁹⁴

These artificially high ratings are worse than useless because, with the regulatory imprimatur of the SEC, they falsely assure investors that investments are stronger and safer than they truly are. Having no such assurance might prompt investors—or their intermediaries—to conduct their own due diligence or at least to exercise caution.¹⁹⁵ But learning that a security has a AAA rating might coax investors into transactions that are, in fact, far more perilous.

Dissenting SEC Commissioner Kathleen Casey notes that ratings and their use by the SEC “have long acted as a crutch rather than a safeguard for many investors, creating a false sense of comfort and protection and effectively encouraging their use as a substitute for due

190. See, e.g., Kia Dennis, *The Ratings Game: Explaining Rating Agency Failures in the Build Up to the Financial Crisis*, 63 U. MIAMI L. REV. 1111, 1113 (2009).

191. Press Release, SEC, SEC Approves Money Market Fund Reforms to Better Protect Investors (Jan. 27, 2010), <http://www.sec.gov/news/press/2010/2010-14.htm>.

192. *Id.*

193. See Dennis, *supra* note 190, at 1124–25; Partnoy, *Historical Perspectives*, *supra* note 188, at 438, 442; Frank Partnoy, *Siskel and Ebert*, *supra* note 36.

194. See Partnoy, *Siskel and Ebert*, *supra* note 36, at 623.

195. *Id.* at 623–24.

diligence - not only on the part of funds and investors, but regulators as well.”¹⁹⁶

As with the foregoing maturity requirements, the SEC’s reliance upon ratings agencies whose abysmal performance has been widely condemned *increases* rather than decreases the likelihood of future runs on money market funds and consequential failures of the credit markets.

C. The Retention of a Fixed NAV

A false sense of security is perhaps the single largest peril of money market funds today. These funds convey an artificial impression that they are as safe as bank accounts, when recent events so clearly demonstrate that they are not. This sense of security is certainly exacerbated by the continued reliance upon ratings agencies, but the chief culprit in propagating this impression is the fixed NAV, because it so closely resembles the fixed obligations of a bank account. Yet in its newest rulemaking, the SEC has missed an ideal opportunity to return to the floating NAV that money market funds originally used.¹⁹⁷

The SEC justifies its continued permission for fixed NAVs by pointing out that investors enjoy tax and accounting advantages through this mechanism.¹⁹⁸ Even assuming that claim is true, it would be so only because of regulatory largesse, not because of any inherent design innovation. Indeed, it would beg the question why these funds, and not all funds, should be allowed to enjoy such preferential treatment. Or, the related query, why should not all funds—regardless of their pricing structure—be granted equal tax and accounting treatment? The SEC is, in effect, providing a regulatory subsidy to one specific kind of investment over others.

The fixed NAV has been defended with an admixture of stare decisis and free-market economics. Professor Mercer Bullard, for example, has argued that:

Money market funds have always been viewed as bank equivalents. A conversion to floating-NAV [money market funds] would likely reverse three decades of market-driven disintermediation from banks to [money market funds] and thereby eliminate competition for bank deposit accounts,

196. Kathleen L. Casey, Comm’r, SEC, Statement on Proposing Release, Money Market Fund Reform (Jan. 27, 2010).

197. See Money Market Fund Reform Final Rule, 75 Fed. Reg. 10,060, 10,060 (Mar. 4, 2010) (to be codified at 17 C.F.R. pts. 270, 274).

198. See Money Market Fund Reform Proposed Rule, 74 Fed. Reg. 32,688, 32,688–89 (July 8, 2009) (to be codified at 17 C.F.R. pts. 270, 274).

increase the cost of short-term capital intermediation, and risk a destabilizing run on [money market funds].¹⁹⁹

Bullard offered this defense of the fixed NAV primarily in advocating for government insurance of money market funds, not in defending the new SEC rules or status quo ante.²⁰⁰ Yet one might take issue with claims that money market funds and bank accounts have always been equivalents and that whatever happened over the past three decades was “market-driven.” When first offered, money market accounts featured floating NAVs and did not offer the array of check-writing, ATM, and other bank-like conveniences (because those conveniences require the greater predictability of fixed pricing).²⁰¹ Thus, the two investments were not always equivalents; when money market funds first appeared, they were quite different from bank accounts. The two became equivalents only through the concerted efforts of fund sponsors to achieve legislative and optical similarities to bank accounts. Moreover, claims that the inflow of money to money markets has been “market-driven” ignore the predicate effects of regulation upon available market choices. Indeed, such a claim is akin to suggesting that the growth of high fructose corn syrup ahead of imported sugar is “market-driven” without acknowledging the role that massive government subsidies play in the success of one of those sweeteners.²⁰²

Both the SEC and the fund industry argue that, through disclosure, fund investors are disabused of the notion that money market funds are guaranteed or insured in the manner of bank accounts.²⁰³ Indeed, they claim that all investors in these funds are acutely aware that their investments are subject to loss.²⁰⁴ But nowhere in the SEC’s copious rulemaking materials is any empirical evidence produced to that effect. When one considers the history of the growth of these funds, one sees a consistent and concerted attempt by fund sponsors to make money market funds appear as similar as possible to bank accounts. For the industry now to claim that investors never bought their ruse is cheeky at best and deceptive at worst.

199. Bullard, *supra* note 144, at 28.

200. *Id.* at 1, 28.

201. *See supra* text accompanying notes 23–27.

202. *See, e.g.,* Stephen D. Sugarman & Nirit Sandman, *Fighting Childhood Obesity Through Performance-Based Regulation of the Food Industry*, 56 DUKE L.J. 1403, 1432 (“The federal government directly subsidizes certain farming interests in ways that allow them to keep their prices down and increase quantities consumed. The subsidy of corn-based sugar products is especially troubling in this regard . . .”).

203. *See* Money Market Fund Reform Proposed Rule, 74 Fed. Reg. at 32,709–10.

204. *See id.* at 32,710.

D. The Relevance of the Primary Fund's Failure

Even if one were to view the rationales and arguments supporting the SEC's new rules in the light most favorable to the SEC, the failure of the Reserve Primary Fund ineffably alters the future calculus for these funds. Whatever investors and the capital markets may once have believed about money market funds has been altered fundamentally by the events of late 2008. When the U.S. government stepped in to guarantee these funds against failure, it crystallized the suspicion that money market funds are, in fact, insured against loss. Or at least the government implicitly provides that insurance.²⁰⁵ But perhaps the only thing worse than operating without insurance is operating with insurance for which none of the players pays. That scenario is always the prelude to moral hazard and future failures.²⁰⁶

If a financial instrument operates with a fixed return, it must either arrange a mechanism to guarantee that return or be prepared to suffer runs at the first suspicion that the return is no longer fixed.²⁰⁷ But money market funds attempted to have the best of both worlds: a fixed return without the costs of a guarantee. In retrospect, the industry argues that it never claimed to offer a fixed return. Industry supporters argue that disclosure documents clearly state that money market funds are not insured and are at risk.²⁰⁸ The events of 2008, however, demonstrate that the financial authorities simply cannot afford to allow this enormous sector of the economy to fail.²⁰⁹

These events have taught investors that the failure of even one money market fund may create systemic dysfunction and that the U.S. government will not allow such a failure. In the future, perhaps events will not conspire to create the same degree of damage from the breaking of a single buck, but some fund sponsors may still be prepared to gamble. If money market funds continue to operate without paying insurance to cover their returns, problems are more likely to occur in the future than they were before. Individual fund sponsors can now make riskier investments in higher yielding securities, either to capture market share or to increase profits, all the while knowing that if they overreach and their funds fail, the government may be standing by as an insurer. Again, Booth offers a specific prediction: "Presumably, it is only a

205. See Booth, *supra* note 120, at 65 ("[T]he illusion that MMFs were risk-free created a moral hazard that led depositors to move more funds into MMFs than they should have.").

206. See, e.g., David S. Miller, Note, *Insurance as Contract: The Argument for Abandoning the Ambiguity Doctrine*, 88 COLUM. L. REV. 1849, 1863 (1988).

207. See FRANKEL & KIRSCH, *supra* note 43, at 463.

208. See Money Market Fund Reform Proposed Rule, 74 Fed. Reg. at 32,712.

209. See PAULSON, *supra* note 4.

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matter of time before someone offers an uninsured [money market funds] with higher returns.”²¹⁰ Yet a basic premise of all insurance is that those who take the risks must be the ones to internalize the costs of the insurance. When individuals do not pay for their own mistakes, moral hazard abounds.²¹¹

Thus, even if the SEC’s rationales were compelling in a vacuum, they are no longer so. The SEC must now address the very real sense of an implicit guarantee that greatly increases the moral hazard and systemic risk associated with these funds.

III. NEW SOLUTIONS FOR MONEY MARKET FUNDS

The SEC could quickly remediate the perils of moral hazard and systemic risk in money market funds and credit markets simply by reducing the level of obfuscation in its current approach. By adopting the lessons of neoclassical,²¹² behavioral,²¹³ or prudential regulation, the agency could quickly encode a new set of rules to bring greater transparency to this vital and once-ignored sector of the economy. Two simple but fundamental changes could accomplish a great deal of this work: either return to the floating NAV or establish an insurance facility to guarantee deposits in money market funds.

A. Neoclassical Economics and a Floating NAV

Neoclassical law and economic theory emphasizes the primacy of market forces in achieving optimal social welfare. As Professors Ronald Gilson and Reinier Kraakman argued in their seminal article two decades ago, the efficient capital market hypothesis—and its reliance on a market for information—is “*the* context in which serious discussion of the regulation of financial markets takes place.”²¹⁴ Neoclassical theory promotes a disclosure-based approach to financial regulation, positing that through a sufficiently competitive market for information, investors and their agents will quickly and effectively process risk and price in the capital markets.²¹⁵ Ostensibly following this theoretical framework, the SEC itself states publicly that “[o]nly through the steady flow of timely,

210. Booth, *supra* note 120, at 65.

211. See Ayotte & Skeel, *supra* note 145, at 489 (“The Lehman/Reserve Primary Fund situation illustrates the difficult choice between providing a government rescue to prevent systemic consequences . . . and limiting moral hazard.”)

212. See, e.g., EASTERBROOK & FISCHER, *supra* note 15.

213. See THALER & SUNSTEIN, *supra* note 168.

214. Ronald J. Gilson & Reinier H. Kraakman, *The Mechanisms of Market Efficiency*, 70 VA. L. REV. 549, 550 (1989).

215. See *id.* at 631–32.

comprehensive, and accurate information can people make sound investment decisions.”²¹⁶

But the SEC’s approach toward the regulation of money market funds is fundamentally in conflict with transparency. Indeed, the SEC’s rules have done much to obscure the true risks associated with money market funds by abetting the efforts by fund sponsors to make their funds resemble bank accounts. Were the pricing mechanism of these funds to revert to their original floating status, all fund investors would be reminded daily—even without digging deep into formal disclosure documents—of the possible losses from their investments. Yet the conservative nature of money market portfolios would limit losses and, on occasion, even offset them with gains.

1. TRANSPARENCY

The SEC appears to accept the industry’s contention that statements in official prospectuses and Statements of Additional Information effectively convey to all money market fund investors the claim that their fund investments are perpetually at risk.²¹⁷ Yet a great deal of scholarly work has demonstrated the very real limitations of financial disclosure.²¹⁸ Few investors read these documents; fewer still comprehend their import and act accordingly.²¹⁹

These limitations would be true even if the money market fund industry had not spent a great deal of effort attempting to override these disclosures. Although all fund sponsors file their legally required disclaimers, they wink at those statements of risk through the enormous promotional effort they put into far more visible intimations of stability in these funds. Money market funds are regularly referred to as “cash or cash equivalent;”²²⁰ they are furnished with check-writing and ATM privileges, and they are provided with the all-important fixed price that no other investment fund is permitted to use.²²¹

216. *The Investor’s Advocate: How the SEC Protects Investors, Maintains Market Integrity, and Facilitates Capital Formation*, U.S. SECURITIES AND EXCHANGE COMMISSION, <http://www.sec.gov/about/whatwedo.shtml> (last modified Sept. 20, 2010).

217. *See* Money Market Fund Reform Proposed Rule, 74 Fed. Reg. 32,688, 32,710 (July 8, 2009) (to be codified at 17 C.F.R. pts. 270, 274).

218. *See, e.g.,* James D. Cox & John W. Payne, *Mutual Fund Expense Disclosures: A Behavioral Perspective*, 83 WASH. U. L.Q. 907, 926 (2005) (explaining why, under current disclosure practices, investors cannot be relied upon to make rational choices).

219. *See id.*

220. James J. Eccleston, *SEC Issues Helpful Investment Guide*, CHI. DAILY L. BULL., May 8, 2006, at 5.

221. *See* FRANKEL & KIRSCH, *supra* note 43, at 463.

Indeed, the success of the industry's efforts to assure investors of the stability of money market funds became clearest during the panic of 2008. Even though the Primary Fund stood to lose less than 2 percent of its value, the breaking of its buck represented a profound violation of trust—investors ran for the exits immediately.²²² If they had believed that their investments were truly at risk, that their assets might fluctuate a few pennies up or down on any given day, then panic on that scale ought to have been very unlikely.

But if we accept the contention that most investors understood how money market funds operate, what then ought to be done about the benighted few? Should financial regulation of money market funds accommodate the wise or the foolish? One might argue that the industry filed their required disclosure announcing that money market fund investments were at risk, and that anyone who failed to read or to believe those warnings is a fool and, further, that crafting regulation to accommodate imprudent customers is a poor policy. While such an approach might be reasonable for sophisticated financial sectors, in which counterparties possess equal bargaining power and information, it makes less sense for an inherently retail product.²²³ But what about the presence of institutional investors in this sector—won't they protect the interests of individual investors? While sophisticated players do often discipline a market to the benefit of all participants,²²⁴ in this scenario, retail and institutional investors often invest in separate money market funds.²²⁵ Thus in the absence of regulation that reasonably accounts for the ability—and inability—of retail investors, problems will assuredly occur.

Professor Gordon follows his lapidary analysis of the flaws of money market funds with a specific recommendation along these lines: "A minimum reform strategy should create a sharp divide between retail MMFs ("RMMFs") and institutional MMFs ("IMMFs")."²²⁶ He then outlines ways in which the bifurcated species of funds ought to be regulated differently. As a practical matter, this separation is largely already in place, as many fund sponsors offer funds with similar portfolios but different prices to different clients.²²⁷ And, as the lessons of mutual fund pricing demonstrate, such a separation is not always

222. See Mamudi & Burton, *supra* note 2.

223. See generally William A. Birdthistle, *Investment Indiscipline: A Behavioral Approach to Mutual Fund Jurisprudence*, 2010 U. ILL. L. REV. 61 [hereinafter Birdthistle, *Investment Indiscipline*].

224. See *id.* at 72.

225. See *id.* at 72–73.

226. Letter from Jeffrey N. Gordon to Elizabeth M. Murphy, *supra* note 35, at 9.

227. Birdthistle, *supra* note 223, at 73.

positive. When institutional and retail investors do not invest in identical funds, the prices of those similar products may quickly diverge. Thus, Professor Gordon's proposal to reduce risk might lead to a disparity in pricing.

Yet proponents of these rules might contend that no change is needed here. Money market funds have broken the buck only twice in their history and, both times, investors stood to lose only pennies on the dollar.²²⁸ Indeed, some might say that the system operated correctly this time, with the system avoiding collapse and Reserve shareholders losing just 1 percent of their investment.

Such rare and minimal risks, so the argument might go, simply do not warrant significant changes to an industry. This argument glosses over two problems: first, without changes, the frequency of future mishaps is much higher today than before the 2008 meltdown; second, the relatively minor losses to fund shareholders completely omits the massive and profound losses that would have accrued in the capital markets if the federal government had not intervened. As the director of the SEC's Division of Investment Management, Andrew J. Donohue, put it, "the events of the fall of 2008 showed that money market funds are susceptible to runs, particularly by institutional investors. . . . [and] precipitated a massive intervention with respect to money market funds that many in the government would not like to see repeated."²²⁹

Each of the counterarguments to a floating NAV rests on the implicit and remarkable assumption that the market will perform better if investors are offered less transparency and furnished with an inaccurate view of these funds. Yet decades of financial theory and empirical studies demonstrate the opposite: that with greater transparency comes healthier, more efficient, and more effective markets.²³⁰ If the SEC emphasized the perils of these funds to investors, many investors may still choose to invest in them (albeit fully cognizant of the risks), while others may choose either to invest in less risky, less rewarding alternatives, such as bank accounts, or more risky, more rewarding alternatives, such as short-term bond funds. Without a regulatory thumb on the scale, the market could provide a better picture of the price and risk of these securities, and investors would not operate in an artificial bubble ignorant of growing systemic risks.

228. See *supra* text accompanying notes 4–7.

229. Andrew J. Donohue, Director, Div. of Inv. Mgmt., SEC, Remarks Before the Practising Law Institute's Investment Management Institute (Apr. 8, 2010).

230. See Gilson & Kraakman, *supra* note 214, at 552, 554.

2. EQUALIZING REGULATORY BENEFITS AND BURDENS

With one concerted step, the SEC could level the competitive field both between money market funds and all other mutual funds as well as between money market funds and bank accounts. By reverting to the regulatory framework that the SEC maintained during the early years of money market funds—in which they, like all mutual funds, were required to use a floating NAV²³¹—and systemic foibles of this investment could be policed with robust market mechanisms.

If the SEC repealed the use of amortized-cost accounting—which it could do with a straightforward amendment of Rule 2a-7²³²—money market funds would then be obliged to use mark-to-market accounting.²³³ Inasmuch as most investment advisors who sponsor money market funds also oversee large mutual fund complexes, the industry could quickly adopt this technical alteration. The price of money market funds would then begin to float and, shortly thereafter, investors in those funds would see their daily NAVs oscillate between a few pennies above and below the \$1.00 price. This fluctuation would communicate far more effectively than any prospectus disclosure the fact that these funds carry the risk of loss and thereby help to forestall any future runs on the industry.

If a money market fund experienced the collapse of one of its investments, as the Primary Fund did with its Lehman Brothers holdings,²³⁴ the price of that fund would drop a few pennies lower than usual, but investors would not be alarmed at the violation of any sort of iron-clad guarantee. But even if investors did exit the fund, they would not trigger a run because a floating NAV is, by definition, immune to such phenomena.²³⁵

Certain investors, however, may greatly value the stability of the \$1.00 price in money market funds, and a floating NAV would eliminate this feature. Indeed, one might argue that changing money market funds might reduce investor choices and permit unhealthy market concentrations in the remaining options. On the contrary, a wide variety of choices would remain.

For any investor who demands the predictability of fixed balance—in order to write checks or simply to plan future activities—a financial product already exists: the bank account. Similarly, bank accounts will

231. See Levin, *supra* note 42, at 750–53.

232. *Id.* at 750–51.

233. See Money Market Fund Reform Proposed Rule, 74 Fed. Reg. 32,688, 32,690 (July 8, 2009) (to be codified at 17 C.F.R. pts. 270, 274).

234. See Henriques, *supra* note 44, at BU13.

235. See *supra* text accompanying notes 78–82.

accommodate those investors with more conservative investment profiles.

But bank accounts typically offer lower yields than money market funds.²³⁶ Certainly, that is true, primarily because bank accounts must pay insurance on their deposits to the FDIC. In essence, money market funds have received free insurance, with disastrous results and equally dire prospects in the absence of revisions. Money market funds, their investors, and their sponsors have all enjoyed higher yields by transferring the risk of their investments to the American taxpayers.²³⁷ Both the equities of that structure, as well as its promotion of moral hazard, require its termination.

For those money market investors who do prioritize a higher yield and will not be satisfied with bank accounts, products already exist for this taste: short-term bond funds. Short-term bond funds hold investments extremely similar to those in money market funds, but are structured as classic mutual funds, and thus already have floating NAVs.²³⁸ They carry a higher yield than bank accounts and reflect more accurate risks for those rewards.²³⁹ In the absence of the SEC's regulatory subsidy, money market funds must reflect price and risk that are true reflections of the prevailing market rate.

The industry argues that investors will move offshore to riskier and unregulated products.²⁴⁰ But that supposition prompts two replies: unlikely and so what? Unlike hedge fund investors, about whom the "offshore" argument is commonly deployed,²⁴¹ money market investors are not seeking outsized returns, privacy, or investment expertise.²⁴² Onshore bank accounts and short-term bond funds already offer money market investors the straightforward investments they seek. Why move offshore when abundant and comparable investments are available next door? Fund sponsors contend that the market has already spoken by

236. See ICI FACT BOOK, *supra* note 3, at 34 (noting that for the first time in the last fifteen years, yields on money market funds were lower than those on bank accounts in 2009).

237. *An Inadequate Case for the Bailout*, N.Y. TIMES, Sept. 24, 2008, at A26.

238. See, e.g., J.P. MORGAN, *JPMorgan Short Duration Bond Fund*, in PROSPECTUS: J.P. MORGAN INCOME FUNDS 10 (July 1, 2010) (describing the investment strategies and holdings of this open-end mutual fund).

239. See, e.g., *id.*

240. See Money Market Fund Reform Proposed Rule, 74 Fed. Reg. 32,688, 32,718 (July 8, 2009) (to be codified at 17 C.F.R. pts. 270, 274).

241. E.g., Kathleen E. Lange, Note, *The New Antifraud Rule: Is SEC Enforcement the Most Effective Way to Protect Investors from Hedge Fund Fraud?*, 77 FORDHAM L. REV. 851, 873–74 (2008).

242. See *supra* text accompanying notes 46–47.

pouring more than \$3 trillion into these funds.²⁴³ But this argument ignores the enormous regulatory thumb on the scale—investors have chosen a product whose price is artificially low because of governmental intervention. Again, to attribute the popularity of corn in the United States to superior performance rather than to massive government subsidy is woefully naive, or disingenuous.²⁴⁴ Asking customers to purchase bank accounts or short-term bond funds, as may befit their preference for risk and yield, is simply a regulatory-neutral position that defers to market forces.

The market for short-term paper will be largely unaffected, inasmuch as bank accounts and short-term bond funds will replace fixed-rate money market funds as purchasers in accordance with the migration of investors. Corporate issuers of commercial paper will not care whether Bank of America's savings funds or Bank of America's money market funds are lending them money. Any temporary disruption to these channels will be replaced quickly with buyers already operating within the system. In short, money market funds have enjoyed thirty years of regulatory largesse, whose elimination effectively rectifies an old but growing threat.

B. Behavioral Economics and the Selection of Winners

The work of Cass Sunstein and Richard Thaler emphasizes some of the shortcomings in neoclassical economic theory.²⁴⁵ The market is deficient in processing information, they argue, because of biases, distractions, and shortcomings in so many market participants.²⁴⁶ Rather than leaving all decisions to a completely unregulated agora, therefore, regulators should be prepared to offer “libertarian paternalism” in the form of choice architecture.²⁴⁷ That is, without actually restricting the choices of market participants, regulators may still privilege certain options over others.

243. See Money Market Fund Reform Proposed Rule, 74 Fed. Reg. at 32,689; Sugarman & Sandman, *supra* note 202, at 1432 (discussing corn subsidies); see also *Navigating New Rules: Q&A w/ Stephen Keen*, MONEY FUND INTELLIGENCE, Feb. 2010, at 1, 3–4 (“People who actually have money invested in funds, particularly individuals, uniformly said, ‘Don’t do that. I don’t want a fluctuating product, and I don’t want to have to put my money in a bank. I like what money market funds do. I know I have a risk of loss. I accept that.’”).

244. See D. Daniel Sokol, *Limiting Anticompetitive Interventions That Benefit Special Interests*, 17 GEO. MASON L. REV. 119, 127 (2009).

245. THALER & SUNSTEIN, *supra* note 168.

246. See *id.*

247. *Id.*

As an excellent example of behavioral theory applied to financial regulation, consider the Pension Protection Act of 2006.²⁴⁸ Prior to that law, any proceeds employees saved in their retirement accounts that they did not allocate to a specific investment were required, by law, to be held as cash.²⁴⁹ In many cases, the obliviousness or busyness of employees would result in retirement assets languishing well below levels necessary for healthy savings.²⁵⁰ The Pension Protection Act permitted retirement administrators to direct unallocated investments into conservative, passively managed, broadly diversified mutual funds instead.²⁵¹ In both scenarios, employees could easily change the allocation of their investments. The behavioral approach, however, took account of shortcomings in the existing approach and simply altered the default setting, which has resulted in far higher savings rates for plan participants.²⁵²

In the context of money market funds, one might argue that behavioral economic theory might justify the SEC's behavior even if neoclassical theory does not. For instance, one could argue that the SEC has surveyed the available options and simply privileged money market funds for their optimal combination of safety, yield, and convenience. Indeed, the argument might proceed, requiring a floating NAV might exacerbate future runs because investors might panic sooner if they see a fund's value declining or because the "true" price of short-term debt becomes highly unreliable during moments of market stress.

But, again, investors simply cannot trigger a run on any financial portfolio that promises only to pay them a pro rata portion of whatever the portfolio holds. Runs occur when investors are promised more than a pro rata portion, and thus have an incentive to be the first to withdraw their portions before the corpus is exhausted.²⁵³ More importantly, the SEC has not simply placed an existing financial option at the top of a menu of choices; it has, through rulemaking, affirmatively altered the nature of investment options by giving one an advantage that could not exist without regulatory intervention.

248. See Pension Protection Act of 2006, Pub. L. No. 109-280, § 624, 120 Stat. 980 (2006).

249. See Birdthistle, *Investment Indiscipline*, *supra* note 223, at 67.

250. See, e.g., James J. Choi et al., *For Better or for Worse: Default Effects and 401(k) Savings Behavior*, in PERSPECTIVES ON THE ECONOMICS OF AGING 81, 81–121 (David A. Wise ed., 2004).

251. Pension Protection Act of 2006, § 624(a)(5).

252. Birdthistle, *Investment Indiscipline*, *supra* note 223, at 67.

253. See *supra* text accompanying notes 77–81.

C. Prudential Regulation and Mandatory Insurance

Regulation is, of course, a central feature of even financial systems that purport to be heavily market-oriented and laissez-faire.²⁵⁴ Indeed, in the United States, earnest debates about financial oversight do not seriously contemplate either a truly unregulated system or a truly controlled system—the debate is largely one of degree. Prudential, or merit, regulation therefore often plays some role.²⁵⁵ One of the few widely celebrated examples of financial-merit regulation is the success of the FDIC's record of insuring bank accounts. If the SEC declines to require money market funds to use a floating NAV, then it should adopt some equivalent system of insurance.

With every financial instrument, some party must be prepared to absorb the loss of unfortunate market events. A floating NAV places the risk of that loss on investors in a fund. A fixed NAV requires that some other party do so. Indeed, a fixed price always carries an assurance, express or implied, that someone will make customers whole if the investment fails.²⁵⁶ In the events involving the Primary Fund, the federal government placed billions of public dollars at risk to avoid collapse. In bank accounts, the FDIC does so as well, but only after being paid to do so by depositors through their banks.²⁵⁷ A few variations on this insurance scheme might be equally useful in the context of money market funds.

1. THE EXISTING, UNSPOKEN INSURANCE REGIME

The first option would be to continue with the current regime. Currently, money market funds offer the strong suggestion to investors that their investments are stable, safe, and secure. When that assurance proved false, as it did with the Reserve Fund, the Federal government guaranteed depositors against loss.²⁵⁸ That is, the government offered implicit insurance for money market funds without charging specific

254. See, e.g., Mohammad H. Fadel, Riba, *Efficiency, and Prudential Regulation: Preliminary Thoughts*, 25 WIS. INT'L L.J. 655, 695 (2008) (explaining that Islamic financial law adopts a laissez-faire attitude towards business dealing, but also has regulatory aspects).

255. See *id.* at 657 (arguing that Islamic financial law regulation is part of a larger prudential scheme).

256. See Henriques, *supra* note 44.

257. *Who is the FDIC?*, FEDERAL DEPOSIT INSURANCE CORPORATION, <http://www.fdic.gov/about/learn/symbol/WhoistheFdic.pdf> (last updated Aug. 11, 2010).

258. See Press Release, U.S. Dept. of the Treasury, *supra* note 10.

insurance premia to any of the participants—investors, funds, sponsors, lenders—in this system.²⁵⁹

As we have seen, insurance that is given to parties who do not pay for it cultivates significant moral hazard and, if left in place, provides every incentive for participants to increase the risk of their activities. Investors have every incentive to put their money into money market funds offering the very highest yield, while funds and sponsors have every incentive to choose investments with the highest degree of risk and reward. If these decisions turn out to be poor ones, the loss will be borne by all U.S. taxpayers.

Such a system, needless to say, will greatly exacerbate, not mitigate, the future likelihood of runs on money market funds and systemic risk in the capital markets. In light of the equally problematic rules shortening maturities in money market funds, the status quo would appear to be untenable.

2. SELF-INSURANCE

A second alternative would be to require the sponsors and advisors of money market funds to insure their funds themselves.²⁶⁰ Such a system has been in place informally for several decades.²⁶¹ With two very notable exceptions, in all previous instances in which funds have threatened to break their buck, their investment advisors provided self-insurance to the fund's investors.²⁶² That is, the advisors or their affiliates intervened to purchase at full value portfolio securities whose values had declined precipitously and threatened to break the buck. In essence, the advisors paid money out of their own pockets to insure the loss and to make fund investors whole. The advisors paid for this insurance through the premia of previous profits they had made from managing the funds.

In many respects, this system most perfectly aligns the interests and risks of money market funds—if the people most directly responsible for managing the funds are also the people who stand to lose the most from mistakes, they will take the optimal degree of care in running the funds. The limitations, however, are clearly visible in cases such as the Primary Fund.²⁶³ Whenever the advisor simply does not have sufficient capital to

259. *See id.*

260. *See, e.g.,* Timothy Stoltzfus Jost, *The Massachusetts Health Plan: Public Insurance for the Poor, Private Insurance for the Wealthy, Self-Insurance for the Rest?*, 55 U. KAN. L. REV. 1091 (2007).

261. *See* Henriques, *supra* note 44.

262. *See* Mamudi & Burton, *supra* note 2.

263. *See* Henriques, *supra* note 44.

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buy its own fund, the fund will fail and the system will face collateral risks. Or, indeed, if fund sponsors believe the government will insure their losses, they will have a powerful incentive not to resuscitate their own failing funds. Thus a broader insurance pool is necessary to address the true amount of risk in these funds.

3. COLLECTIVE INSURANCE

A third option would be to follow the example of the banking industry's collective insurance.²⁶⁴ Money market funds could either mutually or governmentally insure their risk across the entire industry by having all funds pay into a common pool that would rescue any fund that failed. Of course, all funds would have to pay insurance premia, the cost of which would in turn be passed through to all investors in those funds. That additional cost would naturally reduce the yield for all funds, but only by the true cost of securing these investments.²⁶⁵

The current system is cheaper, but only because none of the industry's constituents is paying for their actual risk. Inasmuch as different funds operate with different risk profiles, so too could the premia be risk-adjusted,²⁶⁶ so that the actual costs of investing with a guaranteed return are internalized with the most accurate allocation possible. Insurance certainly will not prevent future investment failures, but, as the FDIC has demonstrated, it can protect both investors individually and the capital markets more systemically.

CONCLUSION

The shattering of the buck in the Reserve Primary Fund dramatically demonstrated two suspected but unspoken fears about what were once considered among the economy's safest and surest investments. Contrary to the industry's long attempt to conflate money market funds with bank accounts, the global markets witnessed the serious magnitude of the risk that funds carry, not solely to themselves and their investors, but also to the broader credit and capital markets. When the Primary Fund stumbled, investors fled what they feared were Potemkin bank accounts, and the credit markets promptly seized.²⁶⁷

264. See Johnson, *supra* note 37.

265. See Bullard, *supra* note 144.

266. Letter from Jeffrey N. Gordon to Elizabeth M. Murphy, *supra* note 35, at 2–10 (discussing possible ways to adjust fund insurance payments for their respective risk profiles).

267. See PAULSON, *supra* note 4, at 234–37.

Notwithstanding this vivid demonstration, the SEC's regulatory response has been disappointingly incoherent and ineffective. Shunning the principles and guidance of widely accepted legal economic theories, the SEC adopted instead not just an incoherent set of risk-reduction measures but also an ineffectual one. By shortening the permissible maturities of money market funds, the SEC has actually increased the likely velocity and force of future runs without making any compensatory effort to address the newly enhanced peril of moral hazard.

Neoclassical and behavioral economic theories proffer two alternative approaches that would eliminate the regulatory subsidy of these investments while improving the health of the capital markets. By either replacing fixed NAVs with floating ones or, instead, requiring the industry to adopt insurance to cover their fixed obligations, the SEC might increase the transparency and long-term well-being of a cornerstone of the U.S. economy.