Fordham Journal of Corporate & Financial Law

Volume 16 | Issue 4 Article 3

2011

Another Role For Securities Regulation: Expanding Investor Opportunity

Jasmin Sethi

Follow this and additional works at: https://ir.lawnet.fordham.edu/jcfl



Part of the Securities Law Commons

Recommended Citation

Jasmin Sethi, Another Role For Securities Regulation: Expanding Investor Opportunity, 16 Fordham J. Corp. & Fin. L. 783 (2011).

Available at: https://ir.lawnet.fordham.edu/jcfl/vol16/iss4/3

This Article is brought to you for free and open access by FLASH: The Fordham Law Archive of Scholarship and History. It has been accepted for inclusion in Fordham Journal of Corporate & Financial Law by an authorized editor of FLASH: The Fordham Law Archive of Scholarship and History. For more information, please contact tmelnick@law.fordham.edu.

Another Role For Securities Regulation: Expanding Investor Opportunity

Cover Page Footnote

J.D., Harvard Law School 2007; Ph.D., Harvard University 2007. Ms. Sethi is currently an Attorney at the U.S. Securities and Exchange Commission. The Securities and Exchange Commission, as a matter of policy, disclaims responsibility for any private publication or statement by any of its employees. The views expressed herein are those of the author and do not necessarily reflect the views of the Commission or of the author's colleagues at the Commission. The author would like to thank Michael Ogershok and Alex Hoover for their excellent research assistance in the preparation of this article.

ANOTHER ROLE FOR SECURITIES REGULATION: EXPANDING INVESTOR OPPORTUNITY

Jasmin Sethi*

ABSTRACT

Securities regulation can be justified on a number of grounds, but furthering the expansion of opportunities for wealth accumulation across sectors of the population has generally not been utilized as an argument for regulation. This article demonstrates how an opportunities-based perspective, informed by the findings from interdisciplinary research, could alter securities policy in four areas: (1) enhancing access to information and financial institutions; (2) requiring disclosures; (3) impacting the behavioral biases of investors; and (4) aligning the incentives of investment professionals to better facilitate the wealth accumulation of their clients. The implications of applying an opportunities-based approach to financial regulation are distinct from those of a public welfare or efficiency approach to regulation. More so than these other approaches, an opportunities-based approach requires an understanding of the empirical realities of investor behavior and yields policy recommendations targeted at increasing opportunities for wealth accumulation for the average investor.

^{*} J.D., Harvard Law School 2007; Ph.D., Harvard University 2007. Ms. Sethi is currently an Attorney at the U.S. Securities and Exchange Commission. The Securities and Exchange Commission, as a matter of policy, disclaims responsibility for any private publication or statement by any of its employees. The views expressed herein are those of the author and do not necessarily reflect the views of the Commission or of the author's colleagues at the Commission. The author would like to thank Michael Ogershok and Alex Hoover for their excellent research assistance in the preparation of this article.

FORDHAM JOURNAL OF CORPORATE & FINANCIAL LAW

TABLE OF CONTENTS

- I. Introduction
- II. DIFFERENTIAL ACCESS TO FINANCIAL INSTITUTIONS AND PRODUCTS
- III. INFORMATION
- IV. SAVING US FROM OURSELVES
 - A. OVERCONFIDENCE
 - B. Framing
 - C. MISJUDGING PROBABILITIES
 - D. A ROLE FOR REGULATORY NUDGES
- V. INCENTIVES FOR FINANCIAL ADVISERS AND MANAGERS
- VI. CONCLUSION

I. Introduction

To date, commentary on the role of securities regulation has focused on its role vis-à-vis financial markets. Academics have posited that the purpose of securities regulation is to make markets operate more efficiently.¹ In general, the goals of securities regulation – when attempting to improve market efficiency – have been consistent with a social welfare approach to government regulation.²

^{1.} See, e.g., Matthew Beville, Dino Falaschetti, & Michael J. Orlando, An Information Market Proposal for Regulating Systemic Risk, 12 U. PA. J. BUS. L. 849, 858 (2010) ("[A] wealth of economic theory and evidence supports the hypothesis that 'free markets' work better when the law provides a low-transaction-cost environment."); Zohar Goshen & Gideon Parchomovsky, The Essential Role of Securities Regulation, 55 DUKE L.J. 711, 713 (2006) ("[T]he ultimate goal of securities regulation is to attain efficient financial markets and thereby improve the allocation of resources in the economy."); Jeff Schwartz, Reconceptualizing Investment Management Regulation, 16 GEO. MASON L. REV. 521, 522 (2009) ("The central idea behind the welfare-economics inquiry is that society fares best when markets are competitive. Regulation is therefore justified to the extent it corrects for failures in the market that hinder competition and does so in a cost-effective manner.").

^{2.} See Beville et. al., supra note 1, at 859-60 (treating securities regulation of

Specific arguments along these lines have prioritized the role of securities regulation in correcting market failures.³ Perhaps the most common market failure discussed in the context of securities regulation is imperfect information.⁴ The Securities and Exchange Commission

systemic risk as similar to the effect of pollution on third-parties, where regulation is used to improve social welfare). Relying on a social welfare approach involves using regulation to correct a market failure, as when regulation is necessary to correct the financial incentives for industry participants to pollute at the expense of others, by internalizing the externalities they cause. *Id. See also* Schwartz, *supra* note 1, at 525 ("A welfare-economics framework can provide a backbone to regulatory analysis in this area Free competition . . . may not always yield such a utopian result. If the market itself is flawed, then it may be unwise to rely solely on the invisible hand to bring about societal progress. Regulation, therefore, may be justified when a market suffers from such structural imperfections—so-called market failures. Markets could fail if they involve[] the provision of public goods or cause[] harmful third-party effects (so-called negative externalities).").

- 3. Schwartz, *supra* note 1, at 525 ("If the market itself is flawed, then it may be unwise to rely solely on the invisible hand to bring about societal progress. Regulation, therefore, may be justified when a market suffers from such structural imperfections—so-called market failures.").
- 4. See id. at 521 ("In the fund industry, the primary market-failure concerns revolve around consumer fallibility—that fund investors potentially lack the information and know-how to properly make investing decisions without regulatory intervention."); Goshen & Parchomovsky, supra note 1, at 756 (summarizes the views of proponents of mandatory disclosure, describing information as a public good, where optimal levels will not be provided by private entities without some form of mandatory disclosure); David E. Riggs, Robert C. Rosselot, & Melanie Mayo West, Securities Regulation of Mutual Funds: A Banker's Primer, 113 BANKING L.J. 864, 865 (1996) (describing regulation of mutual funds through disclosure as "a foundation of investor protection" and "intended to facilitate informed investment decisions and to provide basic uniformity among mutual funds"); Troy A. Paredes, Blinded by the Light: Information Overload and its Consequences for Securities Regulation, 81 WASH U. L.Q. 417, 418 (2003) (in order to be effective, mandatory disclosure, which is designed to solve informational asymmetries and "promote[] informed investor decision making, capital market integrity, and capital market efficiency," requires both the actual disclosure of information and that information being put to use effectively); Onnig H. Dombalagian, Licensing the Word on the Street: The SEC's Role in Regulating Information, 55 BUFF. L. REV. 1, 1-2 (2007) ("The availability of and access to . . . information on reasonable terms has been identified as one of the essential characteristics of strong financial markets."). The existence of imperfect information arises in any case where there is not perfect information - where everyone is assumed to be informed about the entire history of actions that have already been taken. Boğaçhan Çelen & Shachar Kariv, An Experimental Test of Observational Learning Under Imperfect Information, 26 ECON. THEORY 677, 678 (2005). A simple example of

("SEC" or "Commission") has long seen its role as an agency that mitigates information problems by promoting the availability and accuracy of information.⁵

In addition to imperfect information, some scholars have focused on the other market failures which impact securities markets. For example, some have attempted to model and remedy the problem of systemic risk, a negative externality caused by the trades and investment positions of certain financial players in the market because of the interconnectedness of their own trades.⁶ Another justification for

imperfect information would be to assume that in a competitive market, sellers know the quality of what they are selling, while buyers only know the average quality in the market as a whole. Bruce C. Greenwald & Joseph E. Stiglitz, *Externalities in Economies with Imperfect Information and Incomplete Markets*, 101 Q. J. ECON. 229, 239 (1986).

- 5. See U.S. Securities and Exchange Commission, "The Investor's Advocate: How the SEC Protects Investors, Maintains Market Integrity, and Facilitates Capital Formation," http://www.sec.gov/about/whatwedo.shtml (last visited Nov. 11, 2010) ("The laws and rules that govern the securities industry in the United States derive from a simple and straightforward concept: all investors, whether large institutions or private individuals, should have access to basic facts about an investment prior to buying or selling it. To achieve this, the SEC requires public companies to disclose meaningful financial and other information to the public."); Assessing The Madoff Ponzi Scheme and Regulatory Failures: Hearing Before the U.S. H.R. Comm. on Financial Services and Subcomm. on Capital Markets, Insurance and Government-Sponsored Enterprises, 111th Cong. 111-12 (2009) (Statement of Andrew J. Donohue, Director, Division of Investment Management at U.S. Securities and Exchange Commission), available at http://www.sec.gov/news/testimony/2009/ts020409-joint.htm ("The SEC is concerned primarily with promoting the disclosure of important market-related information, maintaining fair dealing, and protecting against fraud.").
- 6. See Hal S. Scott, The Reduction of Systemic Risk in the United States Financial System, 33 HARV. J.L. & PUB. POL'Y 671, 673 (2010) ("Systemic risk is the risk that the failure of one significant financial institution can cause or significantly contribute to the failure of other significant financial institutions as a result of their linkages to each other."). See also Steven L. Schwarcz, Systemic Risk, 97 GEO. L.J. 193, 199 (2008) ("The classic example of systemic risk . . . is a bank run [because] . . . [t]he chain of subsequent failures can occur because banks are closely intertwined financially. They lend to and borrow from each other, hold deposit balances with each other, and make payments through the interbank clearing system (whereby banks with equity and deposit accounts exceeding their liabilities can offer these excess funds to other banks who wish to increase loans to their customers). Because of this interconnectedness, one bank's default on an obligation to another may adversely affect that other bank's ability to meet its obligations to yet other banks, and so on down the chain of banks and beyond.") (internal citations and quotation marks omitted).

regulation that has been proposed is minimizing the principal-agent problem, which relates to market failures caused by imperfect information and transaction costs. Boosting investor confidence has also been cited as a goal of securities regulation, although it is not clear which market failure this goal addresses.

What is missing from an analysis of the role of securities regulation is a social welfare justification that is distinct from market efficacy altogether. While improving the efficiency of markets can improve social welfare by facilitating investment decisions that increase investor utility, wealth and investor satisfaction could also be increased for a significant group of investors by considering policy measures that are not traditionally associated with enhancing market efficiency. I evaluate the implications of securities regulatory policy, contending that one of its explicit goals is, and should be, the expansion of opportunities for wealth accumulation across different sectors of the population. Different sectors of the population include distinct groups of investors: those who are wealthy and those who are not; those who delegate their

^{7.} See Paul G. Mahoney, Mandatory Disclosure as a Solution to Agency Problems, 62 U. CHI. L. REV. 1047, 1048 (1995) ("Disclosure can help reduce the cost of monitoring promoters' and managers' use of corporate assets for self-interested purposes. The modern literature on the firm recognizes the ubiquity and importance of such agency problems; moreover, rules mandating particular disclosures are common in principal-agent contexts. It therefore seems reasonable to consider the reduction of agency costs as an efficiency justification for mandatory disclosure in securities markets."); Paredes, supra note 4, at 462-67 (arguing that disclosure would reduce agency costs by limiting the need for investigation and enforcement actions as corporations would limit undesirable conduct if the public was aware of all their actions, and that investors need to be confident in the markets in order to invest, something that an appropriate level of regulation can help achieve).

^{8.} Paredes, *supra* note 4 at 467-70 (arguing that an investor's belief that she has adequate information on a company's activities improves investor confidence in financial markets); Large Trader Reporting System, Exchange Act Release No. 61908, 75 Fed. Reg. 21456, 21484 (Apr. 23, 2010) (proposing rules that would allow the SEC to collect information on large volumes of assets or asset value for the purpose of improving the SEC's understanding of the impact of large traders on securities markets and being "better positioned to administer and enforce the federal securities laws, thereby promoting the integrity and efficiency of the markets, as well as, ultimately, investor confidence and capital formation"); Short-Term Borrowings Disclosure, Exchange Act Release Nos. 33–9143, 34–62932, 75 Fed. Reg. 59866, 59886 (Sept. 28, 2010) (proposing rules that would require greater disclosure of registrants' short-term borrowing for the purpose of maintaining "investor confidence in the full and fair disclosure required of all registrants").

investment decisions and those who do not; those who are well informed about financial institutions and products and those who are not; and, in short, those who are financially sophisticated⁹ and those who are not.

Expansion of opportunity may appear novel as a goal justifying financial regulation, but it should not. In other areas of government policy, promoting opportunities for different groups has been recognized as a worthy justification for government intervention. Indeed, promoting wealth through the ownership of housing for the middle and lower income classes has long been a mainstay of U.S. social policy.¹⁰ Politicians have touted home ownership as emblematic of achieving the American dream¹¹ and have encouraged middle class citizens to rely on

^{9.} A financially sophisticated investor has been defined as "an investor that, either alone or with the assistance of a purchaser representative, possesses such knowledge and experience in financial and business matters that he is capable of evaluating the merits and risks of the prospective investment." Houman B. Shadab, *The Law and Economics of Hedge Funds: Financial Innovation and Investor Protection*, 6 BERKELEY BUS. L.J. 240, 258 n. 114 (2009).

See Beville et. al., supra note 1, at 856 ("For example, the Federal Housing Enterprises Financial Safety and Soundness Act of 1992 required the Department of Housing and Urban Development to establish goals encouraging [government sponsored enterprises] to promote home ownership among low-income borrowers and borrowers in historically underserved areas."); U.S. Department of Labor, "Home Needs of Nation Offer Opportunity for Constructive Initiative," Information and Education Service, Division of Public Works and Construction Development, March 18, 1919 (No. 3-17A: National Archives, Washington, D.C.) ("The home-building problem of the country must be approached from a new angle. The central idea must be to build well, yet inexpensively, so that the opportunity of home-ownership may be widened and extended to persons to whom, heretofore, it has been closed. The problem can be solved by private interests. If they devote their energies to the situation they will meet the same success that was theirs in the automobile and in the piano industries.") (cited in Thomas C. Hubka & Judith T. Kenny, Examining the American Dream: Housing Standards and the Emergence of a National Housing Culture, 1900-1930, 13 PERSP. VERNACULAR ARCHITECTURE 49, 49 (2006),available http://www.jstor.org/pss/20355368); Adam Gordon, The Creation of Homeownership: How New Deal Changes in Banking Regulation Simultaneously Made Homeownership Accessible to Whites and out of Reach for Black, 115 YALE L.J. 186, 188 (2005) ("Prior to the 1930s, owner-occupied housing was a good held primarily for reasons of consumption — not investment — and usually acquired late in life. Through New Deal reforms, homeownership became the primary mechanism that middle-class Americans use to build assets. Today, 60% of the total assets of middle-class Americans are held in owner-occupied homes.") (internal citations omitted).

^{11.} See Curt Hochbein, Mortgage Forgiveness Debt Relief Act of 2007, 38 CAP. U. L. REV. 889, 889 (2010) ("Owning a home has transformed from being part of the

the value of their home as a source of wealth.¹² The policy of promoting home ownership as a form of wealth accumulation has significantly impacted the tax code of the United States¹³ and has served as the impetus for the formation of Fannie Mae in 1938,¹⁴ the creation of Freddie Mac in 1970,¹⁵ and the institution of the FHA loan guarantee

'American Dream' to what many people, including our legislators, see as the 'American Right.'"); President George H.W. Bush, Remarks on Arrival in Appleton, Wisconsin (July 27, 1992) *available at* http://www.presidency.ucsb.edu/ws/index.php?pid=21270 ("Part of the American dream is owning your own home").

- 12. See Foreclosure, Predatory Mortgage and Payday Lending in America's Cities: Hearing Before the H. Comm. on Oversight and Gov't Reform, 110th Cong. 6 (2007) (statement of Josh Nassar, Vice President for Federal Affairs, Center for Responsible Lending (CRL)) ("Nearly 60 percent of the total wealth held by middle-class families resides in their home equity the value of their home minus the amount they owe on it. For African-American and Hispanic families, the share is much higher, topping 88 percent for both groups."); Alice M. Thomas, The Racial Wealth Divide Through the Eyes of the Younger Family: Undoing America's Legacy of Wealth Inequality in Search of the Elusive American Dream Utilizing a Sankofa Model of Transitional Justice, 5 Fla. A&M U. L. REV. 1, 13 (2009) ("The residential home is typically the largest wealth-producing asset for the middle class").
- See John E. Anderson et al., Tax Reform and Incentives to Encourage Owner-Occupied Housing: Analysis of the President's Tax Reform Panel Recommendation to Convert the Mortgage Interest Deduction to a Tax Credit, at 2 (Sept. 19, 2006), available at http://ssrn.com/abstract=943062 ("Public policy designed to encourage home ownership has operated primarily through the federal income tax system in the United States. With multiple incentives for home-ownership, the income tax system is the main tool by which the federal government encourages families to become homeowners and accumulate wealth in the form of real estate."); Edward L. Glaeser & Jesse M. Shapiro, The Benefits of the Home Mortgage Interest Deduction, 17 TAX POL'Y & ECON. 37, 37-38 (2003) ("The American subsidy of homeownership is among the most prominent features of our tax code. In 1999, \$773 billion was deducted by 40 million homeowners using the home mortgage interest deduction."); Tim Iglesias, Our Pluralist Housing Ethics and the Struggle for Affordability, 42 WAKE FOREST L. REV. 511, 550 (Summer 2007) ("[The mortgage interest deduction] makes housing ownership more affordable because it enables prospective homebuyers to qualify for larger mortgages than their incomes would otherwise justify.").
- 14. See Christopher L. Peterson, Fannie Mae, Freddie Mac, and the Home Mortgage Foreclosure Crisis, 10 Loy. J. Pub. Int. L. 149, 154 (2009) ("Even with the prospect of a federal guarantee on mortgage loan terms, the housing crisis of the 1930's continued. In 1938 Congress created Fannie Mae to simply buy up mortgages that met federal underwriting guidelines and public policy objectives.")
- 15. See id. at 156 ("In 1970, Congress created 'Freddie Mac' to serve a similar role as Fannie Mae. By creating a second Government Sponsored Enterprise, Congress hoped to help diversify and promote modest competition in the secondary market.").

FORDHAM JOURNAL OF CORPORATE & FINANCIAL LAW

program.¹⁶ This support reached such an excess that government support for housing and our societal faith in that support, has been deemed one of the leading causes of the financial crisis of 2008.¹⁷

While home ownership may be the area for which the connection to wealth accumulation has been the most clearly articulated, it is certainly not the only area in which expansion of opportunity to different groups has been accepted as a legitimate government objective. Education policy is another area in which the principle that the government should promote the expansion of opportunity is salient. The stated purpose of recent education policy has been to improve the educational outcomes of economically disadvantaged groups in order to facilitate their access to opportunities for economic and social mobility. Fundamentally, the goal of "No Child Left Behind" was "excellence and equity in education

^{16.} See Geoffrey D. Korff, Reviving the Forgotten American Dream, 113 PENN ST. L. REV. 417, 436-37 (2008) ([T]he Federal Housing Administration . . . insures lenders against the risk of default on single-family homes. The FHA gives middle income families the ability to purchase housing at affordable rates of interest by providing them access to credit that was not available to middle-income earners to such an extent prior to its creation.").

^{17.} The federal government continually encouraged widespread access to housing since the 1930s to avert economic crises or overcome increasing economic inequality. That encouragement came in the form of government institutions providing guarantees for low-income debt or pushing the government sponsored enterprises ("GSEs") to increase its support of low-income borrowing. As the federal government held more of the risk of low-income debt, the private sector was able to offer credit to more debtors with little income, assets, or savings. When the low-income debtors defaulted, the private sector experienced a systemic shock. *See* RAGHURAM G. RAJAN, FAULT LINES: HOW HIDDEN FRACTURES STILL THREATEN THE WORLD ECONOMY 32-45 (Princeton University Press 2010) ("[S]ubprime lending and the associated subprime mortgage-backed securities were central to this crisis. Without any intent of absolving the brokers and the banks who originated the bad loans or the borrowers who lied about their incomes, we should acknowledge the evidence suggesting that government actions, however well intended, contributed significantly to the crisis.").

^{18. &}quot;Education has always been a fundamental part of achieving the American Dream. An educated citizen is more likely to hold a good job, escape poverty, own a home, start a business, be free from crime, and participate in America's democracy." OFFICE OF THE PRESS SECRETARY, THE WHITE HOUSE, EDUCATION: THE PROMISE OF AMERICA (Sept. 26, 2004), available at http://georgewbushwhitehouse.archives.gov/news/releases/-2004/09/20040926.html. "Now, for years, we've recognized that education is a prerequisite for prosperity." President Barack Obama, Remarks by the President on Education Reform at the National Urban League Centennial Conference (July 29, 2010), available at http://www.whitehouse.gov/the-press-office/remarks-president-education-reform-national-urban-league-centennial-conference.

for all students."¹⁹ It sought to achieve this by punishing schools, through a variety of measures, for not meeting certain basic standards.²⁰ The goal was to ensure that even the most disadvantaged students attained basic grade level proficiency in math, reading, and science²¹ in order to participate as well-informed members of the electorate and to adapt to the changing demands of the information age.²² The Obama Administration has continued the pursuit of this goal with its "Race to the Top" program, in which states compete for a share of a \$4 billion fund by implementing plans to improve teacher accountability, expand

^{19.} David Nash, *Improving No Child Left Behind: Achieving Excellence and Equity in Partnership with the States*, 55 RUTGERS L. REV. 239, 242 (2002). The law required states to adopt standards, conduct assessments, and report "adequate yearly progress," continually increasing the level of students who meet the standard of proficiency, meeting 100% by 2013-14. Gershon M. Ratner, *Why the No Child Left Behind Act Needs to be Restructured to Accomplish its Goals and How to Do It*, 9 UDC/DCSL L. REV. 1, 8-9 (2007).

Schools that did not meet the appropriate standards would lose funding and be forced to undertake restructuring action necessary to enable them to meet standards. Ratner, supra note 19, at 9-11. Students of low-income families who are the most disadvantaged by underperforming schools will be given the first opportunity to transfer to better performing schools in the area. Amy M. Reichbach, The Power Behind the Promise: Enforcing No Child Left Behind to Improve Education, 45 B.C. L. REV. 667, 675-76 (2004). As of 2008, schools in 32 states have been sanctioned for low performance. Jessica Flynn, No Child Left Behind Gets a Tip From Tort Theory: Protecting Responsible Schools Against Undeserved Sanctions, 31 T. JEFFERSON L. REV. 157, 169 (2008). See also Sam Dillon, Under 'No Child' Law, Even Solid Schools Falter, N.Y. TIMES, Oct. 12, 2008, at A1, available at http://www.nytimes.com/ 2008/10/13/education/13child.html?pagewanted=1&ref=no child left behind act ("Schools that miss targets for two consecutive years are labeled 'needing improvement' and face escalating sanctions that can include staff changes or closings."); Annie Correal, Leaving the No Child Left Behind List, N.Y. TIMES, Mar. 20, 2009, at L12, available at http://www.nytimes.com/2009/03/22/nyregion/longisland/22improveli.html?ref=no child left behind act ("At the Caroline G. Atkinson School, which serves ... fifth and sixth graders, and which was also taken off the ["Needs Improvement"] list this year, the school doubled the time devoted to math and English language arts, and added after-school and Saturday tutoring sessions, with the help of private grants A school or district is removed from the list when it shows improvement two years in a row in student performance in an area where a problem was identified.").

^{21.} Matthew D. Knepper, *Shooting for the Moon: The Innocence of the No Child Left Behind Act's One Hundred Percent Proficiency Goal and its Consequences*, 53 St. Louis U. L.J. 899, 899 (2009).

^{22.} Ratner, *supra* note 19, at 4-5.

charter schools, and improve the lowest-achieving schools.²³ The purpose of these measures is to expand educational opportunities to those who are not sufficiently wealthy or informed enough to access better quality schools. The program seeks to improve the quality of all schools, but particularly those that service disadvantaged children, in order to expand their opportunities.

Perhaps the expansion of educational opportunities disadvantaged groups is perceived as inherently justified because guaranteeing certain educational opportunities has long been a legal and More than twenty-eight years ago, the political American value. Supreme Court demonstrated its concern for equality of opportunity in education when it held that children of illegal immigrants could not be denied public schooling.²⁴ The Court articulated the consequences of inequality by asserting that, "[c]hildren denied an education are placed at a permanent and insurmountable competitive disadvantage, for an uneducated child is denied even the opportunity to achieve. And when those children are members of an identifiable group, that group through the State's action-will have been converted into a discrete underclass."²⁵ Thus, preventing the perpetuation of a discrete underclass has been recognized as a legitimate social objective in the context of education. While the promotion of wealth accumulation (apart from housing) has not been consistently recognized as a regulatory goal, the perpetuation of classes divided by wealth through the concentration of opportunities for wealth accumulation is not remarkably different from the consequences of the concentration of educational opportunities.

Beyond economic disadvantages, the U.S. government has also sought to expand opportunities to racial groups who would not otherwise have them. Civil rights advocates have agreed that "[g]overnment... was responsible for ensuring that each individual had

^{23.} The "Race to the Top" program also focused on preparing "students to succeed in college and the workplace and to compete in the global economy." *See* Race to the Top Fund Executive Summary, United States Department of Education (Nov. 2003), *available at* http://www2.ed.gov/programs/racetothetop/executive-summary.pdf. Of the 46 states that applied to the competition, 11 states and the District of Columbia received a share of the \$4 billion. *See* Press Release, United States Department of Education, Nine States and the District of Columbia Win Second Round Race to the Top Grants (Aug. 24, 2010), http://www.ed.gov/news/press-releases/nine-states-and-district-columbia-win-second-round-race-top-grants.

^{24.} Plyler v. Doe, 457 U.S. 202 (1982).

^{25.} Id. at 234.

access to all spheres of public activity – social, economic, and political – regardless of race, sex, or ethnic origin."²⁶ Through civil rights legislation, the government sought to expand opportunities of all kinds – employment, education, access to public accommodations, and voting rights – to groups who might have otherwise been restricted from them.²⁷ It did so to prevent the continued segregation of opportunity in our society.

Thus, in multiple arenas apart from financial regulation – housing, education, and civil rights – the U.S. government took steps to expand the opportunities available to groups who might not have had those opportunities without some form of government intervention. Housing policy sought to make it easier for more households to own homes, despite limitations on wealth and access to credit. Education policy sought to provide students living in neighborhoods where their schools were disadvantaged with opportunities available to those situated more favorably with respect to their income and geography. Civil rights legislation sought to promote opportunities for those denied them because of their race. In each of these cases, multiple justifications for the chosen policies were present. The expansion of opportunity as an end in itself was not the only potential justification for these policies, but it was perceived and utilized as a legitimate justification.

In all of these arenas, social policy justifications were not limited to

^{26.} Morris B. Abram, *Affirmative Action – Fair Shakers and Social Engineers*, 99 HARV. L. REV. 1312, 1312 (1986).

^{27.} President John F. Kennedy, Radio and Television Report to the American People on Civil Rights (June 11, 1963), *available at* http://www.jfklibrary.org/Historical+Resources/Archives/Reference+Desk/Speeches/JFK/-

⁰⁰³POF03CivilRights06111963.htm ("It ought to be possible for American consumers of any color to receive equal service in places of public accommodation, such as hotels and restaurants and theaters and retail stores, without being forced to resort to demonstrations in the street, and it ought to be possible for American citizens of any color to register to vote in a free election without interference or fear of reprisal [An African-American], regardless of the section of the Nation in which he is born, has about one-half as much chance of completing a high school as a white baby born in the same place on the same day, one-third as much chance of completing college, one-third as much chance of becoming a professional man, twice as much chance of becoming unemployed, about one-seventh as much chance of earning \$10,000 a year, a life expectancy which is 7 years shorter, and the prospects of earning only half as much . . .

[.] I shall ask the Congress of the United States to act, to make a commitment it has not fully made in this century to the proposition that race has no place in American life or law.").

FORDHAM JOURNAL OF CORPORATE & FINANCIAL LAW

arguments regarding market efficiency and the need to mitigate market failures, even though these arguments were just as salient in these areas as in the case of financial regulation. For instance, supporting housing has positive externalities for economic growth, ²⁸ psychological well-being, ²⁹ and political participation. ³⁰ Market failures prevented more widespread distribution of these benefits. ³¹ With respect to education

- 28. See Dimitri B. Papadimitriou et al., The Effects of a Declining Housing Market on the U.S. Economy 5-6 (Levy Economics Institute Working Paper No. 506, 2007), available at http://ssrn.com/abstract=999957 ("There are several ways in which housing is an integral part of a growing economy, especially in periods of rapidly rising home values. First, homebuilding, furniture sales, and home improvements account for a large percentage of GDP. Government statistics show that the residential investment sector is already acting as a drag on economic growth. Second, rising home prices increase household net worth, and consumers probably base their spending decisions partly on their net worth, not just their income.") (internal citations omitted).
- 29. Christopher E. Herbert & Eric S. Belsky, *The Homeownership Experience of Low-Income and Minority Households: A Review and Synthesis of the Literature*, 10 CITYSCAPE 5, 9 (2008), *available at* http://ssrn.com/abstract=1341163 ("Another significant benefit thought to be associated with homeownership is higher life satisfaction and better psychological health. Owners are thought to have higher self-esteem, due to both the higher social status associated with homeownership and the sense of accomplishment that results from having achieved a significant life goal.").
- Denise DiPasquale and Edward L. Glaser, Incentives and Social Capital: Are Homeowners Better Citizens? 3 (Nat'l Bureau of Econ. Research, Working Paper No. available at http://www.law.uchicago.edu/files/files/54.Glaeser. 6363, 1998), Home .pdf (arguing that homeownership is connected to specific externalities that are proxies for social connection and political participation. "Homeowners are approximately 10 percent more likely to know their U.S. representative by name. They are 9 percent more likely know the identity of their school board head. Homeowners are 15 percent more likely to vote in local elections and 6 percent more likely to work to solve local problems. On average, they are members of .25 more non-professional organizations than non-owners. Homeowners are 12 percent more likely to garden and 10 percent more likely to own guns. Homeowners attend church more frequently than renters.") (internal citations omitted) (cited in Edward L. Glaeser & Jesse M. Shapiro, The Benefits of the Home Mortgage Interest Deduction, 17 TAX POL'Y & ECON. 37 (2003)).
- 31. The lack of more widespread housing ownership prior to the emergence of subprime lending was the result of inadequately functioning credit markets because of information barriers. Subprime lending led to an increase in homeownership as credit was made available to groups previously excluded from credit markets. See Todd J. Zywicki & Joseph D. Adamson, The Law & Economics of Subprime Lending, 80 U. Colo. L. Rev. 1, 4 (Winter 2009) (citing James R. Barth et al., Despite Foreclosures, Subprime Lending Increases Homeownership, Subprime Mortgage Data Series (Milken Inst.) (Dec. 2007)). The previously excluded groups were able to access credit

policy, positive externalities result from a more educated population.³² As for civil rights, in addition to the compelling democratic arguments for promoting them,³³ information problems also perpetuate discrimination.³⁴ Along with these alternative justifications, expanding

markets because of the increased use of objective credit scores that gave lenders better information on which potential borrowers were credit worthy. See id. at 7 ("Subprime lending emerged as a result of interest rate deregulation and improved underwriting procedures that reduced some of those information asymmetries, including increased use of credit scoring as an indicator of willingness and ability to repay a loan. The use of credit scores as objective tests of borrower risk allowed lenders to create a schedule of interest rates and other loan terms that currently make up the mortgage market, leaving traditional one-size-fits-all lending products as relics of the past.") (citing Kristopher Gerardi, Harvey S. Rosen & Paul Willen, Do Households Benefit from Financial Deregulation and Innovation? The Case of the Mortgage Market 8 (Fed. Reserve Bank of Boston, Pub. Pol'y Discussion Papers No. 06-6, 2006)).

- 32. James R. Hines Jr., Jill R. Horwitz, & Austin Nichols, *The Attack on Nonprofit Status: A Charitable Assessment*, 108 MICH. L. REV. 1179, 1204 (2010) ("A common example of a good with a positive externality is education. Better-educated people make better citizens, improve the quality of democratic decision making, are less likely to lead lives of crime, and otherwise contribute positively to the lives of others."); Rachel Denae Thrasher & Kevin P. Gallagher, *21st Century Trade Agreements: Implications for Development Sovereignty*, 38 DENV. J. INT'L L. & POL'Y 313, 318 (2010) ("Basic literacy and education have positive externalities such as improved health and better participation in democratic processes").
- See, e.g., Dr. Martin Luther King, Jr., I Have a Dream: Address at March on Washington (Aug. 28, 1963) ("In a sense we have come to our nation's capital to cash a check. When the architects of our republic wrote the magnificent words of the Constitution and the Declaration of Independence, they were signing a promissory note to which every American was to fall heir. This note was a promise that all men, yes, black men as well as white men, would be guaranteed the unalienable rights of life, liberty, and the pursuit of happiness."). See also ERIKA WOOD, RESTORING THE RIGHT TO VOTE 1 (Brennan Center for Justice at NYU School of Law 2009), available at http://brennan.3cdn.net/5c8532e8134b233182 z5m6ibv1n.pdf ("The right to vote forms the core of American democracy. Our history is marked by successful struggles to expand the franchise, to include those previously barred from the electorate because of race, class, or gender. As a result our democracy is richer, more diverse, and more representative of the people than ever before."); Christopher Leon Jones, Jr., The Protection of Democracy: The Symbolic Nature of Federal Hate Crime Legislation, 29 T. MARSHALL L. REV. 17, 35 (2003) ("One's exercise of political liberty is dependent on the protection of one's personal liberty; therefore, the existence of civil rights is a key virtue of democracy. Accordingly, the recognition and protection of civil rights is also necessary for the proper functioning of democracy.") (internal quotation marks omitted).
 - 34. Paulo R. A. Loureiro & Adolfo Sachsida, Adverse Selection, Asymmetric

FORDHAM JOURNAL OF CORPORATE & FINANCIAL LAW

opportunity was, and still is, an acknowledged and legitimate justification for these policies.³⁵

Like these social policies, securities regulation can and should be justified on a number of grounds, but historically, expanding opportunities for wealth accumulation across sectors of the population has not been a justification that has been given credence. This paper advocates for, and examines the implications of, implementing an opportunities-based perspective in evaluating securities regulation for policy decisions. I demonstrate how the policy implications of such a perspective are often distinct from those implicated by other approaches, such as a public welfare approach to securities regulation. In this Article, I apply this perspective and what we know from the empirical research about investor behavior³⁶ to examine how securities policy could be shaped by an opportunities-based perspective in four areas: (1) enhancing access to information and financial institutions;³⁷ (2) requiring disclosures;³⁸ (3) impacting the behavioral biases of

Information and Discrimination in the Labor Market, 30 PLANEJAMENTO E POLÍTICAS PÚBLICAS [PPP] 71, 76 (2007) (Braz.) ("[A]symmetric information is a strong determinant of discrimination, which the main outcome being that workers with different productivities earn the same wage."); Edmund S. Phelps, *The Statistical Theory of Racism and Sexism*, 62 AM. ECON. REV. 659, 659 (1972) (noting that an employer will discriminate against a group of workers if the cost of obtaining information about the individuals is excessive).

^{35.} *See* Beville, Falaschetti, & Orlando, *supra* note 1 (on housing); Nash, *supra* note 19 (on education); Abram, *supra* note 26 (on Civil Rights legislation).

^{36.} See, e.g., Stephen J. Choi & A.C. Pritchard, Behavioral Economics and the SEC, 56 STAN. L. REV. 1 (2003); James D. Cox & John W. Payne, Mutual Fund Expense Disclosures: A Behavioral Perspective, 83 WASH. U. L.Q. 907 (2005); Paredes, supra note 4; Robert Prentice, Whither Securities Regulation? Some Behavioral Observations Regarding Proposals for its Future, 51 DUKE L.J. 1397 (2002); Olivier Armantier, Do Wealth Differences Affect Fairness Considerations? (CIRANO, Working Paper No. 2006s-13, 2006); Antoni Bosch-Domènech & Joaquim Silvestre, Do the Wealthy Risk More Money? An Experimental Comparison (Pompeu Fabra Univ. Dep't of Econ. and Bus., Working Paper No. 692, 2003); Robert Bloomfield, Robert Libby, & Mark W. Nelson, Confidence and the Welfare of Less-Informed Investors (Jan. 30, 1998) (working paper, available at http://ssrn.com/abstract=72068); Barbara Döbeli & Paolo Vanini, Stated and Revealed Investment Decisions Concerning Structured Products (Apr. 4, 2008) (Jan. 30, 1998) (working paper, available at http://ssrn.com/abstract=991868).

^{37.} See infra Part II.

^{38.} See infra Part III.

investors;³⁹ and (4) aligning the incentives of investment professionals to better facilitate the wealth accumulation of their clients.⁴⁰ The implications of applying an opportunities-based approach to financial regulation are distinct from those of a public welfare or efficiency approach to regulation. More so than these other approaches, an opportunities-based approach requires an understanding of the empirical realities of investor behavior and yields policy recommendations targeted at increasing opportunities for wealth accumulation for the average investor.

II. DIFFERENTIAL ACCESS TO FINANCIAL INSTITUTIONS AND PRODUCTS

Access to financial markets, like access to education, employment, public accommodations, and a host of other areas, is significant in promoting opportunity.⁴¹ In the case of financial markets, the opportunity at stake is the opportunity to create and accumulate wealth. The adage, "it takes money to make money,"⁴² or, in other words, the assumption that wealth is required to create more wealth, embodies the idea that wealth results from the taking of large risks and that the wealthy are more likely and better able to bear such risks.⁴³ While these

- 39. See infra Part IV.
- 40. See infra Part V.
- 41. Michael S. Barr, *Banking the Poor*, 21 YALE J. ON REG. 121, 127 (2004) ("[I]mproved access to bank accounts can reduce the costs of financial services for the poor, expand access to lower-cost forms of credit and increase opportunities for saving-all key to reducing poverty and expanding social mobility.").
- 42. See Christopher H. Lytton, Soft Money: The Weapon of Choice for the Runaway Productions, 35 McGeorge L. Rev. 719, 736 (2004) ("The old adage is true: it takes money to make money."); Daria Roithmayr, Locked in Segregation, 12 VA. J. Soc. Pol'y & L. 197, 258 (2004) ("[I]t takes money to make money, and that is why the rich get richer and the poor get poorer.") (internal quotation marks omitted); Robert Hockett, A Jeffersonian Republic By Hamiltonian Means: Values, Constraints, and Finance in the Design of a Comprehensive and Contemporary American "Ownership Society", 79 S. CAL. L. Rev. 45, 90 (2005) (providing one manifestation of the old adage, that a lender will mitigate risk by taking a security interest in an asset already owned by the borrower, or by requiring a guaranty from a well-resourced associate of the borrower)
- 43. See Sarah Molseed, An Ownership Society For All: Community Development Financial Institutions as the Bridge Between Wealth Inequality and Asset-Building

assumptions do have some truth to them, a societal problem arises when government action perpetuates the superior opportunities of the wealthy to become wealthier. Inequity in the opportunity to grow wealth should not be facilitated by the government any more than inequities in opportunities for education, employment, accommodations, and the like.

Because of both the actual and expressive effects of government action on the relationships between different groups in society, the government does and should consider how its actions impact the perception and actuality of equity in the realm of securities regulation. In its current role of re-examining a host of market structure issues, 44 the SEC is in a position to consider the impact on opportunities in its rulemaking. By not taking into account differentiation in access, the government perpetuates the ability of certain groups to obtain advantages in the accumulation of wealth not available to other groups, thereby exacerbating disparities in opportunity.

Creating disparities in the ability to grow wealth could create self-perpetuating cycles of entitlement. Research in psychology and economics has demonstrated that a danger of creating distinctions between the wealthy and non-wealthy is that such distinctions can create cycles of entitlement for the affluent and an acceptance of less equitable outcomes by the poor. Experiments have demonstrated that once individuals are endowed with relative wealth, they become accustomed

Policies, 13 Geo. J. on Poverty L. & Pol'y 489, 492 (2006) (noting that a household's stock of assets impacts its access to credit and "the ability to collateralize, thus opening the door to more credit and subsequent opportunities"); Ari Dobner, Litigation for Sale, 144 U. Pa. L. Rev. 1529, 1532-35 (1996) (describing how wealth impacts the ability to bear risk, particularly in the context of pursuing a potentially lucrative legal claim); Robert Frank, How the Rich Invest, Wall St. J., June 12, 2007, available at http://blogs.wsj.com/wealth/2007/06/12/how-the-rich-invest/ ("The rich invest differently because, well, they're different. They can take more risks because they have more money to lose. And they can invest for the long-term . . . because they have so much extra capital The rich prefer to invest directly in start-up companies The reasons for these differences are mainly access and suitability. Investing in start-ups is not as feasible for everyday investors because they don't have all the information on hot new start-ups that the rich often get, known as "deal flow". And even if they did, everyday investors wouldn't be able to risk the necessary capital.").

^{44.} For a detailed examination of several areas of market structure examination, see Mary L. Schapiro, Chairman, U.S. Securities & Exchange Commission, Strengthening Our Equity Market Structure, (Sep. 7, 2010), available at http://sec.gov/news/speech/2010/spch090710mls.htm.

^{45.} See Armantier, supra note 36, at 419-20.

to wealth differences over time. 46 This phenomenon was illustrated in an experiment with variations of the classic ultimatum game, in which participants were classified as rich proposers and poor proposers. 47 In one treatment group, the proposers were rich while the receivers were poor, while in another treatment group, the proposers were poor and the receivers were rich. 48 The experimenters found that even though participants initially strived for egalitarian distributions, over multiple repetitions of the game the rich proposers became less generous and the poor accepted lower offers. 49 Similarly, the poor proposers became more generous over time while rich receivers became more demanding. 50 As a result, the treatment groups, which began with a relatively small degree of inequity relative to the control group, ended up with a drastically different distribution than the control group. The party endowed with more wealth had significantly increased its wealth relative to the other party by the end of a 60-stage game. 51

While the implications of this experiment should be extrapolated with caution, these results support the theory that those who are endowed feel more entitled to a larger share of societal wealth while the poor become accustomed to receiving a smaller proportion over time. Similarly, studies of inequity in pay between CEOs and employees have shown that greater inequity in pay gives CEOs a greater feeling of power and that they are more apt to maltreat employees. While wealth and income are distinct, it is not implausible that exacerbating already significant wealth differentials could have significant consequences for the ability of different groups of society to empathize with each other.

These findings have policy implications. If the law facilitates opportunities for wealth accumulation primarily for the affluent or a select few, then these chosen groups will come to expect such

^{46.} See, e.g., id.

^{47.} *Id.* at 408-13, 425.

^{48.} *Id*.

^{49.} *Id.* at 412.

^{50.} Id. at 425.

^{51.} Id. at 411-12, 425.

^{52.} See, e.g., Sreedhari Desai, Arthur Brief & Jennifer George, When Executives Rake in Millions: Meanness in Organizations 25-26 (June 24, 2010) (working paper, available at http://ssrn.com/abstract=1612486) (finding in an experiment that individuals designated as managers and varying levels of inequity in pay displayed an increased tendency to "fire" individuals designated as employees even when those "employees" turned in an adequate performance of the designated tasks).

800

opportunities and demand more of them, while the non-wealthy will become accustomed to inequitable distributions and being restricted in the opportunity to grow their wealth. Several examples of areas in which differential access in the securities markets is present and facilitated by government regulation merit reform in light of an opportunities-based perspective.

If we accept the premise of the opportunities-based perspective – differences in opportunity created by the government, whether perceived or actual, matter for societal well-being – then we should be particularly skeptical of blatant separations between classes facilitated by government regulation. An example of an area of blatant separation created by financial regulation is the restriction on which investors can invest in hedge funds based on their ability to meet the net worth requirements articulated in the accredited investor standard.⁵³ Historically, the SEC has permitted certain financial institutions, such as hedge funds, to escape regulation.⁵⁴ In order to protect unsophisticated, individual investors from the market imperfections of the unregulated world of hedge funds, the SEC restricts who can invest in a hedge fund.55 The SEC introduced the accredited investor requirement for investing in hedge funds in 1982.⁵⁶ The SEC believed that hedge funds engage in risky investment strategies and that the best way to shield unsophisticated individual investors from such risk was to keep them from investing in the funds directly.⁵⁷ Thus, in order to combat the potential market failure of information problems in the hedge fund

^{53.} See infra note 56 and accompanying text.

^{54.} See, e.g., Matthew F. Gately, Much Ado About Nothing: An Analysis of the "Accredited Natural Person" Standard, 2008 COLUM. BUS. L. REV. 760, 761; David Schneider, If At First You Don't Succeed: Why the SEC Should Try and Try Again to Regulate Hedge Fund Advisers, 9 J. BUS. & SEC. L. 261, 263 (2009); Scott V. Wagner, Hedge Funds: The Final Frontier of Securities Regulation and a Last Hope For Economic Revival, 6 J.L. ECON. & POL'Y 1, 8 (2009).

^{55.} Gately, *supra* note 54, at 776; Schneider, *supra* note 54, at 289.

^{56.} Wagner, *supra* note 54, at 9-10. *See* SEC General Rules and Regulations, Securities Act of 1933, 17 C.F.R. § 230.501(a) (2010) (defining accredited investor); *See also* Gately, *supra* note 54, at 762; Schneider, *supra* note 54, at 272-73 (discussing the requirements needed to satisfy the exemption under Regulation D).

^{57.} Gately, *supra* note 54, at 776; Schneider, *supra* note 54, at 289; U.S. SECURITIES & EXCHANGE COMMISSION, IMPLICATIONS OF THE GROWTH OF HEDGE FUNDS: STAFF REPORT TO THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION 80-81 (2003), *available at* http://www.sec.gov/news/studies/hedgefunds0903.pdf [hereinafter 2003 Report].

market – the problem that most investors would not understand and be able to evaluate the risks of investing in hedge funds – the SEC responded by preventing most investors from accessing hedge funds.

Originally, the requirements for accreditation as a hedge fund investor were an individual annual income of at least \$200,000 and a net worth of at least \$1 million. In 2006, the SEC proposed rules requiring that an accredited investor own investments of at least \$2.5 million, in addition to the income and net worth requirements, in order to invest in hedge funds. The SEC's theory behind this accredited natural person standard was that, in addition to increasing the net worth requirement, ownership of investments at this level would provide a "clear standard to use in ascertaining whether a purchaser of a private investment vehicle's securities is likely to have sufficient knowledge and experience in financial and business matters to enable that purchaser to evaluate the merits and risks of a prospective investment, or to hire someone who can." Before these rules were adopted, Congress included a provision

^{58. 17} C.F.R. § 230.501(a) (2010). *See also* Gately, *supra* note 54, at 762; Schneider, *supra* note 54, at 272-73; Wagner, *supra* note 54, at 10.

Prohibition of Fraud by Advisers to Certain Pooled Investment Vehicles; Accredited Investors in Certain Private Placement Vehicles, Securities Act Release No. 8766, 72 Fed. Reg. 400, 405 (Jan. 4, 2007) (proposed Dec. 27, 2006) (consideration deferred pending comments review) [hereinafter 2006 Proposed Rule]. See also Gately, supra note 54, at 768-69. Under the proposed rules, investments are to be defined as in rule 2a51-1 under the Investment Company Act of 1940, excluding the provisions that do not apply to natural persons. 2006 Proposed Rule, at 407. See also 17 C.F.R. § 270.2a51-1 (2010) (defining investments). In 2007, the SEC recommended modifying the accredited investor standard to include an "investments-owned" standard. Accordingly, an individual would enjoy accredited investor status by owning at least \$750,000 worth of investments. The newly developed "investments-owned" standard could be substituted for the current net worth and income requirements. Revisions of Limited Offering Exemptions in Regulation D, Securities Act Release No. 33-8828, 72 Fed. Reg. 45116, 45123-24 (Aug. 10, 2007) (proposed Aug. 3, 2007) (consideration deferred pending comments review) [hereinafter 2007 Proposed Rule]. In addition, the income and net worth requirements would be adjusted for inflation beginning in 2012 and then every five years thereafter. Id. at 45126. These proposals also included the creation of a new classification, the large accredited investor, which would be met if an individual owned \$2.5 million in investments or had an annual income of \$400,000. Id. at 45118. The SEC estimates that 1.64% of households would qualify under the large accredited investor standard. Id. at 45119.

^{60. 2006} Proposed Rule, supra note 59, at 405. The SEC justified proposing the more stringent requirements because compiled data revealed that a much greater percentage of individuals qualified as accredited investors in 2003 than in 1982. *Id.* at

FORDHAM JOURNAL OF CORPORATE & FINANCIAL LAW

limiting the eligibility requirements of accredited investors in the recently enacted Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank").⁶¹ Congress directed the SEC to exclude the value of an individual's primary residence when computing the individual's net worth as applicable to the current accredited investor standard; fewer individuals, as a result, can satisfactorily meet the conditions necessary for becoming accredited investors.⁶² In 2011, the SEC proposed rules that would add this provision to the accredited investor standard.⁶³

The rationale for denial of access to hedge funds appears to be the desire to isolate the realm in which complex financial institutions, which are difficult to regulate, can cause harm.⁶⁴ The accredited investor standard, however, does not serve to shelter the non-accredited investor from the risks of hedge funds.⁶⁵ Far more individuals are indirectly

406; 2003 Report, supra note 57. In 1982, for example, 1.87% of U.S. households qualified for accredited investor status as compared to approximately 8.47% in 2003, representing a 350% increase. 2006 Proposed Rule, supra note 59, at 406. By incorporating the accredited natural person standard under the proposed revisions, the SEC estimates that only 1.3% of U.S. households would qualify for accredited investor status, which is lower even than the 1982 level. Id.

- 61. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 413, 124 Stat. 1376, 1577-78 (2010) [hereinafter *Dodd-Frank*].
- 62. *Id.* § 413, 124 Stat. at 1577. The SEC is directed to review the accredited investor standard four years after the Act's enactment (and every four years thereafter) and make adjustments as deemed necessary "for the protection of investors, in the public interest, and in light of the economy." *Id.* § 413, 124 Stat. at 1577-78.
- 63. Net Worth Standard for Accredited Investors, Securities Act Release No. 33-9177, 76 Fed. Reg. 5307 (Jan. 31, 2011) (proposed Jan. 25, 2011).
- 64. See Wagner, supra note 54, at 18 ("Thus, the SEC reasons, hedge funds should only be available to sophisticated investors who have a high net wealth thereby minimizing the risk of severe loss to average investors.").
- 65. "Accredited investors who can no longer directly invest in hedge funds because they do not meet the new accredited natural person standard will still be able to meet the lower financial requirements of funds of funds. While it is true that investing in a fund of funds provides additional investor protections, the shift from direct investment to indirect investment will not reduce the total amount of capital entering the hedge fund industry or the number of investors impacted by the industry." (internal citations and quotation marks omitted). Gately, *supra* note 54, at 773 (arguing that non-accredited persons may still be exposed to the risks of hedge funds through financial instruments called "funds of funds," or retail funds that invest in various hedge funds, thus mitigating or eliminating the protections offered by the "Accredited Natural Person Standard").

4

exposed to the risks associated with hedge funds⁶⁶ by investing in funds of hedge funds ("FOHFs")⁶⁷ and could also be exposed to hedge funds through their pension funds.⁶⁸ Moreover, hedge funds impose systemic risk on the rest of the financial market because of their increasing number and size, the concentration of the largest funds in the hands of a few advisers, and their use of leverage as a major investment strategy.⁶⁹ Thus, non-accredited investors are exposed to the risks of hedge funds through indirect investment as well as through the systemic risk imposed by hedge funds on the financial system.

Although limiting access has not entirely shielded non-accredited investors from hedge funds⁷⁰ and we do not know that hedge funds are any more risky on average than other investment vehicles,⁷¹

- 66. See, e.g., 2003 Report, supra note 57, at 82 ("[R]etail investors seeking diversification by investing in a Dual Registered FOHF . . . may take on more risk than desired as a part of their overall portfolio."); Id. ("Although [pension plans, universities, endowments, foundations and other charitable organizations] typically qualify as "accredited investors" or "qualified purchasers," these institutions, by investing in hedge funds, expose their participants or other beneficiaries to hedge funds.").
- 67. *Id.* at 68-69. Only a Dual-Registered FOHF (registered under both the Investment Company Act and the Securities Act) may publicly offer its securities. Currently, all registered FOHF's have restricted their sales to individuals who meet the accredited investor standard, at a minimum. This requirement, however, is not established by law, and can be changed by an FOHF at any time.
- 68. *Id.* at 82 ("Pension plans were among the earliest hedge fund investors. The pace of these investments, however, has increased over the past few years."). *See also* Wagner, *supra* note 54, at 24. ("Investors of the banks or beneficiaries of pension funds thus often indirectly, and often inadvertently, expose themselves to hedge fund risk."). Alarmingly, pension funds, as of January 2005, accounted for 7% of hedge fund capital sources. *Id.*
 - 69. Schneider, *supra* note 54, at 287.
 - 70. 2003 Report, supra notes 57 and accompanying text.
- 71. Shadab, *supra* note 9, at 240. ("In 2008, as losses from the U.S. subprime mortgage market transformed into an international financial crisis, the value of global equities dropped 42 percent while hedge funds worldwide lost a comparatively smaller 19 percent for their investors."); *Id.* at 271 ("The foregoing innovative hedge fund investment strategies have the general effect of reducing an investor's exposure to market risk."); *Id.* at 272 ("[H]edge funds have a relatively low correlation to standard systematic factors compared to mutual funds."); *Id.* at 292 ("[D]espite the unprecedented 19 percent annual loss, hedge fund performance in 2008 was at an all time high relative to the U.S. public equity market, which lost 38.47 percent of its value. Hedge funds also far outperformed stock mutual funds, which lost an average of 37.6 percent in 2008.") (footnote omitted). *See also* Kelly Bit, Hedge Funds Took in \$16 Billion in October, Most in a Year, BLOOMBERG, Dec. 7, 2010, *available at*

differentiating access has continued to be the preferred means of regulation. Policy alternatives, however, do exist. In order to limit the impact of hedge funds on the rest of the financial system, regulators could impose limits on the risk exuded by hedge funds by restricting credit to hedge funds, imposing leverage ratio limits, or correlating leverage limits with the riskiness of hedge fund assets.⁷² If evaluated from a public welfare perspective, limiting the credit and thereby the risk taken on by hedge funds has clear trade-offs. On the one hand, limiting risk addresses the externality of the potential systemic risk imposed on the whole market by the risky transactions of one hedge fund that could impact thousands of counterparties.⁷³ On the other hand, if the market is willing to provide credit and allow the hedge fund to be as leveraged as it is, regulations create distortions that prevent the market from working as it otherwise would. Regulations might limit the upside potential of hedge funds, decreasing wealth and potentially decreasing investment by the wealthy.⁷⁴

If an opportunities-based perspective is considered along with the traditional social welfare approach, then the possible disincentives for investing by the wealthy are weighed against the loss in opportunities for others to invest. Once the incorporation of an opportunities-based perspective occurs, differentiating access is no longer a preferred means of regulation. If the policy problem that regulation is attempting to address is that hedge funds hold portfolios that are too risky to serve as the sole means of investment for an individual's retirement, then regulation could limit the percentage of an investor's savings that are invested in a hedge fund. Such a regulation could both protect the wealth of unsophisticated investors as well as convey the expressive

http://www.bloomberg.com/news/2010-12-08/hedge-funds-took-in-16-billion-in-october-most-in-a-year.html ("Preliminary data show that hedge funds are outperforming the S&P 500 by about 21 basis points through November [2010].").

_

^{72.} Schneider, supra note 54, at 307-08.

^{73.} *Id.* at 307 (noting that with leverage limits, hedge funds will be less likely to fail, and should they fail, "creditors will feel less pain which will stem the possible ripple effect").

^{74.} *Id.* ("One downside of [imposing leverage limits] is that, although losses are less magnified, profits will also not be as magnified. Hedge funds may no longer be able to provide the above market returns that they have shown over the years and they will become less popular investment vehicles. Any decrease in the utilization of hedge funds may also correspondingly diminish the benefits that they provide to the market and investors.").

message that the purpose of regulation is to further diversify and mitigate risk – not to separate society into those sufficiently wealthy to escape regulation and those who are not. Moreover, those who could benefit from the wealth-enhancing opportunities of hedge funds, but are not currently eligible, could benefit from access to these financial institutions, thereby increasing social welfare.

Another area of differentiation is access to information. The flourishing of flash orders and dark pools, to which only limited parties have access, is not so different from the world of hedge funds. Flash orders permit some investors to see the prices of certain securities milliseconds before other investors. Flash orders create differential access to information between the general public who receives its information from the consolidated quotation data and those select market participants, generally those with access to special technology, who receive a market's individual data feed. Commentators have argued that such orders provide an unfair advantage to insiders, allowing these individuals to trade ahead of the public. Yet, it is not clear that

^{75.} Molly J. Walker Wilson, *Behavioral Decision Theory and Implications for the Supreme Court's Campaign Finance Jurisprudence*, 31 CARDOZO L. REV. 679, 693 (2010) ("[F]raming has been recognized as a critical tool for politicians and parties alike, in the effort to control the agenda and the hearts and minds of Americans."); Cass R. Sunstein, *On the Expressive Function of Law*, 144 U. Pa. L. Rev. 2021, 2026 (1996). ("[A]n appropriately framed law may influence social norms and push them in the right direction. For example, if the law mandates recycling, perhaps it will affect social norms about the environment in a way that is different from (and better than) the way curbside charges might affect norms.").

^{76.} Robert Hatch, Reforming the Murky Depths of Wall Street: Putting the Spotlight on the Securities and Exchange Commission's Regulatory Proposal Concerning Dark Pools of Liquidity, 78 GEO. WASH. L. REV. 1032, 1041 (2010).

^{77.} Elimination of Flash Order Exception from Rule 602 of Regulation NMS, Exchange Act Release No. 60684, 74 Fed. Reg. 48632, 48636 (Sep. 23, 2009) (proposed Sept. 18, 2009) (period for public comment reopened July 2, 2010) (hereafter 2009 Flash Order Exception).

^{78.} See, e.g., Michael J. McGowan, The Rise of Computerized High Frequency Trading: Use and Controversy, DUKE L. & TECH. REV. 16, 36 (2010) ("[Senator Charles] Schumer argued that flash orders allow market insiders to utilize rapid trading platforms to trade ahead of those orders and profit from advanced knowledge of buying and selling activity.") (internal quotation marks omitted). "Traders who benefit from the use of flash orders are shown the buy and sell orders ahead of everyone else in the marketplace in exchange for a fee. With this very small advance notice of market conditions, high frequency traders can use their super-computers to conduct rapid statistical analysis of the changing market state and trade ahead of the public market."

these insiders are not retail-side investors who may use the advantages of flash orders to lower transaction costs, allowing them to benefit a large segment of the public through passed on benefits such as reduced commissions. Empirically, therefore, we do not know whether the presence of flash orders expands or restricts opportunities for wealth accumulation across sectors of the population.

The SEC proposed a rule calling for the ban of flash orders in 2009.80 Regulation has been justified, in part, by arguments that are consistent with an opportunities-based perspective and should be more explicitly tied to such a perspective. If an opportunities-based perspective were to be employed, the effects of flash orders on different segments of the population should be taken into account when considering adoption of the flash order proposal. Relevant justifications under an opportunities-based perspective have included that the use of flash orders could detract from the fairness and efficiency of the markets, that they may create a two-tiered market where the public does not have access to the most accurate pricing information, that they may create a disincentive for the public display of trading interest and harm quote competition among markets, and that they may decrease investor confidence by putting the common investor at a disadvantage to those with greater resources.81

Similar considerations are relevant when evaluating the regulation of dark pools. Dark pools, which are mediums where parties can trade without being regulated as they would be on an exchange, 82 have

Id. at 28. "The SEC is mainly concerned with the possible creation of a two-tiered market system, which favors those with sophisticated computer systems over retail investors." *Id.* at 37. "[O]nly those who have invested in sophisticated trading systems are able to effectively access flash orders." *2009 Flash Order Exception*, *supra* note 77, at 48634.

^{79. 2009} Flash Order Exception, supra note 77, at 48638; David D. Gruberg, Decent Exposure: The SEC's Lack of Authority and Restraint in Proposing to Eliminate Flash Trading, 65 U. MIAMI L. REV. 263, 286 (2010).

^{80.} The exception for flash orders in the national securities laws was first approved in 1978. Flash orders as commonly referred to today, however, developed with improved technology as trading become more automated and electronic. 2009 Flash Order Exception, supra note 77, at 48632.

^{81. 2009} Flash Order Exception, supra note 77, at 48635-36, 48638.

^{82.} Regulation of Non-Public Trading Interest, Exchange Act Release No. 60997, 74 Fed. Reg. 61208, 61208 (Nov. 23, 2009) (proposed Nov. 13, 2009) (hereafter 2009 *Proposed Rule*). Dark pools have been created to operate under Regulation ATS, which allows trading to occur in venues not subject to the strict regulatory requirements of

increased in number from 10 in 2002 to 29 in 200983 and have grown to account for over 10% of all trading volume in 2010.84 Dark pools provide those investors who have access to them with a high-level of pre-trade privacy, allowing them select access to information on prices and sizes of transactions, and often provide a better price than is available on publicly traded exchanges. 85 Currently, the existence of dark pools creates differential access to information between those select individuals and institutions that are granted access to a dark pool and the rest of the general investing public. 86 Dark pools do not have to comply with fair access requirements until they exceed a volume threshold.87 While the Fair Access Rule generally prohibits alternative trading systems from unreasonably prohibiting or limiting access to the trading system⁸⁸ and requires alternative trading systems to keep and report records of whom they grant and deny access.⁸⁹ dark pools can avoid the fair access requirements if the trading volume of a particular security in the dark pool is less than 5% of the security's average daily volume traded in four of the preceding six months.⁹⁰

Commentators have argued that hiding information from the public through dark pools could harm the validity of price quotes and keep

section 6 of the Exchange Act. Hatch, supra note 76, at 1036-37.

- 83. 2009 Proposed Rule, supra note 82, at 61208-09.
- 84. Nina Mehta, SEC Should Force Dark Pools to Improve Market Prices, NYSE Says, BLOOMBERG BUSINESSWEEK, available at http://www.businessweek.com/news/2010-04-23/sec-should-force-dark-pools-to-improve-market-prices-nyse-says.html ("Dark pools . . . handled 10 percent of U.S. equity trading in February [2010], compared with 5.8 percent in March 2008.").
- 85. Hatch, *supra* note 76, at 1037-38. *See also 2009 Proposed Rule*, *supra* note 82, at 61211.
- 86. 2009 Proposed Rule, supra note 82, at 61211 ("The public . . . does not have access to this valuable information concerning the best prices and sizes for NMS stocks. Rather, dark pools transmit this information only to selected market participants. In this regard, actionable IOIs can create a two-tiered level of access to information about the best prices and sizes for NMS stocks that undermines the Exchange Act objectives for a national market system.").
 - 87. 17 C.F.R. §242.301(b)(5) (2011).
- 88. "Establish written standards for granting access to trading on its system." 17 C.F.R. §242.301(b)(5)(ii)(A) (2011); "Not unreasonably prohibit or limit any person in respect to access to services offered by such alternative trading system by applying the standards established under paragraph (b)(5)(ii)(A) of this section in an unfair or discriminatory manner." §242.301(b)(5)(ii)(B).
 - 89. 17 C.F.R. §242.301(b)(5)(ii)(C-D) (2011).
 - 90. 17 C.F.R. §242.301(b)(5)(i) (2011).

investors from knowing if they are getting the best price for their transactions, and that better prices in dark pools could take liquidity out of conventional exchanges.⁹¹ At the same time, an argument for the presence of dark pools is that a lack of pre-trade transparency can allow block trades to occur by providing an opportunity for market participants to find trading interest for large-size orders without simultaneously causing an impact on price. 92 Such pre-trade opacity could be beneficial to institutional investors, with whom many individuals have their pension and 401(k) accounts, that need to trade in large sizes and can benefit from this lack of pre-trade transparency.⁹³ In considering the regulation of dark pools, the Commission has expressed concern that trading in dark pools undermines the concept of creating a national market system by creating a two-tiered level of access to information, and that the private trading may discourage the display of public interest and thereby limit competition.⁹⁴ These justifications are focused on the appearance of a lack of opportunity for the unsophisticated investor, and the Commission should continue to emphasize this perspective as it evaluates proposals to regulate dark pools.

For both flash orders and dark pools, in addition to the effects that result from how dark pools and flash orders are perceived, the Commission should also consider empirical investigations of these mechanisms' effects on different classes of investors when the Commission is deciding whether and how to regulate in a way that would promote opportunities for wealth accumulation across a broad segment of the population. When we view these proposals from an opportunities-based perspective, we should be assessing whether and to what extent the presence of flash orders and dark pools creates definitive classes between those who are advantaged and those who are not.

The Commission's policies and rhetoric with respect to opportunities have potentially significant consequences because government action can create both the reality and perception of the idea that the wealthy are favored and are entitled to even more opportunities. When one group, such as the affluent, is believed to have a particular sphere of influence over an institution, public trust in that institution can

^{91.} Hatch, *supra* note 76, at 1039.

^{92. 2009} Proposed Rule, supra note 82, at 61227.

^{93.} *Id.* at 61208.

^{94. 2009} Proposed Rule, supra note 82, at 61211.

be weakened because of growing institutional corruption. An example of the effects of such distrust can be seen in the public's cynical view regarding the impact of campaign contributions. Similarly, the public has perceived recent economic policies, such as the Troubled Asset Relief Program ("TARP"), as primarily benefitting wealthy individuals and large financial institutions, thereby weakening the public's trust in government institutions. Ultimately, the perception that certain

^{95. &}quot;Institutional corruption does not refer to the knowing violation of any law or ethical rule It instead describes an influence, financial or otherwise, within an economy of influence, that weakens the effectiveness of an institution, especially by weakening public trust in that institution." Lawrence Lessig, *Democracy After Citizens United*, BOSTON REV., Sept./Oct. 2010, *available at* http://bostonreview.net/BR35.5/lessig.php.

^{96. &}quot;The vast majority of Americans believe money buys results in Congress; less than a quarter of Americans believe the institution worthy of their trust. When 'free-market' Republicans vote to support milk subsidies or sugar tariffs, or when 'proconsumer' Democrats vote to exempt used-car dealers from consumer financial-protection legislation, it is easy to understand the mistrust and hard to believe that the influence of money hasn't weakened the ability of members to serve the principles, or even the interests, they were elected to represent." Lessig, *supra* note 95. *See also* McConnell v. FEC, 540 U.S. 93, 115 (2003) ("[The Bipartisan Campaign Reform Act of 2002] is the most recent federal enactment designed to purge national politics of what was conceived to be the pernicious influence of 'big money' campaign contributions.") (internal quotation marks and citations omitted).

See Office of the Special Inspector General for the Troubled Asset RELIEF PROGRAM, QUARTERLY REPORT TO CONGRESS 4 (Oct. 21, 2009), available at http://www.sigtarp.gov/reports/congress/2009/October2009 Quarterly Report to Con gress.pdf [hereinafter SIGTARP] ("Notwithstanding TARP's role in bringing the financial system back from the brink of collapse, it has been widely reported that the American people view TARP with anger, cynicism, and distrust The beliefs of some, for example . . . that TARP was created in secrecy to transfer wealth from taxpayers to Wall Street insiders . . . are only reinforced by Treasury's failures of transparency."); PEW RESEARCH CENTER FOR THE PEOPLE & THE PRESS AND THE NATIONAL JOURNAL, GOV'T ECONOMIC POLICIES SEEN AS BOON FOR BANKS AND BIG BUSINESS, NOT MIDDLE CLASS OR POOR (The Society for Human Resource Management 2010), available at http://people-press.org/report/637/ ("Fully 74% [of respondents] say that government policies over the past two years have done a great deal (53%) or a fair amount (21%) to help large banks and financial institutions. Majorities also say that large corporations (70% great deal/fair amount) and wealthy people (57% great deal/fair amount) have been helped. By contrast, 68% say government policies have helped small businesses not at all (29%) or not too much (39%); 68% also say middle-class people have received little or no help from these policies. And about the same percentage (64%) says poor people have not been helped."); Sewell Chan, Both Parties Play the Wall Street Card, Sometimes from the

policies favor the wealthy can undermine the public's trust in government. 98

Moreover, the expressive message of such government distinctions is potentially very powerful. "These expressive or symbolic dimensions of policy are central in many regulatory contexts. They are just as real and significant as other dimensions of policy." In fact, "[m]any people support law because of the statements made by law, and disagreements about law are frequently debates over the expressive content of law." Thus, the expressive message conveyed by securities regulators in making distinctions between different types of investors could, alone, have harmful effects on those denied opportunities available to others.

Bottom of the Deck, N.Y. TIMES, Nov. 1, 2010, at A16, available at http://www.nytimes.com/2010/11/01/us/01wall.html?scp=4&sq=anger%20over%20bail out&st=cse (explaining the trend during the 2010 Midterm Elections for candidates to use anger against Wall Street bailouts and the economic stimulus against political opponents).

See SIGTARP, supra note 97, at 165 ("Accuracy and transparency can enhance the public's understanding of and support for Government programs, whereas statements that are less-than-careful or forthright — like those made in [communicating about TARP] — may ultimately undermine the public's understanding and support for these same programs. This loss of public support could damage the Government's credibility and have long-term, unintended consequences that actually hamper the Government's ability to respond to crises."); Frank Rich, Still the Best Congress Money Can Buy, N.Y. TIMES, Nov. 28, 2010, at WK8, available at http://www.nytimes.com/ 2010/11/28/opinion/28rich.html (arguing that the recent dissatisfaction the public feels with the government stems from the inability or unwillingness of Congress to deal with the influence of "Big Money" in politics); Michael O'Brien, Sanders: 'Big Money Control' Congress, THE HILL, Dec. 22, 2009, available at http://thehill.com/blogs/blog-briefing-room/news/73311-sanders-big-money-interestscontrol-congress (quoting Sen. Bernie Sanders: "The truth is -- let me break the bad news to the American people -- big money interests control the United States Congress. That's the reality. Some of us, for years . . . have been trying to give the working class, middle class, low-income people some power. But the reality is, campaign contributions -- What do you think? We bailed out Wall Street; we're giving insurance companies, drug companies breaks here.").

- 99. Richard H. Pildes & Cass R. Sunstein, *Reinventing the Regulatory State*, 62 U. CHI. L. REV. 1, 70 (1995).
- 100. Cass R. Sunstein, On the Expressive Function of Law, 144 U. PA. L. REV. 2021, 2022 (1996).
- 101. Expressive messages can have a negative effect when they constitute expressive harms, such as a state or local government "communicat[ing] its contempt for blacks by requiring the racial segregation of public facilities." Elizabeth S. Anderson & Richard H. Pildes, Expressive Theories of Law: A General Restatement,

Such harmful effects could take the form of less saving¹⁰² and investment by the non-wealthy as well as greater perceptions of unfairness and undemocratic government.

III. INFORMATION

If the goal is to expand opportunities to participate in financial markets for the purpose of growing one's wealth, the direct restrictions imposed by regulation on access to institutions, such as hedge funds, are only one barrier to entry. Another barrier, which the SEC has attempted to tackle in numerous ways, is access to information. Dark pools and flash orders are only one aspect of the larger problem of accessing and comprehending the tremendous volume of information regarding publicly listed companies, mutual funds, and financial institutions. The SEC has tackled the problem of information barriers primarily through disclosure requirements. Such an approach is consistent with an efficiency/social welfare approach, which would predict that better information would improve the functioning of markets, thereby increasing social welfare. An opportunities-based approach, however, recognizes that more information does not necessarily create more opportunities for the majority of investors.

The disclosure requirements for publicly listed companies are formidable. Large prospectuses provide detailed information on over

148 U. PA. L. REV. 1503, 1528 (2000). This segregation sends a message that blacks are inferior, and need to be separated from the "pure[r]" whites. *Id.* Desiring that the government create a positive expressive message, many discriminating restaurant owners supported the Civil Rights Act of 1964, wanting the law to help "shift social norms and the social meaning of nondiscrimination," where before it was not socially acceptable to avoid discrimination. Sunstein, *supra* note 75, at 2043.

102. Sarah Molseed, An Ownership Society for All: Community Development Financial Institutions as the Bridge Between Wealth Inequality and Asset-Building Policies, 13 GEO. J. ON POVERTY L. & POL'Y 489, 500-01 (2006) ("Many asset-poor individuals do not have access to the mainstream financial institutions, such as banks and credit unions, that are essential to most asset accumulation. . . . The failure of many low-income individuals to access mainstream financial institutions seriously undermines any long-term asset accumulation.").

103. See, e.g., Paredes, supra note 4, at 417-18 ("A demanding system of mandatory disclosure . . . makes up the core of the federal securities laws. . . . [B]y arming investors with information, mandatory disclosure promotes informed investor decision making, capital market integrity, and capital market efficiency.").

fifty items, including "business development and prospects, legal proceedings, properties, financial performance, directors and officers, and securities." Since the passage of the Sarbanes-Oxley Act of 2002, 105 companies are expected to include even more information regarding off-balance sheet transactions, reconciliations of pro-forma financial information with the registrant's financial condition and results of operation, insider stock transactions, internal control systems, codes of ethics for senior financial officers, the audit committee's financial expert, and CEO and CFO certifications of financial statements. 106 In addition to these daunting disclosure requirements for individual companies, mutual funds, in which most individuals invest their retirement accounts, are required to disclose significant amounts of information in their prospectuses. In particular, they must disclose all costs, fees, and charges associated with a mutual fund in a variety of ways.¹⁰⁷ Additionally, mutual funds must provide a statement of the fund's investment objective and investment policies, including those regarding the borrowing of money or the issuance of senior securities, any involvement in the business of underwriting, the purchasing or selling of real estate or commodities, any making of loans, the concentration of their investment in particular industries, and the particular securities that may be utilized in pursuit of the fund's investment objective. 108

Does all of this mandatory disclosure actually increase the access of individuals to the financial markets? The purpose of disclosure requirements has been to combat the problems of asymmetric information in the marketplace and thereby allow the markets to work

^{104.} Id. at 425.

^{105.} Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, 116 Stat. 745 (2002).

^{106.} Paredes, supra note 4, at 428.

^{107.} Cox & Payne, *supra* note 36, at 926-27. In particular, mutual funds must disclose all fees and charges associated with a mutual fund as a percentage of net assets, the cost in dollars of an investment of \$1,000 that earned the fund's actual return and incurred the fund's actual expenses during that fiscal period, the costs in dollars based on the fund's actual expenses of a \$1,000 investment that earned an assumed return of five percent, and a narrative explanation of the types of costs charged to the fund. *Id*.

^{108.} Riggs, Rosselot, & West, *supra* note 4, at 865-66. Additional disclosures required include the operating policies of the fund, explaining how fund shares can be purchased or redeemed, support services provided for investors, and any other features that may be relevant to investment in the fund. *Id.* at 866.

more efficiently.¹⁰⁹ If investors know about the plans and financial wellbeing of different companies, the theory is that they will be more able to channel capital efficiently.¹¹⁰ These determinations will, in turn, allow investors to more accurately price assets on the market.¹¹¹

The problem with the market failures approach to regulation – that is, the provision of excessive information in order to combat the problem of inadequate disclosures – is that it does not address the reality that more information may have little or no value to investors. Individuals are limited in their ability to absorb and process large amounts of information. The Nobel laureate Herb Simon recognized the "bounded rationality" of individuals. This theory recognizes that individuals are limited in their ability to process and optimally utilize all available information and, instead, will satisfice. Even experts cannot process all of the information they are given. In fact, more

109. Paredes, *supra* note 4, at 470-71 (explaining the "lemons market," caused by asymmetric information, in which sellers offer inferior products because they have more information about the low quality of these products than the buyers, leading buyers to withdraw from the market, a problem mitigated when companies are required to disclose accurate information to consumers).

110. Paredes, *supra* note 4, at 471 ("[T]his commitment [to provide comprehensive, quality, and truthful disclosures indefinitely] is important because investors want assurances that they will have access to the information necessary to value a company's securities.").

111. Cox & Payne, *supra* note 36, at 930 (explaining that providing information to consumers can lower prices by facilitating product comparison and increasing competition).

112. Paredes, *supra* note 4, at 435 ("Cognitive capabilities are scarce resources that have to be allocated; because of limited cognitive capabilities, people cannot attend to all the information made available to them and cannot evaluate all their choices perfectly.").

113. Herbert A. Simon, *A Behavioral Model of Rational Choice*, 69 Q.J. ECON. 99, 101 (1955) ("[S]ome of the constraints that must be taken as givens in an optimization problem may be physiological and psychological limitations of the organism (biologically defined) itself. For example, the maximum speed at which an organism can move establishes a boundary on the set of its available behavior alternatives. Similarly, limits on computational capacity may be important constraints entering into the definition of rational choice under particular circumstances.").

114. Paredes, *supra* note 4, at 436. In satisficing, people choose a satisfactory outcome as their "aspiration level," and then work towards reaching this outcome, even if some better decision may exist in theory. *Id.* In other words, because individuals do not have the cognitive capabilities to optimize, they try to do "the best as [they] can under the circumstances." *Id.*

115. Id. at 455 ("[E]verybody - experts and non-experts alike - has limited

information can potentially cause individuals to make worse decisions. This is because greater amounts of information make it more difficult for individuals to rank which piece of information is most important. Additionally, investors may turn to heuristic rules of thumb, which may lead them to make errors. Under the availability heuristic, investors place too much weight on more recent and salient information.

Information about individual companies may not be as relevant to

cognitive abilities. A vast behavioral finance literature suggests that securities market professionals, like lay investors, are subject to all sorts of cognitive biases that affect investment decisions.").

Id. at 419 ("Studies show that at some point, people become overloaded with information and make worse decisions than if less information were made available to them."). For examples of such studies, see David Hirshleifer & Siew Hong Teoh, Limited Attention, Information Disclosure, and Financial Reporting 2 (Sept. 2003) (unpublished working paper), availableat http://papers.ssrn.com/sol3/ papers.cfm?abstract id=334940 ("[I]nformation that is presented in salient, easily processed form is assumed to be absorbed more easily than information that is less salient, or that is only implicit in the public information set. . . . Thus, investors neglect relevant aspects of the economic environments they face. For example, investors may neglect the distinctive features of different divisions of a diversified firm, or may not adequately adjust their interpretations of disclosures to take into account the strategic incentives of firms to manipulate observers' perceptions."); Russell Korobkin, The Efficiency of Managed Care "Patient Protection" Laws: Incomplete Contracts, Bounded Rationality, and Market Failure, 85 CORNELL L. REV. 1, 52-55 (1999) (arguing that numerous choices in healthcare coverage options can cause individuals to select simpler, less accurate decision-making processes in order to handle the amount of information they have to process); Naresh K. Malhotra, Reflections on the Information Overload Paradigm in Consumer Decision Making, 10 J. CONSUMER RES. 436, 437 (1984) ("In real life, consumers are often faced with large amounts and a wide variety of information, which is so prevalent and obtrusive in the environment. Although consumers develop mechanisms for limiting their intake of information, their limited processing capacity can become cognitively overloaded if they attempt to process 'too much' information in a limited time, and this can result in confusion, cognitive strain, and other dysfunctional consequences.").

117. Paredes, *supra* note 4, at 441. Each decision an individual is choosing between contains several attributes that are relevant to the consideration of the decision and that influence which alternative to choose. *Id.* at 437. The more attributes per choice, the closer individuals get to becoming mentally overloaded and making worse decisions. *Id.* at 441.

118. Stephen J. Choi, *Behavioral Economics and the Regulation of Public Offerings*, 10 LEWIS & CLARK L. REV. 85, 110 (2006).

119. *Id*.

the unsophisticated individual investor as is information about mutual funds. Of the 117.2 million U.S. households in 2009, 43%, or 50.4 million total households, owned mutual funds. These households represent 87.1 million individual mutual fund shareholders. The type of information that is likely to matter, therefore, for individual investors pertains to the risk, return, and fees of a mutual fund.

An opportunities-based policy might require that risk and return measures be incorporated by providing detailed descriptions of a mutual fund's past performance (monthly, quarterly, and annual in order for individuals to see the volatility of the fund over time), the types of assets in which it invests, and how its performance compares to a standard index, such as the S&P 500. In fact, mutual funds already make such disclosures and are required to do so under rules and amendments adopted in 2004 under the Investment Company Act of 1940, the Securities Act of 1933, the Securities Exchange Act of 1934, and Regulation S-X. 122 What would assist investors further is if the performance of mutual funds was compared in an accessible format to those of others of the same type and to mutual funds overall. 123 This could be done for risk and return. Simple explanations showing what the individual's investment would be in ten years if it continued to grow at the current rate of return, a historical average rate of return, or an alternative rate of return could assist investors in obtaining a more complete understanding of their current investments. Risk measures would be far more difficult to compare, but representing investment gains for different plausible return levels could be a great benefit to investors.

The SEC has also regulated mutual funds with respect to fee

^{120.} INVESTMENT COMPANY INSTITUTE, PROFILE OF MUTUAL FUND SHAREHOLDERS 3, 2009 (Winter 2010).

^{121.} *Id.* at 1

^{122.} Shareholder Reports and Quarterly Portfolio Disclosure of Registered Management Investment Companies, Investment Company Act Release No. 26372, 69 Fed. Reg. 11244 (Mar. 9, 2004).

^{123.} See Cox & Payne, supra note 36, at 935-37 (arguing for the reporting of expenses by mutual funds to be done in a way that leads to easy comparison by investors, such as requiring funds to calculate their expense ratio relative to other funds in their comparable investment classification and to report this to the SEC); Paredes, supra note 4, at 476 (supporting the continued use of charts, graphs, and tables in SEC filings so that information is presented in a more easily digestible way).

disclosures.¹²⁴ Mutual funds are required to disclose transactional fees (the sales loads and redemption fees), as well as management fees and 12b-1 fees (fees for marketing and distribution activities).¹²⁵ Fee disclosure requirements, however, fail to give investors a comparative basis for their costs. When investors only see the costs associated with the fund in which they are investing, they have no means to evaluate whether the price of their investment is justified.¹²⁶ Such a lack of comparative information makes it more difficult for the investors in mutual funds to monitor their cost and quality.¹²⁷ While the SEC's online fee calculator is a helpful step in the right direction,¹²⁸ measures that require investors to take initiative and do extra work are far less effective than providing the information directly in an easily accessible format.¹²⁹

Simplification of information allows more individuals to access the financial markets in ways that will effectively increase their wealth. For instance, individuals may be paying more fees for the same types of passively managed index funds without knowing it because the

^{124.} See Consolidated Disclosure of Mutual Fund Expenses, Investment Company Act Release No. 16244, 53 Fed. Reg. 3192 (Feb. 4, 1988) ("Investment Company Act Release").

^{125.} *Id.*; Cox & Payne, *supra* note 36, at 925-27; Investment Company Act Release, *supra* note 124.

^{126.} *Cf.* Cox & Payne, *supra* note 36, at 936 ("[P]roviding operating expense and return disclosures in a truly comparative framework is much more likely to elicit an informed choice on the part of investors than if operating expenses or return disclosures are made in isolation.").

^{127.} See id. at 937 (Having information comparing a fund to other comparable funds makes it more likely that directors will engage in proper oversight of their fund's services and fees because "[c]onsistent with the wise maxim that you manage what is measured, the independent directors are far more likely to probe the causes for above-average expense ratios than when not aware that the fund's expense ratio is above average.").

^{128.} See Calculating Mutual Fund Fees and Expenses, U.S. Sec. and Exch. Comm'n (Aug. 10, 2010) http://sec.gov/investor/tools/mfcc/mfcc-int.htm. This resource from the SEC allows for the comparison of the fees and expenses of up to three mutual funds, up to three ETFs, or the share classes of the same mutual fund, on FINRA's Mutual Fund Expense Analyzer. All that is needed is the full name of the fund or its ticker symbol, but you can also search for this information using key words.

^{129.} See Cox & Payne, supra note 36, at 932 ("Because processing of information is costly, people tend to accept information in the format in which it is given rather than expending cognitive effort to transform it.").

information is too complex for them to absorb in a timely way.¹³⁰ Mandating mutual funds to provide expense ratios, the expense ratio range for the comparable group, and the percentile ranking of their expense ratio within this group, would greatly reduce the information costs associated with pricing in the mutual fund market.¹³¹

This idea is analogous to what has been discussed by Professor Elizabeth Warren in promoting disclosures of credit card terms.¹³² Under the Credit Card Act of 2009, credit cards must now clearly disclose, the timing necessary to pay the balance of a credit card bill if the minimum payment is made (including the total cost of doing so as well as the minimum monthly payment required to pay off the balance within 36 months), as well as information about late payments (including the date after which such a fee will be charged and any increase in the interest rate for late payments), and an electronic method for credit card disclosures to become available.¹³³ This information must

^{130.} In one study, over eighty percent of respondents believed that higher maintenance charges signified a better performing fund. In a more detailed study, a sample of fifty-two S&P 500 index funds showed that those with poorer performance had higher distribution costs and yet grew their customer base at a higher rate than lower-cost funds. The biggest portion of the difference in performance between funds is attributable to the higher management expenses and costs. This problem could be impacted by the fact that individuals are not receiving enough information to make good comparisons among products, or that the information is not being presented in a way that makes it processible enough to make rational decisions. *See id.* at 909-11.

^{131.} Cox & Payne, *supra* note 36, at 936.

See Elizabeth Warren, Making Credit Safer: The Case for Regulation, HARVARD MAGAZINE, May-June 2008, at 34 (suggesting the development of a Financial Product Safety Commission that would establish guidelines for consumer disclosure, collect and report data about the uses of different financial products, judge the safety of new products, and require the modification of products judged as dangerous to consumers, in order to ensure that credit cards and other financial products are sufficient to meet "minimum safety standards" and that uniform disclosures would make it easy for consumers to compare products); Regulatory Restructuring: Enhancing Consumer Financial Products Regulation Before the House Financial Services Committee, 111th Cong. 5 (June 24, 2009) (testimony of Elizabeth Warren, Leo Gottlieb Professor Law, Harvard Law School), available of http://www.house.gov/apps/list/hearing/financialsvcs_dem/warren_testimony.pdf [hereinafter Regulatory Restructuring] (arguing that credit card companies should be required to provide uniform information about "the interest rate, the penalty rate, when a penalty will be imposed, and how to get the free gift" on a two-page document in order to facilitate product comparison by consumers).

^{133.} Credit CARD Act of 2009, Pub. L. No. 111-24, 123 Stat. 1734 (2009).

be provided in an easily accessible format. Warren has further proposed having a simple, two-page long credit card contract that is clear, easy to read, and highlights key information (interest rate, penalty rate, when penalties are assessed, and how to get free gifts) in a straightforward way. Each lender would have a similar contract where it would fill in the blanks with its company's information, creating a quick and easy way for consumers to compare competitors. Such a proposal, if applied to mutual funds, would help investors better accomplish one of the primary goals of disclosure – to discriminate on the basis of quality.

It is not necessary for the SEC to eliminate any of its current disclosure requirements. Eliminating some disclosure requirements could have costs, such as omitting information that is more useful than what remains disclosed, taking away information that may be useful to some market participants but not others, and eroding investor confidence by making the market seem less regulated and therefore more prone to fraud and inefficiency. Providing a two-tiered system of information, however, could be a good way to offer summary information that an individual investor could easily understand. For mutual funds, this could consist of graphics that show the mutual fund's costs and performance relative to others in its category and as compared to mutual funds as a whole.

For individual companies, it may be more difficult to determine the most important information that an investor should have. If the goal of

^{134.} Regulatory Restructuring, supra note 132, at 5.

^{135.} *Id.* ("Picture it—a credit card contract that is two pages long, clear and easy to read, and that has a few well-lit blanks—the interest rate, the penalty rate, when a penalty will be imposed, and how to get the free gift. Each lender can decide how to fill in the blanks for the cards it wants to sell, and each customer can make quick comparisons to see who is offering the best deals.")

^{136.} See Paredes, supra note 4, at 470 (describing the securities market as having a "lemons problem," where "the challenge for buyers is to identify quality, which buyers have difficulty doing without the necessary information to distinguish between superior and inferior items or the ability otherwise to determine quality at a reasonable cost").

^{137.} See id. at 450, 460, 462.

^{138.} See id. at 461 (advocating a disclosure system in which one set of disclosures is provided to experts, while a different set of disclosures is provided to the ordinary investor). This tiered form of disclosure is useful in that it provides the information most useful for two very different types of investors in the way that is most understandable to them, which for individual investors could be a simplified version of the most important general information.

policy is to promote the expansion of opportunity in wealth accumulation, the greatest gains in achieving this goal are likely to be derived from beginning with the types of investments made by the most people and assisting them to gain as much as possible from them. This approach would likely result in a focus on mutual funds and pension funds. The majority of investors in individual companies are institutional investors who, though still limited in their cognitive abilities, have better resources to help process and summarize large volumes of information about individual companies. The majority of investors and summarize large volumes of information about individual companies.

What information is most relevant and how it should be presented may require empirical research into what information is most easily processed and used by investors. ¹⁴² In sum, the notions underlying regulation in the form of mandating many disclosures may be founded on a myth:

A fair amount of what the Commission does . . . is in the name of

139. In 2009, an estimated 87 million individual investors owned mutual funds and held 84 percent of total mutual fund assets at year-end. Altogether, 50.4 million households, or 43 percent of all U.S. households, owned funds. Mutual funds represented a significant component of many U.S. households' financial holdings in 2009. Among households owning mutual funds, the median amount invested in mutual funds was \$80,000. Investment Company Institute, 2009 Investment Company Fact Book 80 (2009). "[O]ver 50 percent of pension fund investments are undertaken through the purchase of shares in mutual funds" World Bank, *Private Capital Flows to Developing Countries: The Road to Financial Integration* 129 (Oxford Univ. Press, 1997).

- 140. Kelli A. Alces, *Revisiting Berle and Rethinking the Corporate Structure*, 33 SEATTLE U. L. REV. 787, 801 (2010) ("Institutional investors have become very common and now account for the vast majority of shareholding, but they have failed to actively participate in corporate governance.").
- 141. See Paredes, supra note 4, at 455 ("Although the risk of information overload may be eased for experts, it is not eliminated."). However, securities market professionals can learn from past mistakes and often gain valuable experience over time. Id. In addition, experts can work with other individuals to help by hiring people, dividing tasks, and allocating resources. Id. "In large part, the expert filters are in reality collections of individuals housed in financial institutions that can bring lots of human and other resources to bear on a task." Id.
- 142. *Id.* at 473-74 (advocating for further research, such as interviews, surveys, laboratory experiments, or the study of historical data to expand existing behavioral finance literature and to determine how individuals process information and make investment decisions, particularly looking at the level of information overload for different securities market participants and what information is most useful and should be disclosed).

making disclosure "accessible" to the average investor. That sentiment has led to the creation of an awkward myth-story in which probably few have deep faith. In this story, the typical retail investor is very much an earnest and rational person, but with bounded capacity. He wants a substantial amount of government-mandated disclosure and evaluates it fairly carefully in making his investment decision so long as it is packaged properly (e.g., in "plain English"). To be sure, some investors actually do this. But the Commission has never studied investor behavior deeply enough to say, publicly at least, what percentage of investors read or understand these documents, or what influence the fundamental analysis-oriented disclosure has on their investment decisions. We now know from research in behavioral economics that this belief is unfounded. Regulatory policy needs to evolve to reflect that reality. 143

Thus, an opportunities-based perspective, unlike a social welfare approach, demands not that more information be provided, but rather that the most relevant information for the majority of investors be provided in as accessible a format as possible.

IV. SAVING US FROM OURSELVES

A host of behavioral biases that impact investment behavior compounds the problem of information overload. Such biases are examples of irrational behaviors that are not taken into account in traditional economic models. Consequently, the traditional social

^{143.} Donald C. Langevoort, *Taming the Animal Spirits of the Stock Markets: A Behavioral Approach to Securities Regulation*, 97 Nw. U. L. Rev. 135, 173 (2002).

^{144.} See infra Parts A-C.

^{145. &}quot;For most of the past two centuries, economic thinking has been dominated by the concept of *Homo economicus*. The hypothetical Economic Man knows what he wants; his preferences can be expressed mathematically in terms of a 'utility function.' And his choices are driven by rational calculations about how to maximize that function: whether consumers are deciding between corn flakes or shredded wheat, or investors are deciding between stocks and bonds, those decisions are assumed to be based on comparisons of the 'marginal utility,' or the added benefit the buyer would get from acquiring a small amount of the alternatives available." Paul Krugman, *Who Was Milton Friedman?*, THE NEW YORK REVIEW OF BOOKS (Feb. 15, 2007), available at http://www.nybooks.com/articles/archives/2007/feb/15/who-was-milton-

friedman/?pagination=false. *See also* DAN ARIELY, PREDICTABLY IRRATIONAL, REVISED AND EXPANDED EDITION *xix* (Harper Perennial 2009) ("In this book, when I mention the *rational* economic model, I refer to the basic assumption that most

welfare approach would not acknowledge them as one of the standard market failures to be addressed by government intervention.

Nevertheless, these behavioral biases have significant impacts on investors. They lead traders to trade too frequently (thereby reducing their returns by what they incur in fees), 146 refuse to realize their losses when they should, 147 and misjudge the probability of events. 148 Regulation can facilitate wealth accumulation by assisting investors in mitigating the impacts of their own biases on their investment behaviors. In this section I will describe three types of biases and some opportunities-based regulatory proposals that might help investors be less negatively impacted by their own biases.

A. OVERCONFIDENCE

One behavioral bias that has been well documented is overconfidence, or over-optimism. 149 Overconfidence leads to excessive

economists and many of us hold about human nature – the simple and compelling idea that we are capable of making the right decisions for ourselves.").

146. Choi & Pritchard, supra note 36, at 12.

147. This behavior is defined as "loss aversion," a behavioral trait that causes individuals to "continue [to hold] a losing position in hopes of reversing their losses without regard to disclosure." *Id.* at 22.

148. *Id.* at 16.

149. Stephen Choi, Regulating Investors Not Issuers: A Market-Based Proposal, 88 CAL. L. REV. 279, 316 (2000) ("[I]nvestors may act with overconfidence, placing too little weight on low-probability risks and justifying their prior decisions even when misguided. Similarly, investors may act with 'hindsight bias,' placing too much weight on past performance in projecting future performance.") (citing Jonathan Clements, Riskphobes are Taking Two Big Gambles, WALL St. J., Dec. 1, 1998, at C1); Choi, supra note 118, at 110 ("Investors may make decisions with overconfidence or overoptimism. Male investors in particular may trade excessively in securities."); Choi & Pritchard, supra note 36 at 12 ("Commentators have argued that investors often do not recognize how difficult [the choices they face] are and instead rely on a belief that their innate abilities will lead to a good investment result."); Langevoort, supra note 143, at 146 ("[P]erhaps the most robust finding in the psychology of judgment is that people are overconfident. . . . This bias has a comparative dimension to it: people are overconfident in their skills vis-à-vis others. Indeed, far more than fifty percent of a sampling of active investors will rate themselves as above average as compared to their peers at the task of investing."); Susanna Kim Ripken, The Dangers and Drawbacks of the Disclosure Antidote: Toward a More Substantive Approach to Securities Regulation, 58 BAYLOR L. REV. 139, 166 (2006) ("Investors . . . can be overconfident in their abilities to assess risks and to make wise investment decisions. Most investors

trading and a reduction in returns due to transaction fees. ¹⁵⁰ One study examined the investment performance of a large number of online brokerage accounts, 151 which are held by those who think that they can make their own trading decisions without the assistance of a stockbroker providing advice. This group has been the fastest growing segment of the brokerage industry over the last few years. 152 What the researchers found is that the rate of trading increased once the accounts were established, especially after an initial spurt of good performance (or good luck). 153 Notwithstanding this increasing volume of trading, overall average performance lagged behind what a more passive, welldiversified trading strategy would generate.¹⁵⁴ All of the lag could be traced to the costs (e.g., commissions) associated with active trading. 155 Simply put, "[o]verconfident investors will overestimate the value of their private information, causing them to trade too actively and, consequently, to earn below-average returns."156

Other evidence regarding overconfidence relates to investor behavior during bull markets. The number of day traders increased as the bull market peaked in the late 1990s. Day traders are able to place their trades directly online, giving them a sense of empowerment and control, which can exacerbate their overconfidence. The overconfident behavior of day traders has been likened to a "new form

overrate their stock-picking abilities and believe that their investment skills are above average. Studies have shown that investors consistently overestimate both the future performance and the past performance of their investments."); Simon Gervais & Terrance Odean, *Learning To Become Overconfident*, 14 Rev. Fin. Stud. 1, 1 (2001) ("Traders who successfully forecast next period dividends improperly update their beliefs; they overweight the possibility that their success was due to superior ability. In so doing they become overconfident.").

- 150. See Choi & Pritchard, supra note 36, at 12. See also Nisha Patel, IX. ETFs and Mutual Funds: Changes in the Industry, 27 REV. BANKING & FIN. L. 345, 348-49 (2008) ("[When] the investor makes small, frequent investments . . . the fee is applied to each transaction, amounting to heavy broker fees.").
- 151. Brad M. Barber & Terrance Odean, *Trading Is Hazardous to Your Wealth: The Common Stock Investment Performance of Individual Investors*, 55 J. FIN. 773 (2000).
- 152. Langevoort, supra note 143, at 147.
- 153. *Id.* at 147; Barber & Odean, *supra* note 151, at 800.
- 154. Langevoort, supra note 143, at 147; Barber & Odean, supra note 151, at 800.
- 155. Langevoort, supra note 143, at 147; Barber & Odean, supra note 151, at 800.
- 156. Barber & Odean, *supra* note 151, at 800.
- 157. Choi & Pritchard, supra note 36, at 12.
- 158. Ripken, *supra* note 149, at 167.

of casino gambling" that has caused these traders to "frequently los[e] family savings and [go] into debt, essentially eliminating their own retirement incomes." This type of trading can also be detrimental to the market as a whole, making it more volatile and stock prices more artificial, rising and falling on a measure of "consumer confidence" rather than any actual change in the value of the company. 160

A third example of overconfident behavior is that investors believe that they know more about the value of their employer's stock than the rest of the market. Their overconfidence leads investors to believe that their own company is better than others and as a result will perform better in the market. Hence, they invest heavily in their employer's stock, which is an obvious mistake from a diversification perspective. More than 20% of defined contribution pension money is invested in the employer's stock. When employees believe their company is doing well financially and are optimistic about their company's future prospects, they may have additional emotional reasons to invest heavily in their employer's stock: euphoria, exuberance, greed, and general feelings of positivity, well-being, or goodness. An example of this behavior leading to disastrous consequences was displayed in the case of Enron employees investing too heavily in Enron stock, and suffering substantial losses as a result. In Enron stock, and suffering substantial losses as a result.

^{159.} Norman P. Stein & Patricia E. Dilley, Leverage, Linkage, and Leakage: Problems with the Private Pension System and How They Should Inform The Social Security Reform Debate, 58 WASH. & LEE L. REV. 1369, 1416 (2001).

^{160.} *Id.* at 1416-17.

^{161.} Ripken, *supra* note 149, at 164.

^{162.} Choi & Pritchard, *supra* note 36, at 12.

^{163.} Shlomo Benartzi, Richard H. Thaler, Stephen P. Utkus, & Cass R. Sunstein, *The Law and Economics of Company Stock in 401 (k) Plans*, 50 J.L. & ECON. 45, 47 (2007) ("[S]ome 11 million participants in U.S. defined-contribution plans have more than 20 percent of their account balance invested in company stock. Within this group, some 5 million have more than 60 percent of their account balance concentrated in their employer's stock."). *See also* Gur Huberman and Paul Sengmueller, *Performance and Employer Sock in 401(k) Plans*, 8 REV. FIN. 403, 404 (2004) (finding that for 401(k) plans that offer company stock as an investment choice, individuals invest 36.3% in company stock). Respondents to a Gallup survey view their own employer's stock as safer than a diversified stock fund, domestic or international. Gur Huberman, *Familiarity Breeds Investment*, 14 REV. FIN. STUD. 659, 660 (2001).

^{164.} Peter H. Huang, Trust, Guilt, and Securities Regulation, 151 U. PA. L. REV. 1059, 1092 (2003).

^{165.} See Id. at 1093; Richard A. Oppel, Jr., Employees' Retirement Plan Is a Victim

B. Framing

A second cognitive bias in the behavioral literature that results in several distinct investment behaviors is framing. 166 People appear to approach risk-taking differently depending on the framing of the choice before them. 167When evaluating a potential gain, people exhibit a strong degree of risk aversion. 168 At the same time, if investors are prompted to see the choice as one of trying to avoid a loss of something that is currently possessed, they tend to be more risk-seeking. 169 As a result of framing effects, people may hold on to their losing stocks too long, and sell their winners too readily.¹⁷⁰ An investor may sell winners too readily in a "quest for pride," as closing a stock account at a gain induces a feeling of pride, and may hold a loser too long in an effort to avoid a feeling of regret from closing an account at a loss. 171 Selling winners too readily can have a negative impact on an individual for tax purposes, because short-term gains are taxed at a higher rate than longterm gains. 172 Nevertheless, perhaps because regret is stronger than pride, and can be experienced on either side of the market (if the investor sells a winner too early, it can also create a feeling of regret later on if the price continues to rise), inaction is favored over action, and an investor is more likely to hold a stock than to sell it. Thus, when investors' stocks have lost value, they may hold on to the stocks

as Enron Tumbles, N.Y. TIMES, Nov. 22, 2001, available at http://query.nytimes.com/gst/fullpage.html?res=9A00E0DC143AF931A15752C1A9679C8B63&pagewanted=1 (indicating that at the end of 2000, more than half of the Enron 401(k)'s \$2.1 billion value consisted of Enron stock, which, by November 2001, lost 94% of its value.).

^{166.} Langevoort, *supra* note 143, at 144. "[A] frame is a central organizing idea or story line that provides meaning; it suggests what the controversy is about, the essence of the issue." Paul R. Brewer and Kimberly Gross, *Values, Framing, and Citizens' Thoughts about Policy Issues: Effects on Content and Quantity*, 26 POL. PSYCHOL. 929, 931 (2005) (quoting W. A. Gamson & A. Modigliani, *The Changing Political Culture of Affirmative Action* 143 *in* 3 Research in political sociology (R. D. Braungart, ed., 1987)).

^{167.} Langevoort, *supra* note 143, at 144.

^{168.} *Id*.

^{169.} *Id*.

^{170.} *Id.*; see also Terrence Odean, Are Investors Reluctant To Realize Their Losses?, 53 J. Fin. 1775 (1998); Hersh Shefrin & Meir Statman, The Disposition To Sell Winners Too Early and Ride Losers Too Long: Theory and Evidence, 40 J. Fin. 777 (1985).

^{171.} Shefrin & Statman, *supra* note 170, at 782.

^{172.} *Id.* at 778, 786.

^{173.} Id. at 782.

longer than warranted in hope of reversing the losses.¹⁷⁴ This loss aversion may lead investors to hold on to losing stocks longer than optimal from a tax planning perspective.¹⁷⁵ Conversely, investors that make large investment gains may not value the gains as highly as the principal, leading them to take on excessive risk with their gains (treating the gains much like "house" money in a casino).¹⁷⁶

C. MISJUDGING PROBABILITIES

More generally, investors are often simply poor judges of probabilities.¹⁷⁷ Investors may under weigh low probability, high magnitude risks if no obvious examples of the risks have recently been brought to their attention.¹⁷⁸ By contrast, once a big event happens – such as the Enron scandal – investors may overreact, unduly emphasizing the risk of fraud.¹⁷⁹ Immediately after the Enron and WorldCom scandals in the United States, the net volume of money flowing into mutual funds turned negative for a period of time, even though the holders of diversified mutual funds were unlikely to suffer any significant reduction in their returns from fraud at any particular company.¹⁸⁰ Money managers may also discount small, low probability risks and act overconfidently, as they are also subject to behavioral

^{174.} Choi & Pritchard, *supra* note 36, at 13.

^{175.} See id. See also Langevoort, supra note 143, at 144; Odean, supra note 170 (reporting that despite tax advantages investors were more willing to sell winning positions than losing ones); Shefrin & Statman, supra note 170, at 785-88.

^{176.} Choi & Pritchard, *supra* note 36, at 13. *See also* Nicholas Barberis, Ming Huang & Tano Santos, *Prospect Theory and Asset Prices*, 66 Q.J. ECON. 1 (2001) (arguing that risk aversion will be reduced after the revelation of good news that increases the price of a stock); Richard Thaler & E.J. Johnson, *Gambling with the House Money and Trying to Break Even: The Effects of Prior Outcomes on Risky Choice*, 36 MGMT. SCI. 199 (1990) (finding that people are more willing to take on risks with money that was recently won).

^{177.} Choi & Pritchard, supra note 36, at 12.

^{178.} Id.

^{179.} *Id. See also* Peter Klibanoff, Owen Lamony & Thierry A. Wizman, *Investor Reaction to Salient News in Closed-end Country Funds*, 53 J. FIN. 673 (1999) (finding that investors react more strongly to prominent events, defined as those reported on the front page of the New York Times).

^{180.} Choi & Pritchard, *supra* note 36, at 12 (citing Shaheen Pasha, *Redemptions Aren't Lone Villain*, WALL ST. J., Aug. 7, 2002, at D13 (reporting that "investors pulled a net \$28.47 billion from stock funds in July, beating even the \$23.6 billion in withdrawals that . . . were made in September following the terrorist attacks")).

biases.¹⁸¹ For example, when failing to meet a perceived benchmark, a money manager may take an overly risky position in an attempt to "catch up."¹⁸² Money managers are also subject to several other biases, including underreacting to unfavorable information and overreacting to favorable information.¹⁸³

D. A ROLE FOR REGULATORY NUDGES

In sum, some of the ways in which investors reduce their prospects for wealth accumulation are by trading too frequently, 184 holding on to losses when they should accept sunk costs, 185 being excessively risky with their gains, 186 and overreacting to new information. 187 The impacts of all of these behavioral biases could be mitigated with regulatory nudges in ways that could enhance wealth accumulation. 188 In a free market system, we should preserve the rights of investors to make the decisions they wish to make based on the information they have or believe they have, whether accurate or not. 189 Regulation can, however,

^{181.} *Id.* at 17-18.

^{182.} *Id.* at 17; Donald C. Langevoort, *Selling Hope, Selling Risk: Some Lessons for Law from Behavioral Economics About Stockbrokers and Sophisticated Customers*, 84 CAL. L. REV. 627, 643 (1996) ("A string of losses can cause the agent to assume more risk simply to get back to even, especially if failure to do so might result in termination and severe reputational penalty.").

^{183.} Choi & Pritchard, *supra* note 36, at 18.

^{184.} See supra Part IV.A.

^{185.} See supra Part IV.B.

^{186.} See supra Part IV.B.

^{187.} See supra Part IV.C.

^{188.} See RICHARD H. THALER & CASS R. SUNSTEIN, NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS 72 (Yale Univ. Press 2008) (stating that in order to protect people from making irrational blunders, they should be offered "nudges that are most likely to help and least likely to inflict harm"). See id. at 81-100 (providing examples of different scenarios that are likely to produce errors leading to suboptimal outcomes, along with potential "nudges" as solutions to prevent or mitigate these errors).

^{189.} See Allison Clare Gordon, The "Day Trading" Phenomenon: An Educated Investment or a Day at the Casino?, 30 Sw. U. L. Rev. 353, 375 (2001) ("Most opponents, including Senator Phil Gramm, the Senate Banking Committee Chairman, contest the regulatory proposal, because '[y]ou can't protect people from making bad decisions.' Moreover, such regulations encroach on investors' freedom and privacy."); John H. Walsh, Can Regulation Protect "Suckers" and "Fools" From Themselves? Reflections on the Rhetoric of Investors and Investor Protection Under the Federal

use certain tools to prompt investors in the event that they are prone to behavioral biases to which they would like to be less prone. ¹⁹⁰

Simple regulatory devices could be of great benefit to investors. For example, when individuals sign up for a brokerage account, they could be asked to pre-commit, even if this is not a binding commitment, to no more than a certain number of trades per month or to remain within a certain cap of trading fees per month. Each time they trade they could be reminded of their limit and of how many trades/fees they have left relative to their pre-committed cap. This pre-commitment need not be binding because investors may have extenuating circumstances – investors may need to liquidate their funds and have the right to do so – but such a device would remind investors of the investment decisions they previously made. It could serve as a nudge to reconsider before

Securities Laws, 8 J. Bus. & Sec. L. 188, 239 (2008) ("In a true free market . . . investors are responsible for their own decisions, good or bad. This responsibility leads them to vigorously analyze companies before they invest, using independent financial analysts. In our heavily regulated environment, however, investors and analysts equate SEC compliance with reputability. The more we look to the government to protect us from investment mistakes, the less competition there is for truly independent evaluations of investment risk."); Joseph W. Singer, Things That We Would Like to Take for Granted: Minimum Standards For the Legal Framework of a Free and Democratic Society, 2 HARV. L. & POL'Y REV. 139, 143 (2008) ("Under the theory of liberty championed by John Stuart Mill, individuals are best suited to determine what is in their own interest; it is a violation of autonomy for courts or legislatures to act paternalistically to protect individuals from their own mistakes on the ground that these government officials know better than individuals what is in their best interest. The ability of individuals to choose their own ends and to determine the course of their own lives is fundamental to liberty.").

190. Choi & Pritchard, *supra* note 36, at 52 (noting that "[1]arger institutional investors may have enough self-awareness of their own susceptibility to behavioral biases to appreciate a regime that protects them against such biases"). Regulation can be desirable to many individuals, if it can encourage them to make better choices. For example, "many smokers, drinkers, and overeaters are willing to pay third parties to help them make better decisions." Thaler & Sunstein, *supra* note 188, at 7. "When people have a hard time predicting how their choices will end up affecting their lives, they have less to gain by numerous options and perhaps even by choosing for themselves. A nudge might be welcomed." *Id.* at 76.

191. The fees associated with the number of trades could speedily accumulate. For example, in addition to the annual \$20 account service fee, Vanguard's standard brokerage services account charges \$7 for each of the first 25 trades, and \$20 for each trade thereafter. *See* Schedules VANGARD BROKERAGE SERVICES COMMISSION AND FEE SCHEDULES, *available at* https://personal.vanguard.com/us/whatweoffer/stocksbondscds/feescommissions (last visited Nov. 24, 2010).

engaging in unnecessary trading.

A similar commitment device applying to both brokerage fund and mutual fund accounts could prompt investors to determine how much of a loss they are willing to tolerate and at what gain they would like to sell. Alternatively, investors could commit to invest in a particular portfolio for a set period and pre-commit to a penalty if they withdraw early. Investors should be prompted to make these decisions at the initiation of an investment account. If investors do not respond to a prompt pertaining to a certain amount of gain or loss in the portfolio within a specified amount of time, they could be required to decide ahead of time whether the investments should continue or gains and losses should be realized.

These commitment devices are not unlike the options individuals now have vis-à-vis debt instruments. With respect to credit cards, individuals can choose to have their credit card payments automatically deducted from their bank account in the amount of the minimum payment or in the amount of the total balance due. 192 The rationale for such commitment devices in the credit card context is that by simply allowing or recommending payment of the minimum balance, individuals may become anchored to pay only the minimum, which maximizes interest charges over time, rather than making the alternative decision to pay off the full bill and minimize interest charges. 193 In the same way, investors could become anchored to hold on to their investments as long as the market prices are within some predetermined range of movement. Such simple pre-commitment devices could help mitigate the problems of over-reaction to news. If investors are within their target price range for a stock, for instance, a range of not selling if within twenty percent above or below their initial purchase price, then they may be less likely to decide to purchase more stock on the availability of good news or to sell at the appearance of bad news, as

^{192.} See, e.g., Dawn Allcot, How To: Automatically Pay Your Credit Card Bill Each Month, CREDITSHOUT BLOG (Feb. 19, 2010)), http://creditshout.com(stating that most credit card companies offer the option to have the bill automatically paid from a checking account each month, either by the minimum payment, statement ending balance, or another fixed amount).

^{193.} Thaler and Sunstein make the point that individuals already receive a "nudge" from companies to simply pay the minimum balance each month. They propose that the government require companies to provide the alternative option of paying of the full amount each month, so as to "nudge" individuals to minimize their interest charges. *See* Thaler & Sunstein, *supra* note 188, at 144.

they know that they will be prompted when they reach their own personal trigger point for a decision. They may be less likely to feel the need to react to the news when they get it. While this result could lead to an under reaction bias, ¹⁹⁴ the extent of this bias is likely to depend on the range of pre-commitment options individuals select. Regulations proposed on a pilot basis coupled with empirical research would provide excellent opportunities to study the effects of experimenting with various pre-commitment devices. If such pre-commitment devices save individuals transaction costs and promote more thoughtful, long-term investing, then they would serve the goal of promoting wealth accumulation across different sectors of society.

V. INCENTIVES FOR FINANCIAL ADVISERS AND MANAGERS

In order to promote opportunities for wealth accumulation, securities regulation must take into account the reality that a majority of retail investors delegate their investment decisions to financial professionals. They do so by investing in mutual funds, investing in pension funds, relying on money managers, and occasionally, for high net worth individuals, investing in hedge funds. Their wealth

194. Langevoort, *supra* note 143, at 144 (defining this phenomenon as based on cognitive conservatism: an extremely robust behavioral construct showing that people change their views slowly even in the face of persuasive evidence, or people cling as long as possible to what they previously believed to be true).

195. Sixty percent of U.S. households reported that they had an employer-sponsored retirement plan—that is, they had assets in DC plan accounts, were receiving or expecting to receive benefits from DB plans, or both. Eighty million, or 68 percent, of U.S. households reported that they had employer-sponsored retirement plans, IRAs, or both in May 2009. Investment Company Institute, 2009 Investment Company Fact Book 96 (2009). At year-end 2009, total IRA assets totaled \$4.2 trillion. *Id.* at 98. Mutual fund assets held in IRAs were \$2.0 trillion, and assets managed by mutual funds were the largest component of IRA assets, followed by the securities held directly through brokerage accounts (\$1.5 trillion). *Id.* The mutual fund industry's share of the IRA market increased to an estimated 46 percent at year-end 2009. *Id.* Investors held roughly the same amount of mutual fund assets in IRAs as they did in employer-sponsored DC plans. *Id.* at 114. Among investors owning mutual fund shares outside of retirement plans at work, 77 percent own fund shares through professional financial advisers. *Id.* at 68.

196. *See* Mutual Fund Distribution Fees; Confirmations, Securities Act Release No. 9128, 75 Fed. Reg. 47064, 47065 (Aug. 4, 2010) (proposed July 21, 2010) ("More than 87 million Americans, representing slightly less than half of all households, own mutual

accumulation, therefore, depends in great part on the behavior of these financial professionals. The behavior of these professionals, in turn, depends on the performance incentives they face - namely how they are paid. 197

While a social welfare approach to regulation would say that government intervention is only needed to mitigate principal-agent problems by, for instance, mandating disclosure by various financial agents to their investor principals, ¹⁹⁸ an opportunities-based perspective would deem the provision of information insufficient to promote wealth accumulation. If the majority of the middle and lower income segments of society are relying on financial professionals to help them accumulate wealth, then a goal of securities regulation should be to promote incentives that better serve the wealth accumulation of these groups. In many cases, the current incentives of financial professionals favor their own wealth accumulation over that of their clients.

For instance, the performance of most mutual fund managers and other financial professionals is assessed, in terms of the fees they collect,

funds . . . [and] most fund investors buy through intermediaries."); SEC Release No. IA-2107, Compliance Programs of Investment Companies and Investment Advisers, available at http://sec.gov/rules/proposed/ic-25925.htm (proposed Feb. 5, 2003) (noting that "millions of investors . . . invest in funds, participate in pension funds managed by investment advisers, or use the services of a personal financial planner or money manager," and that 5,030 funds and 7,790 advisers are currently registered with the SEC, collectively control[ling] over \$21 trillion of assets, and engag[ing] in tens of millions of transactions each year); Marcel Kahan & Edward Rock, Hedge Fund Activism in the Enforcement of Bondholder Rights, 103 Nw. U. L. REV. 281, 282 (2009) ("That most individuals cannot invest in hedge funds, however, has not hurt their popularity. The assets managed by hedge funds have grown at stratospheric rates, from \$40 billion in 1990 to more than \$1.7 trillion in 2007.").

197. Bernard S. Black, *Agents Watching Agents: The Promise of Institutional Investor Voice*, 39 UCLA L. REV. 811, 877 (1992) (stating that money managers have incentives to improve portfolio performance to increase asset-based management fees); D. Bruce Johnsen, *Myths About Mutual Fund Fees: Economic Insights on Jones v. Harris*, 35 J. CORP. L. 561, 608 (2010) (stating that mutual fund advisers will put more effort into picking stocks when incentive fees are used to condition compensation on investment performance); Troy A. Paredes, *On the Decision to Regulate Hedge Funds: The SEC's Regulatory Philosophy, Style, and Mission*, 2006 U. ILL. L. REV. 975, 995 (2006) (noting that it is "reasonable for investors to depend on the manager's performance fee to help align the manager's incentives with the best interests of the fund's investors").

198. See Mahoney, supra note 7, at 1048.

_

on no lengthier period than on an annual basis.¹⁹⁹ Investors are provided with quarterly reports for mutual fund performance relative to some benchmark, such as the S&P 500.²⁰⁰ Mutual fund advisers are typically compensated with a fee based on the percentage of total assets under their management.²⁰¹ Each year, mutual funds can charge performance fees based on by how much they outperform their benchmark as long as their fees decline symmetrically when they underperform that benchmark.²⁰² The benchmark, however, is generally assessed on an annual basis.²⁰³

Other financial professionals, including banking and finance executives, are also generally compensated on the basis of short-term performance.²⁰⁴ The problem with having financial professionals paid on the basis of a shorter time horizon is that they are incentivized to take

199. See, e.g., James R. Repetti, Corporate Governance and Stockholder Abdication: Missing Factors in Tax Policy Analysis, 67 NOTRE DAME L. REV. 971, 997 (1992) ("[B]ecause compensation schemes for institutional investors are frequently tied to annual investment return, rather than long-term investment performance, it is possible that investment managers trade in an attempt to maximize the annual return by capturing appreciation in their portfolio selections.").

200. Shareholder Reports and Quarterly Portfolio Disclosure of Registered Management Investment Companies, Securities Act Release No. 8393, 69 Fed. Reg. 11244 (Mar. 9, 2004).

201. John C. Coffee, Jr., *Liquidity versus Control: The Institutional Investor as Corporate Monitor*, 91 COLUM. L. REV. 1277, 1363 (1991).

202. Investment Advisers Act of 1940 § 205(b)(2), 15 U.S.C. § 80b-5(b)(2) (1988). See also Investment Company Institute, Performance Fees and Expense Ratios, 12 Fundamentals 1, 2 (Aug. 2003) ("With performance fee arrangements, the advisory fee rate is increased whenever the fund's return exceeds a stated benchmark over a specified period. The fee rate is symmetrically reduced when the fund's performance falls short of the benchmark."); Robert C. Illig, What Hedge Funds Can Teach Corporate America: A Roadmap for Achieving Institutional Investor Oversight, 57 Am. U. L. Rev. 225, 319 (2007) (defining a "fulcrum fee" as a fee in which the manager of a mutual fund adjusts "the base advisory fee depending on how the fund performs relative to a stipulated market index). "The key to the fulcrum fee is that the percentage charged cannot merely increase when performance exceeds expectations—it must also decrease proportionately when performance lags." Id.

203. *See supra* note 199.

204. JIAN CAI ET AL., FEDERAL RESERVE BANK OF CLEVELAND, COMPENSATION AND RISK INCENTIVES IN BANKING AND FINANCE 4 (2010), available at http://www.clevelandfed.org/research/commentary/2010/2010-13.pdf ("Bonuses are often tied to short-term financial performance, typically of the past one to three years. Thus, this compensation structure tends to reward short-term profits and may have encouraged 'short-termism' at financial institutions.")

on tail risk, ²⁰⁵ that is, to invest in assets that will bear short-term returns even if they are likely to be volatile and underperform in the long-run. ²⁰⁶ The financial advisers could have long cashed out their bonuses and retired by the time the tail risk catches up with their investors. ²⁰⁷ For the investors, the tail risk can completely destroy not only all of their short-term gain, but even the wealth they initially invested into the account.

One way to combat this problem has been proposed vis-à-vis traders at investment banks (though it need not be limited to this group of financial professionals) by Professor Raghuram Rajan ("Professor Rajan")²⁰⁸ in his book *Fault Lines*.²⁰⁹ Professor Rajan has proposed that traders not be given their bonuses in one lump sum at the end of the year, but rather be paid only a fraction of the bonus they earned based on that year's performance.²¹⁰ Professor Rajan indicates that it would be better for investors if the bonus was paid out in increments over time

^{205.} A tail risk is a risk with a very small probability of manifesting. It is named a "tail risk" because its probability is at the tail of a statistical distribution. RAJAN, *supra* note 17, at 136-37.

^{206.} Using the example of selling earthquake insurance, Professor Rajan illustrates how a fund manager's adoption of tail risk is rewarded. The manager sells earthquake insurance to buyers seeking to protect themselves from a catastrophic event. In the short-term, the manager can demonstrate large profits from the incoming insurance premiums but no losses because an earthquake is a rare occurrence and is thus a long-term risk. The short-term profits are rewarded by superiors within the manager's fund or customers seeking to invest with the manager to realize similar profits. Thus, the manager's behavior of adopting long-term risk for short-term profit is rewarded. Profits eventually diminish or disappear altogether when an earthquake does occur and the manager must pay insurance claims. If the manager did not save the short-term profits to protect against the long-term risk, the manager will default on the insurance claims. The manager's incentive structure rewards short-term success at the expense of planning for long-term losses. *Id.* at 138-39.

^{207.} See id. at 139 (explaining that the rewards reaped during periods of short-term profit are likely to be enough to allow a manager taking on tail risk to live comfortably in retirement).

^{208.} Raghuram Rajan is the Eric J. Gleacher Distinguished Service Professor of Finance at the University of Chicago's Booth School of Business, a current economic advisor to the Prime Minister of India, and was Chief Economist at the International Monetary Fund (2003-2007). *See* The University of Chicago Booth School of Business, "Faculty Profile: Raghuram Rajan," http://www.chicagobooth.edu/faculty/bio.aspx?person id=12825569280 (last visited Nov. 16, 2010).

^{209.} Rajan, supra note 17, passim.

^{210.} See id. at 164.

based on the performance of the trader's positions over time.²¹¹ Consequently, if all of the gains in the first year were lost by the end of the second year, the rest of the bonus would never be paid.²¹² Of course, determining the appropriate timeline for such bonus structures would be a challenge.

Regulators may hesitate, as they should, to set such bonus structures.²¹³ Such a task should be performed by the market. What regulators could do, however, is incentivize the private sector to adopt structures that better incentivize long-term performance. One way to accomplish this goal is to require blatant disclosure of the incentives of the financial professional, whether she is a mutual fund manager or other adviser, to achieve high performance beyond the current year. In this way, firms may begin to compete more openly based on the incentive structures they can create and will experiment with different structures in an effort to compete for investors. This approach would be consistent with the enhancement of social welfare through addressing a market failure as it seeks to remedy the information problem of investors not necessarily being aware of the incentives their financial advisers face.

An opportunities-based policy would go further, perhaps by mandating that financial institutions establish long-term incentives, such as the proposal offered by Professor Rajan. An opportunities-based approach need not prescribe the particular incentives; it need only mandate that incentives for long-term gains exist.

^{211.} See id.

^{212.} See id.

See Jeremiah Thomas, TARP's Hard Line on Executive Compensation: Misaligned Incentives and Constitutional Hurdles, 70 OHIO ST. L.J. 1307 (2009) (arguing against the provisions restricting executive compensation in Congress's implementation of the Troubled Assets Relief Fund and subsequent legislation). One negative effect of statutory restrictions on bonus structures is that companies could shift towards higher salaries in place of performance based structures that can be altered to meet the financial realities of the current market. Higher salaries would result in higher fixed costs, and would diminish external incentives to encourage performance. Id. at 1349-50. See also David I. Walker, The Challenge of Improving the Long-Term Focus of Executive Pay, 51 B.C. L. Rev. 435 (2010). Previous attempts to regulate executive pay have included the use of tax incentives and mandatory pay disclosure. These initiatives have achieved mixed success, and often have resulted in unintended consequences, such as shifting the cost of non-compliance with tax incentives to shareholders, and in the case of pay disclosure, incentivizing higher bonuses to avoid giving the appearance that executives were below average, which could undermine investor confidence. Id. at 451-54.

In addition to the potential misalignment of time horizons between investors and their financial advisers, a conflict of interest could arise between the liquidation incentives of an investor and the financial advisers upon which she relies. For instance, suppose that a mutual fund manager is compensated, at least in part, based on the total value of assets under her management at a particular point in time.²¹⁴ Suppose also that the fund specializes in seeking out stocks that are undervalued based on certain fundamentals, holding them until they rise to provide a certain percentage return, and then liquidating these positions into a safe alternative, such as government bonds, to preserve the value gained while seeking more undervalued equity in which to invest. Now suppose that the management fee is determined based on the total value of assets under management at the end of the year.²¹⁵ A manager may thus be tempted to hold on to certain positions that she believes are overvalued in order to benefit from the fee gains at the end of the year. This decision could turn out to expose her investors to additional risk and volatility and not gain as much return as they otherwise would have, as these positions begin to lose value and the manager continues to hold on to them. Of course, if the manager happens to be very lucky and the positions do not lose value before she is compensated, this could be a win-win situation for both her investors and her. Such a scenario, however, is far from guaranteed.

One way to overcome such perverse incentives is to base management compensation not on the value of assets at any point in time, but rather on their average value over a longer time horizon.²¹⁶ In

^{214.} INVESTMENT COMPANY INSTITUTE, PERFORMANCE FEES AND EXPENSE RATIOS, 12 FUNDAMENTALS 1, 2 (Aug. 2003) ("Advisory fees are usually computed as a percentage of fund assets; many funds employ a declining rate structure under which the percentage fee rate decreases at designated breakpoints as assets increase."). Mutual funds generally charge two types of fees: sales loads, a type of brokerage fee to compensate advisers for particular transactions which are paid either at the time of purchase or when the shares are redeemed, and fees for ongoing expenses, which are paid from fund assets and tend to decrease as the fund achieves economies of scale. Illig, *supra* note 202, at 320. "Total mutual fund fees – ongoing expenses plus an annualized portion of any sales loads – decreased from an average of 2.32% of fund assets in 1980 to 1.07% of fund assets in 2006." *Id.*

^{215.} See Dana Anspach, 6 Ways Financial Advisors Charge Fees, ABOUT.COM, http://moneyover55.about.com ("A typical asset management fee can range from 2.0% per year on the high side to .50% per year on the low side. Typically the more assets you have, the lower the fee.").

^{216.} See Black, supra note 197, at 877 (acknowledging that the incentives of private

this way, compensation would incentivize long-term stable wealth creation over short-term gains, which could deprive investors of more sustainable gains to their portfolios. Consistent with an opportunitiesbased approach, the SEC has recently proposed rules regulating incentive-based compensation arrangements at financial institutions.²¹⁷ In particular, the proposed regulations, if adopted, would: (1) require disclosure to federal regulators of the firm's incentive-based compensation arrangements; (2) prohibit incentive-based compensation arrangements that encourage inappropriate risks; and (3) require financial institutions with \$50 billion or more in total consolidated assets to defer at least 50-percent of any incentive-based compensation for executive officers for three years.²¹⁸ Furthermore, under the proposed rule, deferred compensation would be awarded on a pro rata basis and would be adjusted for losses incurred by the covered institution after the compensation's initial reward.²¹⁹ While this proposed regulation is controversial because of its proscriptive nature, 220 it provides investors with the benefit of prioritizing longer-term goals by aligning the incentives of financial professionals with these goals.

Regulators could further encourage a larger number of institutions to consider unique fee structures in multiple ways. First, as mentioned before, they could mandate public disclosure of whether such incentives do or do not exist. Second, they could require that incentives for long-term performance exist, indicating that a host of options is possible, and not specifying which measure must be taken. Third, federal regulators could indicate that during times of crisis, support for banks that do not have such incentives would be limited. Such a threat would have to be credible, however, which is difficult given the magnitude of recent bank bailouts.²²¹ In order to promote wealth creation and account for the

money managers may need to be redirected toward more long-term goals).

^{217.} Incentive-Based Compensation Arrangements, 76 Fed. Reg. 21170 (April 14, 2011)(amending 12 CFR 42, 12 CFR 236, 12 CFR 372, 12 CFR 563, 12 CFR 741, 12 CFR 751, 12 CFR 1232, 17 CFR 248).

^{218.} *Id*.

^{219.} Id.

^{220.} The proposed rule was approved by the Commission by a 3-2 vote. *SEC Proposes Bonus Restrictions*, FINANCIAL ADVISOR (Mar. 3, 2011), http://www.famag.com/fa-news/6939-sec-proposes-bonus-restrictions.html.

^{221.} For arguments supporting the ability of bailouts to cause moral hazard, see Onnig H. Dombalagian, Requiem for the Bulge Bracket?: Revisiting Investment Bank Regulation, 85 IND. L.J. 777, 828 (2010) (describing a House Republican Bill that

cognitive limitations of most investors to process the overwhelming amounts of information with which they are already inundated, some type of direct mandate for incentives for long-term wealth creation are in order.

VI. CONCLUSION

This article advocates for the inclusion in the goals of securities regulation a value that has not heretofore been asserted. Along with well functioning capital markets, 222 efficient capital allocation, 223

refused to identify systematically significant institutions because, according to its sponsors, doing so would represent an express guarantee of a bailout during times of financial distress and would create "undue moral hazard"); Alison M. Hashmall, After the Fall: A New Framework to Regulate "Too Big to Fail" Non-Bank Financial Institutions, 85 N.Y.U. L. REV. 829, 832 (2010) (stating a policy that bails out institutions deemed "too big to fail" is problematic in that it "creates moral hazard for the guaranteed parties, who will come to expect future bailouts"); Shelley Smith, Reforming the Law of Adhesion Contracts: A Judicial Response to the Subprime Mortgage Crisis, 14 LEWIS & CLARK L. REV. 1035, 1038 (2010) (noting that bailouts used by the government during past financial crises create a moral hazard by "insulating the bailout recipients from the consequences of the risks they willingly assumed" and that instead of discouraging excessive risk-taking, put large financial institutions in a "heads I win, tails you lose" position that justifies engaging in future problematic conduct); SIGTARP, supra note 97, at 3-4 ("It is useful to analyze any Governmental intervention in the market like TARP against three distinct types of cost: the financial cost to the taxpayers; the moral hazard damage to market incentives created by Government intervention; and . . . the impact on Government credibility due to the failure to explain what is being done with billions of taxpayer dollars transparently and forthrightly Absent meaningful regulatory reform, TARP runs the risk of merely re-animating markets that had collapsed under the weight of reckless behavior.") (internal quotation marks omitted).

222. See Paredes, supra note 4, at 422 ("Our federal securities laws are designed to protect investors and the integrity of capital markets by mandating disclosure that enables informed investor decision making, boosts investor confidence, and reduces agency costs."); 2009 Flash Order Exception, supra note 77, at 48643 ("Section 3(f) of the Exchange Act requires the Commission, whenever it engages in rulemaking and is required to consider or determine whether an action is necessary or appropriate in the public interest, to consider whether the action would promote efficiency, competition, and capital formation.").

223. See Paredes, supra note 4, at 424 ("The federal securities laws promote market efficiency by requiring that information be made available to the market for investment decisions."); Goshen & Parchomovsky, supra note 1, at 713 ("[S]cholarly analysis of

combating market failures, ²²⁴ and other goals that have been advocated by legal scholars and policy makers, securities regulation should also seek to expand opportunities for wealth accumulation, particularly for the majority of our society, which has a small proportion of our nation's wealth. ²²⁵ In considering how to promote this goal, I take an interdisciplinary approach to illustrate the ways in which current policies do not adequately promote opportunities for wealth accumulation.

First, I note that a regulatory approach that creates blatant divisions between groups creates cycles of entitlements and perceptions of unfairness that could delegitimize democratic government.²²⁶ At the same time, I advocate for a better understanding of how perceived differences in access empirically impact different groups of investors. Second, I look to the research in psychology and behavioral economics to evaluate how investors respond to the SEC's current dominant approach toward regulation of mandating disclosures.²²⁷ This analysis shows that the current approach is inadequate in reducing inequities and may, in fact, be exacerbating inequities between those who are sophisticated and can afford assistance to absorb massive amounts of information and those who cannot. Third, I also look to the behavioral economics literature to evaluate where regulation can help investors

securities regulation must proceed on the assumption that the ultimate goal of securities regulation is to attain efficient financial markets and thereby improve the allocation of resources in the economy."); 2009 Flash Order Exception, *supra* note 77.

224. See Schwartz, supra note 1, at 525 (Regulation . . . may be justified when a market suffers from such structural imperfections—so-called market failures."); Beville, Falaschetti, & Orlando, supra note 1, at 859-60 (arguing that regulation does better than the free market from a social welfare perspective when transaction costs are high).

225. See Yasmin Dawood, The New Inequality: Constitutional Democracy and the Problem of Wealth, 67 MD. L. REV. 123, 124 (2007) ("[In 2005] [t]he top 1 percent control[led] 38.1 percent of the country's wealth, while the bottom 90 percent control[led] 29 percent of the country's wealth."); Martin A. Sullivan, Economic Analysis: Inequality, Populism, and Democratic Tax Policy, 114 Tax Notes 16, 17-18 (2007) ("[In 2004,] [t]he least wealthy 50 percent of households held only 2.5 percent of the nation's wealth. Meanwhile, the wealthiest 10 percent held nearly 70 percent."); Albert Yoon, The Importance of Litigant Wealth, 59 DEPAUL L. REV. 649, 658 (2010) ("[In 2007,] the wealthiest five percent of the nation's households collectively own[ed] sixty percent of the nation's wealth. Collectively, the top half of the population own[ed] ninety-seven percent of the overall wealth.").

- 226. See supra Part II.
- 227. See supra Part III.

mitigate their own behavioral biases, which inhibit them from acting in ways that are ultimately in their best interest.²²⁸ Regulatory policy can give "nudges" without taking choice away from investors to help them maintain and grow their wealth more effectively.²²⁹

Finally, I apply the research of financial economists to examine the implications of how financial professionals are compensated given that the principal agent problem impacts the majority of investors because they delegate their investing decisions. This research demonstrates that the incentives of investment professionals do not always align with the long-term goals of investors, making it more difficult for investors to retain and grow their wealth. I provide suggestions for how regulators might induce the private sector to restructure the incentives of money managers, traders, and other investment professionals. 232

An opportunities-based approach, which would promote wealth accumulation for a greater proportion of society, is likely to result in a more long-term approach to investing. Such an approach could have systemic benefits, making investors less prone to bubbles and bursts.²³³ The positive externalities of taking an opportunities-based approach are not to be underestimated. Promoting more stable, long-term investing could lead to wealth creation that incentivizes more saving and investment, creating a positive feedback loop of wealth creation for many who, to date, have been unable to benefit from the tremendous opportunities for investment and wealth creation in our society.

^{228.} See supra Part IV.

^{229.} See supra Part IV.D.

^{230.} See supra Part V.

^{231.} See supra Part V.

^{232.} See supra Part V.

^{233.} FINANCIAL INDUSTRY REGULATORY AUTHORITY, BUILDING YOUR PORTFOLIO: INVESTING FOR DIFFERENT TIME PERIODS (2010), http://www.finra.org/Investors/SmartInvesting/GettingStarted/BuildingYourPortfolio/P117326 ("[W]hen you have 15 years or more to meet your goals, you have a good chance of being able to ride out market downturns and watch short-term losses eventually be offset by future gains."); U.S. SECURITIES AND EXCHANGE COMMISSION, BEGINNERS' GUIDE TO ASSET ALLOCATION, DIVERSIFICATION, AND REBALANCING (Aug. 28, 2009), http://www.sec.gov/investor/pubs/assetallocation.htm ("The volatility of stocks makes them a very risky investment in the short term But investors that have been willing to ride out the volatile returns of stocks over long periods of time generally have been rewarded with strong positive returns.").